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THE MONTH.

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THE Conference on the Eastern Question has met after adjournment, having carried its deliberations so far as to find out what each of the Great Powers exactly wanted, and what each would concede. The diplomats at this point have ceased negotiations, in order to ask definite instructions from their governments. The Russian programme, it is definitely known, contains a demand for the occupation of Bulgaria; and it is also definitely known that Turkey will not—indeed, no Sultan dare—concede this. The only remaining questions are those of diplomatic tactics. Can England induce Turkey, or persuade Germany to induce Russia, to yield consent to some feasible compromise? Or failing that, and war following, on which side will Austria-Hungary be, either by reason of its instinctive preferences, or by virtue of diplomatic pressure from without.

We are still of the mind that war rather than compromise is the desirable outcome of the present entanglement. Any disposal of Bulgaria which does not either place it under a government like those of the Danubian Provinces, or else hand it over to a foreign army of occupation, would be a crime against humanity. But if war should come, we are by no means so certain of Russia's speedy success, as we are desirous of it. Never, since John Sobieski raised the siege of Vienna, have the Ottomans been in such a fighting mood as at the present time. Moslem fanaticism has not

been so near red-heat for centuries, as is seen both by the outbursts in the great cities, and the really good fighting on the Serbian frontier.

On the other hand, Russia has overcome the financial difficulty which stood in the way of her warlike preparations. On appealing to her own people for the needed loan, she received bids enormously in excess of what is required. For here also the fire of religious zeal has been awakened in no ordinary degree. Her priesthood, by excited and eloquent appeals from the pulpit, and by the display of pictures of the Bulgarian massacres, have aroused all classes in "Holy Russia" to a new crusade, and the war is for once forced upon the Czar by his people, rather than proposed to them by him. As regards the Christian champions of Turkey, Russia contemplates no attack upon them; if England is to fight, England must declare the war.

The English opposition to the Islamite policy of the Ministry is taking a definite shape. A Parliamentary Committee which was created last session by a sort of Liberal Caucus, has called a National Conference on the Eastern Question, a sort of outside Parliament to give expression to the real views of the English people at this conjuncture, when the regular organs of utterance have ceased to perform their functions.

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THE final vote in the German Parliament on the abolition of the iron duties, shows that the *Junckers* have made up their minds to ignore the interests of the manufacturing districts. Bismarck, as we anticipated, urged at least a postponement of the measure, and there are indications that the people of the intellectual centres of Germany, notably Berlin, were of his mind. Ten of the most prominent journals came over to the Protectionists. But the squireocracy marched straight forward to their purpose; and from the beginning of the present year, the iron industries of Westphalia will be exposed to those methods of "industrial warfare"—the official English phrase—by which rival industries are destroyed in time of financial depression, so as to leave the field clear for English capitalists when times improve and prices rise. One effect of this will be, to create a marked division of interest between the Germans of the Rhine Valley and of the few large cities where manufactures are centered, and those of the more Eastern districts, where agriculture is the chief employment. The manufactures of

Elsass and Lothringen complain that the new tariff is far worse for their interests than that of France, under which they once lived. This is to be regretted, for nothing is so fatal to political animosities as prosperity, and nothing so fosters and deepens them as adversity and distress.

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THE greatest recorded destruction of human life that has been owing to a single disaster, has occurred in British India, and yet hardly a ripple of interest and compassion seems excited by it. The lands along the upper coast of the Bay of Bengal are of alluvial formation, and are steadily encroaching upon the bay through the action of its northward currents in piling up breakwaters of sand and gravel, and that of the great rivers in bringing down vast volumes of loam from both sides the Himalayas. The site of Calcutta was, in the Mohammedan period, a part of the bay, and even since the English occupation of it, its distance from the sea has been decidedly increased. The districts thus formed are intersected by streams and canals which are the usual routes of transportation, and the land at no point rises more than a few feet above the ordinary water level, so that they suffer much from inundations. But they are densely populated by an industrious and patient class of ryots. One such district, containing an area of three thousand square miles, and inhabited by a million and a half of people, has been swept by three successive waves of an inundation reported to have been twenty feet deep. These were driven upon the district by one of those sudden cyclone-storms which are the terror of Asiatic waters. Of course, every one who could not climb a tree was drowned, and the loss of life is estimated at two hundred and fifteen thousand, a number only equaled by the report of the slain in the battle of Chalons. How so many escaped, seems a mystery, and it is feared that the vast multitude of corpses will breed a pestilence by their putrefaction. At the same time, famine has broken out in several provinces of India, so that the new Imperial rule has had but an inauspicious inauguration.

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FOR the first time in our national history, the Thanksgiving and Christmas which followed a Presidential election have come and gone, and the New Year has opened upon us, without removing the uncertainty as to which of the two candidates has been legally elected, and will be inaugurated. Mr. Hayes has, indeed, the bet-

ter case *a priori*. One hundred and eighty-five votes in his favor are or will be transmitted to Washington, and have been cast by those who have received the proper certificates of election as having been chosen by the people of the several states. But the majority of the present House of Representatives,—who will have the election of the President in case it shall be decided prior to the 4th of March that there has been no choice by the people,—are of the opinion that Mr. Tilden has been elected, if any one has been; and that the vote of Louisiana, in particular, has been fairly cast for him, as the face of the returns, before the rejection of the vote of certain parishes as terrorized, goes to show. And it seems likely that it will be decided by sharp parliamentary practice, whether Mr. Hayes or Mr. Tilden will be the next President.

Here, again, the friends of Mr. Hayes have the technical advantage on their side. The authors of the Constitution contemplated no such difficulty, and have made no provision to meet it. They merely provided that the vote should be opened by the President of the Senate in the presence of the two Houses and then counted; they vested the decision of doubtful points neither in one house nor in both. It is true, that a usage which never received constitutional sanction, has perhaps denied his right to exercise any judicial functions in such cases, and has vested the power to command him to reject any vote or votes not in the Senate, whose officer he is, but in either of the two houses acting separately. But at the present time, this usage has no legal authority, for the Democrats of the House, at the opening of the present Congress, failed to adopt the "Joint Rule," in which it was embodied, and these joint Rules expire as enactments with the termination of each Congress. There is therefore not a word in the Constitution or Laws of the United States to enable the House, or for that matter the Senate either, to exercise any control over the Republican President of the Senate. If the Senate has any power over him, it derives it from the recognized principle that the officers of a deliberative body are its organs and servants.

For this reason, it seems most probable that the election of Mr. Hayes will be proclaimed at the joint-session of the two Houses of Congress, and in that case, he will certainly be inaugurated President on the 4th of March next.

THE submission of the Democrats to this decision under protest, is among the possibilities; indeed we think it extremely probable. Unless they can give such a direction to the course of events at Washington, as will put their antagonists in the attitude of assailants, they will probably prefer to accept the situation, rather than violently resist the decision given by those who have the technical right to decide. But that they mean to do everything short of resistance is evident from the manifesto issued by Mr. Abram S. Hewitt, Chairman of their National Committee.

The points upon which they rest their case are (1) That of the Republican electors of Oregon, only two have been certified by the Governor of that state, as the law requires, and that another elector, who possesses the Governor's certificate, has deposited his vote for Mr. Tilden. The electors of Oregon cannot be deprived of their right to suffrage by a failure on the part of its Governor to do his duty. If they could, he might have given Mr. Tilden the election by refusing to sign any certificate. And, as the Chief Justice of that state very properly points out, he is neither by law nor constitution vested with any judicial power to inquire into the qualifications of any elector. His business is to ascertain which electors received a majority of the legal votes cast by the people of the State, and to issue the certificate to them.

(2) If Congress can go behind the official certificate in the case of Oregon, it can do the same in the case of Louisiana. To this it may fairly be answered, that the rejection of a judicial decision made by an officer not invested with any judicial powers, differs very distinctly from the rejection of one made by persons expressly invested with such powers, and even with the right of final decision. It may have been unwise to create such a board as that which revised the Louisiana returns, but we very greatly doubt the right even of both Houses in joint-session and acting unanimously, to set aside its decisions. As to the rightfulness of those decisions, especially the exclusion of the vote of the parishes which were said to have been terrorized, everything, both of law and of justice, turns upon the question whether that charge was true or not. *If* it was true, the Board were not only authorized, but commanded to exclude the vote of those parishes; *whether* it was, is not so easily decided, as Mr. Lowell says, at this distance; but certainly the evidence presented before the Board creates a strong presumption of its truth. How far the

investigations, now making by the Committee of the two Houses of Congress, will establish or overthrow that presumption, remains to be seen.

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THIS statement of the Republican case very naturally excites a certain distrust in an impartial mind. It may be asked very fairly upon how many "ifs" and "peradventures" the right of Mr. Hayes to the Presidency depends? And what opportunity there is for the fair election of a President of the United States, in the manner prescribed by the Constitution, when everything is made to turn upon the judicial fairness of a partisan Board in a single state, who have every political motive to patch up a case for their own side? And whether it is honest for a great party and its candidate to secure a political victory by raising a series of technical points, when the broad outlines of the case indicate their defeat?

This view of the case has a superficial plausibility about it, and it has even been urged by some among the less zealous supporters of Mr. Hayes. But it is exactly the reverse of the truth: Mr. Tilden's strength in the whole conflict has been technical and Mr. Hayes has been the true choice and representative of the American nation. We cannot hope to make this clear to the minds of those who believe that the American nation is the creation of a contract recorded in the Constitution; and that there are no laws of political life and power, save those which receive the sanctions of Conventions and Legislatures. The nation is a reality, which exists independently of any document constituting and defining its Government, although it will always naturally embody its leading political ideas in some written or traditional code of fundamental law. Its growth and development are determined by natural laws, which the Constitution may retard for a time, but can never in the long run hinder in their operation. And as the nation is an organic body, so these are its true organic laws. We had some experience of this during the Rebellion; the letter of the Constitution would have delivered us over to the enemies of the Union, but the nation fell back upon the higher and organic law of self-preservation, and bore the howls of the Constitutionolaters with considerable equanimity. Since that, the popular worship for the document has largely abated, not because the people have less faith in the organic unity and authority of the nation, but because they have come to

a semi-conscious apprehension of the fact that these rest on a far deeper foundation. Language was popularly used during the war, which was previously without parallel outside the Abolitionist camp; and the fine-spun distinctions by which legal interpreters sought "to stretch the old formula to cover the new fact" found no sort of general currency, because facts had become all at once more real than formulas.

Now one corollary of the law of self-preservation is this, that the people never forfeit the fruits of any great struggle through any submission to technicalities. When Col. Pride marched his soldiers to the door of the House of Commons on the 6th of December, 1648, it seemed as if no power in the land could prevent the restoration of Charles Stuart to the throne, and the re-establishment in another form of the spirit of Laud's *regime*. The supreme constitutional power of the land, that for the vindication of whose authority the war was begun, had declared their readiness to accept the King's terms; and this had been brought about by the blunders of the leaders of the Army in accepting the Self-denying Ordinance. But the true nation of England and its truest representatives, its soldiers, took the step which saved English liberty, although the step was a stride across a thousand formulas and conventions.

In all essential respects, the present situation is a parallel to that of 1649. Mr. Tilden has received the votes of those who desire to reverse the policy of the war, to weaken and decentralize the national government, to restore the system of State Rights, and to remand the Southern negro to a position of virtual slavery, both political and industrial. Against his election every northern state that heartily supported the war, including all of New York except her disloyal metropolis, and excluding with New York City her two suburbs on the East and the West, have deposited their votes. The line of division runs exactly as it did in 1862-4; and the South has any suffrage to cast in the matter through the blunder of her reconstruction, a blunder made in the vain hope that the negro would have the political stamina necessary to make him the political balance of his former masters. The vote of the Republican party is the vote of what was during the war and is still in every sense but the technical one, the American nation. It is the vote of the states which have decreed and accepted our new political status, and whose ideas are embodied in those great amendments,



which are the best clauses in the whole document. It is the vote of those, who, in every country under heaven except our own, and in our own if we had not been led and ruled by *doctrinaires*, would alone elect the President and the Congress for a long period to come. And that the foolish restrictions upon this their natural right,—the right of a victory whose real results have never been accepted by the defeated—will remain the permanent law of the land, is rendered improbable by all the historical experience of the civilized world.

This instinct it is, the conviction that the right and the power of the South and its allies are bare technicalities, which has united the great mass of the Republican party in supporting their leaders in contesting Mr. Tilden's election. They are fighting technicality with technicality, and they mean to fight it to the end. But let us not be misunderstood here; we are not speaking of definite plans for the future which have been formed either by the Republican party or its leaders. We are trying to discern and to describe the deeper currents of feeling which occupy the public mind, and which take shape in definite ideas and plans in the instant of a practical emergency. And such an emergency will have come when the Southern representatives and their Northern allies resist the inauguration of Mr. Hayes, if he be declared elected. Nor do we foresee any violent *coups d'état* or revolutions, for none such will be needed. No State that was in the Rebellion has any security for its status inside the Union, except a law of Congress which is as liable to repeal as any other law; and the Southern representatives cannot refuse to recognize the regularly-inaugurated President of the United States, without giving the North the opportunity to repeal those laws.

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THE fearful destruction of life by the burning of the Brooklyn theatre has caused a thrill of horror throughout the community, such as we have not experienced for many years. The loss of over three hundred lives, including that of an actor so well known and so widely esteemed as the younger Murdoch, the dreadful glimpses given us of the scenes of despair and death, the evidence of frightful mental and bodily suffering undergone by the victims, all conspire to prompt the demand for greater safeguards and more active precaution in connection with all our places of public resort. Most of our theatres seem to be little else than vast tinder-boxes,

and it seems quite possible that many of them, as in this instance, are all but unprovided with any means for the extinction of fire. And on the other hand, there seems to be no restraint, either of law or custom, to prevent the adoption of the most dangerous accumulation and arrangement of articles upon the stage. In this instance the ordinary resource of cutting away the burning "fly" and letting it fall on the stage would have been sufficient, had there not been erected on the stage itself an edifice of the most combustible materials, which at once spread the flames. A law to compel the Fire Insurance Companies doing business in the city to jointly insure all its places of amusement, and to vest in the agents of these Companies rights of inspection and regulation, would probably accomplish the end in view. But in the existing state of public opinion, between the recklessness of the public and the greediness of those who purvey for their amusement, no less efficacious method would be sufficient.

The clergy instead of insisting on this inference from the occurrence, take it as a ground for denouncing the theatre as a corrupting and dangerous institution, connecting this sad premise and these favorite conclusions by a logic more feminine than forcible. Some of them could not with any consistency speak of creating and enforcing safeguards for the protection of life in public places, since in defiance of the law and in violation of the pledges given to the Insurance Companies, they allow the aisles of their churches to be obstructed by chairs, whenever the audience overflows the pews. Now we cannot say what is the duty of any individual man as to attending such places, in view of the character of the theatre as it is. "Let every man be fully persuaded in his own mind," and act accordingly, as Paul advised the Christians of Philippi in a similar case. But we do say that the hostile attitude taken by the Church towards the theatre as an institution, instead of promoting the moral interests of society, does them a grievous injury. It injures the actors—not all of them having the moral stamina needed to render them virtuously insensible to a social proscription of this sort. It injures those who visit the theatre, by creating in their minds a needless conflict between the sense of rightful liberty and the sense of bounden duty. The moral sense is always corrupted when a made or artificial sin is held up by authoritative teachers as equally bad with a real transgression of the moral law.

The love of dramatic representations is an innocent liking, which is innate in the human mind, and not even to suit the Churches, will the Creator of man remake him. Especially "there is in the very substance of the" Anglo-Saxon "mind that which naturally predisposes us to sympathy with the drama, and this, though we are perhaps the most untheatrical of all people. The love of action, the impatience of abstraction, the equity which leads us to desire that every one may have a fair hearing, the reserve which had rather detect personal experience than have it announced—tendencies all easily perverted to evil, yet capable of the noblest cultivation—seem to explain the fact that writers of this kind should have flourished so greatly among us, and that scarcely any others should permanently interest us" (F. D. Maurice). The instinct even comes out in the "unco guid" themselves. No scheme of theology has ever been so popular with our severest Protestants as that of Cocceius, who threw it into the form of a divine drama of redemption; and dramatic preachers, such as the Welshman Christmas Evans, have always enjoyed the highest popularity. And no lecturer is so much a favorite with them as Mr. Gough, who is an actor *pur et simple*. The old Scotch Protestants wisely recognized this truth. They confessed that Sir David Lyndsey's dramas had prepared the way for John Knox's sermons; they made provision for the due regulation of the theatre, giving the Presbyteries a voice in the matter. And a Church Historian of those times tells us that a certain event occurred in John Knox's presence while he was seeing a play acted. It was from the Puritans that the present tradition of the churches has come down to us; but even the Puritans, when brought to face the practical question, did not go so far as to close the theatre. One was kept open in London all through Commonwealth times. And the great Puritan poet, besides giving a thoroughly dramatic cast and spirit to his two epics, has left us two of the finest dramatic pieces in the world's literature.

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THE eminent services rendered by Mr. John Welsh, as chairman of the Centennial Board of Finance, could not with propriety have failed to receive some recognition from his fellow-citizens. To have taken no action in the matter, would have been to do violence to feelings shared by all classes among us. It was at first proposed that the testimonial take some tangible shape, such as an appropriate piece of plate. But it was found that the endowment

of a chair in the University of Pennsylvania would better accord both with the amount of the subscriptions pledged or expected, and with the preferences of Mr. Welsh himself. The sum of fifty thousand dollars has already been secured, and will be expended, not in the erection of a new professorship, but in the endowment of one of those already in existence,—that of History and English Literature, we believe. This Professorship will, of course, hereafter bear Mr. Welsh's name, and the occasion of its endowment will be commemorated by a tablet in the College Chapel.

There is an eminent fitness in this method of expressing the regard felt for Mr. Welsh by his townsmen. He has been for a long time a Trustee of the University, and his devotion to its welfare has been the parallel of that which he exhibited in the Centennial Board of Finance. As it has already been announced in the *New York World*, and evidently upon official authority, we need not hesitate to say here that the revenues of the University are not at present equal to its expenses, and the responsibility of the annual deficit thus created falls, of course, upon Mr. Welsh and his associates in the Board of Trustees—men of the same spirit as himself. This endowment will by so much reduce the deficit. Now, the Board think it would be impossible to reduce the expenses of the University much below their present amount, without seriously impairing its efficiency. We agree, therefore, with some of the city papers in thinking that the amount of this Testimonial Fund might very properly be enlarged to a sum far beyond that already reached, and that not one but several chairs should receive an endowment at this time. The fifty thousand dollars was subscribed quietly and privately, without any appeal to the general public; and when its completion and its destination were announced, there were excited both approval and regret—regret that others besides its donors, or even the general public, had not been given the opportunity to contribute to it.

ART INDUSTRIES.<sup>1</sup>

IT IS with feelings of great pleasure that I appear before you this evening, for now I am in a country that I have long wished to visit. For years I have regarded you as pioneers in all mechanical progress, and as the most enterprising of commercial nations. As the inhabitants of a new country you have had great difficulties to surmount, yet these you have overcome one after the other by that indomitable energy which has led you already to take your place amongst the foremost nations of the world, and I cannot but think that the day is near at hand when you will be enabled to remove your import duties, and yet successfully compete with the various manufactures of the world.

The last thing that a new country can cultivate is art. You *must* till the soil, you *must* sow your crops, you *must* reap your harvests, you *must* rear your cattle, you *must* build dwellings which shall give you shelter from the weather, and all this must be done before you commence to consider art. The log hut comes before the fine architectural edifice, and many of your towns have passed during our generation from being a mere con-course of shanties to cities of palaces; thus you have done in a few years what it has taken many countries generations to achieve.

To me it appears that nothing could be more wise than your manner of celebrating your victory. You are not men of war, but are men of peace. You are not celebrating your conquest by destroying a civilization which you have so perfectly built up in one hundred years; but you are seeking further advancement in knowledge of what is noble and true. Your conduct echoes the motto which Longfellow has put into your mouths—*Excelsior*. You have commemorated your triumphs by an Exhibition, in which man peacefully and fairly competes with man for honor and glory; and that man who has shown himself to be most able to lead his fellows onward towards advancement and prosperity is your most worthy exhibitor.

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<sup>1</sup>The first of three lectures delivered in Philadelphia at the request of the *Pennsylvania Museum and School of Industrial Art*, by Christopher Dresser, Ph. D., F. L. S., F. E. B. S., etc., of London, author of "The Principles of Decorative Design," "Unity in Variety," etc. The other two lectures will follow in subsequent numbers.

It is not your Exhibition, however, from which I think you will derive your greatest permanent benefit, but from the museum and art schools which you are about so nobly to found, and which I am sure you will liberally endow; these will be lasting monuments to your glory, and monuments which will do more towards enabling you to compete successfully with foreign manufactures than anything that you have yet done. Up to the year 1851—a memorable year to us—we English were behind almost every nation of the world in knowledge of art as applied to industries; but, perceiving our shortcomings, our legislature extended our system of art teaching throughout the length and breadth of the country. It also granted a small sum of money with a view to the purchase of certain manufactured objects which it was desirable to place before our manufacturers for study, and these, it was arranged, should form the nucleus of a permanent museum. Our art schools and this museum have exerted a more and more powerful influence over the manufacturers, the designers, and the native buyers of our productions, and the result has been such as to cause the late Emperor of the French to say, after the International Exhibition of Paris, in 1867, that while the French had made little progress during the ten preceding years, the advancement of the English in art as applied to industries had been so rapid that England must be regarded as a dangerous rival. And your Professor Ware, of the Boston Institute of Technology, does us the honor of saying “at the Universal Exhibition of 1851 England found herself, by general consent, almost at the bottom of the list, among all the countries of the world, in respect to her art manufactures; only the United States, among the great nations, stood below her. The first result of this discovery was the establishment of schools of art in every large town. At the Paris Exhibition of 1867, England stood among the foremost, and in some branches of manufacture, distanced the most artistic nations.”

The fact of our advancement in knowledge of art as applied to industries is patent to the world, and between the year 1867 and the time of holding the Vienna Exhibition it was scarcely less rapid than it was during the preceding sixteen years. But what has been the cause of this strangely rapid advancement? Professor Ware not only gives us the fact, but he also shows the cause of our progress. “It was the schools of art, and the great collection of works of industrial art at the South Kensington Museum, that

accomplished this result;" and then follows the painful remark, "the United States still held her place at the foot of the column." I am sure that you will not be offended with anything that I may say, for if I make painful remarks it will be with the view of promoting your individual and national prosperity. I have pleasure in speaking to you as one true friend should speak to another; and this leads me to say that while for enterprise, energy, perseverance, and progress, you are foremost amongst the nations of the earth, you are yet, to a great extent, ignorant of the laws which govern the production of decorative compositions, and of the principles which should regulate the application of ornament to objects. But to me you appear to have most to learn respecting the harmonies and contrasts of color.

This I can truthfully say, however, that in my opinion you have all the qualities which are necessary to the formation of one of the greatest schools of ornament that the world has ever known. In what people has the faculty of invention been so conspicuous as it is in you? and all ornamental design results primarily from the exercise of this faculty. You have also vigor and power as national characteristics; and what is ornament without vigor? it is a dead and withered leaf in which the sap of life has ceased to flow. Since I came amidst you I have seen pieces of ornament which for energy and power surpass anything that I have before seen. There is a soda-fountain by the entrance to the Continental Hotel, in this city, on the back of which gold incised ornament is wrought: this ornament is most excellent. And surely in many of your buildings there is much decoration that is good, yet I cannot say that great faults do not also abound; but the edifices are often noble, and vigorous, and stately, and the shortcomings are those which are due to the smaller opportunities of study, which a new country necessarily affords, than a continent which has enjoyed a civilization of a thousand years.

Your quick perception of what is true, the readiness with which you apply principles when once perceived to be right, and the perseverance by which you triumph over difficulties, leads me to believe that before ten years have passed your industries will take a leading place for art excellence amidst the nations of the world. At present what is good in ornament appears to spring rather from your architects than from your designers; yet your designers must also become men of education if your art indus-

tries are to prosper. But it is this ignorance which you are now about to dispel. You are founding in this great city a museum of art objects, and schools for art instruction, which, if properly organized and conducted, will do more for you than you can even imagine or hope; and I mistake the American character if it does not as quickly embrace the opportunities which these schools and this museum will afford of gaining art knowledge, as we embraced the opportunity afforded by ours, and if it does not apply the knowledge gained with that energy which is so characteristic of the nation.

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I desire to address you upon art industries. And first let me say to you that art has a money value, and that in some cases it may lend a value to an object greater than that of the material of which the object consists, even when the object is formed of priceless matter, as rare marbles, scarce woods, or silver or gold.

I remember a lecturer on art at the old Central School of Design in London showing three marmalade-pots, in each of which a pound of the best Dundee marmalade was sold. The first was a plain jar, in which one pound of the best marmalade was sold for 14 cents; in the next, which had a thistle embossed on the side, but the jar was still white, one pound of the same marmalade was sold for 18 cents; while in the third, which was decorated with a colored spray of the orange, a pound of the same marmalade was sold for 24 cents. Yet neither jar cost two cents more than the plain one. Art then has a commercial, or money, value.

Let me now direct your attention to a brief consideration of decorative forms, with the view of showing you that there is something in ornament beyond mere prettiness or external beauty, and that ornament may express the knowledge and refinement of its producer, or his coarseness, ignorance and vulgarity. Few great civilizations have ever arisen upon this earth without a national style of ornament accompanying them. The ancient Egyptians raised a vast civilization, but with it sprung up a peculiar style of ornament. Decorative figures were drawn on temple and palace, on cups and on urns, on dresses and on tombs, but all of these ornaments bore a sort of resemblance to one another—a resemblance which enables us at this distant time to say, upon seeing any one of them, that it was produced by the ancient Egyptians.

The civilization of ancient Greece was as marked as that of



Egypt, and its ornaments were as characteristic; but they again bear to each other a resemblance by which we perceive, however they may be used, or however they may be met with, that they are of Greek origin.

With the increasing power of Rome, characteristic ornaments had birth, and certain decorations became associated with the great Roman empire. In like manner the mighty civilizations of China, India, Persia, Arabia, and Japan, each produced ornaments which became typical of particular peoples and particular ages.

To those who have never given thought to this subject, it may appear strange that an educated ornamentist can say to what age and to what people any particular ornament, if of national style, owes its origin; but a moment's reflection will show that in determining the age and nationality of an ornament, he is only applying a degree of perception that is common to us all. You can see the difference between various kinds of writing, and if you receive twelve letters from twelve friends, you name the writer of each while viewing the address on the envelope. Those of you who are in the habit of receiving letters from the various European countries will also have perceived national differences of style in writing—thus you say that one letter is from France, one is from Germany, one is from Italy, and so on. In order to discover the nation from which the letter came, you do not feel it necessary that you read it. Thus no errors of idiom aid you, nor any imperfections of spelling; and while you mentally feel the differences, you could scarcely say what enables you to refer the production of each letter to a particular country. It is so in detecting styles of ornament. While it is difficult in some cases to explain wherein the ornaments of one nation differ from those of another, there is yet a something which the cultivated eye detects as peculiar to the ornaments of each particular age and of each particular people. In some cases, however, dissimilarities are so obvious that all can at once perceive them.

Having seen that a particular development of decorative art, or of ornamental forms, accompanied each great civilization in its development, glory and decay, we must notice that the ornaments produced by each people were not simply meaningless forms, resulting from the caprices of their producers, but were forms expressive of national peculiarities of character, of religious faith, of wants and of feelings, as well as of individual idiosyncracies; and

that the form which expression took was to an extent governed by the material at command for the formation of the ornaments.

With the view of showing that good ornament is not merely a combination of forms and of colors arranged simply to make the object on which they are wrought pretty, and with the hope of proving the popular notion that ornaments have no higher purpose than that of lending beauty to whatever they invest, to be a grievous error, I will briefly allude to certain characteristics and qualities of a few of the national styles of ornament which have accompanied the greatest civilizations that the world has known; and I beg of you to notice the manner in which these ornaments reveal the knowledge or ignorance of the peoples who created them; how they often manifest high culture and great learning on the part of those who originated them, and how they have frequently been the means whereby moral teaching has been achieved.

Going back to the earliest historic ornament of which the date is authenticated—the Egyptian,—we notice that it is largely formed of two plants—the lotus or blue water-lily (*nymphaea cerulca*) and the papyrus or paper-plant (*papyrus antiquorum*); both being the subject of a rigid and characteristic conventional treatment. The drawing of these plants, when used in ornament, was severe, and the flowers, or heads, were chosen for delineation when just bursting from the bud; or, in other words, at a moment when the manifestation of the power of vegetable life is greatest. The severity of the drawing in every delineation of these plants is an expression of the Egyptian character, and shows the manner in which mental “feeling” is expressed in form. I will ask you to notice—as a special proof that the ornaments of past ages have not been mere meaningless forms—that national characteristics, as well as individual feeling, have always been impressed upon ornaments; and that an ornament has been as truly a manifestation of special thought as written words. Indeed, when the mass of people composing any great nation have been unlettered, ornaments have taken the place of letters, and teaching has been achieved by the agency of decorative forms.

The severity of the drawing of the lotus and of the papyrus by the Egyptians is an expression, I have said, of the Egyptian character. The Egyptians were great slave-owners; they were hard task-masters, and the austerity of character which their words and

acts revealed found expression also in their decorative forms. It was the priests who designed the ornaments, and it was the priests who oppressed the people. But in all Egyptian drawing stateliness and dignity are mingled with the severity, for the Egyptians were a noble people—noble among nations, noble in the greatness of their power, noble in the perfection of their arts. The character of a people, then, finds expression in national ornaments.

Egyptian houses were first formed of bundles of papyrus. These bundles placed together vertically constituted the walls; and a thatch of the same plant, or of leaves, formed the roof. The finest decorated columns of Egypt show the origin of an Egyptian house as fully and as clearly as if the record was in words; for they consist of well-arranged bundles of the Nile bulrush—the papyrus—with withes and a broad band of coarse linen, on which hieroglyphics were painted, tied around. A decorated column in this instance reveals to us the origin of a national style of architecture, and the character—as the severity and the dignity—of the people by whom the column was created.

Just in proportion as a work is a manifestation of mind, of knowledge, of refinement, of power, or of wisdom, so is it valuable, provided that the manifestation be of good qualities. The manifestation of uncultivated mind, of perverted knowledge, or of misapplied power, would not be pleasant; but if the manifestation is of cultivated mind, of knowledge such as is desirable, of power rightly directed, then the greater the manifestation of these qualities made by a work the more excellent it is. I have said that when a people has been illiterate, decorative forms have frequently been employed with the view of teaching moral and religious lessons. Egyptian ornaments will enable me to illustrate my statement. Over every door and over every window-opening in Egypt was placed a singular ornament consisting of a ball, two asps, and two extended wings. The drawing of this symbol is very grand; the wings, which are widely and firmly extended, represented the protection which the kingdom of Egypt afforded; the asps expressed dominion, and the ball the sun, or the source of life. The priests taught, and the people believed, that no evil spirit could enter where this symbol was. And we are told in the scriptures that the blood of the lamb slain at the passover was ordered to be placed on the lintel, the very place occupied by this winged globe—the symbol of protection.

The majority of Egyptian ornaments are symbols, that is, they express ideas which are not apparent to those uninstructed in their significance. One man may look at Arabic characters and receive from them information; but to those unacquainted with the language they are mere forms, and are not the symbols of thought. All symbols, whether they be letters, or figures, or decorative forms, are only intelligible to those who have been informed of their meaning. Egyptian ornament consists largely of symbolic forms; but having called attention to this fact, I must pass on.

Greek ornament followed the Egyptian, having arisen with a fresh civilization. But the Greeks, being more cultivated as a people than the Egyptians, dispensed with symbolism, and made the expression of beauty, refinement and knowledge their highest aim. The Greek strove to form in his mind a perfectly beautiful ideal model; and then to realize in matter his perfect mental conception, in such a manner as should most fully reveal his knowledge. When we view Greek ornament, we must consider to what extent beauty, refinement, vigor and knowledge are revealed by it, and in proportion as it manifests these qualities so is it excellent. But mark: the revelation of knowledge—knowledge of natural laws, knowledge of the principles of beauty, knowledge of the greatest subtleties of refinement—knowledge of the most welcome modes of expressing vigor, made by some of their ornaments, is almost greater than words can express.

Greek ornament is not symbolic, yet in a sense its every shape is a symbol of the refinement and knowledge of the age which called it forth. The Greeks were feelingly alive to the laws, forces and gifts of nature, and "conceiving God in the image of man, they made men like gods." And thus believing that man could attain to the attributes of a god by culture, refinement and heroism, they devoted themselves to the highest intellectual improvement, and during successive generations sought more and more to embody their utmost subtleties of refinement in the few ornaments they created.

I cannot call your attention to all the great national styles of decoration, with the view of showing you that ornamental forms have been a means whereby thought and sentiment have been expressed. Passing then without notice the gorgeous and characteristic combinations of shapes and of colors which arose with the civilization of India, Formosa, China and Japan, I may say in rela-

tion to that marvelous system of enrichment which sprang up in Arabia—a country to which we owe so much—that their sumptuous wall decorations were little more than copies in stone of the tissues which the Arabs wove while yet leading a nomadic life.

Arabian ornament gave rise to the Moorish—or Alhambraic—and the Turkish styles; and these we may regard as bearing the same relation to the Arabian that a dialect does to a language. These three styles, or this one style with its dialects, were to an extent an outgrowth of the Mohammedan religion; hence to the rights, usages, and injunctions of the Koran we have to look in order that we may fully understand certain of their qualities. But to the most casual observer these styles of ornament present a perfect mystery of beauty. In some of their compositions there is a breaking up of the decorated surface into parts such as bear to one another a proportional relation of the most subtle order, there is an intricacy of plot in the design which is of the most ingenious character, a simplicity of detail which causes us to marvel when we contemplate the art-effects achieved with such simple forms, and a general *harmony* of all the parts, both in form and color, so that together they form one concordant whole which is perfectly charming. Thus the cultivated intellect in this case, as well as in that of the Greeks, impressed itself upon time through the instrumentality of beautiful forms.

Just as a style of ornament lent itself to any particular faith, or form of worship, so it became modified in character; thus we have a Buddhistic modification, a Brahminic modification, and an Islamic modification of ornament. Climate also influences style; and as I have before said, the material at command for the formation of ornaments necessarily governs, to an extent, their aspect.

I need not dwell upon what is generally known as Christian art, for the manner in which decorative forms have expressed Christian ideas is probably more or less familiar to all. I may recall, however, that much that has been regarded as of Christian origin has arisen in paganism. The nimbus around the head of our Lord and of saints is common to the gods of India, Persia, and Japan; and is a legacy of fire-worship grafted upon Christian art. And so are other Christian symbols; but we must ever remember that Christian art arose in Byzantium—now Constantino-ple—and at first consisted of mere Pagan forms, but slightly altered. In order that we may fully understand an art, we must know its history.

Before dismissing Christian art, I may just remind you of a strange form which it took under the Celts during the seventh, eighth, and ninth centuries of our era. Worked at by monks in the seclusion of the monastery, ornaments of characteristic style were produced, such as reveal an amount of loving, pains-taking labor as do few of the works of any past age.

I have reviewed briefly, too briefly I fear to have done more than open lines of thought, a few of the leading styles of ornament—styles which have arisen with great civilizations which they have accompanied through their development, glory, and decay—with the view of showing that ornaments are not mere meaningless forms, but are the exponents of faiths, of feelings, and of the culture of the peoples who produced them.

The Egyptian is most stately, and is that style which best hands down historical facts. It tells us of the primitive dwellings which gave it birth; it speaks of the severity of the rulers and yet of their nobleness; and in many ways reveals to us the greatness of the empire which called it forth. The Greek is most refined in its individual forms, and manifests the greatest amount of knowledge of natural laws. The Arabian is intricately beautiful, giving soft mingled effects, and is a noble expression of the feelings of the Arab's mind, and of the Arab's faith. The Celtic manifests such conscientious labor as only results from religious convictions, and the thirteenth century Gothic is unrivaled in elevating tendencies; while the Roman, the Pompeian, and the Renaissance, are alike false, debased, and impure, and speak only of lust, of conquest and of pride. These are the general expressions of the various styles, but the individual ornaments of all ages reveal the character of the men who created them, as well as the peculiarities of national style. Leaving the past, however, let us come to the present, and observe the extent to which various nations now succeed in expressing ideas by the agency of decorative forms.

In the Japanese court of the Vienna Exhibition was the robe of a prince or daimio, and in my judgment it was the finest dress that I have ever seen. The pattern of this rare garment consisted of many-colored flowers and butterflies, arranged irregularly upon a cloth-of-gold ground. The flowers were not foreshortened or shaded, but were treated as flat ornaments, which are befitting decorations of a flat surface. The butterflies were also flatly treated, and were mingled with the flowers in a most harmonious manner.

It is not, however, simply the color harmony to which I wish to call your attention, nor the beauty of the drawing, nor the consistent treatment of the flowers and flies, but to the thought realized in the work—*Summer!*

No one could look upon this beautiful dress without *feeling* the influence of the sunny ground, of the profusion of richly-colored bloom, of the gay and glorious insects which appeared to hover over the flowers; and the influence makes us feel that it is summer while we gaze. The very insects appeared to be sunning themselves, the blossoms appeared radiant with light; and the whole aspect was that of a bed of flowers where a thousand blooms vied with beautiful flies, each striving to emit the largest share of radiance, and glory, and light. Yet all this is achieved without the violation of the most rigid art principles. But by the employment of truthful means more can always be achieved than by resorting to falsehood; no merely imitative treatment of flowers could possibly have conveyed the thought of summer so well as this conventional treatment did; and here we are pleased with the consistency of the means employed, as the surface is befittingly decorated, while if the rendering had been naturalistic, we should have been offended by inappropriateness.

Everywhere in Japanese work we have the stork occurring. I have a gift-bowl on the back of which is delineated in a most artistic manner a storm at sea, with storks driven in the wind. The crested waves are rolling and breaking, and the clouds come near to the waters; but there is more than a mere storm portrayed here, for the stork is, with the Japanese, the emblem of long life, and the wish that life may be long, although storms and troubles occur, is expressed in this drawing of birds and of storm. In passing we may remark that bowls which are intended for gifts in Japan often have a pleasant wish, or symbol, at the bottom, which, through its position, is discovered by the receiver with surprise, and hence with special pleasure.

On a bowl from China which was shown in the Vienna Exhibition were three ornamental panels, situated amidst intricate and characteristic ornament. In one of these panels was a conventionally-treated spray of the apricot, in another was the sacred bean, and in the third was the chrysanthemum. These sprays not only formed a pleasant contrast with the purely ideal ornaments, but conveyed to the minds of the people for whom the work was made a

poetic thought—the apricot typified spring; the sacred bean, summer; and the chrysanthemum, autumn: and, besides this, the apricot is to them the emblem of beauty; the bean is sacred—Buddha sits in the flower; and the chrysanthemum is imperial. The vase was beautiful, its ornamentation was in every way consistent, and it conveyed to the mind the thought of spring and of beauty—or of beautiful spring—of summer and of God.

Let us now turn from Japan and China to Persia, and there consider the common Mohammedan rugs or mats. Summarized, the characters of the majority of the small Persian mats are these: their patterns are simple, the proportion which one part of the design bears to the other is beautiful, the general treatment of the ornament is just and true, the decorative forms are refined, the parts of the ornament are combined in a simple, yet pleasant manner, and the colors are harmoniously blended. Mark all the beauty which this simple work presents; the beauty of composition, the refined expression of ornament, and the perfection of harmony between the parts of the work—a harmony which causes this little carpet to appeal to the eye as a burst of soft concordant sounds does to the ear. When I look at such a work, I feel its full, rich, and harmonious utterances, and I am not dead to the more subdued, yet not less beautiful, secondary and tertiary harmonies of the secondary and tertiary parts, for these are as the varying notes of the rippling brook mingling with the deeper music of harmonious voices. And to what is all this harmony, or rather, concord of harmonies, dedicated? To the service of the Mohammedan's god; for the pattern of this prayer-carpet, for such it is, points in one direction; and the devotee sets the point towards Mecca, the sacred city of his spiritual king. Here again we have decorative art in association with religion.

We now perceive that one great beauty of oriental ornament is its poetical significance. What is art without poetry? An ornamental form is as a mere solitary word of a language; a line is as a letter of an alphabet; what are the letters unless they make words? what are words unless they make sentences? and what are sentences unless they convey ideas? Ornamental forms should make compositions which speak of the knowledge of the draughtsman, of his perception of refinement, of his power over color, and of the education, wants, and tastes of the people for whom they are created. This they should always do, but they may do more. They



may remind us of the dell where the blue-bells grow; they may tell of the fading year; they may call up thoughts of joy and of spring, of evening and of shade, of duties to be performed, of pleasures to be enjoyed, of rights imposed, or of ten thousand welcome ideas or emotions of the soul; and all this they may do without violating the simplest canons of art.

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We have this evening devoted ourselves to the consideration of decorative forms as a means of expressing knowledge and refined mental conceptions. I have already shown you that ornamental shapes have in times past revealed, and that they still do reveal, the knowledge of those by whom they were called into existence, and that they are capable of expressing poetic thought; but there is yet another point from which our subject may be viewed.

In the design of many art works we have first to construct and then to decorate the object. This has to be done when we create a tea-pot, a jug, a coal-box, a chair, a wine-glass, or anything that has a cubical form. In all such cases we have to consider the formation of the work, and then its beautification; but the consideration of structure must precede that of beauty. If an object which is intended to meet utilitarian ends is, when formed, beautiful, the structuralist says, so much the better; but if it is verily ugly he cares not, for he is a utilitarian only. The true ornamentist is, at the same time, a utilitarian and an artist; he constructs, but the laws of beauty govern all his creations. He will not give to any object a shape which is not at the same time both useful and beautiful; and the more skilful the ornamentist, the more useful and the more beautiful will his productions be.

All that is added to what is useful with the view of rendering the object beautiful is of decorative character, and every shape formed in accordance with the laws of beauty is an ornamental shape. I ask you to consider with me ornamental shapes—as the shapes of such tea-pots, jugs, coal-boxes, etc., as have been produced with the intention of being beautiful as well as useful, as capable of expressing the knowledge and refinement of their producers.

Let me describe to you a Turkish water-vessel, such as I procured in the Vienna Exhibition. Its body is somewhat egg-shaped, and downwards it is continued as a tapering foot, rough with perforations; upwards it terminates with three small necks,

surmounted by a funnel-shaped member. From the upper part of the egg-shaped body a small spout protrudes in an upward direction, and opposite to the spout is a handle which is also small; in the funnel-shaped orifice there is a piece of clay which is perforated with small holes, and the whole vessel is porous.

If a water-vessel is properly constructed, we can discern from it much of the character of the people who made it, and of the country whence it came; but without going into this matter, let us consider the Turkish water-vessel which I have just described.

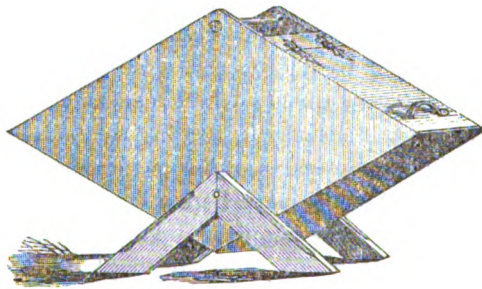
When water is to be collected this vessel is so placed in a pond or river, that it is immersed to a height anything less than the orifice of the spout. The rough and elongated foot is stuck in the mud at the bottom, and thus the vessel is prevented from falling and from altering its position. The porosity of the body permits the water to percolate through it, hence it is at the same time a water-vessel and a filter; the funnel-shaped neck allows water, that has been poured from the vessel and is not required for present use, to return to it; the clay grating prevents the ingress of insects; and the very quality which causes it to act as a filter when collecting water assists in keeping the water cool when the vessel is in the house, by encouraging evaporation.

To me it appears that we have here a vessel of the utmost utilitarian value, yet it is also beautiful. While beautiful and picturesque, it is so thoroughly and obviously adapted to the performance of a certain work, that from merely seeing it for a short time we could safely assert that water is bad in Turkey where such vessels are used, and that it is collected from ponds and rivers in the manner that I have described.

Time will not permit my giving further illustrations, but the example just given is sufficient to show that knowledge and refinement may be expressed in an object of daily use. The designer of this Turkish water-vessel was obviously a man of knowledge and of refined culture. The object is eminently useful; hence the creator of the work had very exact knowledge of the wants which his vessel was to meet, and he had also an amount of skill sufficient to enable him very perfectly to meet the various requirements, and he was so fully an artist that his utilitarian productions were of beautiful shape.

With the view of utilizing the lesson just learned, and of showing how we should proceed when we have a common object to

construct, let us design a coal-box. But in doing so we must divest our minds of what we usually see around us; for some of the coal-boxes with which we are familiar are formed of iron, some of zinc, some of wood. Some, while formed of iron, are yet so painted as to resemble wood in appearance. Some are ornamented with photographs, some with engravings, and some with bad ornament; but, with the exception of a few of the wooden coal-boxes, all are bad, while many violate every principle of both utility and beauty. A coal-box should be so formed that the shovel with which the coal is to be removed from it should find resistance at a point easily reached, and the coal should always be found at this point; the box should stand securely, and be capable of being carried with as much ease as possible. Also, the material of which it is formed should be suitable; and it should be used with economy, and in the most simple and befitting manner.



To me the coal-box here sketched meets the case. It is formed of wood, which is an appropriate material, as coals do not make a great noise when placed in or taken from a vessel formed of this substance; the shovel meets with resistance at the lower angle, and here the coals are always found, however few they be. The box stands securely and can be carried easily, and the wood is used in the most simple manner and with the utmost economy.

If we would but take every object that we employ in daily life, singly, and consider the wants that it is intended to meet, the material at our command for its formation, and the simplest, most natural and most economical method of using the material, we should soon arrive at an improved class of domestic utensils.

Having achieved the production of what is useful, let us seek also to realize beauty. A few chamfers, a little carving, or a small amount of painted ornament, is all that is necessary in order that

our coal-box become an object of beauty as well as of usefulness; indeed, a mere crest on the lid, or a pair of well-hammered hinges, will suffice for the ornamentation of such a work.

I must now dismiss this part of my subject with these brief considerations; but in doing so I ask you—the buyers of common objects—to join me in considering the utility and beauty of whatever you purchase; and I earnestly beseech you, as ladies and gentlemen desirous of national advancement, to bestow your patronage on what is both useful and beautiful.

Do we not now see that the knowledge or ignorance, refinement or coarseness, of the creator of our object is revealed in his every work? If he draws an ornament, that drawing will reveal his character and his learning; if he designs a kettle, the extent of his knowledge of the requirements to be met, and of his ability to construct an object which shall meet the requirements, is manifested. We cannot in any way express a knowledge which we do not possess. Yet how is it with us generally? Structurally, nine-tenths of our chairs, tables and couches are wrong, for they are formed upon principles which are absurd when wood is the material of which they are made; the wood is cut across the grain, hence the maximum amount of weakness is obtained with the greatest expenditure of material. We hang our curtains upon a pole, or rod, which is necessary in order to their support, and then we hide the rod with absurd valances, which are alike without utility and beauty. We have one set of fire-irons for show and another for use, as though fire-irons were ornaments merely. Why not have knives and forks for use and knives and forks to look at? Why not have seats to sit in and seats for show? (But I fear that some *do* have these show seats.) Why not have books to read and books for ornament? Absurdities such as these must be done away with, and utility and beauty must be characteristic of every object.

Our decorations are no better than the forms of our vessels, for they also serve to reveal the ignorance and coarseness of their producers. A room is to be furnished, but first it must be decorated. The ceiling is made white, because white looks clean; the walls are painted so that they may be washed, or are papered as paper is easily renewable. If paper is decided upon, a pretty pattern is selected; and then a carpet is bought, and if the paper is green the carpet must be green, or, at least, contain a large amount of this cheerful color; and the same rule holds good for window hangings

and chair covers. The wood of the furniture must be walnut, if that wood is in fashion; and the fire-irons and fender must be pretty and bright, as if intended to reflect distorted images of the visitors. A nice white wool hearth-rug completes the room, and the occupant is happy.

This is the way the majority of our rooms are furnished, and yet the grossest ignorance of the most rudimentary principles of art is revealed by such a procedure. No room can ever be satisfactory from an art point of view if its ceiling is white. Harmony consists in the combination of pleasant contrasts; glitter is destructive to the sense of repose; and repose is an essential art quality. In this method of furnishing, the white ceiling destroys unity of effect; the sameness of color presented by walls, carpet, and hangings is offensively monotonous; the destruction of repose resulting from the glitter of the fender and the whiteness of the hearth-rug accords with the excitement of a beer-house, but is altogether opposed to refinement and good taste. And into such a method of furnishing, the thought, even, of the ornaments speaking to us of the knowledge of their producers, of their calling up pleasurable thoughts and welcome ideas, or of their giving a new charm to the landscape which we view from the window, never enters. Those who furnish thus ignorantly lose pleasures, and a source of continual refinement, greater than I can express. But you are not altogether to blame for this state of things, lamentable as it is; but rather the ornamentists of your country, whose ignorance is such that its revelation in their works makes all that they produce offensive rather than welcome. We have *long* ceased to look for, or expect to find, a revelation of knowledge and of beautiful thought in patterns; yet we all feel the beauty of the rainbow where colors are harmoniously combined, and we all revel in the glories of the western sky when radiant with sunny hues. Who now thinks of seeking an expression of poetic thought and of refinement and knowledge in the pattern of a carpet, or the paper of a wall? yet no pattern, however simple, should fail to reveal the knowledge and refinement of its producer.

But how can we expect the uneducated men who constitute the chief portion, and indeed almost the whole, of our designers of ornaments, to produce noble works? Uneducated as youths, untraveled as men, without the means of seeing great art works or of procuring good illustrated books, which are always expensive,

how can they possibly produce what is ennobling, elevating, and exalting?

The education of an ornamentist should be of the highest and most refining character; he should be a trained scholar, a gentleman and a poet; and yet, also, a utilitarian, having scientific knowledge. And it is this which your museum and art schools will accomplish. Under the roof of your Centennial building he will be taught to draw, and will be instructed in all that may aid him in serving your manufactures; and in your museum he will see illustrations of the principles that he learns applied to objects of utility. If your art manufactures are to prosper, if the fabrics which you weave and the objects which you make are to satisfy the educated—which they must do, if you desire to introduce them to the markets of the world—you *must* apply to them an ennobling art.

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#### PAUPERISM AND ITS ALLIED OFFENSES.

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HOWEVER closely we may apply statistical method to the affairs of life, it is difficult to give it human interest, and especially is this true when human frailty and passion are the subjects of study. Shift its details as we may, yet we fail to reflect light beneath the surface, or render visible a single human motive. But we may go further, and create out of the tabulated acts of life absolute error, which is infinitely worse than failure, and which, like Mrs. Shelley's weird creation of Frankenstein, may lead beyond the bounds of human sympathy and action. Statistics which deal with human acts alone, cannot be interpreted by their own light; but the varying phases of physical and mental life, the potent influence of environment, must each be given its due value. Thus to say that pauperism exists in a certain given ratio to the tax-paying population, is without meaning except to the taxpayer. The radical, physical and mental differences which exist between the householder and the pauper, the moral atmosphere that develops one and retards the growth of the other, are not in the least rendered clear by statistical knowledge. The statistical method of study has been laboriously followed for many years, yet

it is within a very recent period that the intimate relations existing between the perpetrator of the minor degrees of crime against property, the pauper and the habitual violator of the normal sexual relations, first were understood; and this knowledge was attained not by means of social statistics, but by a study of the laws of heredity. The tabulated array of social facts may be translated into other language than a mere numerical statement by viewing it in relation to the physiological and mental conditions of men. In these conditions may be found the laws in obedience to which the components of the social fabric are defined in groups.

Pauperism, then, and its allied phases of crime, are not accidental circumstances in social organization. These offenses are the outcome of seemingly fixed laws, and the sequence of antecedent conditions, near or remote. Indeed, we must conceive that the evolution of society, both material and intellectual, is the result of forces acting uniformly and resulting in a continuous increment of growth; but, I believe we must also conceive that the same forces which tend to evolution in one direction tend to degeneracy in the opposite, just as the circumstances that favor the growth of some widely-branching oak enable it to over-shadow and thus retard the development of a younger comrade; or the same causes that result in a high barometer in one region produce a corresponding fall at another point. This may be corroborated to a certain extent by observing the action of some of the artificial laws which society enacts to favor its development. A protective tariff for instance, that favors the increase of some particular industry in one country must react unfavorably upon the same industry in another country. The laws by means of which society endeavors to protect itself from the pauper, favors rather than retards the growth of this social parasite. It is therefore more in harmony with what we know of the laws of human development to suppose that the pauper is himself the result of these laws, rather than that he is the outgrowth of special forces which tend to this retrograde condition.

The popular idea of a pauper is that of a man who *will* not work; and in law this popular notion is given practical force by making vagrancy a misdemeanor. But physically and mentally the pauper is one who *cannot* work; whose energies are insufficient to keep him up to the level of the average man, and who has no surplus vitality to expend in productive labor. Regarding the

ability of a man to provide for his natural wants as an evidence of a normal mental and physical life, an inherent deficiency in this ability is equally an evidence of abnormality. The typical pauper is, therefore, a diseased man. We can consider him in no other light and assign him his place as a fixed fact rather than as an accident in social order. If we analyze his character closely, every trait shows that in him we are dealing with an abnormal mind and body.

This becomes yet clearer when we observe that the different races of men and the different phases of social life produce different types of pauperism. Beginning at the lowest level of society, we see that pauperism disappears in the mass. The normal average is so low that it cannot be depressed and life sustained. From this point to the highest stage of social evolution the pauper, growing less and less able to keep himself upon the surface of society as a producer, conforms more closely to the type of his order. Tracing him through the descending phases of social development, he may be observed partaking of his social environment. We may therefore conceive it possible that a pauper who is the outgrowth of our own civilization may correspond to the self-sustaining average existing among the semi-barbarous, while one who is unable to exist higher than the level of pauperism in the latter community, may disappear as a pauper in the average mass of a savage tribe. Pauperism appears therefore as a relative quality; its force as a negative quantity increasing as the area of social activity enlarges.

We must, however, in this analysis, limit the term pauper. Its common applications include every one who requires support at the public expense. But many who were at one time producers may become broken down by bodily disease, or may be used up after a life-time of honorable toil. These are not in a true sense of the word "paupers;" they by toil have purchased the annuity of the poor, and have a right in old age, or in broken health, to demand of society food and shelter for the few years left to them. Cases such as these are inseparable from a high state of social tension. Society cannot exist without attrition in its complicated machinery, and social, like physical, hygiene cannot be preserved except by the elimination of used-up material. The honorable poor drop into the condition of public dependents as the *débris* of productive labors; while the ideal pauper is the rejected material, the refuse, unfit to be assimilated by society in its productive movements.



Now the ideal pauper exists by a sort of divine right. Of all the various normal and abnormal, physical and mental conditions which may be transmitted by entailment, pauperism stands pre-eminent. As a moral disease it exceeds in the potency of its hereditary tendency all the more marked physical diseases. Of 615 pauper children in the various county almshouses in the state of New York in 1874, 5 per cent had pauper grandfathers, 7 per cent had grandmothers in the same condition, while of the fathers 17, and of the mothers 71 per cent were paupers.<sup>1</sup>

Men alone furnish the peculiar combination of depressed mental and physical energies necessary to constitute the ideal pauper. We may explain this in a general way by the great excess of physical energy and its accompanying mental conditions of man, as compared with woman, which are demanded by his coarse and heavy form of labor; while the other sex possessing the same radical errors are either able to maintain themselves by an allied offense in harmony with their sexual organism, or by marriage are partially, at least, placed beyond the requirements of self-support. But this view does not embrace an explanation of the entire phenomenon. The predominance of the male is a marked feature of alms-house population in childhood. Of 615 children in the almshouses of the State of New York, 58 per cent are males.<sup>2</sup> The number of women to men for the year 1871, is as 100 is to 110 in the alms-houses of the same State. One of the conclusions Mr. Dugdale arrives at is, "that pauperism follows men more frequently than women,"<sup>3</sup> and for which I know of no explanation except that given above, but this is supplemented by the conclusion also arrived at by the same author that the "intermarried branches show a preponderance of pauperism" and "the illegitimate branches produce a preponderance of crime." Mr. Dugdale's conclusion, based upon 1200 cases more carefully analyzed than any others in the study of the natural history of crime, are very valuable; but it needs long-continued and minute physiological study to explain them. Omitting some which involve a partial repetition, they are as follows:

"The different degrees of adult pauperism, in the main, are indications of waning vitality," and "tend to terminate in extinction."

<sup>1</sup> "Pauper and Destitute Children," in *Eighth Annual Report State Board of Charities*. Albany, 1875.

<sup>2</sup> State Board of Charities Report, 1875, p. 246.

<sup>3</sup> Loc. cit. p. 162.

"The diseases which enter most largely in the production of pauperism are the result of sexual licentiousness."

"Pauperism in adult age, especially in the meridian of life, indicates a hereditary tendency."

"The youngest child has a tendency to become the pauper of the family."<sup>4</sup>

It is by tracing the relations of pauperism to its allied social errors that we gain an insight into the nature of those links which bind together the different strata of social life, and reveals the fact that forces which seem to be exerted counter to each other spring from a common centre, diverge and yet produce a common result either for good or evil. We may gain a knowledge of social health by studying social disease. Physiology would to-day have many unexplored places, were it not for the aid given the scalpel and the vivisector by disease. Evidence exists that comes upon us with nearly the force of a revelation, that vital forces and functions which express the sum of life in the individual find an almost infinite imitation in the forces and actions which express the sum of the social fabric—just as the movements of one system of planets seem endlessly repeated through the starry infinity of heaven. We look upon pauperism, vagrancy and prostitution as evils, but we seem driven to the conclusion that they are evils in the sense that the perversion of a natural law or function in physical life is an evil. Evil as any of these errors may be, yet viewed in this light we perceive in them a beautiful harmony; that pauperism is a process of social excretion, a rejection of effete material, a force existing in society for the extinction of the unfit in order to permit the survival of the fittest; that vagrancy is but one stage of the process; that the sexual crime of women is a perversion of a natural function, the tendency to which finds its origin in the radical perversion of the normal energies which serve to keep the individual at an average level in active life, and that this perversion underlies all these classes of crime.

It was in the relation of the social evil to pauperism that Mr. R. L. Dugdale first caught a glimpse of his law of criminal analogues.<sup>5</sup> As Mr. Dugdale formulates it, the professional unchastity of women is the analogue of pauperism and crime in the males of the same

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<sup>4</sup> *Loc. cit.*, p. 162.

<sup>5</sup> "Thirtieth Annual Report of the Prison Association of New York," p. 152.

family; but this is hardly true of the ideal pauper, who has sunk below the level of the energy necessary to crime. It is true that the thoroughly pauper stock may intermarry with blood of healthy vigor and the offspring possess sufficient of the *vis vitæ* to overcome the *vis inertia* of pauperism, and drift into crime as a resultant, as it were, of the two forces; yet the same conditions in the sisters, while it may not secure them against unchastity, must at least make them more the result of environment and less the passive tools of their innate mental and physical perversions. This matter of unchastity bears another near relation to pauperism. The number of illegitimate children is 63 *per cent.* of the total number of the children in the county alms-houses of the State of New York.<sup>6</sup> We can perceive from this the manner in which pauperism in all its shades of allied conditions is partly the result of tendencies that act "through a circle that ever returns to the self-same spot," and adds increment upon increment to forces which tend to extinction.

It only remains for us to trace this underlying essence of pauperism in one of its protean shapes—that of the sexual crime of women; and, while it seems in its more usual phases to be linked with conditions common to both sexes, yet here she exists in a criminal atmosphere of her own, with but a feeble contrast with the other sex. This contrast has no reference to equalities or degrees of crime as it exists in man; it relates rather to the motives and the moral tendencies of the sexes. In forming an estimate of the moral and intellectual qualities of men and women, this social crime of women brought in as evidence reveals the fact that such moral qualities as exist innately in the sexes, spring from a common point and maintain a nearly perfect parallelism through the period of sexual activity. From certain physical and mental conditions an almost constant proportion of men drift naturally into crimes against property; while from equivalent conditions an equally constant proportion of women drift into prostitution. These criminal tendencies have their origin in forces ceaselessly at work. Some of these forces are patent upon the surface of society, others are hidden and are known only by their results. In view of these known factors, it is safe to assert that this phase of crime in women is not the result of causes existing in the other sex. To explain this crime otherwise, is as difficult as the explanation of

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<sup>6</sup> "Extract Relating to Pauper and Destitute Children." *Eighth Annual Report of the State Board of Charities*, Table V. p. 90.

animate nature as a special creation for each genus and species of animal life.

The aggregate intellectual characteristic of a community is that of common sense, and the manner in which this subject has been touched upon from the pulpit and in the articles which at rare intervals have appeared in popular literature, has not been such as to inspire the respect of this aggregate sense. This subject has been unfortunately under the treatment of a class of men, unfitted by education and mode of life to deal with it. The results prove this. It is sentimentally called an evil, not a crime; it is treated as if it were exempt from those laws which operate upon crime in its relation to women. The only agent of reform brought to bear upon it is a moral one, to the neglect of all those physical forces which may so potently tend to this form of crime.

These moral reformers expect to evoke virtue in these fallen ones. They cannot believe that it must be called into existence *de novo*; that it must be an act of spontaneous generation—the genesis of a moral quality, as difficult surely as that of any atom of protoplasm which may assume its scarce defined existence under the gaze of the biologist. They cannot realize that in the scheme of nature human beings are created with no place for the moral attribute of virtue, and in whom, if it exists at all, it must be an artificial product. M. Prosper Despine calls it moral idiocy; it is the theological dogma of total depravity becoming a real presence in human organic life. It is doubtful if simple moral teachings and example can afford restraints sufficiently strong to arrest the natural career of this type of woman. She is like those media in optics that absorb light but emit no ray in return.

With this negative state of morality a high degree of education, of refinement and of esthetic feeling, is not incompatible. The glimpses we obtain of Greek civilization give us many examples in proof of this, and many who have figured brilliantly upon the stage of modern history have won and maintained their place by the absence of qualities that are prized higher than earthly honors by the majority of their sex. It would be a mistake to suppose that we find this type only in the lowest stratum of society. It is true that at this level in the social scale she is indigenous, but this is true only so far as certain grades of society furnish the habitat of certain types of moral and intellectual development. These grades are like geographical boundaries, across

• which the flora, native on one side, may flourish as exotics on the other. We must bear in mind that there are greater differences in the social grades than that furnished by moral contrasts. One of the most marked results of social training is in the power of self-restraint. This educated power of repression and control is greater than that of any organic emotion. The woman of this grade has therefore standards of excellence not based upon any code of morality, and to which morals are an accessory and not a principle.

We have advanced sufficiently far in this study to be able to appreciate the fact that moral forces are not alone concerned in the government of crime. By giving due value to this fact we are furnished the key to many of the conditions which surround this offense. The moralist may also find in this a consolation. Total depravity is not purely of mental origin, but it may be the expression of a physical condition—a shadow cast over the mental life by physical errors. Insanity was lifted out of the horrors of demonology, when a physical basis for mental diseases was recognized; chronic drunkenness found a place in human sympathy, and the aid of brotherly hands, when it was acknowledged to be in many cases the offspring of a physical fault; we have but to add one other to this list of miseries in order to bring all of the more potent causes of moral and physical degradation under the mantle of Charity.

In the natural history of this offense, it is interesting to observe the fact that among savage and semi-barbarous tribes only, does it assume undue importance as a crime. Among some people, who punish murder by a small fine, adultery is punishable by death. It is kept down, or nearly stamped out by the rude naturalism of the barbarous, and thrives best in the heat of civilization. In the vigorous culture of the Greeks, the *hetaerae* existed as the most characteristic feature. They lived as an inspiration in art, as a motive in literature, as an agent in politics, and as participants in the most solemn rites of religion. Our civilization has departed from this primal type. The beautiful is no longer clothed in a gross materialism, and has a broader existence as an abstract quality. In our artificiality we have multiplied greatly the ideal forms of the beautiful, and the worship of its human type has ceased to lend the gilding of refinement to this irrepressible crime. We therefore give to our *hetaerae* the toleration of obscurity, and are content that they exist, provided they remain under the surface of society—buried beneath the proprieties of life.

This crime, more than any other act growing out of human passions, seems to present phases of evolution. Its existence is a violation of a natural sexual law, that finds its normal expression in all the lower mammalia. By reason of his intellectuality, apparently, man is exposed to the ceaseless operation of passions, which in the lower animals have their periods of activity and of rest. Analogy renders it probable that man, when in a state of nature, conformed to the same law. With the evolution of intellect came the development of artificial wants which modified the physical and functional life. The probability is that in his sexual relations, man was profoundly changed by this expansion of physical and intellectual activity. Thus it may have been that he was cut loose from those laws which govern there productive energies of his brother animals, and became sexually a law unto himself.

The sexual crime is rendered possible only by removing the sexual feeling from among the instinctive mental acts, and making it a part of the volitional action. While the emotions which underlie these tendencies may exist with sufficient force to shape the destiny and color the life of a vast majority of men and women, yet its physical expression, when confined within the limits of health, is under the control of the will, if not of that higher and purer intellectual condition—the moral feelings. Not only is it probable that a primordial sexual law is violated; but those modified sexual relations, which, so far as the human race is concerned, exist as the normal condition, are also infringed upon. The evidence of this is of a negative character. The sexual relations which constitute this offense, rarely result in reproduction. It is reasonable to conclude that this arrest of function is due to perversion of physical or vital laws, or, it may be, due to the escape of energies which in their normal exercise conserve the reproduction of the race; but, whichever of these is correct, the comparative sterility, which is a characteristic of this offense, exists among no other class, and that this is directly the outcome of the violation is shown by the prompt recovery of fertility on the return to a normal life.

With this presumptive evidence that the crime is a direct violation of organic laws, the question is in order whether it is not *per se* founded upon abnormal physical and mental conditions? If the answer to this is in the affirmative, it follows that to the normal individual, no matter to what sexual accident she may be exposed,

this crime cannot exist as an episode in her life. Despair, ruined faith or sorrow, may come to such a woman; but she can escape behind the barriers of a normal, mental and physical life, and there contend successfully with emotions, under the influence of which a weaker sister would drift helplessly into the current of offense. There are many facts which tend to show that the truth lies very near to the affirmative in this question. It is not rare to meet with cases that exhibit the sexual passion operating with explosive violence. These cases are often surrounded by the purest social atmosphere, and religion, culture and the strong restraints of caste in no way retard the career. Nymphomania is universally recognized as a disease. Authors treat of it as a local disease, not as a local expression of an aberration from normal sexual cerebation. Like methomania, it must be regarded as a disease of the cerebro-spinal nerve centre. The history of medicine offers one lamentable instance of an attempt to treat nymphomania and its resulting nervous complications locally, resulting in ruin to a brilliant surgical career. I allude to Baker Brown's operation, and which, as far as I know, cannot be regarded as the cause of cure in a single case. For 1800 years hysteria has been treated by this means upon the persistent theory that it sprang from a local disease.<sup>7</sup> These centuries of failure in local treatment, render the explanation probable that abnormal sexual cerebation lies at the root of the irrepressible forms of this crime, and the allied nervous disturbances which accompany it, and that they are but different forms of one and the same psychological error. Such cases as these are nearly always irreclaimable. The moral instincts are not wanting, as in the majority of those in whom hereditary and environment both lie in the direction of this crime; but these are the ones which afford those ceaseless conflicts between the moral feelings and ungovernable passion. A career in crime induced by this means does not imply an obliteration of the moral consciousness, but that this barrier is broken down by the onset of uncontrollable impulses; and, after their fury is spent, it resumes its restraining influence and goads the unhappy victim into the depths of remorse. There are many analogous instances of manial tendencies to crime which exhibit the same combat with the moral forces. Homicidal mania often co-exists with a very keen sense of the moral consequences of the act. These cases are very often accompa-

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<sup>7</sup>Dr. Aveling in the *Transactions of the Obstetrical Society*. London, VIII., p. 375.

nied by strong hysterical tendencies—so often indeed that throughout the history of medicine this disease is associated with the undue operation of organs within the sexual cycle. To assert that these cases are simply expressions of hysterical mania, is as near the truth as any other so-called fact in mental pathology. The vicious system of education of girls and young women adopted by society has much to do in rendering possible a disease such as this. Over-feeding of both body and brain, and idleness, are causes which may destroy the balance between the emotions and the inhibitory moral senses. Healthful labor is the normal condition of woman. These conditions stand at the opposite poles of health and disease. Labor is a prophylaxis, it may be even a cure, if society were in a condition to apply the remedy. With the class of women to whom such a career is possible, steady persevering labor is irksome.

Aside from their criminal career and its more closely allied traits, there are no features more prominent than the lack of normal, mental and physical energy. This blunted energy permits organic emotions to pervade their consciousness unchecked, while they drift helplessly upon the current of emotional life. I do not believe that these organic emotions exist with greater intensity in this class than in the average healthy woman, but contrasted with the dwarfed energies and blunted will-force, they assume fictitious prominence. This seems to be the reason for the organic emotions appearing more sharply defined upon the surface of the character. Subjects of this class are deficient in the power of emotional control in any form. Joy, grief and anger appear when roused to exist with the intensity of mania; but joy is no more ecstatic, grief not more keen, nor anger more burning than in the normal woman whose habit of habitual control of the feelings masks the ebb and flow of emotions through the mind. In view of these mental peculiarities, it is not surprising how large a number of this class permit these mental acts to elude the feeble grasp of the will and degenerate into actual hysterical attacks. There is no subject that offers so favorable a study of hysteria as a woman of the *demi-monde*. With her it is a Proteus. It will stimulate all forms of bodily disease or mental condition. The lives of many of these women may be divided into lunar periods of hysteria.

Underlying many of these hysterical states, is a characteristic mental trait in this class—a morbid craving for sympathy; morbid from the facts that it colors many of their conscious acts, and is



prominent in their hysterical attacks, while from the tone and compass of their mental life, sympathy creates a morbid self-consciousness, instead of being the support and solace that it is to the normal woman. Without a healthy counterpoise to sexual cerebration, they continually mistake an offer of sympathy as an appeal to the predominant organic emotion. With such an obliquely developed character, as many of these subjects possess, love as an abiding emotion, as a possibility in the mental life, which endows its object with qualities, among the least of which is sex, as an impulse which rouses the latent heroism of the character, is nearly impossible. Its existence implies a concentration of the emotional consciousness upon one object. This is its essence. Possessing all the other qualities yet lacking this, it is the love of the *hetærae*, that may burn upon many altars, but it cannot be the abiding, the abnegating love that runs like a thread through existence, upon which may be clustered the pure emotions and tender recollections of a life-time. There exists another characteristic in this class that reveals its origin in an abnormal state of the psychical or physical tone; this is its marked tendency to hereditary transmission. While it is true that heredity may not always consist of diseased conditions either mental or physical, yet such hereditary qualities imply aberrations from the standard type. I have already shown that this class of criminals presents marked deviations from the intellectual type of the average. I have also given strong presumptive evidence that this offense is an expression for a radical physical error. The inference, therefore, is a reasonable one, that of whatever nature the essential qualities of this offense that are capable of entailment may be, these qualities constitute a diseased condition. I have used the word diseased throughout this paper, because the vital conditions which centre upon this offense, cannot constitute a normal aberration from the standard type in either the physical or mental life. The single fact, that the conditions which constitute the offense defeat the scheme of nature as observed in the reproductive faculty, places it beyond the scope of the normal relations of the sexes. I have recapitulated briefly at this place in order to show—dimly it is true, but sufficiently for my purpose—the nature of the qualities that are capable of hereditary transmission in this offense. As it exists as a possible episode in the history of woman, with the peculiar mental asymmetry already described, it is safe to say that these mental characteristics are the essential qualities which are

transmitted from mother to child. So important is this hereditary factor in the causation of this crime, that it deserves a careful consideration.

It may be observed as a more or less constant trait of inherited mental taints, that they assume different phases in several members of the same family. Thus a brother may be insane; a sister an epileptic, while another brother, or a cousin, may be idiotic. Indeed, insanity, whatever may be its form, is one of the most marked hereditary diseases, and, when it exists in a family, generally presents itself in different forms. The same fact may be observed in the entailment of this group of crime. This has been already alluded to under the theory of criminal analogues. In families in which harlotry and crime are hereditary, the offense in the sisters is not connected with the active and graver forms of crime in the brother, but the brothers are petty thieves, tramps or paupers. The male branch exhibits the same want of mental tone the same disposition to drift helplessly upon the current of life that marks the criminal career of the sisters. This is strongly corroborative of the theory that diseased conditions are antecedent to the sexual crime; and points directly to the nature of the mental qualities that are entailed. This hereditary tendency shows both the male paupers and the unchaste sisters are in respect to vital energy, to use a commercial term, below par. The ancestors near or remote, have overdrawn, as it were, their stock of physical and mental energy, and left their descendants bankrupt in those vital qualities that are necessary to keep them in the ranks of productive labor. This is directly opposed to the notion commonly entertained that women of this class are surcharged with physical energy, and that the organic emotions are too strong to be confined within the bounds prescribed by society for women.

The sexual crime presents another phase of inherited origin. This is the limiting of entailment to the female members of a family. Nature gives many instances of this one-sided form of heredity. In the matter of the entailment of the criminal tendency it is a common feature. Mr. Dugdale gives many examples of it in the legitimate and illegitimate crosses of the Juke blood.<sup>9</sup> This careful observer fairly demonstrates the differences in the criminal tendencies which follow intermarriage with either the male or fe-

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<sup>9</sup> *Thirtieth Annual Report of the Prison Association of New York*, p. 159.

male criminal stock. Frequent cases of this one-sided heredity may be observed in the entailment of methomania, which is often confined to the male line. Many parallel instances are common in which the men of a family conform to the average of morality, so far as the known perpetration of crime is concerned, while the women appear irrepressibly to drift into this offense, even when the environment apparently is free from forces tending in that direction. A lamentable feature of these cases is, that through the industry and good conduct of the father, the circumstances of the family are such as to lift the daughters above the usual environments attending lapses from virtue, and thus bring other and innocent parties within the circle of their influence. The forces of heredity in these instances take the direction of sexual aptitudes, and descend from either parent. Possibly many instances of this crime may be traced to the transmission of impaired physical and mental energy to the offspring without any absolute criminal antecedents in the parents. Whatever tends to impair strength of resolution and self-reliance lays the character open to the assault of causes that lead to this offense. The records of several prominent families during the medieval and modern epochs of history afford numerous instances of atavism in the entailment of this crime. Space prevents a detailed reference to these cases, but the reader who takes the trouble to look them up will be impressed by one peculiar fact which bears directly upon the theory of the crime shadowed forth in this paper, that these instances of atavism coincide with the ebb of the energies and fortunes of the house. The Bourbon and Borgia families will repay analysis with respect to the coincidence of this crime with waning energies.<sup>9</sup> While this is true of the few families that have left their marks upon human history, it is not unreasonable to suppose that the same truth holds good in the rank and file of the population. There is this difference between the great and the little in crime; the one has the prestige of an historical name, which is often so potent as to spur on the flagging energies of effete descendants, while the common individual succumbs to crime from the same causes which lead to the final extinction of his race, without a tradition to stem the current of his swift descent.

Attempts have been made to connect the matter of temperament

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<sup>9</sup>Numerous historical references bearing upon this question may be found in the *History of Prostitution*, by W. W. Sanger, M. D., N. Y., 1858, p. 93. *et seq.*

with this offense ; but there appears reason to believe that the predominance of any particular temperament is the result of accidental causes rather than that of cause and effect. In the ranks of the *hetaerae* all kinds and shades of temperament may be met; and while we know that various casts of mind and of emotional intensity are apparently associated with particular temperaments, yet the tendency to this crime does not seem to depend so much upon emotional fervor as upon obliquity of mental development. The same objections may be raised against any theory that assigns value to glandular activity or hyper-secretions as a cause. This functional quality is often closely allied to temperament, but unlike temperament it may vary as to age or health; while the tendency to this crime once having assumed sway over the individual, it shapes her destiny and forms a current in her life which endures until the end. It may be seen from this brief analysis how men and women whose physical life finds expression in equivalent acts, group themselves under closely allied types of psychical life. There are, of course, endless gradations of shading between the groups, yet this blending but serves as a background against which the type stands revealed with the bold contrast of a *silhouette*. But in examining the effect of the environment upon the tendency to pauperism, and its allied offenses, we lose sight of the types in the common conditions to which all are exposed. We know that individuals exhibit conduct in harmony with their surroundings; but we must regard this as the result of a long series of impressions, and not that of transient conditions. The individual, in order to receive the full impress of environment, must be exposed to its influence during the formative period of life. This human plasticity coincides with the period of physical and mental growth; after this has ended the power to mould character after its environment ceases. The plastic model is then cast, as it were, in enduring bronze. I believe this to be true of all types of character—all pass through the period of plasticity and receive the stamp of environment for all time.

Taking into consideration the fact that heredity and abnormal conditions of the mental and physical life may coincide with environment during this period, we can form an idea of the vast forces that exist potentially in what may be regarded as accidental conditions. Value must be assigned to the fact that oblique development may be given to the moral feelings, the organic emotions be made to assume undue relative prominence, and the

normal tendency to physical exertion be blunted by errors of surroundings, while the forces of heredity tend in the opposite direction. We perceive in this a fact of terrible significance. This is the process of manufacturing the pauper, the tramp and the prostitute, out of the raw material of virtue and industry. Aside from physical states, we must regard entailed peculiarities as latent tendencies, not as existing conditions during this period of plasticity. Thus it is that the errors of environment may obliterate inherited tendencies to virtue and industry. Taking into consideration the vast number of children of industrious parentage yearly thrown into alms-houses through the United States, we may form an idea of the importance of this matter of environment. While these errors of environment may prevent sustained and well directed industry in those of normal tendencies exposed to its influence, yet we must concede to the force of hereditary influences that transcend the misfortunes of one generation; therefore while the males so exposed, instead of drifting into inert pauperism, recruit the ranks of the active criminals, the females as the natural result of their moral atmosphere become sexual criminals, but without the irreclaimable tendencies of those whose defects are the result of both heredity and surroundings. This is the class probably of whom Mr. Dugdale says that early marriage tends to extinguish this offense.<sup>10</sup>

It is evident, and it has for some time been acted upon, that children who are dependent upon the state for support, if they are to be preserved from the doom of pauperism and moral degradation, must not be reared in the society of adults of their own class.

We have in the tramp and vagrant essentially distinct beings from the pauper. They seem to be, in their own types, as wide a departure from the average man as the pauper is in his; but they present many traits which lead to the conclusion that they are expressions of the same forces. In the aversion to fixed abodes and continuous labor, in the disposition to gain an existence without adequate return, and the mental apathy that retards all expression of the moral feelings, we perceive characteristics that link tramp and pauper to the class of effete humanity. While they exhibit equal repugnance to labor, yet the tramp is a man of activity, of events. He is not deficient in bodily powers; but this power is expended in the direction of his predominant trait—his nomadic

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<sup>10</sup> *Loc. cit* p. 152.

tendency. He will work intermittently rather than starve—which cannot be said of the pauper—but he had also rather beg than work. The pauper exists wherever there is a civilization capable of rising above him; while the tramp is found only amid a civilization with a surplus of its products, in a society of the greatest tension. The one is fixed like a barnacle, the mess-mate of his productive brother the laborer, and by his waning energies restricted to the life of a social parasite; the other is a scavenger, restless, migratory, always in the rear, never in the van of the movement of population.

Heredity, atavism and intermarriage produce the same phenomena in one as the other; and whether they are the product of the same factors or not, they are amenable to the same vital laws. There is, however, this radical difference, that, while pauperism exists with a sort of cumulative force from childhood to old age, the tramp disappears at the two extremes of life, existing germ-like in the one, vanishing with the decline of his vital powers in the pauperism of the other. The nomadism of the tramp consumes totally the energies of the productive period of life. In this sense he is a criminal with the pauper, and his unchaste sister; but it is rare that he is engaged in crime, except the minor offenses against property. The habitual criminal is gregarious, the tramp is solitary and nomadic. It is not by the force of morality that he abstains from crime, but he expends his vigor in the direction of his mental characteristic, and the lighter shades of crime in which he indulges are those that coincide with his ruling traits.

The type of trampism prevails only among men more sharply defined than even pauperism. In the great army of tramps it is rarely that a woman is seen who exhibits the taint of nomadism in full force. Sink as low as she may, woman reveals the dominant force of sex in finer lines than man; her mental and physical errors coincide in direction with that of a force more powerful than heredity or environment. Since we have reason to regard the mental anatomy of both sexes as the direct and reflex results of governing physical traits, we perceive how widely separated she must be from many of the errors common to men. Sturdy, brutalized self-reliance upon thews and muscle, solitary and uncompanionable, wandering with aimless toil, are the traits of the tramp, each of which is opposed to the mental and organic expression of sex in women. From the absence of mental states which arise

from the consciousness of masterful strength, her offenses are social; she sins in company, and rejects those errors that shut her out from fellowship and aid. When tramp-women are met with they are usually attendant at the heels of sturdy men. They seem dejected, as if they were benumbed in will—an incarnation of misery, moving against the current of natural energies in obedience to the organic law of man's physical mastership.

If there has been any truth brought out in the course of this paper upon the physiology of crime, it is this: That entailed tendencies to crime seek an outlet in the direction of the physical and mental characteristics of the individual. With this in view, we may understand the extent to which this nomadism among a civilized people exists at the expense of physical qualities not possessed by average women.

Moreover, woman exceeds man outwardly as reflexions from her inner life. She, with eyes innately fashioned to receive the impressions of the lights rather than the shadows of life, sees harmonies, beauties and colors, that are invisible to man with his coarser vision. This she possesses without the refinement of education. The hard, prosaic life of the tramp is constantly revealing vivid contrasts with the brighter and better life around her; she follows her nomadism surrounded by points of counter attraction, having intensified effect by reason of exerting their force in harmony with her moral nature, which seems to exist too radically to be disturbed by even the full expression of an abnormal life.

Trampism and the more serious offense of women against the purity and dignity of their sex, are errors which beset the most active period of life. We rarely meet the aged and broken-down tramp; it is still more rare to meet with the aged woman who is holding her place in the ranks of her fallen sisters. Dr. Sanger gives the average life of public women at about four years, but he commits a grave mistake in explaining this by excessive mortality. They, instead of disappearing in death, undergo a social metamorphosis. Sickness and a decline in physical energy, the result of dissipation or age, are conditions which force a large percentage into pauperism. A very large number marry, and are in this manner either temporarily or permanently restored to a normal sexual life. Mr. Dugdale assigns to matrimony great value as a reforming agent among this class, believing that an early marriage may preserve a woman from sexual crime in opposition even to the force

of environment. According to this author there is a strong disposition among women so rescued to drift into pauperism while under the disabilities incident to child-bearing or from desertion. The fact, that by a well recognized social force the career of this class may be interrupted in the direction of one crime, only that they may drift the more easily toward an allied offense, is evidence of the strongest nature of both the truth of criminal equivalents and that in this class of women we are dealing, not with accidental social conditions, but with profound physical and mental inherent errors which lead inevitably toward one or the other of the crimes here studied. And here may be traced an interesting parallelism between this group of crime in one sex, and the more serious phases of crime among men. We find one group beginning and ending in pauperism. Its meridianal strength and fervor never attains greater force than the sexual crime of one sex and the trampism of the other. Its beginning, full onset and decline are beneath the physical energies demanded by the simplest form of the active criminal career. And yet the more potent energies of the active criminal life exhibit the same stages of incipency, full activity and decline. It begins in the lighter shades of offense against property, culminates in grave forms of crime against persons and property, and terminates at old age in the phases of crime that characterized the first period.<sup>11</sup> It is by such a glimpse as this of the working of an infinite order in the field of human existence, which many suppose to be the scene of the spasmodic operations of evil, that we are entitled to hope for a possible redemption of many in the generations to come from the conditions of vice. This is a legitimate hope to entertain from the advances that scientific sociology is nearly certain to make in the future. Much might be done from what we know even now, if we were to recognize human nature as rather the exalted expression of divine law, than as simply a part of creation to be inexorably cursed or infinitely blessed.

Trampism in the other sex conforms to the same law in its beginning, acme and decline. Without regarding the relations between trampism and pauperism as in any manner those of cause and effect, we may yet look upon the latter, for the sake of illustration, as holding the attitude of a foster-parent to the on-coming generations of tramps. The child-tramp, replete with the taint of

<sup>11</sup> *Popular Science Monthly*, Jan., 1876, p. 334. "Relations of Women to Crime."



nomadism, is reared in the alms-house. His mental and physical horizon, at the time of greatest receptivity, is bound down by the torpidity of the pauper. Trampism after this is his best expression of manhood. Oftentimes of great endurance and sturdy of limb, he is without the enegy of continuous labor. After expending all there is of manhood in aimless wandering, he disappears in the obscurity of pauperism. He is the father of children who are either tramps, paupers or hopeless prostitutes. His life defines the lines of their lives with the force of heredity, environment and education. He is the human atom that acts as the common carrier of infectious diseases. He carries with him as a badge of usefulness, as an indication of the motive of his existence in the order of nature, the forces of extinction. He, his sister and the torpid pauper, seem to exist in an atmosphere of forces that tend to total obliteration—an extinction of the unfit, in order to give full scope for the survival of fitness in a purer and better type; an elimination of effete human beings for the sake of social health.

ELY VAN DE WARKER.

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### WISDOM IN CHARITY.<sup>1</sup>

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THE open hand must be guided by the open eye. The impulse of pity, or compassion for suffering, belongs to every well-ordered mind; but, like every other impulse, taken by itself alone, it is blind and idiotic. Unable to protect itself against imposition, unable also to discriminate and adapt its relief to the various conditions of actual helplessness, it flings its resources abroad at haphazard, and gushes itself to death.

We think of the All-perfect as a being in whom pure good-will is in harmony with absolute reason. "God is love;" but also "God is light, and in Him is no darkness at all." His goodness is wisdom; His wisdom is goodness. Human charity, then, is un-divine when it is unwise—when it acts in the dark, or without the guidance and restraint of good sense. To suppose there is any

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<sup>1</sup> A paper read before the Social Science Association of Philadelphia, December 7th.

merit in giving, apart from reason in giving, is a piece of harmful superstition. It is indeed "more blessed to give than to receive;" but he who gives for his own spiritual advantage—like him who gives only to silence importunities, from without or from within—is only confirming his own selfishness.

The times propound to us many a sober problem, and this is one: how to administer charity so that nobody shall be injured; neither the giver, the receiver, nor society. Nor is the solution an easy one; pauperism, like other social cancers, is "dangerous to touch, more dangerous to let alone."

We are not without warnings from abroad and from history. Among the "Seven Curses of London," James Greenwood enumerates "Waste of Charity," putting it in the same black list with Neglected Children, Professional Thieves, Professional Beggars, Fallen Women, Drunkenness, and Gambling. The great city has 140,000 paupers in April: in mid-winter 170,000. The overseers give them \$7,000,000; various charitable associations add \$10,000,000 more; and where such fat carcasses are, the eagles gather together.

Henry Fawcett, a member of Parliament and Professor of Political Economy in Cambridge, shows that England has been brought nearer to ruin by the foolish generosity and laxity of her poor laws than by any foreign enemy. Her pauperism, he thinks, arises almost entirely from indolence, improvidence and self-indulgence; and these vices are largely due to a system which makes the able-bodied poor feel that they have a right to live at public expense, and that there is no disgrace in receiving it, if only it comes in the form of out-of-door relief. For only a small fraction (one-ninth) is distributed through the almshouse.

Mr. Lecky, in his "History of European Morals," finds one of the causes of the decline and fall of the Roman Empire in the long-continued policy of distributing supplies to the poorer classes. Modern Italy is overrun with beggars, because all her people regard it as a religious duty to give, without inquiry.

The same writer, while bestowing the highest praise on that benignant spirit of charity which the gospel has diffused through all Christian lands and ages, yet feels obliged to admit that, in the sphere of poverty, it cannot be doubted that the Church "has created more misery than it has cured." Of the monastic institutions, many of whose members gave their lives to ministries of mercy, he

says, "the poverty they have relieved is insignificant compared with the poverty they have caused." Even if this may be an overstatement, it is full of warning.

In America the matter grows more complex and difficult as population increases, diversifies and masses itself in towns. Indeed, every active agency in American life mixes itself in some way with the production of both wealth and poverty. Machinery, which multiplies and cheapens comforts, multiplies cripples while it complicates the labor problem; the tides of trade, in their ebb and flow, leave many stranded and wrecked; the free movement of our people unsettles the stability of thousands of families and wastes their small resources, while they vainly strive to better their condition by change; business is often a lottery in which the hopeful investor draws a blank; and the successful gains of a minority leave a larger minority to encamp on the narrow, ragged edge between competence and want. Worst of all, our grand attempt to raise high the standard of intelligence, by education through books alone, results in bringing forward hundreds of thousands of young men and women, with fine and dainty aspirations, but with neither training nor taste for productive industry. They marry, found families, and pay the bills with drafts on the bank of hope. Couple this with the expensiveness of modern life, growing out of the great increase of artificial wants, and it may appear that the plea of want of employment often means that many men and women cannot find just such work as they would like to do, at just such wages as they would like to command.

Now to this hungry and growing multitude it will never do for society to say, either through its public laws or its private charities, "The world owes you the living you covet, and you shall be maintained in idleness till your dreams come true." What then? Shall we adopt the motto, "Every one for himself, and the devil take the hindmost?" Then he would surely catch us all! We cannot innocently be indifferent to any form of suffering, however caused. Shall we make every poor-house a work-house, and drive all the needy to the overseers? The remedy for all this misery is not in indiscriminate harshness and pitiless severity. Every poor-house and asylum ought indeed to be in part a work-house; but society would be brutalized, along with its victims, if the delicate duties of humanity were discharged only through political functionaries as now selected.

For a time, while population was thin, charity might safely be left as a duty between neighbors; but with the growth of cities, who knows, or can know, the people of his own street, to say nothing of the swarming myriads? And who can find time or means to deal with the hapless wanderers, or with the human rats that infest the crowded and sickly alleys? Yet something must be done, or we all sink together. An ever-increasing deposit of misery and vice, disorder and desperation, at the bottom of society, will surely send up stench and pestilence to the very top. Rich and poor, wise and ignorant, virtuous and vicious,—“we are all members one of another.”

Indeed, something must be done. Everybody sees it and says it. And so a meeting is called, a benevolent society is formed, a subscription is started, supplies are purchased, and the poor are told there is bread enough and to spare. But never enough: the case grows ghastlier.

Meanwhile, the religious societies, whose motto is, “Ready to every good word and work,” hear the good word that something must be done, and feel that the good work is to do something. Faithful ministers and kind-hearted brethren and sisters seek out and aid the sufferers; a dozen churches are doing the same work in the same populous district—each striving to be the almoner of the whole community. But the abyss of poverty, which swallows all their willing gifts, still yawns like a bottomless pit.

Then good Mr. Prosperous concludes that something ought to be done. So he dies, leaving a handsome bequest, a well-founded, well-guarded charity, for the poor; a fountain which is to send out living streams, world without end, so that all generations shall call him blessed. Mrs. Greatheart is named trustee. She puts a notice in the papers that if any are really and truly in need, and will deny themselves, come forward and say so, here is a charity fund. Mrs. Greatheart’s door-bell rings and rings; bashful people come in procession, telling tales that make Mrs. Greatheart’s eyes too dim for close inspection—but they brighten as she draws orders on orders for flour, and coal, and shoes, and clothing. Blessed Mrs. Greatheart! Blessed memory of Mr. Prosperous!

But by and by it transpires that the benevolent society, several of the churches, and Mrs. Greatheart, have all been helping in part the same bashful and unhappy people: that under various pretences, and sometimes under various names, divers and sundry

families have been duplicating duplicity and quadrupling their allowance, yet all the time developing a genius for wretchedness.

That is not all—nor is it the worst! with some carefulness this kind of leakage might be stopped. A mischief has been done which will not be undone in a century. All these charitable people, who could not taste their daily bread without remembering the poor, have really been educating some hundreds or thousands of men and women to habits of indolence, improvidence and dishonesty, and converting them into parasites and vermin, by lessening their motive to self-dependence, self-support and frugality. Parents have grown careless about training their children to industry; children have shuffled off their obligation to provide for aged and infirm parents; young people have married without forethought; a third generation has started on a plane as low down as Ginx's Baby.

The experiment began with a desire to do something for struggling poverty; it has ended with the production of three times as much poverty which has not the merit of struggling; it is pauperized in spirit. And so "something" has been done! But of all this manifold stewardship of life, to which we are appointed by Providence, is there any trust which we administer with so little wisdom as charity?

If, in trying to help a man outwardly, we injure him inwardly,—undermining his self-respect, weakening his will, confirming his faults—shall we call our folly a charity? But it is easy to do this mischief—a down-hill business!—as easy as for the kind mother to slave herself to death in waiting on her children, instead of patiently and firmly holding them to the duty of serving themselves and others. John Todd says, "Man is naturally indolent: as lazy as he can be." Therefore habits of indolence are easily encouraged. Those who have always lived in narrow circumstances have but few wants. Supply these few wants by charity, and you suspend all motive to exertion.

We ought to know better what human nature is like: are we not of the same flesh and blood with our neighbors in Bedford street? Indeed, there are plenty of people besides the abject poor who do not "hanker after hard work;" and there are some rich people who would not be rich if it depended on any very tiresome exertion of their own. Why should not the desire to live without labor be as strong down-town as up-town? Human nature is just what it was

a hundred and fifty years ago, when De Foe complained that the robust fellows, whom he tried to hire for some sort of work, told him they could make more by begging! Make the poor man easy in his rags by a little injudicious kindness, and he will soon be as useless as any of us! But he becomes a public burden, and oh how the public back tires of him! We must stop giving blindly; stop giving to strangers, without knowing what we are about; stop contributing to so-called charities which encourage beggary. Not one cent for unconditional soup-houses or doles of bread; not one cent for societies which keep open doors and offer supplies to all the poor and needy, without investigation.

The total accumulations of the race are not so large that we can afford to draw our appropriation bills with a free hand. This item for relief needs not so much to be made large as to be "put where it will do most good." If we could weed out from the receivers of charity all who ought to take care of themselves, the number would probably be reduced two-thirds. Then if we could make industry a part of universal education, and if wisdom and justice could preside over all departments of business and of government, society might bear with cheerful ease the burden of its disabled members. But industry is not a part of general education; reason and fairness do not bear rule in business and in public affairs; and, taking affairs as they are, what are we to do with this question of relief?

Even the leading branches of the general inquiry are too much for this occasion. We cannot now consider the causes and prevention of poverty, the function of legislation, or the forms of social injustice: though there will be no end of miserable complications, till these matters are duly considered in committee of the whole people. The pressing question now is, How can we deal wisely with the immediate claims of helpless poverty? I do not ask how we can establish an equilibrium between full purses and empty ones, but how shall we manage to *give*, innocently for ourselves, usefully for the poor, and safely for society?

1. That charity may be judicious, it must become *judicial*. That is, it must cease to be chiefly a matter of feeling, and be made a matter of judgment. Supplies must not be given indiscriminately, to all comers, nor to all the poor, nor even to all the suffering poor. *Each case must be examined, put on trial, and disposed of upon its merits.* Not in form, but in spirit and substance, we must learn to administer charity as through courts of law we

seek to administer justice. In no un pitying sternness, but with humane, considerate, wide-seeing wisdom, we must adapt our methods to the claims of society, as well to the claims of the individual. If a man comes into court and tells his story, the court does not say at once, in a gush of tenderness, "Your case is a hard one; you shall have judgment in your favor;" but rather, "There shall be an inquiry; this matter shall be probed." Is not an indiscriminating charity almost as injurious and quite as absurd, as an indiscriminating justice? We must refuse to act at all till we are enlightened by evidence: that is, till we are reasonably satisfied of what is due to private right and public welfare. Obviously several other things are implied in such a judicial administration of charity.

2. This judicial spirit must be guided by some fixed principles; it must apply rational laws to discovered facts.

(1) It must appear that the object of charity is incapable of self-help. We surely owe no relief to these who can get along without it. But that is a question of fact, and calls for evidence.

(2) We must discriminate between those whose helplessness arises from external misfortune and those whose helplessness arises from internal defect, or personal fault. For even if in both cases some help is due, they should be helped by different methods.

(3) We must distinguish temporary from permanent helplessness. As a general rule, the chronic and incurable cases should soon be sent to the overseers. Without great caution many cases of temporary helplessness will slip into a habit of dependence.

(4) An offer of some employment, not too tempting, is generally the best and only test of the applicant's disposition. A charitable agency ought therefore to have some employment to offer. When the managers of a Boston soup-house attached thereto a wood-yard, and announced that the daily ration would be issued to no able-bodied man who would not saw a certain amount of wood, the number fell off at once from 160 to 49. They were not so hungry as they thought! But many persons of moderate intelligence and force do not know how to find or make work for themselves; and no charity is so noble, because none is so helpful, as that which puts them in the way of earning honest bread, preserving self-respect and cultivating the habit of industry. In English cities, where the overseers have tried this work-test, the poor women especially have shown their real quality; and many have earned

such honorable recommendation as secured them situations in shops or families. That vein will bear working.

(5) The highest benefit of charity is in the mental and moral impression made; therefore every word and act should tend to produce and confirm in the mind of the receiver the idea that he is only being helped toward self-help—that dependence is itself misfortune, and that willing dependence is dishonor. Without humiliating or reproaching the unfortunate, I think we should never hesitate to express our natural feeling of surprise and regret when any human creature comes before us as a suppliant. The unwilling beggar will accept our regret as a sign of wise sympathy; the willing beggar may be helped to see himself as others see him. There are two classes: one man is so spiritless that, if he stumbles, he will lie sprawling and calling for help, without trying to rise. Another, who is in trouble up to his chin, will decline any offer of help so long as he can keep his nose above the waves. Plainly, these two classes must not be treated alike.

(6) If the evidence shows that idle and wasteful habits are the cause of distress, and that one is habitually and by preference a beggar, it is not charity to the applicant, nor justice to society, to extend any relief whatever, except in "extreme extremities," as to rescue one from despair and death. Both justice and charity to such an one command that we let hunger write on his heart and stomach this lesson of St. Paul: "If any will not work, neither shall he eat." Even if there is no work to be had, one who is proved to be a shirk, from habit and choice, will only be confirmed therein by being put on the list of common charity; let him try the overseers.

(7) When it appears that the applicant is not only an idler, or a bummer, but also an impostor—inventing lies to gain assistance, and giving false accounts of himself or his family—he should be promptly turned over to the magistrate, and charged with attempting to procure money or goods on false pretenses. If prisons are not for such, prisons are of little use. A very few prosecutions for this form of fraud would soon relieve any community of a pest and a peril. The chief constable of Westmoreland, England, is Greenwood's authority for saying that "ninety-nine out of every hundred professional mendicants are likewise professional thieves, and practice either trade as occasion serves." To men of this character, he attributes "the greater number of



burglaries, highway robberies and petty larcenies that take place; and gives it as his opinion that if the present system of permitting professional tramps to wander about the country were done away with, a great deal of crime would be prevented."

When we fairly settle down to the administration of charity on a judicial system, it will be seen that nearly all cases naturally distribute themselves into a few leading classes, and the application of a just law to each case would soon be obvious and easy.

The most serious difficulty turns on finding the *evidence* by which each case is to be adjudicated. Since neither you nor I can spend the time or the means necessary for conducting an inquiry into the merits of one in a score of the applications made to us by strangers, and since "what is everybody's business is nobody's," the facts of the situation push us to this:

3. Every community needs a court or tribunal of charity, that is, an organization through which we can all avail ourselves of the services of skilled agents to whom we can send all cases not otherwise provided for, with confidence that they will be fairly examined and wisely determined. For hundreds of years, when whole nations were subdivided into parishes, each with its priest, there could hardly be a better provision than to put the whole business and resources of charity into his hands. An act of Parliament, under Henry VIII., made it illegal for any to give to the poor, except through the priest of the parish; the irregularity was punished with a ten-fold fine. But the conditions of modern society have made this method of distribution both impolitic and impossible.

So far as each one of us knows his suffering neighbors, we shall certainly feel free to help them directly and privately. Probably, also, every church and benevolent fraternity can care for cases of need within its own constituency more considerately and delicately than would be possible for outsiders. But these institutions, and private citizens also, are bound to act in the judicial spirit, and to guard against waste and harm, even in helping fellow-members and acquaintances. There are plentiful facts to warrant this caution; and it has become a matter of grave public concern.

But outside of all these limited provisions, outside also of the fair scope of the present poor laws, there exists a constant and sore need of some charitable organization which shall represent

and serve the whole community, as its eye and its hand, and which shall do, under adequate guards and limitations, what we all know ought to be done, with courageous thoroughness.

4. This requires the intelligent co-operation of all classes of inhabitants. The wisest and best method would be partly defeated and nullified, if several rival methods and organizations were in operation at the same time and in the same territory. To what purpose is it that you or your agent should spend half a day looking up the case of a poor family, that you may not too carelessly answer their plea for help, if the same family can depend on half a dozen other sources of supply, and no questions asked? Unless the whole community will work together on one plan, well-matured and well-understood, the local administration of charity breaks down into all the old confusions.

The larger the territory to which this system is applied, the more complete will be its results; for the best endeavors of a small district, like those of a single person, will be embarrassed, if not wholly neutralized by the folly of the neighbors.

A very little candor and justice, along with a very little acquaintance with the mixed and jealous conditions of society, will make it plain that no such broad and general system—no true and acceptable Court of Charity—can be called into existence by any political party, any “ring” of reformers, any single religious sect, or any combination of sects: it must be neither Protestant nor Catholic; neither Jew nor Gentile: it must spring from the community, (noble word!) it must unite all classes of citizens, and command their cordial confidence and co-operation. Intelligent representatives of the various interests, schools of thought, moral and religious activities, must confer together at the outset, and must invite all the people to follow their leading into an organization as free from the suspicion of sectarian influence as are the courts of justice and the stock exchange.

An experiment in the way of judicial charity has been tried for the last three winters in Germantown—the 22d Ward of the city of Philadelphia. The Relief Society is composed of all citizens who sign its constitution and pay a dollar a year. It has a Managing Board of seven discreet and public-spirited gentlemen, who care enough about the business to give it the necessary attention. An auxiliary society of women, (irrespective of sect,) is a co-ordinate part of the same machinery, and works in happy harmony with the

Managers. The territory is divided into districts; and the Visitors, selected by the women from their own number, report all cases to the Superintendent, (the only paid official,) who follows up their information with careful inquiries of his own; so that *every case is put on trial*, and disposed of according to its ascertained merits. Both the Superintendent and many of the Visitors have become *experts*: their discernment and practical judgment are invaluable, though it may well be that in a body of forty or fifty persons, all will not be equally wise, and some will act in the old traditional spirit. The value of the system must depend on its being in the hands of those who understand it.

Premising that the Germantown experiment has been carried forward in a community which imperfectly comprehends its principles, and which therefore extends to it only inadequate moral support, let me sum up what has been accomplished, in spite of these embarrassments:

1. The amount of promiscuous begging has been greatly reduced, especially during the severe season, when alone the agency is active. All householders who use the reference cards and send beggars to the office for examination, have been delivered from much outward annoyance and inward misgiving.

2. It has been demonstrated that the *real* destitution within the 22d Ward is limited and easily manageable. But little is given, and that with caution. Last winter, or from December to April, relief was granted to six hundred persons in a population of over 25,000; but the average to each person was only \$2.36, and to each family, \$10.14. Not *much* encouragement to lie idle through the summer in the hope of being cared for through the winter! Contrast this with the London charities, which spend a hundred dollars a head upon the poor, one-fourth of which is used up by the machinery of dispensing it.

3. The society has detailed knowledge of nearly every poor family and person likely to need or ask assistance. The causes and circumstances of *each case* are observed and studied.

4. A little employment and small distribution of supplies, for a short time, has prevented the breaking up of families.

5. A large body of intelligent and excellent women, irrespective of sect, have opened lines of friendly communication with the poorest classes, giving sympathy and counsel, quickening self-respect, encouraging habits of household economy, and cheering them through dark passages of sickness and trial. Neglected children

have been rescued from vagrancy and brought into the schools. And the society has been steadily improving its own system, and learning from its own mistakes.

Women have not generally won the praise of men for judicial qualities; it has rather been held that their sympathies and sentiments would lead their judgment into easy captivity. But in Mr. Lecky's book there is a handsome and cordial recognition of the peculiar fitness which many a modern woman has shown for the high functions I have been describing. He says she has "illustrated with perfect accuracy" the principles of "enlightened charity," by "the simple force of common sense, and by a scrupulous and minute attention to the condition and character of those whom she serves." Exactly what we are seeking! This quickness of insight, which penetrates behind the disguises of both pretence and reserve, and reads the real situation of a miserable household, could hardly find a more admirable illustration than in the case of some of the "Visitors" of the Germantown Relief Society. But it is not merely a matter of original insight; it has been a matter of experience, close observation, reflection on facts, consultation with the shrewd and faithful Superintendent, and much conference with the other Visitors at their monthly meeting. The ready faculty, which *other* judges gain by united study and practice, has been gained by these judges in our local Court of Charity. To see through a fool or a knave, give us the sharp eyes of a woman. But for the whole business of charitable administration, give us the joint and balanced discernment and practical faculty of women and men. Thus ought every Board of Guardians to be constituted; and when the laws shall provide for this, and shall also remove the appointment of Guardians from the influence of politics and parties, we shall need not one of all our benevolent societies to deal with the matter of general poverty. The State will create a true Court of Charity in every city: its higher officers will be named by the judiciary, or by some commission of citizens deserving the confidence of all parties and sects. Then, armed with the authority of the whole people, and guided by the lights of political economy and experience, charity will shield society by its wiser use of larger powers, while it ministers to helpless suffering in the spirit of our common humanity. So will be brought to pass the saying, which, if not written, deserves to be: an abrupt saying, indeed, which shall serve me for a period, instead of a peroration, viz.: "Charity is not a fool!"

CHARLES G. AMES.

THE LIBRARY OF THE UNIVERSITY OF  
PENNSYLVANIA.

THE interest expressed in a brief account of the Library of the University of Pennsylvania, contributed to the volume on Public Libraries, recently published by the Department of Education at Washington, has suggested the going over the same ground with somewhat more of detail. We do not intend, or rather we do not hope, to write anything that the disciple of Dibdin will care to read, for the simple reason that we know little or nothing of the technicalities of bibliography. It is our desire simply to tell of what interested us while we were arranging the books in their new home in West Philadelphia, in the hope that it may not be found uninteresting by others who know about as much of such matters as we do, but care for books, and like to read about them as well as to read them for themselves.

The Library of the University is more properly the Library of the two Faculties of Arts and of Science; the former being the original stem of the University's life, around which the two Faculties of Medicine, and the Faculties of Law and of Science, have grown by accretion rather than by development. From internal evidence, we judge that the Library is as old as the College of Philadelphia, if not as old as the Academy, out of which the College grew. The names of early donors are those of the first founders and patrons of the College itself, and more than one title-page bears autographs which the student of our University history must regard with veneration and piety.

First of all these comes Benjamin Franklin, whom the University justly regards as, *par excellence*, the founder of her fortunes. The number of his gifts now in our possession is not very large, but it is probable that he gave many to the Library which are not now in its collections. His interest in the College was of the warmest. The oldest minute-books of the Board of Trustees testify to this. They are in his hand-writing and are not the brief and perfunctory records, which commonly fill such volumes. For instance, he gives quite a full account of an early commencement, describing the speeches of the graduates and other students, and expressing the very high gratification felt by the intelligent audi-

ence on the occasion. On his return from England in 1775, he brought two gold medals to be given to students of the College as prizes for English essays. The first subject he proposed was *The Motives to and Advantages of a Perpetual Union between England and Her Colonies*. All of the five essays submitted, and not only the one which obtained the prize, were printed here and reprinted in England; but we have no copy of either edition. The works of his gift which bear his autograph, are chiefly on physical philosophy, but one is his *Historical Review of the Government of Pennsylvania*, which he published anonymously in 1759, in London.

The autograph of Richard Peters, Franklin's successor in the presidency of the Board of Trustees, is far more frequently met in our older title pages. He was an English clergyman, of good family, whose early life was a series of misfortunes. Entrapped into a marriage with an unprincipled adventuress, and learning of her death some time after his separation from her, he contracted a second marriage with a lady of the Stanley family. But very soon after this, his first wife reappeared, and attempted to extort blackmail from him. He at once adopted the manly and honorable course; he disclosed the entire situation to the relatives of his second wife, and declared that he would be bound by their decision. They promptly acquitted him of all dishonorable intent, but could see no course open to their sister except a separation from her husband, and Richard Peters came to Pennsylvania a sorely tried but still a young man. His history, of course, could not be kept concealed; probably he made no attempt to conceal it. Malice used it to wound him in this new world, as we know from a malicious satire which is still in existence. On his arrival in the colony he was regarded with no friendly eye by the clergyman, who was the Rector of Christ Church, and Franklin thought of securing his aid in his educational projects. "I therefore in 1743 drew up a proposal for establishing an Academy, and at that time thinking the Rev. Richard Peters, who was out of employ, a fit person to superintend such an institution, I communicated the project to him; but he, having more profitable views in the service of the Proprietors, which succeeded, declined the undertaking; and, not knowing another at that time suitable for such a trust, I let the scheme lie a while dormant." Mr. Peters became, in 1749, one of the first Board of Trustees, and preached a sermon at the opening of the

Academy in its new quarters on Fourth street in 1751. He was President of the Board by annual reëlection from 1756 till 1764, and was succeeded by the Governor of the Province.<sup>1</sup> After his rejection of Franklin's overtures in 1743, he became Secretary of the Colony, acquired considerable wealth, and won the regard of his fellow citizens in no ordinary degree. When set free from the entanglements of his first marriage by the death of his wife, and by the second marriage of Miss Stanley, he married again, and the celebrated and witty Judge Richard Peters († 1822) was his son. It was not until his old age that he began to turn his attention again to the ministry, and in his sixtieth year he became the Rector of Christ Church, and soon afterwards received the degree of Doctor of Divinity from Oxford. Though greatly valued for his personal excellence and his brilliance in social converse, he was not esteemed as a preacher, for he had become imbued with the theosophy of Jakob Böhme through the writings of William Law, and he was wont to fire rather over than unto the understandings of his hearers. His assistant, Rev. Jacob Duché, became his convert to theosophy, and preached in the same style.<sup>2</sup>

The gifts of Dr. Peters to the Library were both numerous and of standard worth. From the number of Tory historians (Carte Heylin, Echard, Basil Kennet, Speed, Barnes, Clarendon, Howell,) and of old Anglican divines (Leighton, Hooker, Pearson, Chillingworth, Sherlock, Kettlewell, Bray, Allen,) we might suppose that he, like his master Law, had been in sympathy with the non-jurors and Jacobites. But the presence of Seneca, George Buchanan, Descartes, Montaigne, and of Sewell's *Dutch Dictionary*, testifies to the wide range of his reading. If he gave us any of his mystical authors, they are not now to be found.

Another benefactor in those early times was the London Yearly Meeting of the Society of Friends. The old and massive editions of Isaac Pennington's *Works*, Fox's *Journal*, Beste's *Sufferings*,

<sup>1</sup> See *The History of the University of Pennsylvania from its Origin to the year 1827*, by George B. Wood, M. D. [*Memoirs of the Historical Society of Pennsylvania*, Vol. III.] Philadelphia, 1834.

<sup>2</sup> Duché was a member of the first class which graduated from the College, and served for a time as chaplain to the Continental Congress, but finally withdrew to England. He renounced theosophy after some years, and even refused to lend Law's works to Mr. (afterwards Bishop) William White, on the ground that they had done himself no small mischief. But his published sermons have a mystical tinge, and it is said that he became a convert to Swedenborg's views after his arrival in England.

came from them; and Jas. Logan, who was a Trustee, besides offering a site for the new Academy, spared from his own library a few to that of the College. A copy of the splendid Baskerville edition of Barclay's *Apology* has an inscription in the handwriting of Provost Smith, stating that it was the gift of the author's son, Mr. David Barclay, a merchant of London. These gifts have been supplemented in our own time a collection of more recent Quakerly literature, the gift of the venerable Deborah Fisher Wharton.

The Baskerville Barclay is but one of several mementos of Provost Smith's visit to Europe to prosecute the plan for the endowment of the College.<sup>3</sup> Several contemporary authors, chiefly clergymen, sharing in the enthusiasm he excited, presented him with copies of their works. More important were the gifts received from Thomas Penn, the Proprietor, including with other works the Baskerville editions of Virgil and Milton. We also have Milton in the sixth edition, a folio of 1695, with glaring illustrations, nearly as coarse and vulgar as those of Dore. The donor, Lewis Evans, added a copy of Cowley's *Works* in folio. The works of Bishop Thomas Wilson, author of Matthew Arnold's pet phrase "sweetness and light," were presented by his son, the Prebend of Westminster, in the handsome folio edition of 1782. He was also a favorite with Washington.

To this period we owe many works, whose donors we cannot trace. Such are old editions of the Greek and Latin classics—the Tacitus of Justus Lipsius, the Livy of Gruter, the Cicero of Verburgius (Wetstein), the *Scriptores Rei Rusticæ* of Gesner, the Pliny of Gelenius, the *Lexicon Antiquitatum* of Pitiscus, Hooke's *Roman History* and Blair's *Chronology*, Gale's Herodotus and his Iamblichus, the Xenophon of Leunclavius, the Isocrates of Jerome Wolf, the Dionysius Halicarnensis of Sylburgius, Mill's Critical Greek New Testament, the Homer of Barnes, who "knew Greek like an Athenian blacksmith," the Josephus of Ittig, the Plutarch and the Pausanias of Xylander (Wilhelm Holtzemann), the *Patres Apostolici* of Le Clerc, the Julian of Spanheim, the Libanius and the Theophylact of Morell, and Sir Henry Saville's Eton edition of Chrysostom, in eight folios (1612). Such, too, are venerable and solid pieces of divinity, such as the Chemnitz-Leyser-Gerardian Harmony of

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<sup>3</sup> See *A Memoir of William Smith, D. D., Provost of the College, Academy and Charitable School of Philadelphia*. By Charles J. Stillé, LL. D., Provost of the University. Philadelphia, 1869.



the Gospel, in two thick folio volumes, Stackhouse's History of the Bible, in two folios; the works of the great Rabbinist, John Lightfoot, in two folios; those of the lay theologian and Dutch lawyer Grotius, in six folios; the *Clavis Scripturæ Sanctæ* of Flacius Illyrius; the works of Temple, Boyle, Newton, Locke, Malebranche, Linnæus, Boerhaave, and Gravesande. A set of the *Transactions of the Royal Society* is nearly complete down to the Revolution period, and is flanked by Birch's *History* of that Society. At the other pole are the Latin translations of Aristotle, with the commentaries of the Coimbraesians Jesuits, whose quartos do no better harmonize with the folios of the English translation and enlargement of that great repository of learned flippancy and skepticism, Bayle's *Dictionary*. Johnson's *Dictionary*, in its first edition, and the English Bible, in the splendid Oxford edition of 1717, in two elephant folios, and Pickart's *Religious Antiquities*, in six, all put to shame the degenerate condensations of these days.

The Library is not rich in a class of books now sought after by our book-hunters—we mean Colonial imprints. It has, indeed, presentation copies of Anthony Benezet's *Short Account of Guinea* (1771), and of a volume of German poetry, by Rev. J. C. Kunze, which was printed by Christopher Saur, Jr., in 1778, during the British occupation of the city. This was one of the last, if not the very last issue of Saur's prolific press, for on the evacuation of the city, his property was confiscated because of his disloyalty to the patriotic cause. Kunze, besides being a Lutheran pastor, was afterwards Professor in the German department of the University, but does not shine as a poet. This is the only Saur imprint in the library, and the Franklin, the Ephrata, the Böhme and the Armbruster presses are quite unrepresented. It is most likely that the books printed in the Colonies were regarded as of too slight and ephemeral interest, to take a place on shelves, on which Locke and Grotius kept company with Boyle and Clarendon. The Trustees of the College made overtures to the Ephrata people to have them print parts of the classics for use as text-books, but nothing came of it. Probably the mystics of Ephrata shared too deeply in that horror of pagan learning and literature, which characterized the Separatists of Germany, for them to meddle with such matters.

William Bradford's press is represented by a book which has great interest in connection with the history of the College. It is Prof. John Morgan's inaugural *Discourse upon Medical Schools*,

spoken at the Commencement, in the summer of 1765, the year in which our Medical Faculty was organized. In the introduction prefixed, he explains to the citizens of Philadelphia, his proposal to inaugurate among them the "regular" practice of medicine (*i. e.* to the exclusion of pharmacy and surgery), and that a Mr. David Leighton had accompanied him from Scotland with the purpose of opening an apothecary shop. He assures them of his reasonableness as regards fees, and so forth. Two years older is his *Tentamen Medicum*, printed at Edinburgh (*typis Academicis*), and presented on the occasion of his graduation as Doctor of Medicine. It is dedicated on a large folding page, to the two Proprietors, to Governor Hamilton, and to the Trustees and Faculty of the College, whom he severally names. In enumerating the Trustees, he especially mentions as his instructor, Dr. John Redman. This thesis is one of the many land-marks which record the filial relation of our Faculty of Medicine to that of Edinburgh. Another is found, we think in the gift of Van Swieten's *Commentaries upon the Aphorisms of Boerhaave* (1775), from Charles Elliott, its Edinburgh publisher. Of early printed medical theses, the general library contains only two, dated 1771 and 1793, respectively.<sup>4</sup>

Soon after the Revolution, our library received a handsome present of books from the ill-fated Louis XVI., who sent them at the instance of the Marquis de Lafayette. They are easily recognized, from their heavy leather bindings, and backs covered with elaborate but now faded gilding. They include voyages of exploration, works on natural history, and on French and general history. A Buffon in thirty-four quarto volumes, a part of the Paris edition of the Byzantine historians, the *Dictionnaire Historique* of La Martiniere (six folios, 1768 *et seqq.*), De Joinville's *Histoire de Louis XI.*, De Joligny's *Histoire de Charles VIII.*, and Desormeaux's *Histoire de la Maison de Bourbon*, are among the more voluminous works.

With the retirement of Provost Smith from his position at the head of the College, there began a period of trouble and decline which was not retrieved till about 1830. The Library indicates this in the comparative cessation of its growth. The largest and

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<sup>4</sup>See *A History of the Medical Department of the University of Pennsylvania from its Foundations in 1765; with Sketches of the Lives of Deceased Professors*. By Joseph Carson, M. D., Professor, etc. Philadelphia, 1869. A book of great interest to the student of local history, and especially of that of the University.

steadiest additions were in the form of Government documents, and the set of these is quite complete down to 1830. From Provost McDowell's library there were received a considerable number of works on natural philosophy, besides several classic authors—Aristotle, Lucretius, Cicero, Demosthenes, Ausonius and Apuleius. A few important books, such as the first edition of Webster's *Dictionary*, and Bowditch's translation of Laplace's *Mecanique Celeste*, must have been purchased when they appeared. The first literary text books written by our Professors, that we have seen, are of this period. The *Elementa Philosophica*, printed by Franklin, in 1752, as a text-book for the College of Philadelphia, was from the pen of Dr. Samuel Johnson, of Columbia College, a disciple of Bishop Berkeley and of Pere Malebranche. But there is no copy in our library. Less original are the Westminster Greek Grammar (Philadelphia, 1813 and 1817); and the *Selectæ e Profanis* (Philadelphia, 1819); a Latin Grammar (Alexandria, Va., 18—) and Esop's Fables (Philadelphia, 1814); all of them published by James Ross, who taught those languages in the University at that time, and afterwards at Carlisle. To the first is prefixed a solemn resolution, signed by all the Board of Trustees, forbidding the teaching of Greek through the medium of any language but the Latin, or out of any grammar but that of Mr. Ross, or one similar to it.

From this period till our own days, the increase of the library was by sporadic gifts. Napoleon I. sent us the huge French and Chinese Dictionary which appeared under his patronage, and Napoleon III. added that unlucky edition of his uncle's *Correspondence*, which has done so much to disclose the Corsican's lack of moral principle. Dr. Thom, the zealous Universalist theologian of Liverpool, sent us not only his own works, but also a number of Chinese books received from his brother, a merchant resident in that country. Dr. Wm. Carey, the eminent Baptist missionary to the natives of India, sent several works in Bengalee, besides his *Sungskrit Grammar* (Serampore, 1806).

Here we may mention Morrison's *Chinese Grammar* (Serampore, 1815), the gift of Matthew Ralston; and Halhed's *Grammar of the Bengalee Language*, "printed at Hoogly in Bengal, 1778," and bearing the autograph, besides containing the book-plate of Sam. Parr, the big-wigged Doctor who wrote such Ciceronian Latin and upheld the Whigs. Parr has written in it "The Gift of the Author, April 19th, 1780, Sackville street. *Cui pudor et justitia sua incor-*

*rupti fides nudaq. veritas: quando ullum inveniet parem?* Bound at the Cape of Good Hope." Another hand has added, "Prof. Geo. Allen from J. F. Frazer; 27th September, 1845." Dr. Sam. H. Turner, of the General Theological Seminary and of Columbia College, sent us the five volumes of his works "as a small tribute of the author's respect and veneration for his *Alma Mater*." Similarly, Dr. Thomas Hartwell Horne, in acknowledgment of one of the few Doctorates conferred upon foreigners by the University, presented a beautifully bound copy of his complete works in fourteen volumes, including both the *Introduction to the Bible* (4 vols. 1839) and the *Manual of Bibliography* (2 vols. 1814). The disciples of Swedenborg, with their customary zeal for the dissemination of their peculiar tenets, presented at various times a number of the works of the Swedish Seer. But the most curious present was the *Memorial of William Law*, published by Mr. Christopher Walton, a London watch-maker, formerly a member of the Wesleyan body, but latterly a zealous advocate of Behmenism. It takes a front rank among the curiosities of literature. Although a thick royal octavo of over seven hundred pages, and printed in very small type, it is not properly and finally a book, but an advertisement for some competent person to undertake the preparation of a book, or a series of them, and a statement of the qualifications required for the purpose, with elaborate lists of the works to be studied as a preliminary. There are foot-notes in it which would of themselves make books of considerable size. One of these, extending from p. 334 to p. 628, contains a very full personal and polemical biography of William Law, with notices, generally scorchers, of his eminent contemporaries, and commendatory criticisms of his numerous writings, besides very large extracts from his private correspondence and that of his two lady friends who shared his retirement at Kings Cliff. The dates printed on the several sheets show that the printing of the book was the labor of years. It contains a vast selection from the unpublished writings of Dionysius Andreas Freher, the whole of Pierre Poret's *Bibliotheca Mystica*, a correspondence between Francis Lee and the Non-juror Dodwell in regard to the merits of Jane Leade and her writings, and a French biography of Louis Claude St. Martin. And all these gems are imbedded in matter of Mr. Walton's own composition, chaotic, full of repetitions, but ever and anon returning to the main point, viz: the literary gifts, the spiritual tastes, the theosophic

discipline, and the course of study needed in "the candidate" who shall undertake to set forth Law's claims to be the true English exponent of the one true philosophy, that is, of Behmenism. Among the documents it contains are letters from Rev. Jacob Duché to Henry Brooke, Jr., who, like his better known uncle of the same name, was a zealous Behmenist. The book has its uses; it contains much material for the student and historian of mysticism not easily or not all accessible in any other quarter; and it corrects many gross blunders, such as the current statement that William Law († 1762) was the editor and translator of the (imperfect) quarto edition of Böhme's writings which appeared in 1764-81. But a little literary tact and some common sense would have made it both more useful and less expensive to its author.

With the removal of the University to its third and present site in West Philadelphia, an era of enlargement and prosperity began, which reflects itself in the Library. The first great addition was in the gift of Mr. Stephen Colwell's magnificent collection of works on Social Science, a collection unique in its range and its completeness. Mr. Colwell was a man whose excellencies of character not only endeared him to a wide circle of friends, but also led him to a patient study of social questions with a view to the amelioration of the condition of society. He was profoundly impressed with the failure of the American churches to do their duty as social teachers, therefore published his *New Themes for the Protestant Clergy* and his *Politics for American Christians*, besides procuring translations of Chastel's *Charity and the Primitive Church*, and works of similar practical tendency. The same interest led him to the study of political economy, but made him altogether dissatisfied with the works of the usual authorities on that subject. The school of Sismondi and Droz, but especially the writings of Gioja, excited his interest; and then he found in the works of List and our townsman, Henry C. Carey, a presentation of the great truths of social science, which, both in form and substance, corresponded to his own convictions. He procured the translation of List's *National System of Political Economy* (1856), and published it with an introduction, which is a sustained protest against the inhumanity of the Malthusian school, and its absurdities as exposed by Gioja in his famous tabular exhibit of their all but countless contradictions of themselves (*Scienze Economiche*, 6 vols., 4to., Milan 1815, *seqq.*) But he was also an original investigator in the

department of finance. His *Ways and Means of Payment* (1859), is one of the great but neglected books, which must be left to posterity for a just appraisal of their worth. It is based upon an extensive study of the history of the past, and points to a future adjustment of our commercial and banking system, by which all obligations will be discharged, and exchanges effected, by the principle of set-off, which was discovered or originated by the merchants of the great French fairs, and is already applied to the mutual obligations of our banks, as settled in our clearing-houses. In this view, soft money and hard money are alike mere temporary expedients and actual incumbrances in the management of business; money of account furnishing both the true and unvarying standard of value, and the best means of payment.

Mr. Colwell was a man of fortune, and spared no expense to make his library of works on his favorite topic a complete one. Being acquainted with French and Italian, he collected in those languages, as well as in English,<sup>5</sup> every important book, pamphlet or periodical that came within his reach. Sometimes he would be for years on the track of a book, whose value he knew, before he succeeded in adding it to his collection. Some books of this class have become, for various reasons, of extreme scarcity. For instance, as much as a hundred pounds has been offered, by public advertisement, for a single copy of Healy Hutchinson's *Commercial Restraints of Ireland* (Dublin, 1779), and offered in vain, but it is found in Mr. Colwell's collection. Another work of equal rarity, is a collection of the most important English pamphlets on finance and banking. It is in twelve handsome volumes, and its contents begin with the times of the first Stuarts, cover the controversies which connect themselves with the origin of the Bank of England and its contemporary rival, the Tory Land Bank, and extend into the present century. It contains but a fragment of the whole literature of the subject, but the pieces it includes are so rare and of such importance, that it would command almost any price. And its permanent value may be inferred from the fact that the queries propounded in connection with the recoinage controversy of 1695, coincide very closely with those issued by the Silver Committee, which has been in session during the recess of Con-

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<sup>5</sup>The weak side of the collection is the slight representation of the German literature of the subject. Such German writers as have been translated into English or French, are present; but the rest, with a few exceptions, such as List and Dühring, are wanting.

gress. In the collection of works on money and banking, which is a very large one, there is a goodly number of the best writers on numismatics, including Eckhel, Mommsen, Ruding, Snelling, Gronovius, De Dominicis and others.

It was the declared intention of Mr. Colwell, not only to give his library to the University, but also to endow a Professorship of Social Science in connection with the gift. But he died before he had carried out either of these intentions, and it was simply the pious regard of his family for his wishes which secured his books to the University, and resisted urgent solicitations to dispose of them in another direction.

When we say that the Colwell collection covers between nine and ten thousand books and pamphlets, our readers will excuse us from any detailed enumeration of its contents. While richest in the special departments in which Mr. Colwell especially interested himself, it covers the whole field of political or national economy, and includes the great bulk of the important literature in the three languages already mentioned, down to the time of his death, in 1870. To describe it, would be to rewrite and greatly enlarge McCulloch's *Literature of Political Economy*. It has excited the just admiration of every home and foreign economist who has seen it, and there have been many such who visited it during the Centennial Exhibition. An earlier visitor, Mr. Marshall, who lectures on the subject in the Cambridge University, pronounced it unique in its completeness, and said he and his associates would be delighted to possess such a collection on the Cam or the Isis. It has therefore been the more amusing, to see a New England professor escorted through it, and observe him surveying with encyclopedic consciousness and elevated nose, the thousands of arrayed volumes which could add nothing to his wisdom.

But of course, like every library of works on a subject still undergoing developments, it needs continual additions, and should be furnished with a permanent fund for that purpose. The annuals and other periodicals should be kept complete up to date, and new books of importance should be added every year. Thus we have every edition of Adam Smith's *Wealth of Nations*, except the last and best, edited by Prof. Thorold Rodgers; and while Mr. Colwell would have taken a lively interest in the reopening of the discussion of first principles by the *Katheder-Socialisten*, he died too soon to have even a Pisgah-sight of that now widely-spread

and influential party. And even in its collection of older works, there is room for large additions.

One such addition, a very magnificent one, has been made during the past summer. An English gentleman has presented, through Mr. Henry C. Carey, a collection of two hundred and forty-two volumes of English pamphlets, amounting in all to several thousand publications, and covering the period between 1670 and 1851. Four volumes represent the seventeenth century, and sixty-three the eighteenth. While some of these were already in the Colwell collection, this is by no means true of the bulk of them, and they contribute greatly to the value and the completeness of the library. Their arrangement in chronological order enables the student to get at once at the literature of any of the great financial controversies, such as the Bank of England controversies in 1695 and 1845; the Recoinage controversy of 1695; the South Sea bubble which burst in 1720; the Bullion controversy of 1817, and the Corn Law agitation, 1839-46. This collection may be said to form a library of national economy in itself, so rich is it in the utterances of great authorities such as Ashburton, Tooke and Fullarton. But it receives no less than it imparts of additional value from its association with the Colwell collection, and the generous donor deserves the thanks of all our economists in adding so handsomely to the completeness of the finest library of the subject which they can anywhere find. For in accordance with Mr. Colwell's own wishes, his books have been made as accessible to those who are specially interested in the subject, as is consistent with our University arrangements, and have been freely consulted by many of those who are engaged in writing upon the financial questions of our time.

The Rogers Library of works on Civil and Dynamical Engineering and related topics, is a gift to the University from Prof. Fairman Rogers, as a memorial of his father. It is still in process of formation, but is already one of the finest and most costly collections in the country. Having no technical acquaintance with its subjects, we can only speak in very general terms of the works which compose it. But even the most unskilled observer cannot fail to admire the costly splendor of some of them. For instance, Scott Russell's work on *Naval Architecture* seems to have been constructed on a scale proportional to his "Great Eastern;" and its next neighbor *The Ganges Canal* is another elephantine folio



of elaborate maps, plans and prospects, with three bulky volumes of descriptive letter-press. The price of one such work is counted by hundreds of dollars. This library is very rich in periodicals, and besides the published catalogue of its books, there is preparing a written catalogue of all the important articles which these contain. Of greatest interest to general readers are the works on architecture, which cluster around Ferguson's great *History*, itself one of the most wonderful among the wonderful books of this century.

By the conjoint action of the Board of Trustees and the Society of the Alumni, the classical library of the late Prof. Geo. Allen was added to the literary treasures of the University, in the summer of 1873. The latter raised by subscription some three thousand two hundred dollars, to which the former added two thousand. But this sum does not represent even the first cost of the books thus acquired, to say nothing of any payment for the skill exercised in their selection, a matter in which Dr. Allen was an expert of the first order. We may, therefore, regard the former owner of the books as one of the chief donors of the collection to the University.

The main thing in this Allen Library is, of course, the collection of classic Greek authors, in the best and most desirable editions, but chiefly the modern editions; together with a large apparatus of introductory works on Ancient History, and Antiquities, Grammars, Lexicons, and the like. The central stem of the collection, as we may say, is the magnificent Paris *Bibliotheca* of Didot, in sixty-six volumes of lexicon octavo size, in which the Greek texts are accompanied by Latin translations, and a more or less elaborate annotation. The names of the editors show that "the Aldus Manutius of France" was obliged to call Teutonic scholarship to his aid in its preparation, as also in enlarging to its present size his magnificent edition of the Greek *Thesaurus* of Henry Estienne. The latter was a Huguenot classical scholar and publisher, such as France cannot now exhibit, although he was but one among the Scaligers, the Casaubons, and the Castellios in the Reformed camp, and not even *primus inter pares*. Beside the nine folios of the Didot reprint stand the four of his own edition, themselves a monument of the patience and the thoroughness of the scholarship of the Renaissance. Every word in Greek literature is here, and not only is it defined, but all the important passages, and in some instances all the passages in which it occurs

are quoted. Both the *Bibliotheca* and the *Thesaurus*, we may add, are beautifully bound, and like all Dr. Allen's books, are in the best condition. Parallel with the *Bibliotheca* runs that Tauchnitz edition of the classics in duodecimo, whose cheapness and handiness have made classical literature accessible to the slender purse of the scholar. Around the two series are grouped all the great modern editions of the Greek authors, especially of Homer, Herodotus, Thucydides, Xenophon, Demosthenes, the Greek dramatists, and Theocritus; especially, also, all the critical labors of his favorites, Bentley, Schweighauser, Hermann, Dindorf, Beckker, Stallbaum, and Paley. What we have said of his tastes and preferences last July, may excuse the absence of a further account here. One point, however, seems worth adding: he looked upon Greek literature with the eye of a scholar and a philologist, rather than with that of a historian. His tastes and his collections were, therefore, limited to classic authors, and he used to express his astonishment at the preference shown by the older generation of teachers, like his predecessor Dr. Wylie, for Longinus, Cebes, Epictetus, Theophrastus and Marcus Aurelius, writers of a later age and inferior purity of style and vocabulary. For this reason his collections terminate somewhat abruptly at Plutarch and Lucian, only the romancers, the scholiasts and the lexicographers of a later date, being properly represented. It was, therefore, a most desirable addition to his library, when a part of the fund voted by the Trustees for the purchase of historical works (*vide infra*), was expended in procuring the Bonn edition of the Byzantine historians, edited by Barthold Niebuhr and his colleagues, these latter including some of the most eminent of German scholars. Another addition which is still much needed, is the great critical editions of the Greek Scriptures, by Tischendorf, Stier and Theile, Lachmann and Buttman, Meyer, Tregelles, Bloomfield, Ellicott, Webster and Wilkinson, Alford, and Wordsworth, besides the reprints of the great Codices, and the special apparatus for the study of New Testament Greek. A superb copy of Plutarch's *Moralia*, in Wyttembach's (Oxford) quarto edition, the gift of the class of 1865, commemorates what was in his opinion the first in time of the notable graduating classes of the recent era. It takes rank among the finest specimens of Greek printing in the world.

Supplementary to Dr. Allen's Greek library is his collection of works on military science, which he used in his very thorough

expositions of the Greek historians. The works of Jomini and Rüstow, of themselves a considerable collection, are the chief books but there are a considerable number of others, both English and French, especially in regard to the campaigns of Napoleon.

Dr. Allen's collection of Latin authors, as might be expected from the early separation of Latin from his chair, is nothing like as complete as that of Greek authors, and its completion should be effected at an early date. It contains no collected edition of the Latin authors except that known as the Regent's classics, whose texts have no critical value; and while there are a good many fine editions of the Roman poets and historians, there are also great *lacunæ*.

More complete in its way is his collection of the modern Latin historians and poets, especially the Italians, a class of writers for whom he evinced a taste that is now rarer than it ought to be. Genuine Latin poetry did not cease with Claudian; for Buchanan and Vida, Secundus and Balde were true poets, although the pedantic taste of their times led them to select a dead language as the medium for poetic utterance. Together with these, stands his collection of works on bibliography, with Lowndes, Burnet and Graesse as the foundation, and the complete works of Peignot and Nodier, besides many valuable monographs, especially on the history of printing; and also catalogues of Libraries (Pinelli, McCarthy, Libri, etc.), some of which are now great rarities. His bibliographical preferences were not for the English school of Dibdin; he cared but little for their technicalities and their slang; for in him the book-hunter was always subordinate to the scholar. He cared more for what was in a book, than for the envy that could be excited by its possession as a rarity. He probably never bought a book for any reason apart from its intrinsic merits, and when tested by that last evidence of bibliomania, the readiness to own several copies of the same edition, he would be found perfectly sane.

His Shakespeare library is an instance of this. It certainly is one of the finest that was ever in the possession of a private scholar not possessed of unlimited means; yet it contains only six books older than the nineteenth century, and those six are of the eighteenth. But it is rich in all that is most necessary to the real student of the text, beginning with Malone's *Variorum* and the facsimile of the first folio edition, and including the three great Ger-

man translations (Schlegel and Tieck, Franz Horn, and that edited by Bodenstedt), the standard annotated editions of the text (Keightley, Dyce, Knight, Staunton, Clarke and Glover, Hudson, White, and best of all, Delius), down to the (unfinished) Variorum edition of Mr. Furness. And these are supported by monographs and commentaries on Shakespeare, the *Shakespeare Jahrbücher*, works on English philology, standard editions of the other Elizabethan dramatists, and the like. The collection has been more recently supplemented by works on earlier English and German philology, including the publications of the E. E. Text Society, the *Brut* of Wace, the *Ormulum*, Grein's Anglo-Saxon Laws, and the chief mediæval German Poets, and also by Cohn's interesting and curious volume, *Shakespeare in Germany*.

On the transfer of the University to West Philadelphia, the Trustees, in view of the scanty and antiquated character of the general literary apparatus, appropriated five thousand dollars for the purchase of new books, naming, especially, the subjects of history and English Literature. The greater part of this appropriation has been expended by the Provost, with the coöperation of the Vice-Provost and the Professors of Literature, firstly and chiefly in procuring a satisfactory collection of works on European and American history. We will not take time to dwell upon its merits here, but merely say that its selection was guided by the practical experience of those who were to use it, and that they have been able to do the duty of their chairs more perfectly since they have had access to it. By a very proper construction of the intention of the appropriation, this purchase has included the additions to the Allen Greek and Shakespeare libraries already specified, besides some works of a philological character, such as Ducange's Glossary of later Latin, Littre's French and Grimm's German dictionaries. There has also been procured, for the use of the chair of Moral and Metaphysical Philosophy, a collection exhibiting the history of philosophy, and including the philosophical works of Hegel, Schelling, Fichte, Spencer, Lewes, Cousin, and others of the great names in that department.

The historical library has been supplemented from three sources : (1) By the transfer of a number of historical works from the Colwell library to this department, where they more properly belong. (2) By a gift of valuable books, chiefly in French and Italian, from Dr. Alfred Stille, of the Medical Faculty. Most of

these—such as Michelet's *Ceuvres*, Buchon's French Chronicles, Tiraboschi's *Letteratura Italiana*, Guiccardini and Botta's *Storia d' Italia*, Vasari's *Vite dei Pittori*, Lanzi's *Storia pittorica*, *Il Museo Borbonico*, Gioberti's *Rennovamenti d' Italia*—are standard works, but rarely met with, except in such translations as we have of some of them. (3) The Tobias Wagner Library Fund, created in memory of the deceased gentleman whose name it bears, by a lady, a member of his family, is devoted to the purchase of works in this department, and brings in a revenue of about \$500 a year. One of the purchases already made from it is the magnificent collection of photographs of antiquities in possession of the British Museum, in twelve large volumes. This generous gift of itself conveys the assurance that the department of history will be furnished with a steadily increasing literary apparatus.

The law library of the late Judge Bouvier, has been given to the University by his son-in-law, Dr. Peterson, of this city. It is especially rich in French and Roman law, containing among other things the edition of the legislation of Justinian in sixteen quarto volumes (Latin and French), published at Metz, at the beginning of this century; that of the Pandects (Latin and French), edited by Pothier, in twenty-three octavos (1818–23); Toullier's *Droit Civil* (21 vols), the French translation of Savigny, the works of Dalloz, D'Auguesseau, Pothier, Dupin, Ortolan, Carriere, the French *Code* in 34 volumes, Mackeldy, Hugo, Heineccius, De Passay, etc. English law, and even American law, are more slightly represented in comparison, though the eleven folios of the *State Trials* count for something in the former field; while in Scotch law there are the standard treatises of Erskine (1785), Allison and Burton. The Canonists are represented by their *Corpus Juris*, and by Van Espen, Sanchez, Ant. Schmidt and Dupin.<sup>6</sup>

This enumeration of gifts and additions brings us to the Centennial year. The Exhibition has not failed to leave its mementos on the shelves of the University's Library, as might be expected from its proximity to us. We have, of course, the catalogues of nearly all the nations which united in the Exhibition. From the German exhibit Baron Tauchnitz sends us a considerable number of his excellent publications. These include the *Acta Rectorum* of the University of Leipsic, the *Codex Ephraemi Syri Rescriptus*, the

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<sup>6</sup> The library of the Law Faculty, like that of the Medical Faculties, is separate from that of the University, and therefore does not come under our notice here.

*Monumenta Sacra Inedita* of Tischendorf, the Decrees and Canons of the Council of Trent in the standard edition of Richter and Von Schulte, the Forged Decretals ascribed to Isidore, the Genealogies and Armorial Bearings of the reigning Houses of Europe, the Witnesses of the Truth of Dr. F. Piper (a sort of Protestant Acta Sanctorum in four volumes), two of the smaller editions of the Greek New Testament, and editions of Aristophanes, Tacitus, Livy and Cicero, together with three volumes of Logarithmetical Tables, and a few other works. The Netherlands add the description of their wonderful public works, and as it to show that their nation is not as flat and prosaic as its territory, they send us a considerable quantity of their music. Much of this is of historical interest, as it consists of the church music and the popular songs of the great era when Holland was among the greatest of the nations, and is republished by a society for the revival of the old music of the country.

France sends us the various publications of her *Ecole des Ponts et Chaussées*. Russia, the tables in which are projected the statistics of her industries and her commerce. Sweden gives her volume of statistics (prepared for the press by Dr. Headen of the University), a goodly number of papers and monographs in regard to her iron industries, besides a large portfolio of very beautiful topographical maps of her southern provinces. India contributes the finely illustrated catalogue of her *Thanatophidia*, or poisonous snakes. The Australian colonies, several works descriptive of their resources, both mineral and agricultural, and an especially beautiful volume of plates of her kangaroos, opossums, and their like. Rev. Geo. Sutherland, a Sydney clergyman, contributes the initial volume of Antipodean philosophy, his *Christian Psychology*. Spain gives us Coello's magnificent Atlas of her provinces and her dependencies, and the publications of her hospitals, National Libraries, and Archæological Museum at Madrid.

The nations on our own side of the world contribute still more largely, and as their literature is far less accessible to us than that of Europe, because their commerce as yet connects them rather with Europe than with us, their gifts are the more valuable. Chili sends publications describing her commerce, her resources, her best map, and the publications of the Exhibition she held at Santiago a short time since. To these she has added a large collection of her governmental reports, accounts of explorations, medical and

literary periodicals, general literature, and educational text books on every conceivable topic, and of such merit in point of style and matter as gives an entirely new notion of the state of knowledge and culture in the most prosperous and peaceful of our sister Republics. Brazil, to show the progress of the healing art, contributes the catalogues, theses and dissertations of her medical schools, and a few descriptions of the resources and the development of single provinces, besides the general description of her Empire—the latter in the English, German and French languages. From Cuba we have maps of the Island, the *Annales* of the Royal Academy of Havana in eleven volumes, the Transactions of its commission on public Hygiene, and its volumes describing the Flora and Ornithology of Cuba.

Our next neighbor across the Pacific, the Empire of Japan, sends us the elaborate reports made by her agents, in regard to the educational systems of the various Christian nations, which fill fifteen volumes in the Japanese language; and also the valuable English publication on Education in Japan.

This is enough to show that "the day of small things" is past for our Library. It now numbers *over* twenty thousand volumes, and that "*over*" represents not scores nor hundreds, but thousands, as we know from an enumeration made some years ago. But even that number is but a beginning, a nest-egg for the accumulation of such a Library as will fully correspond to the needs of a University, and will take its place beside the great collections of the old world. As the recent *Report on Public Libraries* (Washington, 1876), fully shows, the formation and the increase of such collections is going on as never before in our history. We are drawing hither books from the old world in a continual stream, and not merely the new and fresh issues that gratify the tastes of the hour, but literary rarities and antiquities in great numbers. We saw in a German theological journal the other day, a lamentation that the only known copy of Luther's first edition of his Catechism had been bought up and carried off to our city; and it went on to say, that antiquarians were vainly seeking to replace it. So let it be; our country is the best and safest storehouse for the literary treasures of the old world. As Europe gathers up the Manuscripts of the Indias, to save them from the literary voracity of the white ant, so may we bring hither those of Europe, to save them from that

vile and hungry creeper, the book-worm. In our climate, he cannot live to pursue his critical raids upon literature.<sup>7</sup>

In our city, the city of Logan, Franklin and Peters, and, we may add, of Rush, this process of accumulation may be said to have begun as a thing of municipal interest. And, although Philadelphia did for a long period relinquish the foremost place she had once held as a literary and a publishing centre, there are signs of a *Renaissance* of literary interest among us. The improved condition of the University, and the increase of popular interest in it, is but one indication out of many. And may we not fairly hope that a generous provision for its many needs, not excepting its Library, will become a matter of pride in our city, as is the case with Boston in relation to the most venerable of our Universities?

ROBT. ELLIS THOMPSON.

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## NEW BOOKS.

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THE THEORY OF SOUND IN ITS RELATION TO MUSIC. By Prof. Pietro Blaserna, of the Royal University of Rome. With numerous wood cuts. 12mo. Pp. xii., 187. D. Appleton & Co., New York.

In the preface to this book, the author speaks of the notable progress which the science of acoustics has lately made, especially in its important bearing upon many musical questions; yet we are sorely disappointed not to find even one of the later discoveries recorded—discoveries which have fully as much bearing upon practical music as the long-established and well-known principles of sound expounded in this volume.

In the second chapter, treating of the "transmission of sound," the laws regulating it are by no means clearly set forth, It reads: "The vibratory movement is not possible if each particle of the transmitting medium be not able to vibrate on its own account—that is to say, if the medium be not elastic; and thus the power that a body possesses of transmitting sound constitutes

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<sup>7</sup> A member of Trinity College, Dublin, told us that their large and valuable collection of Manuscripts and rare books was suffering terribly from the ravages of this destroyer. We generously offered him store-room and watchful care for the whole collection, but he declined it! We will not be responsible if the collections of Ussher and the other great benefactors of that library are ruined.



one of the surest criteria of its elasticity." But every one, even those not acquainted with physical science, knows that one of the most elastic bodies, viz: india-rubber, does not conduct sound easily; on the contrary, it, like felt, is used to present an obstacle to the transmission of sound. The correct explanation, viz: that the facility with which a body transmits sound depends upon the *relation* of its elasticity to its density, is mentioned only incidentally further on.

In speaking of the measurement of the velocity of sound, the author relates the old experiment of Biot in the water pipes of Paris, but omits mentioning the much more accurate and beautiful experiments made a few years ago in those very pipes by Radeau Koenig, the results of which were published in "Poggendorff's and Annalen." The method employed in this investigation differed materially from those in former experiments of this kind, inasmuch as not the ear of the observer alone gave the final judgment, but it was aided by the eye; the so-called graphic method having been employed, in which the sound is caused to trace its vibrations upon blackened paper or glass. We are amused also to find faithfully recorded the old mistake of Radeau, who requires a person to pronounce five syllables in a second, and what is more, says that an echo will repeat those syllables *distinctly* if at the proper distance from the source of sound.

The very important subject of resultant, or *Tartini's*, tones is treated very lightly, and the explanation of their production is exceedingly unsatisfactory. The author says, "the theory of these notes is not easy to give;" nor do we hold it to be, yet this does not excuse the assertion, after having given Young's theory—but without the name—that the true theory of these sounds can only be explained by mathematical calculation. He does not mention the very important researches in the subject of beats and resultant tones, made by Dr. R. Koenig, of Paris, which were published in "Poggendorff's Annalen," where a theory of these tones is given, differing in some vital points from both Young's and Helmholtz's. Neither do we find the many important experiments and discoveries of Prof. A. Mayer, of Hoboken, which were published both in this country and abroad. His experiments in regard to the retention of sound in the ear, after the sound has ceased, and the conclusions derived from them, have an all-important bearing upon the consonance and dissonance of intervals, which the author of the volume under consideration has taken so much pains to explain with both figures and words.

However, in the part of the book which relates to the theory of music and to the history of the musical art, both the musician and the lover of music will find much of value and interest, especially in the last chapter, where Prof. Blaserna shows himself as a musical critic of rare ability and fine æsthetical feeling. His criticism of the music of the future is the more acceptable, as it shows

none of that infuriated partisanship which has split the musical world of the present time into two antagonistic parties, keeping up a constant warfare with each other.

The illustrations, with the exception of one or two, explanatory of the Stroboscopic method of studying the vibrations of strings by means of intermittent light, are taken from Helmholtz, from Tyndall and from Koenig's catalogue, but unfortunately from the earlier editions of those works which were printed before many of the instruments depicted were improved to their present forms. The volume is one of the *International Scientific Series*, which has gained some repute on this side of the water.

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LES ORIGINES DE LA FRANCE CONTEMPORAINE. Par H. Taine. Tome 1. L'Ancien Régime. Paris: Hachette. (Translated by John Durand. New York: Holt. 1876. pp. 553.

At last Taine has found a subject worthy of his eloquence and suited to his style. Gifted with a wondrous clearness of expression and an admirable love of paradox, he was altogether out of his element in discussing English literature or the philosophy of art; even his travels gave him small opportunity to show his real power, and now only does he show himself master alike of his subject and its wealth of resources. The ancient Regime or France before the Revolution, the Revolution itself, and France as it was reorganized, in 1808, into the France of to-day as far at least as its political geography goes, are the grand outlines, and of these Taine now publishes his living picture of the first part. Unquestionably there was a vast amount of material ready to his hand, and a help rather than a hindrance in the earlier works on the subject, notably De Tocqueville's book with the same title—for De Tocqueville's only eloquence was that of truth, and his only aim was a direct attack upon the Napoleonidae, and he endeavored to show that many of the reforms credited to Napoleon were really adopted long before by the leaders of the royalist party. Taine disclaims any reserved purpose and declares that he is only a historian and not at all a partisan, and yet his book leaves a strong impression of being intended to cultivate a tendency, although with characteristic art, both as politician and man of letters, he evidently means to keep his own counsel and leave it to his readers to adopt all unconsciously the opinions he prescribes. To Frenchmen, therefore, the book may have a significance of peculiar meaning and value; to us, who read it as a charming contribution to modern French literature, it has a grace, a novelty, a rush and force of eloquence, a contrast of colors and a depth of light and shade, that make it almost, if not quite, the most notable book of the day. It is not that the parts are new, for these have been in the main stated in all earlier histories; but for the first time they are brought out in their full force and significance, are marshaled

not merely in their chronological order, but in a way that best shows their political and social significance. It is not that the story of the utter decadence of real power in France in the eighteenth century is a new one, or that the prologue to the great French tragedy is not familiar, but M. Taine knows perfectly well how to illustrate the old by the new, and to make each strengthen the other. The analysis of society is necessarily a serious study, as befits the subject; but the sketch of the manners and character of the world that lived in France, not for it, is wonderfully well done, with all the point and force, and without the wearisome detail and repetition, of the famous biographies of the same period. The discussion of the spirit which prevailed in France, and the doctrine that grew into being, is clear, sharp and decided; but the way in which the propagation of what was essentially the philosophy of the French Revolution, is described, rises to an almost absolute eloquence, and then in tones of awful darkness, is the account of the condition of the French people, the long, wearying, crushing deadening weight of years of oppression and misgovernment, ruining them alike in mind and body, in purse and person, in heart and intellect. The few books that make up the picturesque tale of the French pro-revolutionary period, are for the most part exaggerated or unreliable, and sometimes both; and even of the gloomy horrors of the Revolution itself, Carlyle and Dickens have given us the best examples of how to treat so great a subject. Here, however, we have in Taine a hand worthy of the facile clay and able to mould it into a living shape, and his book is full of life and light, of shadow and effect. He has thrown aside lesser tasks and the uncomfortable business of criticism, for the nobler work of recounting the story of a great revolution, and his first volume gives promise of a book that will serve to throw light on the present of France as it is explained in the France of a century ago. The translation of the book necessarily, in the case of an author like Taine, deprives his writing of much of its sparkling clearness, and therefore of course it ought to be read in the original, by those who can do so, for the pleasure of his force and beauty of diction, and as a study of the best French of the day, the French of a scholar and a man of authority; but for those who must read the book in English, there is fortunately a good translation from the pen of Mr. John Durand, published by Messrs. Henry Holt & Co., of New York. The substance of Taine's work is preserved there, and it ought to find abundant readers; for it deserves careful perusal and diligent study, and there is no better method of contrasting the building up of nations, than to recur to the now familiar history of our hard task of creating a union in the struggles of our eighteenth century life, and then to turn to Taine to read, in his eloquent pages, the story of the undoing of France by its rulers.

FIFTY YEARS OF MY LIFE, by George Thomas, Earl of Albemarle, New York: Henry Holt & Co. 1876. pp. 420.

Lord Albemarle had the good fortune to be born under a lucky star and in a lucky family; but with all the other fairies on his side, he certainly was not blessed with the gift of authorship. His book is essentially vulgar and stupid: the vulgarity that of a man who thinks that his peerage has done so much for him that he need do nothing more for himself; the stupidity that of a man who has lived with bright and clever people, without in the least acquiring any of their good qualities or appreciating them. Perhaps the only justification of the book is the appendix, with its absurd chronological history of the Keppel family, showing that it began with nothing and ended nowhere, while it had a long run of nobodies to make it rich and famous. Lord Albemarle's personal history is utterly insignificant, and yet, in his seventy-odd years of life, he was thrown among great folk and took part in great events. He was at Waterloo; he traveled and wrote books about the East, when it was something of a *terra incognita*; he held various petty offices, and he was in Parliament at times of importance; and yet his book is so vapid, so dull, so insignificant, that one wonders how it came into being in England, and why it was ever borrowed for our American market. Can it be that we dearly "love a lord," and may safely be counted on to buy a book, no matter how worthless, provided it is written by a peer, and admits us to the wonderful circle in which Lord Albemarle now takes his round of duty? Sir Henry Holland disappointed the world with a dull book, but it was not a bad one; and he was not less readable than people expected, only he was too circumspect and impersonal. Lord Albemarle has no reserves, either about his own family or any other, and he vamps up old stories that might as well have slept on another half century, without being pressed into the service in this last example of book-making. Even the art he uses in that inglorious trade, belongs to the fashion of half a century ago, when he inscribed himself on the list of noble authors by his books of travel that died long before their writer. He tells a story of his own accidental being—his grandfather married to pique his sister-in-law and cut off her son from the peerage. Having accomplished that praiseworthy purpose, he left us the present Lord Albemarle, who is foolish enough to add this to his other store of elegant anecdotes. Perhaps there may be some special merit in the book, or some value in its account of events once important, such as Queen Caroline's trial or Princess Charlotte's domestic life—but we thought Mr. Thackeray had effectually put an end to that sort, of easy writing and bad reading. It is not pleasant to see sharp, harsh things said half a century ago, revived by Greville's Memoirs, but at least they were true, new and good; it is far worse to

find an American publisher—one too, with an especially well-deserved reputation for the excellence of his list of books, lending his name, and with it a certain voucher for merit, to a book that is quite without reason for its existence.

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### BOOKS RECEIVED.

Joan; A Tale. By Rhoda Broughton. 8vo., paper, 75 cents. Pp. 216. New York: D. Appleton & Co. [Porter & Coates.

History of the Mexican Railway. By Gustavo Baz and E. L. Gallo. Translated into English by George F. Henderson. Illustrated by lithograph plates. Folio, pp. 212. Mexico: Gallo & Co. [Mexican Centennial Commission.

Fourteenth Annual Report of the Secretary of the State Board of Agriculture of the State of Michigan, for the year 1875. From State Agricultural College Library, Michigan.

In the Levant. By Charles Dudley Warner. 12mo., cloth, \$2.00. Pp. 382. Boston: James R. Osgood & Co. [Porter & Coates.

Fridthjof's Saga: A Norse Romance. By Esaias Tegnér. Translated from the Swedish by Thomas A. E. Holcomb and Martha A. Lyon Holcomb. 12mo., cloth, \$1.50. Pp. 222. Chicago: S. C. Griggs & Co. [Claxton, Remsen & Haffelfinger.

The Centennial Frog and Other Stories. 16mo., cloth, \$1.00. Pp. 45. Philadelphia: Claxton, Remsen & Haffelfinger.

The Barton Experiment. By the author of "Helen's Babies." 16mo., paper, 50 cents. Pp. 208. New York: G. P. Putnam's Sons. [J. B. Lippincott & Co.

The Life of Marie Antoinette, Queen of France. By Charles Duke Yonge. 8vo., cloth. Pp. 473. New York: Harper & Brothers. [J. B. Lippincott & Co.

Three Memorial Poems. By James Russell Lowell. 16mo., cloth, \$1.25. Pp. 92. Boston: James R. Osgood & Co. [Porter & Coates.

Poems by Clement Biddle. With photographs and cuts, 8vo., cloth, \$5.50. Pp. 115. Philadelphia: Lindsay & Baker.

Harold: A Drama. By Alfred Tennyson. (Author's Edition from advance sheets.) 16mo., cloth, \$1.00. Pp. 170. Boston: James R. Osgood & Co. [Porter & Coates.

THE  
PENN MONTHLY.

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FEBRUARY.

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THE MONTH.

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THE Conference of diplomatists at Constantinople, in their negotiations with the Sublime Porte, have certainly not been playing a very dignified part. Day after day they met and adjourned without receiving any definite answer to their exceedingly mild proposals for guarantees for the future of the Eastern Christians. They asked not for the autonomy of Bulgaria, but (1) for the organization of a Bulgarian *gendarmie* after the model of that of Belgium and with a Belgian nucleus, but in the pay of the Turkish Government and wearing its insignia of office; and (2) for the supervision of the appointment of the Governors of the two provinces into which they wished the country divided. They would not exclude the Turkish troops from Bulgaria, but they would confine them to certain localities. And to secure the execution of the agreement, they asked for the power to create an international commission with advisory and supervisory powers. Count Bismarck grew sick of these undignified concessions and parings down. On the 11th he telegraphed his displeasure to the German minister, and forbade him to sign any more such concessions without first telegraphing their text to Berlin. And even the English cabinet telegraphed to the Porte that they were of one mind on the subject, and that Turkey need expect no help from England if she refused these terms.

Yet on the 15th the English representative on behalf of the Conference submitted another ultimatum, in which everything

worth having in the other proposals was passed over in silence; a mixed commission of Turks and Europeans—fox and geese—was proposed; the supervision of the appointment of governors for five years only was asked—and nothing more.

To all this the Porte replied with offer of promises—promises—promises. The paper guarantees of 1856 would be renewed and reduplicated without end, but not one step would the Sultan and his advisers take towards any other sort of guarantee. And as a last resort, they fell back upon their new paper constitution; the Sultan could not consent to such things without consulting the Grand Council,—one hundred and eighty of his creatures, who dare not open their lips except to echo his wishes. This act of the diplomatic farce was played on the eighteenth, and of course the proposals of the Conference were voted down unanimously. The telegraph agents were careful to let us know that a third of the Assembly were Christians, and that the Greek and Armenian patriarchs spoke in favor of repelling the European proposals. But they do not add what they, as being on the spot, know very well, that these exalted dignitaries are appointed to office and removed from it by the Sultan at his pleasure; and that this latter power is very frequently exercised upon small provocation. If we are not mistaken, there are several ex-patriarchs of both churches yet alive, and meditating on the instability of fortune in monastic cells.

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THAT Russia went so far in concession was disappointing, unless it had the purpose of putting Turkey still more clearly in the wrong at the bar of public opinion, and with the foregone certainty that the Porte would concede nothing. It seemed to confirm the rumors that her financial and military condition were not such as to make war easy for her, and that the Government had been holding back the popular enthusiasm not so much from a love of peace as from a sense of its own embarrassments.

Poland too is an embarrassment; she is again “searching for a sword in her sepulchre.” An advance upon Russia might set Warsaw in a blaze of insurrection; for the Roman Catholics of Europe, from the Pope down, feel no sympathy with the new crusade, and the Roman Catholics of Poland have but little reason to wish Russia any success. It is thus that the Nemesis of past sins comes down upon men and nations, not in the guilty moments of

their wrong-doing, but in some hour of noble aspirations and purposes, when the hand that was raised to do justice falls in powerlessness, because the Avenger's clutch is on their own throat.

Ye shall watch while nations strive  
 With the blood-hounds, die or survive,  
     Drop faint from their jaws,  
 Or throttle them back into death  
 And only under your breath  
     Shall favor the cause.

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THE extradition muddle has ended in the only proper way, by England receding from an untenable position, and ordering the re-arrest and surrender of the American criminals whom her judges had discharged from custody. The English affection for smugglers may be a very laudable one—as praiseworthy as Mr. David A. Wells thinks it. But it may be carried too far; and even the sacred interests of those who set American revenue laws at defiance are not to be tenaciously guarded at the cost of exposing all the vaults and strong-boxes of England to the depredations of such as are light of finger and of heel. The course of our Department of State throughout the negotiations has been most admirable; our national dignity has been in safe hands. And we earnestly hope that no modification of the existing Treaty of Extradition will be agreed to, farther than to forbid the punishment of political offenses committed previously.

The example of Spain in surrendering Tweed to the United States in the absence of any Treaty of Extradition, just as President Lincoln surrendered Spanish criminals, had much to do with England's retreat from her false position; but it is well that such a treaty with Spain has now been negotiated.

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THIS seems destined to be remembered as a winter of great calamities. In India the famine we spoke of last month, is assuming frightful proportions, and will take rank beside that of a century ago under the administration of Warren Hastings. At home the burning of the Brooklyn theatre is followed, by the utter destruction of an express train on the Lake Shore railroad. About a mile from Ashtabula, Ohio, the railroad crosses the Ashtabula creek at the height of seventy-five feet above the stream. The iron bridge, resting on abutments of solid masonry, had been constructed three



years ago, and was, to all appearance, in as good condition as ever. But it gave way under the weight of two locomotives and two express cars, precipitating everything except the forward locomotive upon the ice. The cars, of course, were soon in a blaze, yet although there was an ample supply of water and of pumping apparatus close at hand, nothing was done to extinguish the flames, so that very few of the nearly two hundred passengers escaped a horrible death. The railroad employees, when asked by persons on the spot why the water was not used, alleged an order by telegraph from the superintendent of the road, but at the coroner's inquest they stoutly denied this.

No reason has yet been discovered for the bridge's giving way. The editor of the *Iron Age* declares from personal knowledge that its construction was such that even if one or more of the cars had leaped the track, the bumping would not have caused the fracture. Of the structure in general he says: "While not as perfect in its details as some of the bridges since built, it is not one which could be condemned off-hand, nor one with which the intelligent and impartial engineer would have been likely to find fault." He adds: "If a bridge well built of good materials, and nearly, if not exactly correct in its proportions, suddenly and without warning sinks in shapeless ruin under a load which could not have been within many hundreds of tons of the weights which have rolled over it safely during the period of its service, it offers a problem to the engineer which contains some new and important factors. Why may we not expect such a disaster at any moment and on any road? We know there are plenty of cheap, badly-built bridges, which the engineers are watching with anxious fears, and which, to all appearance, only stand by the grace of God. When these fail we are not surprised; but when a bridge like that at Ashtabula fails under the weight of two engines and, at most, two cars, after several years' service under a heavy freight and passenger traffic, we realize how much we have still to learn of the art of bridge building."

The simplest inference, it seems to us, is the unfitness of iron for building bridges, and the wisdom of substituting stone for that material in all such structures. The tenacity of iron under different conditions differs so greatly, that the tests which an iron bridge will sustain under one set of conditions furnish no certainty as to

behaviour under another. At low temperatures, especially, fractures of this sort occur continually in the case of rails and ties, and the first heavy frost of each winter is the most dangerous period of railway travel. Another element of danger is the tendency of iron to crystallize when placed in a position to receive a succession of shocks or jars. A bar of wrought iron, for instance, if freely suspended in the air and struck repeatedly with a hammer, becomes, through crystallization, of no greater tenacity than a bar of glass; and this process of degeneracy is cumulative, for the bar does not relapse into its previous state, but will carry over from period to period all the crystalline character it receives in each. The only remedy for this is to alloy iron with nickel, but as this is costly, it is never done. For this reason no iron edifice, whether a house or a bridge, can last for a very long period. The condition of an iron bridge after a hundred years of existence would be perilous in the extreme, while a stone bridge, if it be well constructed, will last a millennium, and be none the worse for wear.

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THE political situation has very materially altered since the opening of the year, and the prospect of a feasible, if not of a laudable, solution of the entanglement before St. Valentine's day seems clear enough. That there has been no collision and no real danger of any, has not been owing to the good conduct of one section of the Democratic party: that which is led by Messrs. Knott and Watterson, of Kentucky. The latter gentleman has even threatened Congress with the presence of an armed mob from his own State; while the former, forgetful of the numerous crabs he caught last summer, has been turning the House Committee on Privileges into a general investigating committee, with a view to hunting out all the scandals of the campaign. Investigation, thus far, has not helped the Democratic case. The despatches of the Republican National Committee to the disputed States have been unearthed, but they are as irreproachable as heart could desire. On the other hand, the discovery of a remittance of eight thousand dollars to Oregon by one of Mr. Tilden's most trusted political agents, and the confession of Mr. Cronin, the Democratic elector, that he received three thousand of it "for expenses," has not helped to increase the enthusiasm for the New York candidate.

Another of Mr. Knott's questionable proceedings was the preparation of a report on the rights of the House in the matter of count-

ing the vote, evidently with a view to exerting pressure upon the more conservative Committee of Conference which had the matter under consideration. In this document it was claimed that the more numerous body was "*at least* the equal of the Senate" in this respect. We are not disposed to dispute the equal rights of the two bodies in the matter, as each has under the Constitution just no rights at all, except that of being present as witnesses. The Convention which framed the Constitution decided the question by passing a resolution directing the new Senate to elect a President to count the vote of the first election. And until the adoption of the famous Joint Rule at the close of the War, which was clearly an intrusion of Congress upon the sphere of the Executive, there was no act or resolution upon record which disputed the right of the Vice-President or his acting representative. And on the other side there stands the distinct and emphatic decision of Chancellor Kent, our very first of constitutional lawyers, that the Vice-President, and he alone, is the judge in all cases of dispute. If such powers inhere in the two Houses, then we might as well refer the election of the President to them in the first place; whereas, in the present status of our political methods, the election is by the votes of the States as such, and the constitution and laws of each State—not those of Congress—determine how it shall be cast, and how it shall be ascertained when cast.

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FOR these reasons, and for those which we gave last month, we are unable to approve of the Compromise Bill reported by the Committee of Conference, and passed by Congress after a brief and hasty discussion of its merits. The new Returning Board, consisting one-third of Senators, one-third of Representatives, and one-third of Judges of the Supreme Court, will possess no powers under the Constitution to decide any cases of doubt or dispute. Its acts, if they have any validity, will derive it from their adoption by President Ferry as his own decisions. The creation of such a Board will be a precedent for future Congresses, but future Vice-Presidents may not be so ready to surrender their Constitutional powers and abandon their Constitutional responsibilities. So that unless the new measure is embodied in the Constitution itself, we are preparing for a dead-lock of the very worst sort, and at some date in the twentieth century the world may see two Presidents claiming the executive chair, the one sanctioned by the Constitution and its

highest interpreters, the other by the two Houses. And if the Constitution be amended so as to legalize this new tribunal, the effect will be to make the transfer of power from one party to another impossible except by a revolution, in case both the Senate and the *out-going* House are favorable to the administration.

Furthermore, this new tribunal is not an executive officer who has been scanning the political situation for months past, quietly collecting evidence, and gravely making up his mind as to what it will be just and wise for him to do in view of the difficulties of his position, and who will say his say and be done with it in ten minutes. It is a body selected from the partisans on both sides, which in its united capacity knows nothing of the points in dispute, and which has no evidence on the subject accessible to it, but such as has been collected for partisan purposes and with a partisan bias. It must go behind all reports, reopen all questions, re-begin heated and tiresome discussions, listen to partisan speeches, and thus work the country up to a degree of embittered excitement such as we have not yet experienced. And the whole of its operations will be in the sharpest contradiction to the theory of the Constitution as it stands—the theory that the election of the President is done by the votes of the States, and that when a State has voted and reported its vote in the form and through the officers prescribed by its own laws, no branch of the National Government has any right to review its action.

None of these considerations could be expected to have any weight with those who think that the one thing we need is a road out of the present entanglement. To use a phrase which is on everybody's lips, they were willing to "mortgage the future" for the sake of the present, and when that spirit is re-awakened in political circles, what is to be expected? We say *re-awakened*, for "mortgaging the future" was the very policy which carried the nation through compromise after compromise into the depths of a Civil War. The political leaders whom Harriet Martineau questioned during her visit to this country, and Henry Clay among the number, confessed that they were only mortgaging the future by their measures; that the conflict between slavery and freedom must come some day, and they were trying to stave off the evil day. *Après moi le Deluge*, is but the final outcome of that line of policy.

The resistance offered by the minority in both houses of Congress to the passage of the bill was dignified, weighty, and unavail-

ing. Never was a great measure carried in more hot haste, and never did one more depend upon the warmth of its first reception, and the outside urgency of those who were actuated by motives which had nothing to do with the merits of the scheme. The founders of the Government borrowed from Scotch ecclesiastical law a method of constitutional amendment which is of all others the most certain to secure time for discussion and deliberation—that of requiring that amendments to our fundamental law shall pass the State Legislatures as well as Congress. But here is a measure to readjust the relations of the national Executive and the Legislature, and that by setting aside the ascertained meaning of the authors of the Constitution, which has been passed through Congress alone, and with a haste that would have been hardly decent had it been an appropriation bill to relieve a dire famine in some suffering district of our national territory. What really commends the plan to most of those who favor it is the uncertainty of result which induces each party to adopt it in hope that the fifth judge will favor its own claims. This would equally commend the simpler and more primitive method of “pitch and toss.” And whatever might be said of the want of dignity in this or any method of casting lots, it has high precedents on its side. It once gave Pennsylvania a bishop.

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THE most cheering sign of the times is the conservative position taken by the Southern leaders. They have inaugurated the Democratic Governors in both South Carolina and Louisiana, and in New Orleans have got possession of the State edifices, by their armed constabulary. But they are determined to submit to the United States authorities, if the latter choose to exert force. Governor Hampton sends the statement of his case in duplicate to Governor Hayes and Governor Tilden. Ben Hill of Georgia, and other Southern whigs, have evidently made up their minds that the day for “fire-eating” is past, and that they are not again to be surprised into the follies of 1860. A former Confederate general in Missouri announces that if there is to be any more fighting, he is ready, but he will be on the other side this time. This is all the more admirable, because exactly the same false signals are now held out to them. The business community in our Northern cities go on sending up petitions based on the old assumption that the business interests of the community are paramount to all

others, and that the country will be glad to accept any solution, or submit to any concessions, that will allow money-making to go on. And the Northern and Border Democrats are mouthing the old threats with as much unction as if they had never said all that before, and had not slunk off the field when it came to blows. Kentucky, especially, seems to be disputing with Indiana for the honor of the tallest talk both in and out of Congress, in a way which recalls one of President Lincoln's little stories. During the war, when that brave Commonwealth, which held with the hare and hunted with the hounds, was doing its utmost to embarrass the Government, he said Kentucky reminded him of the old colored woman's child who escaped the small-pox when his brothers and sisters caught it. His mother used to say she "jest wished he had cotched it like the rest, for he was so sassy ever since, there was no livin' with him."

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THE apathy of the South, in view of all this, shows that they have learned something from their experiences in the war. But it would be very unsafe to infer that they are indifferent to the result of the election, or that Mr. Tilden's elevation to the Presidency would not be the occasion of such legislation as would—to use their own euphemism—"take the negro out of politics." The Constitution contains no provisions which forbid an educational or property qualification, or a heavy poll-tax like that of Georgia, or the disfranchisement, as in Virginia, of persons convicted of any crime, however small; and by these means all but a small percentage of the colored voters would be disfranchised without depriving the States of the additional representation secured them by the emancipation of their slaves. The next step will be a large extension of the vagrant laws, such as sending every negro laborer to work on the roads or in the prisons of the State, unless he make a contract to labor for six months within two weeks after the expiration of his previous contract. We are not drawing upon imagination for these details of the method by which emancipation may be undone in substance without touching its form. These are the things which Southern legislatures did enact, in the Johnsonian era between the war and their reconstruction. It is true that in all the doubtful States, the white politicians are profuse in their promises to respect the rights of the negro. But that sort of conversion, which is rooted in fear and not in love, is, as the theologians tell us, of all conversions the least lasting.

THE election of Judge Hoar, as Senator from Massachusetts, is one of the many good signs of the times. Mr. Boutwell, the rival candidate, was not in himself an objectionable man; but his defeat is the defeat of General Butler, and the emancipation of the Bay State in so far from the influence of an able but unscrupulous man. Massachusetts is returning to her first love, when she sends such as Hoar to the Senate; and this elevation of the brother of the man who ran for Congress as the bolters' candidate, to the highest office in the gift of her legislature, is a warning that the day of party dictation is over in that State at least. The return of Judge Davis, of the United States Supreme Court, as the Senator for Illinois, by the votes of the Democrats, will have the good effect of removing an active and ambitious politician to a sphere where his ambition will be less out of place than on the bench. Judge Davis was regarded as the most likely candidate for the vacant place of fifth judge on the new National Returning Board, to be filled by the four judges specified on the bill. The Republicans are now confident that his election to the Senatorship debars him from filling that most important position, and rejoice that the only candidates left are Republicans. We are not so sure of his ineligibility, for he is still the most ambiguous judge on the bench, and his decision in favor of either of the candidates will secure to him all the local patronage as Senator that he can desire, unless Gov. Hayes's pledge as regards Civil Service Reform means something.

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THIS has been one of the most solid, orthodox, respectable winters we have had for a long time past. We have had but little severe cold, which in view of the deficiency of employment and the scantiness of money among the poor, is a thing to be thankful for. But for substantial snow storms and moderate frosts, we have had no such winter for five years back. The amount of privation is very great all over the country, but much less in our manufacturing than in our commercial districts. One good reason of this is the greater accumulation of savings and resources in the former; their working classes are like those fat people who in a famine can subsist for awhile upon their internal resources. The problem of aid and assistance, so ably discussed in our pages last month by Mr. Ames, needs attention, and that speedily. One half of what is given in charity tends only to pauperize and degrade, because given wrongly. Our church "Dorcas Societies," are

among the worst of the promoters of this false and fraudulent charity; and we have known families of children carried the rounds of the Sunday-schools of the wealthy churches in southern Philadelphia, for the sake of the dole of clothing extracted from each of them. Our soup societies are not much better; an estimable lady, who had charge of one of them as directress, tells us that instead of the pass-book to record the quarts of soup served out daily to the applicant, she has ere now been handed by mistake a savings' bank-book which showed hundreds of dollars on the credit side. The curse of all our charities is in their laziness, their lack of consideration for the poor, their giving to get rid of the applicant. We need first of all to give more than bread,—to give sympathy and encouragement, and personal influence directed towards lifting men up to a better way of life. We need to get rid of the patronizing spirit of the benefactor, which betrays itself in look and tone to those who receive our gifts, and to give as to a brother man in need of help.

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NEW YORK has lost her third great millionaire; Vanderbilt has gone "the way of all the earth," following Astor and Stewart; and yet how small the loss of all three. We sometimes hear it said, and at times we all incline to think, that "money makes the man;" but these three men have left no gap in society, and the subtraction of their combined manhood is no loss to the city they lived in. The gifts and powers needed for the accumulation of great fortunes are only developed to a high degree by the sacrifice of all those which would enable their possessors to spend them effectively. In spite of their money, these three men were nobodies, and many a man of not a tithe of their wealth is effecting more for that city by his money, and will be more missed out of it when he dies, than they. Why, even Jim Fiske, with all his rogueries, was more to the community, and is looked back to with more real regret.



THE TWO SCHOOLS OF POLITICAL ECONOMY.<sup>1</sup>

## I.

THE NEW AUTHORITATIVE SCHOOL, OR THE PROFESSORIAL SOCIALISTS.

THOSE who have followed the movements of political economy during the past few years will perhaps be astonished at our asking the question: Are there in fact two schools of economy? Nobody, indeed, is ignorant of the fact that in Germany as well as in Italy, certain groups of economists have set themselves up as reformers of the science; they have solemnly, and we may say noisily, separated themselves from other economists; they have issued programmes not without heaping reproaches upon those who have remained faithful to the doctrines hitherto recognized as the sole true, sound and orthodox. The innovators have naturally been treated as heretics. Certain German professors have even deviated sufficiently far from the doctrines of Adam Smith, of J. B. Say, and of Rossi, to have merited the designation of professorial socialists<sup>2</sup> [*Kathedersocialisten*]<sup>2</sup>—a designation which they have taken in good part, and which they have almost sanctioned by founding the *Society of Social Polity*. The polemics have had time to relax their fierceness; early hostilities have yielded to reflection; but there nevertheless remain marked differences, less fundamental than were at first supposed, but which none the less require to be noted with care, and examined in the light of science.

We must make a reservation at the outset. We have to speak of two schools, but we use this term with regret; we believe, and we hope to be able to prove, that there are only different tendencies and not different doctrines; we also unwillingly employ such expressions as *the old school* and *the new school*, but these expressions are current, and the first law of every statement, of every discussion, of every criticism, is to be intelligible.

It is unnecessary to say that the new school proceeds by criti-

<sup>1</sup> Translated from *Le Journal des Économistes*, by Professor Stephen H. Carpenter, of the University of Wisconsin.

<sup>2</sup> This designation was first used by H. B. Oppenheim, a deputy of the Prussian Parliament. He published in 1872, a brochure entitled "*Der Katheder-Socialismus*," Berlin, in which he replied with great aptness to certain attacks made by the group of professors formed at Eisenach. This brochure contains a very clever letter of C. Braun, president of the Congress of German Economists, addressed to Adolphe Wagner, professor at the University of Berlin.

cism and attack; it seeks out the weak points of the received doctrine, and, as every human work has its defects, and all human wisdom has its gaps, it finds them; but most generally it succeeds in demonstrating only one thing, that is, that its manner of viewing the subject and reasoning about it, or rather its tendencies, are different from those of the old school. We shall show that it has never been able to refute anything or to establish anything.

Among the founders or chiefs of the new school, we may particularly mention four, who are evidently great geniuses, men of vast learning; all four are professors of political economy in Germany—Roscher at Leipsig, Hildebrand at Jena, Knies at Heidelberg, and Schmoller at Strasburg. The views of these savants differ by shades which we cannot disregard; they agree in one point—in reproaching the followers of Adam Smith with the inflexibility of their principles, the absolute form of their propositions, and with the pretense of having discovered economic laws. There are no economic laws, say they; political economy is essentially changeable; its theories reflect the social organization of the period. Other times, say they, bring in other customs; other countries, different interests. In a word, everything is relative. There are then two schools of economy—the school of principles more or less absolute, and the school of facts, with the rules and precepts relative to them.

The terms *absolute* and *relative* are frequently employed, but others are found more frequently. Let us first notice the term proposed by Roscher, for it is he who invented it—or who at least first applied it to political economy in 1838.—the term *historic method*, an expression which has since played quite a part in the science. It is Roscher who is considered the originator of the “historical school,” which has found adherents even in England (Cliffe Leslie) and in Italy (Luzzati and the economists grouped about him). But if the historical school (the new school) is that of Roscher, how does this savant characterize the opposite school? He calls it the *idealistic method*.<sup>3</sup> So, the eminent professor at Leipsig knows only differences of method: one, that of the economists, is based upon observation, upon induction; it shows us men as they are: the other sets out with a preconceived idea; it proceeds by deduction, and shows what men ought to be; this is the process of the socialists. These are distinctions, be it said in

<sup>3</sup>Page 33 of his Treatise. Ed. 1854.

passing, wholly determined by our manner of view.<sup>4</sup> But twenty years later, in 1874, Roscher published a *History of Political Economy in Germany*. During these twenty years, the economical movement has been active in Germany, and Roscher places meanwhile in opposition to the *historical* school no longer the *idealistic* school but the *abstract* school. He considers as synonymous with "historical" the terms "realistic" and also "ethical" employed in preference by some of his colleagues. He insists also more than before upon the relative character of political economy, and declares himself still more energetically against economic laws. So he no longer opposes his method to that of the socialists, but to that of the disciples of Adam Smith.

We shall return again to Roscher, let us pass to Bruno Hildebrand.

Hildebrand published in December, 1847, a book entitled, *The National Economy of the Present and the Future*. It is volume I. of a work, the continuation of which has not yet appeared, although the author has since published many works. This first volume treats of the *present*; volume II. ought to treat of the *future*; it was indeed a somewhat difficult problem, and we understand that the author shrank from its solution.

Hildebrand also praises the historical method, but he renders full justice to Adam Smith. "What distinguishes him," says he, (p. 19) "is his clear and practical method of discussion. He deduces all his propositions from well-chosen facts, and he thus leads the reader from the depths of real life to the lofty region of abstract theories, and from these heights he brings him back to the domain of reality, and communicates to him on the way historical observations the most instructive." Adam Smith then, according to Hildebrand, deserves no reproach, but his disciples have abandoned the historical method to go off into pure abstractions. This statement of Hildebrand will be examined, but we may well express here our astonishment that the disciples of Hildebrand have not preserved the good opinion of Adam Smith expressed by their master. Hildebrand is one of the first economists who professed the doctrines afterwards designated as *professorial socialism* (Kathedersocialismus). He does not restrict himself to criticising the claim—more or less well founded—made by economists of having formu-

<sup>4</sup>But there is henceforth in the distinctions of Roscher, that want of precision which according to the learned professor, characterizes the historic method.

lated laws, or more exactly, of separating the laws from the economical relations which exist between men and nations; he draws up a regular indictment against the science of Turgot and Adam Smith, accusing it of exalting selfishness, individuality and materialism. These views expressed in the first number of a monthly review which has appeared since 1863, under the title of *Jahrbücher für National-ökonomie und Statistik*, although they cannot be called socialist, have yet served as a bridge for more than one of his successors who have adopted the opinions which we have to combat.

But we must first introduce the third in time of the four economists that we have mentioned, that is Charles Knies, professor at Heidelberg, the author of a book remarkable in spite of the errors which it contains, a book which awakens thought and deeply interests even those who do not see things as he does. This book, which appeared in 1853, is entitled: "*Die politische Ökonomie vom Standpunkt der geschichtlichen Methode.*" Knies is the first who has explained what he understands by the historical method. It is in this work and more recently in an essay by Cliffe Leslie,<sup>5</sup> of London, that a definition has been seriously sought after. Hitherto this method might have been confounded with the history of economical science, or even with the history of the social evolution of nations; the confusion has not completely disappeared, but we know a little better of what it treats and whither the doctrines lead that march under this banner. According to Knies the historical method consists in the assertion that each nation, and above all, each epoch has its special political economy, and that instead of deducing the science from general principles and natural laws, it must be induced from contemporary facts. There is nothing but a succession of economical facts, which facts change with men and societies; man produces them, and does not submit to them.

Professor Knies has only given a philosophical form to propositions that have already been current for some time. Frederick List had advocated them in the interest of the protectionist system; the socialists had laid hold of them, for, as the saying is, they "brought water to their mill." According to socialists, actual society is the result of a long series of violences, spoliation, acts of injustice; they have but one desire, to completely change everything. One of the chief arguments that can be brought to bear against them

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<sup>5</sup> On the Philosophical Method of Political Economy. London, 1876.

is that society, like men, obeys natural laws. "In vain would you seek to reorganize society according to your views," they may be told; "it would resist all your efforts, and your victory even would have only a momentary effect; the day after your triumph, if that were possible, things would again take their accustomed course. You can demolish, but you cannot build." The socialists reply: "You deny history. Just as a society holding slaves has been followed by a society in which serfdom flourished, and after this has come a society in which capital reigns, so we may see realized the sway of universal labor. No economical law is the work of nature; it is the state that makes laws, and it depends only upon it to change the actual social organization. The state is omnipotent." Two men of undeniable talent have undertaken to disseminate these views: Lasalle among the workmen; Karl Marx among scholars, for his work *On Capital* is not within the reach of all. Scholars, and especially professors of political economy, have read it; we do not know how much this book has influenced their ideas. This much is certain, that they use part of his nomenclature, and that the tendencies which have manifested themselves hitherto under the form of an historical school, taking its place by the side of a philosophical or abstract school—that these tendencies, we say, take a character more decided, and that a new school is formally constituted under the name of *The Society of Social Polity*, that is, a society of social applications. This society met for the first time at Eisenach, October 6, 1872, and Schmoller, acting professor of political economy at Strasburg, has undertaken to introduce the doctrines, or more exactly the spirit of the new school.

After having set forth the antagonism that prevails between patrons and workmen, between the classes well-to-do, and those that live from their daily wages, an antagonism that threatens us with a social revolution, the learned professor expresses his doubts as to the possibility of exorcising the danger by the aid of those economical doctrines that exalt freedom of labor, and he asks whether it would be right to cause the industrial organization of the middle ages to disappear without replacing it. "On this point," says he, "two methods of looking at the question present themselves. One, remaining faithful to the principle of absolute liberty, continues to see safety only in individual initiative in the efforts which each is to make to better his condition, whilst the other has lost all confidence in this agent of progress." The learned professor then

enters into certain details of the political and economical situation of Germany, observes that for some time two currents have been noticed in the scientific movement, one representing the philosophical, or abstract (or old) school, and the other the historical or realist (or new) school, and he thinks that the time for action has come. The school thus formed is as far from the glorification of the individual as the absolutist theory is from the omnipotence of the state. According to this school the task of the state varies with circumstances; it is now limited, now extended, but the state is never a necessary evil, as natural right pretends, or as the free-traders hold: it is and always will be "the grandest moral institution for the education of the human race."

Schmoller and his friends do not deny the "brilliant and unheard of" advance of production, but they proclaim also the defects of actual society, the increasing inequality of fortunes, the low grade of honesty in commerce, the brutality of the lower classes. As a principal cause of these evils, they call attention to the custom of considering inventions, measures of organization or of legislation, only from the point of view of the advance of production, and never from that of their effect upon the morality of men. The orator develops this point with great eloquence, but not with all the clearness desirable, for after having protested with great energy against every retrograde idea, after having affirmed his desire to maintain "the existing economic legislation, the existing forms of production," he states his desire to reform what exists, and that by the intervention of the state. The orator closes by an invocation of the grand ideal which ought to inspire the state and all who wish to co-operate in the solution of the social question.

From the brilliant discourse of Professor Schmoller, it follows that of these two schools, one—that of the free-traders—has not sufficient feeling for the workmen, that it is indifferent to the morals of men, and that it has too much confidence in the individual initiative, while the other school does not understand material progress without moral progress, affirming at the same time that true progress—progress equally shared by all classes of society—can be realized only by the intervention of the state. The state indeed can slacken the progress of those who advance too rapidly, and rise above the common level. It is proper to say that Schmoller does not express himself so bluntly, but another savant of the same group, M. de Scheel, professor at the University of Berne, has un-

dertaken to dot the i's (*Die Theorie der socialen Frage*, p. 75), and still another, Hermann Roesler, professor at the University of Rostock, wishing to characterize the two schools "the old and the new," opposes causality to legality, war to peace, the empire of interest to the empire of justice and liberty, naturally claiming loyalty, peace and justice for the new school, of which he proclaims himself one of the founders.<sup>6</sup>

We must here renew our caution as to the distinction of schools as old and new; it is inexact, and at any rate, it has the fault of not marking the tendencies, of not bringing out their methods, and still less their doctrines. With this view, the terms philosophical, or abstract, or free-trade school for the one, and historical or realist, or politico-social for the other, would be preferable; the single question is to examine whether these denominations are applicable, whether the opposition between them exists to the degree pointed out by certain critics, whether the shades of opinion have not a character quite different from that which is attributed to them.

The first point that we examine is the opposition so frequently asserted nowadays between the historical and the philosophical methods.\* We pass by the crowd of followers to whom the word *historical* has become a banner, to consider only their masters, the originators of the movement. And first we take Roscher, who, so to speak, invented the word; but first of all let us pay attention to the work of Knies, who has devoted an entire book, and a remarkable book, to the question. If we wished to avoid the discussion we could find in this book itself wherewith to non-suit the author [*opposer une fin de non-recevoir*]. From several passages which may be found there, we select as the most complete the one which we here translate (*Politische Oeconomie*, p. 323):

"It is well known that in order to bring out a marked opposition between two scientific methods, we call one philosophical, and the other historical. Roscher in the Introduction to his *Elements of Political Economy*, has done this to call the attention of the reader to his peculiar manner of treating economical questions. I hardly understand this opposition, especially if its usual limited meaning be given to the word *method*. Is the philosophical method the one that philosophers employ, as naturalists make use of theirs? In this case we gain nothing by the definition, for the methods of philosophers in research differ so widely that the generalization

<sup>6</sup> Die alte und de neue National-oekonomie.

has made all precision to disappear; to have a clear idea it would be necessary to restrict ourselves to a particular philosopher, or to the philosophy of a given period. For what a difference there is between the methods of philosophers—from those of Bacon and Descartes to those of Hegel and Herbart! Would it be possible to oppose a philosophical and ‘unhistorical’ method to an historical and ‘unphilosophical’ method, although such a work might have deserved such a combination of epithets?”

Then, to show in a practical manner the defects of this opposition, he cites the example of Roscher. “So,” says he, “when Roscher wishes to point out the ‘difference between the historical method and the philosophical method,’ he does not indicate the different methods in use in the *same* science; he restricts himself to pointing out the difference between philosophy and history. ‘The philosopher,’ says Roscher, ‘seeks out a system of concepts and judgments as abstract as possible, that is to say, as free as possible from all contingencies of space and time; the historian is devoted to the description of human development and human relations, copied as faithfully as possible from real life. The one has explained a fact when he has defined it, and when his definition contains no concept that has not been examined in the former part of his system; the other, when he has depicted the men who have caused or suffered the fact.’” Prof. Knies easily shows that Roscher has only described the methods proper to different sciences. Continuing the discussion, he reaches the conclusion (p. 424) that the opposition of the historical to the philosophical method is *nichtssagend*, naught-saying, or at least “an expression badly chosen.”

But a non-suit would not advance science. Let us examine the real difficulty. Knies opposes the historical method to the absolutism of theory. This is the way in which the learned professor of Heidelberg defines *his* historical method: “In opposition to the absolutism of theory, the historical conception of political economy rests upon the principle that economic theory, like economic life, under whatever form we may find it, and with whatever arguments and results it may be provided, is the product of historical development; that it is in an organic relation with all that constitutes a period in humanity or in the history of a nation; that it is the resultant of conditions of time, space and nationality; that it derives its arguments from the historic life, and should give its re-



sults the character of historic solutions; that the 'general laws' of political economy are only historical explanations, and only a progressive manifestation of the truth; that the science cannot be considered as completed at any epoch, and that an absolute theory, if it gains acceptance at a given time, is only a child of the time, and marks a stage in the historic development of political economy."

This, then, is the argument: there are no economic laws;<sup>7</sup> there is only a relative theory, which has reference to the economic life of a nation at a given moment, and to prove it the author interprets in his way a certain number of facts. If Knies had simply said that political economy is a science of observation, that it borrows all its arguments and principles from real life, from the succession of facts, we should have no objection to urge against it; yes, political economy is indeed a science of observation. It is also true that science is developed, progresses, goes on towards perfection, and is never completed. But fortunately it does not have to renew each day its web of truths; those that have been elaborated remain in our possession; they are not lost. What economic science seeks after is not so much facts and nothing but facts, as it is the ideas which they enclose, the relations that subsist between them and other facts. If the results thus obtained could throw light only on the instances observed, and could not throw a clear light upon cases similar or analogous, they would be almost useless, and we might well ask whether it were worth while to record them.

It would not be exact to say that in Germany facts and their meaning, or their theory, are confounded; Knies especially makes praiseworthy efforts to distinguish them, but the employment of the word *Volkwirthschaft* evidently embarrasses him, and embarrasses other economists still more; this word, the literal translation of which is "economy of the people," is indifferently used to denote the economical condition of a given people and for Political Economy. If we did not prefer to avoid all digression, we might show that the choice of words has an evident influence upon economic doctrines in France, England and in Italy; we have frequently remarked it; but nowhere has this influence been so great as in Germany, since the pure German word *Volkwirthschaft* has been substituted for the half-foreign word *Nationaloekonomie* or *Politische*

<sup>7</sup> To deny the existence of economic laws is nothing but saying that in economic matters causes have no effects, and effects no cause.

*Oeconomie.* Were it not for this confusion, of which, through habit, we are not always conscious, the fact would never have been confounded with the law. From the fact that at a given era society was organized differently from the present, it does not follow that the real principles of our science have not always been true. Would any one say that the earth is not a planet, because the ancients believed it to be the centre of the universe?—The natural relations between things do not change according to the idea that men have of them. But, says the objector, the things themselves did not exist in the early ages, and the relations could not exist. Doubtless we cannot speak of the influence of railroads in the time of Pericles; but Thucydides will inform you that Corinth owed her wealth to the ease of communication by sea. The fact is different, but the law is the same. What economical science affirms is not so much the identity of phenomena as the identity of the relations of causality. We just now cited Thucydides; we have lately reread him, because we found in a book of Roscher, translated into French in 1872, with the title *Recherches sur divers sujets d'Economie politique*, p. 8, the following: "I remark, in closing this subject, that in the eight books of his history, there is not, to my knowledge, a single economical error." Let us add still another quotation; it is Roscher who speaks: "If then we pass from the theory to the practice of political economy among the ancients, we shall find that this science, in all that is essential, was developed according to the same natural laws as among modern nations. It is indeed within the range of political economy that one is most frequently surprised at the multitude of striking analogies which are met between ancient and modern history; nowhere else are these analogies so numerous, because it is here that the most simple and elementary relations of life are brought into question." And Roscher is right. The relations between buyer and seller have always been the same; among slaves or freemen, rare articles are dear, and plenty lowers prices.

## II.

We have just examined what has been said in favor of the historical method; let us now examine what has been written against the philosophical method. It is a sort of counter-proof that we are going to attempt. Cliffe Leslie, the distinguished professor of political economy at London, and author of numerous works,

which we purpose to make known some day, has lately published a dissertation, entitled, *On the Philosophical Method of Political Economy*. The author, after having quoted the definitions of Adam Smith, Senior, and Stuart Mill, thus sums up the doctrines of these masters and their disciples: "The nature of wealth is explained by defining it as the sum of objects that men desire—objects whose amount is limited and which have an exchangeable value. To set forth the causes which determine its quantity and distribution, it is said that the desire of acquisition leads man in countries where security and liberty are found, to labor, to accumulate capital, to appropriate the soil, to divide labor, to engage in commerce, to make use of money; hence results a continual increase of the mass of wealth and its distribution in wages, profits, income (*rentes*) and prices of products, proportionally to the labor, to the economy, to the amount of capital, to the quantity and quality of the soil furnished or possessed by each individual. We may add, that human fecundity tending to increase population in geometrical progression, while the productivity of the soil is limited, the ratio of the rent of the soil to salaries and profits tends to increase with the progress of society."

We have literally translated this *exposé*, and we refrain from giving our opinion upon it. The author continues: "The theory which we have just submitted to the reader is illusory as a solution of the problem. In the first place, it throws scarcely any light upon the *nature* of wealth." This then is the objection, the criticism of Cliffe Leslie: the definition of the economists does not enter into details, therefore it is insufficient. Cliffe Leslie would wish that, instead of saying briefly that wealth is composed of all the goods that man can desire, an enumeration had been attempted of these goods. He begins it: "lands, houses, furniture, clothing, tools, arms, ornaments, animals, grain, wine, money, pictures, statues, books," and adds that these are after all but a small part of wealth. Must we then make a complete enumeration of all objects, necessary, useful or agreeable, of all those that man or woman has been able to desire at any period, whatever? To complete the definition, it would be, for Cliffe Leslie, indispensable to mention the jewels of the little Turkish prince, or the turbans of costly stuff of the inhabitants of the Punjaub, or the diamonds of the Shah of Persia. It is difficult for us to admit this. We also admit that we do not find very weighty the reproach brought against the common defi-

tion, that of being *abstract*. Certain economists seem to consider abstraction as the enemy of the human race; they ought indeed to know that science cannot do without it. We will not do them the wrong to say that they get along without it.

The first charge of Cliffe Leslie against "the doctrine of abstract political economy" is that it does not explain the *nature* of wealth; the second is directed against the proposition that it is *the desire of possessing wealth* or useful objects that leads to their production and accumulation. The learned English economist sets himself against this new abstraction. It is not exact to say that men labor to be rich, or to gain well-being; some labor to gain military glory, or civil or political honor, or literary celebrity, or they are impelled by still other motives which the economists wrongly endeavor to comprehend in a single synthesis. Moralists, says he, although setting out from the opposite point of view, have fallen into the same error, and have embraced under an abstraction, *love of wealth*, love of life, of health, of neatness, of decency, of knowledge and art, together with sensuality, avarice and vanity (p. 6). We may leave to the moralists the care of freeing themselves from this reproach, but we must cite another passage which we find on the same page of the dissertation of Cliffe Leslie; "Division of labor, the mechanism of exchange and the intervention of money, have made abstract wealth appear to be the motive of production, and have hidden the fact that production is called forth by the demands of consumers determining the commodities supplied by producers." This is not the time for examining whether this proposition is true or whether it is good; what first attracts notice is that it is abstract. Cliffe Leslie is equally guilty of an abstraction. And in what does the abstraction of Cliffe Leslie differ from those of other economists? They say "man labors to become rich" (or well off); he says, "man labors to cease to be poor."

We are then right in saying that science cannot avoid abstractions. When Schmoller proclaims that the direction of progress ought to be put into the hands of the state, he utters an abstraction; when De Scheel teaches that the Revolution of '89 having produced political equality, it belongs to us to establish economic equality, he perpetrates an abstraction; in short—not to unduly prolong the enumeration—when Hermann Roesler makes God interfere somewhat in fixing the price of merchandise, it is still an abstraction. But we do not insist. We prefer to listen to an emi-

nent economist who has devoted a special book to the refutation of criticisms upon the philosophical method ; we mean J. E. Cairnes, formerly professor at Dublin, and who afterwards filled the chair of political economy at the college of the University of London, where he died towards the end of last year. The book to which we allude is entitled "The Character and Logical Method of Political Economy" (London, 2d edition, 1875). We select certain passages from it in which the author examines the value of the inductive method, which is with the German economists, with Cliffe Leslie, and certain Italians who group themselves around them, a perfect synonym for the historical method.

Professor Cairnes, attacking the criticisms brought against the philosophical (or abstract, deductive, logical) method, says, (p. 63.): According to the partisans of the inductive method, "the scholar ought to commence by collecting and classifying the phenomena of wealth—prices, wages, rents, profits, imports and exports, the increase or decline of production, changes in the modes of distribution ; in a word, so far as they admit of determination, all the facts of wealth as presented in actual experience in different countries." Having gathered all these materials, the economist ought to "rise by direct or indirect inference to the causes and laws which govern them. Now [it is Cairnes who is speaking still] to perceive the utter futility, the necessary impotence of such a method of proceeding as a means of solving economical problems, one has only to consider what the nature of those problems is. The phenomena of wealth, as they present themselves to our observation are amongst the most complicated with which speculative inquiry has to deal. They are the result of a great variety of influences all operating simultaneously, reinforcing, counteracting, and in various ways modifying each other." Cairnes cites as an example the many causes that concur in fixing the price of merchandise at a given moment. He then shows from the Logic of J. Stuart Mill that to reach a law by means of induction, we must experiment. It is necessary to be able to isolate a fact, to place it under circumstances the most diverse, and to notice how it comports itself. But this is impossible in social matters. We are obliged to take economical phenomena, as they are presented in life "with all their complexity and their ever-changing variety;" but says Professor Cairnes, "From the facts as thus presented, the economist, if he decline to avail himself of any other path than that of strict in-

duction, may reason till the crack of doom without arriving at any conclusion of the slightest value." Indeed if we profit by induction, it is because we unwittingly combine it with deduction. We all have a stock of acquired knowledge, both concerning human nature, and the political and social organization, and, in general, of the relations of things, and we do not fail to make use of it. Ordinary facts we classify according to rules already fixed in our minds; only new facts can give an opportunity for induction, but in this case, shall we refuse the aid of our knowledge, of our experience?

The progress of economical science has been due to a sort of alternation in the employment of induction and deduction. Every man desires to better his condition, and man aims at obtaining the greatest result with the least effort. These premises each one may induce from his own nature. Other simple laws are equally drawn from the direct observation of facts. But when we are in possession of principles, our intelligence wishes to draw from them their consequences, and thus it is that political economy comes to formulate its general laws relating to profits, wages, prices. But the formulas first discovered have only a very relative value, for only the most salient facts at first strike our attention. Secondary influences, the action of perturbing causes, bring out the defects of the first formulas, we return to the observation of facts, and in this way induction corrects the errors of deduction. The corrected principles serve as a starting point for new results, and so on; principles ceaselessly tend to become more perfect, so long as there are observations to be made, until the end of time.

### III.

If this is so, if science goes on perfecting itself, there must have been a time—it may be said—when it was rudimentary. No doubt science has its beginnings, but the state of advancement of the science, and the nature of the things that it studies, are distinct. How often must it be repeated that a law may exist without men perceiving it; a mere denial is not enough to make it disappear. But since certain learned scholars deny the existence of economic laws, it seems necessary to examine this question more at length.

To fully examine this question, it might be necessary to make an excursion into the domain of philosophy, and inquire in what degree man is free and to what degree he is subject to necessity;

but we have a special end in view, and we shall try to reach the end by a shorter way. One knows that *law* and *necessity* may be considered as synonyms. Now, necessity plays an important part in human life. Man has wants; some of these wants, for instance food, clothing, shelter, all men experience, Diogenes or Epictetus as well as Sardanapalus or Lucullus; in these instances we may neglect differences of quantity and quality, to attend to the elementary fact. The satisfaction of these wants depends upon material conditions, physical laws, on the one hand; upon intellectual and moral conditions, on the other. These last are those which involve the elements of liberty. It cannot be denied that man is subject to material conditions which constitute, under this relation, the laws of his nature. The laws which control the gratification of the wants of man, living in society, are of the economic species. These laws are complex; they are the resultant of two sorts of actions:—1. Of the action of those natural forces that contribute to production, fertility of the soil, for instance, the motion of water, the expansiveness of steam, light, heat, electricity: 2. Of the action of man, who uses these forces in the satisfaction of his wants. Political economy does not study natural forces; other sciences are charged with the elucidation of their laws; it studies only the action of man, his motives and his end. It seeks to know how man, living in society, succeeds in producing the objects of which he has need, or which he imagines that he needs, and it follows these objects until it sees them render their service, or disappear for some reason. If this be so, we can consider as proven this first economic law that *man desires to satisfy his wants*, a law which the English economists render by "man desires wealth:" the terms differ, the thought is the same. A second law which we enounce rests on the same evidence—man must act to be able to satisfy his wants, for nature does not present him food, clothing, and other products ready prepared. The necessity for human action figures in science under the form of this axiom: *man produces by labor*. We mention yet a third economic law, that *each one wishes to gain the greatest possible result with the least possible effort*. Here we have three laws drawn from observation, and which extend their sway over the human spirit. The existence of economic laws is thus proven, and if we are reproached with having yet presented only three laws, we remind them that it sufficed to discover one law, that of gravitation, to explain the heavenly mechanism, just

as one single principle—the golden rule—suffices as the basis of the entire system of morals.

We have pointed out certain fundamental laws, but each order of economic facts has its own laws. Take for example what Professor Cairnes says (p. 18, Logical Method), concerning the *natural* laws of economic phenomena: "Now what are the phenomena of wealth? Simply the facts of wealth; such facts as production, exchange, price; or, again, the various forms which wealth assumes in the process of distribution, such as wages, profits, rent, interest, and so forth. These are the phenomena of wealth, and the natural laws of these phenomena are certain constant relations in which they stand toward each other, and toward their causes. For example, capital grows from year to year in this country, at a certain rate of progress; in the United States the rate is considerably more rapid; in China considerably slower. Now these facts are not fortuitous, but the natural result of causes, as the external physical circumstances of the countries in question, the intelligence and moral character of the people inhabiting them, and their political and social institutions; and so long as the causes remain the same, the results will remain the same. Similarly, the prices of commodities, the rent of land, the rates of wages, profits and interest, differ in different countries; but here again not at random." Professor Cairnes develops this idea, that economic facts are necessary effects, no less than physical or natural facts, and that it is for our interest to be acquainted with them.

This interest is evident. But how may we determine, and especially study the action of these economic laws? To this question the universal reply is *by isolating them*.<sup>8</sup> Here the opponents of economic laws await us. To mention only the more recent of them: Cliffe Leslie charges J. Stuart Mill with having insisted upon the necessity of this intellectual operation. This is the passage as it is quoted in the dissertation of the learned professor that we have already cited (*on the Philosophical Method*). "Political economy (says Mill) takes account of man only as a being who desires to possess wealth (read: to satisfy his wants). It entirely abstracts every other human passion, and motive, except those that may be considered as principles constantly opposed to the produc-

<sup>8</sup> What is it to evolve a truth but to isolate it, to exhibit it by itself, pure from all alloy, freed from its connection with other truths, and also with whatever of error may be mingled with it?



tion or the accumulation of wealth, notably, aversion to labor, and the desire of immediate gratification. It takes account of these passions, because they do not enter, like other passions, accidentally into conflict with the pursuit of wealth (that is to say, production), but because they hinder its action, like a clog." The foregoing is the citation of Cliffe Leslie; it is taken from Mill's *Definition and Method of Political Economy*; and we take this opportunity to cite still another passage. After having reviewed the principal economical facts, J. Stuart Mill continues: "All these operations, although some of them may in fact be the result of a plurality of motives, are considered by political economy as consequences of the desire for wealth. The science then proceeds to the investigation of the laws that govern various operations, upon the supposition that man is a being so constituted by nature as to prefer in every case more wealth to less wealth, except when he is controlled by laziness or the love of immediate gratification. Not that any economist has ever been so irrational as to suppose that men are thus constituted, but because it is only in this manner that science can proceed." We have nothing to add to this proposition of the illustrious thinker, further than to say that pure science always proceeds thus; it abstracts the accessory, contingent circumstances; it is art or some application that takes account of them: this is its specialty.

We return to Cliffe Leslie. This is the way in which this economist appreciates Mill's manner of looking at the subject: "Abstraction has here disturbed the view of the most celebrated logician of the century. If Mr. Mill had observed real life, he would have seen that among the strongest desires confounded in this abstract *desire of wealth* is found that of immediate gratification, and that aversion to labor has been one of the chief causes of inventions and improvements calculated to lessen toil." We cannot accept these observations of Leslie as a refutation of the proposition of Stuart Mill. We do not see, indeed, why Mill has made a separate class of immediate pleasures; he should have comprised them under the *desire for wealth*,<sup>9</sup> as other economists have done. It is nevertheless true that man labors to satisfy his wants real or imagined; as to the second point, that aversion to labor has led to the invention of machines, it is, at least, a vicious way of expressing it. Of what use then is the law of the least effort in obtaining the greatest possible result? The workman

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<sup>9</sup> Immediate gratification is a hindrance to the formation of capital.

who has invented a tool wished to lighten his labor; it is no less true that he labors to satisfy his wants, or as it is said in English, *his desire of wealth*. Cliffe Leslie lays great stress upon the habit, objectionable as he thinks, of the economists of paying attention to the most frequent cases and *evading* secondary instances by "other things being equal," *caeteris paribus*, or some such reservation; but this is to find fault with them for making treatises in *one* volume instead of treatises in *four* volumes. The point is to know whether the usual cases have been exhibited in conformity to the reality of things. Let one labor to get bread or to go to a show, is not the end in both cases the desire of satisfying a real or imaginary want? Cliffe Leslie seems to humor himself in hunting up exceptional instances like that of persons who have bought pictures to adorn their rooms, and who after some years have sold them at a large advance, and made money without labor. We might offset this by the instance of a painting bought for 4000 francs and sold for 450—and other analogous cases: this is not then a safe way of acquiring. It seems to us that isolated cases cannot lessen the force of ordinary cases; and we believe that science must confine itself to rules, and leave exceptions to art and its applications.

It is also especially to the domain of application that the relations between political economy and morals, religion, and politics belong. No doubt one can formulate certain generalities upon these relations, and wish to show what nobody denies, that man does not live by bread alone, that he has not only material needs; but as soon as we enter upon details, and make a thorough examination, we come upon the level of applications. If in its application pure science is forced to relax somewhat its rigidity; if we are forced to take into account the other demands of human nature; if even, moved by a nobler passion, one sacrifices legitimate advantages to morals, religion, country, friendship, or the performance of some duty, it does not follow that science committed an error in isolating phenomena in order to study them better, or that she made a mistake in yielding to evidence when she has found a truth. Now, this is the point to which certain economists of what is called the new school have come. One says: Abstract principles are modified in their application, therefore there are no principles. Another holds that economic principles are badly stated, if the non-economic facts of human life do not enter into the result.

A third builds a magnificent temple to political economy, places in it the laws of economy as so many gods and goddesses, and when you feel like prostrating yourself, he stops you: "this is nothing but a mirage," says he. Forthwith he raises a cloud of incense to another goddess, and all disappears in a fog.

The most distinguished and the most sympathetic of this last sub-division seems to be Gustave Rümelin, chancellor of the University of Tübingen. In a volume of several essays, entitled, *Reden und Aufsätze* (Discourses and Dissertations) which appeared last year (1875), we find an essay of considerable length intended to solve the question, What is a social law? In a series of considerations, the author attempts to prove that there are three kinds of forces—physical, organic and psychical forces. Social phenomena are the result of psychical forces. There are two kinds of psychical laws—psychological and social laws. Psychology studies the faculties of the soul in an individual type, like the attributes of a species; the social sciences study the same faculties in their collective section, that is, the faculties of a mass of men (*massenwirkung*) and they strictly confine their attention to the effects, changes or modifications that result from this common action. A social law would then be the expression of the elementary form of the collective action of the psychical faculties. We omit the philosophical discussion of the author, to present the passage in which he treats of political economy.

"Are there," asks the author, "any social laws that point out the constant elementary form of the collective action of the psychical faculties? The group of social sciences is, as is well known, still young and incomplete; on more than one side even their scientific title is questioned. One of these sciences has advanced more than its sisters, and the legitimacy of its scientific pretensions has been universally admitted. It rests upon settled propositions, which are not questioned by each new investigator; it does not confine itself to theory, but lays down laws, and is already able to make quite a wide use of the process of deduction. It treats of political economy. It owes, as I think (says Rümelin), its great and rapid success not only to the practical interest that attaches to the object of its researches, but still more to the excellence of the methods followed. The founders of the science have isolated as much as possible the object of their study; starting with an elementary psychological fact, they have followed it to all its conse-

quences. Political economy sets out expressly or impliedly from this postulate, that man has by nature a marked tendency to procure the means of satisfying his needs as abundantly and as cheaply as possible, and further, that the same kind of goods is desirable at the same time for many men, and that some of these goods (food for example) are necessary for all. Whether the desire of obtaining good indicates the action of an elementary psychical faculty or a complex faculty, need not be examined into so long as the fact it self is not disputed. Now, science, in observing the action of this desire in human society regularly organized, in which one cannot take away by fraud or violence the goods of another, but where one can acquire them with the consent of the owner; and taking into account certain empirical facts, like the difference between the spontaneous products of nature and those that result from human nature, or between products limited in quantity and those that can be increased at will;—by means of these elementary data, the science finds a whole series of fundamental propositions concerning value, prices, wages, labor, capital, rent, money, credit, and out of them it constructs a well-adjusted system. Yes, political economy seems to me completely in the right when it gives the name of laws to its fundamental propositions concerning the variations of prices and wages, concerning competition and the circulation of money; for these laws respond perfectly to the definition, in presenting the constant elementary forms of the collective action of the psychical faculties.”

Economical laws could not have a better advocate; but Rümelin builds only to tear down, for he thus continues:

“But this precision and this force of scientific development rest upon an abstraction, upon the intentional isolation of the object. In fact, even in his economic life, man is not moved by none but interested motives; other faculties and psychical faculties come in; there are moral, politic and religious motives. The law of prices did not exist under the regime of the community of goods among the early Christians, and all during the middle ages it was believed that the absence of wants and voluntary poverty were a ladder by which to rise to heaven. According as the economist departs from this abstraction, and seeks to bring into his system the effects of the other psychical faculties, he loses the advantages peculiar to his method. He is compelled to borrow propositions from other social

sciences, and even from sciences that do not yet exist. Thence he is enabled to form propositions for himself; thus he may be attractive, original, full of wit, but his system ceases to be solidly built, it gets into disorder and falls to pieces."

Must we not then admit that if abstraction is an evil, it is a necessary evil?

Science seeks as far as possible for the permanent, the absolute, always true; but in the reality of phenomena presenting a combination of permanent elements and changeable forms, especially in life, the contingent and the absolute intermingle. The empiric takes facts as he finds them, classifies them according to external signs, and so only half knows them; the empiric is the man of half-truths, The man endowed with the scientific spirit, on the other hand, feels the need of thorough examination; he wishes to know the substance, the law, "the truth, the whole truth, and nothing but the truth." Now, if there are really two economic schools—we admit only tendencies—one of these schools is guided by the scientific spirit, the other by a sentimental empiricism, well meant, no doubt, but powerless.

The scientific school, seeking principles, is compelled to penetrate deeply into the subject; the principle once found, it knows how, in applying it, to take circumstances into account. The empiric school dispenses with principles, and substitutes sentiments, or rather a vague sensibility that frequently uses the words "ideal" and "ethical," but which proposes only a backward progress. In fact, under the pretext of *marching* with history, an economist—and not one of the least celebrated—proposes to set apart the soil in collective ownership, because the soil is held in common in all barbarous countries; another, still under the pretext of *marching* with history, advises us to return to guilds of arts and trades; others cry up each his social panacea; all invoke the aid of the State.

We have now reached the distinction between the two schools, at least that which is most insisted on in practice: one, the scientific school, called also the liberal school, demands liberty, and gives responsibility as its sanction; the other, the empiric school, called also the authoritative school, wishes that the state, which according to it is the moral principle, *par excellence*, should conduct everything, direct everything, decide everything. The utility of the frequent intervention of the state, seems to be the sole absolute principle which this school recognizes. Shall we meet here, too, in the domain of

economy, that eternal opposition—an opposition apparent or real—between liberty and authority, reason and faith? This we propose to examine in a second study.

MAURICE BLOCK.

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## II. ART MUSEUMS.<sup>1</sup>

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I HAVE this evening the honor of addressing you upon a subject in which I believe you are now deeply interested, as, through the liberality of some of your worthy citizens, you are about to have established in your midst a museum of industrial art founded on the plan of that at South Kensington in London. I congratulate you most sincerely upon the use that you are thus about to make of your great Centennial building, and upon the manner in which you are going to commemorate permanently your liberty; for the formation of a collection of art examples in your midst cannot fail to be of inestimable value to your manufactures and commerce. Knowing that I have been acquainted with the South Kensington Museum from its first formation to the present time, and also feeling that I had exceptional opportunities for judging of the influence which it has exerted upon English taste, my excellent friend, Mr. Philip F. Cunliffe-Owen, the director of that institution, asked me to set before you its rise and progress, believing that you would be interested in its history at this particular time when you are founding a museum of your own.

Up to the year 1851, we had no art museum, and but few—I think only four—"Schools of Design." In that year it became patent to us, and to all men, that we were behind almost every other nation in our knowledge of art as applied to industries; and with the view of bringing our lamentable state before the government for consideration, Mr. Redgrave, R. A., a gentleman who had been for some time a head master of the Central School of Design, was requested to report to the Royal Commission of the Exhibition of 1851, on industrial art and on our position as manufacturers of art objects as compared with that of other nations.

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<sup>1</sup>The second of Dr. Dresser's three lectures, delivered under the auspices of the *Pennsylvania Museum and School of Industrial Art*.

This report was in every way excellent. It told us plainly of our utter ignorance of art principles; it placed us at the very bottom of the list of European nations; and it also brought before the country for consideration those principles which should, in Mr. Redgrave's opinion, govern the application of art to each particular industry. Although it was written as far back as the year 1851, and although we English have made since then such progress in art manufactures as but few nations have succeeded in making in the same time—a progress which I believe to be due to the influence of our South Kensington Museum and our schools of art—yet Mr. Redgrave's excellent report may be read at the present time with much profit by all who are interested in the advancement of art manufactures.

The result of this report was the foundation of the South Kensington Museum, for the government then granted a small sum for the purchase of oriental objects at the International Exhibition; and I should like you to notice this fact, for it is interesting, that it was oriental objects which all perceived to be the most fitting examples for our consideration, and it was these which we chiefly bought with our first parliamentary grant.

Up to this time the Central School of Design was located in Somerset House, in the Strand; but now, the building becoming necessary for the purposes of excise and customs, the school was moved to Marlborough House, in Pall Mall—the present residence of the Prince of Wales. A small museum, consisting of the purchases from the Exhibition, and of objects loaned by private gentlemen, was opened in a suite of rooms in this palace, where the head school of design was now located; and a more extended system of art instruction was established throughout the country, the whole being under the direction of the Board of Trade. This new branch of the Board of Trade was termed "The Department of Practical Art," the old term of "School of Design" being abolished; and the museum constituted one portion of this department of practical art.

The museum, as first opened, occupied about six ordinary-sized living-rooms, and all but one of these—the entrance chamber—were filled with objects which it was desirable that our manufacturers should copy. But this ante-chamber constituted what ultimately became known as "The Chamber of Horrors." It presented to the visitor examples of bad art—of objects which

contrasted strangely with the beautiful works in the inner rooms. Thus we had scissors formed as birds, which separated into halves every time that the scissors were opened; candle-sticks formed as human beings, with the candle fitting into the top of a chimney-pot hat or into the head; egg-cups formed as birds' nests; plaid fabrics bearing check patterns so large that it almost required two persons to wear the same pattern in order that the whole design be seen; carpets on which ponds of water were drawn with water-lilies floating upon them; and other absurdities equally offensive to good taste. As certain objects found a place in this chamber which had been but recently issued by large and influential manufacturers, and which were expected to command a large sale, the room of horrors raised an outcry in the country such as no art influence which English manufacturers had heretofore been subjected had induced; and to this very outcry I attribute our first and most important advancement. The pressure which was brought to bear upon the infantine museum caused the room to be dismantled; and this I have never ceased to regret. Why men should be allowed to issue such works as can only degrade a nation's taste I do not know, for thereby all suffer for the good of a few. And this is certain, that people learn to discriminate between the bad and the good in art most quickly by having the false and the true both placed before them, if the reasons of the falsity and of the truth are also clearly set forth.

By annual grants from the State this museum became gradually enlarged, and room after room was filled with precious objects, till it almost outgrew the utmost space that could be given to it at Marlborough House. The pressure for space, together with the fact that this palace would soon be required by the Prince of Wales as a residence, led to the erection of temporary buildings in South Kensington for both museum and art schools, and these in their turn gave way to the comparatively fine permanent buildings in which the museum and schools are now located.

Upon the removal of the temporary building from Kensington, one portion of it (about a fourth) was re-erected in Bethnel Green, one of the poorest districts of London, and was filled with objects lent by the central establishment and by wealthy private collectors; and I am happy to be able to say that this museum is crowded by visitors from the poorer class, who appear to appreciate the merits of its contents in a manner that could not have been expected.



The South Kensington Museum also has a traveling branch which visits the provincial towns in the provinces, on condition that suitable rooms are found for the exhibition of the objects, and that these are supplemented by the temporary exhibition of the collections of private individuals in the neighborhood. This traveling museum has been the means of doing much good in some of our provincial towns; and in Nottingham, the seat of the machine-lace manufacture, the largest numbers, I believe, have been attracted by the Exhibition, and here there is charged one penny as an admission fee. Indeed, so popular has the art museum been in this town, that a permanent museum is about to be established there, and towards the building some of my friends have given £1,000 each.

In connection with the South Kensington Museum there is also an art library, which I believe to be the admiration of all Europe. It is free to all, and if the student wants to search the standard works on any particular branch of art industry, and yet does not know the titles of such works, the information which he seeks can always be obtained from the librarians. Any person may transcribe any parts of the text of a book, or may copy the drawings but he must not trace, use ink, or place his sketch-book on the work that he is copying;—precautionary measures which experience has shown to be necessary in order to the preservation of the books.

If my memory serves me rightly, the arrangements respecting admission to the museum are as follows: The museum is open from 10 a. m. to 10 p. m. on Mondays, Tuesdays and Saturdays, free, and from 10 a. m. to 4.30 p. m. or 6 p. m., according to the season of the year, on other days, upon payment of six-pence. But the library can be used for a week, whenever open, for a fee of six-pence, and the library-ticket carries admission also to the museum; hence, for six-pence any one who is desirous of studying art may do so in the museum and library for one week. For eighteen-pence a monthly ticket is procurable, and for ten shillings and six-pence an annual ticket, each having the same privileges as long as the ticket is in force.

I have now given you some idea, I think, of the working of the art part of that great museum, over which Mr. P. C. Owen so ably presides, but you may wish to have some idea of the cost of the art objects which it contains. Up to the 31st of December, 1874, we

had purchased 355 objects costing each £100 or more. Of these, four cost more than £2000 each; seven more cost more than £1000 each; eighteen more cost more than £500; seventeen more cost more than £350; twenty-four cost about £300; forty-seven about £200; fifty-nine, about £150; fifty-two, about £140; a hundred and two cost about £120 each. Seven collections, comprising together 1,593 objects, have also been purchased for a sum of £7404; and the entire collection, as it stood at the end of the year 1874, cost £193,326 3s. 4d. This collection has also been largely augmented by bequests from donors who have come forward in a princely manner and given their treasures to the nation. Thus, what was in 1852 a mere handful of things comparatively (about £5000 worth), has now become a large and most valuable collection. But added to this, the largest court in our museum is usually filled by objects on loan, which are contributed by opulent collectors for a period of six or more months; and by their liberality the usefulness of the museum is greatly augmented.

When the museum was first founded in 1852, Mr. Owen Jones, our then greatest ornamentist, and a gentleman whose death we have had lately to deplore, was requested to give a series of lectures on the art qualities of the contents of this museum, and most valuable these lectures were. Mr. Owen Jones was also requested to prepare a series of axiomatic propositions which should set forth, in the briefest manner possible, the art principles which should govern the application of art to various manufactures, but the series was never much more than commenced. The general propositions were, however, printed as a pamphlet, which was sold in the museum for one penny, and a few special sets were also issued in larger form for posting in workshops and factories. The lectures on the contents of the museum were soon abandoned; the pamphlets containing the simple propositions were replaced by elaborate, and certainly useful, treatises; yet I doubt whether these do the good that the earlier and simpler publications did. Every line that Owen Jones wrote was worthy of the most careful consideration, for his was a master mind.

The first objects purchased by the museum were, as I have before said, almost exclusively oriental, and all authorities agree that these were most worthy of consideration; but curiously the objects purchased during later times have been chiefly illustrations of Renaissance art; yet the art director of the museum did not consider

Renaissance art of the most exalted character. It has been reserved to Mr. P. Cunliffe-Owen to add largely to the oriental collections, and also to issue cheap hand-books for the guidance of students. Thus, besides the guinea books, there are now a series of excellent shilling manuals, and these have been abridged and are sold at one penny each. Mr. Owen is doing a great work for us, as he is using his every effort to make the art collections at South Kensington of the utmost service to manufacturers; whereas it appeared to be the especial business of his predecessor, during the later part of his career as director, to merely bring together a number of rare and curious objects.

Having now pointed out to you the nature of our South Kensington Museum, I will frankly tell you what, in my judgment, has prevented our museum from being of even greater service to us than it has been.

*First.*—The collection is too fully of antiquarian interest merely. I feel that it is very desirable that the history of every art be set forth, as far as possible, by examples of each particular manufacture from any period and country, and that specimens be procured of whatever illustrates a new or rare process, even if the specimens are altogether inartistic. But while I feel the desirability of all this, I yet think that too many of the objects in the South Kensington Museum are merely of interest as specimens of special manufactures: for one or two illustrations of a particular ware are as useful as fifty, if the specimens possess no beauty in themselves.

*Second.*—We do not now point out, either to the student or the public, which objects have been bought with the view of illustrating processes, and which for art excellence, although this was done during the early existence of the museum; and from this neglect we suffer much. Mr. Redgrave, in his report on Design, says: "The ornament of past ages is the *tradition* of the ornamentist, and tradition ever hands down to us things good and bad, both equally consecrated to most minds by the authority of time. But a moment's reflection will show how necessary it is to discriminate before receiving anything on such authority. A church or temple built in a rude age remains undisturbed by some happy chance, . . . the ornamental details found therein are copied, and illustrated by the notes of antiquarians, or published in the proceedings of learned societies, and are at once regarded as authorities for imitation; it being forgotten that they were perhaps the works of

obscure provincial artists, or of a barbarous age perchance, or of a people with whom art, no longer studied for its principles, had ceased to progress or had rapidly declined." All this is perfectly true; hence it follows that if objects are collected for their antiquarian or historical interest, they should be so labeled as to warn the public against regarding them as examples for imitation.

*Third.*—I think that we neglect the due encouragement of modern art. Surely some plan could be arranged for the preservation of excellent examples such as are from day to day produced by modern manufacturers, especially examples of common household objects. I believe that manufacturers would be glad to send specimens of their wares gratuitously for exhibition, giving them to the museum on account of the value of the advertisement which their exhibition would afford in return. Thus every wall-paper manufacturer would surely submit his new patterns for inspection, in the hope that some might be selected for exhibition; and so also would carpet manufacturers, makers of cups, saucers, jugs, and many other wares. But if this were permitted, a most rigid censorship should be exercised, in order that no inferior works be shown to the public. I think that only those which possess a considerable amount of art merit should be accepted and exhibited. With us in England, most manufacturers issue a new set of patterns at least once a year. I would, then, exhibit the selected patterns till the new designs were issued. But it frequently happens that old designs of great merit are superseded by new patterns greatly inferior in art qualities. I would, therefore, propose making a further selection from the exhibited designs, and preserving them in book-form, or as might be convenient for reference, and as part of the permanent collection of the museum. I want, possibly, a wall-paper for my room. I do not care to go into a store to see what can there be shown me, for they may have no samples of the most artistic patterns, and if they have, they will probably only be able to show me the present season's goods; but if I could go to a museum and see (even if I had to pay a small fee for the privilege) the excellent designs which have been issued during the last five years, and if I could learn from my search where these patterns are procurable, surely a great boon would be conferred upon me, and true art would thereby be encouraged.

I consider it of the very highest importance that every possible inducement be held out to manufacturers to produce excellent art

works, for thereby national education will rapidly be achieved. If a manufacturer produces a good work, and its production has put him to considerable expense, he will make a special effort to sell it; and besides the monetary interest, he will wish to be known as the producer of art works. Our Elkington, the great metal-worker, and our Minton, the great potter, have through their beautiful art productions achieved a world-wide name; yet I think, if you ask them, that their wealth will be found to spring rather from the production of useful objects than from the production of their great art works. But notice what the production of beautiful objects does for them:—it leads all to seek after their works, and the names have become so exalted that their common productions bring higher prices in the market than those of any rival firms.

To the country the production of noble works means glory and honor. Thus, is not France glorified and honored by its art manufactures? yet, if you think about the matter, there are not many French houses that produce great art works. Most French things are rather pretty, merely, than truly artistic; yet a few houses have long been known as producers of works so good, so beautiful, so true, that all who have art knowledge in this present, or at any later time, must value and love them; and it is these few excellent houses that have made the great name for the French nation. You are all, then, concerned in the production of true art works; and I think it most important that you do all that you can to encourage the production of beautiful objects such as we surround ourselves with in daily life; for nothing so fully influences the taste as the surroundings of the individual. Most of us have, at some time or other, taken a house by the sea as a temporary summer residence, and upon entering upon possession we have been much distressed with the wall-paper, the carpet, and indeed the whole surroundings. But after a few days the sense of annoyance has passed away, and what was at first odious now ceases to offend; thus the corrupting influences of bad surroundings are apparent.

In like manner, if we live amidst all that is beautiful and true, our sense of perception becomes so refined that the least discord of color harmony, or the least coarseness of form, is distressing; and this is a right state of things. So far as I can, I allow nothing discordant or coarse in either color or form to enter my dwelling; and in my own study—where I spend so much of my life—I am most particular to achieve the sense of perfect repose, by the presence of welcome and concordant objects.

I wish now to say a few words respecting the influence which certain museum objects have had upon the manufactures of European countries.

We added to our museum at South Kensington, about fifteen years back, a collection of majolica ware; a collection which consists of 749 pieces, and which cost £14,341. This collection of majolica has been added to from time to time till it now numbers 1,040 objects. Many of the pieces, while most valuable as illustrations of an interesting manufacture, are yet far from beautiful as art works; yet see what this collection has done for us. Minton first, and afterwards the more timid, commenced to consider this collection, and to produce works in the same ware. Of the early pieces produced few were pleasant in tone, yet they can bear exposure to weather in a manner that no other ceramic wares can; and now works of the highest excellence are produced in majolica, such as can only be a lasting glory to our country and our time. But more than this—Minton's success is largely due to his productions in majolica, and there can be no doubt but that majolica affords a most useful means for the production of art works.

At South Kensington we have now a large and most interesting collection of Japanese objects, and this has already resulted in the Royal Porcelain Works of Worcester having recently made great strides, owing to which they are once more deserving of esteem as the producers of excellent art objects. But, notice,—their recent works have almost all resulted from the consideration of museum objects.

A most striking illustration of the usefulness of museum specimens is found in the beautiful works of Brocard, of Paris. An Arabian lamp was added a few years since to the collections of the Louvre. It was formed of transparent and nearly colorless glass, which was richly figured with characteristic ornaments traced in enamel colors and gold. It was brought, I believe, from a mosque in Cairo, and was thirteenth century work; a specimen of a manufacture altogether new to Europe; and it was undoubtedly artistic. No sooner was it exposed in the museum than it attracted the attention and elicited the admiration of M. Brocard. But this man did not content himself with simply admiring it; he at once attempted its reproduction; and happily, after many attempts, he is succeeding in founding an art which is most creditable to France. Brocard, however, did not merely commence

the manufacture of lamps now no longer useful, but devoted his best efforts to the production of objects calculated to meet modern wants; and thus a new manufacture has arisen in France, from the introduction of one object into the national museum.

I am happy to say, that while you have had no examples of this manufacture in your great Centennial Exhibition, I have been instrumental, at the request of Mr. P. C. Owen, in inducing Messrs. Loudos and Co., of 126 & 127 London Wall, London—our largest importers of oriental and of European art objects—to lend to you for a period of six months, at least, many specimens of this splendid manufacture; and that you will be deeply interested in these beautiful works I feel sure.

Mr. Deck now produces artistic works such as no other European potter does. But here we have another instance of the usefulness of examples. This talented Parisian devoted himself to the study of oriental earthenware, and especially to the consideration of old Chinese examples. Some of these old works have great art merit, and are coveted by all collectors. Mr. Deck considered these, as Mr. Brocard did the Arabian lamp, and commenced their reproduction. Having re-discovered, to a great extent, the secrets of their formation, he proceeded to make such vessels as he deemed suitable to modern wants, and thus we have another new manufacture of the highest art merit. Messrs. Loudos and Co. have also offered to lend you a series of examples of Mr. Deck's wares, and with these I am sure that you will also be pleased.

I need not multiply examples to show you the value to a nation of the public exhibition of art objects; for instances in which such an exhibition has been of great use to manufacturers must be familiar to you all. Yet I may remind you that we learned the art of damascening from the East; and the great productions of the great French metal workers, Christoffe and Barbidiene, in enamel, have resulted simply from the contemplation of Chinese and Japanese examples; and recently these manufacturers, and our English Elkington, have commenced to inlay various metals—following the arts of Japan.

If you are desirous of taking a first place amongst the art manufacturers of the world, I would urge you to all possible liberality in respect to your museum objects. You cannot have too many excellent examples of art works, and all branches of art industry

must be represented. After most carefully inspecting the purchases of the Pennsylvania Museum as far as I have been able, I must congratulate you upon the care and knowledge with which the selection has been made. The fine Arabian works in brass that you have purchased in the Egyptian court of the Centennial Exhibition, are in every way excellent, and will be most useful as excellent examples of a type of art not largely used in the world at the present, but which arose with the Mohammedan faith. The valuable collection of plaster ornaments which you have also secured from the Egyptians, will be invaluable to the students of Eastern art. But let these be labeled, that the student may see the application of each ornament which is part of the enrichment of a building, and may not regard it as a mere piece of excellent ornament. The carved wood panels that you have secured from the Chinese, are most artistic and valuable works. The specimens of gold, silver, and enamel work that you have selected as illustrations of Russian work, are of high merit. Doulton's Lambeth faience and his works in stoneware will surely be of service to your manufacturers; and while you have secured from Messrs. Daniell fine specimens from the works of Minton, from the Coalport Pottery, and from the Royal Factory at Worcester, I regret that the manufacturers of these great firms will not be better represented in your midst, for in the potter's art you are undoubtedly behind.

The reproductions of great works in metal which you have so wisely secured from Elkington, are, for purposes of study, as useful as the original works. These, as you are aware, are made by the deposit process, under the sanction of the South Kensington Museum. In this collection you have exact copies, which you buy for a few dollars, of objects, the originals of which cost thousands of pounds sterling. You have here the great Milton shield, a pair of large sacred candlesticks from Persia, and, indeed, a number of objects of the highest interest. So far as I have seen, your purchases have been most judicious, and I can truthfully say that with limited means the collection is as judicious as could have been made from your Centennial Exhibition. I congratulate you most warmly upon its excellence.

In labeling these things for your museum, you will not, I am sure, forget to explain the processes by which the various objects have been manufactured. Thus, the nature of those beautiful samples of Henry II. Ware are of little interest if you do not know



that the whole of the ornament, however fine, consists of actual inlays of various colored clays. In the metal work let what is wrought by hammering, casting, chasing, damascening, niello and all other processes be clearly distinguished; for it is only by understanding a work that the student can fully learn its art significance.

In order that your museum may be of the utmost value to your manufacturers, I should advise that you photograph every object, and that you sell these photographs at the lowest possible price, in order that you throw broadcast what can only result in the people learning to appreciate beautiful forms. I would also reproduce all your art objects, so far as possible, as the South Kensington Museum has reproduced those objects which you have acquired for your own museum. I should like to see on the sideboards of your houses the copies of Persian dishes, Arabian salvers, Cellini cups, and of whatever is calculated to refine and cultivate the taste.

In conclusion, let me urge upon you the necessity of forming your museum on an extended and liberal basis. Let the welfare of your art manufacturers be kept steadily in view in all that you purchase and display. Set aside all individual crotchets, and make your collections illustrative of every phase and of every style of art, giving preference to those specimens which are most likely to serve the interest of your country. Be careful not to mistake excellence of workmanship for art merit, and always discriminate between truth and imitation. Prepare, I would say, short and axiomatic principles, such as will set forth the laws governing the application of art to the various manufactures, and exhibit these in each respective department of the museum. Sell these also in pamphlets at the lowest possible cost. I do not see why you should not sell any valuable works which private enterprise may produce, if these are calculated to aid in the work that you are striving to promote; but whether you do this or not, neglect no opportunity of lending a willing aid to whatever is calculated to encourage the development of art among you. Label every object in the museum, and point out its special merits; saying whether it enjoys its place there as a work of art, as a specimen of a rare manufacture, on account of great excellence of workmanship, or because of its historical interest.

By lectures set forth the peculiar merits of your chief museum objects, and explain to the people on every possible occasion the general canons of art. By doing thus, and by encouraging, in whatever

way you can, the efforts of your manufacturers at the production of the beautiful and true, you who have so much energy and such undaunted enterprise will, in a few short years, take a foremost position as art manufacturers in the world.

But now, before I conclude, let me remind you that a great museum cannot be founded without the expenditure of large sums. Let me say to you who are patriotic, and who desire to see your city and your country prosper, that no more useful means of serving the public good could be found than in aiding the museum. I urge upon you, if you love your country, to do what you can to help in the founding of this museum; and to each of your manufacturers I would say, that your pocket is concerned in the project as well as your fame. Paris draws to itself the peoples of all nations, owing to the art excellence of its works; and you may make a name for yourselves which shall equal, if not surpass, that of any of the great European manufacturers. Whatever you give will certainly be returned to you fourfold. I appeal to you, then, to come forward as true citizens, and help in the formation of an institution which can only glorify your nation.<sup>2</sup>

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## PHONETIC SPELLING.

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“In this the antique and well-noted face  
Of plain old form is much disfigured.”—*King John*.

IT is said that any violent movement is apt to be followed by a reaction; and this general truth seems to have found a curious illustration in the excitement for the Spelling Bee and the desire for correct spelling according to our time-honored mode suddenly changing into a movement which its votaries declare will destroy the Spelling Bee by making every child a correct speller a week after it has mastered the alphabet. We refer to a recent attempt for reviving the interest in phonetic spelling—a subject which has exercised the minds of men, and been discussed almost ever since the first book was written in the English language.

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<sup>2</sup>The third of Dr. Dresser's lectures—on Art Schools—will be given in the following number.

According to the author of a pamphlet on this subject, five societies and many newspapers and journals have lately discussed the question in England. It has for some time been noticed and talked of in America, and during the past summer there seemed to be a regular movement in its favor; meetings were held at Philadelphia and other places; some of the proceedings were published in the newspapers; and in fact the rebels in this phonetic revolt seemed to be organizing their forces, choosing their leaders, collecting arms and ammunition, and making all things ready to do valiantly in the "wordy war." Like French revolutionists, they have started a newspaper—a necessary weapon in a modern rebellion. The title of their dread fire-brand is "The Spelling Reformer, a Monthly Journal, Devoted to the Advocacy of a Revision of English Spelling." Besides this they have issued innumerable circulars, and some of them have even gone so far as to provide themselves with letter paper on which is printed a short statement of their reasons for phonetic spelling; with this they intend to bore their friends and correspondents. Again, like other revolutionists, they have the old trick of addressing themselves to the "laboring classes." They declare that our present spelling is so difficult to learn that it offers a most serious obstruction to popular education. "Change it," they cry, "and let every poor man's child learn to read in three weeks." They actually hope to bring this question of altering our orthography into the halls of legislation, and decide it by the majority. And a fine time indeed we may expect when phonetic spelling shall become a party question.

The boldness and hardihood of the enterprise are by no means its least striking features. Either the phoneticians "rush in where angels fear to tread," or they have unbounded confidence in their own strength and ability, and in the comparative weakness of the rest of mankind. These would-be reformers have indeed before them a stupendous undertaking. A reform of any kind is always difficult and slow; and all the great ones that the world has ever accomplished have required many years and the united aid of her strongest sons. Certainly to change the alphabet of the whole English-speaking race, to change the spelling of almost every word is no light task for a few individuals. Our alphabet and spelling are associated with every hour of our daily lives, with our trades and professions, with home, with country, with a literature

the finest in the world, and with the best part of our past history. Such are some of the "prejudices," as they call them, which the phoneticians must contend against. They have, however, thus far had it all their own way; they have not even skirmished with the scouts and sentinels of the army they intend to assail. That army is now perfectly quiet and apparently slumbering in its tents, nor will it arise until aware of actual danger.

We remarked just now that the idea of spelling words according to their pronunciation was not a new one. It is even so old as the time of Augustus; for we have the following words of Suetonius about him: "Videtur eorum sequi opinionem qui perinde scribendum ac loquamur existiment." Indeed, phonetic spelling has been attempted in almost every language at some time or other; but always without success. In a pamphlet on this subject we found a list of thirty-five attempts to reform English orthography in days gone by. The list begins with the "Ormulum" by Ormin, in the thirteenth century, and ends with Noah Webster, in 1830. Dr. Johnson also mentions several not included in this list. So it seems this troublesome question was almost born with the language, and has continued as a sort of nightmare to its happiness ever since. The author of the pamphlet justly remarks that "the number of the attempts made, and the wild extravagance of some of them, show the intense interest felt in the subject, and the magnitude and difficulty of the task to be accomplished." His enthusiasm, however, prevents him from drawing the conclusion that besides being of great magnitude and difficulty this task which so many have failed in may likewise be impossible to accomplish.

But now let us consider some of the arguments lately urged by some of these fanatics in behalf of their favorite hobby. The word "arguments," however, can hardly be applied to the contents of their various pamphlets and circulars; for, with the exception of a few short but well-composed articles, all they say is mere assertion without argument, and, like clap-trap advertisements, a great deal of it is supported only by testimonials of professors and school-teachers. One phonetician, after giving briefly his reasons against the "historic objection" to phonetic spelling, concludes with a sentence which he apparently supposes decides the whole matter: "this question has been so effectually dealt with by able hands that it is unnecessary to pursue it further here." The fol-

lowing is the decided opinion of Prof. March in his own beloved spelling: "It iz ov no yeus tu' trie tu' caracteriez with fiting epith'ets and adeuqet terms ov objurgaishun, the monstus speling of the English lan'gweg." Here is an extract from a summing up of accusations: "As to its origin it is maintained that the present spelling is the 'result of ignorance and chance;' that it gives currency to false and fanciful etymologies; that it stereotypes the blunders of printers and transcribers; that it is at variance with the fundamental principle of alphabetic writing, the object of which is to represent the sounds of words by letters; that it is 'unhistoric,' 'unscientific,' 'contrary to good taste and common sense.'" We refrain from giving any more examples of this peculiar rhetoric, because we would fill too much space with quotation and explanation in trying to give a true idea of the general tone of phonetic publications, but we can refer our readers to any of the pamphlets and circulars which they may meet with for the truth of what we have already said. As we do not wish to imitate the phoneticians in being entirely one-sided, we will now confine ourselves to a statement of the arguments in favor of phonetic spelling, together with what can be said on the other side.

From a printed circular now before us we will quote what is there called a "summing up of arguments in favor of a revision of English orthography." It is said to have been written by Mr. A. J. Ellis, of England, who is mentioned in the preface to some of the late editions of Webster's Dictionary as having once been in favor of phonetic spelling, but as having at length given it up as hopeless.

"1. It takes years for a child to learn to read with tolerable accuracy.

"2. It takes many more years before he is able to spell.

"3. No one ever knows with certainty how to spell a word which he has only heard, and has not yet seen written.

"4. No one ever knows with certainty how to pronounce a word which he has only seen, and never heard.

"5. Very few can or do, at all times, spell every word with which they are familiar, both in speaking and writing, correctly.

"6. Foreigners are continually committing the most ludicrous mistakes of pronunciation from being misled by the spelling.

"7. The irregularities of spelling are the great cause of the difficulty experienced in learning our language.

"8. Missionaries to foreign countries find the greatest difficulty in reducing to writing the dialects of the barbarous tribes which they are endeavoring to civilize; and travelers and geographers seem quite at a loss for a means of conveying the names of places which they have visited or described, the strange medleys of letters which they furnish being in general ludicrously unintelligible.

"If Phonotypy be generally used—

"1. Children of six or eight years will be able to learn to read in a week.

"2. Those who can now read the common print will learn to read in ten minutes.

"3. No difficulty will be experienced in spelling any word which can be pronounced with accuracy.

"4. No doubt will be experienced as to the proper pronunciation of any word which meets the eye.

"5. Every one will be able to spell as correctly as he pronounces.

"6. Foreigners will never be led into any errors of pronunciation by the orthography of words.

"7. Our language, which is about the simplest, in its grammatical construction, of any in the world, will be rendered accessible to the whole of mankind, and will be much more extensively read and spoken.

"8. Missionaries will be able to reduce the language of any tribe to an alphabetical form, and to print it off with ease. No language need be unwritten; no difficulty experienced in giving the names of places, etc. All the immense variety of existing alphabets may be merged into one, and thus one great stumbling-block to the student of languages (especially of the Oriental languages) immediately removed.

"9. Reading and writing will no longer be thought feats; they will take their proper place as subsidiary arts, without which we can learn nothing, but which contain no learning in themselves.

"To conclude. Suppose we had not this 'Monkish Orthography,' but a better system, and some one were to propose the former, and show its beauties by a specimen of its spelling, would he not be scouted at for daring to propose what is so self-evidently absurd? And are generations yet unborn to undergo the labor of wading through this mass of blunders merely because we now

have a bad system of spelling? Is this one argument—it is so, and must therefore remain so—to supersede all reason? Forbid it, common sense!”

The concluding remark in the above is a ludicrous but good example of the reasoning of these men; while what are called the arguments, will be admitted by any candid person to be very exaggerating assertions; and the conclusions drawn therefrom of the marvelous perfection in the English language which is to follow the introduction of phonetic spelling such as belong only to Utopian dreamers. Some grains of truth there certainly are in these objections to our present orthography. But such faults are inherent by nature in our language; and every day proves that they are not of such a fatal character as Mr. Ellis would have us think.

But without more quotation it can be easily seen what are the arguments for phonetic spelling. Its upholders declare that English spelling is very irregular and is a difficulty in the education of children; and this is true. Therefore, say they, if we can surmount this difficulty by having every word spelled exactly as it is pronounced, a great advantage will be gained for the cause of popular education. This is all that can be urged in favor of the so-called reform; all the other arguments on its side are merely attempts to weaken the many objections which are brought against it. No other advantage is claimed for it but this, that it would do away with all the difficulty in learning to spell, and make all English words perfectly easy to pronounce by any one who had mastered the alphabet. This, we admit, would be a great gain, if it could be accomplished, and if being accomplished it would not result in more harm than good.

Now, first of all, we are prepared to say that phonetic spelling is an impossibility. We mentioned in the beginning of this article some of the “prejudices” which would have to be overcome before its introduction could be effected; and we may now add that from the nature of language itself such a radical and wide-extending change could not be made except by the work of ages.

Language has its own laws of action, and is not in the least subservient to man’s will or decree. He can analyze it, and work out the laws by which it seems to be guided, just as he studies the science of Astronomy or Mechanics. He can apply it to the most useful purposes, and by his thorough knowledge of all its parts be-

come eminently skilled in handling it; but he can no more make it conform to a law of his own than he can change the action of his heart or cause any of his organs to assume different functions. It is a part of him, and yet, like most of his other possessions, he can control it only within certain limits. Unconsciously he is changing it all the time; but if he studies its past history he finds that all the changes he has made in it have been very gradual, often requiring centuries for their accomplishment. He can never discover an instance where he made a sudden and radical alteration in its structure. As an example, take Noah Webster's attempt at reform. He succeeded in altering a few words; but his plan of reform fell to the ground, although he supported it by great learning, ability and a dictionary of the language. Even the editors of his dictionary disregard at the present day nearly all his innovations; and he is nowhere, except perhaps at Yale college, considered a safe authority in spelling or pronunciation. This and all like attempts have failed, and it is easy to see the reason why. For language has a life of its own, and will not be interfered with. It is always in a state of growth or decay, and constantly makes changes in all parts of its structure; these changes men can assist if they seize the right opportunity; but for them to alter it at will, and induce millions of their fellow-beings to conform to this alteration—in other words, to make language conform to it—is impossible.

To give an idea of how difficult it is to get a people to accept an innovation of this kind we have only to consider the French Metric system of weights and measures. This system, though admitted by most people to be superior to any other, has required generations to even have it taught in a few schools and colleges, and it will require many generations more before it approaches to any thing like general use. How apparent the impossibility, what madness, then, to try to introduce a change in language which has not only strong arguments against it, but is even contrary to the nature of language itself.

But let us suppose that the phoneticians had induced the whole English-speaking race to spell all their words as they are sounded, would the advantages which they claim for their system last? In this case, of course, the alphabet would be changed; ten new sounds would be added to it, or perhaps more, and all silent letters would be dropped. But here a difficulty arises; how



is each word sounded, who is to be the judge of pronunciation? For that each man, if left to himself, will pronounce differently and consequently spell differently from others, and that we shall have in that case a floating, fluctuating, ever-changing orthography, it is easy enough to see. We need only open a book written in the time of Queen Elizabeth, or earlier, when every man spelt as he listed, and look at the result. Scarcely any word is always spelt in the same way; the same word is often spelt differently on the same page; and the different ways of spelling a word are often very numerous. All this would, of course, happen over again if every man was his own judge and authority for pronunciation; for it is very evident that all men do not pronounce alike. So in the case we have supposed the English-speaking race would have to appoint a committee to make a dictionary in which the proper phonetic spelling of every word was agreed upon; and men could not altogether rely on their ears, but would still have to spend part of their childhood in learning to spell.

But we will suppose the dictionary made; and that we are all agreed on one sound and one spelling for every word;—an event which indeed seems impossible to any one who thinks of the subtle laws that govern human speech, the numerous dialects, and the utterly different way in which the same words are sounded by nations speaking a common language. Here there would be a new question for the phoneticians to solve, how long would this state of things last? We are inclined to think that, supposing them to have succeeded thus far, their system would endure for only a few years, and then would have to be remodeled and started afresh with a new dictionary, occasioning great confusion in the language; or else it would always be changing, and the orthography of the language never settled.

We base this assertion on what is known of laws which govern the pronunciation of words. We have already referred to the fact that few people pronounce alike, and that if each person spelt words as they sounded to him, orthography would be exceedingly changeable. Indeed the subtlety of these changes in pronunciation is very great, but not always fully realized. Any one, however, who will give a little thought and attention to this subject will find that there is a different idea as to the sound of words, not only in different countries, but among different classes in the same city, and that often some natural barrier—a mountain or a river—will

cause a marked difference to exist in the pronunciation of the people living on either side of it. Differences of climate acting on the vocal organs also cause differences in pronunciation; and differences in the structure of these organs in individuals have the same effect. When we consider all this, it does not seem surprising that pronunciation should be a thing which is constantly changing;—not suddenly, but by slow degrees, through causes acting on it all through the life of the language. A man may notice this even in his own lifetime; though changes which might occur in that period would not be very marked.

We will now give some examples to complete the proof of what was stated about the uncertainty of orthography, and to illustrate what we have since said.

Trench, in his "English Past and Present," gives the following sixteen different ways of spelling "sudden," which he found in old books; and this is a word which one would think was hard to mispronounce: "sodain," "sodaine," "sodan," "sodane," "sodayne," "sodden," "sodein," "sodeine," "soden," "sodeyn," "suddain," "suddaine," "sudein," "sudeine," "sudden," "sudeyn."

And now for a modern illustration of the same subject.

The Philadelphia *Times* of August 18th, contained an account of one of the meetings of the phoneticians which was held during the summer, and to amuse its readers spelled all the words phonetically. The writer of the piece of course spelt the words as they sounded to him, but he made some curious slips. We extract a few of the words which he spelt phonetically: Simpithe (for sympathy), loke (for look), introdooced (for introduced), difrent (for different). Now the first word shows that he did not know how to pronounce sympathy, or he would have written it phonetically with an "a" in the place of the second "i." Nor does "loke" give the proper sound of "look," and the "u" in introduced should certainly never be pronounced like "oo;" "difrent" also shows an entire misapprehension of the pronunciation of "different."

We take some examples from Trench's "English Past and Present," where they are used in this same connection, to show the changes in pronunciation which certain words have undergone. Many more might easily be collected from old books; but these will be sufficient for our case. In the following couplets from Pope, the rhyme shows how much the pronunciation of certain words has changed since his day:

“Here swells the shelf with Ogilby the *great*,  
There stamped with arms, Newcastle shines *complete*.”

“Here thou great Anna, whom three realms *obey*,  
Dost sometimes counsel take, and sometimes *tea*.”

“Pope also rhymes ‘obliged’ with ‘besieged.’ ‘Key’ in Elizabethan literature always rhymes with such words as ‘survey.’

“Also ‘should’ rhymes with ‘cooled,’ with ‘hold,’ and with ‘cold’; ‘would’ with ‘mould,’ and with ‘old’; ‘could’ with ‘gold.’ Golding in his translation of *Ovid’s Metamorphoses*, rhymes ‘tough’ and ‘through’ ‘trough’ and ‘through,’ ‘rough’ and ‘plough.’ The complaint of Cassius against Cæsar: ‘Now is it *Rome* indeed, and *room* enough,’ would have had no point if Rome had not been pronounced in Shakespeare’s time like room.<sup>1</sup>”

Thus it is evident that this system of phonetic spelling is founded on a fallacy. Pronunciation is constantly changing; how, then, can such a system endure? It would have to be constantly changing itself in order to keep in harmony with the pronunciation; and what inextricable confusion, what a destruction of all learning would ensue! As Trench well says, every word has two existences, the written and the spoken; and so subtle a thing is human speech that it is utterly impossible to make the written word exactly represent the spoken. English orthography is irregular and difficult to learn; but we must accept the fact as we do any other law of nature which we cannot alter or overcome. For it is the nature of English orthography to be irregular. The language formed by the Anglo-Saxon and Norman-French, both irregular in their spelling, and by numerous Greek and Latin words which have crept into it, presents a compound which must of necessity possess a very peculiar orthography.

We have one more objection to make against phonetic spelling: It would almost destroy the science of etymology which is just now gaining strength and importance. From the pamphlet<sup>2</sup> already mentioned several times we take the following: “The etymol-

<sup>1</sup>*English Past and Present*. Lecture VIII., p. 317.

<sup>2</sup>As this pamphlet has been mentioned so often we will give in full its rather curious title, that our readers may refer to it: “Popular Education. Inspected Schools a Failure! A Revision of English Spelling a National Necessity. Addressed to Lord Sandon (Vice-President of the Committee of Council on Education), By E. Jones, B. A. (An Ex-Schoolmaster.) ‘We are on the eve of a radical reform in the old system of orthography.’—*London Daily Telegraph*. 1875. London: F. Pitman, 20 Paternoster Row. Liverpool: Philip, Son and Nephew, Castle Street.”

ogist is entirely out of court with his objection when it is clearly shown that in scores—if not in hundreds—of instances the present spelling shows a *false* derivation, while the amended spelling would show a *more true* derivation, as in the following words: *Parliament, sovereign, foreign, could, haughty, delight, debt, doubt, whole, island, tongue, ghost, lamb, chief, guard, synagogue, head, believe, pleasant, measure, fruit, etc., etc.*"

Now, the writer is perfectly right about 'whole' and 'island;' spelt phonetically they would show more clearly their origin. There are also other words in our language whose spelling ought to be altered in order to make their derivation more plain; and if the phoneticians attempted this alone their cause would be praiseworthy. But we defy any one to prove that the derivation of words would in general be made more clear by phonetic spelling. Many of our words are spelt according to their derivations; and when spelt phonetically these words of course run every chance of having their derivations obscured. Of the words not spelt by their derivations it is by no means certain that phonetic spelling would make their derivations apparent; in fact, it is a mere chance. It is easy enough to pick out ten or twenty words whose derivations *would be* made apparent; but these are not the whole language which consists of thousands of words. The phoneticians have discovered no law by which phonetic spelling must certainly bring out with superior distinctness the derivations of words in the English language; and it does their cause no good to mention a few cases in its favor and leave all the others untouched. What we ought to do for the assistance of etymology is to obtain a derivative spelling for words which are not so spelt; not to run the risk of ruining the derivative spelling of nearly all for the sake of giving it to a few.

The list of words given above is not only badly selected for the purpose it is intended to serve, but also displays most ignorant and stupid blunders on the part of the collector. He says these words are intended as examples to prove that phonetic spelling "shows a more true derivation." But take the word "debt." Spelt phonetically it would be "det;" but depriving it of the "b" destroys all connection with its derivation, the Latin "debeo." So when we spell "doubt" phonetically, "dout," by leaving out the "b" we lose all traces of its relation to "dubium." The word "fruit" is derived from the Latin verb "fruor," the past participle of which is "fruitus;" and, therefore, our present mode of spelling the word

shows its derivation very clearly, whereas the phonetic spelling, "frut," would have by no means the same result. These words should certainly never have been put in such a list; and some of the others, as "synagogue" and "measure," prove nothing either one way or the other.

If, as we said above, the phoneticians should propose an altogether derivative spelling, their enterprise would perhaps be useful and certainly more worthy of their industry and talents. For derivative spelling, in showing us the history of words, also often shows us the history of nations; it fosters learning; leads to correct definitions and a better understanding of the use of language; and also preserves that conservatism in words on which we greatly rely for the purity and strength of our mother tongue. But to enlarge on this subject would be beyond our limits; we can only recommend to our readers two books by Archbishop Trench, "Study of Words" and "English Past and Present," which will not only set them right about phonetic spelling, but will also introduce them to the wonders and mysteries of language, its subtle laws and strange caprices, its beauty and its strength.

We have now finished our argument against phonetic spelling, and we will conclude this article as we began it, by saying that such a scheme of orthography is an impossibility. Bacon styled it a "branch of unprofitable subtlety;" and these words are as true to-day as when he wrote them. Numerous attempts have been made, but they all came to naught, as will all those which shall come after them. As parting words to the phoneticians we might quote some lines which are found in one of their pamphlets; but strange to say they do not properly follow the advice:

" For every evil under the sun  
There is a remedy or there's none;  
If there is one try to find it,  
*If there's not one never mind it.*"

The enthusiasm and industry they display ought to find a more worthy and more easily accomplished object: and the best results we could wish this article to attain would be the leading of these men from their mad schemes to some of the useful and ennobling enterprises with which the world is filled.

## THE FORESTRY QUESTION.

IN a letter of Benjamin Franklin, which I have seen, but cannot now repeat, he expresses his conviction that America's supply of timber will be exhausted in eight years. This was over a hundred years ago. Since that day numberless similar predictions have been made—the variations being chiefly as to the time allowed, some being more liberal by a few years than others. Failure does not seem to disconcert the prophets: like Dr. Cumming with the end of the world, they merely go over the figures again, see where that little error is, and predict the same sad fate as boldly as before.

During the thirty years that I have been in Philadelphia, I have continually heard the most dismal accounts of our immediate timber prospects. No wood for building, no ties for railroads, floods increasing, streams drying, winter's cold increasing for lack of snow. The whole country is soon to become a desert, and within but a few centuries some future Schliemann will be digging for the spot where Philadelphia's great monument to Washington is to be.

This is the way the story reads: most of us have it by heart. But if we go through the country and look about us, it seems but a romance. I could take the reader to thousands on thousands of acres of magnificent timber—oak, beech, ash, hickory, buttonwood, poplar, pine, and indeed almost all the varieties of popular timber, except perhaps black walnut, which is scarce—all within one, two, or three days' ride of Philadelphia; stocked with deer, turkey, and other game, and much of it purchasable at from five to twenty dollars an acre, not for the timber only, but for timber and land.

And as for the change of climate, I find no evidence of it. I have in my possession the diary of the celebrated William Bartram, a close observer of nature, who day by day, during most of his life, noted down such natural phenomena as came before him; and there seems no change since his time.

And then the facts, as they are given to us, cannot be found. I remember once listening to a profound discourse on the lamentable phase of this timber question: where trees had been cut away, less rain fell; where planting had gone on, the rain-fall increased; and we were referred especially to Salt Lake City, which, through

Mormon plantings, had become such a paradise of rain, (for rain is the one great Edenic blessing nature had deprived the Saints of) that the waters of Salt Lake had risen remarkably. This was no mere child's talk. It was given to one of the most learned societies in America, and he who gave it was in the highest standing there. But when I went to Salt Lake City, I found that instead of planting, the Mormons had been like the rest of the world. The hills, which had once been clothed with pine, were treeless then; and the cottonwood, which before they came there, grew in myriads along the streams of mountain and valley, had all gone to feed Mormon fires. The only plantation that I saw was a nursery of about three acres of yellow locust, owned by President Brigham Young, and from which most of the street trees of the beautiful city were supplied. A few thousand apple and other fruit trees comprised the balance; and yet to this little trifle—and this too, remember, infinitely less than the natural timber cut away—we were told to refer the increased rain-fall, and the rise of level in many hundred square miles of lake surface.

I have had people say to me that these little matters do no harm; that tree planting is a good object, and though the "theories" may not be strictly true, it is best to leave them alone, as good will come from them. The day was when pious frauds, at least, were thought no harm. That day is gone. It is now the day of hard cash and solid, sure returns. Investments are not made on faith, but in the faith which sees sound principle behind it. I believe these wild statements and visionary notions very injurious to the best arboricultural interests. There are enough reasons for planting without them, and much better ones too.

That there is some danger of being some day short of timber is clear; but should the government prevent forest waste and enter on the planting of new ones?

I doubt whether much can be done to any advantage in this way. Most of the forests that are cleared are far away from civilization. Trees do not live forever. A couple of hundred years is about the average duration of most of the arboreal inhabitants of the forest; and most of those destroyed have passed middle age, and are on the downward path. The crops of grain and the herds of cattle on these reclaimed lands are beyond all calculation of more value to the country than the condition of the wild forest ever would be. No forest is destroyed that is likely to be profita-

ble—not even though the profit might be within a view of twenty years. It is best to let this idea of peculiar preservation of old forests go. Let forest lands take the course which civilization marks out for them.

Now, should the government undertake the planting of new forests? Again, I think not. There are many reasons why not; but the strongest to me is that in our country it is best to do all that is possible for ourselves. Every unnecessary office-holder brings us nearer to an irresponsible governing power, which it has ever been the American policy to overthrow. It is entirely unnecessary for the government to engage in forestry, because it can be made profitable enough to individuals. There is no reason why capital may not be made as sure of a good return when put into forestry, as when invested in railroads or other affairs; and it would be a good deal more secure than in most of our every-day enterprises.

The fact most prominent in this question is, that timber is getting scarcer in the well settled localities where it is most needed. The old forests are there disappearing and no new ones are being planted. Now I believe it would pay every land-owner who has land to any considerable extent, to set out a small forest. Every farm of one hundred acres might set out ten acres of trees, to make a wood. The fences will decay, and wood grown on the farm will be the cheapest way to replace them. Firewood and wood for innumerable purposes will be needed, and here it will be ready to hand. For fences especially it will be in great request, for I am sure the idea of making hedges of living plants will never prevail in this country as it has in Europe. I look to the time when the effort to make live fences, except in peculiar cases, will be wholly abandoned; and I say this too though a nurseryman, and raising hundreds of thousands of hedge plants for sale. Unless a hedge is properly made and skillfully attended to, it is not only useless, but an absolute nuisance. This necessary knowledge not one in a hundred has, nor will more than this ever have. A good post and rail fence is the neatest, the cheapest, the strongest, the best. In ten years, a ten-acre lot would make timber enough to fence in a hundred-acre farm, and long before ten years would profit grow out of it. But here is the difficulty about this, and one I have often heard farmers urge. They say, "We never know when we want to sell; we may make our ten-acre plantation, and keep it ten years, making noth-



ing whatever off of it in that time, besides having had the expense of planting, care, and taxes. Not one purchaser in a hundred would want to allow us a dollar more an acre for the timber land than for the land quite clear." There is much force in this, and, as I have found, it is the chief reason why land owners do not plant trees. No one doubts the ultimate profit, but will he own the land?

It seems to me that the best way to meet the prospective timber question is by joint-stock associations. A large tract of land—five or ten thousand acres—should be secured, not too far away from a populous centre, because there are many incidentals which could be turned into cash and made to cover the expenses as the work went along, and which could only be so turned into cash when near where there is a demand for these articles. It should be large enough to make it worth while to engage a first-class superintendent, for there is as much art and skill required to bring out all the best features of timber culture, as in mining and railroading, or in managing a bank. A badly managed plantation would be no further advanced in twenty years than a good one would in ten, and then there is the tact required to know how to make all things pay as the work went along. In a year or two there would be saplings for nail kegs; then follow young trees as straps for packing boxes, poles for hops or beans, material for rails or charcoal, up to posts and timber. Various barks used in the arts, seeds of trees and bushes used in commerce, even material used in festival decorations, might all be a part of the incidental profits of an immense tract like this if intelligently directed. As the trees come into bearing, the nuts or mast could be rendered of account in connection with hog feeding. The trimmings would make fencing for the whole tract, and thus the animals suffered to roam at large over the whole course without the slightest care. How far deer or other "game" might be introduced, and sporting rights made to yield a revenue, is a question I cannot answer, but it is worth study.

Even under the most careless management the property would increase in value. The land is growing, the trees are growing, the settled country is growing and nearing the plantation, and any one wishing to sell out his stock could always get the full value of it. There is indeed nothing that I can think of that would be so safe as an investment in such a joint-stock forest association.

The only chance of loss that occurs to me is from forest fires. As these now are, sparks from locomotives are the chief causes.

A forestry association would have no loss from this source, as they would have no plantations near enough to the railroads to take fire in this way; and there only remain the chances from hunters or or idle boys—chances which so far have been very remote as compared with those from railroad fires, which could probably be easily covered by insurances.

It seems to me that forest companies could be made to meet all our wants, if there is any profit at all in timber culture; and if there be no profit, it is too soon to talk of forest planting at all, for I am materialist enough to believe that cash returns in most cases make the true measure of great public enterprises.

THOMAS MEEHAN.

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### COMMERCIAL ETHICS.<sup>1</sup>

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WE have before us two works on this subject which have the same laudable purpose in view, and which are distinguished from the ordinary literature of the subject by devoting attention to particulars, instead of confining it to the broad generalities of moral exhortation. No one can read either of them without learning something, or without seeing that its author has taken pains that he may speak intelligently, and put his case forcibly.

Mr. Newton's little book on *The Morals of Trade* covers the more ground of the two. In his first lecture he points out the importance of industry and commerce, especially in this industrial age, and thence infers the importance of the morality which they foster to the general morality of society. He agrees with Lecky and Maine that commerce has promoted veracity, especially in the article of contract-keeping, and alleges in proof of this the conduct of New York brokers during the Panic. But as regards other transactions, which are guarded by no contract, and in which the

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<sup>1</sup>THE MORALS OF TRADE. Two Lectures: I. An Inquiry into the Actual Morality of Trade; II. An inquiry into the Causes of the Existing Demoralization and the Remedies therefor. Given in the Anthon Memorial Church, New York, by R. Heber Newton. Pp. 110: 8vo. New York: T. Whittaker.

BUSINESS VERSUS SPECULATION. A Lecture delivered before the Students of the University of California, Sept. 1st, 1876, and dedicated to the Youth of San Francisco, by C. T. Hopkins. Pp. 28: 8vo. San Francisco: Bacon and Co.

rule *caveat emptor* is the only customary canon of business ethics, he finds all branches of business, both retail and wholesale, to be honeycombed by frauds which shelter themselves under the customs of trade. The honesty and veracity of the business classes are chiefly confined to their transactions by contract with one another, and find their parallel (or, shall we say, explanation) in the proverb of "honor among thieves;" while every trade seems to regard the public at large as fair game, to be taken by any sort of pretence. Adulterations, fraudulent substitutes, lying advertisements, cheating the Custom House, shortness of weight and measure, he shows with some detail, are more or less common to all branches of business, both wholesale and retail, and no merchant or dealer would forfeit his standing with his own class for being detected in them, provided he has kept within the bounds of a bare, legal honesty. For law, not honor, furnishes the standard of business ethics in *this* regard; and by consequence a system of advantage-taking has spread through all lines of industry. The mechanic overreaches you by "forgetting" his tools, and charging you for the time he consumes in going to bring them. The contractor runs up flimsy edifices, which will perish so soon that our generation will leave few or no architectural memorials of its existence; or he guards the lives of his customers so slightly that the children are poisoned with the effluvia of the sewers. Dishonest speculation is not then an isolated fact, but the supreme outcome of a bad industrial system. Mr. Newton is careful not to condemn speculation in any wholesale way. Honest speculation, *i. e.* where the risk is calculable, the funds used are one's own, and the public will be benefited by its success, he justly regards as one of the means by which our industrial world must be built up. But all the conditions we have specified, especially the second, are violated by the current speculations of our time, and a still deeper moral depth is reached by such fraudulent speculations as the Emma Mine, where the honor of scientific experts and of men in public life was put in pawn, that the unwary might be induced to pay large sums for property which every manager knew to be worthless. The whole system seems to differ only in form from the wholesale plundering of peaceful citizens by noble robbers in the feudal period. Yet Mr. Newton is not so despondent as might be supposed from this summary of his view of the evils of trade. He believes that the evils he complains of are not things of yesterday; that our age

differs from those which went before it chiefly in the loudness of its complaint of the evil, and, therefore, in the greater likelihood of effecting some reform.

His second lecture is taken up with the methods of reform. First of all, he emphasizes the position that the reform to be lasting must be effected by an appeal to the individual conscience. But he believes that there are sundry conditions of trade unfavorable to any reform. Such are the derangement of the currency, the bad example of the corruption of political life, the eagerness of society for cheapness and for extravagant display, and the slackness of the Church to do her duty as a witness for practical righteousness. But before taking up any of these, he urges the need of a proper organization of each branch of trade for the suppression of fraud and the establishment of a higher code of recognized morals for that trade. We confess that we do not hope to see any permanent reform effected by gathering our trades into guilds. That method has been tested abundantly; the trade-guilds of the middle ages, and their exemplars, the trades-corporations of Athens and Rome, are very beautiful things to look back upon through the haze of a good number of centuries; but they were very ugly realities, and the greatest obstacles conceivable to the general development of European industry. They constituted themselves monopolies of the worst sort, oppressing the laboring classes and extorting unjust profits from the public. And on general principles we may say that such organization for the purposes of moral reform is like extracting sunbeams out of cucumbers. You can get something like sunbeams out of cucumbers, but their timid phosphorescence when left in the dark is a poor return for the volume of light that went to their constitution. And similarly the moral force that can be got out of an artificial organization is, both in kind and in amount, far from equal to the expenditure of moral force needed to bring it into existence.

Our own view is that in all cases where an evil cannot be reached by the law, it must be reached by public opinion. This statement covers nearly all of Mr. Newton's separate heads. To begin where he leaves off, the Church must teach a higher practical morality by declaring that money-making is not the chief end of man nor of any honest human occupation; and that the man who runs a store or a hotel, with no higher end in view, is degrading an honest calling as really as the minister who waits on the

altar with no higher end in view. She must teach men that their lines of business or industry are glorified by being parts of the great system of God's order for the world; and that each separate place in that system is a vocation to which God calls men. When such teaching takes the place of the present, "save your soul" theories, and has had time to permeate society, there will be some chance of a reconciliation of capital and labor, and of avoiding that deadly conflict between the two from which we are now saved by the disorganized and jealous condition of the representatives of the former,—a conflict which Mr. Newton's new organizations would precipitate. Then, too, there will be a chance of political reform; for the offices of the government will never be regarded by most of those who hold them as anything better than a chance to make money, until the other professions are regarded as something better. Our office holders at their worst are simply accepting the present morality of the business community. And lastly the rage for cheapness and for display will be brought under control, and the higher, simpler ideals of life will become those of at least all educated people.

We have analyzed Mr. Newton's book with some care, with the desire to attract attention to its merits—to its originality, its excellence of tone, its fairness of judgment, and the vast importance of its theme. We should be glad to see it obtain a very wide circulation, and especially in this his native city. Nevertheless, we have somewhat against him. He has not always avoided doubtful positions, where his case would have been made much stronger by a little reserve. For instance he stigmatizes the failure of the United States to protect the rights of foreign authors by an International Copyright Law as a dishonesty. First of all, we believe the United States were never asked to do so. No bill, so far as we know, was ever brought forward in Congress for the protection of the rights of foreign *authors*. We have had several such bills proposed for the protection of foreign publishers, and they have deserved their fate. Any bill which should protect an author in a *bonâ fide* bargain with an American publisher for the reprint of his book, would probably be passed. But up to date the question has been contested chiefly between foreign and American publishers. Secondly, the moral obligation to pass any bill is by no means so clear as Mr. Newton and some others assume. No country treats or regards a book as property in the

sense in which either real or personal estate is property. None vest the ownership in either the author or his representatives for more than a limited period. One of John Milton's descendants died in the poor-house at Dover during the present century; the last living descendant of Defoe is a pauper. In these cases there is no outcry for an extension of authors' rights, although if a book is property as really as a piece of land or a piece of furniture, these two persons should have inherited great wealth. And if these rights may lapse by time, why not by space? Or if not, why not? We are to English writers—as Lord Macaulay said—very much in the same relation as posterity; and posterity will pay nothing to them or to their descendants, however long their books may live. The real question is this: is it *expedient* for the United States to grant this extension of existing rights, or is it not expedient?

Mr. Newton is evidently much better read in political economy than most of his professional brethren, and his second lecture shows that he has a very decided opinion on the money question. He quite unintentionally misrepresents the views of Mr. Carey and of his school, from whom, on other points, he has, as he says, learnt much that was worth knowing. The position of that school is, in general, precisely the same as that of all the advanced English economists, such as Mr. Stanley Jevons. They believe that inconvertible paper money is a nuisance and a mischief, because of its inelasticity of volume, while they also hold, as the *Nation* now admits, that gold may do, and in Germany has done, precisely the same sort of mischief. They also believe that it is no more possible to give a country too much convertible paper money, than it is to force upon its people an excessive number of hats and shoes. In both points they agree with the more advanced English economists. But for the reason given they hold that the best *converse* for paper currency is not gold or silver, but some form of property which is not itself money and therefore not a dead loss to the holder, such as a Government bond at a low rate of interest. So that they regard the present distress, when we simply cannot resume specie payments for lack of gold, as a good time to put our currency on a better and a more permanent basis than it ever had. They are not in love with our irredeemable paper money. Nor do they deny that there has been a great and morbid inflation of currency and of values since the war. But

they do say that the currency inflated has not been chiefly or at all the paper money; it has been the money of account, created in such vast and explosive volumes on the ledgers of the banks. Some parts of the country have had too much paper; others by far too little, but that is owing to the vices of an artificial banking system.

Mr. Newton also speaks of "shoddy" as if it were something peculiar to America or of American invention. The great centre of the manufacture is Lancashire, and the invention itself is an English one.

The lecture by Mr. Hopkins to the California students, is occupied, as its name tells us, chiefly with the mischiefs of speculation. He defines business as a line of activity in which a man makes a return to society for his profits; speculation as one in which no return is made for the profits received; and gambling as one where nothing is given for anything received. He presents a schedule of the different occupations, according to the amount of risk in each, and according to their place under one of the three heads. He shows the effect of the speculative spirit in impoverishing the great mass of society while a very few do rapidly accumulate great fortunes, often to lose them as rapidly. And he presents a very lively picture of the way in which great multitudes of young men are tempted out of the paths of steady and honest industry, by the deceptive fascinations of California Street.

Mr. Hopkins has given us a very forcible lay sermon, which deserves a wide circulation in other quarters than San Francisco, though "Frisco" is even worse than New York. California Street is crowded with women—a Women's Stock Board has been opened since the lecture was delivered.

J. D.

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### CONDENSED CLASSICS.<sup>1</sup>

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Mr. Johnson is certainly justified in believing that many of the standard works of English fiction are becoming less and less read. The novels of Richardson, Sterne, Smollett, Fielding and DeFoe,

<sup>1</sup> CONDENSED CLASSICS. Prepared by the Editors of Little Classics. Our Mutual Friend. By Charles Dickens. Condensed by Rossiter Johnson. New York: Henry Holt & Co., 1876.

have gone out of general circulation, and the statistics of the public libraries show that the demand for those of Scott, Dickens and Thackeray is very small. The latter fact ought not to be as much relied on as it generally is in discussions upon this subject, because it must be borne in mind that the immense accumulation of the older standards prevents the necessity in most cases of application to a library. For example, the Bible, which has probably the largest circulation in this country, is never called for. But the general proposition must be admitted to be true, that the rising generation is much more willing to talk about than to read the tales which their fathers pronounced incomparable. Mr. Johnson attributes the change solely to the hurry of the age, and proposes to re-instate the neglected authors in popular favor—condensed. Sir Walter Scott deserves such treatment at his hands, because the editor finds authority for it in the following quotation from *Rob Roy*, which he takes as the motto of his series: "The library of Osbaldistone Hall was a gloomy room, whose antique oaken shelves bent beneath the weight of the ponderous folios so dear to the seventeenth century, from which, under favor be it spoken, we have distilled matter for our quartos and octavos, and which, once more subjected to the alembic, may, should our sons be yet more frivolous than ourselves, be still farther reduced into duodecimos and pamphlets."

But is it so certain that the length of the stories has made them unpalatable, or that they were in fact so much longer?

The ponderous folios of Osbaldistone Hall could be easily pressed into octavos and duodecimos by the help of modern paper, type and binding. Richardson gave way before Fielding, and Smollett before Scott, and he before Dickens and Thackeray, who, according to the editor, are now in great danger of retiring unless saved in a new shape. Every one of these writers must be considered English standards; and yet, though their novels differ very little in respect of length, they have dropped in due order out of the catalogue of books really read by the public. Tales that were of as much worth, and yet shorter and more direct, like the *Vicar of Wakefield*, have shared the same fate. Nor can this change in public taste be due to any difference in the plots, which have in all times been similar, involving love, murder, sacrifice, etc.; nor to the difference between the customs, fashions, tongues and history of the times and countries written about and those in which the reader finds himself;



because the popular author is as much in time with his audience in his stories of olden times and distant lands as in any other. No doubt the new novelist owes much undue prominence to publishers and reviewers, to the demands for new subjects of conversation, and to the fact that he is seen and known in the flesh; but we are disposed to think that his tendency to supplant his predecessors is owing to some subtler sympathy with the temper and wants of the time, which, to say the least, can not be imparted by condensation. Mr. Johnson does not of course expect to supersede the originals for that intelligent class of readers, who do and always will wish for an acquaintance with their own literature. He simply proposes to save these standard stories for the hurried and skillful novel-readers, a class we think not very deserving of consideration. But what is the use of preserving a story? One is about as good as another. So far as the mere plot is concerned, the combinations are limited, and as ready to one man's mind as to another's. Very few persons would think it worth while to condense *Clarissa Harlowe* or *Pamela*. If the times are out of tune with the style, the method, the genius and the personality of the author, they do not need or care to know what were the stories he told. We can condense *Hamlet* or *Macbeth* in ten minutes, with Shakspeare left out.

In some respects Dickens is suited more than others to the operations of the editor and "Our Mutual Friend" a favorable subject. We commend the choice of it to open the course, as being in most need of some preserving process. A book in which the principal characters assume parts simply to test the disposition of the heroine, cannot carry a moral with dignity. It is absolutely necessary, in an artistic point of view, that the reader should believe in the characters, whether good or bad, or else that he should be informed that their conduct and sentiments are not genuine. As a story, it seems to us the least likely and the least worthy of all its fellows to live. But it is better suited for condensation, for instance, than any of Thackeray's works, because Dickens as usual has provided a full *dramatis personae*, who carry several almost distinct threads through the tale—so distinct that in this instance one species of condensation might be effected without requiring great alteration, by dropping out any one of the three dramas the story contains.

1. John Harmon, a miser, leaves his property to his son, who has run away and is supposed to be lost, on condition that he

marry Bella Wilfer. In event of his not returning or not so marrying, the property to go to Mr. Boffin, his servant. On the best evidence that the son has been murdered, Mr. Boffin and wife enter on the property, and as a sort of compensation, adopt Bella Wilfer. Young Harmon, however, does reappear, and is employed as secretary to Mr. Boffin, under an assumed name, in order to test the character of Bella Wilfer. Being discovered by Mr. and Mrs. Boffin, it is agreed, though the reader does not find it out till well on towards the close of the book, that Mr. Boffin shall affect to have become changed and suspicious and miserly, shall bully the secretary in the presence of Bella, who has rejected his addresses, and finally dismiss him. The heroine, who was at first in danger of being spoiled by her adoption, softens towards the secretary in his trials, leaves the house of the Golden Dustman and its expectations, and finally marries the secretary.

2. The reckless, generous and unemployed attorney, Mr. Wrayburn, becomes interested in the daughter of a longshoreman, for whom Bradley Headstone, a self-made schoolmaster, conceives an instantaneous and violent passion. Between her preference for Wrayburn and his cool, contemptuous and superior bearing towards him, Headstone is driven almost wild, and attempts to murder Wrayburn, who at death's door marries Lizzie, and finally recovers. Dogged by the infamous Rogue Riderhood, who knows his guilt, and uses it to bleed him, Headstone ends his own life and his persecutor's by leaping with him in his arms into Plashwater weir mill lock.

3. The story of the Veneerings, the Podsnaps, of Mr. and Mrs. Lammle, and of their marriage brocage contract with Fledgeby.

Filling up the tapestry between these three patterns are Wegg, Venus, Sloppy, Betsy Higden, Mr. Inspector, the Wilfer family, Jenny Wren, Riah, Lightfoot, Miss Peecher, and Charley Hexam. Neither of these stories is dropped out; every one of the characters Mr. Johnson retains. The frame remains as large as ever, and the condensed material is made to cover it as well as possible. Every name we have written is a character, and the reader becomes acquainted with the peculiarities of each, not from the author's description, but from his own conversation. The delineations of Dickens are as dramatic, in respect that the reader becomes acquainted with them at first hand, as if they were represented on the stage. Miss Wren pricks in the air with her needle at the

people she talks to; Fledgeby in his social agonies searches for his whiskers; Sloppy shows every button of his wardrobe; Mary Anne always gives her back a hitch before she answers Miss Peecher, etc. The title Dickens has to fame, is due entirely to the completeness with which he portrays his personages. He sees all their peculiarities, he depicts their surroundings and manners, he goes into the nicest details, he ingeniously repeats the cues until the reader has a life-size Sloppy or Noddy Boffin in his mind, and would resent the imputation that these people were unreal as much as if they were living and breathing neighbors. To be without the conversations of these people is not to know them. It accustoms us to what in the condensed shape often appears incomprehensible exaggeration. Bradley Headstone is one of the hardest characters the book has to carry. Why he should fall so desperately in love with Lizzie at the first interview; why when he never had but one more interview, in which he was summarily disposed of, he could not abandon his passion; and still more why under the circumstances he should wish to trail all over town after Wrayburn at night, and finally try to murder him, is hard to explain. In the original novel it takes much moralizing, much brooding, and many pages to make him appear at all natural; but in the condensed shape his course seems most unaccountable. Shall we be pardoned for saying what literally expresses our meaning, that Mr. Johnson's Headstone is too big for his breeches?

Dickens introduces us to the retainer, helping the wine with a sentence which Mr. Johnson omits, "who goes round like a gloomy analytical chemist, always seeming to say after 'Chablis, sir?' You wouldn't if you knew what it's made of,"—so that in the condensed classic we cannot see for the life of us why the servant is constantly spoken of as the Analytical Chemist. Nor do we understand why Lavvy Wilfer is always spoken of as the "irrepressible," she not saying or doing enough to deserve any title at all. Too much of Wrayburn's wild reckless talk is left out. No one can ever understand or believe in such charming shiftlessness until he has heard many queer touches like this:

"Delighted," said Eugene—though he didn't look so—"to know Mr. Boffin."

"Thankee, sir, thankee," returned that gentleman. "And how do *you* like the law?"

"A—not particularly," returned Eugene.

"Too dry for you, eh? Well, I suppose it wants some years of sticking to before you master it. But there's nothing like work. Look at the bees."

"I beg your pardon," returned Eugene, with a reluctant smile, "but you will excuse my mentioning that I always protest against my being referred to the bees."

"Do you?" said Boffin.

"I object on principle," said Eugene; "as a biped—"

"As a what?" asked Mr. Boffin.

"As a two-footed creature; I object on principle, as a two-footed creature, to being constantly referred to insects and four-footed creatures. I object to being required to model my proceedings according to the proceedings of the bee, or the dog, or the spider, or the camel. I fully admit that the camel, for instance, is an excessively temperate person; but he has several stomachs to entertain himself with, and I have only one. Besides, I am not fitted up with a convenient cool cellar to keep my drink in."

"But I said, you know," urged Boffin, rather at a loss for an answer, "the bee."

"Exactly. And may I represent to you that it's injudicious to say the bee? for the whole case is assumed. Conceding for a moment that there is any analogy between a bee and a man in his shirt and pantaloons (which I deny), and that it is settled that the man is to learn from the bee (which I also deny), the question still remains, what is he to learn? to imitate? or to avoid? When your friends, the bees, worry themselves to that highly fluttered extent about their sovereign, and become perfectly distracted touching the slightest monarchical movement, are we men to learn the greatness of tuft-hunting, or the littleness of the court circular? I am not clear, Mr. Boffin, but that the hive may be satirical."

"At all events, they work," said Mr. Boffin.

"Ye-es," returned Eugene, disparagingly, "they work, but don't you think they overdo it? They work so much more than they need—they make so much more than they can eat—they are so incessantly boring and buzzing at their one idea till death comes upon them—that don't you think they overdo it? And are human laborers to have no holidays because of the bees? And am I never to have change of air, because the bees don't? Mr. Boffin, I think honey excellent at breakfast; but regarded in the light of my conventional schoolmaster and moralist, I protest against the

tyrannical humbug of your friend, the bee. With the highest respect for you."

So much is cut from the Lammle drama, that the reader cannot clearly understand the purposes, method, and results of the conspiracy to marry off Georgiana Podsnap, nor at all why Alfred Lammle should have administered such a beating to Fledgeby. Jenny Wren is not half the shrew nor half the elf we know her to be, and the reference she makes when at Wrayburn's bedside, to the flowers she used to smell and the birds she used to hear sing, is perfectly inexplicable, because the pretty fancy has been cut out of the preceding pages. The titles of the chapters and the moralizing with which they often open and close, though very characteristic, we can afford to lose; but the rest is mutilation. Condensed meat we may have, and condensed milk, and condensed systems of instruction, but we fear not condensed classics. "As good almost kill a man as kill a good book." H. G. WARD.

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## NEW BOOKS.

THE POETICAL WORKS OF JAMES RUSSELL LOWELL. Household Edition. Pp. 416., 8vo. Boston: Jas. R. Osgood & Co.

Reviewers who still retain hearts and memories, are sometimes puzzled so to speak of books as to avoid the appearance of extravagance, and yet not to come short of the truth. We confess to an embarrassment of this sort in taking up Mr. Lowell's poems. We cannot speak of them as they deserve to be spoken of, without claiming for them a place which most readers do not concede to them,—a place, however, conceded to them by the best foreign critics, whose verdict, as Macaulay says, is always likely to be that of posterity. To our thinking, Mr. Lowell is simply and beyond all comparison, the very first and greatest of our American poets, and we have reached this judgment not hastily. It is based upon a familiarity with his writings which extends over fifteen years of our own life—years of intellectual and literary growth, in which other literary favorites have arisen and set on our mental horizon, but Mr. Lowell has retained his first altitude. And our acquaintance with his writings has been somewhat intimate, for we know most of his serious and not a few of his humorous poems by heart. We have submitted them to the most trying tests. We have found them the enlivenment of many a weary railroad jour-

ney, when darkness hid the face of the country but brought no sleep; we have recalled them to quicken our enjoyment of the forest, the waterfall, the Alleghany ridges and the great Western rivers, and they blended with all that was noble and exhilarating in the landscape. And we have repeated them in the night watches of anxious waiting or of personal suffering, when, next to the Psalms, their deep humanity seemed to ease the lapse of weary hours. When youthful zeal outran discretion we have invited others to share our enjoyment of them, and found, among persons of the most different degrees of culture—Illinois farmers, and busy shop-keepers of the great cities—a keen relish for their gravest and their merriest moods. We are not without our own literary ambitions, but we feel that we could sacrifice the best of them to make Mr. Lowell's poems known as they ought to be—as they yet will be—to the great mass of his countrymen.

After this thoroughly unprofessional opening, the reader will be prepared for any amount of extravagance from the present critic. Perhaps he will object that literary power so great should have been more concentrated, and should have been employed to give us some one great masterpiece, instead of being frittered away upon so many medallion paintings. Mr. Lowell, it may be said, has not fairly put himself into comparison with the great poets; he has written nothing which required such sustained effort, such continuous power, as Browning's *Ring and Book*, or Tennyson's *Idylls of the King*, or Longfellow's *Golden Legend*, to say nothing of older writers. It is true, and we have often regretted it, that none of his serious poems are of great length or manysidedness. *The Vision of Sir Launfal*, *Margaret* and *The Cathedral* are the most extensive, but they are none of them poems of such extent as to tax their author's powers as would larger productions. A single "motive" is sufficient for each, instead of that combination of "motives," with the lesser in due subordination to the principal, which constitutes the artistic scaffolding of epic and epicoid poems. Nor is Mr. Lowell a poetic Meissonier, whose miniature and medallion pieces suggest no enlargement or combination to their own completeness. His themes are not those of a Hebel or a Burns, and his style is such as harmonizes with his themes. He occupies himself with the large interests of man and society, especially with their living and local interests in our own time and land. He clearly recognizes it as his function to interpret the truths that underlie the facts of his country's life, and to enforce, by all his powers as a poet, the ethical lessons which are taught us by both intuition and experience. He is, in the true and solid sense of the word, a visionary, seeing what other eyes do not see, but which is none the less there to be seen. The words of Christ, "Inasmuch as ye have done it unto the least of these my disciples, ye have done it unto Me," fit more closely into his thoughts and his vision than any other in the Gospels—or out of them. They seem to furnish

or suggest the theme of many of his finest and most characteristic poems—"A Parable," "The Search," "The Present Crisis," "Extreme Unction," "Ambrose," and "The Vision of Sir Launfal." They represent at once his sympathy with the good and his antagonism to the evil of the present age, and his intellectual sympathy with the Childlike in the world's past. In some sense his writings are to the new world what those of Wordsworth are to England—the key to unlock to us the secrets of common life, and disclose its true greatness. There is therefore a true unity in his works, a common purpose, and motive to them all. He is no idle sonneteer, no culture worshiper. He combines much of the manly earnestness of the Puritan with the wider faith of a new age. Of his technical execution as a poet, "The Vision of Sir Launfal," is the happiest instance. Both in the exquisite adaptation of sound to sense, in the deep spiritual significance of its story, and in the revelations of natural beauty it contains, it stands first of all American poems. The opening "Prelude" seems to have been written to the accompaniment of organ music, as one can hear the echoes in every line. The other "Prelude" in its picture of winter is just as fine poetry, though not, we think, so musical. The penetrative imagination displayed in single pictures is wonderful; take for instance the four lines:

Every clod feels a stir of might  
 An instinct within it that reaches and towers;  
 And grasping blindly above it for light,  
 Climbs to a soul in grass and flowers.

Mr. Lowell's later poems do not surpass his earlier either in poetic power or ethical emphasis, but they come more closely home to our business and our bosoms. The second series of the "Bigelow Papers" surpasses the first in keenness of wit, but not in breadth of effect; and their laughter in places breaks into tears for both poet and reader. Who can read with dry eyes the passage in relation to his nephews' death? The Harvard Ode is pronounced by critics the finest in the language since that of Wordsworth on Immortality, and we think rightly. The verses on "Villa Franca," read like a fulfilled prophecy, and have well been put beside those of Hare on Italy, at the close of *Guesses at Truth*.

Since the household edition of his poems was published, there has appeared a supplementary volume containing *Three Memorial Poems* (same publishers). It is dedicated to Mr. Godkin of the *Nation*, "in cordial acknowledgment of his eminent service in heightening and purifying the tone of our political thought." These three are Centennial poems, one for the Concord celebration, one for that at the Old Elm, and one for the great Fourth of July. All are masterly; the second especially interesting for its study of Washington. We quote the close of the third—

God of our fathers, Thou who wast,  
 Art, shall be when those eye-wise who flout  
 Thy secret presence, shall be lost  
 In the great light that dazzles them to doubt,  
 We sprung from loins of stalwart men  
 Whose strength was in their trust  
 That Thou wouldst make Thy dwelling in their dust  
 And walk with them a fellow-citizen  
 Who build a city of the dust,—  
 We who believe Life's bases rest  
 Beyond the probe of chemic test  
 Still, like our fathers, feel Thee near,  
 Sure that while lasts the immutable decree  
 The land to human nature dear  
 Will not be unbeloved of Thee.

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VIKING TALES OF THE NORTH—THE SAGAS OF THORSTEIN, VIKING'S SON, AND FRIDTHJOF THE BOLD. Translated from the Icelandic by Rasmus B. Anderson, A. M., Professor of the Scandinavian Languages in the University of Wisconsin, and Honorary Member of the Icelandic Literary Society, and Jón Bjarnason. Also, Tegnér's Fridthjof's Saga, translated into English by George Stephens. Crown 8vo., cloth, pp., 370, \$2.00. Chicago: S. C. Griggs and Company; London: Trübner & Co. 1877.

FRIDTHJOF'S SAGAS; A NORSE ROMANCE. By Esaias Tegnér, Bishop of Wexiö. Translated from the Swedish by Thomas A. E. Holcomb and Martha A. Lyon Holcomb. Crown 8vo., cloth, pp. 213, \$1.50. Chicago: S. C. Griggs & Co.; London: Trübner & Co. 1877.

Tegnér's translation of the Fridthjof Saga—if a poetic rendering of a prose original can be called a translation—is said to be most delightful, and is certainly the most celebrated of the Swedish national poems. Since its publication in 1825 it has run through twenty large editions, of almost every variety of style, in Sweden alone; it has been illustrated and set to music; and it has been translated into nearly every language of Europe, in some of them in more than one version, the present translation by the Holcombs making the *nineteenth* attempt to give it a satisfactory English dress. A special feature of the poem, one of its great beauties and the chief source of embarrassment to the translators, is the variety of its metres. Tegnér made the experiment, which proved a successful one, of dividing his miniature epic into short lays or cantos, twenty-four in number, adopting for each a versification suited to the theme; and this peculiarity is so essentially a part of the poem that no translation can be satisfactory which does not reproduce it faithfully. In fact, it is less the spirit of the poem than the beauty of its diction and the easy flow of its rhythm—precisely the points which are the most difficult for a translator to seize and hold—that



give it its great popularity among the Swedes. The chief merit claimed for the present version is the scrupulous care with which this feature of the poem has been preserved throughout. For the first time in an English version, every canto has been rendered in the same metre and with all the alliterations and feminine rhymes of the original; a task by no means easy, but which, so far as can be judged without a comparison with the original, has been very successfully performed. The versification certainly compares favorably with that of Stephens' translation, now republished by Professor Anderson, which received very high praise from the Swedish poet himself. To enable the readers to judge between the two translations, we give a few parallel stanzas from each, placing those of Stephens first. The following hexameters are from "Fridthjof's Inheritance:"

Vifil had but one son, hight Viking. Now old and decrepit,  
Dwelt there at Woolen Acre a king with a fair blooming daughter.  
Just thereupon, from the wood's deep shades, came a grim-looking giant,  
Taller by far than other men, and all hairy and savage;  
Fierce from th' old chief, then, he combat claims, or his daughter and  
kingdom.

Vifil's possessions descended to Viking. At Woolen Acre,  
Old and infirm, there lived a king with a beautiful daughter,  
See, from the depths of the forest there cometh a giant misshapen;  
Higher in stature than man, a monster ferocious and shaggy,  
Boldly demanding a hand-to-hand combat, or kingdom and daughter.

"The Viking Code," the most spirited canto in the whole poem, opens in the two versions as follows:

Far and wide, like the falcon that hunts through the sky, flew he now o'er  
the desolate sea;  
And his viking a code, for his champions on board, wrote he well;—wilt  
thou hear what it be?

Now he floated around on the desolate sea, like a prey-seeking falcon he  
rode,  
To the champions on board he gave justice and law; wilt thou hear now  
the sea-viking's code?

The following stanza is from "King Ring's Dirge," written in the old Icelandic metre, with alliterations and feminine rhymes. It may be a question whether English grammar will permit English words to be made to read smoothly in this cramped and artificial verse. Most of the translators have, in rendering this canto, been deterred from making the attempt to preserve its characteristics; and yet, in fact, the metre is about all there is of it.

Th' hero-sprung sov'reign  
Sits in his barrow,  
Battle-blade by him,  
Buckler on arm;—

Chafing, his courser  
 Close to his side neighs,  
 Pawning with gold-hoof  
 The earth-girded grave.

Sepultured sits he,  
 Sovereign descended,  
 Battle-sword by him,  
 Buckler on arm ;  
 Chafes his good charger  
 Champing impatient,  
 Pawing with gold-hoof  
 The gate of the grave.

The comparison between these extracts, which were taken as the book opened, is certainly favorable to the last translators both for correctness of metre and for smoothness of diction. The Holcombs have in fact done their work very creditably, and in spite of the occasional occurrence of such verses as,

Polished with wax and like steel shining ; carved on two pillars of elm  
 wood,

which will hardly pass for an English hexameter with those familiar with Longfellow's *Evangeline*, they have given us a very readable translation of the famous Swedish poem. One cannot help wishing, however, that in some places it were a little better. But this is only the nineteenth version, and there is room for others. We may yet have a *Fridthjof's Saga* which will rise above all criticism.

Tegnér's poem is, however, a modern work, modern both in form and in spirit, and there could be no greater mistake than to accept it as a specimen of the Icelandic sagas. Indeed, the "wonderful literature of Iceland" is so little known outside of the small circle of students and poets who have rummaged it, each for his own purpose, and have thrown a sort of aurora borealis tint over it, that the popular impression of its character is, no doubt, erroneous. Any one who takes up this volume of "*Viking Tales*," by Professor Anderson, with the expectation of finding in it a pair of literary gems, which for some unaccountable reason have hitherto remains in manuscript, will be disappointed. In fact nothing can be more bald, more prosy, more unreadable, except for certain associations, than the average saga. The saga-man was no poet ; he possessed neither warmth of fancy nor grandeur of soul. He was simply a story-teller, whose tale was about men and deeds, told in the most direct manner, with none of the finery and tinsel in which poets like Tegnér and Morris envelop the same heroes and the same exploits. His art was of that crude sort which can only captivate the attention by depicting the extravagant and the supernatural. His heroes are men of immense stature and immense bodily strength ; they are giants who perform marvelous exploits by brute force. They leap with ease

wide mountain chasms, fight bloody battles under the sea, or stand up in a hand-to-hand fight with an adversary for three and four days. If he wishes to excite detestation for a personage, he paints him as a physical monster, as a huge, misshapen being with a blue tooth an ell and a half long, or with a lip which protrudes an ell beyond his nose. Love has a place in his story, but a very subordinate place. The females are, of course, beautiful, but they appear not to exercise any very potent attraction upon the hardy warriors. They are thrust into the background of the story, while the heroes in the foreground wantonly provoke quarrels, and fight aimless battle, and only retire in to domestic life when they have grown old or have become weary of the sea.

Considered merely in themselves, and looked at from an art point of view, these sagas are about the least seductive reading that can be imagined. But regarded as "survivals" of an ancient folklore now well nigh extinct, they become invested with a very deep interest. The Icelanders are in many respects at least a thousand years behind the age. In their almost complete isolation from Europe, they have preserved their language, their customs, their stories with a tenacity which has no parallel. Through the Iceland literature, therefore, lies the most direct path to an acquaintance with the mental traits of our own forefathers. Icelandic studies are at the present moment being prosecuted in Europe with considerable zeal, and we rejoice to see that they have taken root in our own midst and that they are apparently flourishing well. In connection with the "Norse Mythology," already published, and the two Eddas, which we see advertised as in preparation, this volume of "Viking Tales" should meet with a sale which will repay both author and publishers, as the perusal of it will certainly repay the reader.

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THE FIVE SENSES OF MAN. By Julius Bernstein, Professor of Physiology in the University of Halle. 12mo. New York: D. Appleton & Co.

This volume of the *International Scientific Series* has the somewhat rare quality of being both scientific and popular; and its author has admirably succeeded in his endeavors to elucidate difficult scientific questions in such a manner that the general public can understand and appreciate them. The subjects treated are entered into with remarkable minuteness of detail without becoming tedious, and experiments and facts are recorded that, as a general rule, are wanting even in the so-called text-books.

The book is divided into four parts, one for each sense, except taste and smell, which are treated of together. The first part treats of the tactile sense, and contains an account of the general anatomy of the human skin that is admirable in its simplicity, and yet gives all the details necessary for a clear understanding of the physiology of the sense of touch. There is one fact, however,

that we do not find mentioned in the volume before us, viz: that the Pacinian bodies, which are spoken of as being the terminations of sensory nerve fibres, are also to be found in the mesentery of the cat, in which locality they are very numerous and large, thus giving the microscopist an opportunity to study their nature with greater care than is possible with those found in the skin of the finger of man. This fact makes it rather doubtful that these Pacinian bodies have anything to do with the sense of touch, as there can be no such sense in the internal parts. It is much more probable that these little egg-shaped bodies are ganglions, or small nerve centres, as they are enveloped in a distinct capsule—which has lately been demonstrated by Dr. C. Seiler of Philadelphia—and as some observers are under the impression that they have seen the nerve-fibres pass out, and continue on the other side of the bodies.

The second part of the volume contains a full description of all the phenomena connected with the sense of sight; entering as far as necessary into the study of optics, but without burdening the mind of the reader with mathematical formulæ and calculations. The theory of refraction of light, for instance, is explained with such clearness as we have never before met with. In spite of the difficulties which attend the explanation to the non-scientific reader of chromatics and spherical aberration in lenses, we think that every one may understand from Prof. Bernstein's statement how it is that a *correct* image of the object seen is formed on the retina of the eye. In this connection, Prof. Bernstein speaks of the defects of photographic lenses, and says that on account of the so-called barrel-shaped distortion, or spherical aberration, buildings can not be photographed beyond a certain size of picture. Of late, however, lenses have been made with a very long focus, which will cover a plate of 5 by 3 feet without giving the slightest distortion in the straight lines of buildings. The subject of adjustment of the eye to objects at different distances is exceedingly interesting, and the mechanism by which such adjustment is effected the book in hand lucidly describes. It would carry us too far to enter into every point of interest contained in this part of the volume, and we will therefore only say, that the reader who seeks information in regard to the phenomena of sight cannot find a better guide.

Part III. treats of the sense of hearing, and begins by giving a minute description of the intricate anatomy of the human ear, which is illustrated by many excellent wood-cuts. As in the chapters on sight the author enters into the optical principles involved in the appreciation of the outer world by means of the eye, so here those laws of acoustics which explain to us the way in which we are enabled to perceive sounds, are entered into and briefly but clearly described. The physiological part of hearing and the description of Corti's organ is especially interesting, and

we are sorry to find that just here the translation, which in the rest of the book is exceptionally good, falls short, so that occasionally wrong expressions are used, and thus may lead to a misconception of the author's meaning.

Part IV. comprises a description of both the senses, of smell and of taste, and of the organs in which these senses have their seat, viz.—the nose and the tongue. The descriptions in this part are rather wanting in fullness and detail, and it seems as if both the author and the translator became weary of their tasks and hurried toward the end.

The illustrations throughout are excellent, and most of them original with the author. A few are copied from E. H. Weber's and Helmholtz's works. They are all admirably adapted to make the already clear explanations still more plain. The volume can be heartily recommended.

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### BOOKS RECEIVED.

Lettres sur les États-Unis et le Canada, Adressées au *Journal des Débats*, à l'occasion de l'Exposition Universelle de Philadelphie. Par M. G. de Molinari, Membre Correspondant de l'Institut. 16mo., paper. Pp. 367. Paris: Hachette et cie. [New York: F. W. Christern.

Inventional Geometry. A series of Problems. By William George Spencer. With a Prefatory Note by Herbert Spencer. *Science Primers*. 18mo., cloth. Pp. 97. New York: D. Appleton & Co. [Porter & Coates.

A Mad World and its Inhabitants. By Julius Chambers. 16mo., cloth. Pp. 228. New York: D. Appleton & Co. [Porter & Coates.

A Question of Authorship. An Exposé. By John T. Dexter. 12mo., paper. Pp. 70. London: Printed for private circulation on the Edison Electrical Autographic Press.

Report of the Commissioner of Education for the year 1875. 8vo., cloth. Pp. 1016. Washington: Government Printing Office.

The Plains of the Great West and their Inhabitants; being a description of the plains, game, Indians, etc., of the Great American Desert. By Richard Irving Dodge, Lieut.-Col. U. S. A. With an Introduction by William Blackmore. Illustrated. 8vo., cloth, \$4.00. Pp. lv; 448. New York: G. P. Putnam's Sons. [J. B. Lippincott & Co.

THE  
PENN MONTHLY.

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MARCH.

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THE MONTH.

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THE course of events in the East has been moving forward on exactly the line which we heard predicted, long before the Conference met, by persons who were in the best position to forecast the future. That the Conference would be a failure in every sense, except as a justification of Russia; that a period of seeming inaction would follow its adjournment; that the Russian fleet would turn up in American waters, and that the war would break out by the advance of the Russian armies, as early in the month of March as the weather permitted, was announced with great confidence and evident foresight. We are therefore of the opinion that the seeming hesitation of Russia is strategic and deliberate, and that it is not the consequence of indecision; that it is adopted with the view of taking the best moment for the final advance upon Constantinople. Every day's delay tells more heavily upon Turkey than upon her rival. The home provinces, already ruinously taxed in times of peace, cannot yield the revenue needed for a state of war. The spirit of the army is broken by the wretchedness of the supplies of food and clothing, the spread of disease, and the chafing of religious fanaticism against the restraints of diplomacy. Whenever Russia does cross the border she will find the Turks ready to fight, as they have not fought since the days of Bajazet and Mohammed II. But at present every week's delay improves the chances of a Russian victory.

Since the Conference broke up, Russia has addressed a note to

the Great Powers, rehearsing the conduct of the imperial government, and asking what is to be done to enforce the guarantees of of the Treaty of Paris, and to make the Porte accede to those demands which Europe is unanimous in making. The answers returned to the note accord in nothing; none of the Powers will join with Russia in doing the duty which Christendom owes to the suffering Bulgarians and Herzegovinians; none will bid her Godspeed as the representative of the conscience of Europe. A few offer her a "benevolent neutrality," on condition that in case of success she do nothing to extend her empire to the Bosphorus. That is, if the Czar will take all the hard knocks, and then give up everything that falls to him by the war, they will smile a gracious approval.

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TURKEY is making her preparations on a scale and with an energy which would be impossible to a nation actuated by any passion less intense and warlike than Moslem zeal. From every corner of her Asiatic provinces, the true believers are flocking into Stamboul for the holy war. From every great mart of the West, arms and ammunition are gathering to defend the Crescent. The cities are a mass of blazing fanaticism, and the Christians are constrained to profess a zeal for the cause of the Sultan, which they do not feel. The miserable slave, who has bought of his Mohammedan lord the right to call himself Patriarch of Constantinople, and to *pose* as the successor of Gregory Nazianzen, John Chrysostom and Photius, has issued an encyclical letter to the faithful of the Churches under his care, calling upon them with unctuous hypocrisy to aid the cause, for whose overthrow every Greek Christian, in Turkey as well as out of it, yearns with all his heart. But Turkey, like all greatly excited communities, contains at this moment elements of disorder and confusion which may prove her ruin. Stamboul during the coming spring and summer may be as Jerusalem when Titus was at its gates; or it may be as Paris was while the *Emigres* and their German allies were struggling with Dumouriez for the passes of the Vosges. Their fanaticism, that is, may be the ruin of the Turks, or it may be their salvation. It does not look well that Midhat Pasha, who controlled the policy of the Porte during the Conference, is obliged to give way to a still more extreme statesman, who will take the first safe opportunity to toss the new paper constitution into the Golden Horn, and "reform" Turkey according

to the Shariat, instead of according to the notions of Christendom, and of civilization. On the other hand the negotiations with Servia and Montenegro, by which peace is to be established by restoring the *status quo ante bellum*, and also the appointment of Christians to important positions in the local governments, are facts which do seem to show that there is sagacity enough in the government to temper the fanaticism of the common people.

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HAD the British Parliament met on the eighth of November instead of the eighth of February, the Liberals would have had a much easier task in making out their case against the Disraeli government. But during the last three months the Administration have very materially changed their line of policy, and have complied in a measure with the demands made by the conservative friends of a Christian policy in the East. During the conference England managed to keep the other Powers in unison with herself. Even Russia acceded to the diminution of the demands laid before the Porte, thereby putting Turkey hopelessly in the wrong before Europe, but very materially weakening the case of Russia's friends in England. The Disraeli government can now turn upon Mr. Gladstone and his friends, asking, "What would you have us do? Did we not use our utmost influence with Turkey to secure guarantees for the future? Did we not explicitly warn her that if she refused these, she need expect nothing from England? Did she not show that she is ready and determined to fight, rather than give way? There is nothing left for us but war. Do you seriously propose war?" And just here it is that the Liberals are evidently hesitating. To propose war to a country ridden by interests to which war is ruinous, is a step not hastily to be taken, and yet as matters now stand, the Liberals are shut up to just such a proposal. Their attempt to fasten upon some other point of attack, has proved a failure thus far, and they are taunted by the orators of the Administration with their failure to bring the question between them and the government to an issue by a definite motion. Even as it is, a Liberal ministry could not stand for a week with such a case against it, for the Liberal intellect acts on general impressions, looks at a case as a whole, and reads between the lines. But the party discipline of the Conservatives is much more effective. A minister can only forfeit their support by some definite act, which can be framed into an indictment as definite as that required in a court of law.



It is not improbable, therefore, that the present ministry may tide over the difficulties which seemed so threatening, and without having done anything to carry out the real desire of the nation as regards the Eastern question, may, by a show of doing, break down the opposition which was threatening to be so formidable.

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OUR competition with English manufacturers in even their home market for the supply of some of the cheaper classes of goods—cutlery, mechanics' tools, paper, cottons, and the like—has been very greatly stimulated by the coincidence of these hard times and our Centennial Exhibition. The cry is everywhere raised that the English producers must adopt American methods and American inventions, or their industrial supremacy is gone. A similar lamentation is heard from the Swiss watchmakers, whose craft is suffering from the gigantic competition of our watch factories. And now the British farmer and cattle-dealer is added to the list of those who suffer by American competition, for American meat is shipped largely to Liverpool in a frozen state, and found equal in quality to that which the home producer has to offer. This is the first successful attempt to supply England with meat from over-sea. The canned meats imported from Australia were expected to work wonders, but the final popular verdict was that of the old gentleman, who, after dining on this meat from the Antipodes, remarked, "Very nice, indeed. Very succulent and fine flavor. And I don't intend to eat any more of it."

This invasion of England by our cattle dealers is the more significant, because cattle and green crops are the last resource of English agriculture. Ever since the repeal of the Corn Laws, raising grain under England's humid sky in competition with the Ukraine and the Mississippi Valley has been found, taking year with year, less and less remunerative. And the admirers of the Free Trade policy have been at pains to urge that England had better give up grain-growing and take to cattle-farming, in which foreign competition would prove less troublesome. For less than one-seventh of the meats consumed in the British Islands come from the continent, and the supply from that quarter is not capable of much enlargement. And so year after year the decrease of acreage under wheat, the increase of large grazing farms, and the consequent diminution of the population employed in agriculture, has been pointed out with a glowing satisfaction, and the British

farmer has been complimented on knowing what sort of farming has money in it. Hence also the panic excited by the outbreak of the *rinderpest*, and the jealousy with which all ports of entry are guarded to prevent the importation of cattle from infected or suspected districts.

It now remains to be seen whether any sort of agriculture except truck-raising will be discovered to be unsuitable for the British islands, and the land be divided between the market-gardeners and the loom-lords. England has been making long strides towards the abandonment of what was once the occupation of her entire population. At the era of the Reformation, two out of every three of the families living on her soil were engaged in farming; now it is one out of every four. It may be thought that this is because her population has grown so vast, there is no room for the employment of a large proportion of them within her narrow area, no space for the extension of farming, and no possibility of raising food enough within the island for its inhabitants. On the contrary, there are five million acres of absolutely waste land south of the Tweed, much of it in the best part of the island, and hardly any of it incapable of cultivation. And of the land under cultivation, not one acre in a hundred is tilled with the same thorough application of scientific principle as is needed for the management of a factory, or produces one-half of what it ought to produce. And in nothing is English farming more wasteful than in its stinting to the very utmost the amount of human labor it employs, especially by the prolonged destruction of the small holdings and the substitution of large farms. The rent of lands in the small-farm districts of Belgium are far higher than in England, and the capital invested is twice as much to the acre; yet the Flemish farmer, as a rule, saves half his income. And if the lands now under tillage in England and Wales were cultivated as well as is the wretched mixture of peat and gravel, which passes for soil in East Flanders, they would produce food for forty-seven millions of people. But in that case the dense masses, who have for centuries been crowded into the manufacturing towns, to escape from the slavery of labor on the large farms, would have to be, for the most part, redispersed over the country districts as tenant and freeholders, thus creating anew the yeoman and franklin classes, which were once the glory and the strength of England. With this would end England's wretched dependence on foreign harvests for food, and on foreign markets

for purchasers of her superfluous manufactures. The country would become *αὐτάρκτης*, self-sufficing, and therefore able to take her old place in the politics of the Eastern world. The yard-stick would vanish out of her conscience, and the exhaustion of English coal-fields would cease to be a source of anxiety. So mote it be.

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WE suppose that the Republicans who opposed the Electoral Commission Bill and deplored its passage, are expected to acquiesce in the plan since it has secured Mr. Hayes the presidential chair and has not produced some of the bad effects which were feared. For our part we have become more and more deeply dissatisfied with it every day since its passage. The only good effect of it was to give the conservative wing of the Democratic party, that is the Southern and the Eastern Democrats, an opportunity to put their acquiescence in an unpleasant decision upon the ground of keeping faith. But had Senator Ferry claimed his constitutional right to decide the points in dispute, in spite of all the bluster of the Western Democracy, those very conservatives would have sustained the decision. The truth is that the Democratic constituencies of the South and the East have merely a secondary interest in the Presidential question. To secure the control of the State Governments is the primary object of the one; to restore quiet with a view to the revival of business is the chief end which the others have in view. And only the supineness of the acting Vice-President, and the unwillingness of the Senate to retreat from its position that Congress has the right of decision, prevented the constitutional view of the question from being generally accepted. The most practical way out of the difficulty would have been for Mr. Ferry to announce that he intended to exercise the power, and thus give the House an opportunity to sue an injunction against its exercise from the Supreme Court. That he did not do so, was owing to his sharing in the *esprit de corps* of Congress, the public opinion which takes possession of all who take their seats at the desks in the Capitol, and which upholds the "collective wisdom" of the two Houses as the last tribunal of all questions, the competent reader of all riddles.

The decision of the Florida and the Louisiana questions by a strict party vote, and especially the preliminary decision refusing to receive testimony on any point except the eligibility of individual electors, could not but raise the partisan warmth of the more

warlike Democrats to white heat. That is to say, the only persons who were not ready to accept almost any decision, have been more embittered than they were before. And from their point of view it must seem that they have lost the case because the persons who, by reason of the nature and the dignity of their position, are expected to rise above partisan considerations, and to be free from the partisan temper, have shown themselves no more impartial than so many Congressmen.

This, we say, will be the view taken by these men; not that we think their complaints are in themselves just, or are worthy of attention on any other grounds save this, that it is a misfortune to the nation when its chief legal tribunal comes to be widely regarded as made up of partisans. The tribunal in excluding evidence, decided one of the points which it was, beforehand and by men of both parties, admitted would be open to their decision, and in view of the fact that it had hardly more than a month to do its work, it could, with prudence, reach no other conclusion. It could reach no decision on any point which had not been already adopted by the partisans on one side or the other; none, therefore which would not be open to the stigma of partisanship. But with these matters the good name and repute of the Supreme Court should never have been entangled, except in case of the direst necessity. So long as any other way out of the difficulty existed, it should have been sought and adopted, rather than draggle through the mud of politics the ermine of a body, which is, by its tenure of office, to outlast Congresses and Presidents. A decision on the power of the Vice-President from the same body would have been a very different matter, for that decision would have been sustained by the unbroken legal tradition of the great jurists, from the authors of the Constitution down to our times.

*In fine*, the Electoral Tribunal is a precedent which will lead to dissensions between two departments of the government, a departure from the avowed and manifest sense of the Constitution, a usurpation of the legislature upon the province of the executive, and a disastrous lowering of the prestige of the judiciary in order to bolster up that usurpation. Congress, which was vested with the power to determine the election and qualifications of its own members only, has now constituted itself the judge of the election of the Executive also.

THE conduct of the Southern Democrats in Congress continues to command the admiration of all patriotic and sensible people. Their votes in the House secured the creation of the new Tribunal, and prevented the hot-heads from hindering the completion of its work by dilatory proceedings on the part of the Democratic majority. Many are disposed to see a way to the burial of the issues growing out of the war by a reconstruction of parties during the coming Administration, by rallying the Conservative Democrats to the support of President Hayes, and securing them a representation in his Cabinet. The weakest part of this plan is its parentage; it is claimed to have originated with the business part of the community, whose suggestions about politics are generally about as much heeded by the politicians as would be any suggestions from the politicians in regard to the best method of managing mercantile establishments. Yet the suggestion is a good one, for there is no real reason for the perpetuation of the present party lines except the protection of the Southern negro; and if the whites of the South were divided on the old line between Whig and Democrat, and each bidding for the colored vote, there would be no need of extending any national protection to the colored voter. But the new shifting of party lines would not obliterate the real line which has divided our parties from the beginning of the government. We shall always have a centrifugal and a centripetal party,—the former laboring to perpetuate and intensify the distinctions and divisions inherited from colonial times, the other promoting the natural and rightful growth of a loose confederacy into a compact and well organized nation. The victory of this latter party in the recent war, was a victory whose fruits cannot be destroyed. The nation is more thoroughly a nation today than ever before, and the wretched compromises by which the localizing spirit strove to check its growth, are for the most part a dead letter. But the Whigs of the South, such men as Hill of Georgia and Lamar of Mississippi, though nominal Democrats, belong of right to the other party, and their accession to its ranks, if effected by the magnanimous policy of President Hayes, will give our new executive a high claim to the gratitude of all patriotic citizens. It will be the first practical step towards closing the wounds of the war, and really incorporating the Southern States into the Union. Happily, the attitude preserved by our new President towards the South from the issue of his letter of acceptance

to the present time, gives him an eminent fitness for such a work of reconciliation, and there is good reason to believe that he is not averse to undertaking it.

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UNTIL quite recently it seemed certain that whichever of the two candidates for the Presidency failed to establish his claim to the executive chair would receive the hearty sympathy of all right-minded men, and might look forward to a more successful candidacy in the not distant future. Had Mr. Tilden's friends made good his claims, this would certainly have been true of Governor Hayes; but since the publication of the despatches exchanged between New York and Oregon by Mr. Tilden's trusted political agents, the case is changed so far as he is concerned, and many even of those who have upheld Mr. Tilden's claims declare that their disappointment in him has softened their disappointment at his defeat. It appears that the money remitted to Oregon by Col. Pelton, a member of Governor Tilden's family, was intended to buy up one of the Republican electors to act along with the Democrat who claimed the right to act, and that a despatch signed *Governor* was sent to New York, with the words in it, "I will decide every point in favor of the Democrat having the highest number of votes." These despatches were in cipher, but a shrewd Detroitier—following up, we suppose, the hint contained in a story reprinted some years ago in *Every Saturday* from a London magazine—read this one with the help of a pocket dictionary, and gave the clue to all the rest. What Mr. Tilden will have to say in explanation of all this, no one can say; but in anticipation of all explanations, the public will say that Mr. Tilden has had a great deal too much to explain during his career. His earlier relations to Tweed, the presence of his name on the election circular of 1868, his income tax returns, and other phases of his personal and public life, cannot be left out of sight, when this new scandal comes up for explanation. If his Administration had been managed in the same style, we might have established a special Bureau of Explanations to show that the various crooked-seeming acts of the President were capable of a creditable interpretation. We admire the mother-wit of George III., who, when Bishop Watson presented him with his *Apology for Christianity*, said his Christianity did not need any apology. And it is well that our next President is to be a man whose life calls for none.

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THE municipal election in Philadelphia has resulted in another triumph of the Republican party over the united forces of the Democrats and the Reformers, who put Mr. Caven in nomination for Mayor against the present incumbent, Mr. Stokley. While of the two we think Mr. Caven the better man, we do not regret his defeat. It is possible that he would have given us a more economic administration, but there are things of greater importance in the administration of our city government than economy in its finances. Daniel M. Fox was one of the best men who ever served the city as its Mayor, but "Mayor Fox's police" are to this day a by-word in some of the southern wards. They were, most likely, the best he could make out of the timber at his disposal, but the life, person and premises of no colored man was safe during their era. A Mayor elected by Democratic votes must select his police from among his supporters; and to the lower sort of Democrats—the sort who wish places on the police force—no colored man has any rights which a white man is bound to respect; and, as the equal rights and safety of men of all colors is of more account than economy in the management of the finance, we acquiesce in the re-election of our not very admirable Mayor.

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THE depression of business interests bids fair to last throughout the present year, unless the opening of new markets in countries not affected by the financial distress, such as South America, does something for our relief. Every country in Europe is as ill off as our own or worse, France only excepted. And even Southern France is in great stress through the failure of the silk crop, and the consequent rise in the price of silks, which leads to the use of woolen goods instead. In England the great carpet manufacturer, Crossley, has made an assignment for the benefit of his creditors; and the iron trade—the basket which now holds more of England's eggs than any other—is in a most desperate condition. Less than half the English blast furnaces are in operation, and some branches of the iron business are pronounced dead beyond all hope of revival.

At home, the number and the amount of the failures during the past year was less than in any year since the panic; but there is no prospect of a speedy or extensive restoration of business activity. The great coal-carrying railroads have been suffering greatly since the break up of their combination to control the supply of the

market, and more than one has gone into the hands of a receiver, after paying dividends up to the last moment of professed solvency. The truth seems to be dawning on the public mind that the published accounts of some of the great corporations do not really disclose the state of their affairs. The relation of the "Repair and Construction Account" to the other accounts for instance, admits of an adjustment of figures, which while not technically false, is simply misleading. And the "Sinking Funds" of some of great corporations are a delusion and a snare to the too-confiding investor, being made up of what are technically known as "pups," *i. e.* stocks whose nominal value is exactly a hundred per cent. greater than their market price. Some uniform method of keeping accounts, accompanied by governmental inspection, is absolutely needed to secure not only the public against these practices, but even the sound corporations against the unjust suspicion of indulging in them. With this safeguard it would be impossible for speculators to make such raids upon the stocks of solvent corporations, as the one which was made during the past month on that of the Pennsylvania Railroad.

In Canada affairs are still worse than with us. As no encouragement is given to the development of home manufactures, nearly the whole circulating capital of the country is invested in trade, and the proportion of traders to the needs of the community is excessive. The one producing class, the farmers, have been suffering from bad crops, and the whole business community being dependent upon the market they furnish, business is almost at a standstill.

Such times of depression as the present furnish a conclusive refutation of the ultimate argument for free trade—the argument that is, into which all other arguments resolve themselves in the last analysis. It is that the "consumer's sole interest is in the cheapness of commodities and his interest is the interest of society, while that of the producers is a class interest. As therefore the business of the legislator is to promote the interest of society, he should legislate only in the interest of the consumer, and remove all duties which tend to raise the prices of commodities." Now if this reasoning be sound, such times as the present are those in which the economic interests of society at large are most flourishing. They are times of extraordinary cheapness; the consumer as such is better off than he has been since before the war. And instead



of calling them "hard times" and "bad times," we should call them "easy times" and "good times;" and instead of looking forward with desire to see the revival of business activity by the rise of prices through the reawakening of demand, we should look upon such a change in the markets as a disaster to be averted at all hazards. But all parties are of one mind in this matter; even the Free Trader is anxious for the return of times when that pet abstraction "the consumer" will buy at dearer rates, and the "class interests," of the producers will again flourish as of yore.

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We learn from the supplementary matter which Mr. Lorin Blodgett has appended to the reprint of his valuable exhibit of *The Industries of Philadelphia*, that the manufacturers of our city have suffered much less during the past year than those of New England, and that there has been a very great amount of employment, though wages and profits are both low. Some branches of textile manufactures have been exceptionally busy; others have increased their machinery, and in those which are depressed—such as the carpet manufacture—there has been a great advance in the production of fine qualities, which is of good omen for the future. The metal manufactures have suffered the most, but some of them, such as tools and hardware, have prospered.

As to the condition of the working classes, Mr. Blodgett finds evidence of great advances during the past ten years in point of refinement, the development of taste, of attention to dress, and the like, which indicate a hopeful feeling and a fairly prosperous state of things among them. He believes that the new establishments arising in many branches of business are, in nine cases out of ten, the creation of industrious and thrifty workingmen.

He points out the evidence of the growth of the city in the erection of five thousand houses and stores every year for the last ten years.

## ON THE ORGANIZATION OF THE CENTENNIAL EXHIBITION.

THE Centennial Exhibition has been so great a success, there has been such general concurrence of helpful effort throughout its progress and universal approval of its methods and results, that it may seem unkind to go back to the early history of the project, to inquire who accepted the earliest invitation to work in the vineyard, how they bore the burden and heat of the day, and whether, with those who refused the call but afterwards repented and went, they have received an equal reward. The inquiry seems, however, to be required by justice, and will not be without interest. The early opposition to the Centennial project was the more injurious, because it came in good part from those who did not lack patriotism, who valued the use of competitive exhibitions and deemed the occasion worthy to be commemorated in such a way, but who dreaded failure, and feared that the attempt might come off halting and end in confusion of face. Prudent business men thought the necessary amount of money could not be obtained; conservative statesmen were of the opinion that the government could not constitutionally give any aid, and an eminent member of the United States Senate argued, with apparent force, that monarchical governments would not feel complimented by an invitation to our republican feast, and would respectfully decline to attend.

Mr. Sumner unfortunately did not live to see his predictions falsified, and the result should not be a reproach to him or his colleagues who acted with him, for they were wise in their day and generation, and they had many followers. Even after the exhibition had been authorized by act of Congress, and its preparatory work was fairly on foot, the men who really believed in its success were lamentably few, and they will confess that they were held together and kept in heart for their work by the cheerful courage and abounding strength of Daniel J. Morrell, who represented the State of Pennsylvania in the Centennial Commission, and was, particularly in its early stages, the main prop and stay of the enterprise.

The obstacles which affrighted Mr. Sumner were not found to be real, but others much more formidable were encountered, and, as the world knows, were happily overcome. Somewhat is also known of the inherent defects in the organization provided by the

first act of Congress, and of the devices by which they were remedied; but the gravity of these difficulties, which at times became perils, has not been fully disclosed.

The act of March 3d, 1871, created a National Commission, consisting of one delegate and one alternate from each state and territory, and imposed upon it the duty of preparing a plan for holding the Exhibition and of superintending its execution. The governors of the respective states and territories nominated the commissioners, who were thereupon appointed by the President of the United States. It is easy now to say that the cumbersome and ineffective nature of this machinery might have been foreseen by the framers of the law, but they were doing perhaps the best they could. Provision for a commissioner from each state and territory was a bid for Congressional support. The representation of every state and territory was relied upon to give the stamp of nationality to the enterprise, and each commissioner was expected to exercise a wholesome influence upon the people whom he immediately represented. It turned out that these advantages were but slight, as compared with the disadvantages, which were very great.

The Centennial Commission, composed in the main of excellent men, was, as a body, incapable of transacting or even directing the important business which it had in charge. Its first meeting was held in Philadelphia, on March 4th, 1872, and it remained in session eight days. Twenty-six members presented themselves, of whom a number were alternates, not residing in the territories they were appointed to represent. The next meeting was held in May 22d, 1872, and was attended by the representatives of thirty states and territories, Twelve of the members had not been present before, and eight of those who were at the first meeting failed to report. The session lasted eight days. The third meeting was held on December 4th, 1872, the session lasting eight days. Of the thirty-five commissioners present, there was the usual number of new members, as twelve who were at the May meeting failed to attend. Owing to deaths, resignations and engagements elsewhere, these fluctuations characterized the subsequent meetings of the Commission; the members who were well-informed and ready to act at one time, would be absent at the next, and new members would appear, with whom it was necessary to begin *de novo*. During the first year of the Commission, the twenty-four days in which it was in session were very much taken up with visiting and

exchange of courtesies, which gave opportunity for unlimited gush, and the men of mouth were of more consequence than the men of action. The journal of the Commission shows a disinclination to part with power, and an effort to grapple with its duties; but beyond effecting an organization with a nominal president, five ornamental vice-presidents, a secretary, and a number of standing committees, nothing was or could be accomplished. The machinery provided for carrying on the work during the recess of the Commission, consisted substantially of the temporary secretary, Lewis Waln Smith, alternate Commissioner for the State of Georgia, a resident of Philadelphia, who was willing to serve without compensation, and the Executive Committee composed at first of seven members and afterwards increased to thirteen. Excepting the Executive Committees, the standing committees were so constituted that they could only meet to confer with each other, during the sessions of the Commission. Representation in them was distributed among the states and territories, and as a consequence, a quorum of members could not be found within a thousand miles of Philadelphia. Here and there a member of these committees accomplished something, but the committees, as such, were generally failures, a fact which was also noted in the management of the Vienna Exhibition.

In appointing the Executive Committees, more care was taken to obtain a working majority near to Philadelphia, and the chairmanship was properly given to the Commissioner from Pennsylvania. When the Commission was organized, it was proposed to make Mr. Morrell president, but he declined the empty honor, preferring the office which he foresaw would have the principal labor and direction of the work. The members of the Executive Committee first selected were as follows:

Daniel J. Morrell, of Pa.; John V. L. Pruyn, N. Y.; George H. Corliss, R. I.; W. Prescott Smith, Md.; John Lynch, La.; John G. Stevens, N. J.; Walter W. Wood, Va.

Mr. Smith died, universally lamented, during the year, and was succeeded by James S. Earle, of Maryland. Mr. Corliss was for a short time left out of the committee, but returned to it again. Messrs. Morrell and Lynch remained to the close. The other gentlemen retired from time to time, after rendering efficient service. This committee was so constituted as to render possible the performance of its duties, yet at the outset the great part it

was to play was not foreseen, and it received but stunted powers from the Commission. Article 7 of the By-Laws, relating to the Executive Committee, was, originally, as follows :

“The President shall nominate, subject to the approval of the Commission, at its first session, an Executive Committee, consisting of seven members. The said Committee shall have power to act on such questions as shall arise during the recess of the Commission, subject to the approval of the Commission, at its next stated meeting. A majority of its members shall constitute a quorum, and shall have power to make such regulations for their own government as to them shall seem proper. They shall elect such officers and agents as they shall deem necessary, shall define their duties, and fix their compensation. They shall report fully on their transactions to the Commission from time to time for approval. In case of any vacancy happening when the Commission is not in session, the same shall be filled by the President, subject to confirmation by the Commission at the next stated meeting.”

Thus, during the whole of the year 1872 and a part of 1873, the great work to be done in Philadelphia was in charge first of the Centennial Commission, consisting of a member and alternate from each State and territory. Under it was the Executive Committee, without real power, consisting of seven members scattered along the Eastern seaboard from Rhode Island to Louisiana, who had for a time a salaried officer, with the title of Executive Commissioner. There was a temporary secretary residing in Philadelphia, who fortunately was one of the few men who did not think talk to be the beginning and end of the business, and who believed success to be possible. There was a small fund of money appropriated by the City of Philadelphia, sufficient for the payment of traveling expenses and a few clerical salaries. Never, perhaps, was a great undertaking more viciously organized or more meagerly equipped for efficient service.

The members of the Executive Committee were strongly impressed with the difficulties of the situation, and had little respect for the limitations of their delegated authority. At the first meeting of the committee, the question of ways and means was anxiously considered, in conference with the leading citizens of Philadelphia, and it was concluded to ask for Congressional legislation, which would convert the Centennial Commission into a stock company, with sufficient capital and all the powers needed to prepare the buildings and grounds, and conduct the exhibition. It was

thought that in no other way could the money be raised, or the work be carried on without the danger of incurring individual liability. After the meeting Mr. Morrell consulted his private counsel for the purpose of putting the proposed scheme of incorporation into the form of law, and, after much consideration, concluded to abandon the plan, and in its place he reported in favor of the erection of such a separate corporate agency as was subsequently realized in the Board of Finance. In his letter to the Governor of Pennsylvania, dated Feb. 4, 1873, and by the Governor communicated to both Houses of the Legislature with a special message, Mr. Morrell gives as a reason for the formation of a separate financial agency, a desire on the part of the Centennial Commission to be relieved from the custody of the large sums of money to be received and expended in managing the Exhibition, and from all suspicion of enjoying any pecuniary interest or profit. In his report to the Commission on May 23, 1872, in speaking of the proposed incorporation of the Board of Finance, Mr. Morrell said:

“It was at first proposed that the National Commissioners should be named as Corporators, but this idea was abandoned after mature reflection, as it would have been a virtual abdication on the part of the Commissioners of their functions as representatives of the United States, for membership in a corporation, in the management of which they could have influence only in proportion to the amount of their stock. This would have been a detriment to the country, and also to the proposed celebration and exhibition, which would have lost the prestige conferred upon it by the National endorsement and control through the United States Commissioners.”

These and other considerations had sufficient weight with the Executive Committee and the citizens who were again consulted on the subject, to bring them over to the views of the Chairman of the Committee, and resort was had to the hazardous expedient of creating the independent-dependent corporation known as the Board of Finance.

It is worth while to inquire whether the dangers involved in the original plan, were such as to justify the risks encountered in adopting its substitute. Perhaps it would not necessarily follow that the conversion of the Commission into a stock company, would have left the Commissioners no influence other than what they might possess as owners of stock. They might have been continued *ex-officio* in the direction, with control of all money contributed by the stockholders. In this there was danger of scandals, for

while they were in the main excellent men, not all of them were purely disinterested patriots. One or more of them, to speak with moderation, were distinguished rather as politicians than business men, and were covetous of distinction and adroit in the arts of partisanship. Others, of no particular ability, conceived that their office ought to bring them some pecuniary profit. The East furnished the most conspicuous example of ambitious selfishness, while the needy and greedy, who wanted salaries or perquisites for their services as Commissioners, came principally from the West. The East also furnished an able member who was simply a foe of the enterprise, who was in Congress with the Chairman of the Executive Committee when the latter offered the bill authorizing the Exhibition to be held at Philadelphia, and opposed it in committee and in the House, and afterwards came into the Commission as a subtle organizer of its dangerous elements of personal ambition and venality. No one could tell that such a combination might not obtain control of a treasury, and therefore it was best to have none. Even if this method might have been safe, its adoption would have been inexpedient; for it was of the utmost importance that the people should have full confidence that the money they were asked to contribute would be expended with wisdom and economy, as well as integrity, which confidence they would surely feel if they themselves retained the management of the funds by electing those who should receive and disburse them.

The Commission might have been incorporated without reserving to its members, *ex-officio*, the direction, but this would have been an end to their functions. They would have dropped out of the organization, or retained only such influence as belonged to them as stockholders. The national character of the enterprise would have been so attenuated, that it could not have withstood such a shock as the debate in the United States Senate over the act of 1874, in which the absolute control of the Exhibition and everything relating to it by the United States Centennial Commission, was made the ground for requiring the State Department to issue invitations to foreign governments. The question before the Senate was, in form, whether the Exhibition should be international or not, but it turned upon the point whether it was already and irretrievably national or not.

This consideration of the dangers of a road that might have been taken, reconciles us to the perils of the other way, over which we

have passed with safety. The device of double management, for that is what it amounted to, was only justifiable as a choice of evils. It was capable of producing infinite disagreements and ultimate failure. That it worked well is a tribute to the character of the men who managed it. There were troubles which the public heard of, as, for instance, the controversy over the appointment of the police force, and there were others which did not get into the newspapers. On the one side were Mr. Welsh and his colleagues of the Board of Finance, who were strong in the possession of the purse, and resolved to faithfully execute their trust according to their own views of right and for the ultimate benefit of their stockholders. On the other side was the Commission, holding the sword put in its hands by the acts of Congress, and determined to abate nothing of its lawful authority. Naturally difficulties would occur, much tacking and veering was needed to avoid obstacles, and more than once the vessel scraped on the rocks and seemed in danger of shipwreck. In these emergencies the irresistible *bonhomie* of the Chairman of the Executive Committee was useful in moderating acerbities, and bringing about an accord. The selection of the late John L. Shumaker, of Philadelphia, as Solicitor of the Commission, was also most fortunate; reference of questions to him for a legal opinion had, in almost every instance, the effect of composing disputes, and instances may be cited where his decisions were of supreme importance. He sustained the Executive Committee in the exercise of rightful authority, as against a faction in the Commission, and aided in watching and curbing the efforts to embarrass or unduly tax the Board of Finance. He was in every way capable and always modest; the good men of the Commission valued him highly, and will mourn his untimely loss.

Though the harmonies of the duplex government of the Centennial enterprise have been seen in the Exhibition which was the delight and wonder of the world; while its discords have no monument save a few pamphlets, containing the conflicting legal opinions upon the power of appointing a police force, of lawyers consulted by the President of the Commission and the Board of Finance, and the controversial arguments on the same subject of Messrs. Welsh and Morrell, the experiment must be confessed as hazardous, and should not be regarded as a safe precedent because of its fortunate issue.

The Board of Finance having in accordance with its charter or-



ganized and issued stock and received instalments of payment thereon, the annual meeting of the Commission in 1873 found the Board of Finance in possession of a large amount of money. As it was in all matters subject to the discretion or approval of the Centennial Commission, the necessity of having at all times in Philadelphia an agency which could exercise all the powers of the Commission, was recognized by an amendment of the By-Laws relating to the Executive Committee, the material part of which is as follows :

“An Executive Committee to consist of thirteen persons shall be elected at the regular annual meeting of the Commission, who shall hold their office one year, and until their successors are elected. When duly convened, five members shall constitute a quorum for business. It shall elect its own Chairman, appoint its own clerk, and such agents and employees as it shall deem necessary, and define their duties. The Committee shall cause to be kept a journal of its proceedings, transactions and votes, shall have power to make such rules and regulations for its own government as it may deem proper, shall act without delay on all matters referred to it by the Commission, and make report thereon to the Commission when in open session. During the sessions of the Commission, the Committee shall have the power usually exercised by the Executive Committees of corporate bodies, and in the recess of the Commission shall have all the powers and authority of this Commission which can be delegated to such Committee of its own body.”

A proposition to make the acts of the Committee subject to review and approval by the Commission was voted down. Thereafter, the Commission may be regarded as consisting of thirteen members ; its history is to be found in the transactions of the Executive Committee, and its occasional attempts to resume and exercise the powers it had wisely parted with, were impracticable or attended with confusion. Its deliberations generally ended with a reference of the subjects to the Executive Committee, and where a different course was taken, trouble always ensued, a conspicuous instance of which was its attempted revision of the awards of the judges, the effect of which has been exceedingly injurious.

At the first election under the new rules, the following gentlemen were chosen as the Executive Committee :

Daniel G. Morrell, Pa. ; A. T. Goshorn, O. ; Walter W. Wood, Va. ; G. B. Loring, Mass. ; Chas. H. Marshall, N. Y. ; Jas. T. Earle, Md. ; Geo. H. Corliss, R. I. ; John G. Stevens, N. J. ; Alex. R. Boteler, West Va. ; R. C. McCormick, Arizona ; Wm. Henry Parsons, Texas ; Lewis Waln Smith, Georgia ; John Lynch, La.

Under Art. VI. of the amended By-Laws, the Executive Committee was given authority to elect one of its own members to be known and recognized as Director General, with his office at the headquarters of the Commission in Philadelphia, and to prescribe his duties, powers and compensation. Mr. Goshorn was the choice of his associates for this important office, and the ability with which he has performed its duties is well known and needs no eulogy. Mr. Morrell was re-elected Chairman of the Executive Committee, a position in which he was continued to the end. At the annual election in May, 1874, Messrs. Loring, Marshall, and Parsons retired from the Committee, and N. M. Beckwith, of New York, a gentleman who throughout rendered the most valuable services, E. A. Straw, of New Hampshire, and James Birney, of Michigan, became members. Mr. L. W. Smith, who, as temporary secretary and member of the Executive Committee, had been conspicuously useful, resigned in 1874, to allow the appointment of an actual resident of Georgia; Mr. Wood, of Virginia, also resigned from the Commission; and the Executive Committee lost the valuable services of these two gentlemen, gaining however in C. P. Kimball, of Maine, a member of distinguished ability. Mr. Loring was returned to the Committee at the annual election in May, 1875, and Mr. Corliss and several other members were displaced by a cabal, which attempted with partial success to revolutionize the management.

It is impossible not to feel some sympathy for the incapable and impecunious members of the Commission, who found in the Executive Committee a barrier to their expected emoluments. They had been nominated by a Governor and appointed by the President of the United States to a high office, and were the directors of a great scheme that had "millions in it," but they found that somehow they were always at the outside of everything, and had to be content with the payment of their board and traveling expenses. Possessing no special fitness for any service, they could not be assigned to any duty; they were in fact superfluous, but they could not understand how it was possible to have an office and get no profit out of it. The situation was grotesque, yet had its elements of pathos; and over their final defeat, in the election of 1876, we may drop a tear. That was the last chance, and up to the last moment they were hopeful of success; but their coalition with several of the officers of the Commission fell,

and they suffered a decisive overthrow, which restored Mr. Corliss to the Committee, on a ticket headed by Mr. Morrell and containing the names of the men who had demonstrated their fitness for the office. In this as in other matters it was shown that the majority of the Commission was composed of pure and patriotic men, who desired that the work should be faithfully conducted, and knew that this could only be done by giving plenary powers to the Committee and using the utmost care in selecting its members.

We have seen that early in 1873, the defects of the machinery provided by the original Act of Congress had been cured, in so far as it was possible to do so, and the working organization had finally taken the form which should have been given to the Commission at the outset. The situation was much more hopeful, but doubt still pervaded the Commission, and the public mind, even in Philadelphia, was not yet brought into any confidence of success. In January, 1873, at a conference of the Executive Committee with citizens of Philadelphia, called for the purpose of urging the State of Pennsylvania to make an appropriation, one of the most influential and respected members of the editorial fraternity of that city made a speech, in which he declared that he saw no hope of success unless the General Government would at once assume the entire expense of the Exhibition—and if Congress should refuse to do this, he advised that the enterprise should be abandoned. In this, he but expressed the real opinion entertained then and for a long time afterward, by many persons who acted in such way as to be publicly numbered with the friends and promoters of the Exhibition, while privately expressing the conviction that it could never be held. It was generally believed that the failure to obtain a Congressional appropriation would be fatal, but the Chairman of the Executive Committee never thought so. In looking through his reports, we are struck by his repeated assurances that a sufficient amount of money would be contributed to carry on the work, and that Congress would at last do its part. He had the intelligent foresight to gauge the patriotic force of a slowly awakening people, and its probable effect upon their representatives in Congress, and his robust confidence seemed at times to be the sole stay of his associates.

In truth, the disposition manifested by Congress and some of the high officials of the government was most discouraging. It was

not merely illiberal; it was churlish. When the Commission assembled at its annual meeting in May, 1874, there was grave doubt if the Exhibition could be international in its character, owing to the refusal of the Hon. Hamilton Fish, Secretary of State, to issue formal invitations to foreign governments. This was extreme caution on the part of the Secretary, in view of the requirements of the original law and the President's proclamation under it, with the communications already made to the representatives of foreign powers; but the reason given was that the law as it stood made no mention of invitations and did not in terms authorize them to issue. Mr. Fish, however, went further, and, through our ministers resident abroad, cautioned foreign governments not to attend. In his circular of November 3, 1873, he in effect warned them that the President's proclamation did not mean anything, told them that they must not think they had been invited to take part in the Exhibition; that the Exhibition was not national, but was under the control of a private corporation, and that the government was not responsible for its management. This attitude of the State Department, presided over by a citizen of the—at that time—most unfriendly city of New York, was disclosed when the Director-General requested the issue of formal invitations to foreign powers. It was a shocking surprise. Mr. Fish had given the Centennial Exhibition a black eye. If Congress could not be brought to interfere it would go off in a galloping consumption.

A bill requiring the President to cause invitations to be extended to foreign governments was introduced and passed in January, 1874, in the House of Representatives, and went to the Senate, where it was violently opposed, but finally passed on June 5th, 1874. Mr. Sumner was the leader of the opposition, and exhausted all the resources of his great powers to compass its defeat. It was fortunate that the Exhibition had a champion in Senator Scott, of Pennsylvania, who proved more than a match for the renowned orator of Massachusetts, and vindicated its claims in speeches which are models of force and brilliancy.

The struggle was not alone in the open Senate, and before the eyes of the world, for other difficulties were encountered, of which we deem it a duty to speak. If the pending measure could not be passed, the Centennial Commission might disband, for its functions would be ended. During several months, the utmost efforts of the friends of the bill would not avail to get it out of the Senate Com-

mittee. This may seem strange, because it was in the control of the venerable Senator from Pennsylvania, who succeeded Mr. Sumner as Chairman of the Committee on Foreign Relations, and who has been for so many years, through all the changes of parties and administrations, the dominant power in the politics of his state. It did seem strange. The members of the Centennial Commission and the Board of Finance, the leading citizens of Philadelphia and the Philadelphia delegation in Congress, kept calling on the Senator to urge the passage of the bill. It was not easy to find or see him; he was absent or occupied; he had gone to bed, or had not risen from it, or was indisposed. The anxiety was very great. Men who had always avoided the Senator, sought him out and humiliated themselves. They went down in the dust before him and begged him to pass the Centennial Bill. Men who had fought him for years, offered to bury the hatchet, offered to do anything he wished, offered to put their necks under his feet, if he would only allow the country to hold the Centennial Exhibition. The Senator listened to everything, and, for a long time, said and did nothing. What the obstacle was, and how it was removed, we leave for future historians to explore.

We have seen that the movement to secure the organization of an auxiliary financial agency which resulted in the incorporation of the Board of Finance, commenced in the Executive Committee, and the scheme was perfected and presented to Congress during the recess of the Commission. The plan of incorporation was worked up separately and in concert by Messrs. Morrell, Stevens, Lynch, and Corliss, and was put in legal form by Lewis Waln Smith. Messrs. Stevens and Lynch made valuable suggestions, but the principal credit is due to Mr. Corliss, whose sketch was, in the main, adopted, and if it is still in existence, will be found to contain all the essential points and much of the phraseology of the bill. It is rare to find constructive talent, which applies equally well to steam engines and acts of Congress.

Under the law, the power of nominating the directors of the Board of Finance vested in the Commission, which gave it to the Executive Committee, and it finally devolved upon Mr. Morrell a chairman. His acquaintance with the citizens of Philadelphia, where the direction was necessarily placed, qualified him for the discharge of this duty. The gentlemen first selected by him as Directors proved their eminent fitness for the office, and the man-

agement of their corporation remained substantially the same from the beginning to the end.

Mr. Welsh and his colleagues deserve the honor which has been awarded to them for the faithful discharge of their trust. Their work was visible to the eye, and has been seen and praised of all men. The labors which wrought out the effective organization of the Commission and Board of Finance from the crude materials of the original act of Congress, and which brought together and installed the riches of the earth in the Exhibition, should also be recognized and rewarded. They have now no visible monument; their brief record is found in the minutes of the Executive Committee, and its official documents and reports, which are "caviare to the general," and will only be known to students and historians. We regret that these records are so meager, for the terse recital of the transactions of the Committee and its sub-committees cannot convey to the mind an adequate conception of the labors and sacrifices of the good and true men who left their families and business affairs to devote themselves to this service of the country. No desire for local popularity, no business interest, or feeling of municipal or state pride, drew Messrs. Beckwith, Boteler, Corliss, Lynch, and their colleagues from their homes, to the discharge of harassing and gratuitous labors. It is the highest eulogy of Mr. Morrell, that he was recognized as their leader by these distinguished citizens; and if we have said anything in his praise, it is intended to do them equal honor.

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### FREE COINAGE AND A SELF-ADJUSTING RATIO.<sup>1</sup>

*Le premier devoir des législateurs désormais est de simplifier en abrogeant toutes les lois antérieures dont le maintien complique la jurisprudence \* \* \* \* \* surtout en matière de monnaie.*

JOSEPH GARNIER, *Sénateur.*

ARE we to use both silver and gold as money, or are we to persist in rejecting one of these metals? is a subject which is daily getting a greater hold of the public mind. Our more intelligent citizens are beginning to realize how necessary is judicious

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<sup>1</sup>A Paper read before the Philadelphia Social Science Association and also at the Annual Meeting of the American Social Science Association, held at Boston, January 14th, 1877, by Thomas Balch, author of "Les Français en Amérique pendant la Guerre de L'Indépendance," "International Courts of Arbitration," etc.

legislation concerning this vital matter, and to think that though the Presidency may be a more imminent question, yet the currency is more abiding.

## I.

At the meeting of this Association at Saratoga last September, I endeavored, in the debate which followed the essay, to maintain gold and silver money as against gold alone, and argued that the aggregate of the two metals had never exceeded the wants of man, nor could do more than answer to the world's increasing commerce and industrial production, and pointed out the vast usefulness of Silver to France in the payment of the War Fine. Our Secretary has kindly asked me to speak to the subject to-day. I confess, I approach it with much diffidence. There is so much to say concerning it. It is so far-reaching in its effects, for money is the most powerful engine which that complex mechanism called Modern Society wields for its own development or its own destruction.

Moreover, the interest manifested is not merely national, it is international. Sir George Campbell, in his address to the British Association<sup>2</sup> truly said: "the subject was bristling with controversies, both theoretical and practical." The late debate in the French Senate and the law thereupon passed, the communication of the Belgian Minister of Finance and the action of the Chambers, the report of the Dutch Commission and the provisional legislation in Holland, the new measures which the Germans propose with regard to silver, the report to the British House of Commons, (a monument of the zeal, industry and sagacity of the committee,) our own Congressional "Silver Commission," and the House Bill now before the Senate, the numerous pamphlets which come fast and thick in Europe as well as here, are pregnant proofs of how widespread are the difficulties, the disorders, the sufferings which prevail in so many civilized countries.<sup>3</sup> No one questions to-day that the present monetary situation is due to the disturbances in the currency, yet to commence an "investigation of the currency," Professor Price sadly says in his latest work "is to enter a region which may be justly described as Chaos."<sup>4</sup>

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<sup>2</sup> Athenæum, Sept. 16, 1876.

<sup>3</sup> See an excellent article in the April, 1875, PENN MONTHLY, by Mr. John Welsh, President of the Philadelphia Board of Trade.

<sup>4</sup> Currency and Banking, 1876.

But the investigation must be made. Individual and social welfare; national, commercial, industrial and financial interests depend upon a healthy and abundant monetary supply. Every good citizen, from both selfish and unselfish motives, desires to have the subject elucidated and discreetly dealt with. To arrive at a remedy for present evils, the problem must be clearly stated and logically discussed in a thoughtful and dispassionate spirit. What need of heat or temper? If a study of the currency is already repulsive by reason of its "unendurable jargon,"<sup>6</sup> will it be rendered more attractive by introducing into its vocabulary some of those amenities unhappily too common with us? It is to be regretted when a periodical, generally guarded in its tone, denounces the advocates of bimetallic money as "Silver Swindlers." The same periodical lately upheld our act of 1873 by an argument that reminded one of the old Greek sophism of the crocodile, but it was no answer to the article to call its author "a Goldbug."

Yet, as every one should contribute, though in never so small a way, to the correcter understanding of this matter, I venture to say something about one phase of the subject as a question of applied political economy.

The facts or *status* I take to be, that the ratio between gold and silver has lately been violently disturbed; that this violent disturbance, whether due to an increased production of silver, or to its demonetization by Germany, or to its diminished consumption in India, or to all three partially, caused the panic of 1873, from which resulted the actual, social, commercial and industrial disorders and distress.

If this be true, then the problem for us, who are considering this matter not merely as economists, but as students of Social Science, may be thus formulated:

How can these two metals be held to a normal ratio, in equilibrium, with the maximum of benefit and service to mankind, with the minimum of variation or other detrimental influences?

And of this problem three solutions have been proposed or partially adopted:

I. Single money, with an international gold unit and subsidiary silver coinage: monometalism.

II. Silver and gold money, everywhere convertible at a fixed legal ratio, adjusted and maintained by International Conventions or co-operative legislation; bimetalism.

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<sup>6</sup>Professor Price.



III. Silver and gold money, but in pieces stamped for weight and fineness, exchangeable at their market values; the self-adjusting ratio.

## II.

Before looking into the facts or the problem with a view to considering the solution, one point may as well be disposed of, the *moral* view of the question.

At a meeting of the American Association for the Advancement of Science, held at Buffalo, in August last, a report was read by President Barnard, of Columbia College, the concluding portion of which is to be found in the *Buffalo Courier* of August 29, 1876. In this paper President Barnard sharply dismissed Silver as a money, because it degrades the value of the coinage in the countries where it is so used. The report declared against Double-Money for the following curious reason: "In conclusion, the committee could only add that the existence of a double standard in coinage at any time and anywhere has been a consequence of a *provision of Nature, quite accidental, according to which two metals, and only two, possess the properties which fit them, or heretofore fitted them both to be standards of value.*"<sup>6</sup>

Most of us have doubtless supposed that nothing in nature was "*quite accidental.*" The Evolutionists maintain that by virtue of stringent and austere laws, man, who holds his head so high and esteems himself a little lower than the angels, started from the protoplasm in the slime and ooze of dim and distant ages. The Pantheists teach that "God is in all, and that all is in God,"

"Wie Natur im Vielgebilde  
Einen Gott mir offenbart,"

whilst the Christian has been told that even the hairs of his head are numbered, and that not a sparrow falls to the ground without the knowledge of the Creator. Yet this singular doctrine—that the two great instruments of human association and civilization, have, by a "*quite accidental*" provision of nature, the properties of money—this doctrine was cordially greeted by the philosophers who met at Buffalo.

Fortunately for mankind, the committee "reserved to themselves the privilege of going more fully into the subject at a future meeting, should not the questions which it involves, . . . . be in the meantime satisfactorily disposed of."

<sup>6</sup> *Buffalo Courier*, Aug 29, 1876. The Italics are mine.

We may therefore reasonably expect to see President Barnard "go more fully into the subject," and dispose of it to the great relief of mankind. Those, however, who believe there is nothing "quite accidental" in nature, will probably think that the new supplies of Silver are intended for a similar work and on a grander scale than that wrought by Gold a quarter of a century ago. Mr. Léon Faucher qualified the abundance of gold in the then condition of affairs as absolutely providential.<sup>7</sup> The *London Times*, in a remarkable article, said with great force and truth of the discoveries of gold,<sup>8</sup> "like everything which happens naturally, that is, independent of human contrivance, they can have no result other than that of contributing to the march of civilization."

Owing to these supplies, the burthen of great public debts was eased to the tax-paying classes, production and commerce were developed in proportions absolutely amazing. In France,<sup>9</sup> the foreign commerce in 1852 was 30 (thirty) milliards, and in 1872, 72 milliards=140 p. c. What home-industry, what exchange of products, what social movement, what happiness are in these figures! In some countries the prosperity was even greater.<sup>10</sup>

May we not reasonably ask; has not Silver come from the same hand and for a kindred purpose? Not as a curse, but as a boon to stimulate human aspirations, to further the solidarity of nations, perhaps to develop the *Civitas Christiana*, that dream of so many great and pious men?<sup>11</sup>

### III.

A brief outline of the relations between Man and Money as they grew up naturally, and of the modifications introduced by legislation, will be perhaps the best way of getting at the consecutive facts by which we were brought to our present plight.

Money grew out of man's need of some common medium of exchange. It was in a great part the result of the division of labor. In course of time the experience of the larger portion of the human race led men to abandon all other commodities, and agree upon gold and silver as the two whose qualities rendered them

<sup>7</sup> *The Precious Metals*, translated by Thomson Hankey, Jr., 2d Ed. London, 1853.

<sup>8</sup> *The Times*, June 25, 1852.

<sup>9</sup> Mr. B. Neumann, *Economiste Francaise*, quoted by Laveleye.

<sup>10</sup> *La Monnaie Bimetallique*, par Emile de Laveleye, Bruxelles, 1876.

<sup>11</sup> Zwingli, Grotius.

most suitable for this common medium. Further experience taught man that it was desirable to cut these metals into pieces of a certain *weight*, and to stamp upon them this weight. Hence the mark, the pound, the livre.<sup>12</sup> These pieces took the generic name of *coin*, from the wedge-shape of the instrument (*cuneus-coigne*), used in stamping them. The importance of having these weights accurate, and certified so to be by proper authority, was such that the duty was generally confided to the sovereign; and thus we have the Spanish *real*, meaning *royal* as well as *exact*. This right of coinage was claimed for centuries as a prerogative of the crown, but in later times, since that most noble doctrine of the right of a people to govern itself and direct its political acts according to the National Conscience, enunciated by St. Augustine and proclaimed by the States-General of Holland, has become a part of the political law of Nations, this duty of coinage has been vested in the State; not as a prerogative, but as a trust for the benefit of the whole people. As these pieces were stamped at Rome in the temple of Juno Moneta, and as the Latin race was dominant in Europe, they took the name of *money*, and the operation became known in the English tongue as *minting*.

We must further remember that gold was the first metal used, as far as is known, by all the various branches of the human race. The veriest savage could find it in the washings of the rivers, as the word *Guinea* sufficiently indicates, and prized it for its glitter as well as a means of purchase, without being conscious of the qualities which made more advanced peoples esteem it as one of the precious metals. A visit to the Ethnological Museum at Copenhagen is very instructive as to the gradual growth of its use and importance when, and as, a tribe emerged from primitive barbarism. The workmanship sufficiently attests the rudeness of that prehistoric period, "when Pan to Moses lent his pagan horn," but to which tradition has given the name of the "Golden Age."

Silver, on the other hand, did not and could not come into use until these tribes had so far advanced in civilization as to have become miners, mechanics and traders. Silver is seldom found near the earth's surface, but must be got from the rocks in which it is imbedded by skill and tools, must be crushed, smelted and refined.

<sup>12</sup> In 1867, June 27, M. Chevalier urged a return to this old practice, "of giving money its *true* significance, and exact weight, a pound, a mark." It is a part of the metric system. In this he is followed by Mr. Joseph Garnier. See *Journal des Economistes*, October and November, 1876.

Its use as money was due to the commercial races of the past, the Phœnicians, the Athenians, the Carthaginians. Once, however, introduced into the economy of human existence, it was rapidly and widely utilized. Its very denomination of sterling is derived from *Esterling* merchants, who brought it from eastern lands. That great statesman, Charlemagne, made a *livre* of it his monetary unit. It has undoubtedly more largely than gold served as money in the transactions of mankind.<sup>13</sup> It is to-day the money or means of barter of communities and nations comprising a much greater number of souls than those who use gold. As far as known, through nearly all the past ages, among all peoples, the two metals held and performed more or less in common the functions of money; and where but one of them was the recognized measure of valuation it was silver which down to the early part of the present century was preferred. "I am reasonable," said Front-de-Boeuf to Isaac of York, "if silver is scant, I will take gold at the rate of a mark of gold to six pounds of silver," rather than roast you alive.

#### IV.

Nor must we lose sight of the fact, that money is thus the accepted *price* of any given object because it has its own *intrinsic* value, which is determined by the bulk and fineness of the piece of metal itself. This intrinsic value determines the other objects, for which it can for this reason be exchanged. It is not only a means of barter, but it is also an *equivalent*, as was long ago pointed out by Aristotle, and in its transfer from hand to hand, represents any object whatsoever that it will buy. During the "Dark Ages," the Jews, who perhaps of all nations have most trafficked in money, upheld and promulgated the idea that wealth is identical with money. They hoarded it accordingly, but found it unsafe amid the persecutions that beset them from all sides to transport any considerable sum of it to and fro. They thereupon devised the safer and less costly plan of storing it with some trusty co-religionist, and then using this hoard from time to time as occasion required, by a letter addressed to the individual in whose custody the money was left. This "*waggon through the air*," as Adam Smith called the *letter of credit*, soon became a potent agent.

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<sup>13</sup> *House of Commons Report*. Appendix. Ernest Seyd puts (p. 7)—population in 1871 using gold at 85,720,000—using gold and silver, at 139,200,000—using silver alone at 841 millions. *L'argent*, in French is both Money and Silver.

Commerce and civilization, acting and re-acting on each other, fostering and developing the nations by their benign influences, created greater wants and more diversified occupations, and with these a necessity for more perfect instruments of exchange, bank deposits, bank notes and checks.<sup>14</sup> These are not *money*. Their part in business transactions is so varied and complicated as to "escape precise analysis,"<sup>15</sup> but their usefulness has so incorporated them with all our transactions, that they are now comprised within the generic term of *Currency*, which is thus made to embrace paper tokens as well as metallic money. This usefulness is based upon the idea, that these paper tokens can be converted at the will of the holder into coin, corresponding in amount to the sum called for by the bill of exchange, the bank note, or the check.<sup>16</sup>

## V.

From the foregoing succinct history of the natural relations which grew up between Man and Money, we ascertain:

I. That the true value of coins was in their *weight of pure metal*, and not in their size or denomination.

II. That *minting* was only the process of stamping them, so as to certify this weight.

Wicked rulers used this power of minting for debasing or "raising" the coin. The miseries thus caused and the crimes committed are some of the saddest and darkest pages in the annals of the human race. It is not necessary to recall the wrongs, nor the legislation, the edicts, the decrees, the laws resorted to as authority or as a plea for them. Four centuries ago there was a lack of the precious metals in Europe. Civilization was on the decline, for States waste away if the circulation be impoverished. Suddenly the condition of the world was changed by the discovery of America. There was a fabulous inflow, first of gold and then of silver, into Europe. It is sufficient for our purpose to remember that "the consequences upon the movements of mankind were more palpably beneficial than those of any other recorded physical event."<sup>17</sup>

<sup>14</sup>Some interesting observations as to the "superior convenience" of Paper tokens, from Mr. Charles Gairdner, are to be found in the Appendix to Prof. Price's *Principles of Currency*, 241.

<sup>15</sup>Lord Ashburton.

<sup>16</sup>Lord Ashburton enumerates them at length: "*The Financial and Commercial Crisis Considered*," by Lord Ashburton, London, 1847.

<sup>17</sup>London *Times*, June 25, 1852.

Not the least momentous result was the amazing development of intellectual activity. In every department of mental life great masters instructed their fellow creatures. The tendency was towards a more exact analysis even in the domain of abstract thought. Political science was made more systematic. The functions, attributes, powers and duties of the State were closely examined. Of all the treatises put forth in this department of Social Science, that which most nearly concerns us was the letter of the illustrious John Locke (November, 1691) to Lord Keeper Somers. Moved by the depreciated and wretched condition of the coinage, Locke proposed a reform. How he dealt with the other matters involved is not germane to our present purpose. What he said about Silver it behoves us to know, for the dictum, which he enunciated became the doctrine of an economic school, and has had much to do with the weal and woe of these latter days.

Said Locke:<sup>18</sup> "Silver therefore, and silver alone, is the measure of commerce. Two metals, as gold and silver, cannot be the measure of commerce, both together, in any country; because the measure of commerce must be perpetually the same, invariable, and keeping the same proportion of value in all its parts. But so only one metal does, or can do of itself: so silver is to silver, and gold to gold. An ounce of silver is always of equal value to an ounce of silver, and an ounce of gold to an ounce of gold; and two ounces of the one, or the other, of double the value to an ounce of the same. But gold and silver change their value one to another: for supposing them to be in value as sixteen to one now, perhaps the next month it may be as fifteen and three-quarters, or fifteen and seven-eighths to one. And we may as well make a measure of a yard, whose parts lengthen and shrink, as a measure of trade of materials, that have not always a settled, invariable value to one another."

"One metal, therefore, alone can be the money of account and contract, and the measure of commerce in any country. The fittest for this use of all others is Silver, for many reasons, which need not here be mentioned. It is enough that the world has agreed in it, and made it their common money: and as the Indians rightly call it, *measure*. All other metals, gold as well as lead, are but commodities."

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<sup>18</sup> "Further Considerations concerning Raising the Value of Money," Works of John Locke, Eighth Edition, London, 1777.

As far as my reading goes, this extract from Locke gives most forcibly and clearly the argument for using one metal and one only as money, and that Silver was the only money of account at that time, recognized by all the world.

In point of fact, the monetary mechanism of the world when Locke wrote this was: Silver the accepted measure of valuation, gold received as auxiliary money: thus accepted, not by virtue of human legislation, but by virtue of great economic laws, potent for good, swift to vengeance. Left free to themselves, the two metals adjusted their ratio of the one to the other with such flexibility yet with such steadiness, as to have furnished a basis for well-considered, though unwise legislation,<sup>19</sup> when in 1803 the French law of the seventh of Germinal, year XI., revising the coinage, was passed.

From the time when Charlemagne (800) adopted the livre as a monetary unit, the coin bearing that title was considered to have the position and to exercise the functions bestowed upon it by that great ruler. It had, however, so often been tampered with and debased, that it had ceased to be an instrument of valuation. By the law of Germinal, the ratio of fifteen and a half of silver to one of gold was established, and continues in force to the present day. The proposed law was accompanied by reports which show that their authors, whilst attempting to fix a temporary legal ratio with silver as the unchanging unit,<sup>20</sup> clearly understood that the relation between gold and silver was more or less fluctuating.<sup>21</sup> They traced the price from 1492, when it was at the ratio of ten and a half of silver to one of gold, and the Minister Gaudin stated that the ratio of (15½) fifteen and a half to one, between the two metals had been arrived at by careful examination of the quotations, during a number of years, of gold and silver, left free to themselves as above stated, in Holland, Spain, and Great Britain.

In 1831, Mr. Gallatin called attention to the comparative steadiness of the relative value thus fixed by legislation for more than sixty years in a country where both metals were accepted without

<sup>19</sup> See the *Rapports* made to the French Chambers, and cited further on.

<sup>20</sup> That it was not intended to be permanent, see the *Journal des Economistes*, October, 1876, p. 53; note *Traité d' Economie politique*, etc., 7th Ed. p. 709, xxii.

<sup>21</sup> In the law proposed An. VI., was a provision that the value of the gold coin should not be declared, but left to be settled by commerce, and every six months the National Treasury should proclaim the rate at which gold would be taken in official payments for that period.

distinction in payment of debts, and further, it was noticed lately by an eminent French economist<sup>22</sup> that the abundance of Californian and Australian gold did not long disturb this ratio twenty-five years ago.

But this steadiness may be fairly ascribed to Free Coinage and the monetary situation of the world, which permitted the two metals, through the operations of the world's general commerce, to regulate their own relations.<sup>23</sup> The effects of this fixed legal ratio were therefore not immediately visible, but when the time came, economic law proved paramount to human law. In 1867, the French Commission stated that "Gold was driving Silver out of France, that five-franc pieces were scarcely ever seen, and the whole forty-three millions, issued January 1, 1856, had been purchased and exported." The Commissioners sagaciously added: "Silver is preferred to-day, but it may change by reason of the discovery of vast silver mines, or a reflux of silver from the East."

## VI.

In the new nation, America, where Locke was much studied, its early economists advocated an absolute standard of value. The Acts of Congress of 1792, coining the dollar with three hundred and seventy-one and a quarter grains of pure silver, was supposed to "have irrevocably fixed that quantity as the dollar of account, and as the permanent standard of value, according to which all contracts must be performed."<sup>24</sup>

But the ratio adopted in America was so far defective as to drive gold coin from the country, just as silver was driven out of France.

Mr. Gallatin urged "an alleviation in the mint regulations for the purpose of bringing gold into circulation." The rate adopted had its origin, he said, "in a mistake; and we are sacrificing reality to a pure shadow, when for the sake of an abstraction \* \* \* we promote the total exclusion of gold from circulation." The error was recognized, but the legislation leaned too far the other way.

In June, 1834, the ratio was reduced 16 to 1. Silver promptly quitted America. It went to France,<sup>25</sup> was coined into five-franc

<sup>22</sup> Mr. Paul Coq, in *Journal des Economistes*, November, 1876.

<sup>23</sup> England used Gold; France, both metals; Germany and India used Silver. Coinage of  $\frac{9}{10}$  (nine-tenths) was free.

<sup>24</sup> *Considerations as to the Currency*, by Albert Gallatin, Philadelphia, 1831, p. 62.

<sup>25</sup> January, 1837, the standard of the silver coin was increased to nine-tenths fineness, but the amount of pure silver and the ratio remained the same.



pieces, exchanged for gold, which came back to America to buy Silver over again. The silver dollar vanished.<sup>26</sup>

This was the first great legislative blow at Silver. Regardless of our real interests, Congress sacrificed the metal itself to gain a temporary benefit in the importation of Gold. The law debased the *metal* by augmenting the weight of the metal in the coin.<sup>27</sup>

In England, Locke found a co-adjutor in Newton, who reduced the guinea from 22 shillings to 21, or rather 20 $\frac{7}{8}$ . The metals responded to the legislation, and Silver slowly but steadily quitted England.<sup>28</sup> The wars with France led to a suspension of specie payments. During this period of suspension, the first Lord Liverpool addressed a Letter to the King (May 7, 1805), in which he pointed out, as Locke had done in 1691, the defective state of the silver coinage and argued in favor of gold as the money of the realm, and silver as subsidiary coin. Lord Ashburton<sup>29</sup> characterizes "as very foolish" the principal reason given by Lord Liverpool, "that the richest country should have the most expensive metal for its money." M. Chevalier criticises the unfair (though not intentionally so) way in which Lord Liverpool estimates the "variations which gold and silver commodities had undergone." "One could hardly succeed in finding a device better calculated to persuade the mystified reader that silver alone undergoes any variations, and that gold, by some inexplicable privilege, escapes all appreciable alterations."

Whether or not the Letter to the King was foolish or specious, it had ultimately the effect of provoking legislation. In 1816 a com-

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<sup>26</sup> To supply its loss, gold dollars were coined. Act March 3, 1849. They were a failure: they did not circulate. The ratio of 16 was retained in all of these acts. Gold and silver coin were legal tender until the act of 1873. Mr. McCullough says in his address before the Bankers' Association, (*Bank Mag.* 1876,) that even quarter eagles were not used. Such was the report of the Bank of France as to 5 and 10 franc pieces.

<sup>27</sup> *House of Com. Rep.* Ernest Seyd makes severe criticisms of the American legislation, in coining the "Trade Dollar." "A more mischievous and wanton proceeding than the coinage of this piece \* \* \* cannot well be imagined." *The Fall in Silver*, by Ernest Seyd, 1876. But Mr. Seyd has here fallen into an error. The "Trade Dollar" is merely the "small bar" of which Mr. Hooper spoke. (See further on.) It was for China and the East, and did not affect the status here. It was the law of 1834 to which Mr. Seyd's observations should have been directed. George Walker follows Mr. Seyd.

<sup>28</sup> 1695-1727; as far back as I can trace the exodus of silver from England, seems to have set in in Newton's day, about 1716; but the matter is obscure.

<sup>29</sup> *The Financial and Commercial Crisis Considered*, by Lord Ashburton, 1847.

mittee of the Privy-Council made a report on the Coinage, and recommended that, whilst there should be no change in the fineness of either the gold or the silver coins, gold should be made the sole standard of value, and silver should be converted into a token-coinage, and thus prevent the exportation of silver. They also recommended that no change be made in the weight of the gold coins, but that (66) sixty-six shillings, instead of sixty, should be coined from the Pound Troy. This is the legislation of England at the present time; and to it, more than one careful writer has traced her subsequent political and social disturbances.<sup>30</sup>

Several years ago Mr. Carey pointed out how the holders of the Dutch debt obtained the demonetization of gold.<sup>31</sup> Their greed and influence triumphed over the opposition of the tax-payers. The Minister of Finance yielded. In 1847 the pernicious law for adopting single silver money was presented to the Chamber. The Minister stated one of the moving causes to be, that the important colonies held by Holland used silver only. The law was passed. The loss entailed upon the country was prodigious. Mr. Leon Faucher deprecated this legislation; Mr. Chevalier applauded it. "Some of the most enlightened States in Europe and America," he said, "demonetized gold." The Dutch statesmen confidently hoped that foreign gold would circulate as unminted auxiliary money. They were quickly undeceived. July 31, 1850, the Dutch government began to receive gold at par; October 15, it was two and a half per cent. discount in the market; Dec. 15, it had fallen to four per cent., and finally the difference between silver and gold was more than seven. Under the load imposed by this law have the honest, hardworking Dutch people suffered ever since, and truly onerous have been their grievances. The government appointed a commission to examine into the causes and report upon the best means of rectifying existing legislation. The report in favor of gold was rejected by the Chamber, March, 1874; but June, 1875, a law was passed to stop the coinage of silver for six months and allowing of a ten-florin gold piece of 6.040 grammes, as nearly as possible the exact weight of twenty-five francs; in point of fact

<sup>30</sup>*Is a Double Currency advisable in England?* London, 1876. "One result of which quickly showed itself, and that was an increase in the cost of living. This of course unsettled the minds of our laboring population." The same result in Germany has caused the Government to reconsider the amount of Silver to be coined.

<sup>31</sup>*Principes de la Science Sociale, par H. C. Carey*, ii, 354.

restoring in an undeclared fashion the bimetallic money, a step towards leaving the metals to themselves.<sup>32</sup>

## VII.

I have thus endeavored to give an outline of the monetary situation as it was until within the last six years, and I think the conclusion may be fairly drawn that so long as the two metals were left to themselves, and so long as England was the only country in which Silver was not recognized as money, whilst the greatest part of mankind used that metal in preference to Gold, and the minting of the both metals was free, the ratio between them was self-adjusting, and without a monetary crisis. The metals obeyed their instincts, and fled before local oppression or interference. Legislation drove Silver from one country and Gold from another, thereby demonstrating the unwisdom of attempting to control economic movements by arbitrary rules, "which public approbation hath not made laws."<sup>33</sup>

In 1848 the Revolution swept over Europe. Political disorders produced industrial disasters. Peace was restored in France: but the story does not concern our problem. The Liberal uprising in Germany and Hungary yielded to the bayonet. In the midst of the political troubles Gold was discovered in California and Australia. The event did not seriously affect Germany, chiefly because Silver was the money of legal tender, and paper was used in trade. England was most disturbed because she had Gold only.

In France it was otherwise. Its double money was in fact based on the silver franc.<sup>34</sup> This and free coinage relieved it from any serious effects of the influx of gold, but the subject was discussed with great vivacity. The Bimetallists had at that moment for their chief, Mr. Léon Faucher<sup>35</sup> who deprecated any change in a monetary system consecrated by time and experience; whilst the most brilliant advocate of the demonetization of gold was Mr. Michael

<sup>32</sup> *Adres der Nederlandsche Maatschappij ter Befordering van Nijverheid aan Zyne Majesteit den Koning.* Haarlem, July, 1876. *Byblad v. d. Neder. Staats Courant*, 1876-7. *Muntwetten* 55 en 57; 16, 17 18, 19. *Gewijzigd ontwerp van Wet tot regeling v. het Nederl. Muntwezen.* Also letters from Amsterdam, 11th and 19th November, 1876.

<sup>33</sup> Hooker *Eccles. Pol.* i. 1, 10.

<sup>34</sup> See *Journal des Economistes* Cit. Sup., and Mr. Chevalier's "*Fall in Gold.*"

<sup>35</sup> "*The Precious Metals*" by Léon Faucher, translated by Thomson Hankey, jr., 2d edition, London, 1858.

Chevalier,<sup>36</sup> who contended, that the vicious employment of both silver and gold in France was the "parachute" which averted "a greater and more precipitate fall in gold." In comparatively a short time, and before what was subsequently called the "Gold-Scare" had produced any positive effect—except in Holland, which country as we have seen demonetized gold—the monetary perturbations, being left to the action of natural economic laws throughout the world, duly righted themselves. The fall in gold and the rise in silver, being spread over the aggregate mass of both metals, were scarcely felt and were soon readjusted.<sup>37</sup>

In 1867, during the Universal Exposition, an International Conference was held at Paris, at which were present Commissioners from nearly all parts of the globe. Prince Jerome Napoleon presided over it with dignity and intelligence. There were seven meetings between the 17th of June and the 6th of July. The main question was the possibility of minting an international coin, another idea thrown out by Locke, which its advocates on the Commission said, should be struck of gold. The conferences were fruitless so far as this object was concerned.

Though "failing to accomplish the object for which it was convened, the conference gave an impulse to the theory of gold as the only legal tender."<sup>38</sup> Mr. Chevalier was among those who presented their views to the Commission. He contended that there ought to be a return to the old practice of giving money its true significance, an exact weight: the livre, the pound, the mark. He abandoned silver because there is "no chance of a silver standard being adopted. The English are very determined to have gold and nothing but gold."<sup>39</sup> His adhesion to the dictum of Locke induced him to accept gold, although he had previously demonstrated it to be the less desirable metal for the basis of the world's coinage.<sup>40</sup>

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<sup>36</sup> "The Precious Metals," by M. Chevalier, translated by Forbes Campbell, London, 1852.

<sup>37</sup> "The Fall in the Price of Gold," by Mr. Michael Chevalier, translated by Richard Cobden, London, 1859.

<sup>38</sup> See the remarkable *Money Article* in the *London Times*, dated June 25, 1852.

<sup>39</sup> Lord Beaconsfield.

<sup>40</sup> *Journal des Debats*, quoted in the *London Economist*, July, 1876. *Reports U. S. Commrs. to Paris Exposition*, Washington, 1870, ii. 280.

<sup>41</sup> *Fall of Gold, Precious Metals*, cited above.

The mischievous effects of this Paris conference were felt in various directions. In France an Inquest was appointed, which began its sessions in December, 1869, and ended July 29, 1870. The war was declared before it terminated its sittings, and thus the Report, one of the ablest documents we have on financial questions, did not receive the consideration to which it was entitled. When the war was over, France was occupied with the liberation of her territory and the payment of her War Fine. Both were happily accomplished in the incredibly short space of twenty-seven months, with the maximum of benefit and the minimum of loss. It was the most stupendous financial operation in the history of man. How this was done, what part each of the metals played, has been told with rare skill and fidelity by the late Mr. Wolowski. The gold used, he tells us, was but little more than four hundred millions of francs, whilst "Silver performed four-fifths of the work."<sup>41</sup> But here again we find that the monetary situation of the world was such as to permit a free adjustment between the metals; the Latin Union being the only bar thereto. The consumption of silver in India and the East,<sup>42</sup> Germany, Russia, the United States, and other countries with paper; France bimetallic; England with gold; coinage free, combined to produce a situation by which, though the interests of separate nations had been prejudiced by monetary legislation, yet the finance, and with it the commerce and industry of the world at large, suffered no serious detriment.

### VIII.

If I have thus far told the story of monetary legislation as clearly as it should be told, it must be apparent that it is with this matter of money as it is with some other great social problems: the less that governments meddle, the better. At the Paris Exposition no less than thirty-five different standards of gold and silver, and eighteen different monetary systems were represented. The yearning for some international unit of value in view of such facts seems quite natural, but it was rather surprising to those who were not wedded to any special theory, that the silver franc or dollar of

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<sup>41</sup> *The French War Fine*, translated in the Banker's Magazine, 1875, by Thomas Balch.

<sup>42</sup> Mr. W. Nassau Lees (*Drain of Silver to the East and the Currency of India*, London, 1864,) puts the possible demand for Silver in Asia at from four to five hundred millions sterling.

five francs or of four groschen, was not selected, when so large a portion of the world's commerce already used such a coin, and by it the two metals were made part of the metric system.<sup>43</sup> But England opposed it, and if we understand correctly the Master of the Mint and Mr. Rivers Wilson, the opposition was due to the existence of an arbitrary legal ratio. The influx of gold had changed, as the English Commissioners thought, not only the ratio, but also the stock of the two metals.<sup>44</sup> The French war followed soon after, and then the payment of the great War Fine. Germany thereupon demonetized silver. Of this act and its consequences we will presently speak.

But first a few words about the legislation at Washington, of which a brief history is very instructive. January 9, 1872, Mr. Kelley, of Pennsylvania, reported a bill to revise and codify the laws relating to mints and coinage. He stated that it was prepared with great care and had originated in the Treasury Department. In the debate upon this bill the nickel business and the salary questions were much discussed. The only important statements were those of Mr. Hooper, that Silver was worth three per cent. as compared with gold, and *that it was better to coin silver in bars for the convenience of commerce.*<sup>45</sup> May, 27, 1872, Mr. Hooper, of Massachusetts, introduced a *substitute* for the *Bill on Mints and Coinage*, and moved that the rules be suspended, and the substitute passed. The clerk began to read the substitute.

*Mr. Brooks* asked if that was the original bill? to which the *Speaker* replied: No, that it was the substitute.

*Mr. Brooks* said that as there was to be no debate, both the original bill and the substitute ought to be read.

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<sup>43</sup> Ernest Seyd, *Fall in Silver*, 1875, p. 89, 90, points out the great utility of such a coin, not only in the relations of England with India, but of England and India with other nations. This India Silver question is producing corresponding investigations in England and elsewhere. Already two excellent pamphlets have lately appeared—*India and the Silver question*, by Stephen Williamson, of Liverpool, and *Three Letters on the Silver Question*, by Samuel Smith, President of the Liverpool Chamber of Commerce.

<sup>44</sup> They stated that there were 340 millions gold in excess of the proportion of 15½ to 1. Also gold in 1846 was two to one, in 1867 it was three to one.

*U. S. Com. Report*, (ante cit.) Washington, 1870, p. 270.

<sup>45</sup> The Italics are mine. The "Trade Dollars" were coined, and they are only "small bars" rounded off: the first attempt to escape from a bad theory of legislation.

*The Speaker* said that the original bill could not be read; either the substitute must be passed or none at all.

*Mr. Brooks.* How can we choose unless both are read?

*The Speaker.* The gentlemen can vote aye or no on the substitute.

*Mr. Brooks.* I vote no when I do not know what is going on.

Mr. Hooper was then interrogated about some unimportant matters, and thereupon without the substitute being read, the rules were suspended<sup>46</sup> and the substitute was passed by a vote of 110 ayes to 13 noes.

January 19, 1873, this substitute was called up in the Senate by Mr. Sherman. Some trifling conversations about salaries and the recoinage of abraded gold, concerning which Senator Sherman stated that he had letters from Professor Barnard, the Director of the Mint, and the Comptroller of the Currency. This unread substitute was thereupon passed. And this is the legislation which President Barnard eulogizes as "wise and intelligent."

It has been well said that such legislation is like the pestilence which walketh in darkness.<sup>47</sup> "The Act of 1873" said Senator Bogy, in his speech, 20th April, 1876, "was passed without discussion in or out of Congress." The law of June 22d, 1874, was, he says, "put into the Revised Statutes" surreptitiously. Now that a return to specie payments seems probable, one part of our people is aghast at the situation. To-day, every debtor finds that if the country does return to specie payment, his debt has been frightfully augmented, by his being compelled to pay in a metal whose diminished supply has already enhanced its value. The increased demand for gold for Germany and the United States will further raise its price to the greater injury of the debtor, whilst the creditor classes discover that this "wise and intelligent" legislation has added correspondingly to the value of their securities. Such legislation disintegrates society by the unseen wrongs which it inflicts, for it must be remembered that this weight thus added to every debt, means just so many more days of toil, just so much more

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<sup>46</sup> *Congressional Record.* eod. I.

<sup>47</sup> *The Currency: showing how a fixed price of gold subjects England to loss abroad and to convulsions at home.* By W. Cargile, Esq. 2d Ed. London, 1847.

"The blow is invisible. \* \* \* It is like the pestilence which has already done its work before it is seen. Every man becomes the enemy of his fellow. Each class looks on the other as its oppressor, because the source of the evil is unseen."

sweat of the brow, wrung from the laboring classes to the unearned profit of the creditor.

Moreover this legislation may possibly raise a serious question as to the powers of the respective states of the union. I shall not dwell upon this point, which will probably make its appearance in due season. What may be done about the House Bill now pending before the Senate can not be well conjectured. One thing may be safely predicated of the bill, that its ratio of 16 to 1 will drive out the silver which we are now producing, and thus embarrass still more our wretched financial situation. Able men, amongst them two<sup>48</sup> members of this Association, have promptly exposed the pernicious effect of re-establishing this ratio. Let us hope, and I think we have reason to expect, that the bill will not pass, and the error will not be repeated; but that the obnoxious laws will be amended and replaced by others looking more to the real welfare of the country. The clashing of the scientific with the unscientific provisions of the act must be redressed but not by reviving old errors, revived simply because they heretofore existed. The legislation which calls into existence the trade dollar and at the same time demonetizes silver, is not to be cured by a law equally mischievous.

## IX.

To pass to the action of Germany. The French War Fine yielded such vast sums that the country was dazed. Delbrück, Camphausen, Bamberger, Kapp, Michaelis, Sötbeer and the theoreticians prevailed.<sup>49</sup> The conservative statesmen were overpowered. Moritz Mohl led the opposition. In the beginning it was thought that the law (Dec. 4, 1871) could be so shaped as to allow of a gradual demonetization of silver. This error speedily

<sup>48</sup> See *New York Tribune*, January 2, 1877, Mr. Walker's letter, and *Bankers' Magazine*, January, 1877, for an article from Mr. Horton.

<sup>49</sup> See: The Legislation and political action of Germany critically examined by Mr. Wolowski, *The French War-Fine*, Bankers' Magazine, 1875. Mr. McCullough asserts in his address above mentioned, that the German legislation was "the work of Prince Bismarck." I can quite authoritatively deny this unjust imputation on the statesmanship of the great Chancellor. There is no speech or other utterance of his to countenance the statement. I was so informed in Berlin, in 1873; but to make sure of it I had the Debates examined. Besides which, I have before me a letter from a member of the German Parliament lately received, and in answer to my question he says positively, "*Bismarck took no part in the transaction.*" The debate was conducted as stated in the text.



made itself apparent. Intoxicated by her success in war, it was thought that money could be regulated "in the bayonet fashion."<sup>50</sup> Germany sold silver recklessly. To her legislation and conduct mankind owes the monetary crisis, followed by the financial, commercial and industrial disorders, the end whereof no man can as yet foresee. The panic which began in 1873 can not be fairly attributed to the increased production of Silver, because in 1867 the whole amount of silver produced in the world was 10.845 millions sterling; in 1868, 10.045; in 1869, 9½; in 1870, 10.315; in 1871, 10.315; in 1872, the year before the panic set in, it was 12.210. It cannot be possible that the addition of 17<sup>00</sup>/<sub>100</sub> of a million more of silver to the vast stock of the two metals in the world should have occasioned such frightful disorders. The India bills could have had nothing to do with it, for the heavy sales of the Home Office were \$51<sup>8</sup>/<sub>10</sub> millions in 1874, and \$81<sup>5</sup>/<sub>10</sub> millions in 1875. Up to 1874 the average was \$39 millions a year. But the panic set in at the end of August, 1873. To German legislation therefore, and to it alone, *causa causans*, is due the vast human suffering, ruin and misery of the last three years. With a less phlegmatic and more excitable people, the consequences would have been even more terrible.<sup>51</sup> But the Germans participated in the malign results of their own legislation. In one day there were twenty-eight failures and two suicides at the Berlin Bourse, according to the telegram—April 2, 1875—to the London journals. FRUCTUS BELLII<sup>52</sup> depicted the misery which prevailed. The money-changers and certain credit-classes were enriched, but the peasant and the workman were impoverished. Every man living on a salary or by the fruits of his labor found his income diminished. Amongst the honest, patient, industrious German peoples, a proletariat began to grow up. The government, dismayed at its own handiwork, has lately proposed a bill for the coinage of an increased amount of debased silver.<sup>53</sup> Of this legislation, it may be safely asserted that it will in

<sup>50</sup> *Fall in the Price of Silver*, by Ernest Seyd, London, 1876, p. 95.

<sup>51</sup> See *Silver and Gold*, translated from the Frankfurt *Mercur*, by the writer for the *Financial Chronicle* of New York, Dec. 23, 1876.

<sup>52</sup> An article in the Berlin *National Zeitung*, March 1875.

<sup>53</sup> See this bill, the opposition to it critically examined and the arguments against the bill refuted, in *Silver and Gold*, above cited. Mr. Bamberger maintains, in his brilliant but specious argument, *Reichsgold*, of which I shall shortly offer a translation to those interested in this question, that the exportability of a coin is a test of its home value.

no respect improve the situation in Germany. Instead of her thalers, which before the recent legislation had a recognized bullion-value all over the world, she will find herself loaded down with 600 millions marks of bullion, which have no circulation outside of her own domains and which can only be exported at a heavy loss.

### X.

I have thus endeavored to present a short, impartial sketch of the relations of Man with the Two Metals, how these relations naturally grew up, and what they have been made by legislation. As far as I can interpret the phenomena thus disclosed, the deductions fairly to be made are,

I. That gold and silver are the two, and the only two metals thus far known, to which the Creator has given those attributes physical, chemical, aesthetic, economic, which fit them for the money required by man in his social development.

II. That the two metals have varied, do now and will always vary in their relation; that the primal variations, caused by the greater production of one or the other, are naturally and promptly adjusted, when the metals are left to themselves.

III. That all attempts by legislation "to make either of them to do the work of both,"<sup>54</sup> or to control the primal variations by establishing a fixed legal rate between them, have produced secondary variations, have been futile, and have rendered the resistance of economic laws more serious, thereby intensifying monetary disturbances and converting monetary perturbations into financial convulsions.<sup>55</sup>

In point of fact, *national* legislation has proved bitterly unsuccessful. "That great Leviathan," which "we call the Commonwealth or State,"<sup>56</sup> whose business is *salus populi*," seems thus far to have sadly misunderstood its behest as to Gold and Silver. We are, therefore, face to face with the international problem and its proposed solutions. We can see our way more clearly now than during the excitement which obtained a few months ago. Errors and doubts are fading before facts and figures. The "sweet uses of adversity" drove men and peoples into peering through the mists and haze of the panic. Some unexpected facts became clearly visible. The "Apostasy about gold" is passing away.<sup>57</sup> The fears

<sup>54</sup> Mr. Goschen to Mr. George Walker, letter read at Saratoga, September, 1876.

<sup>55</sup> Lord Beaconsfield, Nov. 19, 1873.

<sup>56</sup> Hobbes, Preface.

<sup>57</sup> I use Professor Price's words, but apply them to a different error.

of over-production of silver in America, or non-consumption by India and the East are diminished if not dissipated, and with good reason, as may be seen in the figures given by the House of Commons Committee.

The whole production of the two metals 1852-1875, was a little more than £814 millions, of which gold was a fraction more than 572, and silver a fraction less than 242 millions. Of this 242 millions India and China absorbed nearly 200, leaving only 42 for the rest of the world to consume in 25 years; less than  $1\frac{3}{4}$  millions per annum.<sup>58</sup> Or in an other way: 1849 to 1875, 27 years, the whole gold production was 2,762 (nearly) millions dollars, 1,574 million dollars silver—an excess of almost 1,200 millions dollars in favor of gold.<sup>59</sup> The "Silver-Panic" has of late abated as sensibly as the "Gold-Scare" did a quarter of a century ago (silver is now selling in London at 57 p. to the oz. or thereabouts), and if we could but get rid of the coercive legislation which prevents a free action of the law of supply and demand between the two metals, mankind would soon be relieved of "the destruction which walketh by noonday," and the monetary circulation of the world would be restored to its healthy and life-giving power.

It will be readily understood from the foregoing observations that the solution commended to the attention of this Association is the third:

"Silver and gold money, Free coinage in pieces stamped for weight and fineness, exchangeable at their market values, and thus to make the ratio self-adjusting."

This solution is the only one which seems free from objections, except such as will rectify themselves after a short experience. It is simple and scientific. It "follows Nature," who taught Man his earliest and best relations with the metals, and relieves them from the aberrations produced by arbitrary and perverted legislation. We have seen that 15½ did not keep five-franc pieces in France, nor 16 prevent dollars quitting America. The metals thus coined have all the normal qualities which the common money of account should possess. In this form they would have elasticity, abundance and utilization of supply. The minimum of variation between them would be obtained. The

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<sup>58</sup> *Appendix H. C. R.* Ernest Seyd.

<sup>59</sup> *Appendix*, Edward Young. •

“parachute” of Mr. Chevalier<sup>60</sup> would be spread to its widest, and any fall would be most quickly arrested. The “reservoirs” of Mr. Jevons<sup>61</sup> would reach most speedily their common level and by a natural and not an artificial conduit. Such a coinage requires neither co-operative legislation nor Mint-Conventions, with their susceptibilities and difficulties. In fact, it seems to be that solution which yields the greatest benefit to mankind with the least variation or detriment: a metallic mechanism with the least possible friction and the greatest amount of force, of steadiness and celerity.

Nor is this idea wholly unsupported by experience and by authority. A large part of the built-up portion of the City of Philadelphia is subject to perpetual ground-rents, some of them nearly two centuries old, where payment is stipulated in Silver dollars of fixed pennyweights and grains; and the payment or its equivalent has always been enforced.

The “Trade-Dollar” has failed to fulfill the expectations of those who introduced it as coin, for the Chinese merchant taps it, tests it, weighs it and finally takes it as so many grains of silver, but not as a piece of money with a fixed value, but the demand for it proves that it does its work.

Mr. Cobden hints at this system in his preface<sup>62</sup> to his translation of Mr. Chevalier’s work, and suggests that “the relative values of Gold and Silver could be published by the Bank of England periodically under the authority of law.” It was presented by Mr. Chevalier as the most philosophic, most natural and least fluctuating method of minting the two metals. It was the plan of the French Institute, was presented to the Corps Legislatif An. III., and again An. VI., and was the original *projet de loi* sent from the Conseil d’Etat, and was modified into the Law of Germinal.

Nor are these all. Very lately,<sup>63</sup> Mr. Joseph Garnier, Senator member of the Institute, submitted a Bill to the French Senate, embodying this system of coinage; and, as presented in the bill, has the merits of symmetry, simplicity and perspicuity. France, who has not vexed the human race by obnoxious monetary

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<sup>60</sup>*The Fall in Gold.*

<sup>61</sup>*Money and the Mechanism of Exchange*, by W. Stanley Jevons.

<sup>62</sup>*Fall in Gold.*

<sup>63</sup>*Journal des Economistes.* Oct., 1876.

legislation, has assumed the hegemony of a sorely needed and grateful reform.

We were the first to strike an ungrateful blow at our own silver production. We imitated the English legislation, so disastrous to ourselves and our fellow creatures. It is true, that being a non-specie paying nation for many years past, we have done but little evil as yet. Let us hasten to follow and uphold the movement in France. I believe I am not wrong in saying that the President of this association, so well known in both hemispheres for his contributions to Economic Science, proposes ere long to offer for our consideration, a practical mode of so doing.

Henry Cernuschi, before whose vigorous attacks, and those of Ernest Seyd and Emile de Laveleye, monometalism has lost its aggressive attitude, and is now on the defensive, candidly declares the necessity of imposing the ratio  $15\frac{1}{2}$  by the mechanism of International Conventions. But the operations of the German Mint Convention were most unsatisfactory. The experience of the Latin-Union is such as to deter any one from taking it as an example. How are such treaties to be framed? and by whom? If these uncertain and complicated treaties could be had, are they as desirable as coins of weight, which require no such adventitious assistance? All heavy bullion transactions are now made by weight. Mint certificates are gradually creeping into use. They will grow just as the Letter of Credit has done, for they and coins of weight are based on the nature of the metals, whose monetary value remains the same, no matter what may be the production.

Whilst penning these last lines (4 Jan., 1877), I received from Mr. Cernuschi, whose presence we have reason to expect to-day, an extract from the *Siècle* of 16 Dec., 1876. In it, he quotes approvingly Lord Lytton's<sup>64</sup> recognition of the economic axiom, that money is automatic, because money is the product of Nature and not of the State, and then proceeds to demonstrate, "that no matter what shape the metal takes, whether bars, coins, wares, or jewelry, its intrinsic value remains the same. The paying power of a particular piece of metal is in proportion to the mass in existence; the paying power is increased if the mass is diminished, the paying power is diminished when the mass is increased; but these movements in no respect touch the economic law: *that with*

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<sup>64</sup>The present Governor-General of India.

*Free Coinage, minted and unminted metal have identically the same value.*<sup>65</sup>

"Unless this law is admitted to be an axiom," says Mr. Cernuschi in conclusion, "the discussion of an universal  $15\frac{1}{2}$  cannot be attempted."

These observations are a precious contribution to the argument which I have ventured to lay before this Association. They strengthen the appeal I make to you and all who desire a sound metallic mechanism, to return to Man's earliest and best relations with the Metals: to have done with obstructive legislation, and with "old wrongs redressed, old doubts removed:" to open a freer, wider sphere of action to money. And as the letter of credit, "the wagon through the air," which effected so easily and safely a change of ownership in two different masses of money in troublesome as well as peaceful times, and in places far apart, has been developed into the Clearing House Certificate, which settles vast local transactions without the transfer of either money or currency; so the simple Mint-certificate may in future become an instrument of association equally effective for the transfer of international masses of bullion with the least possible displacement. With a metallic mechanism thus constituted, the gifts of Providence may be best used for the progress and welfare of the human race.

Some days after the first reading of this paper, the *Public Ledger* of Philadelphia (Jan. 19) had an article speaking of the proposition for the United States to agree by treaty with Great Britain upon a gold dollar, five of which shall be equal to a pound sterling. Congress laid the resolution on the table, and the *London Times* opposed it because "monetary disturbances beyond description would arise." Whilst I fully concur in the observations of the Nestor who pens the financial articles of the *Ledger* as to the "vast labor saved to the trade of the two countries" by a *trade coin of wight*, yet I cannot see that a treaty is necessary, nor that such a trade coin can be struck of gold.

I will not repeat the arguments as to the inefficiency and cumbrousness of Mint Treaties, nor how the parties speedily find themselves hampered by the movements of commerce, nor will I

<sup>65</sup> The italics are mine. This was the principle upheld by Mirabeau, *Speech of 27th Sep. 1790*, and which underlies the French law of Germinal. The error of that law is in fixing a positive ratio.

dwell upon the infinite readjustments which scaling the dollar even so lightly, or one-third of one per cent., and modifying the English sovereign would produce, nor quote authorities like the London *Economist* to show that the supply of gold would not permit it, because I find that there is a solution more practical, creating no disturbance, and ready to hand.

When one reflects over the story of exchange between Great Britain and the United States, one is rather surprised at the flexibility with which money adapts itself to circumstances. Until lately all the exchanges between the United States and England, and through England with nearly all the world, were conducted on the basis of an imaginary dollar, of 4 shillings 6 pence, authorized by an Act of the Confederate Congress, 1788. This dollar was never coined, nor was the law re-enacted by Congress after the union. On the contrary, the Act of 1792 provided for a different dollar. The computations rendered necessary by this anomalous unit grew so burthensome as our transactions increased, that lately a dollar of four shillings has been invented to take the place as the unit of exchange. Now this financial phantom is by consent—without a treaty or without the coin in existence or even authorized by statute—this new imaginary dollar is the unit of our international calculations at London.

Why then should we not convert this phantom dollar into a useful monetary agent? If minted like the trade dollar, not as a coin, but as silver of weight, binding us to the metric system, it will soon be by force of economic law the unit of the English speaking peoples and countries, and thus silver may once more become, to use the words of Locke, "the instrument and measure of commerce in all the civilized and trading parts of the world."

This morning's (Jan. 21) journals tell us, that for the first time the San Francisco Mint has coined no gold for the month because of the demand for trade dollars.

THOMAS BALCH.

III.—ART SCHOOLS.<sup>1</sup>

I COMMENCED my last lecture by calling your attention to the fact that art has a commercial or money value. The same clay that will form a brick or a flower-pot worth scarcely a cent, will also form a tazza worth many dollars, but the former may be made by a man who is altogether uneducated, while the latter can only be formed by the educated artist. A wise policy induces a country to draw to itself all the wealth that it can without parting with more of its native material than is absolutely necessary. If for every pound of clay that a nation parts with it can draw to itself that amount of gold which we value at fifty dollars, it is obviously better thus to part with but little material and yet secure wealth, than to sell the material at a low rate, either in its native condition, or worked into coarse vessels; for by parting with large quantities of materials of which the supply, however large, is yet limited, the ultimate impoverishment of the native resources of the country is only a matter of time.

Whatever hinders art progress is, then, a matter for serious consideration, since it results in national loss; and if you fail in imparting art instruction to your youths, you thereby neglect what would result in great gain to the country.

The princely liberality of a few gentlemen is enabling you to establish in this great city schools of art, in which such art training shall be given as will enable you to look at home for that assistance which your manufacturers need, and for which you have at present to go to Europe. The gentlemen who have thus come to your assistance are doing more for their country than you can readily imagine; for they are seeking not only to save you the ignominy of going abroad for your art designs, but also to place you in such a position as will enable you to compete fairly and successfully with other nations of the world.

In England we have a central art training school in London, and a branch school in almost every town in the country. In all the schools, including the central training establishment, drawing is taught in its various branches, as well as painting in monochrome, water-colors, and oil colors, and in most of these schools the art of designing patterns for manufacturers is practiced.

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<sup>1</sup>The third and last of Dr. Dresser's lectures delivered under the auspices of the *Pennsylvania Museum and School of Industrial Art*.



I am strongly of opinion that our art schools have been the cause of rapid art advancement in England; and I think where rapid advancement in art knowledge is needed, every child should be taught drawing as well as writing. But while I am sure that our schools have done much for us, I yet feel that they might have done more; and as you are about to commence a system of national art instruction, I thought that you might be interested in hearing my opinion of the results of the working of our schools. I will then, with your permission, point out the weak points in our system of instruction, and offer such suggestions for your consideration as experience leads me to make.

I wish it to be distinctly understood, however, that I value exceedingly the work done by our art schools; and it must ever be remembered that when we inaugurated a system of national art instruction, we had no experience to aid us in the formation of our schools nor in the arrangement of a curriculum of study. You have, to an extent, the benefit of our experience; and I am sure that your eminently progressive qualities will lead you to found your new school on such a basis as experience shows to be right, and with such improvements in teaching as the most recent knowledge shows to be desirable.

The one great fault of our mode of instruction consists in the fact that we do not educate the intellect to the same extent that we educate the hand. Were I only to have one, either great knowledge of art and of those laws which would enable me rightly to apply my knowledge to utilitarian ends, or great power over my pencil; I would rather have the former, much though I value the power of drawing with accuracy and with taste. Our schools supply a thorough and most valuable course of instruction in drawing, and the power of drawing is as well taught as in any of the schools of Europe. But a pupil having learned how to draw whatever he sees, is aided but little in forming any just conception of the nobleness of ornamental, or decorative, art. The power and the significance of Egyptian ornament, the refinement of Greek decorations, the richness of the Arabian patterns, and the special qualities of all forms of art, are rarely brought before his attention save in one long course of weekly lectures which are given once a year by a gentleman who, while having great antiquarian and historical knowledge, is not an artist. These lectures, however, are of the highest value.

Education in the art of drawing is essential to the ornamentist, and is useful to all; but if the designer of patterns is to be of service to your manufacturers he must, besides being taught to draw, receive such an education as will make him a scholar, a poet, and a gentleman, and, at the same time, he must have an amount of scientific knowledge. Without scholarship no man can fully appreciate subtleties of refinement, or judge from the history of the past of the value of each particular phase or development of ornament. Nor can he discover what qualities or peculiarities of any particular style of decoration have most favorably influenced past ages.

Who can study Egyptian art from a scholastic point of view without learning more than he could gather by drawing a thousand ornaments from the palaces of the Pharaohs? Let us take a simple illustration. The Egyptians formed much of their ornament of the blue lotus flower and of the papyrus, or paper plant, as I have already explained to you, and these ornaments are worthy of all admiration simply as decorative forms. However, they meant much more to the Egyptian than this, but the hidden meaning can never be learned by simply drawing the flower. I would say, let the student learn to draw not merely shapes as shapes, but let him acquire at the same time power of drawing and instruction in the significance of what he draws. Give a youth a lotus to draw, let him draw the flower when expanded, the bud when closed and when half open, the leaf and the fruit, and then let him copy the lotus flowers as drawn by the Egyptians on their mummy cases and in their tombs. Let him understand that the Egyptians did not seek simply to copy the flower in a picturesque or pictorial sense, but that they sought to found on the flower an ornament such as should accord with their rigid architecture, and be an expression of their special feelings and faith, and then explain to him the significance of the flower. "The fertility of the Nile valley was chiefly due to the river annually overflowing its banks. In spreading over the land the water carried with it a quantity of rich alluvial earth, which gave fecundity to the country on which it was deposited. When the water which had overspread the surrounding land had nearly subsided, the corn, which was to produce the harvest, was set by being cast upon the retiring waters, through which it sank into the rich alluvial earth. The water being now well-nigh within the river banks, the first flower that sprang up was the lotus. This flower was to the Egyptians the harbinger of

coming plenty, for it symbolized the springing forth of the corn. It was the first flower of spring, or their primrose. The priesthood perceiving the interest with which this flower was viewed and the watchfulness manifested for its appearance, taught that in it abode a god, and that it must be worshiped. And it was the acknowledgment that this flower was a fit and primary object of worship that caused it to be delineated on the mummy cases, sarcophagi and sacred edifices of the Egyptians."

The other plant that I mentioned as frequently delineated by the Egyptians, was the papyrus—a reed with scaly base, triangular stem, and mop-like termination above. This plant was sacred to literature and learning, as its bark, or skin, furnished the ancient paper; and for this reason it finds a place in all temples as a decorative feature. But it was the priests who alone were educated; the priesthood monopolized all the knowledge and all the learning of the land, and it was the priesthood who devised the architecture of the temples and who dictated their decoration.

In like manner the student should be taught the significance and special purpose of each great style of ornament which has arisen on the globe, while he is at the same time acquiring the power of drawing. Drawing, if learned by simply copying examples, is learned in a tedious way. In order that perfect mastery be acquired over the pencil, the student must never have the sketch-book closed, yet his intellect must be cultured, and he must acquire knowledge. If a youth is studying architecture, he may work for years and not learn so much as he would from being told that almost all great styles of architecture have arisen from a desire to copy in a more durable material the dwelling of the people who first settled in the land. Thus the temples of Egypt were, as I have before said, idealized copies in stone of the early dwellings, which were formed of bundles of loti and papyri; and the temple of the Chinese at this hour is little more than a re-cast in wood and stone of the tent in which the Chinaman originally dwelt. Two poles intersecting at the top, and carrying a horizontal member, over which was thrown a covering, formed the original house; and while it is both difficult and expensive to produce the curved roof in a building as now formed, the primitive idea of copying the original dwelling is still persisted in.

I think that I have now said sufficient to convince you that scholarly knowledge must be imparted to the student of decorative

art, and that it is possible that he be educated intellectually during the time in which he is taught to draw.

Next I say that an ornamentist must also be a poet. By this I do not mean that he must acquire the power of making verses, or poems expressed in words. What I mean is this—he must have the power of appreciating and of creating poetic thought. Poetry, as I showed in my former address, is the soul of all oriental art, and the best styles of ornament that the world has known, have all arisen in the East. Surely there is poetry in the significance of the lotus as used by the Egyptians; and so there is also in many of the ornaments of the Japanese, Chinese, Persians, and Arabians. To the Japanese the almond, which they so often depict, is the symbol of beauty; the tortoise of strength, the stork of longevity; hence, whenever these objects occur in their decorations, they have a poetic significance.

But as I spoke on this subject in a former address, I need not further illustrate it here.

I have said that an ornamentist should be a gentleman. I attach much importance to this statement, for I never knew a man become a good artist who had not delicate and sensitive feelings. Many of the greatest men that the world has known have risen from comparatively low life. In English schools of design I have observed that the most successful students have frequently been the sons of humble parents. But this I have also noticed, that the want of gentlemanly breeding has in many cases militated against their success in after life. Tenderness of perception and regard for the feelings of others, are the chief characteristics of the gentleman, and they are those qualities which are especially necessary to the artist. The gentleman cannot do a mean act; so there must be no meanness in the true artist, for a man's character is always revealed by his works. In your art schools let every effort be made at inducing self-culture in manners and in gentlemanly feeling.

Next I say that a true ornamentist must have an amount of scientific knowledge. Scientific knowledge does much in the way of expanding the intellect and of enlarging our views. The artist is too apt to get into a groove, inasmuch as new discoveries in art are scarcely possible. Art achieves the production of beauty under the guidance of certain laws; but no modern revolution can occur in its development, by the discovery of a new law, as con-

stantly happens in science. By acquiring scientific knowledge we are taught to think and to reason, and it is reason that must guide us in the production of all patterns which are to manifest great knowledge. I must confess that I have learned much that has been of service to me from listening to the discourses of scientific men; perhaps more than from most of our art instructors. But with the artist must rest the application of the principles learned from science. From music I have also learned much, and when I hear fine harmonies of sound I cannot help what appear to me to be analogous harmonies of color appearing before the mental eye.

But I do not advocate the acquisition of scientific knowledge by the art student simply because of the favorable influence which it exerts on the mind, but also because the ornamentist cannot be a perfect designer without knowledge of natural laws. Constantly the designer finds himself in difficulty if he has not scientific knowledge. For instance, no man can place the handle and spout of a tea-pot, or of a jug, in proper relation to one another, unless he is acquainted with certain scientific principles. I have heard a lady say that pouring tea from a tea-pot makes her arm ache, while the tea-pot was yet small; and I have heard complaints of the weight of a jug, while it scarcely weighed two pounds when full.

On the principle of the steel-yard one pound may balance a hundred-weight, and by leverage a tea-pot which weighs little may practically be heavy to lift. All large and heavy jugs should be furnished with two handles—the one by which it may be carried and the other by which its contents may be poured from it; the pouring—or side—handle should bear to the spout the same relation that the handle of a tea-pot should bear to its spout. In order that the handle and spout be properly applied, find, first, the centre of gravity of the body of the vessel. This you will get by suspending the object by a cord in two or more different positions. If the vertical line formed by the cord suspending the vessel be continued downwards it will in each case pass through the centre of gravity, and where the continued prolonged lines intersect in the object is its centre of gravity.

Having found the centre of gravity, draw a line in any ascending direction passing through it, and then draw a second line so that it makes a right angle with the first. On one of these lines the spout of the vessel must be placed, and on the other the centre of the handle must fall; and this law holds good in the case of all

vessels from which fluids are to be poured with ease. An excellent handle is commonly applied in France to the common garden watering pot, which enables it to be carried and poured from with ease, but it does so simply because it is constructed on truly scientific principles. This is a handle which, starting from the bottom of the pot, is carried in a circle to the opposite side of the top. These are but poor illustrations of the usefulness of scientific knowledge to the art student, but they will, perhaps, suffice to show that even in such an apparently simple matter as the correct placing of a handle and a spout scientific knowledge is involved.

I have said sufficient, I feel sure, to convince you that the student of industrial art should receive such an education as will make him a scholar, a poet, a gentleman, and, to an extent, a man of scientific knowledge; but now comes a question which is of the utmost importance. If the youth acquires the education which he certainly ought to have he will take his place amongst professional and scientific men, and his expenses will necessarily be heavier than if he were little more than a laboring mechanic. The question that arises is, Will the manufacturer pay such prices for designs as will remunerate the designer for his prolonged study?

Much has been said in England about the unwillingness of manufacturers to pay such prices as will fairly compensate the educated designer for producing carefully considered patterns, and a carpet manufacturer in the country has told me that he would pay nothing if he could get the designs by stealing. I have had more to do with English manufacturers than any other artist, and I am bound to say that I have found most of them willing to pay handsomely for well considered patterns; but as the object of business is, in a sense, money-making, the manufacturer cannot be expected to issue many patterns, such as will not sell when placed on the manufactured article. I could name a few good Englishmen who nobly contribute towards the education of the people by yearly producing a few patterns in the most advanced art; although these patterns do not always command a large sale, owing to their extreme excellence. And with the exception of a few mean creatures, such as we find in every country and in every class of society, I believe that the manufacturers of both England and America are willing to pay remunerative prices for good art work. This brings us to consider another part of our subject, and one to which I ask your careful consideration. Many of the youths

who have been trained in our English art schools have abandoned art, owing to their inability to live by it, even after seven or eight years of study. But the cause of their failure is what I wish to call your attention to. The technicalities of some manufactures are intricate, and without an understanding of manufacturing processes, the designer can serve the manufacturer to but a limited extent. I have known a manufacturer to apply to a school for a youth well trained in art knowledge, and upon taking him into the factory he is found to be of little service, and certainly not worth the money that he is receiving. On the one hand the youth who has served a long apprenticeship to art cannot undergo a second time of unremunerative service in the works, and the manufacturer cannot be expected to pay a heavy salary to a man who is now of no use to him, and who promises to be of but little service for many months to come. The result is many of our youths abandon art after having spent years in study which have led them only to disappointment.

When Sir Henry Cole was first appointed, in the year 1852, to the directorate of the art training system of England, he perceived this difficulty, and founded what were, termed "special classes," to meet the want. These special classes were three in number; in one metal chasing was taught, in another designing for woven and printed ornament of fabrics, in another china painting. But as these classes were not patronized by the public they were speedily given up. But how could they be patronized? The metal chasing class was placed under the superintendence of a French refugee architect, and while this professor was a man of great ability, he had no knowledge whatever of metal chasing, and, so far as I know, had never even seen a piece of metal chased in his life. The choice of the professor for the class in which fabrics were to be designed was scarcely more happy; for while the instruction in these classes was to be of a strictly technical character, the professor could neither put a carpet pattern on "rule paper" nor design a calico print so that it could be manufactured, hence he could afford no instruction to the youths placed under his care. The class for painting on porcelain was indeed conducted by a practical potter, but it was abolished with the others.

If your art schools are to succeed you will have to give to the students such technical knowledge as will enable them to be useful to manufacturers as soon as their art education is completed.

Either by lectures or by special courses of tuition, instruction must be given in the principles upon which the various looms and the Jacquard apparatus produce figured fabrics, as carpets, damasse, lace, etc. The processes of printing wall papers, floor-cloths, calicoes, woolen fabrics, and whatever receives pattern by printing, must also be brought before the student, and the whole of the processes connected with the potters' art, the casting and charring of metals, the production of enamels, and the formation even of furniture, must be considered by such students as are to design patterns for special manufactures. How all this is to be accomplished is for you to consider. But if you are to make your schools the success that I am sure you intend them to be, all this must be done. Special lectures by practical men, if amply illustrated by actual work, might do much to aid the student; and this, together with somewhat frequent visits to large factories, might almost suffice, at the outset, to give the necessary knowledge, provided that the designing classes are conducted by men who have practical experience in preparing designs for each particular manufacture. The nearer you can get your designing classes to resemble the offices of some great designer in which practical work is carried on, the more useful these classes will be. I have known a youth in an English school of design spend a year upon one work in the hope of receiving a prize for excellence of workmanship, when, had he to live by his art, the drawing must have been made in two or three days. What the student wants is training in the actual work by which he has ultimately to live, and education in a school in which he will see how actual work is done and turned out. If you could arrange with any great ornamentist who designs for and understands all kinds of manufactures, and were to give him the services of a number of youths who had already been well instructed in art knowledge and in the art of drawing correctly, as part payment for his instruction, you would do well, I think, to make such an arrangement. But whether any man can be found with the necessary qualifications I do not know. This will require your best consideration.

*There is another point to which I wish to direct your attention. When our schools of design were first established we had in England no men who were artistic designers of patterns. All our pattern-drawers were of the most illiterate character, and were, therefore, altogether unfit to undertake the training of youths.*



We had amongst us pictorial artists of ability, but their knowledge of ornament was limited, and they had no knowledge of manufacturing processes. We had, therefore, to do the best we could, and in appointing pictorial artists as masters in our schools we did what appeared to us to be best under the circumstances. This appointing of pictorial artists rather than of scholarly ornamentists, though a necessity at first, has unfortunately become a precedent with us, and to this day the professors at the central training school, where the masters for the provincial establishments are educated, are in the main pictorial and not decorative artists. This is much to be regretted, for it undoubtedly militates against the usefulness of the schools; but I have always noticed that when a school is once *founded* upon any particular plan, however objectionable the plan which is by necessity adopted at the outset, that it is almost impossible to root it out without almost revolutionizing the establishment.

You live in a day when English-speaking ornamentists can be got, I hope, with an amount of scholarly knowledge, and I cannot too strongly urge upon you the necessity of placing such men, rather than pictorial artists, at the head of your new schools of design, for, is it not natural that a man regards his own art as that which is most exalted, as he most fully comprehends its principles. The result of our selection of masters is this—the students are taught that an ornamentist is a man of low grade who has not the necessary ability to be an artist (meaning a pictorial artist), hence, as no one thinks that he lacks ability, he strives to become a painter rather than a decorative artist.

In the last place I would ask you to do all that you can to honor your scholarly ornamentists. To the students of your schools you will probably offer prizes—either medals or books—for without some stimulus to labor great efforts are rarely put forth; yet try to avert the danger which is the natural consequence of success. A pupil who wins many honors is very apt, for human nature is frail at best, to consider that he is quite a master of his art, while he has as yet scarcely any knowledge of its higher branches. This is a danger inseparable from the giving of prizes; yet I do not see how you can do without some system of rewards. I point it out, however, as a danger, for I have known many great medalists utterly fail to succeed in after life.

If you can found an institution on the model of a university, and

should ultimately confer degrees upon great ornamentists, and certain honorary distinctions upon such manufacturers as produce ennobling works, and thus bring honor to their country, I think that you would do well in doing so, for men will work hard to achieve honor as well as to secure wealth.

I think that I have now called your attention to the various objects which you should have in view in forming your art schools, and I have pointed out to you the experiences that we have had in England, and have not hidden from you our shortcomings; for surely that spirit of friendship exists between the two nations which renders it possible for me to speak the whole truth to you, and which will enable you to aid us in return by giving us the benefit of the advanced knowledge which you will bring to bear upon the task which you have so nobly imposed upon yourselves. I am sure that you will enter upon the art instruction of your youth with all earnestness, and in all your efforts at spreading a knowledge of art through your country you have my sincere wishes for thorough success.

Within the next few hours I shall have to say good-bye to you, the people of Philadelphia. But before I do so let me thank you much for the many kindnesses that I have received at your hands during my stay in your midst. You have successfully endeavored to make my stay here happy, and I have not only enjoyed my visit to your beautiful city, but I have learned useful facts which I shall never forget. Your exhibition would do credit to any country and to any people, and no other nation could have achieved such a glorious success save only in the capital town. But the great results of your splendid Exhibition are yet to be felt—the Museum and the art schools which are growing out of it will be of inestimable value to your industries, and these, while commemorating your Exhibition, will exert a permanent influence for good on the tastes of the people.

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### THE CHINESE OPIUM TRADE.

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**T**HERE is probably no obstacle to the growth of civilization and the establishment of Christianity among barbarous or semi-civilized people greater than the immorality or unchristian

principles of Christian nations and their representatives. Of all this class of obstacles, the most effectual is doubtless the policy of the British government, in forcing the Chinese nation to open markets for the sale of opium raised in her East Indian possessions. We purpose, as far as is possible in this brief article, to show the existence and the evil of this policy.

In 1773 the East India Company first made a shipment of opium to China. In 1800 the Chinese government prohibited the importation of opium, on the ground that it wasted the time and property of the people. The Portuguese, English, and American traders, who by this time were introducing large quantities of opium into the country, were entreated to cease their illegal work, and the government at Peking did its utmost to put down the trade. Smuggling boats were frequently captured and destroyed, smugglers tortured, the retailers of opium thrown into chains, smokers punished by cutting out a portion of the upper lip, and three princes of the blood were degraded for smoking opium. These facts prove the sincere anxiety of the Chinese government, but the lust of the natives for the drug and the rapacity of the traders, rendered these restrictive measures ineffectual.

In 1839 Commissioner Lin was sent to Canton, with plenipotentiary powers to put an end to the opium traffic. His zeal outrunning his prudence, and possibly his instructions, he seized and destroyed all the opium, over 20,000 chests, at that time in harbor. The English government immediately sent a military and naval expedition to demand reparation. After a brief campaign, in which British arms were completely successful, the treaty of Nankin was concluded, opening five ports to foreign trade, ceding the island of Hong Kong to Britain, and paying for the war expenses, and for the opium which had been destroyed. At the time the treaty was signed, the Chinese Commissioners, in private conversation with the British Envoy, said: "Why will you not act fairly towards us by prohibiting the growth of the poppy?" The only reply that could be made was, in substance, that if the English did not supply the drug, *some other nation would*, an argument which, we suppose, might equally palliate any iniquity under the sun. When the Emperor was urged a few years later to derive a revenue from the importation of opium, he uttered words worthy of the most Christian government: "It is true that I cannot prevent the introduction of the flowing poison; gain-seeking

and corrupt men will, for profit and sensuality, defeat my wishes; but nothing will induce me to derive a revenue from the vice and misery of my people."

It is not difficult to prove that as the traffic in opium was in the first instance forced upon China, it has been submitted to down to the present time *solely* because the Chinese government has not felt itself strong enough to fight England. The English ambassador at Peking writes: "Nothing that has been gained was received from the free will of the Chinese; the concessions made to us have been, from first to last, extorted against the conscience of the nation; in defiance, that is to say, of the moral convictions of its educated men; the millions who are saturated with a knowledge of the history and philosophy of the country."

The following extracts from a communication of the Chinese Foreign Office to the British Government show what would be the policy of China were it not for fear of English breech-loaders: "We are quite aware that the opium-trade has long been condemned by England as a nation. But the officials and people of this empire, who cannot be so completely informed on the subject, all say that England trades in opium because she desires to work China's ruin. There are those who say, Stop the trade by enforcing a rigorous prohibition against the use of the drug. China has the right to do so, doubtless, and might be able to effect it; but a strict enforcement of the prohibition would necessitate the taking of many lives. Now, although the criminals' punishment would be of their own seeking, bystanders would not fail to say that it was the foreign merchant seduced them to their ruin by bringing the drug, and such a course would tend to arouse popular indignation against the foreigner. There are others, again, who suggest the removal of the prohibitions against the growth of the poppy. We should thus not only deprive the foreign merchant of a main source of his profits, but should increase our revenue. Such a course would be practicable, and indeed the writers cannot say, as a last resource, it will not come to this; but they are most unwilling that such prohibition should be removed, holding as they do that a right system of government should appreciate the beneficence of heaven, and remove any grievance which afflicts its people; while to allow them to go on to destruction, though an increase of revenue may result, will provoke the judgment of heaven and the condemnation of men.

Neither of the above plans is satisfactory. . . . What wonder if officials and people say that England is wilfully working out China's ruin, and has no really friendly feeling towards her."

But why does the British government so far compromise right principle in this matter? Simply because the opium is raised in India, and is a source of much revenue to that portion of her immense empire. We have before us the testimony of witnesses before a Royal Commission in 1871, in which it is stated that the quantity of opium raised in any given year in India is controlled altogether by the government, and depends primarily on the necessities of the revenue. Mr. Pease stated in the House of Commons, during a debate on Indian affairs: "It is only the growth of opium will make our revenue easy." The Lieutenant-Governor of Bengal writes to another official: "I have a telegraphic message from Simla, urging that every possible expedient that you can approve should be used even now to extend the opium cultivation next season to the greatest possible extent."

This encouraging of the growth of opium is producing lamentable results in India. The tea plantations in Assam, a gigantic government enterprise, were in imminent danger of failure, solely through the undue use of opium by the laborers brought to the plantations. Dr. George Smith, the well-known Oriental scholar and traveler, says: "In the Indo-Chinese districts of British Burmah, the action of the departments in promoting the sale of opium has long been a public scandal. Prior to the introduction of British rule into Aracan, the punishment for using opium was death. The people were sober, hard-working and simple-minded. Unfortunately, one of the first measures of our administration was the introduction of the Akbari rules by the Bengal Board of Finance. Organized efforts were made by Bengal agents to introduce the use of the drug. The general plan was to open a shop with a few cakes of opium, and to invite the young men and distribute it gratuitously. Then, when the taste was established, the opium was sold at a low rate. Finally, as it spread through the neighborhood, the price was raised, and large profits ensued. Mr. Hind, an assistant Commissioner, in speaking of the result, says, 'He saw a fine, healthy generation of strong men succeeded by a rising generation of haggard opium-smokers and eaters, who indulged to such an extent that their mental and physical powers were alike wasted.'"

When we follow the drug to China, we turn over a still darker page in its history. Sir Thomas Wade, the present English Minister to the Chinese government, says: "It is to me vain to think otherwise of the use of the drug in China than of a habit many more times pernicious, naturally speaking, than the whisky drinking which we deplore at home. I know no case of radical cure." Dr. S. W. Williams, formerly agent of the American Board of Foreign Missions, and subsequently Secretary to the United States Legation at Peking, writes: "Mr. Wade's experience of about thirty years is like mine of more than forty years' residence among the Chinese, during which time I have known only one case of thorough reformation from the habit." Mr. Majoribanks, President of the Select Committee of the East India Company, at Canton, says: "The misery and demoralization occasioned by opium are almost beyond belief." Consul Lay says: "It is hamstringing the nation." Mr. R. M. Martin, a gentleman of integrity and judgment, who resigned a lucrative position in the British service that he might come to England to support his words, says: "Every hour is bringing fresh victims to a Moloch who knows no satiety, where the English murderer and the Chinese suicide vie with each other in offering at his shrine." Dr. A. G. Reid, a physician in the Chinese Imperial Maritime Customs Service, testifies concerning one hundred patients who had come to him during the previous year. He says: "In every instance the applicants came to me because they had lost their means of subsistence through the use of the drug. Their object in coming was merely to obtain a remedy to appease their present craving, and restore their strength so as to enable them to resume their duties and earn wages to be again expended in opium. . . . Opium differs from alcoholic indulgence by the absolute necessity of having a fixed quantity. A drunkard may abstain until means accumulate to enable him to purchase liquor; but the opium smoker *must have* his daily stimulant, or he breaks down. To obtain it, there is no sacrifice he will not stoop to: even his wife is readily lent out for prostitution to provide means to buy the drug." We have before us many other statements, equally pertinent and forcible, of the process of national deterioration going on in an empire which includes one-third of the human family.

The fact that foreigners force this poison upon the nation is the principal reason for their exclusion from the interior, and for the

jealous and almost hostile attitude of the authorities. It is somewhat to the credit of our nation that many of the Chinese think that all opium merchants are English, and all the missionaries Americans. There is a wide-spread opinion that the opium merchant comes to ruin their bodies, and that the English missionary is sent as an agent of his government to "buy the heart" of the people away from the Emperor; and when the Church is sufficiently strong in numbers, and the physique of the nation has been emasculated by opium, then the Church and the British government will coalesce, and the Celestials be subject to the barbarians. It is notorious, too, that commonly the first word uttered by a Chinaman, when urged to embrace Christianity, is to the effect—"Why do Christians bring us opium, they knowing as they do the misery resulting to us from it?" The bishop of Victoria (Hong Kong) lately said: "I have been again and again stopped while preaching, with the question, 'Are you an Englishman? Is not that the country that opium comes from? Go back and stop it, and then we will talk about Christianity.'" We close this article (leaving further comment to our readers), by quoting words with which a Chinaman interrupted a missionary while preaching in Amoy—"If your nation believes in these doctrines as divine, why has it imported this poisonous stuff to bring poverty, distress, and ruin throughout our land? There is no use in your trying to get out of the matter by saying that you have nothing to do with the opium, system: your country has. It is your nation that is responsible for all the ruin caused by opium. It was the English guns that compelled our Emperor to sanction the trade, and it is through England that it may be sold throughout the length and breadth of the land, without our government being able to do anything effectual to prevent its spread throughout the kingdom."

GEORGE C. JONES.

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### FOX BOURNE'S LIFE OF LOCKE.<sup>1</sup>

**M**R. FOX BOURNE'S *Life of Locke* is the first systematic and satisfactory attempt to write the life of one of the greatest and most representative of Englishmen. The earlier biographies

<sup>1</sup> *THE LIFE OF JOHN LOCKE*; by H. R. Fox Bourne. In two volumes. Pp. xvi. 488 and x i. 574, 10yal 8vo. New York: Harper & Brothers.

by Bp. Law and Lord King are merely amplificacious of the sketch published by his contemporary Le Clerc in the *Bibliothèque Choisie*, by way of an obituary notice; although the latter supplements it with valuable documents, which Lord King has edited, as Carlyle has it, "by hoisting the shafts." But Locke's last biographer has spared no pains in collecting and elucidating the facts and the documents which belong to his subject. He has ransacked the public archives, the family records of the Shaftesbury family, and above all the Library of the Remonstrants at Rotterdam, where besides many that were new, he found the means to restore letters already published to their original form by reinserting those passages of personal interest which previous editors thought not dignified enough for publication. And while Mr. Fox Bourne is not a writer of the first order, he yet possesses many excellencies of style and manner. As readers of his *English Seamen under the Tudors*, his *English Merchants*, and his *Memoir of Sir Philip Sidney*, very well know, he tells a story with a clearness of statement which suffers nothing from his pains-taking accuracy. He can hardly be called a brilliant writer, but he is an eminently readable and useful biographer. He is not always possessed of the preliminary knowledge necessary to enable him to form a just estimate of Locke's position in the historical development of the sciences with which he occupied himself; but what he does tell us is quite correct as far as it goes, though at times somewhat inadequate. He at times makes Locke a more heroic person than the facts indicate, ascribing to him virtues which are part of the biographer's ideal of manhood and patriotism, but in which his subject shared but slightly.

Locke deserves a good biography. He lived through a period of great changes, and he contributed mightily to the working of those changes. He was born, as Mr. Fox Bourne well reminds us, when the author of *Paradise Lost* was in his twenty-fourth year, and when he died the author of *La Pucelle* was seven years old. He interpreted his age to itself, stripping it of hear-says and traditions which had ceased to be convictions, and were becoming hollow hypocrisies and humbugs. He had all the best qualities of his age in an eminent degree, its sober common sense, its public spirit, its growing love of toleration, its dislike of scholastic notions and phrases which did not connect themselves with practical life, its attachment to liberty, its love of daylight unstained by



"storied windows." He shared largely in its limitations also, in its mere common sense, its lack of enthusiasm, imagination and passion, its immovable phlegm, its impatience of the higher forms of speculation, its severance of life from the unseen ground of existence, its utter want of "the historic sense," and its blindness to spiritual beauty whether in art or nature, in life or literature. The conflicts of the period of public opinion between 1688 and 1789, (the true eighteenth century), were fought more under the banner of Locke than of any other thinker. He furnished the premises assumed by both parties; his name was used both by those who appealed to his comparative orthodoxy, and by those who carried his principles to their legitimate conclusions. And although we have passed into a new era, and have re-opened all the old questions which he sought to close forever, his influence is still paramount with the half-educated public. He writes the editorials of our newspapers; he makes the speeches from our rostrums; he has a hand in half the sermons that we hear from the pulpits. And thinkers since the French Revolution may still be classed according to their loyalty to Locke or their revolt from him. Not that Locke has been the creator of that age. It would have been substantially the same if he had never lived, for he was but the spokesman who gave shape and utterance to the thoughts which were fermenting in the hearts of his contemporaries. \* He was the child of the *Zeitgeist*, its favorite child; he was not one of those grander spirits whose mission it is to overcome their times, and whose lives seem fruitless until they have fallen, like the seed grain, to die and yet to bring forth much fruit.

Locke was, of course, a many-sided man, or else he could not have sustained this relation to an age of many-sided interest. He was an educator, both in theory and in practice. He was a physician of some distinction, though not of wide activity, and was associated with Sydenham in the reform of medical practice. He was a theologian after his fashion, having long hesitated between the church and medicine as a profession; and much of his time and of his writings were taken up with this subject. He was also, after his fashion, a philosopher, and the inventor of a philosophic method, or at least its reviver after long disuse. He was a traveler, having spent years on the continent, both before and during his exile, and having left us some very graphic letters descriptive of France, Germany and Holland. He was an economist of the old

Mercantile School, which the disciples of Adam Smith have so grossly and unfairly decried. He was a practical and a theoretical politician; he served when quite young in the diplomatic *corps*; after the Revolution, he took office under King William, and was put forward as the literary champion of the Revolution and of that policy of toleration, which was then adopted. Few of the great themes which were freely discussed in England, and were soon to be discussed with equal freedom in France and wherever French culture could penetrate, failed to receive his attention, and all were treated in such fashion that he excited men's rapture by giving them back their own thoughts in the most suitable forms.

Born in 1632 at Pensford, near Bristol, John Locke was the son of one of that Parliamentary minority who for a time made headway in the west against the Royalists, but were wrecked by the defeat at Devizes. His father was a captain in the Parliamentary forces, and lost most of his estate by the mishaps of the war. It was owing to the influence of a relative that young John was entered in 1646 as a student at Westminster School, where the renowned Dr. Busby, who had been appointed before the civil war, ruled with unbroken sway through Commonwealth times, and that of the three kings who followed the Restoration. Probably no other public institution experienced so little of the mutations of that time of change, possessing as it did a sovereign whose will was law, and who never allowed his pupils to think that the kingdom contained any one of greater dignity than his own. In 1652 Locke entered Christ College, Oxford, then experiencing, under Dr. John Owen, that Puritan administration, which, as Clarendon reluctantly admits, did more for learning, as well as discipline, than any that preceded or followed it. He graduated as Bachelor in 1656, and as Master in 1658, but continued to reside as a student of Christ Church, studying and teaching as opportunity offered. This sort of residence was only allowed to those who had decided on the study of divinity, and for several years Locke hesitated between that and medicine. His expulsion from the University in 1684, at the request of the king, though arbitrary and discreditable to the authorities, had therefore the less of hardship, as it was done by canceling a special favor which had been extended to Locke, who was suspected of having written a very offensive Whig pamphlet. It seems probable from the recently published correspondence of Dr. Humphrey Prideaux, that that worthy had been acting as a spy upon Locke's movements.

Mr. Fox Bourne enumerates, as far as possible, the professors under whom Locke studied, and the subjects which occupied him. But like most men, he ascribed the greatest influence to subjects and books not included in the University curriculum. It was the writings of Descartes (†1650) which "first gave him a relish of philosophical things," and Descartes was, in his own way, the pioneer of the age and the influence of Locke. Starting from the position that doubt is the beginning of philosophy, he had constructed the first intelligible theory of the physical universe, and the first in which the element of miracle or miraculous interposition was denied as a permanent necessity. His school contained many scholars, whom he would hardly have recognized as such—the mystics Malebranche, More, Norris and Andre, the ontological pantheist Spinoza, and their like; but in Locke, we think, while they differed *toto coelo* as to method, he would have confessed a congenial spirit, and would have sustained him against Malebranche.

Locke's medical skill brought him into the service of Lord Ashley, afterwards the first Earl of Shaftesbury, and the grandfather of the Shaftesbury of the *Characteristics*, who was Locke's pupil. From 1667 till 1684 he resided in this family, with the interruption of a visit to France in 1675-9. He shared Shaftesbury's views on politics and ecclesiastical questions, for they were both Whigs; he also shared in Shaftesbury's accession to office in 1672, and in his dismissal in the following year. With Shaftesbury, he took part in the scheme for the creation of a model colony in the Carolinas, and even thought of visiting America. It was to aid Shaftesbury in the struggle over the Exclusion Bill that he returned from France in 1679, and he strove, but in vain, to induce his patron to desist from sharing in the Monmouth conspiracy. His biographer ascribes to him a vivid indignation at the corruption of English morals under Charles II., but such a feeling was alien to his mental constitution and habits. The passages quoted to evince it are purely jocose and unimpassioned. We see no reason to believe that Locke would have quarrelled with the Stuarts, if the Stuarts would have let him alone. He valued quiet and liberty to do as he pleased above anything else that a ruler could give him. He rejoiced in the Restoration, because the death of Cromwell had thrown everything into confusion, and he was more likely to be let alone by a monarchy than a democracy. We have from him no such passionate outbursts of lamentation as there are in the *Para-*

*dise Lost* and the *Samson Agonistes*. He was not capable of Milton's indignation; his public spirit was of a much less exalted type.

In 1684 Locke fled to Holland, where Shaftesbury had died three years previously. Now began his acquaintance with Limborch and the other Remonstrants, on which our biographer casts so much light. Here, as always, Locke gravitated towards men of his own intellectual stamp. The Arminian or Remonstrant party were the first Protestant latitudinarians; their great heroes, Episcopius, Grotius, Limborch, etc., were all of that way of thinking. They were men of the eighteenth century, born out of due time amid the theological contentions of the seventeenth. It was from them that English latitudinarianism took its origin. "The ever-memorable John Hales of Eton" went to the Synod of Dort a Calvinist, but "bade John Calvin 'good night'" as he listened to the defence of the Arminian position which Episcopius made. From him the latitudinarian line of descent is traceable through his pupils Falkland and Chillingworth, though Whitchcote, Wilkins and others, "all of them great readers of Grotius," down to Locke's own days, when latitudinarianism was becoming the fashion, and the new theory needed nothing so much as an able expositor, such as Locke showed himself. The subject had occupied his attention from the period of the Restoration, and possibly even earlier; for Dr. John Owen preached Calvinism, Independency and Toleration during his government of the University. In 1667 he drew up an (unfinished) "Essay concerning Toleration," in which he anticipated the positions of his famous three letters of 1685-92. His grounds are those which Jeremy Taylor put forward in the *Liberty of Prophecy* (1647) and forgot to act on when the Restoration made him Bishop of Down. He argues, that is, from the uncertainty of all beliefs, the wisdom of tolerating all which do not tend to subvert society. The argument goes no further than to urge toleration to all those who believe that all things are uncertain, and that there is no absolute ground for human faith. For any church or party which claims certainty of belief, as Locke himself said of the Church of Rome, cannot be included within the pale of toleration. It cannot, he thought, regard indifference as lawful; it cannot come within the compact of mutual forbearance implied in tolerant legislation. He stood on the ground taken by the Whigs in their exclusion of Catholics from political power—the ground held by the Tories in opposing Catholic Emancipation at a later date. For a

long time this ground was thought inconsistent, and general toleration of all sects indifferently was held to be true liberalism. But we now see further than this; Locke's truest disciples are Falk and Bismarck; his best exponents are the *Pall Mall Gazette* and Prof. Huxley, who declare that the State cannot tolerate the existence of any sect which claims more than probability for its belief. For, if the world is to be forever divided into believers who will tolerate no opinions, and unbelievers who will tolerate anything that calls itself opinion and claims to be nothing more, the two parties will forever come into collision, and each must persecute the other.

Locke's doctrine on this head connects itself with the doctrine and the method of his famous *Essay concerning Human Understanding*, which he sketched in 1671 and published in 1690. All previous philosophers, he complains, had occupied themselves with the subject of Being, had plunged into the boundless realm of ontological speculation. He would first propound the query what the human mind was capable of doing, and thus define with accuracy and precision, its powers and their limitations. He thus put forward the psychological method of inquiry as the true one, and speedily reached conclusions, especially on the derivation of knowledge from experience, which remanded the speculations of Plato, Bruno and Spinoza to the realms of cloudland. His famous conclusion, *nihil in intellectu quod non prius in sensu* ("there is nothing in the intellect which was not first in the sense"), seemed to set aside any possible faculty for apprehending the absolutely true, and to confine men to lower fields of thought and speculation, and to convert all truth into likelihood and opinion. But the very terms of his statement assume the truth which he denies the possibility of our knowing, and when Leibnitz added to his statement the three words *nisi intellectus ipse* ("except the intellect itself") he opened all the gates which Locke thought closed forever. Others than Leibnitz found that key and used it. Jonathan Edwards, the greatest intellect and the one great philosopher whom America has produced, was a devoted disciple of Locke, but he speaks of *Being* in a way which reminds us of Plato and Spinoza, and even makes virtue itself to consist in "the love of pure Being." As to Locke's own ethical doctrine it was of a piece with his philosophy, for he was a utilitarian, making all virtue consist in the intelligent pursuit of happiness. With his convictions as to the limitations of the intellect, he could go no deeper than this, and the rational divines of his and

the following generations were quite contented with it. They (and some earlier divines) presented Christian faith as resting on the balance of probabilities contained in the "external evidences" of Christianity, and the "sanctions" of religion, as its threats of future punishment and its promises of rewards. As the old Puritan Samuel Shaw declared, a Mohammedan sort of Christianity was coming into the world,—a sort that arose, Prof. De Morgan used to say, too late for Dante to put its adherents into the *Inferno*, where they would have been eternally tossed out of a red-hot dice box upon a red-hot gaming-table. Of the general influence which Locke's philosophy exerted on the history of religious thought, Carlyle says: "Locke, himself a clear, humble-minded, patient, reverent, nay, religious man, paved the way for banishing religion from the world. Mind, by being modeled by men's imaginations into a Shape, a Visibility, and reasoned about as if it had been some composite, divisible and reunifiable substance, some finer chemical salt, or curious piece of logical joinery, began to lose its immaterial, mysterious, divine—though invisible—character: it was tacitly figured as something that might, were our organs fine enough, be seen. Yet who had ever seen it? Who could ever see it? Thus by degrees it passed into a Doubt, a Relation, some faint Possibility, and at last into a highly-probable Nonentity. Following Locke's footsteps, the French discovered that as the stomach secretes Chyle, so does the brain secrete Thought. And what, then, was Religion? what was Poetry? what was all high and heroic feeling? Chiefly a delusion; often a false and pernicious one."

Locke's speculations seem to have taken shape during or even before his residence in Holland, but the most important of them were given to the world after his return. He came back about three months after King William had got possession of the throne. From his return until 1696—with one interval, 1692–5—he held office under the Government, and took a lively share in the controversies of the times. His *Letters on Toleration*, his great *Essay concerning Human Understanding*, and his *Reasonableness of Christianity*, were themselves the occasion of prolonged and vigorous controversies, and Locke always dealt with his opponents with a calmness and a fairness which are none the less admirable because in close keeping with his mental constitution. After the retirement of his friend Somers from the Administration, he ceased to

take any active part in politics, and in fact was visibly in the decline of life. He was surrounded by warm friends whom he loved in a sturdy, solid, unsentimental way, rarely falling out with any of them. One of these was Isaac Newton, who shared Locke's Arian views in theology, but, while he far surpassed Locke in genius, showed less common sense in devoting his time to the apocalyptic exposition of Daniel and the Revelation. Others were the talented Irishmen, Thomas and William Molyneux, whose names are inseparably associated with his. Others were members of the Society of Friends, now in its second stage of religious life, having swung from the extreme of singularity to the extreme of reasonableness, and already on the way to become the pet sect of the eighteenth century, and to earn the praises of Voltaire. Another was the good Unitarian merchant, Thomas Firmin, at whose house latitudinarian clergymen like Locke's friend Tillotson used to meet, and whose life shook John Wesley's belief that a man must believe in the Trinity to be a good Christian. But above all and before all the rest was Lady Masham, daughter of the great Cambridge divine, Dr. Ralph Cudworth, herself a woman of remarkable intellectual power, as may be seen from the writings which she published anonymously, especially her refutation of Norris of Bemerton. In her husband's home, at Oates in Essex, Locke resided from 1691, with few interruptions, until his death in 1704. His friends had become as indispensable to him as he to them, and here he enjoyed the quiet he loved, and the honors which by this time were gathering about his name. He lived to see his works the textbooks of Universities—to see the great legislative measures he had urged, tested and approved by experience—to see the tendencies and tempers of his own mind become dominant throughout the educated classes of his country. Could he have foreseen the great part he was to play in the history that followed, he would have contemplated it with no undue elation. He died as he lived, the best representative—after Shakespeare—of the stolid, sober, Anglo-Saxon race which forms the substratum of English society. But we feel with new force as we survey his life and his writings, that England is none the worse for the infusion of Dane and Norman—of Miltons and Cromwells, Johnsons and Wesleys—the element which stirs the English blood to enthusiasm, turns opinions into convictions, and lifts men above the level of common sense into those higher regions of faith, earnestness and inspiration, whose air is native to the human spirit.

We part from Mr. Fox Bourne with thanks for a well written book on a subject worth writing about. If we cannot always share his admiration for his hero, we can always appreciate the results of it in careful statement and patient investigation. And his American publishers have done their part admirably in presenting his book to the public, though we notice a few misprints, especially in dates.

R. E. T.

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### NEW BOOKS.

STUDY OF HAWTHORNE. By George Parsons Lathrop. 18mo.  
Boston: Jas. R. Osgood & Co.

This is a pains-taking account of Hawthorne's life and works, by a genuine admirer. All the great American writers deserve far more study and analysis at the hands of their countrymen than they have yet got, and the volume moves in the right direction. If there be such a thing as a national style, it is high time we had a glimmering of what ours is. But we lay this book down, notwithstanding much interesting, and to us new information, and a great deal of suggestive comparison, without the distinct and orderly impression we had hoped to receive from it. We do not know whether it is because Mr. Lathrop has undertaken too much in attempting to combine the functions of biographer and critic, or whether the obscurity arises from his failure to separate the offices sufficiently. On the same page, and frequently in the same sentence, he will relate a fact in Hawthorne's life and argue from it some effect in his works. There is an effort to reconstruct the Genius from his ancestors, from his birthplace, his early reading; to trace Milton and Bunyan into him, and to parallel him with Balzac, George Sand, Irving and Poe. He is held up as an American genius in contradistinction to the types of other nations. Now we consider this, with all respect be it spoken, a very defective critical method. It is true, that every thoughtful man does make just such investigations and theories, and that they are to him very interesting, great aids to memory, and good frames to hang his ideas in; but then, on the other hand, they are apt to be fanciful, and at the best, they lie in the region of dense uncertainty. We once knew a man who thought all Frenchmen resembled monkeys, and his reasonings on the subject were profoundly satisfactory to himself, and greatly conducive to sprightly conversation. Such literary judgments—we are not referring to the monkey theory—rest on a few out of an immense number of unknown or forgotten facts, each one of which alone and in relation to others has some,



but some uncertain weight in the problem. Perhaps the most trivial incidents have had the deepest influence. Certainly no one of us could pretend to a satisfactory explanation of his own character and temper at this moment. Whoever undertakes to account for a literature, a school, or an author, or having done so to compare them with other literatures, schools, and authors, and explain the difference, treats his reader to an amount of conjectures that makes the driest certainty absolutely delicious. It is fair to say that much of this is suggested by, rather than said of, the particular book in hand.

In his honest admiration of Hawthorne, we fear Mr. Lathrop occasionally bears too hard on other American writers compared with him. Notably Poe, whose horrors have often brought him into contrast with Hawthorne's mysterious vein, suffers at his hands. His estimate of him is certainly too low and unnecessarily severe. His prose was as original, crisp and well formed as possible. And we fail to find in his tales, which appear to us to have been put together with the study and deliberation of a puzzle, the subjective tendency which Mr. Lathrop deplors. In this connection it is of interest to revert to the criticism of Poe himself upon Hawthorne: "Allegory is at war with the whole tone of his nature, which disports itself never so well as when escaping from the mysticism of his Goodman Browns and White Old Maids into the hearty, genial, but still Indian-summer sunshine of his Wakefields and Little Annie's Rambles. Indeed, his spirit of metaphor run mad is clearly imbibed from the phalanx and phalanstery atmosphere in which he has been so long struggling for truth. He has not half the material for the exclusiveness of authorship that he possesses for its universality. He has the purest style, the finest taste, the most available scholarship, the most delicate humor, the most touching pathos, the most radiant imagination, the most consummate ingenuity; and with these varied good qualities he has done *well* as a mystic. But is there any one of these qualities which should prevent his doing doubly well in a career of honest, upright, sensible, prehensible, and comprehensible things? Let him mend his pen, get a bottle of visible ink, come out from the Old Manse, cut Mr. Alcott, hang (if possible) the editor of *The Dial*, and throw out of the window to the pigs all his odd numbers of the *North America Review*."

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THE CENTENNIAL DECLARATION OF HUMAN RIGHTS, AS EXEMPLIFIED IN THE NATURAL LAWS OF MARRIAGE, LEGITIMACY, AND LIFE IN GENERAL. By Geo. J. Ziegler, M. D. Philadelphia: Geo. J. Ziegler.

"Love goeth where it listeth"—that we know, but we may not know the laws of its genesis and of its distribution. Indeed, we fear that if laws there be of human amativeness and of marrying

and giving in marriage, they are shut out by a merciful Providence from the ken of mortals that are exceedingly given to marrying, if not to loving. Can any one imagine the consequence of a careful study and observance of the so-called physiological laws of matrimony—how hampered all spontaneous feeling would be—how anxiously would the individual exercise his, or her judgment upon the physiological merits of fatness or leanness, of temperament, of dark or light hair, and of other transient personal traits that we have to-day and have not to-morrow, according as the world uses us well or ill?

It is not the fault surely of a large class of writers that society is ignorant upon the physiological relations of marriage. The bibliography of this kind of literature is immense, designed apparently to suit all sorts of tastes. In such a field, of course, there are good books and bad books, the usual consequence of moral and literary excellence being reversed,—the bad receiving more attention than they deserve, while those that are written for the purpose of instruction are left unread.

But upon the subject of matrimony, even in its physiological aspects, society unwittingly does very well. There is every reason to believe that the majority of married people are happy, and that the majority of their children are healthy, the very results that writers claim are gained by observing these so-called laws. Instinctively people seek those matrimonial relations that are good for them; and that the unions generally end well is ample proof that this instinct may be trusted. Theology is a better teacher than science in matters matrimonial; and its teachings may be summed up something in this form: Take no heed (physiologically speaking) as to whom you should marry, but live virtuously and cleanly, and marry just as soon as there is the wherewithal to fill more mouths than one; fear God, love one another, and honor—since we cannot say the king—an honest politician, for he is more precious than gold. Know and believe in this one and simple law of marriage, which is physiological, theological and wholly divine;—that we marry in obedience to a Power that numbers the hairs of our head in His infinite solicitude, that looks after the fitness and beauty and perpetuation of man and flowers alike. Here there is scope for a sexual selection spontaneous, unfettered, that insures happiness and health as a natural sequence of its unconscious freedom.

In Dr. Ziegler's book there is much to be commended and much to be found fault with. All that he has to say upon sexual disorders, is well said, and deserves attention, with just a suspicion of radicalism about it; but we can forgive a man's being a radical when he writes with the motives of a reformer upon the subject of alcohol, tobacco, and venereal diseases. Upon the main theme of the book, that of marriage, the author, with the best intentions in the world, we presume, advances views that are not conducive to

either the happiness or safety of society. We cannot coincide with his theory of "natural marriage." In the majority of states there are laws to punish the relations of the sexes to which the author applies this term. As a large part of the book is not suited to a popular review, it would be an injustice to the author to condemn without giving the reader a chance to judge for himself. To those who are interested in literature of this character, and are specialists enough to sift the good from the bad, we may perhaps commend the book; but it would certainly be a mistake to give it a general circulation.

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A WOMAN'S WORK. Letters and Correspondence of Caroline Herschel. Edited by Mrs. J. F. Herschel. New York: Harpers. 1876.

Caroline Herschel was, in her day, a very notable person. The sister of a famous astronomer, Sir William Herschel, she took more pride in his fame than in any of her own achievements, and yet her distinction as an astronomer was such as to secure for her many awards of scientific societies. The filial devotion of the wife of another Herschel of our own time, has put upon record the charming memoir and correspondence of Caroline Herschel, in a volume published by Harpers, which, more than her own scientific publications, will make her name familiar and perpetuate a devotion to science and a self-abnegation that will always be instructive. Living to ninety-eight, Caroline Herschel spent the last twenty years of her life in almost absolute retirement, still doing a fair share of scientific work for her nephew, Sir John Herschel, and thus enabling him to carry on and extend the observations and researches of his father. But it was only to do honor to his memory that she made a record of her own work, and with his death she felt that her life was in the past, dedicated to the task of completing his labors and of encouraging his son in following the father's pursuit of science for its own sake. Her long life extended from the Seven Years' War, which was not without its influence upon her childish experiences, through the American War, the old French Revolution, the rise and fall of Napoleon, and all the varied events of almost a century; yet she scarcely in writing her memoirs mentions public events, or speaks of other occupations than that of "minding the heavens," which engrossed all her own and her brother's thoughts. Indeed, even of her own important contributions to science she thought little, and counted it her great good fortune and distinction to be able to claim that she was of some use in helping that brother on in his great work. When in her old age, an old age that was full of interest and anxiety for those who were carrying on the astronomical researches that had for ever connected the name of Herschel with astronomy, she laughingly accepted the honors thrust upon her by scientific societies, but she took them only as

tributes to the service she had rendered her brother. With the small preparation that a narrow home life could give, she started out to help her brother in his original career as a musician and followed him to England to be his helpmeet and housekeeper; but her force of character, her indefatigable industry, and her indomitable ambition to keep abreast of all his interests, enabled her to join in the pursuit which gave him fame, that of astronomical research. Undaunted by poverty and the necessity almost of inventing as well as manufacturing his apparatus, he persisted in his work, and it was only a poor help that he found in the royal patronage which promised so much and performed so little; but through it all Caroline Herschel was his untiring scribe and co-worker. Forty years of unceasing scientific work, and for a long time with the care of all housekeeping and other domestic provision, might well have made her impatient of other men and women, who with greater advantages made little or no use of them, but Caroline Herschel seems, all through her life, to have had wonderful sweetness of temper and a self-abnegation that of itself ought to make her memory precious. Her discoveries of eight comets, her immense labor in the reduction and record of vast series of observations, her readiness in assisting her brother in perfecting machinery for his work, her catalogues and index of stars for the use of astronomers, all these constitute her claim to be recognized as an independent authority in science; but although she worked until she was seventy-five, it was never from any other motive than to assist her brother in his life or to complete the record of his work after his death. After fifty years of such companionship, she returned to Hanover, and, naturally enough, found life there dull and common-place, wanting the great impulse of her brother's scientific pursuits. Still her love of science encouraged and drew encouragement from the work of the son of that brother; and thus the long years of her exile from her old post, the observatory, were softened by the knowledge that the name and fame of the family were still prominent in her all-absorbing science. She lived, however, altogether in the past, and found the present not only strange but annoying. Her life is thus still another lesson not to pray for length of days, except in so far as it gives time for diligent labor in real work.

## BOOKS RECEIVED.

- Mental Powers of Insects. By A. S. Packard, jr. *Half-Hour Recreations in Natural History Series*. 12mo. Pp. 32. 25 cents. Boston: Estes & Lauriat. [Porter & Coates.
- Sidonie. From the French of Alphonse Daudet. 16mo. Pp. 262. Cloth, \$1.50. Boston: Estes & Lauriat. [Porter & Coates.
- The Rationale of Market Fluctuations. By Arthur Ellis. Second Edition. 12mo., Cloth. London: Effingham Wilson.
- Modern Materialism in its Relations to Religion and Theology. Comprising an address delivered in Manchester New College, October 6, 1874, and Two Papers reprinted from *The Contemporary Review*. By James Martineau, LL. D. With an Introduction by Henry W. Bellows, D. D. 18mo. Pp. 211. Cloth, \$1.25. New York: G. P. Putnam's Sons. [Porter & Coates.
- Sir Roger de Coverley. Consisting of the Papers relating to Sir Roger which were originally published in *The Spectator*. With an Introduction by John Habberton. *Select British Essayists*. 18mo. Pp. xii. 130. Cloth, \$1.00. New York: G. P. Putnam's Sons. [Porter & Coates.
- The Childhood of the English Nation, or the Beginnings of History. By Ella S. Armitage. 18mo. Pp. xii. 247. Cloth, \$1.25. New York: G. P. Putnam's Sons. [Porter & Coates.
- The History of England, from the Commencement of the 19th Century to the Crimean War. By Harriet Martineau. New Edition, 4 vols. 12mo., cloth, per vol. \$1.00. Philadelphia: [Porter & Coates.
- Silver and Gold, and their Relation to the Problem of Resumption. By S. Dana Horton. New edition, revised and enlarged. 8vo. Pp. 196, cloth. Cincinnati: Robert Clarke & Co.
- Art in the House, with Special Reference to the Economy of Collecting Works of Art and the Importance of Taste in Education and Morals. By W. J. Loftie, S. S. A. *Art at Home Series*, No. 1. 12mo. Illustrated. Pp. xii. 100. Cloth flexible, \$1.00. Philadelphia: Porter & Coates.
- Suggestions for House Decoration in Painting, Woodwork & Furniture. By Rhoda and Agnes Garrett. *Art at Home Series*, No. 2. Illustrated. 12mo. Pp. viii. 90. Cloth, flexible, \$1.00. Philadelphia: Porter & Coates.
- The Convicts and Their Children. By Berthold Auerbach. Translated by Charles T. Brooks. *Leisure Hour Series*. 16mo. Pp. iv. 281. Cloth, \$1.15. New York: Henry Holt & Co. [Porter & Coates.
- Philosophical Discussions by Chauncey Wright. With a biographical sketch of the author by Charles Eliot Norton. 8vo. Pp. xxiv. 434. Cloth, \$3.50. New York: Henry Holt & Co. [Porter & Coates.
- "The Jukes." A Study in Crime, Pauperism, Disease and Heredity. Also further Studies of Criminals. By R. L. Dugdale. With an Introduction by Elisha Harris, M. D. 8vo. Pp. 118. Paper, 50 cts. New York: G. P. Putnam's Sons. [Porter & Coates.
- An Introduction to Political Economy. By Arthur Latham Perry, LL. D. 12mo. Pp. 348. Cloth. New York: Scribner, Armstrong & Co.
- Majolica and Faience: Italian, Sicilian, Hispano-Moresque, and Persian. By Arthur Beckwith. With Photo-engraved Illustrations. 12mo. Pp. 185. Cloth. New York: D. Appleton & Co. [Porter & Coates.
- Journal of the National Indian Association in aid of Social Progress in India, for the Year 1876. Crown 8vo. Pp. 384. Paper. London: Henry S. King & Co.
- Six Weeks in Norway. By E. L. Anderson. 16mo. Pp. 80. Cloth. Cincinnati: Robert Clarke & Co.
- The Heritage of Langdale. By Mrs. Alexander. *Leisure Hour Series*. 16mo. Pp. 431. Cloth, \$1.25. New York: Henry Holt & Co. [Porter & Coates.
- Annual Report of the Board of Regents of the Smithsonian Institution for 1876. Illustrated. 8vo. Pp. 422. Cloth. Washington: Government Printing Office.

THE  
PENN MONTHLY.

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APRIL.

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THE MONTH.

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THE prolonged negotiations which followed the Constantinople Conference have at last resulted, it seems, in an approach towards an understanding between the great Christian Powers. The Russian note, despatched at the close of January, busied the diplomatists to find an answer to it, and about the middle of March the formula needed for the basis of a reply, common in substance but differing in the terms to be used by each, was reached. Russia was to be complimented on her zeal for the Turkish Christians; the failure of the Conference was to be shouldered as an indignity to the collective honor of all the Powers; and a mild suggestion of the advantages of peace and disarmament was to crown the whole. That is to say, the Czar was to be let down easily and gently, if he chose to dismount the apocalyptic steed of war. But this conclusion was not reached, it seems, without proposals and counter-proposals exchanged between England and Russia, with the cognizance of the other powers. England especially asked that Turkey be given time, say a year's time, to redeem those lavish promises with which she had flooded the Conference, and which the Conference had declared to be valueless in the absence of substantial guarantees. Yes, Russia would agree even to that; "But when the year is up, what then? Will the other Powers unite with us in an expedition against Turkey if the promises have not been redeemed." To which they all in chorus responded—with glances at the grow-

ing chaos in Constantinople, in Albania, in Bosnia, and where not—"No, never; don't propose such a thing." Prince Gortschakoff seems to have taken a hint from this analytic method of diplomacy, and so just as the suave answers to his January note were receiving the last touches, he telegraphed, "Don't write till you hear from me," and despatched Gen. Ignatieff to Berlin and Paris, but not to London. No, he was not to go to London; Schouvaloff was quite enough to say all that was to be said there, and the dignity of the Czar might be compromised by any show of anxiety as to what the English Government meant to do. But if while he was in Paris any English minister chose to invite him across the channel, there was no need of being surly about the matter. Such are the devious ways of the diplomatists. Well, at Berlin and at Paris he succeeded perfectly. The new Protocol which he carried seems to have won Bismarck's admiration; the Chancellor would sign it—would do his utmost to get Austria's signature also; the Imperial—or shall we say, Chancellorian—triumvirate must march together in this business. France thought it a trifle; a bagatelle that anybody might assent to. She would agree to it, and was rather disposed to make little of it. Then came the invitation just to step across the channel and accept of Lord Salisbury's hospitality, and have a talk over matters in the East. The Cabinet had already had the Protocol before them, and had not found themselves able to treat it as cavalierly as some previous proposals. According to the first and the most intelligible account of it sent us by cable, it affirms chiefly the collective responsibility of the Great Powers for the internal condition of European Turkey—it gives the Porte a period of probation, but leaves its length to the discretion of the Powers—and it demands of Turkey an explicit recognition of the principles contained in the document, and an adhesion to its text. The English Government have virtually acceded to the plan, provided certain amendments are added to it, and one of these is the reduction of the Russian army to a peace footing. What the others are is not yet disclosed, nor is it known whether they are intended to defeat or merely to modify the proposal of Russia. If the latter, there seems every likelihood of an agreement between the Great Powers. But we doubt it.

But what if Turkey reject it, as she rejected the proposals of the Conference? She is in the mood to reject almost anything that infringes upon her autonomy as an independent

power; she would not now assent anew to the stipulations of the Treaty of Paris, much less to a still more definite and explicit assertion of the fact that she has no claim to be regarded by Europeans as an independent sovereignty, but is under tutors and guardians, who may at any moment invade her territory if she do not govern her subjects according to their ideal of justice rather than her own. It is possible that her assent is only demanded as in so far a salvo to Turkish dignity and a guarantee for the peace of Europe, that the Protocol will go into effect without her assent, and that the arrangement is in the main an agreement between the Christian Powers as to what they will do to her in the last resort. In that case the later negotiations have carried the Eastern Question one step nearer to a solution, since a programme for the future will have been sketched out, which does not depend for its validity upon the consent of Turkey. But a more indefinite or ambiguous programme it is hard to imagine. It sounds like Dogberry's orders to the watchmen. When the day of grace for Turkey will be over, and what is to be done in that event, is left to the judgment of six judges, none of whom is to be bound by the decision of the rest, and nearly all of them swayed by conflicting interests. The three more Easterly powers are the only ones likely to take any united action, and they might just as well step in now instead of binding themselves to wait for a new demonstration of what has been demonstrated repeatedly, *i. e.*, the utter unfitness of a Mohammedan Government to rule over a Christian population on European soil.

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WE confess that we are puzzled to see why Russia has proposed any such agreement. She was in no fear of a collision with any of the Great Powers, if she proceeded to attack Constantinople, without any further negotiations. She does sacrifice much of her prestige as the champion of Oriental Christendom, if she retreats from her position under cover of this agreement. There are three possible solutions of the puzzle. The first is, that the well-known pacific character and desires of the Czar have led him to place himself in an attitude of opposition to the wishes of his people and that these negotiations are meant to secure such an appearance of guarantees as would enable him to calm the warlike excitement at home. But this we disbelieve for many reasons, some of them such as we cannot publish here. The second is, that Turkey being certain to refuse this new arrangement, Russia thinks she



will be in a better position to begin the war after that refusal—to begin it either singly with the certainty that she will meet with no interference, or in union with one, several or all of the Great Powers. On this point it is impossible to speak positively, until the publication of the Protocol shows us what points Gortschakoff meant to gain by its adoption. The third is, that the signs of increasing disorder and demoralization in Turkey are such as make delay the wisest policy for her enemies. All the accounts we are receiving from Turkey seem to suggest this. The fanaticism of the multitude has been inflamed to the utmost by wandering dervishes and by the mosque officials, and has broken out into antagonism to the Sultan and his advisers. The banishment of Midhat Pasha, it has come to be known, was caused by that minister's honesty in insisting that the funds gathered for the prosecution of the war should not be squandered upon the pleasures of the harem, and the zealots demand his recall. The agitation has spread to the provinces and to the army, while Stamboul is moved by an intense excitement, which is not allayed by the repeated arrests of ringleaders. In the provinces, wholesale disorder prevails; the irregular troops, chiefly Circassians, plunder the country districts in organized bands, and outrages of the same vile sort as those in Bulgaria are continually reported, even in the newspapers of the capital. The intense religious zeal which the Porte has taken trouble to excite, and which with a really great zealot at the head of affairs, might have done wonders in the defense of Turkey, seems to have been turned against the government, and the Empire of the Ottomans is now a house divided against itself. An attack from without might be its salvation; the mere persistent threat of attack without the reality may be its destruction, and Russia may be wise in preferring this course.

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THE news from India, giving the budget for the coming financial year, does not present a very cheerful outlook for that Empire dependency. The debt, which was already a source of anxiety and distraction to every Indian statesman, has increased nearly nineteen million dollars during the year just ended, and is expected to increase by thirty-two and a-half millions during the coming year, of which only twelve and a-half millions can be raised in India, so that the greater part must be borrowed in London, thus increasing the need of the Indian Government to raise money (gold) to pay

interest in London, and its consequent necessity to sell exchange (silver) on Calcutta. Nor is there any prospect of this debt being paid off; the taxation of the people of India is already excessive, is incapable of increase, and—Earl Mayo, the ill-fated Governor-general, said—is the source of much of the wide-spread discontent of the people. British rule has so impoverished the people and reduced them to such idleness by the destruction of their manufactures, that they are not able to support the costly government which has been set over them—a government whose officials are paid high salaries because they are sitting as it were on a powder keg, and who save up those salaries to spend in England, instead of scattering them among the people from whose earnings they are subtracted.

There is just one pleasing fact in the whole situation, viz: the retention of the duties on imported cottons, whose abolition was promised to Manchester, and as good as commanded by the Disraeli Ministry. The Government cannot afford to dispense with the receipts from those duties, so that they must be retained. This, together with the decline of exchange on Calcutta, will give the Bengalee a chance to go on with the reëstablishment of the cotton industry in India.

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ADVICES from Japan inform us that the long-threatened insurrection of the Samurai of Satsuma had broken out, and the conflict between the rebels and the imperial troops had begun. The Samurai are the feudal aristocracy of Japan, the military caste whose members alone could wear two swords, and were supported out of the Treasury. The recent revolution, which restored the rightful authority of the Emperor, led to the destruction of all their privileges, the prohibition of their marks of distinction, and the abolition of their pensions. In most districts the Samurai submitted cheerfully, but in Satsuma the conservative spirit was strongest, and these alterations were fiercely resented. So also was the peaceful policy of the Government, which, by resisting the cry, "On to the Corea!" prevented these soldiers by tradition and profession from pushing their fortunes. Several years ago such an outbreak was feared, and the best informed observers regarded it and its speedy suppression as equally certain events.

It is not wonderful that Japan has to encounter insurrections; the wonderful thing is that they are not more numerous. There is

no example in the world's history of a nation's relinquishing with such rapidity and unanimity its own traditions and usages, to adopt others from without. It is true there had been a long preparation for the change. The country had fairly got beyond its old institutions, before it began to cast them off. But we fear that much of what it has adopted, has no true root in the national life. As one of the Japanese officials declared in a report to his own government, Japan must become Christian if she is really to appropriate the benefits of Christian civilization. At present she is importing the fruits of that better civilization, without the roots. And of the Christianization of Japan there is no immediate prospect. Educated Japanese, the graduates of European and American Colleges, wearing stove-pipe hats and black coats, are to be seen in the Shinto Temples, practising all the rites of their primæval religion. They have fallen into the mistake, too common among ourselves, of not recognizing the normative influence of religious belief in determining the character of social life and intellectual activity.

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THE inauguration of President Hayes seems to be already regarded as having begun a new era in our political history, and if he do not falsify the expectations he has excited by his conduct thus far, he will be remembered as one of the best Presidents we have ever had. In the selection of his Cabinet he made the first great break with bad traditions. He neither accepted his counsellors at the dictation of the party and its representatives, nor, like General Grant, selected them as he would a military staff, on the ground of personal preference. He has neither taken the somebodies who were pointed out to him, nor the nobodies whom he thought he could get on with. He has sought to represent different sections of the country, different types of political conviction among and even outside of his own supporters. Two or three of his selections are comparatively unknown men in a national sense; but Mr. Evarts, the new Secretary of State, Mr. Sherman, the Secretary of the Treasury, Mr. Schurz, Secretary of the Interior, are men of the first eminence in politics; while the others (Mr. Thompson, Secretary of War, Mr. Devens, Secretary of the Navy, Mr. Key, Post-master General, and Mr. McCrary, Attorney-General), are all men with a record behind them, as they have served in Congress or in the Army, or on the bench of their States. The selection of Mr. Key from the ranks of the southern Democrats, and

his acceptance, with the almost unanimous consent of his friends, is of especially good omen for the obliteration of sectional party lines.

Mr. Hayes begins his administration with the extraordinary good will of his fellow-citizens. Everybody is disposed to look for great things from him, and the first movements of his policy aid in exciting these large expectations. But this very state of public opinion is such as may well excite the apprehensions of himself and his best friends, for it is liable to violent and excessive reactions. Let him make but half a dozen good round blunders, such as his predecessor sometimes served up to us in the course of a month, and he will find his most zealous eulogists becoming his severest censors. As yet he has made none; and yet it must be said that the timber of the cabinet is not equally strong and trustworthy throughout, as was "the Deacon's One Hoss Shay." The new Secretary of the Interior, for instance, is a man of many brilliant qualities and personal excellencies, but he is not a man of any business experience, and therefore has no special fitness for that post. Nor, as a German of the Germans, is he likely to prove himself a very impartial judge in case of disputes between the religious bodies whom the Government has enlisted in the work of Indian management, and their unfriends in the military and the civil services. And this is no trifling matter, for the influence of those bodies is—as Mr. Hayes very well knows—one of far greater extent and importance than such men as his new Secretary are apt to suppose, and in a case like this they are more likely to act in unison than is usual with them.

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IN the matter of Civil Service Reform, the new Administration has begun well. It declares that it will make no removals except for cause shown; that it will try to retain and to promote men of experience in the service of the departments; and that while willing to receive information from Congressmen and others as to the best men for vacancies, it will permit no urging of claims to reward for political services. It recognizes no claims except such as are based upon actual service in the department.

This is the more cheering, as it shows that Mr. Hayes has clearer and more practical notions on this head than those which have been urged on the public during the last ten years by a number of *doctrinaires* who are represented by the editor of *Harper's Weekly*.

In their view, the main thing was to get all the people of the United States to pass a competitive examination on various topics, and then to give all the offices, from the headships of departments down, to those who got the highest marks. The truth is, when the two principles of no removal except for good reason, and promotion within each branch of the service, are clearly recognized and established by law, the matter of appointment may safely be left to the Executive. In that case only the responsible heads of departments and bureaus, and the lower clerkships, *i. e.*, the highest and lowest places in the service, will be open to appointments at all. The freedom to appoint the former is necessary to the responsibility of the Administration for its own policy. As to the latter, Mr. Curtis's Boards of Examination might do some service, but they are not really necessary.

One other step towards reform Mr. Hayes and his advisers might very well take. They might get rid of the ornamental figure-heads who pose as responsible for the work of various departments, and give the appointment to the civil servants, now kept in the background, who do the work of the post. There are branches of the Government whose ornamental chiefs have made their names household words throughout the land, but are utterly incompetent to the simplest duties of their posts, and have those duties discharged by persons whom they send off to privacy when distinguished visitors—royal or other—come along. There are post offices, the selection of whose nominal heads from among several candidates has been trumpeted over the land as showing the want or the presence of a desire to reform the Civil Service, while it was no secret that the whole work of the office was done by a trusted and well-informed clerk, who held his post under one master after another, and preserved the continuity of the service in the midst of changes. Let these men be brought forward and given the distinction to which they are entitled, and the effect will be to encourage every man in the Service to struggle for that excellence which is seen to be the condition of promotion.

It is, perhaps, too much to ask that when vacancies occur they shall be filled without regard to party, or that in Democratic localities only Democrats be selected for local offices, and a fair division be made of the other offices; and yet Mr. Hayes will have effected no permanent reform *by presidential action* unless he manages to take the Civil Service as utterly out of politics as the Military and

the Naval Services are. For no sentiment will be created in support of such a revolution so long as the thirty-seven thousand civil servants are all or nearly all in connection with one party. Either a fair division must be effected, or a Constitutional Amendment must be carried forbidding removals except for just cause—the justice to be ascertained in some specified way—and establishing the principle of promotion by seniority.

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THE Republican members of Congress, who imperiled Mr. Hayes's claim to the presidential chair rather than concede that there could arise any constitutional question which it was the business of the Executive to decide, take this action of the new President, in asserting that selections and appointments are his business and not theirs, as badly as might be expected. In the Senate there was a good deal of quiet opposition to the nominations for the Cabinet, and only the universal expressions of approval and satisfaction which poured in from every quarter, prevented the rejection of two of them. Mr. Blaine in particular showed great consistency, but little of the wisdom of the statesman, in his attitude towards the President's Southern policy, and he has already reconciled many of his friends to the defeat he sustained at Cincinnati. The Civil Service reform Congressmen cannot meddle with, as it is as yet chiefly a matter of the President's refusing to act. It is a real gain to the abler and better-meaning members of both houses, because it leaves them more time for the discharge of their legitimate duties, and takes from their shoulders a responsibility that should never have been placed there. No man who has been selected for a seat in Congress because of his having anything in him, but has good reason to rejoice that he is no longer errand-boy in ordinary to every constituent who wants an office; and if it once comes to be understood that it is of no use to expect of Congressmen the distribution of patronage, men will be selected for other qualities than their skill in "lobbying" the Executive. But to a very large class of Congressmen the change is a frightful disaster. Their skill as errand-boys, and their nice sense of the variations of political influence at home among those who asked their Congressional influence at Washington, constituted their stock in trade; and now nothing but retirement to private life remains for them, if Mr. Hayes not only carries out these new ideas, but transmits them as an established tradition to his successors. To be sure, they helped to elect Mr.

Hayes upon a platform which seemed to promise something like this; but who ever expected him to interpret those promises in such a grossly literal and burdensome fashion?

A marcfiful Providence fashioned us hollow  
O' purpose that we might our promises swallow.

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THE Forty-fourth Congress has departed, leaving its "foot-prints in the sands of time." It might have been a worse body; it might easily have done better. Its strong point was its freedom from the suspicion of great "jobs," and its determination to ferret out and punish those who had been guilty of such transactions. Its weakness was in the congressional inexperience of many of its members, and the intensely partisan spirit which underlay and characterized their efforts at exposure and reform. It is a good thing that public abuses should be exposed, but it is of no good omen that such exposures are received by a large proportion of our citizens and their public representatives with exultation and triumph. It was an unhappy distribution of party influence also, which gave each party a strong control of one branch of Congress. The new Congress, in which the majority in each case is reduced to a very small figure, promises that the action of each branch shall be much less partisan in its character.

Among the worst acts of the late House was the defeat of the military appropriation bill, by attempting to saddle it with a clearly unconstitutional provision requiring the withdrawal of the national troops from South Carolina and Louisiana, and thus compelling a special session of the Forty-fifth Congress in June. The Constitution makes the President commander-in-chief of whatever army and navy Congress chooses to keep in existence. Congress can disband either, but it cannot dictate as to the manner in which it shall be used. Abuses of the President's power may be visited by impeachment, but not anticipated by restriction.

President Hayes is very properly in no hurry to solve the question which the House strove to force to a solution. He finds that complications which have grown up in the course of sixteen years are not to be untied in a breath. If he is properly represented by the reporters, he is fully alive to the necessity of an entire reconstruction of parties at the South, and of the obliteration of the color line, as well as the sectional line, from our politics. He has no notion that the North should either surrender the Southern

negroes and unionists to their fate, or should go on fostering an antagonism between them and their political enemies. Whether the sending a commission of eminent citizens to Louisiana, and the invitation to the two Governors of South Carolina to visit Washington, are the best steps to be taken first, may be open to doubt. But we feel confident that the President and his advisers see both sides of the case, and are determined not to imperil the public interests by haste.

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SIMON CAMERON'S retirement from the United States Senate was no doubt connected with the present current of events, but exactly in what way no one knows. Whether it was because Mr. Hayes exhibited too freely his skill in the short answer that exciteth instead of turning away wrath, and could not be terrified, even by the whole Pennsylvanian delegation, into retaining the younger Cameron in the Cabinet; or whether it was a paternal desire to give his darling boy a chance; or a wish to find leisure to attend to his pending breach-of-promise suit, remains altogether uncertain. This only is certain, that our great Commonwealth was stirred to her depths. Her loyalty to the house of Cameron recalls the feudal ages. It is more than a principle; it is a passion, deep, fervent, inextinguishable. Her sons will ever rally at the slogan of the chief who has scattered his favors broadcast among them—who has secured Tom a place, Dick a credit at the Bank, and Harry the patronage of some big corporation. This man is too rich to stoop to bribe and buy votes; he owns the whole purchasable political material of the State, in both parties. It all wears his collar. Had he needed Democratic votes to put his son into the seat he has vacated, he would have had them now as he had them before, when the three Democratic members elected him. Until this generation of our politicians passes away, or until the State acquires sufficient self-respect to make anti-Cameronism a test in both parties, there will be no change in this matter. And till then the Commonwealth will remain what it is—a State with less influence in the national councils than others that cast one-half or a third her votes.

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THE proposal of Harvard College, at the request of a number of ladies of our city, to open here a branch of its examinations for women, brings up once more the question of the higher education of that sex. Manifestly the contemporaries of George Eliot, Eliz-



abeth Barrett Browning, Caroline Herschell, Harriet Martineau, Frances Power Cobbe, Mary Somerville, Margaret Fuller Ossoli, Lucia Maria Child, Anna C. Brackett, Julia Ward Howe, Sarah Coleridge, Christine Rosetti, Bettina Von Arnim, Rahel, George Sand, Henrietta Hertz, Caroline Frances Cornwallis, Daniel Stern, and Rosa Bonheur, are awakening to a new idea of the capacities of their sex, and of the great service which it can render in the very paths of intellectual pursuit which were once thought too difficult for any but men. The old monkish contempt for the intellect of woman, a contempt taught in the very philosophy of the middle ages, has passed away; but the methods which grew out of that feeling, and which prevented woman from doing her best for herself and others, linger with us still. The monastic principle of the separation of the sexes is preserved in our public schools, to the great moral injury of at least our own sex; and the higher institutions of learning are as a rule closed to young women, while the higher schools carry them no farther or not so far as the pre-collegiate schools for boys. The character of our fashionable schools for girls of the higher classes has been the theme of jest and satire for full a century. Every novelist has had his sneer at their "accomplishments," and at their unfitness to train girls for either the actual life before them, or the intellectual companionship of educated men. That women have held their own so well in society, has been seen to be due to anything rather than their school training.

But while society has made these schools and their mistresses the subject of its scorn, it has done nothing to sustain the best of them in their efforts to raise the standard of education. The teacher who sees and deplores the want of something better, is not shown what to do. She was herself brought up under the system, and though conscious of its defects, she does not know to supplement them. She is bound down by bad traditions and fashions, which have full currency among her patrons, who think that their daughters need nothing better than they got themselves. She is sustained by no organized and articulate public opinion, which calls for and specifies a higher standard. She is not preparing pupils for the colleges and universities, where they will be submitted to a fair but exacting test of their knowledge. No higher institutions are exerting a steady pressure upon institutions of this class, to secure an elevation of their standard.

What shall be done then to bring to bear upon these schools the great law of the survival of the fittest and the elimination of the unfit? One solution is to put them exactly on the footing of boys' schools of the same class, by throwing open to their pupils the higher institutions of learning. Another, and a less thorough remedy, is that of examinations conducted by the higher institutions, and completed by the granting of certificates of different grades to those who pass them. This latter method is the one which Harvard has imported from England, and which is to be tried in our own city during the present summer.

For ourselves we must say that we prefer the more sweeping change. Such examinations as these are better than nothing; but when that is said, all has been said. They give a false direction to studies, by setting students to cram information, instead of deriving illumination, from books. They tend more to make demands upon the memory than upon higher faculties. Their abolition, together with that of all marks, distinctions, honors, and prizes, of everything that connects education with emulation, would be a most excellent improvement in our system.

Then, again, either the examinations cover a course of study equivalent to the higher education, or they do not. In this case they manifestly do not; they are avowedly pre-collegiate. They are, therefore, in so far a definite proclamation of the intellectual inferiority of the sex. They say to women: "We have sacred temples and richly stored treasure-houses here, to whose outer porch you may be admitted, but no farther. We have no degrees for you. We do not intend to open our stores to you, and if, without our help, you get access to them, you need expect no recognition from us. You may know the languages, as Elizabeth Barrett or Maria Evans knew them; science, as George Eliot, Mary Somerville, or Caroline Herschell knew it; philosophy, as Anna C. Brackett, Margaret Fuller and Frances Power Cobbe knew them; social science, as Miss Martineau, Miss Cornwallis and Miss Carpenter knew them. But you are women."

On the other hand, if a course of study that goes beyond the proper range of school studies were intended, it would be unjust to the schools; it would require of them to carry girls' education farther than any schools undertake to go with that of boys. And if examine on advanced topics, why not teach them also?

Our own University is more favorably situated for making the

bolder experiment than any other of the older colleges, except Columbia. Situated in the midst of a great city, with its pupils residing chiefly at their own homes and under home influences, it has no dangerous experiments to make as regards the contact of the sexes at other than the hours of recitation. Its facilities for teaching are far from over-taxed; and we repeat what we have repeatedly said in these pages, when we say that it will not be doing all that it can do for the community at large until it abolish the present invidious distinction which excludes women from its ordinary courses of study.

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### A NEW DEPARTURE.

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THE weak points of a new invention are made manifest by time and wear. The most skillful inventor never made a first machine that he could not improve on a subsequent trial. The mind's eye could not see all the defects until the parts took tangible, palpable form, and only by repeated experiments and trials could they all be made to work so as not to collide, but to each perform their part without interfering with any other. The same may be said of a constitution or code of laws—the wisest law-makers have found their best digested ordinances to work but indifferently in practice till amended by the light of experience. The framers of the United States Constitution, though wise in their generation, and bold enough to venture on startling innovations, did not create so perfect an instrument, but that it has been found necessary to make many amendments. A chain is no stronger than its weakest link, and a government that rests on a constitution is no stronger than the chain that holds it in perpetuity. The weakest link in our Constitution, though always known as such, has but recently received a severe test, and the narrow escape from serious disturbances, if not civil war, has called general attention to the negligence, if not criminality, of our public men in not insisting on its amendment.

Besides the defect in the Constitution in failing to provide in unmistakable terms for the election of the President and the counting of the votes, there are defects in the working of the system, as

universally realized, which are permitted to continue, though remediable without constitutional amendment. They are tolerated more from that dislike of innovation and change which may properly be called general lethargy, than from any conceit of present perfection. This lethargy, usually called conservatism, is most useful as a drag on hasty changes, as crude legislation leads to hasty repeals, and experience shows that bad laws are not so disastrous to public interests as good laws that are frequently changed. But changes of an important character should only be made when their necessity is so fully realized that being made they will be acceptable and will stand. Even then they should only be made after thorough discussion and mature consideration, and the first step towards them must be in the provocation of discussion. When once brought to the public attention, if they are not approved, it follows that whether just and wise, or not, they should wait.

In the following suggestions for A New Departure, nothing new in principle is proposed, but only a new application of certain ideas advanced by Mr. John Stuart Mill, in his *Essay on Representative Government*, for the creation of an influence in the British administration which has long been desiderated but never realized.

The direct object that Mr. Mill has in view in this most suggestive work, is a new rule for the creation of Life Peers, which, if adopted, would bring into the Upper House of Parliament much of the best, most practical and available talent in the United Kingdom, and tend to restore that body to its former influence, making it in reality, as in name, a branch of the government. It has long been a recognized fact that the House of Commons is the government of Great Britain, as it has been a long time since the Lords have attempted to more than delay a measure which the Commons had passed in obedience to the popular will. This diminishing influence of the Lords Mr. Mill ascribes to the lack of practical working talent among them, and which can only be secured to their body by admitting to it those leading minds which have worked their way up by dint of great ability and labor from one court to another, till called to preside over the highest tribunals. The invariable rule in the creation of Peers, is that they must be possessed of such large wealth as to be able to support the dignity and social customs of their class. Unfortunately very

few of those who have great learning or talent, or natural genius, are possessed of large wealth, and if such are needed in the House of Lords, they must come in as Life Peers. These Life Peers Mr. Mill would have selected, not through the favor or caprice of the Sovereign or Prime Minister, but for years of honest, successful labor in those positions requiring great learning and great ability. A career of this kind should entitle one to a seat for life among the Lords, and when there, their opinions would command a degree of respect and influence among the people which would compel recognition in the Commons.

Now whether this plan was practicable and feasible, or not, matters little to my present purpose; and I allude to it only to suggest, under the shadow of a great name, that something analogous may be done in this country, while yet we are not so bound to old forms and ideas as are the subjects of Great Britain. It is not proposed to increase the number or influence of either branch of Congress by any such means, but to add a new department of government to our present system, which shall have the management and control of certain interests that are now exposed to the uncertainties of party contests, and to the whims and partialities of individuals. The public interests should be conducted as far as possible without regard to the advantage of individuals or classes, but solely for the general good; and every branch of executive power should be restrained within fixed limits by the organic law, so that government should appear impersonal, and its penalties and blessings fall on all alike as impartially as the dews and rains of heaven.

The rule that government should never engage in competition with individual enterprises is recognized as an axiom in political economy. But there are certain things to be performed that can only be properly performed by the government. Among these are the coinage of the precious metals and the management of the Post Office. The telegraph should be under the same control, and equally with them be a government monopoly.

The postal system of every nation has, from the very nature of the work required, been commenced by the Government, and in every case to give it efficiency it has been made a monopoly. In early times the post was established rather for the convenience of rulers than for the benefit of the people. In its development to its present efficiency it has been found necessary to make the carrying

of letters a government monopoly, prohibiting individuals and companies from transmitting them except by first paying postage. By having this monopoly, the government has been able to give the whole country the benefit of the mail service, and make it nearly self-sustaining. Except for carrying it into remote and sparsely settled sections it would be entirely so. But were the carriage of letters left open to private competition, the dwellers in remote regions would either be unserved entirely, or at a cost beyond the means of most pioneers. Along the main routes and between large cities it might and probably would be at a cheaper rate than it now is. But, for a general mail service a government monopoly is indispensable.

Yet this necessity of keeping the mail service a monopoly, while its management devolves on the executive, encumbers the government with a duty that it ought not to bear. It is also unpopular, because of the centralization of power in the hands of the President. A great and crying evil with us is that the central government has too much power; that the Post Office Department alone gives the existing administration an organization of office-holders obedient to its will and effective in prolonging its power. The evils and dangers from this source are doubtless greatly exaggerated, as probably not one in twenty of the deputy postmasters, throughout the country has any more influence, or tries to exert any more, from the fact that he derives a few dollars quarterly for taking care of a little village or cross-roads post-office; but in the larger towns, the postmastership is regarded as a political prize and is given as a rule with partisan objects. The postmaster who draws a liberal salary is expected to be not only an obliging official, but an active politician, ready to give his services to the Administration and to the Senator or Representative who may influence his removal or continuance.

This is certainly an evil, and the question presents itself whether or no the whole Post Office Department may not be so organized as to be no longer a political engine, but an arm of the government, no less efficient than it now is, though in its *personnel* entirely independent of the existing administration.

Had the telegraph come into use a century or two<sup>or</sup> earlier than it did, when large enterprises were seldom entered upon but under government patronage, and to give wealth and power to the sovereign, doubtless, it would have commenced, like the Post Office,

as an arm of the government, and grown into use as a public necessity to be maintained by royal authority. It has come to this already in most European countries,—the business having been taken away from private companies and consolidated into one government monopoly. But in this country the business is still in the hands of private companies, one of which is so rich and powerful that up to this time it has been able to defy the government and prevent it from attempting an opposition.

That the whole telegraphing of the country can be performed more cheaply and efficiently by one company than by several, is self-evident. For this reason, it should be a monopoly. This monopoly should of course be the government, for no private company having a monopoly ever did or ever will exist for any length of time without abusing its privileges. Even now we find that where there is but one line between two points, the charges are about double what they are for the same distances between towns where there are competing lines, or rather competing stations at both.

Telegraph lines to be self-supporting must be many thousand miles in length, and so organized as to collect the news and bear the messages from thousands of different points. The lines of one company can of course do all the business on any or all routes at cheaper rates than it can be done on two or more. The expenses of building and operating more than one must necessarily be greater than those of a single company which should do all the business. As well might there be two railroads running through the same country parallel to each other, competing for the same passengers and freight, as the lines of two telegraph companies passing through the same towns and both equally convenient to all the people along the route. If there is but one line, the rates are sure to be much higher; and if there be competition the increased expense of the rival lines must be paid for by the public. Hence it follows that for the whole telegraphic business of the country to be done at a minimum cost there must be no competition; there must be a monopoly; and that the monopoly may not be abused for the benefit of individuals, it must be a government monopoly.

The objections to placing the telegraph under the control of the government are essentially the same as are urged against the post-office as now conducted. The evils resulting would be of the same

character; and if the two were united under one department, as they naturally would be, it might become a dangerous power in the hands of the administration. This is certainly a very grave objection. The postal force would necessarily be largely increased, and the amount of salaries paid to subordinates would be at least doubled wherever the postal and telegraphic service were performed at the same office. Hence the Federal patronage, already alarmingly large, would be dangerously augmented; for which reason, if such a change is ever to be made, it should be done in a way that would not tend to centralization.

Centralization is a great bugbear, to which the people are more sensitive than to any other danger, real or imagined, to which the equality of the States, and hence their permanent union, is exposed. No scheme of statesmanship, no plan for extensive improvements, no matter how meritorious, can be suggested which would not be most bitterly and fiercely opposed if it might by a possibility increase the power of the Federal Administration. Were a second Moses to appear and prove to the world that by a wave of his wand he could open a water channel from New York to San Francisco as deep and broad as the Mississippi at Memphis, provided a majority of the people would pray for it, it is doubtful if they would accept the boon, except with the condition that it should never be under the control of the President and politicians.

This fear of adding to the powers of the central government stands in the way of much healthful and needed legislation. The large interests of the government in several of the great western railroads are notoriously sacrificed or frittered away because Congress hesitates to trust the necessary powers to the executive. Commissions are sometimes appointed to look after them, but they seldom command respect, because of the suspicions that the commissioners are too well affected towards the roads. Interests so large as these, and of such national importance, ought surely to be entrusted to the care of men who do not owe their positions to political favoritism or partisan influence.

Now if it be conceded that we have not in all things pertaining to government arrived at perfection, and that something new should be devised to remedy acknowledged defects, let us consider whether or no it is possible to have a board of commissioners so created under the organic law that it should be independent both of the President and Congress, and to which should be given



full powers for the control and management of the post-office, the telegraph, the government interest in railroads, and such other matters as might properly come under its direction. Such commissioners should not be appointed by the President or by Congress, nor should they be elected by popular vote. They should be created by the organic law, something after the manner proposed by Mr. Mill for the creation of Life Peers; not because of present popularity, nor for influence with the existing administration; but because of long service in responsible positions, to which they had been repeatedly elected by the people of their respective States.

In our State governments the office regarded as most honorable, and for the attainment of which personal integrity and high character count for most, is that of Governor. It is a position desired more for the honor than for the power or emoluments. The duties may be onerous, but the salaries are generally small. Now let us suppose the United States to be parceled out into seven divisions; more might be better, but for the present we will say seven. Let the New England States constitute one of these; the great Middle States another; the Western States the third; the North-western the fourth; the Pacific States the fifth; the South-western and South-eastern the sixth and seventh. Having provided for the creation of a commission to which the entire control and management of the post-office, the telegraph, and government's interest in those railroads built wholly, or in part, at the public cost, should be entrusted, let the members of this board of commissioners be created by the organic act. Let each division of the States, as before arranged, be entitled to one member of the board, and this member not to be appointed by either Congress or President, but to be the ex-governor who had served as governor of his State for the longest period. Then as vacancies occurred afterwards the man who for the most continuous years had been chosen and rechosen chief magistrate of his State, should, in virtue of these endorsements, succeed to this high and responsible post; the most coveted and important, with one or two exceptions, in the whole government service. The president of this board might or might not be a member of the Cabinet. If not he might with great propriety and advantage be allowed a seat, though not a vote, in the Senate, to explain the acts and needs of his department.

A board thus constituted could not possibly be of a partisan

character, and it would certainly be composed of men of experience, of practical sense, of approved integrity and general ability. It would probably command more respect than any other branch of the government, as with this high honor in prospect the people of the different States would select their very first man for governor, and not be changing every two or three years, as has grown to be the almost universal custom. By fixing the age at which the members of the board should retire, it would be certain to be composed at all times of men in the full vigor of their powers.

The efficiency of a board thus constituted would, of course, depend very much on the powers conferred upon it, and the restrictions by which it was surrounded in the organic act. To carry out the reforms expected of it, it must have clearly defined powers that could not be interfered with either by the President or Congress. The money to carry it on must of course be voted by Congress, but beyond that the board should be as independent as the executive now is in the control of the diplomatic and consular service. Being made up as the board would be of the leading men of both parties, it is unlikely that it would ever provoke sufficient opposition to endanger the necessary appropriations. To preserve harmony in its counsels, it must be governed by rules in recommending appointments, which would rigidly prohibit all party considerations.

This would be civil service reform of the best kind. It would take the appointing power from the President in that branch of the government in which, if there are not more abuses, there are more complaints of them, than of any, if not all others. At the start it could make clean new work and, which is more important, thorough reform could be *enforced*. Under the present system anything like general reform is impossible. Let the most pronounced civil service reformer in the country be made Secretary of any of the departments, or president of them all, and the opposition of his own party in Congress to the loss of their patronage and perquisites would be sufficient to render him powerless as the head of an Administration. As long as he has the power to appoint postmasters and mail agents, Senators and Representatives will demand the naming of them; and were he to refuse to listen to them there is danger that he would find himself very soon, like Tyler or Johnson, a President without a party. A change of Administration must inevitably be followed by a change of office-holders. The vicious spoils doctrine has so grown into a rule that only a change of system

can cure the evil. But by the adoption of a plan like that here suggested the very idea of spoils following victory would effectually be set at rest.

To expect anything like reform from a mere change of administration is absurd and preposterous. All admit that the spoils system is an evil; but as long as it exists, the name of the claimants will be legion. Therefore there must be a change in the laws; in the system; and if the one here proposed be impracticable or defective, let those who think it easier to create than to destroy, suggest a better. It is easy to complain of things as they are; it is the delight of demagogues; but who of our public men will incur the obloquy of innovation by proposing a remedy? X.

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## HAECKEL'S GENESIS OF MAN, OR HISTORY OF THE DEVELOPMENT OF THE HUMAN RACE.<sup>1</sup>

[FIRST PAPER.]

GENERAL HISTORY OF THE DOCTRINE OF DESCENT.

IT is no derogation from the epoch-making labors of Charles Darwin to say that the arguments he has presented in support of his celebrated theory constitute, as it were, but the half of the vast array which the present state of biological science is capable of marshaling in its defence.

The sources from which all the evidences of descent and natural selection must be derived, may be divided into two general classes: *First*, Paleontology, Comparative Anatomy and Osteology, and Geographical Distribution (*Chorology*), *i. e.*, a comparison of the adult forms of animals both living and fossil (*Phylogeny*); and *Second*, the study of embryonic changes and post-natal metamorphoses, or a comparison of undeveloped animal forms (*Ontogeny*). Of these two classes it may be said that the first have been furnished by Darwin, the second by Haeckel. Not that Darwin, either in his *Origin of Species* or in his *Descent of Man*, has wholly ignored the bearing of embryological considerations upon his

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<sup>1</sup> Anthropogenie, oder Entwicklungsgeschichte des Menschen, von Ernst Haeckel, Professor an der Universität Jena. Leipsic, 1874.

theory. In the former work he has devoted seventeen pages of one of his concluding chapters to "Development and Embryology;" the greater part of which, however, is occupied in pointing out the importance of the various kinds of metamorphosis, chiefly as it is observed in insects, amphibians, etc., after birth; only incidentally referring to those more obscure metamorphoses which take place within the egg or the uterus.

He does allude, however, more directly to Von Baer's law, but without designating it as such; and contents himself with quoting the passage, cited also by Haeckel in the preface to the third edition of his *History of Creation* (1870), in which the great Russian embryologist remarks upon the striking similarity of many embryos, so much so that he was quite unable to say to what animals two specimens which he had preserved in alcohol but had neglected to label, really belonged. Still less attention has Darwin paid to this source of argument in his *Descent of Man*. A few lines quoted from Von Baer and from Huxley on page 14 of Vol. 1, a figure of the embryo of a human being and one of a dog, from Ecker, on page 15, with brief comments, disposes of this branch of his great argument. Almost as much had been said by the author of the *Vestiges of Creation* in 1842<sup>1</sup>. It may be safe therefore to say that at the time of the appearance of the *Origin of Species* (1859), Darwin had no conception of the real part that the arguments from embryology were destined to play in establishing his great doctrine of the development of organic forms. And although in subsequent editions he was able to notice the *Generelle Morphologie*, it is still improbable that even then he had any adequate idea of the powerful ally he was to have in Germany, as the *Natürliche Schöpfungsgeschichte*, and not less the work under review, have proved the professor of Jena to be. It is of the former of these works that Darwin says that if it had appeared before the *Descent of Man* had been written, he would probably never have completed the latter.

Professor Haeckel is no mere disciple of Darwin, profound as is his admiration of him, and unreserved as is his expression of that admiration. His own countrymen have accused him of being "more Darwinistic than Darwin himself," but it is clear that a large part of this difference is in kind rather than in degree, and that he has infused into the developmental philosophy a true

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<sup>1</sup> New York, 1845, p 150.

Haeckelian element. It is true that he drew the logical conclusion from the premises furnished by the *Origin of Species* five years before the announcement of its recognition by Darwin himself in his *Descent of Man*. This conclusion he boldly and forcibly enunciated in the introduction to his *Generelle Morphologie*, published in 1866, and reiterated with still greater emphasis in his *Natürliche Schöpfungsgeschichte* in 1868. Between this period and that of the appearance of the *Descent of Man*, Haeckel was exposed to the bitterest attacks, not only from the adherents of the Church and the opponents of Darwin generally, but from those adherents of Darwinism in Germany—and they were many—whose conception of it was limited to the body of principles contained in the *Origin of Species*. As in that work all reference to the position of the human race in the animal kingdom was carefully excluded, thus ingeniously avoiding the shock of prejudice which any such connection would have occasioned, the simplicity, the naïveté, and at the same time the force of reasoning contained in that work not only won the immediate assent of all fully emancipated minds, but took a strong hold upon great numbers of liberally educated persons whose independent reflections had not yet carried them wholly out from under the influence of theological conceptions. Among these were many thoroughly scientific men and naturalists, specialists in the various departments of science, whose analytical labors had not left them time for a synthesis of the facts even within their own special branch of research. These accepted the conclusions drawn in the *Origin of Species* without perceiving that other and important ones might and must follow from the same premises. And because Haeckel drew these logical and necessary conclusions, these persons attacked him from all sides, and heaped upon him every form of accusation. Besides the charge above referred to of out-Darwining Darwin, and of going further than Darwin himself would ever sanction, there was added the stronger one that Haeckel knew nothing about true Darwinism. The appearance in 1871 of Darwin's *Descent of Man* placed these anti-Haeckel Darwinians in a most embarrassing situation, silencing many, converting numbers, and driving not a few into the theological camp. But Haeckel emerged majestically from the battle, unscathed and undaunted. To charges of "radicalism" he had simply replied: "Radical thinking is consistent thinking, which allows itself to be checked by no barriers of tradition or of enforced dogma." To

the confused outcry of the theological school and of the anti-Darwinians in general, he did not deem it worth his while to reply. A satirical remark upon this class, however, is worth reproducing and might be ranked alongside of Darwin's cutting sarcasm, wherein he says that he who scorns to be descended from a beast will generally reveal his descent in the act of sneering, whereby he will expose his canine teeth. "It is an interesting and instructive circumstance," says Haeckel, "that just those persons are most shocked and indignant at the discovery of the natural development of the human race from the apes, who, in their intellectual development and cerebral differentiation, are obviously least removed from our common tertiary ancestors."

Both in his *History of Creation* and in his *Anthropogeny*, Haeckel has done a service to the cause of evolution by reviewing, in a fair and disinterested manner the history of the origin and progress of those ideas which have culminated in the Darwinian theory. Let us glance for a moment at this history.

Passing over the names of Wolff, Baer, Kant, Schleiden, Oken, and Humboldt, in Germany, of Buffon and Geoffroy St. Hilaire, in France, and of Dean Herbert, Prof. Grant, Patrick Matthew, Freke, and Herbert Spencer, (*Essays*, 1852) in England, all of whom had given more or less definite expression to these progressive ideas prior to the appearance of the *Origin of Species*, it may be said that the great conception of the natural relationship (filiation) of all organic forms and their descent or development from common ancestors that have existed in more or less remote periods of the past, had a threefold independent origin in the minds of three men who were contemporary at the close of the last and the beginning of the present century, in each of the three great nations that now lead the intellectual world. These men were Erasmus Darwin, grandfather of the illustrious Charles, in England; Wolfgang Goethe, the great poet and philosopher in Germany, and Jean Lamarck, in France. Wholly unacquainted with each other and with each other's works, these three men, almost at the same time, gave utterance to substantially the same fundamental ideas, and elaborated in more or less extended and systematic form the essential ground-principles which now underlie the edifice of all progressive biological science.

In his work entitled *Zoönomia* published in 1794, Erasmus Darwin lays great weight upon the transformation of species of animals and plants through their own activities of life and

through forced habituation to changed conditions of existence. it is a current remark as applied to Charles Darwin that he furnishes in himself one of the finest illustrations of "development," and thus of the truth of his own theory, that can be cited. Far more pointed, however, is the pleasantry of Haeckel, when, referring to the grandfather of Charles as entertaining the germs of his grandson's great philosophy, and noting the striking circumstance that his father, though a respectable physician, exhibited no signs of having inherited these intellectual characteristics, he cites the case as a good example of "atavism," and remarks that "Erasmus Darwin transmitted, according to the law of latent inheritance, definite molecular motions in the ganglion cells of his cerebrum to his grandson Charles without their manifesting themselves in his son Robert."

The importance of Erasmus Darwin's views, however, mixed as they were with some vagaries and unbalanced speculations, was slight as compared with that which we must ascribe to those of Goethe. In his various essays and writings on "Natural Science," in general (1780), on Comparative Anatomy and Osteology (1786), on the Metamorphoses of Plants (1790), and in later works, he has wrought out a philosophy of organic life, which, when carefully analyzed and translated into the terminology now adopted, is found to contain, in their most general and fundamental form the essential principles of the Darwinian theory of biological development. A few passages will illustrate this. In 1706 he wrote. "All the more perfect organic natures, under which we see fishes, amphibians, birds, mammals, and at the head of these last, man, are formed according to one original type (*Urbild*), which in its durable parts only deviates more or less, and is still daily being improved and transformed through propagation." It is from this and other passages in which Goethe establishes his doctrine of an original type or image, which varies only slightly and in detail and not in plan, that the modern adherents of the theory of fixed types seem to have derived their chief arguments. Cuvier must have been conversant with Goethe's scientific writings, and he may have drawn largely upon them in founding his celebrated system of classification. But like some other great works that have become authority, those of Goethe are found, in some things, to admit of two interpretations, and to supply texts looking more than one way. The above passage, taken in connection with others, is now seen to still

more clearly give countenance to what is now the powerful rival of the doctrine of types; viz, the theory of descent. In another place he says: "An internal original community (*Gemeinschaft*) lies at the bottom of all organization; difference of form, on the contrary, arises from the necessary relations to the external world, and we may, therefore, with right assume an original, simultaneous variation and an incessantly progressive transformation, in order to comprehend the at once constant and deviating phenomena."

To further explain this paradox he assumes two independent forces or impulses, working harmoniously together in nature, an internal formative impulse (*innerer Bildungstrieb*), and an external formative impulse (*äusserer Bildungstrieb*). The former of these he also, in different passages, designates as the specific force (*Specificationstrieb*) and as the centripetal force; the latter, on the other hand, he calls the modifying force or impulse of variation (*Variationstrieb*) and the centrifugal force. He also uses the term metamorphosis in a general (phylogenetic) sense as applied to the changes that take place in species and genera rather than in individuals. The following passage contains the kernel of this entire portion of his philosophy: "The idea of metamorphosis is like that of the *vis centrifuga*, and would lose itself in infinity were there not a check offered to it; this check is the specific force (*Specificationstrieb*), the stubborn power of permanency (*sähe Beharrlichkeitsvermögen*) of whatever has once become a reality, a *vis centripeta*, which in its deepest foundations can possess no externality."

If, now, we translate Goethe's internal formative impulse, specific force, or centripetal force, by the modern term *heredity*, as we undoubtedly may, and his external formative impulse, modifying force or centrifugal force, by the modern term *adaptation*, as we may still more clearly do, we shall have, in Goethe's philosophy of life, neither more nor less than the essential elements of the modern doctrine of descent.

Of course nothing is here found but the general principles; the mode and the examples could not have been furnished in Germany when Goethe wrote.

Haeckel, however, is abundantly justified in pointing to Germany's greatest genius as having long ago given utterance to the most radical of his own doctrines and that for which he has received the severest animadversions, when, in the passage first quoted he places man at the head of the mammalian class. And



yet who had thought of assailing Goethe with the charge of deriving man from the apes!

With almost equal justice does Haeckel claim that in the following and other passages, Goethe has not only declared the genealogical relationship of the vegetable to the animal kingdom, but has furnished the nucleus of the unitary or monophyletic theory of descent. "When we consider plants and animals in their most imperfect condition they are scarcely to be distinguished. This much, however, we may say, that those creatures that now and then appear, having relationships with plants and with animals difficult to separate, perfect themselves in two opposite directions, so that the plant at last glorifies itself in the tree, durable and fixed, the animal, in man, with the highest degree of mobility and freedom."

The ambiguity of Goethe's language is due to the profundity and high generality of his ideas, coupled with a certain poetic vagueness so indispensable to his genius. In the former quality, though not at all in the latter, one is reminded of that profound and comprehensive analysis which, with all the materials of that later date (1866), and with the power of logic characteristic of England's foremost philosopher, Herbert Spencer, in his *Biology*, (vol. 1, ch. xi., and xii.,) has made of these same principles; a treatise, I may add, which Haeckel has indeed recognized,<sup>3</sup> but upon which he could scarcely have failed to place more emphasis if he had been thoroughly acquainted with it.

Quite different in method and character from Goethe's contribution to the theory of transmutation and descent was that of Lamarck. Whatever his philosophy may have lacked in profundity, it was not open to the charge of ambiguity. All its shortcomings were amply compensated for by the wealth of illustration and the multiplicity of facts drawn directly from nature, which, as a lifelong naturalist, he was able to bring to its support. In this respect (and this is after all the chief consideration), the now celebrated, though long neglected *Philosophie Zoologique* is alone, of all the works that had preceded it or were contemporary with it, worthy of a serious comparison with the *Origin of Species* or the *Descent of Man*. And it is certainly a remarkable coincidence and may have for some readers, if no other, at least a mnemonic value, that the *Philosophie Zoologique* and the *Origin of Species* were separated by the space of just a half century, the former appearing in 1809,

<sup>3</sup>Schöpfungsgeschichte, 3 Aufl. pp. 106, 657.

the latter in 1859. The interest of this circumstance is still further heightened by the fact that Charles Darwin was born in the year 1809, the same in which the great precursor of his own works likewise issued into the world; as if its subtile influence had wafted across the channel and breathed its mysterious *afflatus* into the nostrils of the new-born herald of its principles!

The dim intimations and scattered glimpses of Goethe and of Dr. Darwin were insignificant in comparison with the lucid illustrations and systematic arguments of the great French naturalist. After so many years of assiduous study Lamarck, as it were, but copied his conclusions from the pages of nature where facts stood forth like letters in a book. Yet none the less credit to his great intellect, for was not this same book sealed to his great contemporary, Cuvier, who knew its alphabet equally well? And is it not sealed to many to-day? The truth is that for the first time the causal and essentially rational type of mind had been joined in the same individual with those other qualities which impel to the patient investigation of facts and details; rare combination so successfully repeated in the intellectual constitutions of Charles Darwin and Ernst Haeckel.

When we compare, from our disinterested standpoint in America, the great *chef d'œuvre* of Jean Lamarck, its systematic execution, its definite, avowed purpose, and its vast array of proofs from the only legitimate source of argument, with the various writings of Goethe containing his views on this subject, arranged with no systematic order, having no well-defined purpose, evincing no clear conception of nature's means or methods, and manifesting a comparatively scanty acquaintance with particular cases by which the laws under discussion are to be illustrated, we cannot fail to perceive, in the circumstance of Haeckel's placing his own countryman before the son of a rival nation, in his estimate of the relative labors of the two pioneers of evolution, a trace of that almost inevitable national bias which lurks in regions of the brain inaccessible to the invasion even of exact science. The essential incongruity between the first and last parts of the following passage will be apparent to all. "At the head of the French natural philosophy stands Jean Lamarck, who, in the history of the doctrine of descent, *next to Darwin and Goethe*, occupies the first place. To him will remain the immortal glory of having for the first time brought forward the theory of descent as an independent scientific

theory, and established it as the natural philosophical foundation of all biology." He certainly ascribes to Goethe no such "immortal glory" as this.

There is but one distinct element in Darwinism that is not also found in Lamarckism. This is the important recognition of the law of competition among living organisms as a factor in development; that principle which Darwin so forcibly expresses by the phrase "struggle for existence." Lamarck does indeed recognize this "struggle" and the influence it exerts in preventing the unchecked multiplication of any one species from rendering the globe uninhabitable to others. But he seems to regard this as a wise precaution and calculated "to preserve all in the established order." In other words he recognizes it as a *statical*, but not as a *dynamical* law. He fails to perceive its influence in transforming species.

It is the full appreciation of this element that constitutes the real strength of Darwinism; it is the key-stone of the arch of the descent theory, for the discovery and successful illustration of which too great praise cannot be awarded to the English naturalist. But every other important principle embraced in his *Origin of Species* was also contained in more or less definite form in the *Philosophie Zoologique*.

The failure of Lamarck's views to gain the ascendancy so rapidly attained by those of Darwin, was due to a variety of causes. First among these was the general fact that the state of science and public opinion had not, at his time, sufficiently advanced for the general reception of that class of ideas; and any estimate of Lamarck's works which leaves out their silent, leavening influence upon certain classes directly, and thence indirectly upon society at large, is too hastily made and fails to do them justice. Next in importance in preventing the early spread of Lamarckism, comes the unfortunate omission above alluded to, to grasp the great law of biological competition in its dynamic form. As a third influence may be ranked the somewhat direct and undiplomatic method of Lamarck which never consulted the policy of what he wished to say or courted the approval of high authorities. Every truth in his possession was put forward in the most direct and naked manner, regardless of the shock it might produce upon a world still groping in the murky atmosphere of teleology. Still a fourth element of weakness in the Lamarckian philosophy was the inadequate emphasis which he laid upon the most important of all his principles, that of

heredity, and the correspondingly undue importance ascribed to habit, to use and disuse, as a direct agent in the modification of organs. The real failure here was to grasp the true connection and co-operation of these two principles. In short he seemed to but dimly perceive the manner in which the inheritance of slight variations, however produced, and their transmission to successive generations, brings about, in the course of time, the transformation of some, and the extinction of other species. It is the clear conception and forcible presentation of this principle and its happy combination with that of the perpetual competition going on in nature, that gives to Darwin's exposition that air of extreme probability and that power of universal conviction so characteristic of his works. The importance of this distinction between the methods of the two naturalists in expressing this conception may justify me in borrowing a few very appropriate terms from the *Biology* of Herbert Spencer for its better illustration. We may then say that while Lamarck seemed to clearly comprehend the influence of the *environment (milieu)* upon the *organism*, and to attribute the results to this as the one great and sufficient cause, he failed on the one hand to take in the full scope of the environment, and on the other to conceive of all the susceptibilities of the organism. In his conception of the former he inadequately, if at all, appreciated the organic element, the influence of one organism upon another objectively considered as a modifying force. In his notion of the organism and its susceptibilities he laid too great stress upon the principle of *direct equilibration*, and comparatively little upon the far more important one of *indirect equilibration*. To the readers of the *Philosophie Zoologique* it seemed a crude, to many a ridiculous, explanation of the length of the fore limbs and neck of the giraffe, that they had become elongated by perpetual attempts to reach the branches of trees that lay beyond the reach of other animals; and while he admits that this could not have been accomplished by the efforts of any single individual, and ascribes it to a series of cumulative efforts through many generations, thus clearly recognizing and expressly affirming the influence of heredity, he yet fails to show the way in which this influence must have been exerted, its *modus operandi*. He does not say, for example, that the great elongation referred to was initiated in some remote ancestor by some slight variation in this direction, either accidental or perhaps due to the animal's efforts; that this variation, proving ad-

vantageous and being transmitted to a numerous progeny rendered their chances of survival in critical periods greater than those of such as possessed no such peculiarity; that this power of survival due to this inheritable peculiarity became thus a constant force which, through the interbreeding of those possessing it, tended to increase this variation, until in the course of generations it resulted in differentiating the giraffe in the special attributes of length of cervical vertebræ and of anterior limbs, giving it its present anomalous position among antelopes. Instead of this Lamarck says: "With reference to habits it is curious to observe the results of them in the peculiar form and figure of the giraffe (*camelo-pardalis*). It is known that this animal, the tallest of the mammals, inhabits the interior of Africa, and that it lives in places where the earth, almost always arid and without herbage, compels it to browse upon the leaves of trees and to be continually exerting itself to reach them. From this habit, long maintained in all the individuals of its race, it *has resulted* that its fore limbs have become longer than its hind ones, and that its neck has become so much elongated that the giraffe, without rearing upon its hind feet elevates its head and reaches to the height of six mètres, (nearly twenty feet.)"<sup>4</sup> It will be observed how in this reasoning (and it is so throughout), Lamarck passes from the observed fact directly to the original cause, leaving out the intermediate steps which it is necessary to supply in order to conceive of the manner in which the results are produced. Now, it is precisely this part of the argument that mankind in general require before they are willing to give in their adhesion to a theory. They say: "it all looks plausible enough, but you fail to show us *how* it actually takes place." As in his illustrations, so in his general "laws," Lamarck fails to grasp the principle of Natural Selection. His first great law is expressed in these words: "In every animal which has not passed the limit of its developments, the frequent and sustained use of any organ little by little strengthens, develops and enlarges this organ, and gives it a power proportionate to the duration of this exercise; while the constant failure to use such organ insensibly, enfeebles and deteriorates it, and progressively diminishes its capacities, causing it finally to disappear."<sup>5</sup> His second law is as follows: "All that nature has caused individuals to acquire or lose through

<sup>4</sup> Phil. Zoo., Tome 1, p. 254. Paris, 1873.

<sup>5</sup> Loc. cit., p. 235.

the influence of the circumstances to which their race has been long exposed, and consequently through the influence of the predominant exercise of any organ, or through that of a constant failure to exercise any part, it preserves through inheritance (*génération*) in the new individuals that proceed from them, provided the changes acquired be common to both sexes, or to those which have produced these new individuals.”<sup>6</sup>

Whatever may be lacking in these two laws there is certainly contained in them a clear expression of the two prime factors of the theory of descent: viz., heredity and variation; or as Darwin frequently expresses it, “descent with modification.” The elements of availability alone are wanting; those working principles and connecting links by which the theory was to be erected into a perfect system and its machinery set into running order.

A grand stride had been made, the doctrine of fixed species had received a fatal thrust, the special creation hypothesis was undermined, teleology was doomed.

A fifth and last element of weakness in the Lamarckian philosophy may be enumerated, one which Haeckel justly sets down to the greater credit of the illustrious author as indicating how far he had outstripped the intellectual progress of his age, so that it was practically impossible that his views should have been accepted in his own day. This consisted in the acceptance and express enunciation of two doctrines which are still to-day deeply involved in controversy even among the most advanced scientific men of our times; that of *spontaneous generation* and that of the *simian ancestry of the human race*, embracing in the latter the extreme theory of the development of the mind *pari passu* with that of the nervous system and the brain, and carrying it out to the logical consequence of denying the freedom of the will in the current sense of the phrase. These were clearly, in Lamarck's day, shocking and atrocious doctrines, and it is doubtless to these chiefly that is to be attributed the neglect of his great contemporary, Cuvier, to give the *Philosophie Zoologique* as much as a passing notice in his report on the progress of natural science; as well as the rebuke of his philosophical views which he saw fit to introduce into his “*éloge*”(?) of the great scientific labors of Lamarck. He little dreamed that when these utterances should have been forgotten, and the works of Cuvier consigned to the musty shelves of antiquarian libraries,

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<sup>6</sup>Loc. cit.

the humble effort which he had first disdained to notice and afterwards noticed with a reproach, would emerge from its long obscurity, and in new and modern dress, find its way to thousands of book tables as the classic foundation of a great progressive philosophy

With regard to Lamarck's views on the subject of spontaneous generation, it is due to him to say that he did not espouse any of the crude conceptions which had been maintained on the authority of Aristotle among the scholastic metaphysicians. He repeatedly asserts that it is only the most imperfectly organized beings that could be directly produced by the forces of inorganic nature, and while he could have had but a faint idea of the extreme imperfection of these lowliest creatures, still as only the *least* perfectly organized could, according to him, become the products of spontaneous generation, his careful language on this point completely exempts him from the charge of gross notions about the origin of life. Haeckel, with his intimate acquaintance with the lowest known forms of organic existence, his *monera*, does not hesitate to declare the necessity of a transition, at some period, from the inorganic to the organic condition; nay, more, he believes that these *monera* are directly evolved, by the mechanical agencies of nature out of inorganic carbon compounds, and that protoplasm, of which alone these creatures consist, is the initial stage of organic life. With Lamarck as with Haeckel it is the logical necessity, rather than any empirical discovery, that renders this doctrine indispensable as a starting point and first link in the chain of organic development. As the latter justly remarks, unless we do this the natural explanation is given up, and there remains no alternative but to fall back upon the supernatural. Herbert Spencer, too, independently of his theory of physiological units, has felt the force of this *a priori* argument, and has ranged himself on the side of complete consistency. Neither need the teleologists exult at the apparent overthrow, just now so imminent of the results of Bastian's experiments. From such a result we shall only the better learn *how* nature works, and no adherent of the doctrine of *archigonia* will the less maintain that life must have had a beginning upon the planet. Lamarck leans to the assumption of a perpetual series of such beginnings which are still going on in the present as in the past, a constant play of the originating force. Haeckel admits as much for protoplasm and for his *monera*; beyond this he says it does not concern the theory of descent to go. Darwin, with his character-

istic diplomacy, never lifts the dark curtain that hangs between the organic and the inorganic world.

Professor Haeckel is not only an original investigator but also an original thinker. Primarily a specialist and investigator of the minute histology of living organisms, there is combined in his mental constitution, along with this indispensable talent, a large development of causality which renders it impossible for him to stop with the mere elaboration of details and the simple accumulation of facts. To him every fact is one of the terms of a proposition, and every collection of related facts becomes an argument, while the sum total of his knowledge of those minute creatures which he has made a life study constitutes in his mind a philosophy. He is at once an investigator and a philosopher. To the former quality his numerous monographs of the lower invertebrates sufficiently testify. His monograph of the *Radiolaria* (with an atlas of thirty-five copper plates), of the *Geryonidae*, of the *Siphonopora*, but especially of the calcareous sponges, belong to the minutest and most exhaustive histological researches of modern zoology. In all these, but particularly in the last named, the author has constantly before him a theorem to demonstrate. He expressly avows that his investigations into the calcareous sponges were undertaken with a view to an analytical solution of the problem of the origin of species. He seems not to have feared to thus invite the charge of having resolved, in this investigation, to verify the argument of Darwin, the perusal of whose great work had induced him to undertake it. Nor does he fail to prove all he hoped to do. On the contrary he claims to have overwhelmingly established all the principal claims of his English contemporary. The objection had been raised that the Darwinian theory did not rest upon a sufficient body of observed facts; that it was a mere plausible synthesis from a too meager analysis. Haeckel holds up his two volumes containing the results of his five years of indefatigable labor on these lower organisms, and his atlas with its sixty carefully drawn plates, all elaborated from the most abundant materials from all parts of the world, and challenges the scrutiny of his scientific opponents to deny the conclusions which he deduces from these facts. The doctrine of the fixity and invariability of species, already reeling under the blows of Lamarck and Darwin, he claims, is therein completely demolished. He proves that in this group of animals the number of genera and species depends altogether upon the



meaning which each naturalist may happen to attach to these terms. He may class them all under one genus with three species, or under three genera with twenty-one species, or under twenty-one genera with 111 species, or under thirty-nine genera with 289 species, or even under 113 genera with 591 species, according as his conception of genera and species be wide or narrow. In fact the 591 different forms may be so arranged in a genealogical tree that the ancestry of the entire group can be traced back to one common form from which all the rest must have descended, undergoing the modifications induced by the varying conditions of their existence. This common ancestor Haeckel believes to be the *Olythus*.

Thus the long respected and miraculously created *bona species* is histologically demonstrated a myth.

Rising gradually from the special towards the general, the *Generelle Morphologie* may be next named. It was the first systematic attempt to establish the theory of development from the organized facts of comparative anatomy. The most popular, in its subject matter and style, of the works of Prof. Haeckel is his *Natürliche Schöpfungsgeschichte*, consisting of a course of popular lectures upon the questions in general opened by the *Origin of Species*, but containing the advanced views of the author already referred to. This work, is therefore, of the highest interest to the general public, and cannot be too strongly recommended. It is divided into five parts designated by the author with the following titles, respectively, each of which sufficiently characterizes its contents: 1, Historical Part; 2, Darwinistic Part; 3, Cosmogenetic Part; 4, Phylogenetic Part; and 5, Anthropogenetic Part.

His *Anthropogeny* or *History of the Development of Man*, to which we will now confine our attention more closely, is simply an enlargement and expansion of the last part of the *History of Creation*. The greatness of the theme required this, and no one who carefully follows the author through this work will complain that justice has not been done the subject. As may well be imagined this work covers the most interesting field of investigation and introduces the reader into the most mysterious penetralia of nature. The charm of its diction, the fullness of its illustrations, and above all the perpetual wonderland through which it leads, entitle it to take rank at once among the most instructive and the most fascinating works to which modern science has ever yet given birth. "The proper study of mankind is man." And yet how tame

appear the most mysterious facts of human anatomy and physiology as taught to the mass of mankind, compared with the astonishing revelations of comparative embryology and comparative anatomy!

As already remarked, Haeckel is a philosopher as well as an investigator. No German philosopher can be without his terminology. Haeckel has his, and it remains to the future to decide whether the ends of science are to be furthered by its introduction. It is at least certain that to understand Haeckel one must understand his terminology. Being much of it of Greek derivation, it undergoes little change by transfer to the English language. In so far, however, as it is German, this difficulty is great, often, indeed, quite insuperable. Everybody admits the inadequacy of some parts of Darwin's terminology. The best English expounders of his theory have found themselves compelled to adopt other terms to convey his ideas with the requisite clearness and force. I have already referred to important improvements introduced by Herbert Spencer before it was possible for him to properly arrange the new biological laws under his universal system of cosmical principles. That author has also, in addition to those before referred to, proposed an excellent synonym for Darwin's most important term, "Natural Selection." This he calls "Survival of the fittest," which, while it can never of course supersede the former, must be admitted by all to bring to the mind far more directly, the idea which it is desired to convey.

Haeckel has felt the need of some adequate terms to characterize the two great classes or types of mind, which, not only now, but in all ages, have existed in a state of opposition or rivalry in the world. No matter what questions might arise for solution bearing upon the knowledge or progress of the race, there has always existed this sharply defined opposition growing out of these two constitutionally opposite mental types. Various popular appellations have been employed from time to time, differing in different countries and for different forms of agitation. None of these, however, have struck at the true psychological root of the phenomenon, and the world has been long waiting for a thorough analysis of this subject and the suggestion of a scientific terminology, based upon this ground-law of the constitutional polarity of the human intellect.

That Haeckel has fully supplied this want I would not venture

to affirm, but that he has made an important contribution towards such a consummation cannot be questioned. "If," says he, "you place all the forms of cosmological conception of the various peoples and times into comparative juxtaposition, you can finally bring them all into two squarely opposing groups: a *causal* or *mechanical*, and a *teleological* or *vitalistic* group."

The first of these groups, by requiring every phenomenon to be conceived as the mechanical effect of an antecedent true cause (*causa efficiens*), necessarily erects a cosmogony that is bound together throughout by an unbroken chain of mechanically dependent phenomena. Such a universe is a unit, and throughout its domain there can pervade but one universal law. This unity is the *Monism*, and this all-pervading homogeneous law is the *monistic* principle or force, while the whole theory which thus conceives of the universe is termed by Haeckel, indifferently, the *monistic*, and the *mechanical* theory of the universe. Only those minds that are imbued with this conception as a fundamental quality of their cerebral constitution are capable of appreciating, or of subscribing to the Darwinian and Lamarckian philosophy, which is simply the monistic principle applied to biology. This class has formed in all ages and countries the progressive and reformatory element of mankind.

The teleological or vitalistic group, on the other hand, conceive of all phenomena as produced by a power either outside of nature and acting upon it, or consisting of nature regarded as a conscious intelligence, and which, in either case, directs everything for an ordained purpose or end (*causa finalis*). This recognition of a cause independent of phenomena renders the operations of nature *dual*, and is designated by Haeckel as the *dualistic* conception, and the body of such conceptions as the *dualistic* philosophy. All teleological conceptions are, of necessity, dualistic, just as all causal conceptions are necessarily monistic. The distinction between teleological and theological conceptions vanishes as soon as we class the pantheists among theologians. This class is the great conservative element of mankind, who, looking upon nature as under the control of Omnipotence, logically resign all effort either to do or to know into its hands.

Haeckel also employs the term dysteleology in antithesis to teleology, and frequently uses it as a general term to designate the monistic or mechanical philosophy.

The entire body of principles embraced in the Lamarckian, Darwinian, and Haeckelian philosophy, when regarded as having passed through its hypothetical and theoretical stages, takes the form of a science, and receives the very appropriate name of a *History of Development* (*Entwicklungsgeschichte*), a term adopted by Von Baer and applied to embryonic development, but extended by Haeckel to embrace also the secular development of specific forms. This twofold application of the term History of Development, suggests the natural division of the science into its two great departments. The first of these is essentially that of Von Baer, and treats of the progress of the individual organism from the earliest embryonic condition throughout the numerous successive stages and transformations through which it passes until it arrives at the perfect state. Properly it does not stop at birth, but continues through life, during which, in many creatures, very important metamorphoses take place. This division of the History of Development is denominated *Ontogeny*. The other grand division of the History of Development, which treats of the development of present living forms out of antecedent forms through the influences of heredity (*Vererbung*) and adaptation, (*Anpassung*) is termed *Phylogeny*, from *φύλον*, a race.

It is to this latter branch of the History of Development that the attention of progressive minds has been heretofore almost exclusively directed, and the arguments of Lamarck and Darwin have been chiefly drawn from considerations of comparative anatomy, of geographical distribution, and of palæontology. The powerful reinforcement which it has now received from ontogeny was quite unexpected, and the astonishing uniformity with which the ontogenetic phenomena support, confirm, and corroborate the phylogenetic arguments, may be regarded as having placed the doctrine of development beyond the stage of theory and speculation, and established it as the first law of Biology.

Although the chief facts of ontogeny had been discovered and recorded by Von Baer and others, a quarter of a century before, it was left for Haeckel to first perceive and announce their relation to the law of phylogenetic development, and to urge their irresistible force as arguments for the theory of descent. Von Baer himself, although he had erected them into a "History of Development," seems but dimly to have realized the significance of these embryonic metamorphoses which he has observed and described, and as

recently as the date of the late Professor Agassiz' public lectures, is quoted by him in a private letter as still adhering to his doctrine of types, and protesting against that of descent from the apes.<sup>7</sup>

Anthropogeny, or the Genesis of Man considers all the arguments, both from ontogeny and from phylogeny in support of the assumption of the descent of the human race in a direct line from the lower animals, shows throughout the length of this line what creatures now existing upon the globe or found fossil in the rocks, stand nearest to this line of descent, and aims to trace the pedigree of the being who is the present undisputed lord of the planet back to the lowest amoeba, and even to the moner. Haeckel does not stop with the ape, with the amphioxus or even with the ascidian. Guided by the Ariadnean clew of *ontogenesis*, he pursues man's genealogy back through the labyrinth of primordial forms into the cell, and thence still back until he loses it in protoplasm.

Standing as man does at the head of the animal kingdom, and forming the last and highest stage of development upon the globe, the history of his progress from the lowest form of organic existence must be coëxtensive with that of all other beings. It differs, however, from the history of development in general in not being concerned with any of the branches that diverge at various points from the main anthropogenetic stem. This becomes obvious when we commence to study phylogeny, but may be noted here as a means of better appreciating the true scope of Anthropogeny. A few illustrations will make it clear.

Not to speak of the entire vegetal kingdom which is lopped off at the first stroke, we find as we ascend the scale, that one after another the great branches of the Zoophytes, of the Annelids (including all the Articulates and the Echinoderms), of the Mollusca, of the Fishes, of the Reptiles, of the Ungulata and Cetacea, of the Carnivora and Rodentia, and of many other less important groups, are successively passed by and left behind; thus obviating the necessity of following out the special genealogy and development of each of these complicated divisions of natural history. The history of development of man pushes right on, taking such notice only of divergent trunks as is necessary to fix with certainty the position of his line of march.

LESTER F. WARD.

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<sup>7</sup> Since the above was written, the death of Von Baer has been announced. His last effort was in the nature of a systematic attack on Darwinism.

A BUILDING SYSTEM FOR THE GREAT CITIES.—  
THE BUSINESS AND' SOCIAL INFLUENCES  
OF BUILDING SYSTEMS ILLUSTRATED.

THE questions presented in the modern life of cities are among the greatest we have to deal with. The tendency of population is now more than ever before, to concentrate in communities which offer the fullest measure of business and social advantages, and in spite of every effort to disperse the increasing population of the older states, the result is that the greater cities increase more rapidly than any part of the country outside their limits. A great city affords much more of positive attraction than it has been usual to concede, and its attractions are not those of fancy or taste only; they are, in the highest degree, those of economy and profit in the exchange of what every man can produce. The greater share of the accumulated wealth of cities is made up of labor put to the best uses, and of exchanges made without loss.

But the facilities the cities afford in the creation and exchange of wealth, have heretofore had a dark side in the losses and insecurity to which persons of moderate means, and particularly to which all persons who work for wages, have been subjected. The separate household, and the independence of ownership, have become more and more difficult of attainment, and with the loss of these, a loss of much more became almost inevitable. It has for years been an unfortunate feature of the social condition at New York particularly, that the increasing population were without homes, except in tenement houses, or flats, or some form of subordinate or dependent residence, the injurious consequences being apparent, and the evil increasing instead of diminishing. The tenant, or tenement house is the worst form of this huddling of people, chiefly the laboring classes, or the poor as they are called, in such cities, into close and stifling rooms in a building usually of the most squalid surroundings. Enterprising and benevolent people have made many efforts to reform and improve these tenement houses, but with little success. A building containing from forty to a hundred rooms, each of which is separately let to one or more persons—no family having more than two—can scarcely be expected to offer any incitement to cleanliness, order and self-respect. Certainly all experience proves that rapid and permanent demoralization follows upon the gathering of laborers,

or of the employed classes of any grade, in any form of tenant or tenement house at present in use.

To inspire self-respect, to develop or even to sustain independence of character and to insure morality and social order, the separate house and family are indispensable, at least with the great body of people. And the struggle to avert demoralization and distress is real and pressing; it will not admit of delay or evasion. The tenement house is a danger and a shame. It is a frightful inhumanity also; not only where the loss of life by pestilence is incurred, but also in the frequent deadly accidents by fire and falling walls which are now so common. Our exemption from these calamities in Philadelphia is almost complete, yet they are near enough to us to be vividly realized in the few we see, and the frequency with which we hear of them in other cities.

The urgent question of the day is whether it is possible for the people of this country to live in the great cities in safety, occupying separate homes, and living in reasonable security in dwellings of their own. It is certainly a great question, and on its solution depends the further question, whether it is not inexcusable cruelty to permit a million of people to gather in any great city.

Through the rare good fortune of possessing an especially favorable site, the development of an adequate system of city house building has fallen to Philadelphia, at least so far as the inauguration of such a system is concerned; and perhaps fifteen years of continuance at it, have vindicated and confirmed it. It cannot be claimed as having been deliberately designed, nor is it as yet carried to anything like its proper completeness of results. But it has made great progress, and has grown to such proportions as justly to attract attention in most of the cities where the want of a proper system causes great loss and suffering. The object of this paper is to state, as clearly and directly as possible, what has been done here, in order to aid others in making use of the results of our experience. It is also desirable just now to help forward the general work of perfecting the system here, and it cannot be too strongly stated that the object proposed to be attained is almost the highest that can engage attention. It involves the greatest results possible in the happiness of great numbers of intelligent people, and in their advancement to a higher civilization. It affects the habits of the thousands who too often spend their small earnings in mere daily living: and decides whether or not they can ac-

quire and possess real property, The difference between a proprietor, however small, and an incapable or a wasteful spendthrift, often reaches far beyond the personal interests of either or both, and becomes an element of the greatest public dangers.

The actual mode of proceeding in what are here called building operations is co-operative. The owner of the title to the land unimproved is one party, the one who advances capital or money to build is another, the contracting builder another, and often the several sub-contractors enter into the work as parties in interest, agreeing to take a certain number of houses as their share of the cost of building a large number. The co-operation of three distinct interests is the most general, the land owner, the capital advancer, and the contracting builder; but it is perhaps equally frequent that the land owner advances a sum of money equal to the value of the ground, which sum of the two elements of cost is placed in a ground rent or mortgage on the building contracted to be built. But the co-operative feature is always foremost, and it is indispensable to success. If the furnisher of materials, as lumber, bricks, stone or anything else, agrees to take a number of finished buildings for his materials, he probably values his materials higher than if sold for cash, but he simply shares in the profit of the general contractor, and is a co-operative builder himself. The fact that in some cases this co-operative building is not as well done as it should be, is quite likely to be realized, but it only occurs when proper supervision is not provided for. As compared with building for cash under rigid supervision, the loose co-operation of what are called bonus building operations is not desirable; yet many thousand dwellings have been so built in a most creditable manner, and now constitute streets and blocks much increased in value, fully occupied, and paying a fair profit on all they cost. Thousands of dwellings have been so erected by contractors who had no capital themselves, and who, in perhaps half these cases, made little profit. Others more skilful made profits rapidly even by what is called bonus building, and became able to build with their own capital.

The public are concerned only with the final results; if these present the form of well-built streets of permanent dwellings, owned by those who occupy them, it is of little consequence whether the original builder had any capital or made any profits, whether the operation was a co-operative or "bonus" arrangement, or whether all the expenditure was by one party only.



Of the mode of erecting buildings in the tenement-house system, we know little, except that it cannot be co-operative. It cannot afford negotiable securities in ground rents or mortgages, nor can it interest or employ many persons. Its range must be very narrow, and without social or other features of general interest. In a few cases such building is primarily with a benevolent purpose, and may, like the Peabody buildings in London, become conspicuous public benefits. But in most cases the tendency is to parsimony and abuse in the erection of the buildings themselves, and still more in their subsequent management and in the treatment of their tenants. The details of management of thousands of these buildings are given in the New York Sanitary Survey of 1865, and a more frightful picture of sordid avarice than that developed by that survey as existing in the management and care of these tenement houses could not be imagined. The squalor, vice and enforced misery of the unfortunate occupants exhibits a state of things to which the comfort of prisons and penal institutions affords a relieving comparison. No greater contrast can be conceived than is presented by the comparison of a well built street of two-story brick dwellings neatly kept, and chiefly owned by workingmen occupants, with the narrow alley separating double rows of lofty tenement houses, reeking with filth and vice. Surely the building surface of the earth is large enough to distribute these foul accumulations, and to cleanse them by a reasonably wide dispersion.

#### THE TENEMENT-HOUSE SYSTEM.

The most graphic and vivid portraiture of the tenement-house system, with its attendant miseries and horrors, was given in a Sanitary report for the city of New York, made in 1865, as the result of the survey before referred to. It was inaugurated by an association of citizens simply, but out of its disclosures grew the energetic Board of Health organization for that city established in the same year. An accurate canvass by able young physicians was then made of the entire city, the results of which are very striking. New York had then no more population than Philadelphia has now, probably less, yet the fearful concentration in certain districts or wards would appear incredible if it were not officially stated and the location and population of each house shown in elaborate plans and diagrams. In the Fourth Ward of that city there were then 714 tenement houses, and 53 private dwellings. In 242 of these tenement houses, there were

2,119 families; and in the others, which were not originally built for such uses, there was an average of 5 families, or of 28 persons to each house. The superintending officer of the survey reported that "*there are more than 400 families in this district whose homes can only be reached by wading through a disgusting deposit of refuse.*" The whole district was a permanent nursery of fever and contagious diseases. Several of the most celebrated nurseries of vice, filth, and disease are found on Rose, Vandewater, Cherry, Roosevelt and Oak streets, and they are scarcely less horrible now than in 1865. I have often visited them, and personally examined the district in 1872, finding it then incurably wretched, although the New York Board of Health had forced the tearing down and rebuilding of a few of the worst great tenement houses. One of these houses contained 105 families, and 472 persons; an alley nine feet wide separated it from another containing 25 families, and another seven feet alley reached a house containing twenty families. Neither of the three had any frontage on a regular street, being reached only by these alleys. The locality was called "*Gotham Court.*"

In the Fifth Ward of New York, the same survey showed 185 tenement houses, with 961 private dwellings, a much better condition, although the tenement houses were all reported as nests of disease.

In the Sixth Ward there were 609 tenement houses, with 4,400 families, and 23,000 tenement population. This district had then, and still has, many incurable "fever-nests." The population was less than 5 per cent. of American birth, and the well-known Baxter street is there. Then 500 persons lived in filthy cellars, but these have since been driven out. The celebrity of that ward for vice and crime has been won by a long persistence in crowding the worst of the laboring classes of a great city into tenement houses, surrounded by conspicuous and flagrant vice, and without the power that separate houses would give to preserve the rising generations from degrading contact. It is somewhat better now than in 1865, yet frightfully depraved, and hopeless of permanent reform.

In the Fourteenth Ward one-half of the buildings were tenement houses, and a very few only were private dwellings. Of its population, in 1865 numbering 33,000 (in 1870 but 26,000), four-fifths lived in tenement houses. Four small squares from the Bowery to Mott street, then contained 4,168 persons, all living in tenement houses. This district has in some respects improved.

Returning to the west side of the city, part of the First and the whole of the Third Ward constitute an Inspection District, in which there were then 241 tenement houses, with a very few private residences only. One locality in this district was described as a "perpetual fever-nest," in which many of the worst tenement houses were located. "The common mode of arranging them is as follows: On a lot of ordinary size 25 by 100 feet will be erected a front house 25 by 50 feet, and a rear house 25 by 25 feet, with a court 25 by 25 feet and frequently less; these houses are commonly 5 and frequently 6 stories high; the principal rooms, of which there are four to each floor, occupy the width of the building, front and rear, with small bed-rooms between, one to each main room. This arrangement gives accommodation to four families on each floor, making, in a six-story building, 24 families. This is the average, but there are many exceptions where the over-crowding far exceeds this." In the Seventh Ward there were 627 tenement houses; in the Eleventh 2,049; in the Sixteenth, Seventeenth, Twentieth and Twenty-first, an average of over 1,200 each; the Seventeenth having 1,890 of these structures—in all cases containing more than three families each. (See Appendix for a tabular statement in full.)

Other wards and districts give even a darker picture than this here quoted, but I have not space to refer to them. The general result is, that of tenement houses containing more than three families there were, in 1865, in New York 15,511, with an average of 8 families and 33 persons to each house; the whole number living in them was 486,000, and there were 15,224 persons then living in cellars. The total number of these unfortunates was 501,224, or nearly two-thirds of the entire population of New York!

Nothing can be more impressive than this statement of the actual condition of the half million of people who in one great city are subjected to such demoralizing influences as are described in the report from which we take these figures. I cite the facts at some length in order to enforce attention to the sanitary and social advantages of our single-house system, and to make a contrast so strong that it must receive attention. What was true of New York in 1865 is practically true to-day—there are more nearly 20,000 of these structures now, with fully 500,000 people occupying them. The general discouragement of such surroundings is adverse to habits of economy, and but little chance is afforded for

the laboring man to save enough to secure a home. Distress and demoralization are inevitable, and the suffering of this enormous class must necessarily re-act on even the wealthy in many ways. Deadly diseases are propagated from these "fever-nests" and social pest-houses, from which the wealthy resident of an adjacent street can scarcely hope to be secure. In fact, the motive to the costly survey, of which the volume I quote from is the report, was a hope that some relief from these dangers could be obtained. But it has been found in the ten or twelve years since elapsed that, although a vigorous policing may improve those crowded prison-houses for the laboring classes to some extent, and occasionally order one of the worst to be torn down, the tenement house proper is in the main incurable, a scourge to the poor man, the ruin of all hope for improvement of his family, and a terror to the neighborhood as a source of disease.

During at least the full period elapsing since this sanitary survey of New York, in 1865, I have had my attention drawn to the contrast presented by the single-house system, and to the elevating influence it has on the population of a great city, in contrast with the degradation and demoralization inevitable in the tenement house. I have made many examinations of the streets and quarters so decisively condemned in 1865, and have seen but little improvement in them. Cleanliness and healthiness are always impossible; while on the contrary, I have seen men with their families pursuing precisely the same occupations, living in Philadelphia in neatly-kept houses of their own, in cleanly streets, and with every evidence that they felt inspired by all the present comfort and hopes of improvement that elevate and honor man in the humblest as well as in the highest position.

I claim, therefore, that it is a social question of the highest character, that is raised in this discussion of the mode of building up a great city. As an act of sanitary precaution, or of benevolent public spirit, there could be no greater service conferred on a city than to introduce and enforce the single-house system. Even at a cost of large sums for cheapening the ground rents, or reducing the capital invested in their erection, an appropriation to aid the building up of streets and squares with single houses would be wise. But here, at least, no aid whatever has been or is necessary. As a business, such investment both in land and buildings pays well. There is an ample margin of profit to the land owner, to the capi-

talist, and to the working builder alike; and when the workingman has taken shares in a building association, there is a profit to him in buying a house, and relative loss in renting one. Circumstances singularly favor the greatest work of popular beneficence almost that the world has known; a work that may carry our population up to millions, without giving us a single square or street of squalor and shame. Such is substantially the condition of things in this city at the present time; a population of 850,000, at least, has passed through a season of unprecedented business depression, with scarcely an instance of serious suffering, or any material check to the growth of the city, or to its expansion in streets and the erection of new houses by many thousands every year. Probably a greater number of persons are now enrolled in building associations than ever before, and are prepared or preparing through them to become owners of their own homes. Certainly the number of such members is nearly seventy thousand, and the capital accumulating reaches nearly to thirty millions of dollars; all of which saving will in due time be invested in the coveted home, which is the object of membership in these associations.

In a recent publication of this society, embracing a valuable paper by each of two gentlemen, thoroughly qualified to state the condition of the Building Associations of Philadelphia, the statistics of these people's saving funds are given more fully than I have space to do here. Mr. Joseph I. Doran, in one of these papers, gives conclusive authority for the statement that the sum of \$50,580,000, at least, has passed through these associations into real estate in Philadelphia, from 1849 to 1876; and he estimates that \$7,672,000 was the amount of payments to them during 1875, at least an equal sum being invested by them during the year. He gives the number of stock-holders or members in 1876, as 67,500, or "over one-fifth of the number of persons having occupations in Philadelphia." There were 450 active Building Associations in operation in that year.

#### THE SINGLE-HOUSE SYSTEM.

The system of building which has grown up here in Philadelphia has attained its present position through a series of generally prosperous years, and the efforts of many practical and enterprising builders. It is scarcely to be credited to any general design, though some acts of local legislation have greatly favored it—particularly those which forbid the erection of wooden buildings, an

restrict the opening of streets less than thirty feet wide. The greater merits of the system have grown upon citizens here unconsciously, and have not received the attention they deserve. To enlightened citizens of other States and countries, however, they have been of great and increasing interest, and a wide-spread desire exists for information by which their benefits may be practically introduced into other cities. It will serve a valuable purpose even here to renew attention to the very favorable circumstances under which this city adds 5,000 dwellings annually to its present great number of occupied houses, and a fair statement of what is already attained will encourage further effort to improve and benefit the city. In all its leading features, the single-house system appears to be applicable to most other cities as well as to this; the only question is whether land is available within easy reach, and whether the price for land is not impracticably high. The street railroads, to a great extent, cover the question of mere distance, and bring a suburb five miles away within easy reach of the business center, where the workingman finds employment. In the case of New York, perhaps the difficulties of distance, and the water surroundings, become more nearly insuperable; though even there the necessary provision must and will be made for rapid transit to the wide stretch of lands within sight of the city not yet occupied. Cheap and prompt communication with the upper tracts of the island itself, and with New Jersey and Long Island across the rivers on either side, cannot be long delayed. It certainly appears as the least of the surrounding difficulties to provide this transit; and not for a moment to be compared with the constant deadly struggle against disease and vice which is forced upon them by the tenement-house system. It must be admitted that there are great difficulties in the case of a city bounded and limited as New York, but the only way to solve them is to enter at once and resolutely upon the duty of offering encouragement to those who must live in other than brown stone edifices, and to give them a chance at least for the possession of houses of their own. This can never be done in tenement-houses.

I have not now before me the exact results of Mr. Peabody's beneficence in London, but it is generally understood to have secured no more than good rooms at a moderate rental, in a well-regulated house. It is not unlike a hotel, in which the occupants provide their own food and furniture, but are subject to examina-

tion and possible rejection when they enter, and to proper discipline while there. Large capital, with benevolent direction, and permanent supervision, are essential conditions of the system. It is excellent in its way, but not generally applicable, or even possible.

All experience has shown that for the best ends of society there must be, in the relation of men and families in a city to each other, something like the theory of the citizen's position in political life; each must enjoy and retain a separate individuality, with entire liberty under due responsibility. Give every possible opportunity, but hold every man and every family in a city to responsibility as independent elements of society. In a tenement-house the occupants soon cease to recognize any responsibility; they are reckless and wasteful of what is their own, and what is not their own. In a house which has cost the occupant care and labor to purchase and to furnish, the foremost thought of the owner and occupant is to maintain and improve it.

#### STANDARD FORMS OF THE SINGLE HOUSE.

The form of building under the single-house system is established with much uniformity—perhaps too entirely uniform, some may say, but the necessities of the case admit only the best, and it can scarcely be denied that the forms employed are wonderfully successful. There are three primary forms, as they may be called: described as the two-story four-roomed house, the two-story six-roomed, and the three-story eight-roomed. They are always of brick, erected on stone walled cellars not less than seven feet deep, 14 by 28 feet for the smallest houses, 14 to 16 by 42 to 45 feet for the six-roomed houses, and the same for the three-story houses of eight rooms, which differ from the larger two-story houses only in having three stories on the front and two stories at the back. All these are built in contiguous rows or blocks, with a common wall between them. No external or dividing wall is less than twelve inches thick, with hard or pressed brick for the outside, and salmon, or light absorbent brick for the inner facings. There is little criticism possible upon either the materials or the mode of building of these standard houses, which have taken the place of all others almost, and are limited by well defined building laws, so that there is scarcely any opportunity for the substitution of inferior structures. In fact, there is no temptation to do so; the great number annually built, and the facility of access to unbuild suburbs, would deprive the careless or lawless builder of all profitable use for poor houses.

Other restrictions and usages also aid in protecting those who use these houses ; they cannot be built of wood, nor can any alley be used for frontage ; no street less than thirty feet wide can be opened or built upon. Under the protection of these general conditions, building has made rapid progress since the inauguration of the system, which scarcely dates before the year 1862. In 1867 it began to be especially active, and since that time an average of 4,500 houses yearly has been erected, of which 2,500 have been two-story, 2,000 three-story, and of dwellings not more than seventy yearly of greater proportions. This rate of increase is much greater than that of other cities of equal population. At New York the annual increase of dwellings is not over 600, the most of these, indeed, being costly structures erected for the private residences of the wealthy. The number of new tenement-houses erected is small, the greater movement in this direction being the change from old buildings originally built and occupied for private dwellings or as stores or warehouses. The Sanitary Survey of 1865 found that four-fifths of the tenement-houses then in use were altered from other forms for this purpose.

In the conduct of house building, as of every other business, there are many unsuccessful attempts, and many instances in which the property changes hands before completion and occupancy. But whatever the good or ill fortune of the intervening parties, the contractor, the workman, or the furnisher of materials, the general public only need to know that the houses are built and duly occupied by owners or tenants. They pay a profit, on the whole, to each of the necessary parties to their erection, and they represent a very large and active employment of both capital and labor. Taking the average value of the 4,500 houses annually built at not over \$3,500 each, the total is \$15,750,000 of value created yearly.

The capitalization of the land itself in the erection of these buildings is a very important question in considering the application of the system elsewhere. It is generally believed that land is too valuable near New York and Boston, at least. To decide this question it would be necessary to see what these houses would be worth there. Those of two stories with four rooms are here worth \$1,200 to \$2,500 each, with a rental of \$11 to \$18 per month. The two story six-room house is worth \$2,500 to \$3,800 each, with a rental of \$16 to \$25 per month. The three story eight-roomed house is worth \$3,000 to \$5,000 each, with a rental of \$20 to \$35



per month. Taking the usual proportions of these three sizes there may be, and actually have been, built upon a square 400 by 400 feet, with exterior streets 50 feet wide, 120 to 130 dwellings on each square; and the land is capitalized at \$100,000 to \$125,000. To this is often added an equal amount as advances, or as money furnished by the owner of the land for building it up; and there may be, also, a nearly equal sum representing the further cost incurred in finally completing the dwellings. The *cost* of a built-up square, as thus made up, therefore varies from \$300,000 to \$325,000. Often the salable value rises to \$400,000 or \$450,000. Converting these items into their equivalents in cost per acre, it will be seen that the land before being built upon represents \$30,000 per acre, nearly, which is certainly a full average value for suburban real estate anywhere.

This distribution also admits an unexpected density of population. In a square mile there might be 130 squares of this size—400 by 400 feet; and with 120 houses on each square, the population would, at five persons each house, be 600 persons on a square, and 78,000 on a square mile. This is not an unreasonable dispersion, and in fact it much exceeds the average density in large cities.

The principal object of this paper is to illustrate and to urge the practical application of the single-house system of building in great cities, and to propose it for New York and Boston particularly, as an available substitute for the tenement-house system. If the land used in building can be capitalized at a sufficiently high value; if the houses can be built at a cost not exceeding twice the value of the land, and the rental, when built, will pay a fair interest on all the money and money value of the different elements of the investment, then there can be no insuperable difficulty. It cannot be expected that either the single house or the tenement house shall be built as charities; certainly not if houses of a suitable character can in any manner be obtained as paying matters of business. There is no difficulty in that respect here, and no want of readiness on the part of builders, who offer to erect houses wherever they can find vacant ground, in reasonable proximity to ground already built upon. For every year of the last ten, it has been asserted that building was overdone, and that building would not pay; yet each successive year has shown an actual record of buildings erected quite equal to its predecessor. As a rule, they are

erected by active men of moderate means, and not by capitalists; the investment of fixed capital in them being chiefly in the ground rents or mortgages. It is a system that has grown up by accident rather than by design, and it finds so large an adaptation, and meets so great a want on the part of the people, that it moves forward with a steady and regular progress not likely soon to be stopped.

The future of this expansion of cities we cannot undertake to predict. It is not necessary to assume anything definite in regard to it, except this, that the greater cities must in some way provide for much more than they now represent of surface expansion. New York cannot attain to three millions of population within the limits of the island of Manhattan, nor can Boston grow to two millions without crossing the Back Bay. A radius of five miles from any city's centre affords a great sweep for expansion, and it is already in perfectly successful use in more than one direction here. There must be and will be prompt and easy transit devised for such municipal areas, and if this is done, the singlehouse system, with its vast benefits and powerful social ameliorations, will last us yet for half a century.

#### OWNERSHIP AND OCCUPANCY OF HOUSES.

A further question is presented in the conditions of occupation and ownership of these single houses when built. It might be inferred that so large a number of dwellings could not be built year after year, if they were not called for and occupied; but whether they are taken as investments by persons who rent to others, or whether they are purchased directly by those who are to live in them, is an important distinction.

The facts are that chiefly through the fortunate agency of Building Associations much the larger share of all these buildings are, within two years after their erection, bought by those who live in them. An extended examination of a district near the southern border of the city, conducted by me at intervals during the past year, shows that three-fourths of the dwellings erected two years or more, are owned by those who reside in them, and nearly half of those which are properly and carefully built are purchased during the first year. In a space less than a mile square, centrally situated, but reaching to the southern limit of the built-up area, more than 4,000 dwellings were examined recently. Of these the proportion vacant was less than two per cent., and while some

blocks were carelessly erected, and remained for a year or more unfinished, all were ultimately well-finished and fully occupied. The condition in regard to personal ownership was not so easy to ascertain; certainly more than half were owned by their occupants, and often entire blocks, of thirty or forty houses each, would show not ten per cent. rented.

These statements are given simply to represent the average condition, and they would be substantially the same for any section of the city near its outer limit. The fact that several blocks on the section examined were erected by persons unable themselves to finish them, and, therefore, most likely to represent the worst phase of the single-house system, appeared to require that the facts should be ascertained. The result fully sustains the system, and shows that even in unskilled hands it cannot be a failure.

The agency of Building Associations in enabling persons, whatever their employment, to purchase these houses, is undoubtedly of the first importance. The facility for creating what may be called mortgages payable by monthly installments, secured by the house in which the mortgagor, or member of the association lives, is the greatest of all possible facilities for house-buying. It secures the principal and makes payment easy; both conditions being indispensable to any great extension of individual ownership. The almost universal division of the principal sum of cost in the erection of buildings, so as to create a first obligation, representing the value of the ground and called a ground rent, is also a very great facility. These ground rents, which are usually one-third, or less, of the value of the house and lot as finished, are the most desirable of investments for retired citizens, trusts, or estate funds. The proceeds are easy and certain of collection, not like ordinary house rents, or tenement rents particularly. It may be estimated that perhaps one-fourth to one-third of the value of the lands annually built upon, is capitalized as ground rent, and remains a fixed investment, the ownership of which may pass from one investor to another almost as an United States bond. Just now the insecurity of railroad and other stocks is inducing a much greater inquiry than usual for well-secured ground rents and first mortgages on dwellings. Taking the average of mortgages and ground rents together, it may be stated that half the cost of erecting dwellings of the classes below \$6,000 in value, and particularly of two-story dwellings valued at \$1,500 to \$3,000

each, is carried easily from the outset in permanent negotiable investments in this form. As soon as dwellings attain advancement in the course of erection, the ground rent becomes a security, and when completed and capable of occupation, a mortgage of one-third or more of the value is a negotiable security.

The business machinery of these building operations is somewhat difficult to explain, though simple and easy in actual operation. The land is "taken up on ground rent," by the builder usually, who pays for the ground itself on ground rents or first mortgages, contracting to build the dwelling in a specific time, in order to make, or as the means of making, those obligations secure. The land-owner is relieved from taxes, and the value placed upon his land becomes a productive security, bearing six per cent. interest, payable semi-annually. If the owner furnishes the money to build with, called advances, he takes securities of the same class. The land constituting a square of 400 feet or more, between principal streets, may, as has before been explained, be capitalized in this way at say \$75,000 to \$100,000, to which, if advances are made, an equal amount is added, making \$150,000 to \$200,000 in ground rents or first mortgages, for 75 to 125 dwellings. The builder requires from one-fourth to one-third the total cost of the dwellings beyond this to enable him to finish them, and his share of the transaction is the value the whole may have above the ground rents or mortgages. To our own citizens all this is, of course, familiar, but it is an essential part of the single-house system, and capable of introduction in any and every other city. It must, in some form, be introduced, in order to unite the interests of the land-owner, the capitalist who makes the advances in money, and the builder and final occupier of the dwelling built. When this is duly arranged, it will be found that the cost of the ground, even if large, is no obstruction to the introduction of the system. The necessity only is that this cost shall be capitalized in a way to enable the final occupier to carry it easily. It is also an essential point to afford time for the erection of dwellings, and to defer the commencement of interest on the several obligations a few months—three, four, or sometimes six months—in order to avoid obstructing the sale and occupation of the finished dwellings by accumulations of accrued interest.

The first statement printed in the appendix gives the result of a survey, made as this paper is prepared, of a section of the city of

Philadelphia, which fairly illustrates the single-house system as it exists here. The district stretches southward from the southern border, as built under the previous irregular systems, a mile in length by half a mile in width, two-thirds of it having been built up within five years. All the streets in this area are represented, and all the dwellings are classified. Factories and shops not used in any part as dwellings are not counted, but buildings used at the lower story front as stores or shops are counted, if also used as dwellings.

As there would be 5,000 dwellings on this area if all the spaces were built up, it may be fairly assumed that a square mile would afford 8,000 to 10,000 dwellings under this system, yet still be conspicuously open and well ventilated, with no street less than thirty feet in width.

Of these 4,252 dwellings, residents of general acquaintance with the facts estimate that two-thirds are owned by those who reside in them—in some localities, a half; in others as high as four-fifths. This very important fact has been verified by many visitors to the district during the past year.

On the west of Broad street in the south-western part of the city a very much larger district is built up in a similar manner, affording fully 6,000 dwellings of this class. In the northern sections of the city, there are still larger areas built up in the same manner, the northwestern districts being built up with three-story dwellings chiefly, but on the north and northeastern border the predominating form is of two-stories. All are brick or stone; none in any case being of wood.

In conclusion, it is proper to say that much more of explanation and elucidation is due the subject than is possible in this paper. It should be shown how the details of building are carried on; how the space is divided in dwellings of the various classes, and in what way further improvements are possible to be attained. The system cannot assume to be developed in all its beneficial relations, but it is remarkable that so much should be attained by efforts not directed in any especial degree to other than the usual objects of business.

It is often the subject of severe criticism that building operations of this class are undertaken by persons of insufficient skill, or of little capital; yet the remarkable feature is, that after much preliminary failure they are always made complete in the end.

I shall be amply rewarded if this peculiar feature of building progress and its striking social benefits receive the attention of thoughtful and benevolent men, who may see their way to apply and improve upon them in other cities. LORIN BLODGET.

## APPENDIX.

## BUILDINGS ERECTED AND OCCUPIED WITHIN TEN YEARS, REPRESENTING THE SINGLE-HOUSE SYSTEM IN PHILADELPHIA.

Streets.	2-Story.	3-Story.	Vacant.
Wharton, Broad to Thirteenth.....	6	11	0
"    Thirteenth to Twelfth.....	1	13	0
"    Twelfth to Eleventh (Public).....	1	0	0
"    Eleventh to Tenth.....	3	16	2
"    Tenth to Ninth.....	2	11	2
Watts, Wharton to Reed.....	4	1	0
"    Reed to Dickinson.....	36	0	6*
"    Dickinson to Tasker.....	36	0	10*
Clarion, Federal to Wharton.....	39	0	1
"    Wharton to Reed.....	33	2	2
"    Reed to Dickinson.....	44	0	0
"    Dickinson to Tasker.....	42	0	0
Reed, Broad to Thirteenth.....	16	0	0
"    (Thirteenth to Tenth, Public).....			
"    Tenth to Ninth.....	4	14	0
"    Eighth to Seventh.....	13	7	0
"    Seventh to Sixth.....	4	23	2
Alexander, above Wharton.....	31	1	1
Lantz, Thirteenth to Twelfth.....	31	0	0
"    Twelfth to Eleventh.....	26	2	0
Parade, Twelfth to Eleventh.....	28	2	0
Austin, Wharton to Reed.....	27	0	0
Denn, Federal to Wharton.....	18	0	0
"    Dickinson to Tasker.....	39	1	1
"    Tasker to Morris.....	23	2	1
"    Mifflin to McKean.....	48	0	0
Seybert, North of Wharton.....	7	10	0
Ashland, North of Wharton.....	29	0	0
Thirteenth, Federal to Wharton.....	13	31	0
"    Wharton to Reed.....	0	16	0
"    Reed to Dickinson.....	0	27	10*
"    Dickinson to Tasker.....	0	25	15*
"    Moore to Mifflin.....	10	13	13*
Twelfth, Federal to Wharton.....	11	4	1
"    (Wharton to Reed, Public).....			
"    Reed to Dickinson.....	17	0	0
"    Dickinson to Tasker.....	23	0	1
"    Tasker to Morris.....	23	2	1
"    Morris to Moore.....	17	4	1
"    Moore to Mifflin.....	14	27	4
"    Mifflin to McKean.....	31	0	6*
Eleventh, Wharton to Federal.....	19	13	1
"    (Wharton to Dickinson, Public).....			
"    Dickinson to Tasker.....	2	8	0
"    Tasker to Morris.....	36	4	1
"    Morris to Moore.....	13	6	0
"    Moore to Mifflin.....	6	0	2*
"    Mifflin to McKean.....	14	0	0
"    McKean to Snyder.....	8	0	2*
Tenth, Federal to Wharton.....	0	24	0
"    Wharton to Reed.....	6	34	2
"    Reed to Dickinson.....	4	10	0
"    Dickinson to Tasker.....	3	15	0
"    Tasker to Morris.....	2	13	0
"    Morris to Moore.....	19	19	0
"    Moore to Mifflin.....	18	4	0
"    Mifflin to McKean.....	40	27	0
"    McKean to Snyder.....	10	28	0
Ninth, Wharton to Reed.....	12	21	1
"    Reed to Dickinson.....	0	7	0
"    Dickinson to Tasker.....	1	15	0
"    Tasker to Morris.....	13	10	0
"    Morris to Moore.....	36	2	2
"    Moore to Mifflin.....	21	5	1

\*Unfinished.

<i>Streets.</i>	<i>2-Story.</i>	<i>3-Story.</i>	<i>Vacant.</i>
Eighth, Tasker to Morris.....	3	8	0
" Morris to Moore.....	30	7	1
" Moore to Miffin.....	28	7	1
Seventh, Dickinson to Tasker.....	10	17	0
" Tasker to Morris.....	35	3	0
" Morris to Moore.....	9	3	1
" (Moore to Miffin not open.).....			
" Miffin to McKean.....	16	17	1
Sixth, Moore to Miffin.....	0	8	1
" Miffin to McKean.....	15	17	0
Dickinson, Broad to Thirteenth.....	18	5	12*
" Thirteenth to Twelfth.....	10	0	0
" Twelfth to Eleventh.....	23	8	1
" Eleventh to Tenth.....	25	4	1
" Tenth to Ninth.....	8	3	0
" Ninth to Eighth.....	22	9	1
Tasker, Broad to Thirteenth.....	0	18	1
" Thirteenth to Twelfth.....	6	4	0
" Twelfth to Eleventh.....	14	0	0
" Eleventh to Tenth.....	15	23	4
" Tenth to Ninth.....	21	13	1
" Ninth to Eighth.....	26	9	0
" Eighth to Seventh.....	22	12	1
" Seventh to Sixth.....	19	9	0
Crumbach, Thirteenth to Twelfth.....	26	1	0
Moseley, Thirteenth to Twelfth.....	29	0	0
Aman, Twelfth to Eleventh.....	40	0	1
Guirey, Twelfth to Eleventh.....	30	0	0
Pallas, Dickinson to Tasker.....	21	0	3
" Tasker to Morris.....	34	0	1
" Moore to Miffin.....	41	1	3
" Miffin to McKean.....	47	5	1
Morris, Thirteenth to Twelfth.....	10	8	8
" Twelfth to Eleventh.....	25	2	1
" Eleventh to Tenth.....	34	2	1
" Tenth to Ninth.....	8	10	0
" Ninth to Eighth.....	8	4	0
" Eighth to Seventh.....	38	4	0
" Seventh to Sixth.....	36	2	0
Taylor, Eleventh to Tenth.....	3	1	0
" Tenth to Ninth.....	14	4	1
" Ninth to Eighth.....	16	1	1
Cross, Eleventh to Tenth.....	15	8	0
" Tenth to Ninth.....	34	4	0
" Ninth to Eighth.....	22	1	0
Fernon, Eleventh to Tenth.....	35	1	1
" Tenth to Ninth.....	26	1	1
" Ninth to Eighth.....	16	8	0
Fisher, Seventh to Sixth.....	48	4	0
Sylvester, Seventh to Sixth.....	38	2	1
Mountain, Eleventh to Tenth.....	28	1	0
" Tenth to Ninth.....	27	2	1
" Ninth to Eighth.....	15	8	1
" Eighth to Seventh.....	14	1	0
Watkins, Twelfth to Eleventh.....	39	1	0
" Eleventh to Tenth.....	26	1	0
" Tenth to Ninth.....	33	0	1
" Ninth to Eighth.....	25	0	1
" Eighth to Seventh.....	47	1	0
" Seventh to Sixth.....	38	2	1
Pierce, Twelfth to Eleventh.....	36	0	2
" Eleventh to Tenth (not open).....			
" Tenth to Ninth.....	38	1	1
" Ninth to Eighth.....	38	0	0
" Eighth to Seventh.....	39	1	0
" Seventh to Sixth.....	28	2	1
Moore, Thirteenth to Twelfth.....	10	5	1
" Twelfth to Eleventh.....	14	1	0
" Eleventh to Tenth (not open).....			
" Tenth to Ninth.....	38	0	1
" Ninth to Eighth.....	37	0	0
" Eighth to Seventh.....	31	0	4
" Seventh to Sixth.....	7	10	0
McClellan, Tenth to Ninth.....	24	0	0
" Ninth to Eighth.....	36	3	0
" Eighth to Seventh.....	38	2	0
Grant, Tenth to Ninth.....	21	1	0
Siegel, Eighth to Seventh.....	38	4	1
Miffin, Broad to Thirteenth.....	11	0	4*
" Thirteenth to Twelfth.....	26	2	1
" Twelfth to Eleventh.....	19	1	1

\* Unfinished.

Streets.	2-Story.	3-Story.	Vacant.
Mifflin, Eleventh to Tenth.....	14	0	0
" Tenth to Ninth (to Eighth not open).....	19	3	0
" Eighth to Seventh.....	34	3	0
" Seventh to Sixth.....	16	3	3
Hoffman, Tenth to Ninth.....	40	0	0
" Eighth to Seventh.....	10	3	1
" Seventh to Sixth.....	26	3	1
Blackburn, Moore to Mifflin.....	16	0	0
Bancroft, Mifflin to McKean.....	44	0	4*
Farrell, Mifflin to McKean.....	20	0	0
Gerhard, McKean to Snyder.....	32	0	10*
Passyunk, Ninth to Tenth.....	0	43	0
" Eleventh to Twelfth.....	10	30	0
" Moore to Mifflin.....	1	29	3
" Mifflin to McKean.....	13	5	0
Canal, above Thirteenth.....	27	1	10*
Cowroy, above Thirteenth.....	29	1	20*
Totals.....	3,295	959	87

In all, 4,252, of which 87 are vacant and finished, or 2 per cent. only—132, vacant and unfinished.

STATISTICAL SUMMARY OF THE TENANT-HOUSES AND CELLARS, AND THE DISTRIBUTION AND STATISTICS OF THEIR POPULATION, ETC., IN THE CITY OF NEW YORK, AT THE CLOSE OF THE YEAR 1864.

(From the Sanitary Survey of New York, 1865.)

WARDS.	Total No. of Tenant-Houses.....	Total No. of Families in Tenant-Houses.....	Average No. of Families in each House.....	Total Population in Tenant-Houses.....	Average Population in each House.....	Total Cellar Population..	Total Population in Cellars and Tenant-Houses.	Total No. of Tenant-Houses without Sewers.	Total Population in Unsewered Houses.....
First.....	250	2,181	8½	8,564	34¼ +	498	9,062	89	2,666
Third.....	54	310	5¾	1,248	24⅙	57	1,305	28	640
Fourth.....	486	3,636	7½	17,611	35¼ +	346	17,957	151	4,473
Fifth.....	462	2,597	5½	10,370	24⅔ +	836	11,206	293	5,796
Sixth.....	605	4,406	7¼	22,401	34½ +	496	22,897	214	6,612
Seventh.....	627	4,586	7¼	19,293	30¾	1,233	20,526	409	10,953
Eighth.....	625	3,977	6½	15,630	25 +	1,258	16,888	302	6,530
Ninth.....	596	3,836	6½	14,955	25⅓	217	15,172	208	4,485
Tenth.....	534	4,487	9	18,140	34 -	453	18,583	110	2,953
Eleventh.....	2,049	13,433	6½	64,254	31⅓	1,366	65,620	403	10,026
Thirteenth.....	540	3,729	6¾	14,997	27¾	939	15,936	215	5,089
Fourteenth.....	546	4,509	8½	20,008	36¾	417	20,425	207	6,202
Fifteenth.....	197	1,358	7	4,970	25 -	235	5,205	72	1,237
Sixteenth.....	1,257	7,088	5¾	31,500	25 +	2,150	33,650	300	7,107
Seventeenth.....	1,890	15,974	8½	63,766	34⅔ +	2,441	66,207	155	4,596
Eighteenth.....	836	7,267	8¾	35,869	42¾	230	36,099	98	3,766
Nineteenth.....	571	3,632	6½	16,067	28¼ +	205	16,272	81	1,912
Twentieth.....	1,162	8,344	7½	32,205	27¾	1,013	33,218	291	7,968
Twenty-First.....	1,026	7,299	7	36,675	35¾ -	135	36,810	144	4,491
Twenty-Second.....	996	7,714	7½	31,845	32 -	699	32,544	162	3,233

This table presents the Statistics of Tenant-Houses, as reported by the Sanitary Inspectors of the Council of Hygiene, and verified in a recent inspection by the Metropolitan Police.

The total number of tenant-houses, none of which contain less than three families,

\* Unfinished.



who hire their apartments by monthly or very brief periods of rental, is 15,511. This exceeds, by 202, the number which the Council of Hygiene, as well as the Metropolitan Police, has elsewhere given.

The total population of these tenant-houses at the time of last inspection was 486,000

The total population in cellars was ..... 15,224

Total in tenant-houses and cellars..... 501,224

NOTE.—The Sanitary Inspectors of the Twelfth Ward report that there are 202 tenant-houses of the larger class (averaging more than six families in a house) in that Ward. In the same Ward there are 643 inhabited *shanties*, and 710 other tenements of a poor class, but not having three families each, consequently not counted in the statistics of tenant-houses.

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### PROF. REULEAUX'S "LETTERS FROM PHILADELPHIA." <sup>1</sup>

OF all the scientific men who visited our Centennial Exhibition none excited a more lively interest in the circles of scientific culture than Prof. Reuleaux, of Berlin. He came, too, hither at the culmination of his renown as a mechanical engineer, when his *Kinematics of Machinery* had become the talk of scientific Europe, and had excited an interest in mechanics even in those who had never cared for subjects. His manner and bearing increased the regard excited by his reputation; while the range of his interest and the number of topics upon which he spoke with satisfaction and illumination to his hearers, showed that the great man was no pedantic specialist, but one of those favored children whom nature has endowed with a manifold capacity for intelligent outlook upon this varied world.

It is impossible, therefore, but that we should all have watched with lively sympathy the controversy excited in Germany by Prof. Reuleaux's criticisms upon the defects of the German representation in the Exhibition. Whatever he might have to say in detail upon such subjects, could not but cast a valuable light upon the general relations of the national industries to each other, and upon the comparative merits of each. What he did say, however, has been made known to us only in the most fragmentary way. A few passages from his letters, translated, and not even honestly

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<sup>1</sup> BRIEFE AUS PHILADELPHIA, Von F. Reuleaux, Professor. Vom Verfasser durchgesehene und durch Zusätze vermehrte Ausgabe. Gr. 8vo, X, und 98 Seiten. Braunschweig: Fr. Vieweg und Sohn, 1877.

translated, for the English newspapers, have been reproduced by the newspapers at home; but not until the reprint of the whole series reached us were we in possession of any adequate presentation of his views.

With the main theme of Prof. Reuleaux's letters we have but a very indirect concern. That German industry has lost ground through the prevalence of a competitive spirit in all its branches—that this competition has undoubtedly taken the shape of efforts to lower the price by lowering the quality, instead of seeking to command the market by raising the quality without altering the price—that the preference for mere cheapness has been diffused among buyers, and from them has reacted upon dealers and producers—and that, consequently, a general decay in the workmen's capacity, skill and preference for good work has begun and is rapidly going on—that the products of art-manufacture, which should appeal to the natural sense of the beautiful, appeal to and foster a Chauvinistic patriotism, or rather self-glorification—these are the counts of the indictment. The name of their author must carry great weight with the public, and his authority is not unsustained. He shows that even some of the commercial bodies which have denounced or protested against his "merciless criticism," have on previous occasions made statements of precisely the same tenor; and he declares that he is but the spokesman of a feeling which is shared by multitudes of patriotic Germans. But, as he himself says, this indictment was directed to the German people, and, but for the disturbance and excitement it produced among those who felt the sting of his criticisms, it would have gone no farther. Many such criticisms had been addressed to them by others; and it is not his fault if this one has obtained a European and more than European celebrity. He sought to speak as Aristophanes does when he prefixes his strictures on some Athenian matter with the caution "*Αἰροῖ ἑμὲν*—We are by ourselves; this is a family matter, and must go no farther." But his opponents have made it a matter for the town-crier.

And had Prof. Reuleaux confined his letters to this leading topic, had it not led him into by-ways of discussion and criticism, we, too, might have abstained from any interference "in other men's matters." But in truth his letters are so rich in collateral discussions and suggestions that they possess a value entirely independent of their controversial worth. For this statement we

shall allege as our warrant the passages we shall translate from them.

The first letter is also the best known, as it was that which provoked all the controversy. It opens with a description of the Exhibition Grounds. He gives it as his judgment that "the Exhibition, in spite of certain defects in the arrangement, has some wonderful aspects, and sundry points of superiority which give it a place high above all that has been accomplished in the way of a theatre for the international exhibition of industry." He rapidly describes the great and the lesser buildings, the beautiful grounds, the Centennial railway, and then from a description of the German Pavilion, its comforts and its hospitality, he passes to speak of the "severe defeat which Germany has sustained at the Philadelphia Exhibition." On this we will not farther dwell, nor yet on the contents of his second letter, which is omitted from the reprint, as in no way connected with the leading purpose of the series. It "contained an account of an excursion, and was intended merely to give a picture of the country and the people in and around Philadelphia."

When the third letter was written (July 19th), the reports of the reception of the first letter in Germany had begun to reach him. It is partly occupied with replies to the excuses which had been put forward for the defects of the German exhibit, which were based on the ground that the manufactures of Germany were not adequately exhibited. It was urged in excuse for this that the hard times, and the failure of the Vienna Exhibition to improve them, had disheartened German manufacturers. But he answers that the same influences were at work in other civilized countries (*Kultur-staaten*). Another consideration was the very small and unsatisfactory exhibit—machinery excepted—sent by America to Vienna. "The wing assigned her in the Main Building was all but empty; only a few of the slighter collateral branches of the machinery eked out an existence in the spacious hall, alongside of places for the sale of gold pens, lead pencils and miraculously-tenacious cement." The American press might have remembered this in their comments. "But no matter. Neither can this excuse us, since it was as well known to all the other nations as to us, The dissuasions which were at times expressly based upon these facts, and also upon the Tariff legislation of America, lose all point when it is seen that other nations were only so far influenced by

such considerations as to exhibit a smaller quantity of articles, while they sought to make the standard of quality as high as was permitted by the circumstances we have referred to.

“One more reason was this, that individual voices even from America made themselves heard in Europe, declaring that a vigorous preparation was not desirable. What complication of motives may have been at work this is not the place to investigate.” But he notes that the Imperial Government set its face against all such negative influences. It, like nearly all the rest of the European governments, labored to secure an adequate representation of the national industry, and, without surrendering his main point as to the decline of the German industrial spirit, he concedes that it did fail to secure a fair representation. The rest of his letter is occupied with a discussion of the mischievous effects of a competition based only on comparison of prices.

The fourth letter (July 31) resumes the same topic. He especially protests against a statement “from Southern Germany that our poor preparation for the Exhibition was for merely external and even praiseworthy reasons, and that there is little for us to learn here. It is the most dangerous of mistakes for us to undervalue foreign, especially American industry, or to assume that they are prostrated by a marasmus. Although American industry is suffering from the hard times, as are more or less all industries, yet it is quite sound inwardly, and in some respects, even in these times of inactivity, it is obtaining, through the perfecting of its apparatus, a strength which makes it capable of quite extraordinary achievements. All the species of industry which pertain to working and refining metals—that is, both the Hardware industry (as they call it here) and the industries that employ the semi-precious and the precious metals—have here attained such excellence as seems to leave no further obstacles in their way, and as will make them venture the reproduction of anything worthy the effort, which is shown them in the Exhibition. So, also, the Earthenware industry of America, taken as a whole, is in a state of vigorous development, and in some respects has already attained to a high stage of progress; and the same is the case with the textile industries.

“That I may not seem to you to have fallen into the mistake of seeing everything here in a rosy light, I will just here, earlier than I had intended, remark that our larger iron industries surpass the

American in excellence, and, I will not hesitate to say, take the lead of all the others here represented at the Exhibition. . . . . Our nearest rival in this field is Sweden, thanks to the quality of her iron, which is guaranteed by the nature of her ores, a quality never surpassed and seldom equalled, and which is brought into the clearest view by the very tasteful arrangement of her exhibit. This country, however, has not attained to the same high excellence as we in technical manipulation, especially as regards the efficiency of apparatus.

“Neither is America quite able to compete with us in bar and pig iron, although it is making notable exertions, and already with important results. A great dexterity has been already attained, and applied, among other things, to the use of machinery for parts of the manipulation of pig iron, in which we still employ manual labor. It is a well-known principle of the Americans to replace by machines the human hands, of which there is here a scarcity. Yet, it would be easy to go astray by drawing inferences without question, from the existence of this principle in any given connection. A piece of labor-saving machinery does not develop its full utility until the labor employed in its management has itself been educated to greater dexterity, and until the organization of labor has been carried to a high point. I dare to say, therefore, that the pig iron establishments which employ those labor-saving machines employ not fewer people than we, but more. The force of men required” for the manufacture of a rail “is here from one and a half to twice as great as in our own establishments of high standing. But I will not fail to add that the dexterity of the laborer, and the organizing activity of the managers, are steadily on the increase, and that both bear the unmistakable marks of development and progress. I must also refer to the fact that the wealth of this country in coal and in ores is such as Europe furnishes no parallel for, and it is so well adapted to the needs of the business, that a rapid development of the iron trade is a matter of certainty. . . Not less rich than the coal and iron mines are the deposits of copper, lead, mercury, to say nothing of gold and silver. What a supply of raw materials, but, also, what competition in regard to manufactured products, will result for Europe from this lavishly scattered wealth of nature, it is impossible to estimate. In the meantime, it is incumbent upon us to preserve our mining industries in active vitality, that we may, by care and excellence of work, create a substitute for advantages nature has denied to us.

“When we turn from iron to the mightiest agent of civilization that is produced from it, namely, machinery, we find that on the part of our own country but little has been brought forward for the contest of competition. . . . . Our neighboring countries likewise have not, in this matter of machinery, sent specially large exhibits. The great bulk of it is American, and by America is meant the United States.

“What was already observable in 1867 at Paris, and afterwards was brought into very clear light at Vienna, is here shown us to the full extent: that North America has begun to occupy one of the places in the first rank of Machine-building, in some respects the very first. Especially has it in some details carried the development of the steam engine farther than any other people, and has even learned to give it a completeness of external form which is worthy of admiration. A significant sign. For where the beauty of form has been developed, and has become a subject of especial and even critical care, the difficulties of construction for merely useful ends must have been previously overcome. At the least, a quiet confidence as regards these latter must have taken its place. The method of repair has also been brought to great perfection. Several firms, for instance, exhibit steam engines of various sizes, whose parts one and all are put together without the aid of a fitter, and afterwards—like the parts of American sewing machines and of those of several German firms—can be replaced. American machinery is very brilliantly represented in the department of tool-making. Here it carries away the palm, not only at the Exhibition, but seemingly everywhere. Wealth of new practical ideas, a surprisingly dextrous adaptation to special uses, a growing exactness in the machine finish of the parts, and an increasing elegance in the external appearance of the machine, characterize American productions in this department. Germany has probably the best natural ability to compete with the tool-machinists of this country. It requires a talent and an intelligent interest in following out the technological examples and processes, which closely correspond to the German character, and which have already in manifold instances made themselves felt among us. Only, however, the most strenuous application, the exertion of all our powers, can put us in a position to overtake America, so great is the advantage she has won. It is but a short time since we adopted the English type of tool, and even developed it farther

according to its own idea, and thus began to stand on our own feet. A German type of tool-making machinery gradually arose. But now the American, with its entirely new ideas, has hurled the English out of the saddle, and we must without delay give our adherence to the new system, if we are not to be utterly left behind. Excellent beginnings, as is well known, are indeed already made.....

“Besides the many weaving machines, those for the manipulation of wood, which exhibit numerous valuable improvements, and the manifold labor-saving machines for all sorts of pursuits, the printing presses and their apparatus deserve especial mention. The great establishment of Hoe exhibits no less than thirteen fast presses. Several of these print daily papers in the Exhibition. About three o'clock every afternoon a dense crowd gathers around the fastest of the Hoe presses, which in one minute prints five hundred copies of *The Times* of this city, and lays them folded upon the delivery table. This, like most of the other American fast presses, prints from a cylindrical ‘form,’ which is obtained by a casting from a paper mould. This latter is taken in a well-known method from a flat ‘form,’ dried and bent into a cylindrical shape, into which the stereotype metal is poured. We hope that Germany, the land in which fast presses were invented and were first constructed, will not long remain behind the Yankees in this regard.”

In a note Prof. Reuleaux adds: “It is not a matter of my personal knowledge, but it was repeatedly stated even at the Exhibition that the rotary printing presses are used in Germany also, and are of excellent construction. There was indeed a press of this sort exhibited by the Augsburg Machine-works at Vienna. What technical cotemporary does not still recall the interest excited by the attempts at such a press presented at the London Exhibition of 1851? The possibility of such achievements as are spoken of above had not yet been shown. It is to be hoped that at Paris this will be effected by us.”

The fifth and sixth letters are taken up with a review of the exhibits of glass and earthenware, a department in which the Professor is evidently a connoisseur. Nowhere have we found the unsurpassed excellence of the English exhibit so truly and happily described. We will not quote him here at any length, because we hope to lay the whole of what he has said on this subject before

our readers in a separate article. To America he gives two wholesome paragraphs:

"In the departments both of the finer and the coarser pottery America has not as yet attained any great development, and has very much to learn. But the endeavor to excel exists, and the materials for the purpose are obtainable in such purity and such volume, as are unheard of. Artistic excellence of form and color Americans have not as yet achieved; it seems as if they had in their eyes [what the oculists call] a *punctum caecum*—a blind point—for these things. But as regards dexterity, nice finish, and business-like adaptation they stand very high already, so that the market is already closed to the coarser English wares.

"Far better than in pottery is America's position in the glass manufacture. In this the United States have an industry of older establishment, and this prevents the remark made above about a *punctum caecum* from being applicable here. Their technical skill is quite remarkable, and in point of form some of their productions take a foremost rank. North America cannot fail to compete successfully, and that very soon, with all her older rivals in the production of crystal glass."

The seventh letter (August 18th), takes up the finer manipulation of metals, and is largely devoted to the progress effected by our own country:

"The metal-ware, or, as they here call it, the hardware industry of North America, has attained a high development in various directions. In iron, steel, copper, zinc, brass, as also in bronze, German silver, silver and gold, there are employed thousands of diligent and dextrous hands, which have displayed in the Exhibition brilliant specimens of their achievements. All are more or less distinguished by a notable common characteristic. There is in them, for one thing, an adaptation to their uses, and a close attention to practical needs and to handiness, which everywhere seeks as it were to anticipate our wants; on the other hand, there is a singular blundering in those places and relations where account must be taken of the demands of good taste. Both of these are supported by a brilliant technical skill, which sustains the adaptation of form to use, and in part gets rid of the latter defect. This same characteristic is found in other departments, especially in their architecture, where the offenses against the rules of art are to us the more striking, since in Europe, and especially in the German centre



of Europe, the endeavor at refinement of the taste for architecture is general.

“Of these oddities, however, the North Americans are no longer completely unconscious. For a long time they have been offensive to the cultivated; the knowledge of aesthetic principles, it is easy to see, is spreading rapidly. Foreign masters of the art are brought over, and native artists seek an education in Europe. It is, therefore, beyond a doubt that in no long time a better style of architecture will win its way, or to speak more accurately, that the aesthetic feeling for architecture will be formed and developed among this people, who have already achieved so much that is astonishing and preëminent in purely utilitarian structures, such as bridges and large halls. This feeling already shows itself in individual productions of this class, such as the country residence, the cottage, which are invested with a charm of homelikeness, of household usage, which we could only take as an example for ourselves. In the furniture too—perhaps through traditions inherited from England—good forms of construction are usual, and these, together with their superior joiner’s work and their excellent material, make the apartments in their private houses exceedingly attractive. The Exhibition brings into view their excellence. But then, the Americans, although proud of their great ability in technical execution, have not allowed themselves to be blinded as to the æsthetic defects of the products of their art manufactures. Especially has the Exhibition exerted an influence in this direction, as is shown by the establishment in Philadelphia of a Museum of Industry on a large scale. Important purchases have been made for it at the Exhibition. They were made under the direction of a committee of Art connoisseurs. The gray cards which say: *Purchased by the Pennsylvania Museum of Industry and School of Art*, exercise a silent criticism which is probably more valuable than much that makes itself heard. In Boston there is a similar museum already in existence, and it is undertaking similar purchases. A museum on an especially large scale, with the same aim as the British [in South Kensington?] is founding in New York; a building is to be erected for it in Central Park which shall cover four times as much ground as the British, and one wing is already under roof. Thus you meet everywhere with life, movement, and the zeal to appropriate intellectually what is already a material possession. This last fact must not be forgotten by those who would predict

the future of these endeavors. How much has already been accomplished in some instances, I have shown in my last letter, in speaking of crystal glass.

"In the manufacture of steel the United States take unquestionably the first place at the Exhibition; in single branches of this manufacture their priority is even absolute. The axes, hatchets, files, the tools for forestry, plantations and gardening, and the like, are presented in such variety and beauty, as compels us to stand and gaze with wonderment. The saws, both plain and circular, with all the fine, yea refined singularities possible in this department, together with steel tools for the mason, the moulder, the statuary, and the machinist, are of the first order in merit. I will also add that the larger sawing machines, the cross-saws, the block-saws, and the like, have reached a height of development from which we are still far distant, and at the same time are driven so easily that in this regard also we have still a great deal to learn. The surgical instruments of the Americans are of excellent execution. The best forms are German; the names Tiemann, Gemrig, Kolbe, not only sound homelike in our ears, but those who bear them are German in speech and character. Something like this we find in other departments, for instance in the production of musical instruments. . . .

"In defensive weapons, America has developed, if possible, a still greater wealth than in cutting instruments. The sterling quality of her small fire-arms, which are also undergoing a continual improvement as to shape and beauty, finds a brilliant expression in their exhibit.

"England in the department of steel goods lags far behind America at the Exhibition. Competition will in general grow every day more difficult to her. Sweden certainly comes next to England. . . .

"In the department of lock-smithing, likewise, America has carried off the laurels, and that as well in the ingenious as in the ordinary branches. Whole batteries of Fire and Burglar-proof fastenings are exhibited, by side of which we might have shown excellent work of the same sort, but not in such variety. Among the ingenious specimens of lock-making, the 'Time-locks,' as they are called, shine as the newest inventions, and in their manufacture the celebrated Yale Lock Company distinguish themselves. These Time Locks are really intended as a safeguard against unfaithful cashiers,

who have attained a lamentable notoriety. They are provided either with double or with single clock-works, which give access to the lock only at certain hours of the day, or else allow the bolt to move only at those hours, while they also make it impossible to undo the fastenings all through Sunday. At all those times, therefore, when the members of the firm or the officers of the company are not usually present, the lock cannot be opened even by its owner. The Yale Company have received orders in considerable number for the lock, which, as presented in several handsome styles at the Company's place of exhibit, attracts its share of the public's attention. The same Company have also exhibited, on a magnificent scale, sundry locks for the Postal Service. These have already attracted due attention from our Postmaster General.

"The simpler sorts of lock-smithing are likewise quite as well developed, and are of as excellent formation. They employ extensively the aid of machinery, and consequently they furnish their manufactures at an astonishingly low price, yet of very good construction. It can hardly but be expected that Germany will soon have to sustain an invasion of American products of this class.

"A notable branch of skilled industry in which America far surpasses all other nations, is the nickle-plating of metals. This is practised with remarkable dexterity, and has diffused a brilliancy throughout the Exhibition which has imparted to it a certain novelty and originality. The hand-rails which enclose the American stands for exhibit are nickle-plated, as are a multitude of articles of cast iron and zinc, such as candelabra, chandeliers, and the like. In Machinery Hall very many establishments have on exhibit a model-machine, a show piece, which is nickle-plated throughout. The entire exhibit of steam fire engines are finished in a handsome style never heard of with us, and are almost covered with nickle-plating. I can furthermore bear witness that the same elegant finish is also often to be found on engines in actual service. Among others we found it so in smoky, reeky Pittsburg. There exist here large establishments which devote themselves to nickle-plating, and practice it upon all sorts of objects, the smallest as readily as the greatest. The establishments also for the manufacture of gas apparatus, have workshops for the purpose annexed to them. What is most worthy of notice is this, that nickle-plating, a *German invention*, is here carried on far better than with us. We have so far tried in vain to produce the high, clear brilliancy

which might almost be taken for that of silver, and which is here universally looked for and effected.

"The American exhibit of chandeliers, lamps, and the like, is extraordinarily copious and important. Here also there is shown in general an excellent technical skill, as well in casting and construction, as in gilding, bronzing, and coloring. We have hardly anything worth mentioning opposed to them. . . .

"In silverware, also, and in gold ware, America displays excellent performances. The wealth of silver presented is magnificent; the technical skill it shows is brilliant. The Gorham Company exhibits a piece of plate of unusual massiveness and richness in figures, called the Century Vase, which contains two thousand ounces of solid silver. I must remark that in spite of the brilliant technical skill of the work, it leaves much to be desired when regarded from the standpoint of the higher art manufacture. The Americans have yet to learn, how empty of meaning the Allegorizing, in which they now give themselves the most scope, and how small comparatively the influence it exerts; that as a rule, a work of art should not address itself to the reflective understanding if it is to accomplish its purpose.

"Jewels and precious stones are chiefly exhibited by America, and next of all by France. . . . In the matter of jewels, the Americans are for the most part importers, and indeed their source of supply is almost exclusively in Paris. The settings are prepared here. The same is the case with the finer cameos."

The eighth letter (August 20th) takes up the department of textile fabrics, and he is able to speak with a certain satisfaction of the German exhibit in this department. He mentions especially the admirable display of cotton velvets from Hannover, and the exhibit of silks and brocades from Elberfeld. This last exhibition, we think, was one of the most notable in the Main Building, containing classified specimens of goods made for every leading market of the world, from Paris to Dahomey, from New York to Siam. It showed just the business qualities, the promptness to anticipate wants and accommodate tastes, in which the Germans are especially deficient. But it represented a very peculiar and exceptional district of Germany—the wide-awake Calvinists of Westphalia, the Yankees of the Rhine valley, whose mode of thought and ways of working resemble far more those of their co-religionists of Switzerland, Holland, Scotland, Lancashire, and New England, than of Luther's less business-like disciples throughout the Fatherland.

In textile fabrics he gives the palm to France, as regards silks; to England, as regards carpets and woolen goods, especially upholstery fabrics. "America seeks in vain to dispute the supremacy of England," as regards this last class of cloths, "although she has important productions so show."

In the exhibition of books, he speaks with praise of the German collection as "interesting and instructive to visitors, so that it won many friends." But considering the collection not as literature, but strictly as the products of a branch of manufacture, which is the point of view from which they must be studied at an International Exhibition, he concludes that German books have not attained the highest degree of excellence. "We dare not—a very few cases excepted—venture to bring the classic works we exhibited into comparison with those of England and America; the difference in our disfavor is too great. . . ."

"In point of paper and print, the English and American books, and in great part the French also, are decidedly and far ahead of us—the very points which determine which are the best productions. All three surpass us thoroughly in book-binding. The art of binding a book handsomely and neatly is neglected among us to an extent of which there is hardly any sufficient knowledge, and therefore the art has retrograded. In America, on the contrary, the land of squatters and pioneers, it stands high: in point of artistic skill, there is here hardly in any way a disparity between it and the French book-binding, which is represented by Lortic of Paris still more brilliantly than at Vienna. In the application of the art to works which consist of many volumes, it probably surpasses the French, or at least is not behind it, in consistency of the execution. The English bindings, at least so far as they are here exhibited, do not come up to those two. At the same time, I am unable for my part to decide between the three rivals, as the English in their country set a high value upon book-binding, and have procured for it a corresponding development; and yet it is asserted the English amateur in recent years has frequently sent his books over the Channel for binding. . . ."

"Book-binding, which in England and America extends to the cheapest and the most ordinary edition, where we [like the French] almost exclusively use the *brochure* style, makes itself felt in a province which stands entirely out of connection with literature. It is that of the so-called Account Books, which are here

quite usually called Blank Books. The beauty, the elegance, the strength of their binding, taken in connection with the neatness and the suitability of their ruling, far surpasses anything we are accustomed to expect in such books. On the other hand, these blank books are of such a moderate cost that they might be introduced into Europe. Nothing remains but to urge that the art of book-binding be reanimated and elevated among us. The technical skill of the Americans has here again pursued that characteristic road, to which I have repeatedly called attention; machinery comes into use only for the coarser, purely mechanical part of the labor, and on the other hand all that has its scope within the province of art, and seeks to win by giving a subtle satisfaction to the eye, is effected by careful and skillful human hands. That in an industry carried on in this way, the better and nobler powers, the ideal principle in the mere workman, are confirmed and strengthened, needs no proof."

In the ninth letter (August 25th) he returns to the question why the German exhibit so inadequately represented the industries of the Empire, and he declares that the reason was the "*depreciation, all but universal among us, of American industry and the American market*. Some assumed with self-satisfaction that even without their taking any trouble German industry would command a recognition; others that it was only necessary for that purpose to send its inferior products; both in unison assumed that the American Protective Tariff made the introduction of our goods in general all but impossible. Only a small number of well-informed persons kept themselves free from both mistakes—for that such they are becomes clear in the light which the Exhibition brings, and which the cognizance of the state of things here can give us. . . .

"First of all, the fact should be made prominent, which has already been in a partial way suggested, that American industry has in the last decades worked its way to a degree of excellence which is in some respects amazing. This it owes undoubtedly to the Protective Tariff, along with the ability of the force it has at work, in which we Germans have a respectable share. The Protective Tariff has called into existence, has enlarged, and has brought to greater completeness, industries which had not previously been carried on here, and it is still producing the same results. Nor need anybody in Germany wonder at this; for we also have employed the Protective Tariff in its time for exactly the same purpose and with the greatest success.

"American industry, then, seeks its strength, for the most part, in the quality of its products. By this means it has managed gradually to stop the introduction of a series of articles of import. As indispensable aids to this it employs, first, machinery, wherever this can be substituted for severe bodily toil, and, secondly, human intelligence in the form of skilled labor, while it secures to labor high wages. The two factors together furnish a product, which, while comparatively moderate in price, is of good and, for the most part, of quite superior quality. Finally, the entire industry is based on the riches of the soil and beneath the soil, which, with a few exceptions, far, far surpass ours."

The Professor proceeds to enumerate some of the advantages possessed by American manufacturers—such as the proximity in some cases of iron and coal; the inexhaustible supply of pure sand, free from iron especially, for the glass manufacture; the vast deposits of kaolin of the finest known quality, for the porcelain manufacture; the excellence and the plenty of our timber, which permit the railroads to lay a strong tie at every second foot of their rails; the plenty of petroleum, cotton, grain, flesh-meat, leather, and the like. In these he sees "so many foundation stones of a vast industry, which, when once called into life, may become, by following sound industrial principles, one of the first, if not the very first in the world." To meet with hard facts the declamations with which his letters had been encountered, he proceeds to quote from the official figures the statistics of American industry, showing how fast in recent years the cotton and woolen industries of America had grown, so that in either we now surpass Germany and we are gaining fast on England; then the rapid decline in the import of iron, and the rapid growth in its export; then the growth of the Bessemer steel manufacture, which was nothing ten years ago, and is now one and a-half times as great as that of the German Empire. And here he pauses, to emphasize a fact which must have surprised his readers. There are in America just *twenty-two* Bessemer furnaces or cupolas—the German Empire has *sixty-seven*; the former produce 375,517 tons of steel a year, and the latter 235,600 tons, or two-thirds as much with three times the apparatus. The reason is because "the manipulation of the cupola-furnace is more skillful than that customary with us," and, he might have added, with the English, the Austrians, and all the other nations who use it. He proceeds:

“As in those I have spoken of, so in other industries, the Union, by virtue of the educational influence of the Protective Tariff, has attained a vast development, and as this last instance more than clearly shows, by no means in a sickly fashion, and has as a result victoriously resisted the importation of many sorts of goods, and is even got so far as to have begun a lively exportation business. Importation, however, is not completely prevented,” as he proceeds to show by the official figures which tell the values purchased from France, Germany and Belgium. From these figures he derives another confirmation of his main theme; Germany is seen to be losing ground industrially when brought into comparison with these two neighboring countries, as to her command of the markets of the United States.

We close our extracts here, as the tenth letter, which bears date “On the bank of the Oder, beginning of September,” was written after his return to Germany, and is entirely taken up with the defence of his views as to the internal condition of German industry. We have been, for our part, fortunate that such a controversy occurred, since it has led to the expression of Prof. Reuleaux's views upon other matters, which more nearly concern ourselves. Opinions of our present so gratifying, auguries of our future so hopeful, we as a people dare hardly have given utterance to. They come with the more force from a purely impartial observer, who stands at the very pinnacle of his own profession, and who is in other departments an observant, thoughtful and judicious critic. His words have not been always words of praise; but his blame is such, so clearly right, so well put, and so suggestive, that every one must wish for more of it.

His judgment of the results of the great comparison of industries we have undergone, is not more decidedly favorable to America than that of a multitude of our European visitors, especially the English. These latter are no willing witnesses. They confessed beforehand to a hope that the Centennial Exhibition would give the *coup de grace* to our protective policy; some of them boldly and injudiciously proclaimed that as a certainty. Their exhibit was evidently arranged with that view. It was most excellent in nearly every department; by far the best, indeed, that came from abroad. It showed a fine perception of American tastes and preferences; its quality was a delicate compliment to us. The interpretation thereof was in the British Catalogue, which elaborate-



ly set forth, for all such as chose to read it, the **oppressive burdens** of import duties, which prevented our people from **getting all these nice things as cheap as the people of London and Belfast, Montreal and Calcutta, could have them.** The motive for **their printing that list of duties in a document intended for public circulation, was quite transparent.** There was no need to issue **the United States Tariff duties for the information of anybody; those who needed to consult it could get it easily enough in an authentic form from Washington.** It was printed as a Free Trade pamphlet for general circulation in this country, and that seemingly **with the sanction of a Commission who represented the dignity of their nation and accepted the hospitality of ours—and especially the hospitality of the Protectionist City, the capital of the Protectionist Commonwealth.** We write not in malice, but in good-humored amusement. Never was dignity so badly sacrificed with **such a small result.** Not a Protectionist bears a grain of malice for it; we only recall the gentlemanly bearing, the uniform kindness, **the frankness of our British guests, and mentally wonder what petty snob behind the scenes, clad in loud-patterned drilling, dropping indiscriminate H's, managed to commit so many excellent and cultivated gentlemen to so bad a blunder.**

The Exhibition is over, and Protection is not **dead, nor moribund** even, although our Custom House Officials **exerted themselves to the utmost to show how hateful a Revenue System could be in its actual contact with people.** The verdict at home is summed up in the remark of a Mr. Rutherford B. Hayes from some place out West, that he did not see how any thoughtful man could go to the Exhibition, and not come away a Protectionist. From abroad there comes back the testimony to the excellence and **the vitality of our sickly, hot-house industries, which are now fighting their way into every market of the world.** A Protectionist sits in the White House; a Protectionist in the Treasury. Protectionist sentiment is making itself felt in the ranks of the party which has **been its traditional enemy.** A Protectionist had the management of their Presidential Campaign; another was made, by their votes, **Speaker of the House; and Ben. Hill of Georgia is but one of many of the Southern representatives, who have definitely given up—as even Jefferson Davis has—the notion that the South can grow rich or even hold her own by raising and exporting cotton.** By the time of our next Centennial we will need no Protective Tariff, so fast

do we grow as a nation. Five hundred years of Protection were needed to bring the industries of England to their present commanding position; one hundred of the same persevering policy will be enough for us.

R. E. T.

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### MR. TENNYSON'S NEW DRAMA. <sup>1</sup>

THE departure which Mr. Tennyson so lately made in Queen Mary into the dramatic field, he continues in Harold. A much more healthy, straightforward and vigorous subject it is than the Queen of red-hot memory. The moral of the play is shadowed forth in a prologue, which to be understood ought to have been an epilogue, viz: that all things, however unjust and hopeless, work in the end for good; and although the actors are to be condemned for their falsehood and oppression, or praised for their courage and patriotism, yet Providence works out its designs by each.

We stroll and stare  
Where might made right eight hundred years ago;  
Might, right? Ay good. So all things make for good.  
But he and he, if soul be soul, are where  
Each stands full face with all he did below.

"He and he" are Harold and William, who "if soul be soul" the epilogue seems to insinuate is now contemplating a very distressing panorama of things done in the flesh. Our understanding of the lines may be affected by the conviction that the play does not quite do justice to the Duke's character.

The time of the drama is the close of the reign of Edward the Confessor, when he has given himself up to the religious life, and when because of his childlessness, the minds of the English and Norman parties are much exercised concerning the succession. Tostig, Earl of Northumbria, Harold's brother, is ingratiating himself with the King, in the very apparent design of obtaining the right to succeed. The Duke of Normandy is preparing to make good the promise of Edward before his accession, that he would

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<sup>1</sup> HAROLD. A Drama. By Alfred Tennyson (Author's edition from advanced sheet). Boston. James R. Osgood & Company. 1877.

bequeath the title to him. Edgar Atheling, the legal inheritor, if in those early times there were a legal inheritance, is but a child, and regarded by none of the hard-handed competitors. Harold Godwinson, after Edward the most powerful and respected man in the kingdom, is the hope and reliance of the English party. On a voyage to Flanders he is cast upon the coasts of Normandy, and detained by William until he has taken a solemn oath, with his hand upon a velvet cloth which conceals the bones of Norman saints, to maintain the Duke's claim to the English crown. Upon his return, he finds that the oppressions of Tostig have resulted in the rebellion of his Northumbrian subjects, and that the Witenagemote have deposed him, a judgment which Harold induces the King to sustain. Edward just before his death names Harold his successor, and the Witenagemote confirm the nomination. The disappointed Tostig, with Hardrada of Norway, invades England on the east, while William collects a fleet and army against the south. Harold, in marching to meet the first invasion, finds it necessary in order to unite the Mercians cordially to the Saxons, to marry Aldwyth, and give up Edith, whom he deeply loves. At the head of the forces thus united, he defeats Hardrada and Tostig, who are both killed, and then marches southward, and fights the battle of Senlac near Hastings, in which, after a desperate combat, he loses his life and crown.

This brief outline of the play will show the reader that it is merely a period of English history thrown, and thrown very accurately, into a dramatic form. The test of merit should be whether anything is added in the recital to the interest and dignity and pathos of the facts themselves.

Here, as in Queen Mary, we are struck with the fact, that the poet is happiest when he is depicting bold spirits and vigorous scenes. He has a vein for the common folk akin to Shakspere's. The description of Harold's encounter with the fishermen after his shipwreck, is an admirable instance of it.

*Harold.* Friend, in that last inhospitable plunge  
Our boat hath burst her ribs; but ours are whole; ,  
I have but barked my hands.

*Attendant.* I dug mine into  
My old friend the shore, and clinging thus  
Felt the remorseless outdraught of the deep  
Haul like a great strong fellow at my legs,  
And then I rose and ran. The blast that came

So suddenly hath fallen as suddenly—  
Put thou the comet and this blast together—

*Harold.* Put thou thyself and mother-wit together.  
Be not a fool!

*(Enter Fishermen with torches. Harold, going up to one of them, Rolf.)*

Wicked Sea-will-o'-the-wisp!  
Wolf of the shore! dog, with thy lying lights  
Thou hast betrayed us on these rocks of thine!

*Rolf.* Ay, but thou liest as loud the black herring-pond behind thee.

We be fishermen: I came to see after my nets.

*Harold.* To drag us into them. Fishermen? devils!  
Who, while ye fish for men with your false fires,  
Let the great devil fish for your own souls.

*Rolf.* Nay, then, we be liker the blessed Apostles; *they* were fishers of men, Father Jean says.

*Harold.* I had liefer that the fish had swallowed me,  
Like Jonah, than have known there were such devils.  
What's to be done?

*(To his men—goes apart with them.)*

*Fisherman.* Rolf, what fish did swallow Jonah?

*Rolf.* A whale!

*Fisherman.* Then a whale to a whelk we have swallowed the King of England. I saw him over there. Look there, Rolf, when I was down in the fever, *she* was down with the hunger, and thou didst stand by her and give her thy crabs, and set her up again till now, by the patient Saints, she's as crabbed as ever.

*Rolf.* And I'll give her my crabs again, when thou art down again.

*Fisherman.* I thank thee Rolf. Run thou to Count Guy; he is hard at hand. Tell him what hath crept into our creel, and he will fee thee as freely as he will wrench this outlander's ransom out of him—and why not? for what right had he to get himself wrecked on another man's land?

*Rolf.* Thou art the human-heartedest Christian-charitiest of all crab-catchers! Share and share alike! *(Exit.)*

*Harold (to Fisherman).* Fellow, dost thou catch crabs?

*Fisherman.* As few as I may in a wind, and less than I would in calm. Ay!

*Harold.* I have a mind that thou shalt catch no more.

*Fisherman.* How?

*Harold.* I have a mind to brain thee with mine axe.

*Fisherman.* Ay, do, do, and our great Count-crab will make his nippers meet in thine heart; he'll sweat it out of thee, he'll sweat it out of thee. Look, he's here! He'll speak for himself! Hold thine own, if thou canst!

ACT II., Scene 1.

Harold, in the close of the second scene of the same act, and in his conversation with the Duke's ambassador in the first scene of the fifth act, is spirited in the highest degree. But in the punning use of a word, in different senses in the same sentence, so skillfully employed by Shakspere, Tennyson falls lamentably short. As for instance this paralysis of the verb to make :

*Tostig.* The King hath made me Earl; make me not fool!  
Nor make the King a fool, who made me Earl!

*Harold.* No, Tostig, lest I make myself a fool  
Who made the King who made thee, make thee Earl.  
ACT I., Scene 1.

And this of the verb to save:

*William.* Perchance against  
Their saver, save thou save him from himself.  
ACT II., Scene 2.

In compensation for which we may notice the last words of Act IV., addressed to a bearer of bad news, as of the ring of the old drama.

Break the banquet up \* \* \* Ye four!  
And thou, my carrier pigeon of black news,  
Cram thy crop full, but come when thou art called.

This speech of Edith has the truly Catholic spirit :

*Edith.* His oath was broken, O holy Norman saints,  
Ye that are now of heaven, and see beyond  
Your Norman shrines, pardon it, pardon it,  
That he forswore himself for all he loved,  
Me, me and all!

One of the features of the play is Harold's hopelessness after his false oath upon the sacred relics, which is not improved by the abrupt and almost pert way with which he breaks out on page sixteen when speaking of Tostig's hypocrisy, and, on page fifty-seven, in conversation with Malet about the promises required by the Duke,

"Better die than lie!"

The manner of the sentence is quite offensive, and its repetition is too inartistic a sign-board to the purposes of a poet. In the first scene of Act III. the dying Edward relates a most involved and unpoetical dream. It has in it a good deal of the prophetic force which the experience of some centuries is apt to give.

*Edward.* The green tree!  
Then a great Angel past along the highest  
Crying "the doom of England," and at once

He stood beside me, in his grasp a sword  
 Of lightnings, wherewithal he cleft the tree  
 From off the bearing trunk, and hurl'd it from him  
 Three fields away. And then he dashed and drenched,  
 He dyed, he soaked the trunk with human blood,  
 And brought the sundered tree again, and set it  
 Straight on the trunk, that thus baptized in blood  
 Grew even high and higher, beyond my seeing,  
 And shot out sidelong boughs across the deep  
 That dropt themselves, and rooted in far isles  
 Beyond my seeing: and the great Angel rose  
 And past again along the highest, crying  
 "The doom of England"—Tostig, raise my head!  
 (*Falls back senseless.*)

This reminds us to say that though the play is in its historical incidents most accurate, the treatment of them is quite anachronistic. Abraham Lincoln, at Gettysburg, did not more accurately define the government by the people, through the people and for the people, than do Harold and Edith of the Swan Neck in the first scene of the fifth act.

*Edith.*

No,

First of a line that coming from the people,  
 And chosen by the people—

*Harold.*

And fighting for  
 And dying for the people—

And in his last words in the fifth act the conqueror says, quite in the manner of a constitutional lawyer:

I am King of England, so they thwart me not,  
 And I will rule according to their laws.

Wherever bold straightforward sentiments are expressed the language is good, but the tone of the speeches generally is a little too elevated to be dramatic.

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THE  
PENN MONTHLY.

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MAY.

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THE MONTH.

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**D**IPLOMACY has had its last word on the Eastern Question, but really the Diplomats have shown such slowness in getting so far, that we begin to doubt their sex.

The Protocol at last obtained the signature of the English minister for foreign affairs, and thus received the sanction of all Europe. Its contents were substantially what we deciphered last month out of a complexity of inconsistent telegrams. It announced that the reforms demanded by the Conference express the wishes of all Europe and must be carried out by Turkey, and that the Great Powers hold themselves responsible for them. But it fixed no date for the termination of Turkey's probation, and promised no action in case Turkey either refused to accept the Protocol, or, having accepted it, failed to act in its spirit. And it made the document the basis of an agreement between Turkey and Europe, which, if Turkey had agreed to it, would have postponed hostilities. Lord Granville signed it with the proviso separately added that both Russia and Turkey must disarm in case it were accepted.

As we predicted, Turkey flatly refused to accept it. The Sultan dare not take such a step. The tone of popular feeling among the Moslems of Turkey would have made it madness, and the Porte is evidently relying upon that to carry him through the war, which thus became inevitable. Nor are we sure that this is a mistaken estimate, for religious zeal is one of the most incalculable



forces in history. It has wrought miracles and removed mountains enough in the past, to make us hesitate about saying that it is unable to keep the Slavs beyond the Danube.

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As in 1854-6, the seat of war will be both in Europe and in Asia. Ever since the beginning of the century, Russia has been crossing the Caucasus and encroaching upon the Asiatic possessions of Turkey and Persia. English officers at the head of Turkish troops prevented any extension of territory in the last war; but the Nestorian and Armenian Christians of these regions will without doubt rejoice in the annexation of their provinces to Christendom, even though they are, unlike the Georgians, heretics in the eyes of the Greek church. If Russia succeed, therefore, the Turk will not be expelled from Europe merely, he will be stripped of some of his oldest possessions in Asia also.

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ENGLAND has not played a very dignified or creditable part throughout the negotiations just terminated. Her ministry have surrendered the right to protect the Christians of Turkey, the very right which the Crimean war was waged to acquire from Russia, as Palmerston interpreted the struggle. They have made sure that if Turkey in Europe is to be annexed to Christendom, it will become part of that Empire, whose interests are the most likely to clash with their own. Their organs affect to regard with dislike the methods and principles of Russian rule. These methods and principles are of a very low and despotic sort, and England has given over a vast area of Europe and Asia to the Czar, in order that he may have new fields for their application. They profess to entertain fears that Europe is endangered by the crude notions and theories of the Panslavists and Communists of Russia. That fear is not unfounded; and if Russia succeed in this struggle, the Panslavist and Communist tendencies will gain a new strength, and find new avenues of access to the rest of the continent. Every word that they have spoken against Russia but adds to the condemnation which history will pronounce upon themselves.

And when we turn from the Ministry to the Opposition, we find things not much better. Half a century of Liberal government—government according to the theories of the Manchester school—has left the nation in such a plight of dependency that it has become treason to English interests, and especially to the interests

represented by the Liberal party, to pronounce the word *war*. The miserable vacillation of 1864, which lured Denmark on to her fall, has been again the ruling spirit in the Liberal councils. "*I dare not wait upon I would.*" Hence the ease with which the political trickster at the head of affairs has checkmated them. At every step he has turned upon them with his stereotyped question, "What then would you have me do?" and the moral weakness of the Liberal position has given the question an emphasis sufficient for his purpose.

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THE threatened resignation of Prince Bismarck, and the leave of absence granted him for a year, show that the weaknesses of the extemporized organization of the German Empire are beginning to be felt. In times of a greater national enthusiasm and hopefulness, the worst constitution answers all the needs of a country. When rulers and people feel like one man, it makes very little difference of what shape are the channels of method into which the feeling is directed. But when there has been a little time for cooling, it is found that any sort of a system will not do—only the best, the one most in harmony with the character and the history of the people, will do. And to get that best is a slow and painful process, in which there is sure to be plenty of friction and painful collision. Germany is but entering upon her real political development, and has many lessons to learn for herself, as political lessons must be learned.

The difficulty in the present case arises from the peculiar federal structure of the government, and the conflict of the centrifugal and the centripetal forces, the latter represented by the Chancellor. As Guizot says, no form of government presents so many practical difficulties as a federal government; none calls for such clear definition of the boundaries of power, and so well established a mutual regard for rights. It must have a long tradition behind it, and a great popular enthusiasm on its side, to work evenly and well. And in this case, where local independence is the tradition of more centuries than central authority has seen years, it demands a very high and unselfish enthusiasm on the part of the people to make it work at all. That the Empire will continue its present methods of organization can hardly be expected; a century hence it will be a much more compact body, with a far better organized system of government. And the constitutions and agreements of the present,

which determine the amount of centralization now permissible, however useful for the time, will in the long run be found rather hindrances than helps to national development. Nor can a constitution of that sort be otherwise, if it be regarded as a finality. *Mutato nomine, etc.*

On the other hand, the arrogant and despotic temper of the Germanized Slav, who stands next to the Emperor at the head of the nation, does not make the problem at present an easy or simple one. Prince Bismarck has shown again and again that while the instrument of realizing the great political ideas of the present, he does not share in any of them. He has,—as is shown by his treatment of North Schleswig,—no respect for that principle of nationality, which is the great justification of his own reconstruction of Germany at the outbreak of the Seven Weeks War. He has no conception of government as a process of education, by which the national consciousness is evoked in a people. To him government means not education but repression—an efficient police, a good code, and a powerful army. Nor has he anything of the *suaviter in modo, fortiter in re*, of the great political diplomatists, by which the defects of a system are prevented from working mischief, and the way prepared for their correction. He is not conciliatory. He has no respect for any ideas which he does not share. He feels that if things were as they ought to be, he would be in the position of a Frederick, with power to send packing any official who did not make it the chief end of his existence to know what his master wanted, and do it. He would make a first class despot, and would govern Germany as successfully as Frederick governed Prussia; and then when he died there would probably be just such another era of inanity and incapacity as followed the death of Frederick.

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It seems not improbable that the longest of all the Papal reigns is nearing its close, and that the year will see another Pope upon the throne. The change is not of the slightest significance as regards the ecclesiastical and political policy of the Papal See. All the cardinals are the "creatures" of Pius IX., in the original sense of that word. Not one of those who elected him still survives. This fact of itself indicates that there is a substantial agreement among them upon all questions, and that the new Pope will, as the representative of the views of the majority, take up the mantle of his predecessor's policy. Nor is there the slight reason to sup-

pose that the Catholic governments will find a pretext for interfering with the freedom of choice. The old privilege which belonged to each of them, of each declaring one candidate ineligible, has passed away with the state of things which made it reasonable. And if it did now exist, it would be of no value. Since the death of Antonelli, there is no single cardinal of such prominence as makes it worth while to effect his exclusion, and the prohibition to elect any one of half a dozen or even a dozen candidates, would present no embarrassment to the Conclave. The thirteenth man would suit them just as well as any of those thus forbidden. In fact, as the Conclave is now constituted, nothing but an addition of outsiders, such as was effected for the occasion by the Council of Constance, could have any effect upon its decision. It will elect an Italian, well advanced in years, not offensive for any peculiarities, and fully in harmony with the policy of his predecessor. He will neither give up all hope of the Royal caste of Europe and cast himself upon the people, as would a few of the bolder cardinals; nor will he make any concessions to the Royal caste such as will impair the dignity of the See or its claim to be the sole judge in all causes ecclesiastical. *Non possumus* will be his answer alike to Democracy and to Monarchy.

The present Pope has been a sore trial to those Protestants, who would fain identify the Bishop of Rome with the Antichrist. A kindly, good-hearted, obstinate old gentleman, full of mystical piety, yet witty; not strong enough to play the part of a Hildebrand, but too strong to act like Pius VII.; liberal in politics by instinct, but frightened into conservatism by his advisers, he has often done things that have weakened the position of the Papacy, while anxious to strengthen it. The two great dogmatic definitions of his reign, those of the Immaculate Conception of the Virgin, and the Infallibility of the Pope speaking *ex cathedra*, have been rather hindrances than helps to the advance of the Church. He has been, even in smaller matters, a passionate theologian, condemning opinion after opinion where they came in contact with the scholastic theology, such as the view of Froschammer that the soul is *mediately* created, that of Oischinger that the unity in the Trinity is personal, and that of Guenther that the dualism of Cartesius is the true Christian philosophy, while pantheistic elements are found in earlier Catholic philosophers and theologians.

PRESIDENT HAYES may still be congratulated on the success of his administration. It is true that his Southern policy is a hazardous one, and that there are signs of a revolt against it in the ranks of the Republican party. But it is equally true that this President has managed to put himself just where the President of the United States ought to be, at the head of the great body of moderate and reasonable men in both parties, with a full consciousness of the fact that he is not the representative of any party, but of the nation. He is making a bold experiment; he is trusting much to the good sense and the right feeling of the white people of the South. But the three-fourths of the American people clearly desire that that experiment be made; they share in Mr. Hayes's hope that the colored people can be best protected in their rights by wiping the color line out of politics, and that the South can be most thoroughly incorporated into the nation by obliterating the sectional line. The experiment may fail, but—as the old Scotch dominie said when the old miser asked whether it would improve his chances in the next world if he left a large sum to the kirk—"it is worth trying." And if it fails, the failure is not irretrievable.

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THE South Carolina difficulty disposed of itself on the withdrawal of the national troops, with a promptness which showed how completely Mr. Hampton commanded the support of the elements of political and social power in that State. Mr. Chamberlain retired from the field with no dishonor. He was a good governor, so far as any man could be, who had only the worst sort of support, and only his election two years ago made the recent election of Mr. Hampton possible, by dividing the vote of the colored Republicans.

In Louisiana the duplex government presented a more perplexing puzzle to the President's Commissioners, but the gradual secession of individual members of the Legislature which recognizes Gov. Packard, to that which recognizes Gov. Nichols, made a decision in favor of the Democratic Executive a simple matter. In this case, as in that of South Carolina, the theory of the omnipotence of the numerical majority receives a practical refutation. In any system of government minorities rule; men tell by weight much more than by count. The party which unites money, culture and social standing in support of a political principle, can easily make head-way against numbers. It has only one opponent

that it need fear—the party of moral enthusiasm, before whose advance neither money, culture, nor social standing, can make any effectual stand. But the Republican party of the South never had any inspiration of this sort; it fell before a force superior to itself, though not of the highest sort.

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THE high degree of satisfaction expressed by Southern organs and leaders with President Hayes's policy has set some of the Republicans to speculating as to the possibility of organizing the next House of Representatives by the election of Mr. Garfield or Mr. Foster to the Speakership. We are glad to believe that there is no likelihood of any secession of Southern members to the Republican party. It would be a dear-bought victory, which would be obtained by wholesale political immorality of that sort. Whatever the Southern Congressmen may do at the next election, they have no choice but to act with the Democratic party in all such questions as the Speakership, unless the person presented for their suffrage is so objectionable on other grounds that they cannot in conscience vote for him. To bolt the decision of a caucus is right and proper, when the caucus abuses its power. To act in complete independence of it is equally proper, if that purpose has been announced before election. But to cast off party obligations, after having assumed them in becoming the party's candidate, is just as bad as any other breach of trust.

We hope that the Southern members will do their utmost to make the path of the new administration an easy one; that they will, both in committees and in the House, hold the balance of power in their own hand, put a check on all merely partizan steps of policy. But to break up the Democratic party, without giving their constituencies an opportunity to say whether or not they approve of that step, would be an abuse of the power entrusted to them.

We do look for a dissolution and reconstruction of both our parties, and that at no distant day. But a general election is the proper and the only proper opportunity to effect it. For the present, we hope to see Hon. Samuel J. Randall in the Speaker's chair in the House of Representatives, when it meets next month.

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NEW YORK has had a larger experience in city charters than any other municipality in the world, and is now about to try yet an-

other, which has been drawn up in accordance with the Report of a Committee of Citizens, of which Secretary Evarts was chairman. Its most novel feature is the provision that the Select Council shall be elected by the tax-payers, and the Common Council by universal suffrage, so that both the interests of numbers and the interests of wealth shall be represented in the passage of the laws and the assessment of taxes. The plan will prove feasible if some arrangement has been made for the passage of appropriations in case of a dead-lock between the two branches. Such dead-locks will occur, and at very short intervals. A Select Council elected by tax-payers will be dominated by the idea of economy. Now economy is very well as a condiment, but you cannot live on it,—you cannot carry on the government of a great city on it. Far worse than the extravagance which is usual in our great cities, would be the stingy, selfish, short-sighted meanness of such a body, with its neglect of all the sanitary and other interests, which directly concern the poor. The English municipalities, with their low rate of taxation and expenditure, are often held up to us as excellent models in this regard. The truth is they are the very worst examples for imitation that could be found. They do furnish a “cheap-and-nasty” style of civic administration, but they would be, as they used to be, far worse than no governments at all, without the present pressure of government inspectors to compel them to do their work.

The two branches of the New York councils would hardly ever agree about taxation and appropriations, and the lower branch would not be the one chiefly to blame. They would adjourn without having voted a penny for the civic administration, and then some other key must be found to open the city treasury. Either the mayor, or the executive officers jointly, or the judiciary, would have to be vested with power in such cases to make the appropriations.

There is another serious objection to the plan. If there is any advantage secured to us by our method of universal suffrage, it is that it prevents the collision and softens the antagonism of classes. But this new charter will give these antagonisms a chance of collision, and that in the very locality where they are most deeply rooted. In that city of millionaires and of tenement houses, out of which the middle classes have mostly been driven by the exorbitant cost of living, it is proposed to give the two widely sep-

arated elements each a control of a branch of the civic legislature, and to set them face to face, to quarrel over such questions as the dismissal of workmen from employment on the highways and the park, and to give each an equal vote in the decision. The chief merit of the charter is that it can be sent to the *limbus* in which predecessors slumber.

A PRAISEWORTHY attempt is making in New York to unite the moderate friends of temperance in an effort for the reduction and restriction of the number of liquor saloons in that city. Dr. Howard Crosby, of New York University, is the most prominent representative of the new organization, and he has earned a right to be heard by the courage with which he has maintained his own position on this subject in the face of social and semi-ecclesiastical persecution inflicted on him by those whom Dr. Hall describes as "intemperate advocates of temperance." The truth is, temperance from being a reform has become a religion in the hands of its champions, and a religion with a very narrow and pharisaical creed, which no one, either in or outside their ranks, may call in question; and no discussion being allowed, the creed has become a stereotyped tradition, incapable of amendment. The first article is, that alcohol is a poison; the second is, that its use as a beverage, in any form or to any extent, is a sin; the third is, that the wine mentioned with approval in the Bible was unfermented grape juice. The consequence is, that the cause has lost its hold upon the reason and the conscience of thinking and ruling classes of American society. Something similar was the history of the temperance cause in the north of Ireland. Dr. John Edgar, of Belfast, was the Father Matthew of the North, and gathered tens of thousands into strictly temperance societies. But his converts learnt the new total abstinence—from America, we think—and proceeded to expel him from the very organization he had founded. As he said, in his gruff Presbyterian way, "The devil couldn't upset the coach, so he got himself made driver." As a consequence, although Dr. Edgar was the most popular, as well as the most homely, of all the Irish Presbyterian divines, no American publisher dared to reprint his biography, it would have given so much offence to the people who detest Dr. Crosby.

By a natural reaction from this dogmatic and narrow fanaticism, there has arisen a disgraceful apathy on the part of those who



are properly responsible for the gross abuses we see everywhere. Dr. Crosby and his friends reject every article of the creed specified, but they are fully awake to the necessities of the case. The statistics collected by the Convocation of the English Church show that they are striking at the root of the evil—the needless multiplication of places for the sale of drink. The amount of drunkenness and of crime consequent upon it, as compared with the population of the English cities, is in exact ratio to the number of places where liquor is sold. And no English city, except Liverpool, could rival New York and Philadelphia in this regard.

The bill to authorize the adoption of the Gottenburg system in English cities, which was introduced during the present session of Parliament, encountered of course the opposition of the Government, which owes its tenure of power to the support of the brewers and the distillers; but it had a pretty solid support on the Liberal side, and will doubtless yet secure a trial. It is only through the existence of a genuine but moderate temperance sentiment, such as Dr. Crosby is trying to organize, that the Gottenburg plan could be put on trial at all. To the so-called temperance advocate, it must seem exactly like the attempts to regulate the social evil. In view of something like the Gottenburg plan being attempted in our American cities we regard this New York attempt with great interest and hope.

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MR. WILLIAM M. TWEED has again become the hero of the day, by turning State's evidence against his accomplices and disgorging, or professing to disgorge, the part of the stolen six millions which is still in his possession or that of his agents. The account of his escape from custody and his adventures in Cuba and Spain, with which he has favored the public, has a certain interest, and his whole story has its lessons and its warning for men of his stamp. It shows that no union for dishonest purposes has any more tenacity than a rope of sand; that where a wicked selfishness is the ruling motive in men's association with one another, that motive will prove the disintegrating force for their common destruction and mutual betrayal. And it shows that in the present national and political organization of the world, society is omnipotent against the cleverest rogues, whenever society has moral energy enough to determine on their punishment.

Ex-Mayor Hall, the most astute of all the confederates, seems

to have escaped to England to avoid the consequences of these new disclosures. In his case no evidence could be found of his complicity, because, instead of accepting his share of the plunder in checks, he required it to be paid him in bank-notes in advance, as the condition of his signing the fraudulent warrants. But he is still within the reach of the law, if New York sees fit to take the proper steps for his arrest. The truth is the modern criminal has no chance to escape, so long as he remains within the range of that civilization which alone makes his plunder worth the stealing. In Timbuctoo or Thibet he may be safe; but what would be the use of stealing to spend in Thibet or Timbuctoo?

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CONTRARY to the popular opinion on the subject, we have been having an unusually large number of hydrophobia cases during the last two months. They are reported from every quarter of the Eastern and Middle States, and both New York and Massachusetts have been discussing the adoption of very stringent legislation in regard to the keeping of dogs.

The dog-lovers and animal-worshippers generally have been sorely puzzled to make out a case on the other side. The appearance of nervous excitement of another sort in connection with two cases in Brooklyn has been much made use of, and we are gravely assured that if there is any such thing as hydrophobia, it is one of the rarest of diseases, is hardly ever met with in fact. Just such an argument as this was put forward by Mr. Bergh a couple of years ago in one of his S. P. C. A. manifestos, and the New York papers published it with approving comments. The very next morning they had to record an unquestionable case of the disease, resulting in the horrible death of a well-known dog dealer, who had all his life been utterly skeptical about hydrophobia, and who had no notion of his being in the slightest danger from it until he found himself unable to swallow his coffee at breakfast. Exactly the same thing occurred in the case of a person who died of hydrophobia a few weeks ago, within a few minutes' walk of where we are writing. His physician was called in to treat him for rheumatic pain in the bitten arm, and not until difficulty was experienced in swallowing the medicine prescribed, had the poor man the least notion of his true malady, or did he recall the fact that he had been bitten. And that physician declares that if any of these wise editors had been spectators of his agonies, and had

heard his pleas for something to terminate his life, they would have got some new light on the dog question.

There is probably some truth in the popular notion that summer is worse than winter for the prevalence of this dreadful disease. Certainly wet weather in summer is worse than any other; and if, as is quite likely, our last dry summer is to be followed by a wet one, we may look for an outbreak of this *rabies* along the northern Atlantic coast, such as they had in the Mississippi Valley one summer several years ago. The most strenuous preventive measures will not be out of place, and that speedily. The best is that of the old Pennsylvania Dutchman, to cut off the dog's tail close behind his ears.

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#### DID THE GOVERNMENT BRING ON THE HARD TIMES?

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THE election and its excitements are over, and yet business is no better than it was before. Prices have not risen; stocks are tumbling; the bears rule the market. All the mischiefs which were so clearly traceable to the "suspense" at Washington continue, although the pending questions were peaceably settled, a new and a satisfactory President is in undisputed possession of the White House, and Congress has gone home. The merchants who implored that some solution be reached, for the sake of business interests, are just as idle and as empty of fresh orders as before. Stocks of merchandise are short, but the demand is shorter. Even the jubilant editors have ceased to prophesy; and the long lane of depression and distress has not yet come to its turning. The authors of the business men's manifestoes, resolutions and despatches, which poured in upon Washington during December, January and February, must find them rather unpleasant reading now, and they will probably continue such for some time to come.

The working classes share with the capitalists this tendency to lay the blame upon the government, whenever there are hard times. Nothing is so likely to cause a transfer of power from one party to another as the depression and distress of the average

voter. "Revolutions move upon their bellies," Napoleon used to say; their watchword is "Bread! bread!" The long tenure of power of the Democratic party was twice broken after a Panic—in 1840, by the election of Harrison, and in 1860, by the election of Lincoln. It came very near to regaining its power last Fall through exactly the same influence. The average voter is apt to say: "We can't be much worse than we are. Let us give the other fellows a chance by way of experiment. These who are in power have had time enough to do something for our relief, but they have done nothing. I'll vote for the opposition." Should there be a general revival of business interests during Mr. Hayes's administration, then the Republican party will elect his successor, if it do not reëlect himself. If there should be no such revival, we may pray for a moderate and sensible Democrat to take his place.

This instinct is universal. It is seen in every country and in every class of society. And it is a right instinct. Governments exist "to promote the general welfare," and when that is imperiled or diminished, the people hold them to a strict account. Bloody revolutions have again and again emphasized this truth of national responsibility, and should our *Laissez faire* theorists succeed in inducing the governing classes to deny it, they will also succeed in creating a reaction which will land us in Socialism, the theory that it is the duty of the Government "to provide for" the general welfare, as much as "for the common defence."

But while the instinct is right enough, it frequently shapes itself into the most absurd opinions, such as the notion that nobody in the country was willing to buy and sell and get gain, until it was settled at Washington which candidate had been elected. The men who talked, wrote, and exploded in telegrams to this effect, had seen business prosper while two hostile armies lay between Washington and the nearest Southern capital; and they could not but recollect that only a year previously, when there had been no political excitement, the state of affairs had been not a whit better. And they may have yet another chance to learn wisdom, by seeing it no better next December, January and February, although there shall be no presidential conflict, nor any other political stalking-horse, to blame for the financial depression.

To discern what are the sins of omission and commission, which have brought down upon us the present paralysis of our industrial energies, is not a very easy task. Some plead the vast

destruction of property during the war as its cause, but the latter years of the war, and those that followed showed no such bad effects. In truth the war left the nation very much more wealthy than it found it, *i. e.* much richer in all the elements of enterprise, skill and mastery, as well as in the accumulations of capital needed for their direction and organization, and more full of that hopefulness and self-confidence which are of inestimable value even when measured by their purely economic results. And it would be easy to show that the enforced idleness of the years 1873-1877, have caused greater losses to the nation, in the destruction of values and the consumption of savings, than did the disasters and the standing armies of the years 1861-1865.

Others allege the state of the currency, its fluctuations and its vast inflation, as the reasons. But chronology again refutes bad logic; our recent experience shows that our paper money has steadily approximated to a gold standard without either being contracted in volume, or producing any improvement in the state of business. We had rather steady prosperity under great fluctuation in the relation of gold to paper (1864-7); feverish inflation of values in the period of its comparative steadiness (1867-73); almost complete prostration with almost no fluctuation at all (1873-7). The truth is that gold was a scarce and dear commodity in this country for years past; we were paying out large quantities of it, and receiving none, and circumstances compelled the Government to enforce its use, really or nominally, in certain connections. We created a demand beyond our supply. But since we began to import gold, the scarcity has diminished, not only by reason of all that we bring in, but also by the accumulation of the native supply which we have ceased to export. The greenback is not a whit more valuable than it was two years ago; its power to purchase in any market has not increased, but that of gold has fallen. If the balance of trade continue in our favor, gold may become so plenty that the difference in value between it and our paper money will disappear, and a bimetallic resumption became easy without any Government pressure.<sup>1</sup>

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<sup>1</sup> Turgot's saying, "Gold is a commodity like any other," used to be regarded as axiomatic by the English or Free Trade school of Economists. Their theory of unrestricted exchanges demanded it. But their American representatives now shun it; they will not and dare not admit that gold can become dear in any country, through the supply falling below the demand. All their recent argumentation on the money question takes for granted that it is an absolute standard of value, not affected by local circumstances.

There is much more reason, we think, in the complaints of those who protest against the forced approximation of paper to gold, which was begun by Hon. Hugh McCulloch when Secretary of the Treasury. He thought it the first duty of our Government to force the resumption of specie payments, and he asked authority of Congress to contract the legal tender notes by ten millions in the first six months, and four millions a month afterward. In his famous Fort Wayne speech, he declared the currency in excess of the needs of the country, and that therefore all prices were inflated; that the amount of blood in circulation in the body commercial must be reduced by phlebotomy, and the societary circulation diminished; that the debtor class must take the consequences, and had better sell, while the capitalist would be wise to abstain from buying. At a time when the country had almost no gold, he proposed to compel a population of forty million people, scattered over a territory nearly as large as Europe, to the cessation of all interchanges of services which they could not effect by means of that metal.

Now this was certainly "heroic treatment." To steadily change the terms of every outstanding contract in favor of the creditor class, is not the way to promote general prosperity. Mr. McCulloch and the others who have carried out the policy to some extent, probably cared little for general prosperity. The farming class of the West, especially, have suffered terribly from this contraction, and the impending threats of its continuance. Their farms are generally mortgaged for sums, which in gold approach to or even exceed their value; they received no such value from those who lent the money. And while every turn of the screw has been driving these men to desperation, their passionate and perhaps illogical outcries have been met with the sympathetic answer: "Repudiationists! Thieves!" If there be any easy method for the general dissemination of Communistic views throughout this large class of voters, surely this must be it.

In one point, we are obliged to agree with the hard-money people, *viz.*, that there was a feverish inflation of values during the years which preceded 1873. A fictitious and unnatural demand was in some way created for large supplies of goods, for the establishments and machinery to produce them, and for the skilled labor employed in their production. The capacity of the country to produce such goods was developed to a point far beyond the

normal demand, and when the fever broke the capitalist or the mill owner found himself furnished with everything but a market.

Hence the languor which has succeeded: hence the decline of prices, the renewal of the conflict between labor and capital, and the outcry against over-production.

"But how is the Government to blame for all this, unless it be for maintaining its vast volume of irredeemable paper money?" We think we can show how it is to blame; but first let us ask attention to the fact that Germany has been going through an experience exactly parallel to it, because of a vast increase in her circulation, not of paper, but of gold. What the money of a country is in its material is of slight importance; a vast and sudden increase in the volume of capital seeking investment, by a diversion of it out of any channel of investment heretofore open, is the true cause of inflation. Men invest excessively and rashly, when they do it in a hurry; to expend an extra thousand millions wisely in three years, makes a demand upon the wisdom and prudence of the business community, to which it is unequal. Speculation follows speculation, until the crash recalls them to their senses.

Now, with this in view, let us look back at the recent years of our financial history. We came out of the war with a bonded debt of some \$2,800,000,000. These bonds were almost entirely, *owned at home*, and bore five, six and seven and three-tenths per cent. interest. And not only this debt, but the vaster outlay for the war, the cost of creating, maintaining and disbanding armies and fleets which had been already paid, had been borne by our own people. The Treasury reports show that less than \$200,000,000 of our bonds were held abroad; and if we add to this the total of our public, corporate and private indebtedness to Europe, the total did not then exceed \$600,000,000.

Now we are very far from believing a national debt a national blessing; we should rejoice to see it paid off to the last cent. But where a national debt is owed by a people to themselves, and where every dollar assessed in taxes and paid in interest, is again dispersed among that people, it is, as Coleridge long ago pointed out, far less burdensome than a debt owed by one private person to another, or by any nation to the capitalists of another. It is like the aqueous circulation, which drains off the waters from stream and field by solar influence, to send it back in refreshing showers. It is like the pressure of the air upon the human body

or of the water on the fish, balanced by counter-pressure, so that we cannot feel the weight of fourteen pounds to the square inch. Very different is it with the national debts owed to foreign money lenders. There we have something analogous to the condition of those unhappy Irish tenants, whose hard-earned rents are spent by absentee landlords in Paris and London, and all sense of the landlord's personal relation to those who till the soil has disappeared. Or we might compare it to the impoverishment of India by the just, equitable and cheap government given it by England—a government whose officials save their salaries to spend in England and Scotland. The native princes taxed higher; they at times plundered wholesale. But they spent the money where they took it, and while individuals were wronged, the community received no vital injury. The English carry justice to individuals to a point never dreamed of by their subjects; but they have beggared India.

Our Secretaries of the Treasury,—the wise and the foolish alike, if we have had both sorts—have kept before them the traditional policy of “reducing the public burdens.” So far as this means the gradual and steady repayment of the principal, nothing could be better. Such payments are never so large as to affect the money market or create embarrassment in any quarter. Neither can we object to any plan of funding the debt, which replaces the present bonds by others at a rate of interest which will secure their sale in the home market and to American investors. It is the duty of the Government to borrow in the cheapest market it can find among its own people at least. If one citizen will lend to the Treasury at a lower rate than another, then let the Treasury transfer to him as much as he desires from the person who asks the higher rate.

But there we stop. Our “at least” is our “at most” also. No ordinary reduction of interest is sufficient to counterbalance the disadvantage incurred by transferring our bonds to foreign money lenders. To transfer one thousand millions to the foreign market, at a saving of one *per cent.* even, is of course a saving of \$10,000,000 a year from the taxes of the country. To transfer the whole debt would be a saving of something more than twice as much every year. But it would mean, on the other hand, the payment of over \$80,000,000 a year in gold sent out of the United States, and deducted from our supply of that metal. It would be the same as selling to Europe three or four inches of water out of our canals, or ten per cent. of the rolling stock of our



railways, with, in this case, no means of replacing what we had disposed of. It would be the deliberate surrender both of an irreplaceable necessity, and of all those compensations which make national debts less burdensome than other debts. It would be the transformation of our debts into the most burdensome form of debt.

And this is the policy which the Treasury has pursued, is pursuing, and means to pursue. It has steadily aimed at funding the debt at rates too low for American investors. It is borrowing on terms on which no money is permanently lent in this country on the best security, say on bonded mortgage. It is true that money is to be had on call loans at lower rates, but call loans are no test of the case, for at times when call loans are offered at two, three, and four *per cent.* legitimate investments are sometimes made at seven, eight and nine *per cent.* The Treasury has deliberately turned its back on the American money-market, and sought the European. When it has concluded its present series of transactions all our bonds will be held in Europe, except those needed as the basis of our National Banking system. Every Secretary has been eager for the lower interest; not one seems to have seriously considered whether even cheapness may not be dear bought.

And this, be it noted, does not affect only the bonds which have actually been funded at a lower rate. It affects them all. The purpose of the government to pull down the interest in this way has made our bonds of all sorts undesirable as a permanent investment in this country; for as they are all now redeemable at the option of the Government, all are liable to this reduction at an early date. Hence they flow steadily towards Europe. Our Philadelphia brokers buy them steadily for the New York market, but rarely make a sale for home investment; they are sent in quantities from our city to New York, and thence exported to Europe. And as it is with us, so it is at all the other money centres.

“ But if Europe takes the bonds, she must send us the gold. If we do have to pay the interest, she must pay the principal first.” This is true in effect with some qualification which we shall afterwards notice. But see what the effect is. It means the savings of the people, heretofore invested in our debt, are forced to seek some other channel. Every hundred millions thus invested in Europe, means a hundred millions set free in America, and turned for the time into our banks to be multiplied. It means the vast

and rapid growth of deposits, and the still vaster and more rapid of loans based upon deposits in the national banks; John Smith having ceased to hold his thousand dollars in Government bonds, because he has either voluntarily or involuntarily sold them to Max Hirsch, of Frankfurt, goes to the bank and deposits there the price they brought, and the bank lend the sum to John Jones who wishes to invest in Lake Shore, or Rock Island, or Reading. Smith steps into Wall street or Third street at the same instant for exactly the same purpose, so that that thousand dollars has become two thousand in practice,—an inflation not produced by our Treasury notes. These loans advanced from 603 millions, in 1867, to 944 millions, in 1873, while bank stock advanced only from 415 to 491 millions. Here was an inflation of nearly 350 millions in the national banks alone, and taking in the State and private banks and the Trust Companies, the total would be well on to 1,000 millions. Funding the debt means, therefore, the stimulation of every sort of business speculation. It means a vast inflation of the currency, in the strictest sense, with a view to Resumption!—an inflation affected without the addition of a dollar to that volume of paper money which is commonly held responsible for all our inflations. And this is just the history of the years 1867–1873: a steady increase of the volume of American capital seeking investment, and a corresponding decline in the character of the investment. Three hundred and fifty millions were invested every year in railroads—most of it creating an enormous demand for iron, a rapid multiplication of establishments for its production. These establishments were built rapidly, and therefore wastefully. They competed with each other for skilled labor, forcing wages up to an abnormal rate. In 1870, the duties were lowered on iron, because of its high price, but the price remained the same. Had the duty been abolished, every American establishment would have gone on producing at the old rate. The world was “iron-hungry,” Mr. Greeley said in 1872. England could not produce pig iron enough to fill her orders for iron goods; she had to import it. The pigs are piled up thirty feet high around her Staffordshire furnaces now, and find no buyers. Steel rails brought \$136 a ton in our city; they sell now for \$48. In 1867, we had two establishments for their manufacture; now we have thirteen.

This and other similar causes produced a factitious demand for various classes of goods, especially textiles. The work-

man paid above his work, must dress himself and all his household in a new style. Spinning and weaving mills grew apace, like the iron establishments; every other species of manufacture felt the same feverish stimulus. Nor was it native capital only that kept the pot boiling; the overflow of the London money-market reached us. The volume expanded, so that by 1873 we owed abroad about \$1,800,000,000.

The crash began in America, because the inflation began here; but it had extended to England, to Germany and to Canada. Over production, *i. e.*, industrial fever followed by collapse and languor, was the cry of the world. Free Trade countries and Protectionist countries, Hard Money countries and Soft Money countries, felt the depression alike. Our own paper currency had not been expanded one dollar from the beginning to the end of the period, yet it must bear the blame with our economic wiseacres, whose pet nostrum is its abolition. Our credit currency had been enormously inflated, as had that of England; but no economic wiseacre takes account of any money that is not either coined or stamped on bits of paper. And the inflation of that currency, while it contributed vastly to the result, was not itself the prime cause but the effect of it. It is most sensitive to all the breaths of public opinion; but it takes no initiative; it expands when other interests expand, and contracts with them.

It must be said farther that this transfer of bonds to foreign holders, which the Treasury has forced, has not been used to bring into the country a stock of gold, which might help us toward specie payments and furnish a reserve upon which to draw in paying back the interest in Europe. Those bonds have been really paid away for European commodities and luxuries, which we had better have done without. The enormous importations which took place in the period of inflation could not have been effected, had not the government forced our home investors to dispose of their share in the National Debt, and thus furnished our importers with a means of paying Europe. Had the balance of trade against us been paid in gold alone, imports must have been vastly reduced, for no such supply of gold was accessible. We would have been speedily drained of that metal, and exchange with Europe would have risen to a figure beyond all example. Funding thus both stimulated extravagant tastes and furnished the means of gratifying them. It raised among the people in connection with the

speculative spirit, a demand for more and more costly articles than our exports and our small accumulations of gold could pay for, and it plunged us into a burdensome debt to Europe in order that they might be paid.

And now we are in the Slough of Despond, all together, and seem likely to stay there. And the Treasury, sublimely unconscious of its part in producing the general havoc, goes on with its high-handed policy. It is thrusting millions upon millions more of American capital out into the cold in search of investment; it is transferring the public burdens still more from the places where they will be least felt to those where they will prove intolerable. It is giving ever more leverage to the demagogues of repudiation, who would have no opportunity but for the genuine grievances and distresses of the people, and instead of rallying all classes of the community on the side of public honesty and probity, by distributing the national debt among all classes, as is the case with that of England, it is laboring to bring about a day when no person in America except the national banks will have any personal interest in the matter. Instead of making the debt, as in England, the basis of a community of interest, it is making it the basis of a division of interest of the most threatening sort.

And this foreign debt is not the worst result of the policy, although it has saddled us with a vast burden, and brought us no adequate return. Far worse are the results at home, — the immense destruction of capital by bad and hasty investments, the enforced idleness of hard times, the diminution of confidence and enterprise. The first alone has inflicted a loss greater probably than the whole of our foreign indebtedness.

Conclusions for use: (1) Funding should stop and stop at once.

(2) A change is needed in the Treasury's policy such as will make our bonds a desirable investment for the savings of our own people, even if it be a higher rate of interest.

(3) The national currency, the only good paper money we have ever had, should not be sacrificed to the theories of *doctrinaires*, but should, together with the national bank-notes be made convertible into government bonds at the counter of every national bank.

HAECKEL'S GENESIS OF MAN, OR HISTORY OF THE  
DEVELOPMENT OF THE HUMAN RACE.

[SECOND PAPER.]

· ONTOGENESIS.

THE primary law of ontogenesis and that which connects it with the modern theory of development, is founded on the discovery of Von Baer, that the different successive stages of the embryonic development of the higher animals bear a singularly close resemblance to certain lower animals in their adult state, and that the embryos of many animals, and of man himself, in their earlier stages, are scarcely distinguishable from one another. This fact, as already remarked, was carefully studied by Von Baer, and the successive stages of embryonic life systematically compared and co-ordinated. In his great work on the *History of Development of Animals*, (1828-1837), that distinguished embryologist has given to the world the results of his exhaustive investigations. In this work he announces that the theory of types founded by Cuvier in 1816, upon the facts of comparative anatomy, is confirmed by those of embryology, and shows that the process of development, which is the same for all the animals of any of the four types, is different from those of different types.

Haeckel does not gainsay the general truth of this statement, but simply shows that it cannot be used as an argument against the theory of descent, as Baer's investigations were confined to fully differentiated animals of each type, and not extended to the then little known *Amphioxus* and *Ascidians*, which later researches have shown to constitute transition forms uniting two types. Besides, as we shall see, however different the course of development of different animals may be, the embryos of animals of higher types pass through phases identical with the adult forms of some of the lower types, though not of others, showing that the four types of Cuvier and Von Baer—Radiates, Articulates, Mollusks and Vertebrates—can neither be regarded as co-ordinate, nor as regularly subordinated to each other. And this is not all: Baer's own facts and those of many embryologists show that there must be another type added to these four; viz., the *Protozoa*, and that from this the course of both phylogenetic and ontogenetic development has been through the *Vermes* directly to the *Vertebrata*, leav-

ing the remaining types untouched. It seems, therefore, simply that the different branches of the main stem have in our time spread so widely, and become so far differentiated by adaptive influences, that even their embryos have lost many of the original traces of relationship. The important fact remains that within the vertebrate type, as within other types, the embryonic stages correspond with wonderful accuracy to the successively ascending classes and orders established for that type.

The law of Von Baer, expressed in the most general terms, as laid down by himself, is in these words: "The development of an individual of a definite animal form is determined by two relations: first, by a progressive development of the animal body through increasing histological and morphological differentiation (*Sonderung*); secondly, through simultaneous progressive development from a more general form of the type to a more special. The degree of development of the animal body consists in a greater or less amount of heterogeneity of the elementary parts and of the individual components of a composite apparatus; in a word, in the greater histological and morphological differentiation. The type, on the contrary, is the fundamental relation of the organic elements and organs."

Upon this important law, Haeckel puts the new interpretation that the "type" of Von Baer is the representative of the law of *heredity* of Darwin (the *vis centripeta* of Goethe), while the "degree of development" means neither more nor less than his law of *adaptation* (Goethe's *vis centrifuga*).

The parallelism which is found to exist between the facts of ontogenesis and the facts of phylogenesis, between the embryonic forms of higher, and the adult forms of lower, organisms, is one of the most astonishing discoveries which science has ever made. It is one which would have been least likely ever to be reached by conjecture or by any form of *à priori* reasoning. There was but one possible mode of reaching this truth, and this was by long and patient investigation of the minutest objects and most occult phenomena, without the aid even of a "working hypothesis."

Such a truth must have a meaning. This meaning Baer himself never realized, and when pointed out to him by others, never accepted. Yet I venture to predict that no unbiased reader of Haeckel's *Anthropogenie* will any longer doubt the justice of his

conclusions respecting the significance of this marvelous co-incident. The believers in miracles, who refuse to accept this explanation, will have discovered the most miraculous of all miracles. The singular alleged action of Providence in stirring fossil shells and bones into the earth, of which the mountains were made, "as a cook stirs raisins into a pudding," would be an intelligible phenomenon compared with this. That a man should begin his existence as an *amoeba*, should subsequently turn into a *worm*, a little later should become a *lamprey*, later still a fish, and after passing through amphibian, reptilian, monotreme, marsupial, lemurian, and simian forms, should at last emerge with the human shape,—this series of remarkable metamorphoses, if required to be explained on the assumption that it is directed by the arbitrary will of the Creator, would certainly furnish a still more fatal stumbling-block than even the presence of so many useless and usually deleterious rudimentary organs, as all higher animals are found to possess. For even if we can bring ourselves to comprehend how the Creator may, for some inscrutable reason, introduce many arbitrary irregularities into his handiwork, according as he may be actuated by this or that caprice, we are still at a loss to understand how he should wish to carry on a whole system of freaks in the embryo, which have a manifest correspondence with the mature forms of life, known to exist upon the globe, unless there be some causal connection between the two systems. Nothing short of the most complete abnegation of reason, nay, of a strong effort to believe in the unreasonable, can prevent the mind, cognizant of these two series of facts, from becoming thoroughly convinced that such a dependence must subsist.

The science which embraces both the ontogenetic and the phylogenetic development of life, the genesis of life in general, is called by Haeckel *Biogenia*, a science, as he remarks, as yet scarcely entered upon. The law which expresses the relation between the facts of ontogeny and the facts of phylogeny is, therefore, the fundamental law of *biogenia*. Stated in the most direct manner, this law is that "phylogenesis is the *mechanical cause* of ontogenesis." From a somewhat altered point of view, the same idea is conveyed by saying that ontogenesis is a *brief recapitulation* of phylogenesis, or, that the history of the *germ* (*Keimesgeschichte*) is an *abridgment* or *epitome* of the history of the *race* (*Stammesgeschichte*). Mathematically enunciated, the germ-development becomes a

*function* of the race-development, so that every differentiation of the latter carries with it a corresponding and consequential differentiation of the former. This is the fundamental law of organic development, the great biogenetic ground-principle, to which the student of the history of development, whether of its ontogenetic or its phylogenetic aspect, must continually recur. The great law of heredity, which Goethe calls "the stubborn power of permanency in whatever has once possessed reality," while it graciously yields to the influence of surrounding circumstances and admits of progress, nevertheless requires, with all the rigor of sovereignty, that every step forward shall be taken through the established channels, and with due respect for the most ancient forms. The human germ may, indeed, develop and perfect itself in the highest form of organized existence, but the old and time-honored fish-form and worm-form and amoeba-form, nay, even the moner-form, must be respected, and the proud man-germ must humbly bow to the inexorable decree of Nature, and must undergo this manifold and repeated *metempsychosis*, which in its strange reality eclipses all the dreams of Thales and Pythagoras.

Phylogensis, which is a cause, begins with the moner; ontogenesis, which is a consequence, begins with the cell. For man, as for all animals that have advanced beyond an extremely low stage of existence, there is but one mode by which new individuals of the race can be created and the race itself perpetuated, and that is by the contact of two germinal principles having opposite sexual polarities. Each of these principles is a simple cell. The male is the sperm-cell, the female the germ-cell. Only by the union and literal blending of these two cells can generation take place.

The cell is the lowest organized form of existence. It is also the last term in the histological analysis of the tissues of the body. An animal is ultimately nothing more than an organized assemblage of cells, a compound individual.

The moner is a lower form of existence than the cell, the lowest known form, and may be distinguished as a wholly unorganized and undifferentiated individual.

There are but two essential properties of a cell, a central *nucleus* and surrounding *protoplasm*. The only organization, the only differentiation, is that which distinguishes these two substances. And this is itself very slight. Chemically they can scarcely be distinguished. Both consist of a carbon compound, containing a



certain proportion of nitrogen, and belong to the albuminous group, of which all animal tissues are principally composed. The nucleus is generally of a darker color, but sometimes of a lighter, and may or may not contain in its centre a minute dot—*nucleolus*? It also may or may not be surrounded by a membranous envelope. This is generally present in the cells of plants, while it is generally absent in those of animals.

The form of cells differs according to the circumstances of their existence. They are the most plastic and easily modified by external conditions of all organized beings, and therefore make the best subjects for the study of the law of adaptation. Stationary cells in a motionless medium are uniformly spherical. When subjected to pressure they assume hexagonal, elongated or compressed forms, according to the nature of the pressure. Cells that are active in a liquid medium have a portion of the matter composing their outer parts extended into a caudal appendage away from the direction of motion. In addition to the forms named, cells frequently assume others, sometimes taking wholly amorphous shapes, resulting from the particular conditions to which they may be subjected. They frequently change their form, and this not only from external influences, but in obedience to internal or subjective determinations. For a cell is a living creature. It possesses all the essential characteristics of an organized individual. The only functions necessary to characterize a living being are nutrition and propagation. Both these the cell possesses. It grows by the absorption of nourishment from the medium in which it lives. Where this nourishment is not uniformly mingled throughout the medium, but exists in the form of scattered solid particles, the cell acquires the power to extend portions of its substance into temporary organs of grasping, and thus to enclose and devour its food. It thus improvises a mouth and jaws on whichever side it may need them, and feeds itself after the manner of another animal.

The cell propagates, like many much higher organisms, by division, or fission. It continues to take nourishment and to grow until it reaches the limit fixed by heredity for its size, and then, instead of growing larger or of ceasing to take food, it divides into two distinct cells. Each of these then goes through with the same process of nutrition and division, and so on.

But beside these two essential phenomena, which are common to all life, whether animal or vegetal, the cell performs two other

truly animal functions. It possesses the power of *locomotion*, and the faculty of *sensation*. Cells with caudal appendages, called lash-cells (*Geisselzellen*), have acquired that form in consequence of their independent activities in their liquid medium. Various other forms are traceable to similar causes. As a proof of the possession by cells of a faculty of sensation, we have only to consider the efforts of various kinds to obtain their food. Some are actually carnivorous, and show a certain degree of dexterity in capturing their prey. They are, therefore, not only capable of feeling, but in a qualified sense of thinking and of reasoning.

There is no essential difference between the sperm-cells and germ-cells of higher animals, and the simple cells of which many lower animals consist, and beyond which they never advance. We can only say that among the infinitely varied forms of life we find that while most creatures have developed into highly compound states, and only revert to the original unicellular condition at the beginning of each individual's existence, there are still many creatures that never progress beyond this primordial stage, and whose entire existence is passed in the form and condition of simple cells. Among such creatures may be named the *Amoebae*, the *Gregarinae*, the *Infusoria*, etc. These animals, as well as those which consist simply of an accumulation or aggregation of cells, such as the *Labryinthulae*, etc., and which form the second stage of development, never rising above the cellular condition, are classed by Haeckel together with his *Planacada*, in a grand division or department by themselves, and called *Protozoa*. A further ground for this classification will be seen later.

According to the fundamental biogenetic law above stated, the cell must be the primordial form out of which all more highly organized beings, including man, have developed, since it is the original stage of their ontogenetic development. And as there still exist unicellular beings resembling the sperm-cells and the germ-cells of higher organisms, the deduction is warranted that all higher creatures are the descendants of some form of these unicellular beings. Considering the differences that may and do exist even in cells, and in animals consisting of a single cell, Haeckel is led to the conclusion that of all the unicellular creatures known to science, the *Amoeba* bears the strongest evidence of being the original progenitor of the human race.

The history of the discovery of the human *ova* and *spermatozoa*

deserves a brief notice. In 1672, De Graaf discovered the Graafian vesicle, which he supposed to be the ovum itself. In 1797, Cruikshank, Prevost and Dumas found and described the true ovules, but failed to comprehend their real nature and importance. It was left for Von Baer thirty years later to complete the discovery, and place it before the world in its full light. Pürkinje (1825) and Wagner (1835) added important contributions in the discovery of the germinative vesicle or nucleus, and the germinative dot or *nucleolus*. The fact that the ova are simple cells could not be recognized until after the founding of the universal cell-theory by Schleiden (1838) and Schwann (1839). It was then perceived that eggs themselves are cells, differing in scarcely any respect from the cells of other tissues.

The discovery of the spermatozoa, or male seminal animalcules, was first made by Leeuwenhoek in 1674, and confirmed by Louis Ham in 1677. A long war arose between the so-called *Animalculists* and *Ovulists*, the first of which believed that the animalcules were the true and only germs of the future being, which simply found in the ova a suitable *matrix* for their development, while the latter maintained that the ova were the true germs, which were only affected with a germinative impulse by contact with the spermatozoa. The real nature of this mysterious process has only been clearly brought to light by the labors of more modern investigators, among the foremost of whom must be ranked Prof. Ernst Haeckel, of Jena.

The ova of all mammals are identical in all essential characteristics. They all possess both nucleus and nucleolus, are of a spherical form, and about one-tenth of a line in diameter, and all acquire at maturity a membranous envelope called the *chorion* or *zona pellucida*. The egg of a mouse and that of an elephant cannot be distinguished from each other or from the human ovum in any respect. They are all simple cells.

The sperm-cells of mammals possess a no less marked similarity. They are exceedingly small as compared with the germ-cells, and possess long filiform caudal appendages. The *chorion* is wanting. Their form may be divided into head, body and tail, but between no two of these parts can there be said to exist any clear line of separation. The head contains the nucleus surrounded by protoplasm or cell-substance, which is carried backward in gradually diminished quantity, forming the remaining portions. It was not

until the year 1873 that it was discovered that these important organisms, like the female ova, were simple cells. This discovery is in great part due to Prof. Haeckel's own investigation.

We may now consider the immediate consequences of the union of the sperm-cell with the germ-cell. The *spermatozoon* penetrates the many times larger *ovum*, making its entrance through minute pores in the *chorion*, and mingling at once with the germinative matter of the cell. A remarkable change takes place. Two perfect cells with opposite sexual polarities have been drawn together by their inherent affinities. They have met and their substances have commingled. They literally blend into one individual. But that individual is no longer a cell. The sperm-cell has lost its individuality and wholly disappeared. The nucleus of the germ-cell has likewise entirely vanished. The entire interior of the original cell has become a homogeneous mass of protoplasm, no longer possessing any traces of organization. Only the *chorion* remains to determine its original form. It is a case of retrogression (*Rückbildung*), of reversion to the lowest type of existence. The human being who, as represented in sperm-cell and germ-cell, stands on the plane of the *amoeba* and the *infusorium*, has gone back, on the union of these cells, to that of the *moner*. As if nature was not satisfied that any form of life should begin with the cell, the second stage of existence, but required absolutely that every being, no matter how high might be its destiny, should go to the very foot of the scale and climb the entire distance, in order that it might pass through every form that has belonged to its whole line of ancestors.

From another point of view, this union and literal blending of the male and female principles is not only of the highest intellectual interest, but is calculated to awaken the most lively esthetic sentiments. Nothing more poetic or romantic has ever been presented to the human fancy by all the fictions of the world than the marvelous reality of this courtship of cells! The very fountain-head of love (*Urquelle der Liebe*) is reached in the affinities of two cells! The ruling passion of all ages has its ultimate basis in this new-found physiological fact. When the march of science shall have exposed the shallow fictions and falsehoods upon which the present artificial code of social life rests, and when the fears of those who can imagine nothing better shall have been dispelled, then let the future Homer of science sing, not the illicit loves of Paris and

Helen, which whelm great nations in untimely ruin, but the lawful wooings and the heroic sacrifices of the sperm-cell and the germ-cell as they rush into that embrace which annihilates both that a great and advancing race may not perish from the earth! And here there is no fiction, there is not even speculation. Both the plot and details of this tale belong to the domain of established fact, and rest upon the most thorough scientific investigation.

The structureless form first assumed by the fecundated ovum is termed a *cytode*, but from the circumstance of its being the ontogenetic form, which corresponds to the moner, Haeckel has also applied to it the systematic name of *Monerula*. In his system this is the stage of germ-development which the moner, before its further differentiation, had impressed upon all organic matter, and through which all higher forms must consequently invariably pass.

This *cytode* or *monerula* stage is, however, of short duration. Very soon the homogeneous mass acquires a new nucleus, and thus again assumes the character of a simple cell. This second cell-form is so similar to that of the unfecundated ovum that many observers who had actually witnessed the cytode form, on looking again soon after and seeing only the primary cell-form, had discredited their intermediate observations. It was not until the entire transformation had been repeatedly witnessed through all the steps of its progress that the fact of such a strange transition became established beyond a doubt.

The new cell, although indistinguishable from the old, possesses an invisible element derived from the absorbed substance of the sperm-cell which gives it the potential character of the parents. The old cell, as such, was an independent living organism, capable of performing the essential functions of life, including that of reproducing its kind; *i. e.*, of dividing up into cells like itself, but which could progress no farther. The new cell, on the other hand, is the germ of a highly-organized being.

This is the second, or *ovulum*, stage of development which has been impressed upon the germ by the *amoeba* stage of phylogenetic development. The human being is now an *amoeba*.

The next step in the development of the fecundated germ consists in a process of division which takes place in the nucleus. This first divides into two, and the surrounding protoplasm arranges itself into two hemispheres so as to form a double cell. Then each of these two nuclei, with its surrounding protoplasm,

goes through the same process, dividing the cell into four parts. The same process is then repeated for each of these parts, and so on, increasing the division in a geometrical progression, until the entire contents of the *chorion* consist of a mass of closely-aggregated minute cells.

The form which the fecundated egg has now assumed, is called, from its resemblance to a mulberry, the *Morula*. It is merely a compound form of the simple cell. Instead of one comparatively large cell, it now consists of an aggregated society of small cells. Prof. Haeckel has established a theoretical group of compound amoebæ which he calls *Synamoebia*, as the phylogenetic ancestral form to which the *Morula* owes its existence; but it has been shown by the researches of Archer and of Cienkowski into some species of *Cystophrys* and into the *Labyrinthuleæ*, that these hypothetical *Synamoebia* have an actual representation in the fauna of the globe. These creatures are found to consist of formless accumulations of similar simple cells.

The fourth stage of germinal development is the *Blastosphaere*-stage. It consists of a transformation of the *Morula* which is brought about by the absorption of a clear fluid from the medium in which it is situated, which collects at the centre and crowds the cells outward, pressing them together until they are made to form a single layer upon the inner surface of the chorion, and thus leaving the whole interior filled only with the new liquid. The germ is enlarged during the process from its former diameter of about one-tenth of a line to that of half a line. The cells now forming this single layer have assumed a hexagonal shape due to their lateral pressure against one another. The new form is denominated the *Blastosphaera* or *vesicula blastodermica*, while the cellular layer bears the name of *germinal membrane* (*Keimhaut*) or *blastoderm*.

The blastosphaere is a stage of embryonic development which is common to all creatures that have a higher organization than that of the synamoebian societies of cells. In many of the lower forms of life it becomes a stage of metamorphosis rather than of embryonic development, since these minute blastosphaeres lead independent lives for a time as the larvæ of higher forms. This is the case with the calcareous sponges, with many zoophytes, worms, ascidians and molluscs. Such larvæ are called *Planulæ*. They are usually covered with ciliæ which serve as aids to locomotion.

These facts alone would justify the believer in the dependence of ontogeny upon phylogeny in maintaining that this stage had once formed the highest plane of development, and that there had once existed a race of creatures which, after passing through the three preceding stages, completed their career as true blastospheres, and that all higher organisms must, in that sense, be descendants of such a race. Haeckel assumes such a group of creatures which he calls the *Planacada*. This hypothesis, however, was scarcely necessary, from the fact that there are animals well known to science which conform in their general structure entirely to this stage of development. Many such creatures now exist both in the sea and in fresh water, consisting of a single exterior layer of cells surrounding a fluid or gelatinous interior, and usually provided, like the larval forms, with locomotive ciliæ. Especially may be mentioned the *Synura* in the *Volvocinae* and the *Magosphaera planula*. The latter was discovered and named by Haeckel, who has carefully traced its development through the lower stages and proved the *Planula* to be its highest and mature condition. Such an animal is therefore a true *Planaea*, as strictly so as are the members of Haeckel's theoretical ancestral group of *Planacada*.

To the philosophical embryologist, the blastosphere stage presents an extraordinary interest. Nothing could illustrate this better than the remarkable utterance which it has elicited from Von Baer himself, one of the few of his statements which possess not only an ontogenetic, but also a phylogenetic significance. "The farther we go back," says he, "the greater agreement do we find even in the most different animals. We are thus led to the question whether at the commencement of development all animals were not essentially alike, and whether there does not exist for all a common primordial form? As the germ is the undeveloped animal itself, it may be reasonably stated that the simple blastosphere (*Blasenform*) is the common fundamental form out of which all animals are, not only ideally, but historically developed."

The next and fifth stage of embryonic development is the most important of all, as it leads us directly to the consideration of Haeckel's celebrated "*Gastraea Theory*." The ontogenetic form is called the *Gastrula*, which differs in two important respects from the *Planula*. Instead of a single cellular layer, as in the latter the *Gastrula* possesses two such layers, one immediately within

the other. These layers themselves differ from that of the *Planula* in consisting of several rows of cells instead of one, thus forming two distinct coats composed each of several layers of cells. These two coatings are quite independent of each other, and may be easily separated, which is not the case with the layers of cells composing each coat. The two coats differ still further from each other in being made up of unlike cells. Those of the inner are larger, softer, and darker colored than those of the outer.

The other important distinction between the *Gastrula* and the *Planula* is the possession by the former of an orifice at one point on its surface, through which it receives its nourishment, and excretes refuse materials. This form of the *Gastrula-stage*, however, it should be stated, cannot be identified in the higher vertebrates. In man it is represented merely by a disk-shaped thickening at one spot on the spherical germ, and the formation there of the two primary germinative layers which extend round into a sort of sack, which is the unmistakable homologue of the typical *Gastrula* of the lower animals.

The process by which the embryo passes from the *Planula* to the *Gastrula* state, though simple, would be somewhat tedious, and the reader must be referred for the details of this transition to treatises on embryology, or to Prof. Haeckel's own work.

An extraordinary interest attaches to this stage of ontogenetic development, in consequence of its carrying the embryo across the line which separates the *Protozoa* from the *Metazoa*. Haeckel insists upon this as the primary division of the animal kingdom.

The *Protozoa* are not a co-ordinate department or type with the Vertebrates, Mollusks, etc. They constitute a sub-kingdom, co-ordinate only with the other sub-kingdom of *Metazoa*, under which these types all fall. To class the *Protozoa* among the Radiates would be equivalent to placing the Cryptogams under the Endogens in a botanical system. The reasons for this are purely ontogenetic. The *Gastrula* possesses the two primary germinative layers, which belong to none of the forms below it. The most thorough embryological research has established beyond a doubt the important fact that all the tissues of the body of every animal that develops beyond that stage are evolved out of the one or the other of these primary layers. The *Protozoa* and the *Metazoa* are therefore separated by the broadest possible line of demarkation, the former possessing no primary germinative layers, while the latter are either composed of them or developed out of them.



The extreme importance of these cellular layers, therefore, becomes at once apparent, and it is upon the manner in which the different tissues of the body are formed out of this simple building material that the most patient and indefatigable embryologists have been engaged during the past half century. It is found that from the outer layer or *exoderm* are formed; first, the *epidermis* and organs arising from it (hair, nails, feathers, scales, etc.); secondly, the nervous system and the most important part of the organs of sense; thirdly, the greater part of the flesh of the body, the muscles; and fourthly, the skeleton of vertebrates; in short, all the organs of *locomotion* and of *sensation*.

Out of the inner layer, or *entoderm*, on the other hand, are developed first, the inner lining or epithelium of the entire cavity of the body, together with that of all the glands and organs belonging to it, lungs, liver, etc.; secondly, the muscles of the internal vegetative system, including the heart; and thirdly, the cells of the generative organs. This last, however, is still open to some doubt.

In consequence of these special functions performed by each of the two primary germinative layers, the outer one has been called the animal germ-layer (*animales Keimblatt*), and the inner the vegetative germ-layer (*vegetatives Keimblatt*). The Latin terms *exoderma*, *dermophyllum*, *lamina dermalis*, and *lamina serosa*, have also been applied to the former, and *entoderma*, *gastrophyllum*, *lamina gastralis*, and *lamina mucosa* to the latter.

The *Gastrula* is a common larval form of many lower animals, such as Sponges, Polyps, Corals, Medusae, Worms, Mollusks and Radiates. It is also a larval form of the two most interesting of all animals for the history of development, viz: the Ascidian and the Amphioxus. Many zoöphytes and sponges are indeed nothing more in their final state than an aggregation or society of *Gastrulae*. They therefore constitute a compound *Gastraea*.

There is still another larval form belonging to this class which possesses an almost equal interest with the *Gastrula*. This is the *Ascula*. It belongs to the life histories of both Sponges and Medusae, being developed out of the *gastrula*-form, and from it the fundamental biogenetic law leads us back to the long extinct *Protascus*, or primordial sack, which was the ancient progenitor of the zoöphytes. It is fixed to the bottom of the sea, having its open end directed upward. No longer needing the ciliae em-

ployed by the *Gastrula* as organs of locomotion, these are consequently wanting. Its body consists of a simple sack or stomach, whose walls are formed by the two primary germinative layers in all their primordial simplicity.

The already famous *Gastraea Theory* of Haeckel is nothing more than the simple application of his fundamental biogenetic law to the *Gastrula* stage of development. By this law he is led to the conclusion that at one period in the history of the globe an animal having at maturity the form and organization of the *Gastrula*, and to which he gives the name of *Gastraea*, constituted the highest form of organic development upon it, and that from this primordial state of the two primary germinative layers the process of differentiation of organs proceeded until the present complex state of the animal kingdom has been reached, even as from the embryonic *gastrula*-form the highest of living beings are now developed through this ontogenetic recapitulation. "The *Gastraea*," says he, "must have lived at least during the Laurentian period, and sported about in the sea by means of its ciliated exterior coat, in the same manner as the free-moving *Gastrulae* now do."

The great interest which attaches to the *Gastraea Theory*, as already remarked, arises out of the immense importance of the primary germ-layers as the basis of all future histological development. That which carries it further out into the field of speculation, however, and thus in one way adds still more to its interest, is the difficulty both in finding the true homologue in man and the higher vertebrates generally, of the *Gastrula* of the *Ascidian* and *Amphioxus*, and also in finding any good systematic representative of the ancestral *Gastraea*.

The rest of the history of the ontogenetic development of man is the history of the differentiation of the two primary germinative layers. The *Gastrula* stage has furnished in these two layers the raw material for the entire future structure. By watching the progress of growth in exoderm and entoderm, the successive tissues of every part of the body may be traced to the highest degrees of specialization. From this point of view that stage possesses an interest far exceeding that of all those that have preceded it: for in it is found the first truly specialized organ. That organ is the stomach. The two essential functions of life are nutrition and reproduction. The one is the promoter of ontogenetic, the other of phylogenetic development. But as we saw in the cell, these two func-

tions are originally but one, and that one is nutrition. Reproduction appears here as a mere continuation of nutrition. Nutrition goes on to the limit of growth when division takes place. Nutrition is commuted into reproduction. *Generation is phylogenetic nutrition*; a truth which we should never have reached except by the study of the lowest organisms. Nutrition, therefore, is the one essential function of life. The organ of nutrition is the stomach. How significant, and yet how reasonable, that in the course of development the first specialized organ should be the stomach, and that the first creature possessing a specialized organ should consist wholly of a stomach! Such a form is the *Gastrula*; such a creature was the *Protasclus*; and such is the hypothetical *Gastraea* of Haeckel.

The sixth stage of the ontogenetic development gives the human embryo the form and organization of a worm. Our moral and religious teachers have from time immemorial delighted in reminding us that we were but "worms of the dust." They should thank science for demonstrating that they were right. We might almost give them credit for an inspirational insight, did they not render their sincerity questionable by the indignation they evince when told that in the same sense that we are worms, we are also apes.

The first important step in the progress of embryonic development, after leaving the *Gastrula*-stage, is the formation of two additional germ-layers out of the two original ones. The exact mode of their development is still under discussion among embryologists. Haeckel believes that the original exoderm and entoderm secrete each a new layer of cells from its inner surface; that is, from the surface of each which is contiguous to the other, so that the two new layers lie against each other and separate the primary by the thickness of both. It is, nevertheless, considered that in the process the original constitution and identity of the primary layers are destroyed, so that they have virtually resolved themselves into four secondary germ-layers. The two outer layers, however, now perform together the office of the original exoderm, while the two inner ones take the place of the entoderm. This division into four secondary germinative layers is the final division, all the tissues, without exception, being formed out of these, as they have in nearly every case been traced.

The names assigned by Von Baer and by Haeckel to these secondary layers have reference to the functions which they are found

to perform. Being all German in their etymology, they are difficult to render into English. The following may answer as such an imperfect version: Numbering them from the outside, the first is called by Baer the skin or dermal layer (*Hautschicht*), and by Haeckel the dermo-sensory leaf or fold (*Hautsinnesblatt*). The second is the muscular layer (*Fleischschicht*) of Baer, and the dermo-fibrous leaf or fold (*Hautfaserblatt*) of Haeckel. The third is Baer's vascular layer (*Gefüßschicht*), and Haeckel's gastro-fibrous leaf or fold (*Darmfaserblatt*). The fourth, or extreme inner layer, Baer has denominated the mucous layer or membrane (*Schleimschicht*), while Haeckel calls it the gastro-glandular leaf or fold (*Darmdrüsenblatt*). Space will admit of no further following out of this interesting part of the history of embryonic development.

All worms are composed of these four secondary germ-layers, the lowest possessing them in their greatest simplicity. The popular idea of a worm is an elongated creature consisting of many joints or rings, (*somites*) but this is only a compound state of the primitive worm, each ring or joint constituting zoölogically a distinct individual, and possessing morphologically, if not physiologically, all the characters of one. The primitive worm has but one joint. Among the lowest of the worms are the *Turbellaria*, which in many respects resemble the *Gastrulae* of some higher animals. Like them their body consists of a simple sack with only a single orifice, and even possesses the ciliary organs of locomotion. The great difference lies in the nature of the cellular layers composing this sack. In the *Turbellaria* these are the four secondary instead of the two primary germinative layers. Haeckel reasons here to an ancient primordial worm (*Urwurm, Prothelmis*.) corresponding in all respects with this stage of embryonic development in man and the higher animals generally, and from which not only all other worms, but all creatures higher than the worms, including mankind, have descended. This worm-stage acquires an increased interest from the circumstance that, here the main trunk divides, sending off the articulate branch in one direction and the mollusk branch in another, leaving only the vertebrate stem. The embryo assumes a certain bilateralness, the four secondary germinative layers grow together at their dorsal median line and a *chorda dorsalis* is formed. This is the true *Chordonium-stage*. The embryo now has the closest affinities with the larval state of the *Ascidian*, which, strangely enough, though wholly devoid of a *chorda*

in its final state, has a well defined one in its larval state. There is another creature, the *Appendicularia*, which possesses a *chorda dorsalis* throughout its existence, although in all other respects it is a true worm and belongs with the ascidians, to the *Tunicata*. This animal is the true connecting link between the worms and the vertebrates, between the ascidian and the amphioxus. The hypothetical *Chordonium* of Haeckel, the assumed ancestor of the human race at this stage, and exact representative of the embryo at this period of its growth, differs scarcely at all from the *Appendicularia*. It is the common ancestor of the *Tunicata* and the *Vertebrata*.

From a worm the embryo passes directly into a vertebrate. As the ascidian larva, the appendicularia, and the amphioxus are separated only by the smallest differences, although the two former are clearly worms, while the latter is clearly a vertebrate, so the corresponding transition stages in the embryo are distinguished only by almost imperceptible shades.

The future man is now a vertebrate, but without distinct vertebrae. He is wholly without brain or cranial enlargement, without a regular heart, without mouth, without limbs. He now belongs to a great sub-type of the *Vertebrata*, which Haeckel denominates the *Acrania*. This entire sub-type has now but a single known living representative on the globe, the amphioxus<sup>1</sup>; but Haeckel believes that a period existed when the *Acrania* greatly prevailed over the *Craniota*, or cranium-bearing vertebrates, and peopled all the seas and waters. This *Acrania* or amphioxus form constitutes the seventh stage of ontogenetic development.

The next or eighth stage is the *Lamprey* or *Monorrhina* stage. The nervous system and the vertebral column begin to differentiate. The spinal marrow undergoes a slight enlargement at its anterior extremity, which is the rudiment of the brain. The vertebral column begins to develop out of the rudimentary *chorda dorsalis*. This does not take place by a gradual, simultaneous formation of all the vertebrae along the line of the *chorda*, but, singular as it may seem, by the formation of one vertebra after another, beginning with the most anterior. This remarkable

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<sup>1</sup> A second acranial animal, discovered near Peale Island, Moreton Bay, Australia, has very recently been reported to the Royal Society by Prof. W. Peters, who has described it under the name of *Epigomethys cultellus*. This discovery is of the highest interest to naturalists.

process points unmistakably to the composite character of the frame-work of every vertebrate body. Each vertebra of a vertebrate, like each ring of an annelid, represents a distinct and once independent unit of a compound organism.

The present *Cyclostomata* or *Monorrhinae* are believed by Haeckel to be the sparse remains of a once great group of animals which in ancient times shared the possession of the globe with their gradually increasing rivals, the *Amphirrhinae*, which had sprung from them just as the embryo of every higher vertebrate passes from the condition of the one into that of the other. The type of the former is the still living Lamprey or *Petromyzon*. As the names imply, the *Monorrhinae* have but one orifice for mouth and nose, which is of a circular shape, and is used as a sucker, while the *Amphirrhinae* are provided with a pair of jaws and two nasal orifices. Excluding the Amphioxus (*Acrania*) the entire vertebrate type (*Craniota*) falls under these two groups, the *Amphirrhinae* embracing all the higher vertebrates from the lowest fishes upward.

From the form of the first of these groups to that of the second the embryo now passes, and enters upon its ninth stage of development; it becomes a fish. But as *natura non facit saltum*, this first fish-form is not that of a true *Teleost*, but of a *Selachian*. Indeed the higher fish-form is never attained, but the embryo skims along at the bases of the great ichthyan and amphibian branches without becoming at any time a true fish or a true Batrachian. This is a very significant fact, and one which, while it is easily accounted for by the general theory of descent, forms at the same time a powerful ontogenetic argument for the truth of that theory. For the typical representatives of any great group exhibit only the extremities of greatly differentiated branches remote from the parent stem, and it is not to be expected that in the corresponding embryonic forms of animals higher up the stem we should see anything but copies of those forms which existed prior to, or at the commencement of, ramification, and which are consequently within the common line of descent of both.

Some will, perhaps, regret that their ancestors should have been worms, while they cannot count in their pedigree either the bee or the ant; others may not feel flattered to be informed of their close relationship with the frog and the toad; but few, I think, will be sorry to learn that their forefathers were not reptiles, though this fact precludes the more pleasant thought of claiming relationship

with the birds; for birds, with all their grace, beauty and innocence, are neither more nor less than transformed reptiles.

The human embryo passes along the base of the Batrachian branch and through the *Sozura* (thus saving its tail), and so keeps quite aloof from the whole race of lizards, snakes, turtles, etc., and *à fortiori*, of birds. The unborn man is first a Selachian, then a Lepidosiren, then a Siren, and finally a Triton. His first limbs are fins, his first respiratory organs are gills, and his lungs are at first fish-bladders.

The tenth and last stage of ontogenetic progress is denominated by Haeckel the *Amnion-stage*. This stage embraces not only that of all true mammalian forms, but also takes in the two interesting antecedent groups, the *Monotremata* and the *Marsupialia*. Haeckel establishes a hypothetical *Protamnion*, which he locates in the Permian period, and which he claims to have been the original progenitor of all the *Amniota*, or amnion-bearing animals. The distinguishing characteristic of this embryonic form, as the name implies, is the beginning of the development of the important organ known as the *amnion*, which is simply a large extension of the yolk-sack, and is filled with a nourishing fluid. This fluid is gradually absorbed and appropriated by the embryo and furnishes a portion of its nutrition. Simultaneously with the amnion is developed also another important organ, the *Allantois*, or primordial urinary sack. Both these organs are confined to the three highest classes of Vertebrates (reptiles, birds, and mammals). The embryo now begins to manifest decided mammalian characteristics. Already the gills have disappeared, having become transformed into jaws, hyoid bone, and otolithes: the heart has acquired its four chambers, and the swim-bladders have been specialized into lungs. For a while the uro-genital and excrementary orifices empty into the common *cloaca*, giving it the *monotreme* character. Then, while the allantois is still present, a partition separates these, making both open externally. This is the Marsupial stage. Lastly, the allantois is transformed into a *placenta*, and the pure mammalian stage is reached. Leaving the great branches of the *Carnivora* and *Rodentia* on the one side, and the *Ungulata* and *Cetacea* on the other, the line of progress of the embryo until it is now direct, through the various phases of a Sloth-form, an Ape-form, and an Anthropoid form, emerges at last,—conditions being normal,—on the 280th day of gestation, with the form of a human being.

No one who experiences the least regard for natural truth, whatever views he may hold respecting the meaning of particular facts, can contemplate so remarkable a series of phenomena as this, and realize that he has himself once been the subject of such a strange course of development, without being led into a train of reflection which will open up to his mind broader and juster conceptions of the universe.

At the same time it would be impossible to exaggerate the degree of added strength which a popular acquaintance with the bare facts of ontogenesis would impart to the hypothesis of development or modern doctrine of descent, and thus indirectly to the general conception of the law of universal evolution.

LESTER F. WARD.

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### ART?

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“ Shall these things be, and overcome us as a summer cloud,  
Without our special wonder ?”

NO one who has seen many recent exhibitions of paintings can fail to note the growing tendency, particularly among foreign artists, to new and especially oriental and tropical subjects, requiring striking outlines and high and varied color. In landscape, the temperate zone of Europe has become as “effete” as we used to think its political capacities, and the genius of Gerome, Schreyer, and Fromentin, on the wing for new worlds to paint, hovers only over Northern Africa, Turkey and Siberia. In figure painting, pre-Raphaelitish Romans and Syrians, Venetian courtiers, modern Nubian and Circassian slaves, Arab sheikhs, Egyptian fellahs, and Moorish princesses, glorious in person and costume, have replaced the theological, mythological, or contemporary and local themes of the past. An “embarrassment of riches,” in complexion and covering, often forces on the artist a difficult decision, as to whether he shall sacrifice “the lendings” of crimson silk, of cloth of gold, of jeweled braid, or the surface of “the unsophisticated man.”

Let us hail this emancipation of art from the limits of tradition, this subservience to it of railway and steamship, of historical exploration, and all the outgrowths of civilization, this subjection of



science! And only a beginning has been made—the galleries of the future will be brilliant with the floral prodigality of South American rivers; the picturesque heights and lakes of Central Africa; the opal and emerald coloring of South Sea islands set in coral reefs; the pale, unearthly splendors of the poles—and all that human life in each region can add to vivify the scene.

All this is a part of a grand movement in the same direction, pervading architecture, music, literature and social life. Is it that the world, like a child *blasé* with his toys, has again taken to “dressing up”—foretasting the coming of age? When the child possesses his manhood, he finds its tastes simpler than he imagined it; and in the real glories of the consummation of all things, our nineteenth-century imitations of mediæval dress, building, and religious forms may seem like a play by daylight. But, however this may be, color and form, in quiet or active attitudes, harmoniously outlined, always speak effectively to our inner nature. Whether in the lower degree of “still life,” or the higher of the human figure, the soul seeks always through them in art, the revival and the glorification of the same elements of beauty and consolation in nature. Of consolation—for not only the brilliant and graceful, but the gray, the bleak, the almost formless and colorless, are in nature, as are medicinal herbs and waters, as well as glowing fruits, flower-crowned foliage, and joyous streams.

Therefore we rejoice in the extension and subdivision of the painter's chromatic scale, in the acquisition by art of whatever is best in nature. But in all this widening of the field of the masters, and its reaction on the style of the schools, must the moral laws of man be stretched and attenuated to even a “solution of continuity?” Is the painter to become like the barbarian he portrays, as free from the instincts of civilization as *he* is from the acts of its legislators and the decrees of its courts? The laws of drawing are unchanged, and regard not the subject—who may suspend any higher law?

If art be only technical skill in coloring surfaces, these questions have no meaning. There can be no morality in the painting of a house: why should there be in the painting of figures on canvas? But when we call the former an art, and the latter art, we mean to express an essential inference—one not of degree, but of kind, and involving the artist in immutable responsibilities. When the subjects on the canvas are such as awaken thought, stir passion, and

develop taste in the beholder, is not the painter as responsible for the character of the impulse as an equally effective writer? "Excellent examples of effect" in this sense, ought to be such pictures as the "Bottle nearly Empty," and the "Cabaret," or the "Interrupted Sitting," and the "Confessional," with their evident inuendoes;—and all representations of drunkenness past the joys of conviviality, of personal exposure with no veiling grace of shame.

There is a consciousness in mankind, as universal as that of a supreme existence, that the human body, in distinction to that of any other animal, should be clothed. Whatever disputed meanings lie in the story of Eden, this one is plain, that a sense of the need of clothing sprang up simultaneously with the knowledge of good and evil, of right and wrong, which is the peculiar trait of Humanity. A downward step may be one of progress also, and his fall may have been man's true entrance on his manhood. There is no surer mark of a degraded race, even in tropical regions, than the dullness of this sense; no surer sign of retrogression toward materialism and brutishness, in civilized society, than its gradual enfeeblement. In what other decade of American history than the last would we more naturally look for the Opera "Buff," the Blonde Troupes, Anatomical Museums, Variety performances like the "Naked Truth," the nudities of the Centennial Art Gallery, and the public exhibition of Vanderlyn's<sup>1</sup> "Ariadne" and Cabanel's "Birth of Venus?"

It will be said that art, like innocence, knows no sex; that practice in every department is necessary to the thorough artist, and that what must be painted in the life-school, may surely be shown to the public. To which we reply that art, a personification, does not so much concern us in this regard, as its followers, who are persons; and as to the rest, all depends upon what we mean by "the thorough artist." To paint well the human figure, models are necessary; but on the grounds already stated, and with the limitations to be made, we deny that to paint the human figure utterly naked is to paint it well. And to paint it in any condition of exposure that lowers our sense of the dignity of the human being, should be forbidden by directors of life-schools. We admit this requires the exercise of discretion, but it is to exercise discretion

<sup>1</sup>In 1864, this picture was exhibited at the Sanitary Fair in Philadelphia, in a special building or room, set apart for it, in deference to the public sentiment of that day.

that they hold their positions. A life-like portrait of a drunken brute—necessarily human—is not an ennobling, or to many even an agreeable, object of contemplation; yet should such a study be found essential to the development of the “thorough artist,” the same good taste that keeps the interests of the dissecting-table out of general society, should keep it in the private corner of the studio. Is every whipster of a medical student encouraged to practice vivisection? Because public opinion elsewhere tolerates the hiring of female models, shall we debase our standard to the same level? Because a painter—we cannot say artist—chooses to sit for hours to depict a naked woman of purchased presence, and—to make the occupation both profitable and respectable—sends to a public gallery his shameless copy, have men who are gentlemen and delicate-minded ladies whom the law defends from some other public indecencies, no protection? Has a Hanging Committee no right of refusal if the *technique* be correct? If mere handicraft suffices, why not open our Academies to the grainer and fresco painter? Why place on Hanging Committees the layman as well as the professional, if the immaterial element of a work be not a matter of judgment as well as the material? Places of amusement that take pains to advertise that on certain evenings “gentlemen only” are admitted, and “positively no boys,” are under police surveillance. Why more than galleries that invite the unsuspecting country lad or shop girl to a Sunday exhibition of paintings, of subjects hitherto confined to first-class bar-rooms?

We speak strongly, and many more have felt strongly. Yet, let us not be misunderstood. While there is no more place for nude figures in art than in real life, yet there is as much. Poetry presents us with personifications of pre-historic innocence, and history, in records of times of great moral stress, when this life and the next have drawn together, tells of some, unclothed but not uncovered, stripped of vestments by fervor or violence only—yet “clothed upon” by so forceful an inner grace that the ennobled body has become “more than raiment.” And there be, in pictures as in life, some richly clad, whose nakedness cannot be hid. One Frenchman discovered that words were intended to conceal ideas; another has, in our day, shown that dress may expose the form. The gross artist's soul may be known, even though the drapery of a lay figure; and if the moral tone of the public be no higher than his, there will be admirers and buyers.

But not for *his* pencil are the unearthly nudities, the glorified bodies, of which we have spoken. So few, indeed, are equal to these things, that such subjects may be said to lie practically as much out of the domain of art, as the visions of faith are beyond the lens of science. Who will paint God? Where almost inevitable failure makes even an attempt blasphemy or indecency, few fortunately will essay.

The Godiva of Tennyson, breaking the law of modesty in shuddering obedience to the law of mercy,

—“rode forth, clothed on with chastity,  
The deep air listened 'round her as she rode,  
And all the low wind hardly breathed for fear.”

—and the noble story, an example of a lower order than those we have imagined, *may* be told on canvas as in verse, but not even this by the mere trickster in flesh-tints. For such, and higher work, the thorough, the *true* artist has appeared, and will appear, at those recurring epochs when art works with reverence and love—for these three, thank God, are immortal graces. Yet not for such work only, for as the same sunlight that hallows the Alpine peaks with hues of heaven, gives the green to the leaf and the grass of the lower valleys, so the genius that guides in these perilous heights, will never fail the artist, but to *all* that he touches add a charm or a glory.

“For art is a revelation from heaven, and a mighty power for God; it is a merciful disclosure to men of His more hidden beauty; it brings out things in Him which lie too deep for words. In virtue of its heavenly origin, it has a special grace to purify men's souls, and to unite them to God by first making them unearthly.”

J. S. W.

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### SPRING ASKS.<sup>1</sup>

**Y**E knotty roots that roof my bed,  
That frame the valley, arch the pond  
And silver woodslope where, beyond,  
Sits a bird on a sumac-head—  
You bird on a sun-drugged sumac-head,  
Blue o' the back, brown o' the breast,  
Who placed you—best?

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<sup>1</sup>See THE WINTER ELF in a back number of the *Penn Monthly*.

Was not I last night the child,  
 Changeless, mad as leaves that **blow**  
 Playmates mine o'er frosty snow?  
 Well may south winds blow me **mild**

But not change:

Here I wake 'mid flattened leaves  
 Languid under twisted eaves;  
 Slim like mortals, shot with strange  
 Emerald hue is my clear frame,  
 Thin my cheeks and weak my **knees—**  
 Hark, the violet-smoky trees  
 Speak my name!

“Up, up, by our hands  
 Catch us, savior of the earth,  
 Tree and herb at thy commands  
 Leap with music into birth,  
 Spring, Spring, young god Spring—”

Ungainsaid the voices ring,  
 Every cell o'er night is broken,  
 All things loss and gain betoken:  
 Snow from twig and cloud from **sky!**  
 Where the ice was broad I spy  
 Dead gold wavelets; tuneful trees,  
 Trees majestic march at ease  
 Down the slope to where I lie—  
 Hazy masses, dark on dark,  
 Thick, more thick with budding **bark**  
 Till, 'mid young brush, sweet of **smell**  
 Past the tell,

Flinty edged against the white  
 Of the snow-banks over night,  
 Now the shape of gnarring crows  
 Blurry on the woodside grows.

Work! the stirring branches sing,  
 Nor may be denied the chant  
 Organ-toned from every plant.  
 Question comes not, but on wing  
 Of the languor-laden air  
 Propped, I slide the willow's hair  
 To the root of fingers lean.  
 Lo, where'er my touch hath been  
 Drifts a rain all golden green!  
 Russet fall the red-oak sheaves,  
 Maiden beeches drop their leaves—  
 Tatters thin they chastely drew  
 Round about when bold winds blew—

**And** the woods of all the lands  
**Lift** their myriad clenched hands,  
**Quake**—and these from brown gray bands  
     Struggle free.  
**Bird** on a storm-beat sumac-head,  
**Blue o'** the back, brown o' the breast,  
     I wrought you best!  
**Or had** you otherwise worn the red  
     O' the sumac-head,  
**Sweet** bird that ever dost blithely wait  
**For** something to come, though it cometh late?  
**No, you** ne'er could hope to guess,  
**You, nor** Sun, though Sun may bless,  
**Nor** the dreadful Moon of night,  
**Cold** and strangely great of might;  
     Yes—  
**God** I am; the tangled swamps  
     Gain from me a thousand new  
**Wonder**-brilliant forms. The lamps  
     Borne by myriad wings, the blue  
**Tender**-veined liverwort,  
     Windflower meek, and coil of fern,  
     Crocus-flames that have no burn,  
**These** to waken is my sport;  
     Each and all of these in turn,  
**Whose** deep sleep is danger-fraught,  
**By** my craft to life is brought,  
**Mottled** beak of marshy weed,  
**Gasping** for the air, I feed,  
**And** when great moths, brown and eyed,  
**Ope** their doors, I stand beside;  
**So** from slimy mold I break  
**Each** weak piper by the lake.  
**All** things alter, burgeon, rise;  
**All** things veer 'neath changing skies:  
**Change** hath touched me. Who shall say  
**Changes** come not every day?  
**I** am god, let all things chime.  
**I** am space and I am time.  
**Only** this is past my lore—  
**What** the bird is waiting for?

CHARLES DE KAY.

TOWNSHIP ORGANIZATION IN THE NEWER STATES  
OF THE UNION.

**T**OWNSHIP organization, as a term applied to a **system for the** regulation and management of municipal or fiscal affairs, was first employed in that sense by the Constitution of Illinois as amended in 1848, wherein was contemplated a division of the counties of the State into smaller districts forming bodies corporate, for the regulation and management of local affairs,—denominated Township Organization.

The State of Illinois being originally comprised **within the territory** of country belonging to the State of Virginia, received an early impress of the general features of the municipal system of that State, from which it provided for departing as a settled policy, in the revision of the Constitution in 1848. And so too the influence of the parent State of Virginia, in this regard, was in like manner originally extended, in a greater or less degree, over all those States carved out of the territory northwest of the Ohio river.

A learned writer on the subject of the origin of laws and government, remarks that we are not to consider the first laws of society as the fruit of any deliberation, confirmed by solemn and premeditated acts. They were naturally established by a tacit consent, a kind of engagement to which men are naturally very much inclined. Even political authority was established in this manner, by a tacit agreement between those who submitted to it and those who exercised it. This idea applies with much force to the American system of government, now so perfect and harmonious in its operation. De Tocqueville, in his work entitled *American Institutions*, in speaking of our political system, very properly remarks that two branches may be distinguished in the Anglo-American family which have grown up without entirely commingling; the one in the South, the other in the North. He discovers the causes which led to this condition of things, which are apparent to the most casual observer. They arise, not from design, but from the force of circumstances at the beginning. The planting of the original colony of Virginia at Jamestown had for its design the single and naked object of pecuniary profit to the proprietors. Its mission involved no principle for the benefit of mankind. It recognized the Crown of Great Bri-

tain, from whence it derived the charter of its existence, as the source of political power. There was no recognition of the principle of self-government, or right of those who were not commissioned by the Crown for that purpose to have any part in administering the government.

Indeed, it was not intended that the administration of public affairs should be committed to those who were to form the population of the colony. The colonists in general came with no such intention on their part. They were not of that class to concern themselves in the affairs of government. They are mentioned by the historian as largely composed of adventurers, discharged servants, fraudulent bankrupts and vagabond gentlemen.

At that day the Church was closely united to the State. The early charters of Virginia required the establishment of the Church of England, and authorized the infliction of punishment for drawing off the people from their religion as a matter of equal importance with their allegiance. These circumstances conspired to assimilate the form of government to a system in which the masses had no control. The large landed estates, and consequently sparse settlement of the country, obviated the necessity of attention to public roads, or local improvements of a character demanded in a community of mutual interests or more dense population. The functions of the government were therefore reduced in like proportion, being confined mostly to those of a judicial character, for the adjustment of controversies and enforcement of penal laws. This gave rise to a division of the colony into counties or districts, for the purpose of defining the jurisdiction of courts of justice and the convenience of collecting revenue for support of the government.

But the circumstances attending the settlement of the colonies of what was called New England, were of an entirely different character. The colonists in this instance were non-conformists or dissenters from the Church of England. They came as exiles: the first of them flying from an ecclesiastical tyranny, whose displeasure they had incurred, cast out as public offenders, "as profane out of the mountain of God." Whilst the colonists of Virginia came with the law, those of New England came against the law, or perhaps more properly speaking, without the law. Here then arose on the part of the latter a positive necessity for the establishment of law for their mutual protection. But this necessity was not realized until the occurrence of threatening dissensions among themselves



before quitting the ship in which they had embarked. The result was a written compact subscribed by the male adults of the infant colony, declaring that those whose names are underwritten, having undertaken for the glory of God and the advancement of the Christian faith to plant a colony in America, "do by these presents solemnly and mutually, in the presence of God and one another, covenant and combine ourselves together into a civil body politic for our better ordering and preservation, and furtherance of the ends aforesaid: and by virtue hereof to enact, constitute and frame such just and equal laws, ordinances, acts, constitutions and offices from time to time, as shall be thought most meet and convenient for the general good of the colony, unto which we promise all due submission and obedience."

This, it is said, is the first written constitution extant contemplating the general good. It was the first time since "the morning stars sang together" that the people themselves had met in council and framed a government based upon equal rights. Compacts had been made in the past, partial enfranchisements had been conceded, and the power of kings had in some instances been limited; but England, notwithstanding her Magna Charta, was still far from free; neither civil nor religious liberty was understood or practiced in her dominions. The Pilgrims on board the Mayflower did more for human freedom by this single act than whole centuries had done before.

Another important principle attending this compact is that, while it is signed and entered into by the adult males only, each affixed opposite his name the number of persons comprised in his family, as a recognition of their interests in the premises, and the responsibility of the subscriber to them as the head of the family. In other words, it is a recognition of the principle that the family is the unit of government; that the head of the family in his exercise of political authority is their representative, and is responsible to them for his action.

When we contemplate the causes which led to the formation of that system of civil government established by the Pilgrim Fathers in the New England Colonies, we enter upon a field of increasing interest. It was simply the outgrowth of their theory of the Christian Church, which contemplated the formation of "a pure congregation of true believers in which the right of ecclesiastical self government should be exercised immediately by the congregation, not

mediately through representatives," as derived from the law of Christ according to St. Matthew, which requires it to be "told to the church" when a brother will not hear admonition, the Church being nothing but the assembly of believers; and according to the word of St. Paul, that the believers must be gathered together for the public censure and excommunication of a scandalous person.

In forming a settlement, the first important care of the Pilgrims was the erection of a *meeting house*, or place of assembly of the congregation for religious worship, around which clustered their habitations. As others arrived, or the congregation increased, it became necessary to move off and form a settlement at a convenient distance; but for protection against the Indians a number of families in like manner settled near to each other, in the midst of which was the meeting house of the congregation. This clustering system prevailed until after the extirpation of the Indian tribes, and the establishment of passable roads. The communities thus formed were called *towns*; or as they assumed territorial extent with defined boundaries, they were more properly denominated *townships*; in which the local affairs of the community were managed by direction of the freemen, assembled in their town meetings held at stated periods, or as occasion demanded. Thus New England grew up a congeries of towns: out of this self-government in the Church grew self-government in the State, democracy and the representative system.

In New England, towns existed before counties, and counties were formed before states.

Originally the towns or townships exercised all the powers of government now possessed by a state. The powers subsequently assumed by the state governments were from surrender or delegation on the the part of the towns. Counties were created to define the jurisdiction of courts of justice. The formation of states was by a union of towns, wherein arose the representative system, each town being represented in the state legislature or general court by delegates chosen by the freemen of the town at their stated town meetings. From thence, as De Tocqueville expresses it, "the principles of New England spread at first to the neighboring states they then passed successively to the more distant ones; and at length they embraced the whole confederation. They now extend their influence beyond its limits, over the whole American world. The civilization of New England has been like a beacon lit upon a

hill, which, after it has diffused its warmth around, tinges the distant horizon with its glow." For in New England is found the germ and gradual development of that township independence which is the life and main-spring of American liberty; the confederation of the states of the National Union being but a further application of the principles whereby were formed the original New England Colonies by a union of towns. It is to be remembered, however, that notwithstanding this manifest influence, and whilst many states have borrowed theories from the institutions of New England, yet none have accepted a township system so purely democratic.

New York, bordering upon the New England States and receiving a large proportion of its population therefrom, especially from Connecticut, by tacit consent adopted the township system at an early day. Here, however, the system did not grow upon the people like that of New England, but came to be adopted in imitation of it; from the circumstances attending, it was wanting in those purely democratic elements which characterize the New England system. In New York, unlike New England, the state government was formed before the township. The formation of the township system was through the medium of state authority, recognizing the state government as sovereign and supreme; while in New England in the absence of a state body politic, in the formation of towns the freemen or the people themselves were the recognized source of power. In New York, the state became divided into counties, and the counties were subdivided into towns. The town in principle was a mere representative district and an agency in the state government. In New England a town was a commonwealth, the legislative power whereof was vested in the freemen when duly assembled. The laws in general were executed by a board of officers called select-men of the town. Their principle of representation in forming a state government was one of right reserved to themselves, and not an institution of convenience granted by the state as the superior body politic. In New York this system of town representation was imitated by providing a county board for the management of the fiscal affairs of the county, forming a sort of legislative body concerning local affairs, intermediate between the towns and the general assembly of the state, each town being entitled therein to one representative. The large extent of the territory of the state rendered the New England system of town representation in the General Assembly impracticable.

The State of Ohio was entitled to more positive results from the influence of New England institutions than it in reality received, from the fact that Connecticut for a time claimed dominion within the territory of which it was formed, and that its early settlers hailed from the New England States. The first settlement of this State at Marietta by New England people, was marked by the same Pilgrim spirit as had planted the original colony at Plymouth. A noticeable characteristic of the early New England colonist is that of at once providing rules for civil government. History presents no other such striking instance of this peculiar character.

In planting the original colony of Virginia, the idea of the necessity of laws or rules for the general good seems not to have entered into the minds of the colonists. In this regard they committed their interests entirely to the Church and the Crown, relying not upon themselves, but on the authority which they acknowledged as superior, and as possessing the right to direct and control their conduct.

The first settlement of Ohio at the mouth of the Muskingum river, afterwards called Marietta, was by a New England association under the management of Col. Rufus Putnam, in advance of the territorial government established by Gov. St. Clair, and whereby it became necessary as is stated to erect a temporary government in the meantime for internal security. For this purpose a set of laws was passed, and published by being nailed to a tree in the village, and Return Jonathan Meigs was appointed to administer them.

Among the first acts of the Governor in organizing the territorial government was the establishment of one county, comprising all the territory that had been ceded by the Indians, and embracing about half that within the present limits of the State. It was called Washington county, and was the first political sub-division established in the Territory. Subsequent legislation, in adopting a system of political sub-divisions, reveals a contest between the county and township organization system. The Virginia military reservation drew a considerable number of Revolutionary veterans and others from that State, who naturally contended with their New England fellow citizens for that system which was more in harmony with their early notions of government, which exempted the masses from the cares and responsibilities of public affairs. For convenience of description, the plan was adopted of sub-divid-

ing the public lands into townships of convenient size, of six miles square. This was favorable to the idea of organized political townships. But the influence of the Virginia system of county organization was felt to that extent that a plan followed which has been called the compromise system, wherein the functions of the government in local affairs are divided between the counties and townships as bodies politic.

It was long after the organization of the State government, however, that this compromise system was matured in its present form. Notwithstanding that the ordinance of 1787 for the government of the territory northwest of the Ohio river, had recognized and invited township organization by providing for township representation, and for the appointment of magistrates and other civil officers in townships, the system as now existing became established in Ohio with reluctance, and not until the New England spirit of local self-government had so far permeated public sentiment as to overcome resistance from Virginia prejudices.

In organizing civil government in Virginia, the first care of the constituted authorities seems to have been the establishment of courts of justice. In 1623 courts were directed to be held in the corporations of Charles City and Elizabeth City. In 1631 commissioners were appointed to hold monthly courts in some of the more remote plantations, styled commissioners of the county courts. In time as the county system assumed form, the fiscal affairs of the county were committed to these commissioners, or those of like functions: and this seems to have been the origin of that executive board called county commissioners, adopted in Ohio and prevailing at first in all the northwestern and newer States—having the management of the fiscal and local affairs of the county.

In the Plymouth Colony the first act in civil government was the organization of the militia for defence against the Indians. So in Ohio, the first act of the Governor and Council was a law "for regulating and establishing the militia." Laws of a general nature followed soon thereafter. The government of the United States having adopted the policy of giving a section, or one mile square of land in each township, for the benefit of public schools therein, organization became necessary in time for the management of the fund arising therefrom for the purposes intended. This was an additional influence in maturing a township organization system, and as the wealth and population of the State has increased, and a local in-

terests have multiplied, this crude system, as originally commenced, has ripened into one in imitation of that in New England, but with more limited powers. Larger powers are reserved to the legislature than in the New England States; the management of local affairs, as before remarked, being divided between the counties and townships therein.

By the laws of Ohio, the general powers of a county, as a species of corporation, are exercised by a board of county commissioners consisting of three persons, elected by the qualified electors thereof. These commissioners may sue and be sued upon matters in controversy where the county is concerned. They have charge of the public buildings, poor houses, bridges and public grounds of the county, and the maintenance and support of idiots and lunatics. They have authority to establish and vacate public roads, and to appropriate funds for their improvement, and they have a general supervision over the fiscal affairs of the county. The assessment and collection of taxes is in like manner entrusted to the county authorities.

A marked feature in the general authority of the county commissioners under the present statute is that of being required to subscribe for one copy of the leading newspaper of each political party, printed and published in the county, and to cause the same to be bound and filed in the county auditors' office, as public archives for the gratuitous inspection of the citizens of the county.

The township organization system of Ohio, which has been imitated by several of the newer States, is the most simple form of the system which exists that can be called township organization. Indeed among those best understanding what the term *township organization* imports, it is a misnomer as applied to the Ohio system.

In borrowing from New England, Ohio has substituted instead of the select-men of the town, three officers styled *trustees*; these with the township treasurer and the township clerk constitute the whole force of township officers for the management of local affairs, except overseers of highways for the various road districts. Each township is made a body politic and corporate in express terms. The subjects of which the town has control are the repair and superintendence of public roads, and the establishment of roads of minor or local importance, estrays, health, fences and inclosures, and the support of the poor. The supervision of these various affairs, and the execution and enforcement of the laws relating thereto, is in general committed to the township trustees.

A noticeable feature however in the Ohio township system is the absence of that institution which De Tocqueville so much admired in the political system of the New England States—the town meeting. He adds that local assemblies of citizens constitute the strength of free nations.

An eminent citizen of Marlborough, Massachusetts, in writing up the history of that town, speaking of the New England political system, takes occasion to remark that "a town meeting is a surer exponent of the will of the people than a legislative assembly, whether state or national. The nearer you come to the fountain of power, the people, the more clearly you perceive public sentiment and learn the popular will. The American Revolution was inaugurated in town meeting, and the history of that great political movement may be seen in the resolutions passed and acts done in those little assemblies. It was there that the great question was debated, the first step taken, the solemn pledge given. Next to the family, the primary gatherings of the people exhibit the purest fire of patriotism to light up the hopes of the nation."

A town meeting, according to the New England system, is an assembly of the electors of the town, organized as a deliberative body by the selection of one of their number to preside as chairman or moderator. It is a legislative body composed of the people themselves, and is purely a New England institution, growing out of the theory of the Pilgrims and Puritans in church government, that affairs of common interest should be subject to the direction and control of the congregation in their meetings duly convened. When it was found necessary to form a body politic, the subjects of deliberation became extended beyond the affairs of the church to such as concerned the state. Assemblies for religious worship were called simply *meetings*. The place of assembly was called the *meeting-house*. Meetings for regulation of public affairs were called *town meetings* as distinguished from religious meetings. The congregation or electors would be the same in either instance; none were freemen unless admitted to the congregation.

The first town meeting in New England or meeting of the congregation of Plymouth colony to consider affairs of common interest, it is stated, occurred on the 23d of March, 1621, for the purpose of perfecting military arrangements, at which a Governor was elected for the ensuing year, and it is noticed as a coincidence,

whether from that source or otherwise, that the annual town meetings in the New England States have ever since been held in the spring of the year. New York imitated this example, and in every northwestern state, where the township system exists, the annual town meetings or election of town officers occurs likewise in the spring of the year, in either March or April.

The electors under the New England system are not only empowered to elect all town officers at their stated annual town meetings, but they have power to enact by-laws and ordinances for the regulation of town affairs, and to give direction in numerous instances to town officers concerning the discharge of their duties. But under the Ohio system, the electors have no such power. They are empowered to meet annually and elect township officers, but have no power to make by-laws or to give directions to the officers whom they elect for any purpose whatever. Their authority ends with the election of township officers.

The State of Indiana has been more stubborn in its resistance to township organization than the neighboring State of Ohio. The early inhabitants of Indiana were largely from Kentucky, or those States that adhered to the county system. The people were called "Hoosiers," and were noted as well for their frontier simplicity of life and manners, as for their prejudices against institutions of the Eastern States. To them the term "Yankee" was synonymous with an outlaw, and anything called a "Yankee invention" was to be abhorred. The county system was here adopted at the beginning of the government without modification. But as the influences of eastern emigration increased these early prejudices became relaxed, and a species of the township system has been adopted of the nature of that existing in Ohio, but more limited in its importance. The counties, as in Ohio, are a species of corporation, whose affairs are in like manner committed to the management of three commissioners. The commissioners have authority to divide the county into such number of townships as the convenience of the citizens may require; each township being a body politic and corporate. The affairs of the township are entrusted to one trustee elected by the voters of the township on the first Monday in April annually, who is the sole township officer. His duties are to receive and disburse the funds of the township, to take charge of its educational affairs and to superintend the repairing of public roads. He is one of the inspectors of elections, is



overseer of the poor, and fence viewer of the township. His most important duties, such as the levy of taxes on the property of the township, are performed with the advice and concurrence of the board of county commissioners. Indiana, like Ohio, has no such institution as *town meeting*.

The State of Michigan was the first of the North-western States to adopt a regular and unqualified system of township organization—being the same in its general features as that existing in New York, and known as the New York system. In this State a large portion of the population at the time of the formation of the Government were emigrants from the State of New York. Township organization was adopted without a contest, and as a natural consequence the New York system was preferred. Each county is created a body politic and corporate in express terms, with more extensive powers than counties have in Ohio or Indiana. The affairs of the county are managed by a county board, whose powers and duties are defined and extended to many objects which in Ohio and Indiana are reserved to the state legislature. This board is styled *the Board of Supervisors* and is composed of one delegate from each organized township, called supervisor of the town, with additional representation in case of populous cities. This board forms a deliberative body, conducting its proceedings according to parliamentary rules and usages, and is sometimes styled the county legislature. Its duties in their nature are both legislative, and executive or ministerial.

The township is sovereign and supreme within the scope of the powers granted, but the powers are not as extensive as those reserved to towns in New England, and unlike the New England system there is no executive head for general purposes in administering public affairs, such as the board of select-men. The officers of the township are one supervisor, who is *ex officio* a member of the county board, a township clerk, a treasurer, a board of school inspectors, directors of the poor, assessors, board of commissioners of highways, justices of the peace, and constables; all of whom except constables, have various duties assigned them in the management of township affairs. The officers of the township are elected annually by the electors thereof—except justices of the peace, whose term of office is four years, commissioners of highways three years, and school inspectors two years; being so arranged or classified that the term of the incumbent of one of these several offices ex-

pires annually. The town meeting exists in Michigan, and is conducted in the manner of the New England system, the supervisor of the town acting as moderator. The annual meeting is on the first Monday in April. Each township is made a body corporate—with the usual powers granted to such corporations. The grant of power to the inhabitants at town meeting, is given in general terms, and in the exercise thereof is left largely to their discretion. The electors have authority to vote sums of money not exceeding such amounts as are limited by law, as they may deem necessary for defraying proper charges and expenses arising in the township. They have authority also to make all such orders and by-laws for restraining cattle and other animals from going at large in highways and for directing and managing the prudential affairs of the township, as they shall judge most conducive to the peace, welfare and good order thereof.

The supervisor is the chief officer and representative of the township, and it is his duty to prosecute and defend all suits in which the township is interested. The township clerk keeps the records of the township, and the treasurer takes charge of its funds. The establishment, vacation and repair of public roads is committed to the three commissioners of highways. The supervisor, the two justices of the peace whose term of office soonest expires, and the township clerk, constitute a township board for examining and auditing the accounts of the town. Their action in this regard is required to be reported to the next annual town meeting.

The State of Wisconsin was next in order in adopting township organization. It commenced while in its Territorial condition, with the county system. But like the State of Michigan, the inhabitants becoming mostly of New York emigration, the township system of that state, with some modifications, was adopted. The counties of the state are created bodies politic and corporate, with much the same powers as counties in the State of Michigan. The county board was originally formed in like manner, but became changed a few years since to representation by districts, each district being composed of two or more towns, thereby greatly reducing the number composing the board. The plea for this change was the reduction of expenses in the per diem of members.

Each town is made a body corporate with powers similar to those of townships in the State of Michigan. The town officers are three supervisors, one of whom is designated as chairman, a town clerk,

a treasurer, four justices of the peace, as many constables as the electors may determine at town meeting, not exceeding three, one assessor, a sealer of weights and measures, and one overseer of highways for each road district in the town. The electors are empowered to vote money for the support of common schools, for the repair and building of roads and bridges, for the support of the poor, and for defraying proper town charges and expenses. They have the same power to make orders and by-laws, and for the like purposes, as the electors of townships in the State of Michigan. Town officers are chosen annually by the electors of the town, except justices of the peace, whose term is four years, classified so that the term of two of them shall expire every two years. The three supervisors are the executive heads of the town, and correspond to the select-men of towns in New England. They are the commissioners of highways, and overseers of the poor of the town, and have the general charge of its fiscal affairs. The town meeting exists in Wisconsin just as in Michigan. The chairman of the town board of supervisors, is the moderator. The annual town meeting is held on the first Tuesday in April.

Illinois was the next State in the order of time to adopt township organization. The history of the introduction and perfection of the system in its present form shows a contest amounting to bitterness. Illinois was once a county of Virginia, and when it passed into a Territorial organization, it retained the Virginia notions of government. The introduction of township organization was a compromise inserted in the Constitution, as revised in 1848, wherein it was directed that the General Assembly should provide by general laws for a township organization under which any county might organize, whenever a majority of the voters of such county at any general election should so determine. The General Assembly at its first session thereafter, made provisions as directed, and in doing so, adopted the New York system, modified, however, to a certain extent, from being necessarily engrafted upon the existing county system. Most of the counties north of the Illinois river promptly availed themselves of this provision and adopted the township system. As a coincidence, it is noticed, however, that the inhabitants of those counties were mostly from New York and the New England States. Other counties have followed their example from time to time, until of the one hundred and two counties of the State, seventy-eight of the number have accepted township organization.

The system adopted in Illinois as perfected at the present time is essentially the same as in Michigan. Counties and towns are bodies corporate and politic with like powers; the county board is formed in the same manner; the town officers are the same with the exception of town treasurer, and have the same authority and duties as provided by the laws of Michigan. The town meeting exists in Illinois in the form established in Michigan and Wisconsin, except that the moderator is chosen by the electors assembled. The annual town meeting is held on the first Tuesday in April. The electors have the like powers at their town meetings to make orders and by-laws as provided by the statutes of Michigan and Wisconsin. The Supreme Court of Illinois have construed the statute of that state liberally in this regard for the purposes intended.

It is to be observed that in none of the newer states, save the State of Michigan as before noticed, has township organization been adopted without a contest. In this regard Minnesota affords a peculiar example of vacillation. While in its Territorial condition the county system existed; on becoming a State, township organization was adopted by copying the statutes of Illinois on the subject in their crude condition as then existing. After the lapse of about two years it returned to the county system, designedly expunging from their statutes every vestige of township organization. But the clamor of the people, who were mostly of New England origin, compelled a restoration of the township system, which still continues. The system last adopted is essentially the same as that which exists in Wisconsin, with some features of the Illinois statute, originally borrowed from New York. The town meeting is organized and conducted as in Illinois.

The State of Iowa, whilst it claims to have learned wisdom by experience, and at one time partially recognized the excellence of the principles of the township system, is but a shade removed from the prejudices of Indiana. In organizing the State government it adopted the Indiana township system, except that it provided for three trustees and a township clerk, and authorized the holding of township meetings; counties were made bodies corporate for civil and political purposes, but the management and control of the public and fiscal affairs of the county was committed solely to one person, called the county judge. The result was improvident management in the erection of county buildings, and disregard of

economy in public affairs, whereby serious and oppressive burdens were laid upon the tax-payers. As a remedy for the evils complained of, the people demanded that the county board be increased in numbers, and constituted upon the representative principle, so that the members would be directly accountable to the people for their action. Thereupon the State swung to the other extreme, not only inaugurating the New York system of a board of supervisors, composed of one delegate from each township, but provision was made for further representation by additional delegates according to increased population. Hereupon that interest which had shaped the original policy of entrusting public affairs to the fewest hands possible, found opportunity for portraying the burdens which were to follow the expense of so numerous a body of public officers. This argument, whether the evils urged were real or imaginary, succeeded, and the county board was reduced to three in number, leaving the people of each county to increase the number in their discretion, to five or seven members; the style of the board still being *the Board of Supervisors*.

In 1871 the State of Missouri, becoming inhabited largely within a few years preceding, by people from the more northern and eastern States, succeeded in passing an act for adopting township organization by a vote of counties, in a similar manner as provided by the statute of Illinois; the act for establishing the system being copied nearly *verbatim* from the laws of that State. But its being engrafted on the existing county system of Missouri, renders their township organization at the present time quite imperfect. A number of counties have voted favorably and organized under the law, and continued effort is making to make the system general throughout the State.

Of the remaining States which are classed among the newer States, there are none which have adopted a township system that may be called *township organization*. In many of them, however, the counties are sub-divided into districts, which are called townships, for school purposes, to serve as election districts, and the like, as in the State of Indiana.

It is noticeable from the account here given of township organization in the newer States, that in its progress it has in general met with vigorous resistance. Conceding this system to be what eminent publicists and statesmen have claimed for it, that it is the life and main-spring of American liberty, we shall look with much con-

cern for the causes which have inspired this resistance. They are but the result of prejudices through early education and example, springing from the remote circumstances, to which we have here had occasion to allude, and which distinguish between the two branches of the Anglo-American family observed by De Tocqueville to have grown up without entirely commingling.

And whilst one may continue to contend for that system which removes the administration of public affairs from the immediate influence of the people through the institution of these local organizations, the spirit of the other will as earnestly insist that these small independent republics, with their unlimited sovereignty in matters of local concern, are the cradles and nurseries of that habit of political debating and acting which are essential in the training of intelligent and useful citizens.

E. M. HAINES.

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#### NEW BOOKS.

LETTERS ON THE UNITED STATES AND CANADA. (Lettres sur les Etats Unis et le Canada, adressées au *Journal des Débats* à l'occasion de l'Exposition universelle de Philadelphie.) By M. G. de *Molinari*, corresponding member of the Institute. Paris: Hachette. New York: Christern, 1876.

1776-1876. Etude sur la République des Etats Unis d'Amérique par le *Marquis de Talleyrand-Perigord*, attaché à la Commission Française de l'Exposition de Philadelphie. New York. Hurd & Houghton. 1876.

THE literature of the Centennial, both at home and abroad, is still increasing, and for the most part, the contributions from abroad are among the most satisfactory results of the great Exhibition. Of course the great mass of material, correspondence, leading articles and other contributions to the daily press, is almost beyond even enumerating, and it is therefore especially gratifying to find so respectable and influential a journal as the *Paris Débats* not only sending its representative here, but also making a permanent record of his impressions in the volume of letters published by Hachette. Their imprint, too, is an endorsement of a very high character, as it is rare to find any of their publications which do not take their place upon the list of authorities on the subject in hand. Few representatives of the great French publishers

found themselves more at home at the Exhibition than Hachette, whose books are our old familiar friends, and whose name has ushered into the world of readers, both French and English, many of the authors whose fame is common to both Old and New World. M. de Molinari has the great merit of speaking out his mind and making his record of impressions sharp, clear and distinct. The dirt on Broadway was not more a mark of the badness of the American system of government than the district telegraph was an evidence of the good results of free telegraphy and of the advantage of self-government over the strictly paternal monopolies of the Old World. M. de Molinari gave two weeks to Philadelphia, and saw the Centennial celebration of the Fourth of July, from the classic quiet of a Brown street boarding-house, but even that does not diminish his hearty admiration of much that he saw here. His main anxiety as to the Exhibition was lest the need of protection for models, designs and inventions, would rob the ingenious exhibitors of their due reward, and his chiefest hope that it would secure the establishment of industrial schools and schools of design, so as to take off American products their purely utilitarian look. Returned to New York, M. de Molinari studied the American system of flirting at Coney Island, and continued his observations in the street cars, where he saw American politeness culminate in a special etiquette. In Washington he found an elevator in the Capitol, and at Montreal arches in the Victoria Bridge, two novelties that suggest the hasty notes of a careless observer. In Canada, he is shocked with the bad French of the people who persist in thus showing their origin, and yet he sees in the sympathies of the French-speaking inhabitants a possibility of establishing a good trade with France, and an opening for French capital and French emigrants, while he carefully disclaims any wish to restore the old political relation of France and its long lost colony.

M. Molinari puts in strong and effective contrast the traits which make Americans successful in private enterprises and unfortunate in their management of government—he attributes the repeated failures in municipal, state and national administration, to the want of familiarity with political and economical science. In private life, the American is intelligent, shrewd and modest; in public, his interest, his passions, his national pride, blind him (absolutely) and put him at the mercy of professional politicians. These outvie each other with promises of reform, and the mass of citizens range themselves in one or other of the great rival parties, contenting themselves with a vote for prescribed candidates, yet always knowing that it is all a mere subterfuge for maintaining existing evils by a mere change of officers. M. Molinari estimates the “politicians” at two to three hundred thousand, who control ten millions of electors. He gives the platforms of the two political conventions, and specimens of the

campaign speeches made on behalf of the Presidential candidates, as well as a fair account of the condition of affairs in the South, which he saw in a hurry and in August and September, but evidently in sympathy with the South and the southern view of men and politics. New Orleans recalls, against the aggravation of seeing a French colony independent of France, the contrast of what the city was in good old ante-war times and what it is to-day. Louisiana is still full of the names and souvenirs of old France, and the same sympathy that in 1870-71, sent to France contributions for the sufferers in the German war, is now looking to France for some expression of regret in the midst of the troubles of the South. St. Louis, with its French names of streets, suggests again the question of opening a direct trade with France, by means of special information as to the advantages of dealing directly and making an exchange of products needed in both countries. Chicago and Boston are both visited, and then a final review is made on board ship on his way home, in which M. Molinari sums up the points of superiority conceded to Americans, their skill in cheap engineering, in all sorts of mechanical appliances, their infinite readiness to go into any enterprise, their practical genius and powerful energy, and sets against it their neglect of science and art for their own sake, and of culture and good government, the poverty of their literature, the want of originality, in fact the total absence of the science of instruction in all the vast machinery of public schools, the neglect of public duties for the sake of private interest, the substitution of professional politicians for an honest representation of public opinion, and the fact that in their keeping the country has seen itself a prey to civil war, the South ruined by confiscation, the North falling into the hands of men of no character. The National Budget exceeds that of France by a hundred million of dollars, while in France the Government does nearly all that in the United States is left to private enterprise or public neglect. Then a third of the expense of administration in the United States is swallowed up in the corruptions incidental to frequent changes in office holders, to their incompetency and dishonesty. Such is the picture which is sent to a leading French newspaper, have we a right to say that it is not honest and truthful?

In striking contrast to M. Molinari's workaday sketches, are the elaborate pages of M. de Talleyrand's Study of the Republic of the United States. M. Talleyrand was attached to the French Centennial Commission, and this seems to be the key-note of his book. He saw in the International Exhibition at Philadelphia a challenge to the rest of the world to come and see the superiority of America in commerce, agriculture and industry, the characteristic virtues which make its greatness. It was an invitation to criticise the government, the habits and the morals of the people, who, while claiming the largest liberty for themselves, are very unwilling to be closely examined and thoroughly analyzed, and



prefer to laugh at the transparent exaggerations of earlier travelers, rather than be submitted to the scalpel of the modern students of comparative politics. France, particularly, in its new rôle of Republic, has a special interest in its sister republic, and it is to meet the natural anxiety of his countrymen to see how and why Americans boast the century-old republic and anticipate yet future centuries of growth and greatness, that M. de Talleyrand has devoted his inquiry, aiming to show the changes that distinguish the United States of 1876 from the America of 1776. For this purpose he gives a rapid sketch of the early establishments, of the successive settlement of the thirteen original colonies, and then of the influence of the theocracy planned in New England, of the independent spirit in matter of religion and morals that characterized the other colonies. The mischievous interference of Parliament and the Home Government is traced, in contrast with the indifference with which France treated its colonists in Canada, and the loss of the possessions which once flourished under the French flag invited on the part of the British, a course of treatment which finally ended in avenging the old hostility, by making the Americans free and independent, after a struggle in which France gave freely of its wealth and power, only to reap a harvest of storms and whirlwind that finally broke over the dynasty and the country that had helped make the United States.

Having brought the history of the United States down to the close of the successful struggle for its existence, M. de Talleyrand gives without note or comment the Constitution of 1789, and then launches out into a comparison of the America of 1776 and 1876. He is unqualified in his praise of the men who brought the country safely through the trials of the war of the Revolution and the risks of the period of an unsuccessful Confederation, and he selects as special examples Washington, Hamilton and Marshall. He cites the illustrious name of Talleyrand, the able diplomat of the great Napoleon and of the Bourbons, as an authority that Hamilton was with Pitt and Napoleon among the great men of the century, and that of these Hamilton was the man of greatest genius. He also repeats Talleyrand's eloquent praise of Hamilton that he had made the fortune of the whole nation, but was obliged to work all night to support his family. To this sort of Roman virtue he contrasts the government and its leaders of to-day, declaring that the irresistible inference is that the people have degenerated, and to such a degree that it is questionable if there is a remedy; they are no longer religious, moral, strong in their ambition to be well represented, and proud of the virtue and talent of their representatives; liberty is no longer synonymous with honor, virtue, duty; religion has become a matter of form; education is merely elementary; the country no longer produces men like its founders yet it is intelligent, active, industrious and successful in overcoming material obstacles; but it has no authors, no orators, no politicians, no

statesmen, no artists, to be compared to its great manufacturers, its rich merchants, its enormous railroads, its marvelous inventions,—all is purely material, without sign of the respect due to intellect.

The thirst of money is the all-absorbing passion, and of course the business of government is left to the least honest, least capable, least worthy of its citizens, who fill positions of trust and honor only to put money into their own pockets at the expense of the public, and every day the list of dishonest officials swells with new names, thanks to the industry of the press and the unceasing pursuit of political rivals. Honesty, intelligence, instruction still exist, but they are pushed to the wall by intrigue and knavery. This moral and intellectual debasement and anarchy are ascribed by M. Talleyrand to two causes: foreign immigration, which has flooded the country with the worst elements of European colonists, who seek only to secure their creature comforts with no regard for literature, science, philosophy, religion; and next, the frequency of elections and the evils that are incidental to them. They have fallen from an honest contest over great political principles and candidates representing them, into the keeping of the worst classes,—tavern-keepers, professional boxers, rogues of all kinds, whose labors are rewarded by appointment to office at the hands of the successful candidate. Hence the examples of the foreign representatives of the United States busy with books on card-playing and the management of fraudulent speculations, of the members of Congress dealing in the shares of Credits Mobiliers and other companies dependent on their official support, of Cabinet officers selling for a price the patronage left in their hands. As against the existing system with its town and ward and primary meetings, the protests, and even the votes, of honest citizens are powerless, unless they can bring to their aid such men as those that overthrew Tweed,—his old associates.

M. de Talleyrand traces in those who have filled the presidential chair a gradual but steady decline, which keeps pace with the growth of party "politicians," and their control of conventions and the other organs for nominating and electing the representatives of the nation. The Americans cannot hide their responsibility for this state of affairs, by pretending that it is out of their power to cure it. Their indifference and inaction are as criminal as the offences of commission of the professional politicians. Rich in honor, in virtue, in talents, the country grows in every other direction, but its political interests are entrusted to unworthy hands. M. de Talleyrand counts it the duty and the privilege of every stranger to protest against the impending anarchy, to save the country from its worst enemies, and to maintain intact the constitution which has done so much for foreign people in the irresistible progress of all nations to constitutional liberty. He closes with an imaginary conversation, in which Washington, surrounded

by that glorious cohort of his time, his moral and intellectual staff officers, asks, in a voice stifled with tears, what good has come out of the material progress of the country, while its political principles have been abandoned and forgotten, and appeals to the good men of all parties to know how they can excuse their neglect or indifference or worse. Washington then acknowledges M. de Talleyrand's courtesy and admiration, by telling him to warn his countrymen against the risks of their new republic, lest it, too, degenerate into a democracy, and to imitate rather the principles of the Constitution, than the practices that have grown up under it. Such is the warning note of the last contribution to the literature of the Centennial.

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SCHOOL INSPECTION. By D. R. Fearon. London: Macmillan, 1876.

Before England undertook the task of organizing a system of public school education, some well-chosen men were sent abroad to examine and report upon the various methods of elementary and higher instruction in Germany, France and the United States. The "Blue Books" and the abstracts (on the subject) subsequently published, showed that in Matthew Arnold and James Fraser and their colleagues, men of real fitness for the work had been found. In the School Boards, the Examiners and Inspectors, some of the foremost men from Oxford and Cambridge, found congenial employment, and indeed a whole new career was opened to a class of specially trained and well-fitted University men, by making the business of examination, as it ought always to be, entirely separate and independent from the matter of instruction, carried on by men unknown to the pupils and to the teachers, and submitted to a higher and absolutely impartial tribunal. With the extension of educational advantages to the masses, was combined a system of making the pay of the teachers depend on results, and these results were obtained and reported by the examiners and inspectors to the authorities of the Board of Education. Then too in the absence of sufficient Normal Schools, there was introduced a system of pupil teachers, by which the applicants for future employment received their instruction in the actual work of the school-room. The legislation on all these subjects is so recent and still so largely of an experimental kind, that for ordinary observers, the best information upon the matter is to be derived from the books specially intended for the guidance of School Boards and School Teachers. There has been an immense amount of bitter discussion in and out of Parliament and of polemical literature on nice questions of religious instruction and kindred topics, to all of which we are here fortunately strangers, and therefore take no very lively interest in debates that have for several years been prolonged in Great Britain. But in the meantime the Inspectors and Examiners have gone on with their work; and for their use and that of teachers and school boards, Mr. Fearon has prepared a brief

manual of the réquisites of school inspection, such as he has found useful after his ten years' experience. Now here in Philadelphia, with its hundred thousand pupils, we are practically without any system of inspection whatever. Our local School Boards and the Board of Education have many good citizens upon them, but not one well-known authority on teaching, hardly a single person whose experience and studies have in the least fitted him for testing the work done by teachers or scholars. The public schools are absolutely free from any supervision of a kind that secures the confidence of the public or the respect of the teachers. A few school directors look after the economy and housekeeping of their school houses and look in at the examination of the pupils. A few parents are attracted by special exercises and encourage the teachers in making displays of elocution or musical performances, often at the expense of regular school work. The Board of Control prescribes a certain routine of study and the text books, but after all the teachers are practically left to the supervision of the Principals in the schools.

In England, on the other hand, as Mr. Fearon's book shows, at every stage there is a system of examination and inspection by men whose training at one of the great universities is a fair guarantee of knowledge and ability. From his hints and suggestions might well be prepared a manual, that would be of use to teachers, school directors, parents, and all others who recognize the immense importance of making our public schools really what they ought to be. It is above all important that teachers should be thoroughly impressed with their work as a vital active influence on their scholars, should keep them up to the standard prescribed by some competent authority, should have the help and encouragement of official recognition of their special merit, and the benefit of warning and guidance against the errors into which they may easily fall. It is very clear that as between the volunteer services of our local school directors, assuming that they have the largest knowledge and the most untiring interest in the work of public education, and the paid staff of examiners and inspectors who continue their university studies and apply them in a new direction, there can be little question that our system or want of it is likely to leave us far behind England, where a few years of diligent and liberal activity have produced results that are in nowise unsatisfactory, even to those who have studied the long experience of German pedagogy, or counted the numerical advantages of our own public-school system. As for the proposed reduction of teachers' salaries in the interests of municipal economy, while every other sort of extravagance is in full blast, it is of course easy to see that the only excuse is availability. It costs few or no votes, and therefore the teachers must be cut down ten per cent., while highwaymen, gas trusts, police, fire, water and all the other necessary departments of a municipal government

like ours, are to be the sole judges of their numbers and wages. Councilmen can boldly and in their own judgment, wisely determine how little is needed for teachers of the public schools, but the heads of departments are to be the final authorities as to their own requirements. Suppose we could introduce the English school system, of paying teachers by results, and those results obtained by competent examiners and inspectors,—and suppose further, that a similar method could be introduced to fix the rate of payment of other city employees, does any reasonable man doubt that the teachers would earn a far larger share of public money than any other of the army of city officials? Now if we are too deeply ingratiated with our own method of volunteer school directors, to secure the services of competent supervisors, cannot we at least try to learn some lessons from English experience and apply it to our own school needs? So far from being afraid of the attack made upon our public schools in the effort to cut down salaries, let the natural guardians of the teachers, the Board of Control and the school directors, take up the challenge and put to the test the comparative merits of this branch of city expenditure and of any or all the others. Gas and water, roads and bridges, parks and markets are all essentials, but so are schools,—now let councils appoint a commission to investigate and report upon the expenditures and results of each and all, and let it be shown how many men and women are employed to do the needful work, how many of them are actually needed, and how far retrenchment can be introduced either in point of numbers or amount of salaries. Measured by this or any other standard, our public schools will undoubtedly hold their own against all other branches of municipal administration. Perhaps this is but doubtful praise, and we therefore venture to go further and to say that so far as we can judge of the work done in English schools, and for this purpose Mr. Fearon's book is a pretty good basis of comparison, the instruction furnished in our public schools is of a very high order of excellence. There are undoubtedly faults in the system, admittedly the proportion of pupils that go beyond the elementary steps, is lamentable small, certainly the standards are too low, the methods prescribed are by no means abreast with those of other school work, and unquestionably public school education ought to be in some way connected with university education, so that the curriculum should be rounded and completed for the whole circle of learners: but with all this, we may well be allowed to congratulate ourselves that in spite of hostility in its early days, improvidence in its later years, and want of scientific training all the time, the public school system of Philadelphia is among its best products. How to make it better, how to get from it all that public schools can and ought to furnish, how to give it the very latest advantages in sanitary and scholastic requirements, can be learned in part by a study of such handbooks as Mr. Fearon's on School Inspection, but not at all by an indiscriminate reduction of salaries

PHILOSOPHICAL DISCUSSIONS. By Chauncey Wright. With a Biographical Sketch of the Author, by Charles Eliot Norton. Pp. xxiii., 434, royal 8vo. New York: Henry Holt & Co.

Mr. Wright was known to the public as a contributor to the *North American Review* and other periodicals. His articles, here collected, show a careful study of the writings of the Agnostic school, Spencer, Mill, Darwin and their congeners. His biographer speaks of him as resting on the proposition "that the highest generality, or universality, in the elements, or connections of elements, in phenomena, is the utmost reach, both in the power and in the desire of the scientific intellect." He was therefore a disciple of the purely and exclusively *a posteriori* school. To him the truth that the three angles of a triangle are in their sum equal to two right angles, was merely a generalization from all the triangles given phenomenally and in experience, but to be held in suspense, as a triangle may, for anything we know, turn up of which it will not be found true. Or as Prof. Huxley puts it, it may be true of no triangle in Jupiter, for anything we know.

Peculiarities, both personal and educational, seem to have made Mr. Wright a man of finely developed understanding, and keen sense perception, but to have blunted or obliterated in him all intuition of a world beyond the range of sense perception and of the analytic understanding. In spite of his editor's eulogy of his impartiality and fairness, we see on every page of his writings, an unscientific impatience with all who profess to possess any insight into any region beyond the phenomenal. Take for instance his review of Dr. McCosh's reply to Prof. Tyndall. A purely scientific intellect would have treated Dr. McCosh's mental processes as a subject for scientific analysis of the calmest sort, but the *odium anti-theologicum* is here visible in every line.

Mr. Wright's prejudices are so strong, that they led him in some instances to speak of matters of which he knew little or nothing, with all the confidence of a man specially well-informed. He seems to have assumed that the ascription of vulgar or selfish motives to the actors in a theological controversy, was the safe way to a correct diagnosis in any case. Thus on page 93 we have this *rationale* of the controversy raised by Mr. Mansell's *Limits of Religious Thought*:

"Mr. Mansell, correctly apprehending the drift of Sir William Hamilton's doctrine, elaborated it still further, and supplied what was wanting to make it a religious philosophy, namely, the authority of religious feeling; but it was the authority of the religious feelings of his own sect, of course. This movement, apparently in behalf of the Established Church, roused great opposition to the doctrine of Hamilton on the part of dissenting theologians. They attacked what had never before been called in question, the empirical doctrines to which, while admitting and defending them theoretically, Hamilton opposed what is peculiarly his own philosophy,

as a practical defence of religion. But any other sectarians were just as competent to supply the defects of Hamilton's philosophy as Mr. Mansell. They had only to advance the authority of their religious feelings into the vacant place....."

Now of all this stuff, we have to say that Mr. Wright can only be excused for the utter falsehood of it, by the lame plea that he knew nothing about the matter. He presents himself to the readers of *The North American Review*, as having mastered the formula which explains all this commotion among the divines. "It's a mere matter of sectarian selfishness. All these sects have different types of religious feeling. Mansell foisted his upon the Hamiltonian philosophy, and set it up as an authority. That drove the others into revolt." What are the facts? The chief assailants of Mansell, the ones whose criticisms provoked his replies, were Messrs. Maurice, Chretien and Young. The first two were champions of the Church of England; the third seceded from the Presbyterian Church long before the controversy, and we believe has joined no other. On the other hand Mansell's huge *reductio ad absurdum* enjoyed the support and applause of nearly all the English sects. The points he made were those in which all the orthodox parties, in the church and out of it, were fully agreed. The organs of all parties applauded. Nor did Mr. Mansell come forward as the champion of the authority of any form of religious feeling, or of religious feeling as an authority in any sense. The *gefuhls theologie* was his pet abhorrence; he was the last great representative of the Hard Church, and was as devoid of the tendency with which Mr. Wright charges him as was Mr. Wright himself. And it is equally untrue that the attack on Mansell and Hamilton was a change of base on the part of the assailants. The Scotch philosopher and his English disciple had a long tradition on their side, but there was a larger and a quite unbroken tradition against them. And Mr. Maurice in particular had repeatedly assailed Sir William Hamilton's views, especially his semi-agnosticism, in his earlier works, as in the account of Nicolas Cusanus in the *History of Moral and Metaphysical Philosophy*.

The book contains some vigorous discussions on the Darwinian theory of Evolution, and on the Philosophy of Herbert Spencer.

R. E. T.

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RUSSIA. By D. Mackenzie Wallace, M. A., Member of the Imperial Russian Geographical Society. Pp. XIII. and 620 royal 8vo. Two Maps. New York: Henry Holt & Co.

The old style of books of travel is rapidly passing away, while a new and a better is arising to fill the vacant place. The gentlemanly tourist, who rushed across countries, making no acquaintances outside of the circles chiefly concerned with travelers, and varying his flippant and shallow opinions of the country by elaborate account of his personal comforts and discomforts, was not, we

are beginning to learn, the most trustworthy of informants. Every tourist contradicted every other. No country became conceivable to us, even when we had read through a whole library of such books. A whole army of such travelers, when they had combined all their contributions to the common stock, had told us little or nothing worth knowing or printing. Mr. Tuckerman in his *America and Her Commentators* has given us a review of the American branch of this literature, as amusing as it is exhaustive; and the clever caricature of it in one of the *Atlantic Almanacs*, derived all its point of wit from its substantial truth to life.

Russia has had plenty of poor books written about it, and a few that are very good. The Marquis de Custine's book was maliciously unfair, but it made the country a conceivable one. Baron Von Haxthausen's was written under a theological bias which made him incapable of being a just critic; but he had looked below the surface of Russian life, and won the honor of discovering the *Mir* or village community, and of giving it a political significance. Julius Eckardt writes from the standpoint of a German resident of the Baltic Provinces, who fiercely resents the attempts to Russify that half-Teutonic district. All these men had their special bias, and yet they gave us the best books about Russia that were accessible to any general reader, whose interest in politics, or whose acquaintance with Turgenev and other Russian writers, led him to seek for fuller information about the great Slavonic Empire.

Mr. Mackenzie Wallace has given us a work on Russia, whose merits are that it represents a longer and a closer study of the country than has ever been devoted to it by any foreigner; that it is more attractive in matter and graphic in style than any other; that its author possesses the special information and interest which have enabled him to depict every side of Russia's variegated life *con amore*; and that he writes in a friendly but impartial spirit. There is no recent book of travel that can at all compete with this in interest. Mr. Schuyler's *Turkestan*, for instance, is a very excellent book, but after reading the first volume, the appetite for the second is not voracious; and where he touches on points in which the diplomatist feels no special interest, such as the Dervishes, he writes superficially and meagerly, though picturesquely. But he who finishes Mr. Mackenzie Wallace's *Russia*, is chiefly concerned that there is no second volume of equal size; and although the author is not a man of specially religious character, he writes about the Greek Church, the Dissenters and other Heretics, in a way that shows his share in the theological culture of his native Scotland.

His sketches of the *Mir*, of the life of the various sets of landholders, old style and new style, and of the effects of the Emancipation of the serfs, are of great interest to the student of social science; they correct many false impressions at present current, especially as regards the wealth of the Russian princes, and the im-



provement of the serf's position by emancipation. What he says about the character of the Greek Church, and of the parish clergy, would hardly do for a tract in the interest of that Russo-Greek Committee, which is laboring for the union of this Church to one branch of Protestantism. The truth is that the Roman Catholic Church stands far nearer to Protestants, than does this its fossilized and unspiritual rival in the farther East.

With the methods of Russian government, Mr. Mackenzie Wallace is no more enamored than Mr. Schuyler. He speaks of them with a candor which cannot be soothing, and which no doubt explains why even the proof-sheets of the work were suppressed on their way to the Grand Duke Constantine, President of the Imperial Geographical Society.

The book is a library in itself, of the fullest, freshest, most authentic information. The American edition, except the lettering on the cover, is an excellent specimen of book-making.

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#### BOOKS RECEIVED.

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- Philology. By John Peile, M. A. *Literature Primers*. 18mo. Pp. 164. Cloth, 50 cts. New York: D. Appleton & Co. [Porter & Coates.]
- Classical Geography. By H. F. Tozer, M. A. *Literature Primers*. 18mo. Pp. 127. Cloth, 50 cts. New York: D. Appleton & Co. [Porter & Coates.]
- Two Lilies. By Julia Kavanagh. 12mo. Pp. 443. Cloth, \$1.50. New York: D. Appleton & Co. [Porter & Coates.]
- The Elements of Banking. By Henry Dunning Macleod, M. A. Second edition. 12mo. Pp. xiii.; 270. Cloth. London: Longmans, Green & Co.
- Bessie Lang. By Alice Corkran. *Leisure Hour Series*. 16mo. Pp. 298. Cloth, \$1.25. New York: Henry Holt & Co. [Porter & Coates.]
- The Wine-Bibbers' Temperance Society. 16mo. Pp. 76. Cloth, 75 cts. Boston: Lee & Shepard. New York: C. T. Dillingham.
- Annual Report of the Comptroller of the Currency to the Second Session of the Forty-Fourth Congress of the United States. 8vo. Washington: Government Printing Office.
- Aloys. By Berthold Auerbach. Translated by Chas. T. Brooks. *Leisure Hour Series*. 16mo. Pp. iv.; 263. Cloth, \$1.25. New York: Henry Holt & Co. [Porter & Coates.]
- Idols and Ideals. With an Essay on Christianity. By Moncure Daniel Conway, M. A. 12mo. Pp. 351. Cloth, \$1.50. New York: Henry Holt & Co. [Porter & Coates.]

THE  
PENN MONTHLY.

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JUNE.

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THE MONTH.

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THE people who expected to see Russia make it a seven weeks' or a seven days' war, are beginning to discover their mistake. The two combatants are much more evenly balanced than has been thought, especially by Americans, with their exaggerated notion of Russia's strength. The Czar has indeed the larger empire, and represents a civilization of a higher order. The worst abuses of his government are remediable; they are not a part of the popular faith, nor, therefore, essential to the system. But in political organization, Russia occupies the very lowest place in European Christendom; its methods are the worst known in Europe outside of Turkey itself. No intelligent friend of the Eastern Christians but must deplore the remissness of the other great Powers, which has given Russia the opportunity to constitute herself the guardian of these struggling nationalities and to control their future.

On the other hand Turkey, if less powerful in the command of men and other resources, and cursed with a system of government and social organization which for all peaceful purposes is irremediably bad, and the worse the more it is reformed, does possess in that system a powerful engine of war. And she is determined to use it to the utmost. The war has been proclaimed a holy war, or "war of zeal," and the Moslem troops are excited to every sort of fanaticism by the appeals of Mollahs, Dervishes and other apostles of the crescentade. She is prepared to make a stubborn resistance

at every point. The first real battle of the war, fought at Batoum on the Asiatic line of operations, seems to have resulted in a decided repulse to the Russians, while the passage of the Danube in the presence of a Turkish army has been found no easy undertaking. The want in Asia of a natural frontier of strategic importance seems to have been the only reason for the earlier collision in that quarter, as the Russians are evidently pushing forward on both lines of invasion with equal energy. And the fact that she is everywhere establishing her system of civil government in the Asiatic towns and districts she has occupied, shows that she has made up her mind to stay.

The superiority of Turkey on the sea has enabled her to blockade the Russian forts on the Black Sea, but it was not the reason for dispatching her fleet to American waters. It was fully expected by the Russians, and they had many more reasons for the expectation than are known to the public, that England would at once take the part of Turkey on the outbreak of the war. It was that they might be out of the reach of the British navy that her ships were ordered to American waters, and they would doubtless have secured the right to remain here by landing their cannon, if the war party in the British Cabinet had had their own way. It is since the defeat of that party by Lord Salisbury and his friends that they have sailed under sealed orders.

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ONE English Liberal leader has had the courage to speak out his mind, and run the line of division between the honest and the half-hearted friends of the Eastern Christians. Early in the month Mr. Gladstone gave notice of resolutions censuring Turkey for her rejection of the demands of the British government, and proposing a resumption of the foreign policy of Canning, which led to the independence of Greece. At once Sir John Lubbock, a Liberal of the radical type, gave notice that he would move the previous question, and from almost every quarter came denunciations of the resolutions, as threatening the dissolution of the Liberal party. Mr. Gladstone is one of those perverse and troublesome people, who believe that the Almighty may have higher ends in view than the preservation of a party, and that in the long run more is achieved by doing what is simply right, than by following the tortuous lines of party policy. And he has accomplished great things by his resolutions, for the great majority of the Liberals—a majority which

did not include Bright, Forster, Goschen or any of the Manchester school—voted for his resolutions, though after he had withdrawn the strongest and the most practical of them. He forced the Administration to speak out; he showed to all Europe that the moderate or peace party in the Cabinet, led by Salisbury, has overborne Mr. Disraeli, and has secured pledges and assurances of a pacific policy, which could have been obtained in no other way. Nothing less than the actual annexation of Constantinople by Russia, or an interference with the Suez Canal, is to be a ground of war. And the whole of the European provinces of Turkey may, therefore, be raised to the status of Servia, or even of Roumania, and the Russian frontier in Asia may be pushed far west of Mt. Ararat without anything being done that will be thought to justify interference. This information is of the first importance to Russia; for the avoidance of a collision with England has been from the first a controlling motive in her policy. The knowledge exactly how far she can go without provoking a collision, will have great weight in her determination how far she will go.

Besides this, Mr. Gladstone has again elicited such an expression of English opinion as shows that the enthusiasm of last summer is not even dormant, but alive and vigorous in all quarters, and that he is a true representative of the nation's views. In every part of the island there was a clear and altogether spontaneous outburst of approval of his resolutions, and this not less in the very constituencies represented by his Liberal opponents than in his own at Greenwich. Hundreds upon hundreds of meetings were held within a week, and one and all were of the same tenor; while in London the only attempt to rally a meeting of another sort broke up in confusion, the Russophobists who denounced the Russian treatment of Poland, being met by outcries denouncing the English treatment of Ireland as no better. It is quite possible that the next general election will show that Mr. Gladstone has England with him, and that this new Cave of Adullam, though it contains Bright this time, will be treated as was the old one. When England's better self is aroused enough to make itself heard, Manchester is not its organ of utterance.

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MARSHAL MACMAHON has given Gambetta his opportunity. The imperialist soldier has always been a mistake at the head of a French Republic. He has not understood the *rôle*, nor compre-

hended the responsibilities of a constitutional sovereign. The moderately Liberal ministry of Jules Simon was forced upon him by the vote of the Legislative Body, and he has chafed under the necessity of acting with the Left, while sympathizing with the Right. The ministerial declaration against the Ultramontane party and its agitations has been especially offensive to the real advisers of the President, coming as it did upon the Ultramontane triumph in the Italian Senate, and indefinitely postponing the prospect of a general rally of the Catholic nations against Bismarck and Victor Emmanuel; and then the approach of the elections to the French Senate seemed to threaten the last stronghold of Conservative influence in France, if these were to be conducted under the auspices of a Republican ministry. In short it was "neck or nothing" with the party of the Right, and they were certain to induce the President to avail himself of the first opportunity to get rid of the Liberal ministry.

There was a certain clumsy ingenuity shown in the way in which an opportunity was found. The Press Law of 1875 was under discussion, and the President alleges that M. Simon took ground in the cabinet discussion which was not reached by the votes in the lower House. This he chose to regard as showing that the Simon ministry no longer commanded a legislative majority, and had therefore forfeited their constitutional claim to existence as a ministry. But, to forestall all explanations which might weaken this pretence, the President addressed the Premier in a letter such as the Czar or the Sultan might have written to an undesirable or refractory counsellor, and thus forced the resignation of the whole cabinet. Its tone of official insolence is so military, and corresponds so well with the character of its professed author, that there seems to be no reason for ascribing it to any other pen.

In the Legislative Body, especially in the Chamber of Deputies, the effect was a sensation bordering on consternation. The Left resolved, first in caucus, then in the Chamber itself, that they would sustain no ministry unless it was honestly attached to the Republic. The new Cabinet, with the Duc de Broglie at its head, is certainly not the one described in that resolution. The Legislative body was thereupon prorogued for a month. It is just to say that the Left have displayed great self-control, and that Gambetta in particular has been at once the eloquent mouthpiece of the popular indignation, and a calming and pacifying influence in the councils of

his friends. It is of good omen for the future of France if Gambetta can prevent the Left from throwing away their opportunity by violent and inconsiderate action. For even if the impending general election to the Legislative body should be managed to the utmost by the Marshal's Prefects, the Left will have such a majority in the House of Deputies at least as will give them control of the situation.

The public opinion of Europe is for once decidedly with the Left. All its great organs in England, Germany and Italy, have spoken out in condemnation of the President's action, and the entire diplomatic corps at Paris have conveyed to the President's representatives their disapproval of his conduct. The French Right have adopted a most perilous line of action; they are threatened with domestic dissension and insurrection, which they have most needlessly provoked; they have not a friend in Europe, outside of the Vatican and the minorities who hold by the Vatican. And whether even these will extend their sympathy to the half-hearted Orleanists of the Right Centre, who compose the new ministry, is altogether uncertain.

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THE rejection by the German Parliament of the bill to restore the Protective duties on iron seems to have exactly the opposite significance to that first ascribed to it. It is, as the Berlin correspondent of the *London Times* declares, the forerunner of a return to a general Protective system. The *junkers* refused to vote Protection to manufactures alone, but they are about to agree to a compromise by which agriculture and manufactures will share in the benefits of a policy looking to their coördinate development. If this be true, then the future of the Protective policy in Germany seems assured. The *Zollverein*, with all its merits, was always a one-sided sort of arrangement, which had no direct claim to the support of the agricultural classes and districts in the East of Germany. But the new arrangement rallies to the Protective policy all classes except the traders. What these latter feel may be seen from the action taken by the voters of the seaport of Memel, denouncing Von Moltke, their representative, for voting to reimpose duties upon iron. We trust that the old hero is not scared.

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THE month has been rather uneventful at home, the chief event in politics being the postponement of the contemplated extra session

of Congress until October. The talk of a union of Southern Democrats and Republicans has ceased; and the Democratic organization of the House is accepted as certain. Of the various candidates for the Speakership, Mr. Randall is possessed of decidedly the best prospect, for his chief rival, Mr. Cox, of New York, has quite ruined his own chances by recommending the worst appointment made by the present Administration. There is every prospect of amicable relations between the House and the Administration, as the Southern Democrats hold the balance of power in their own hands, and can defeat any attempt to embarrass the President, and this, far rather than a base desertion of their party ranks after an election, is what the country expects of them.

All parties are casting the political horoscope of the South with some anxiety, and the coming session will be closely watched, in order to find some indications of its policy in the votes and speeches of its representatives. The chief question on which they are likely to feel very special interest, not shared by other sections of the nation, is that of internal improvements in the South. Not only in the years during and since the Rebellion, but during the preceding regime of slavery, things were generally allowed to run to loose ends throughout the South; and it is a sign of the awakening of a new industrial life in the South, that her people begin to be in earnest in asking the help of the government. Of course they will be resisted by all the "penny-wise and pound-foolish" whose one watchword is economy; and also by some easily alarmed people who will look upon such aid as an indirect way of recouping the South for the losses of the war. But we hope that a generous and wise policy will be pursued towards the South. It is of the first importance that no great district of our country should lag behind the rest in economic and industrial development, and should thus become the Ireland of the new world. It is true that the South's backwardness is chiefly the penalty of her maintenance of slavery, while that of Ireland is the product of wicked and selfish legislation on the part of England. But we cannot afford to leave her people poor and therefore discontented, whatever the origin of their poverty and discontent. We are bound to them too closely to make anything but their full prosperity desirable to us. If Ireland were really prosperous, if she were raised to the industrial level of England, Fenianism would soon be a thing of the past. But her Fenianism, like her typhus,

is nourished by hunger and nakedness. And if the sectional line in our own country is to be wiped out, it will be by obliterating this last line of division, that between the wealth produced by freedom and the poverty which resulted from slavery and from the war for its preservation.

Of course the *laissez faire* theorists, with whom the South has been chiefly in political sympathy, will oppose such measures of assistance with all their might. But the party which believes that it is the duty and the purpose of the government "to promote the general welfare," cannot consistently refuse their support to them; and just here we see the most desirable and favorable opening for such a reconstruction of parties, as will secure both the obliteration of all sectional lines, and the best interests of the country at large. "A tariff and internal improvements" is still a good sound platform, whether the men who stand on it call themselves Whigs or not.

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MR. HAYES grows steadily in popular favor. Both at home, in Washington, and in his visits to New York and Philadelphia, he has impressed every one as a plain, earnest, straightforward sort of man, fully determined on doing his duty, and possessed of sufficient insight to discern the signs of the times. Even the Democracy have been conquered by his frank, broad-minded and unpartisan style of acting and speaking; and the very few exacerbated politicians who cannot forget "how near and yet how far," and who decline to recognize him as President, excite only the ridicule of the organs of their own party. An old Puritan would have likened him to Zerubbabel, the simple, duty-loving Jewish prince who in Zechariah's days rebuilt the Temple, and before whose steady patience mountains of difficulties became as plains.

As to Republican opposition to his policy, it is confined to a few irreconcilables, who seem to believe that Grant is still before Richmond. For a few weeks we heard of this discontent as one hears of the ague in the West; "No, there isn't any to speak of just here, stranger, but there is a power of it just across that creek bottom in the next prairie. Most shakes the weatherboarding off the house, I've heerd say." It was mighty in Ohio, prodigious in Iowa, stupendous in Massachusetts. But on a closer inspection it was found to be of the most sporadic and insignificant type everywhere, and that not a single State Convention of the party was expected to refuse to give its hearty approval to the President's measures.



And Mr. Benjamin Wade, of Ohio, who once came near to being President himself for a fortnight, found himself standing in solitary dignity, when he exploded in fierce wrath against Mr. Hayes.

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It is somewhat curious that the first thoroughly bad blunder of the new Administration should be made by the Southern Democrat in the Cabinet in appointing a Northern Republican on the recommendation of two Democratic Congressmen. The notorious Consul-General Butler of Egypt, whose retention in that post was one of the worst and weakest acts of General Grant's Administration, might fairly have been expected to retire to private life on his removal from that post. But he is "the nephew of his uncle," and life without office is to him (it appears) no life. As Consul-General of a Christian power to a Moslem country, he had held a position of no ordinary responsibility, as he was vested with judicial jurisdiction over American citizens resident within that country. So well did he exercise that jurisdiction, that the American missionaries in Egypt, after repeated complaints to the Department of State at Washington, found that they must renounce their citizenship, and obtain naturalization as British subjects, if they would secure ordinary protection for their persons and their property. And this they did in a body, after publishing to the world the acts of this legal representative of the American government which constrained them to do so.

From Consul-General in Egypt to mail agent in the Black Hills is something of a descent; but Mr. Geo. H. Butler was willing. And two Congressmen were willing to help him into the new berth, one of them a Democratic candidate for the Speakership of the House. Mr. Key evidently knew nothing of the man's past misconduct, and was victimized by those who recommended him, as he very promptly took occasion, from Butler's subsequent misbehavior in a railroad train, to cancel the appointment.

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THE Permanent Exhibition was opened May 10th, in the presence of a vast concourse of people, by President Hayes. The preparations were not quite complete, but the anniversary of the former opening was too auspicious an occasion to be lost. The display of articles is of course nothing like so rich and varied as in the Centennial Exhibition, but the monstrous extent of that made the quieter and closer study of single objects impossible to most peo-

ple, so that to some of us there may be truth in the old Greek proverb, "The half is greater than the whole." Some of the arrangements of the new Exhibition seem to us very defective, such as the want of places of exit, in a very large extent of the building. The permanent success of the undertaking will depend not on the character of the collections, but on the enterprise shown in supplementing and varying these from time to time.

The decision of the United States Supreme Court that the money advanced by Congress must be paid out of the receipts of the Centennial Exhibition, has to some extent diminished the resources of the Permanent Exhibition, as the subscription to it in Centennial stock was thus considerably lowered in value. This decision was a disappointment, but it was received with a quiet dignity by our city and the friends of the Exhibition. On the other hand, it was received with evident glee in New York, and at once urged as a reason why Congress should vote a handsome appropriation to secure a good representation of the United States at Paris! That is to say, the national authorities, after throwing the whole burden of our own Exhibition upon the people of our own and of two adjacent States, should vote the money it repaid into the Treasury, to contribute to the success of the French Exhibition at Paris; and that although our own was so splendidly successful that the English papers warned the French against challenging a comparison with it by holding theirs so soon after its close.

Neither were the relations of the French Government and people to our Centennial celebration, such as to call for any outlay on our part in return. Of all the visitors to America during the Centennial Year, they behaved the worst, and least conciliated the popular regard. The slanderous letter sent home by the French Commissioner, was but an extreme instance of the discourtesy received at every step from our former allies; and the accounts of our country published by our French visitors since their return, might stand on the same shelf with Mrs. Trollope and others of our earlier commentators.

The reason of this was that the French notion of the American Revolution is best depicted by the picture in the Tuileries, which represents both Cornwallis and Washington surrendering to Count Rochambeau! They came here expecting to celebrate the achievements of France, rather than the inauguration of a great Teutonic nationality with but little in common with France. And instead of

being assigned the first place at the feast, they had not even the second, for it was given to the Mother Country, whose closeness of kin, continuity of intercourse, and warm regard for our achievements, as well as her incomparable exhibit, entitled her to the place of honor. Blood is thicker than water. *Hinc illæ lacrymæ.*

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WE were not aware, when writing last month of Dr. Crosby's new temperance movement, that a similar movement had previously originated with the Episcopal Church Congress of this country. We gather so much from some temperate tracts on temperance sent us from New York, which we can recommend to those who feel an intelligent interest in the subject.

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THE University of Pennsylvania has taken a step in the right direction as regards medical education. Its Trustees have voted to adopt the European system of a lengthened course of study with strict examination at the end of each year, conducted by others than the professors of the branch examined upon. Such a change is greatly needed, for the present method, if not, as some one has savagely said, merely "a decent way of selling a diploma," is yet obviously defective and unsuitable to the purpose in view. The difficulty in changing it arises from the fact that our medical faculties, even when nominally constituting an integral part of our universities, are in fact corporations all but independent of control. They manage their own finances, fix their own course of study, and distribute the fees among their members after paying expenses. That they have not fallen to the level of mere mercantile institutions trading in degrees, is due to the high ethical standard of the medical profession, one of the highest that exists among us. But some of the so-called medical colleges and universities, notably one in our own city, are simply diploma-shops; and the bad basis on which the really good schools stand does much to prevent these from being crushed out of existence by the proper regulation of the whole matter of medical education.

The European system has been urgently recommended for adoption by all the great medical authorities and associations, and has been adopted in the comparatively new medical Faculty of Harvard University with the best results, and also in the still younger medical Faculty of Lincoln University for colored students, near Oxford, in Chester county. But the University of Pennsylvania is the

first of the institutions which, after having been long established upon the older system, casts it aside to adopt the new. It does so with generous help from a number of the citizens of Philadelphia, and with every prospect of success in its new line of action.

As might be expected, the new measures encountered the opposition of some of the older professors, while others zealously advocated them. One of the former, Dean Rodgers, has signalized his opposition by accepting the Chair of Chemistry in Jefferson Medical College, and has thus fixed the public attention upon the new movement in way.

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### THE PHILOSOPHICAL METHOD OF POLITICAL ECONOMY.

[The following note from Prof. Cliffe Leslie speaks for itself:

LONDON, 22 February, 1877.

*To the Editor of the Penn Monthly.*—Sir :

As you have given publication in the PENN MONTHLY for this month to a translation of M. Maurice Block's article in the *Journal des Economistes* on "The Two Schools of Political Economy," I trust you will in courtesy admit a few lines from me. M. Block has done me the honor to single me out for criticism as the representative of the Historical School of Economists in England. I do not think M. Block's account of the doctrines of the German historical school adequate or fair, but the German economists are well able to fight their own battles, and do not need my championship. I shall therefore confine myself to an observation with respect to my own essay on "The Philosophical Method of Political Economy" to which M. Block devotes so much space.

The aim and argument of my essay have been completely misconceived, and are consequently not fairly represented by M. Block. So far from "writing against the philosophical method" as he affirms (PENN MONTHLY, p. 105), my object throughout the essay is to explain what the philosophical method ought to be. The following passage from the conclusion of the essay will, I think, indicate its drift and tenor more fairly than M. Block has done :—

"The phenomenon of wealth may be made," [*etc. v. infra.*]

I am, sir, most respectfully yours,

T. E. CLIFFE LESLIE.

We have omitted the quotation made by Prof. Cliffe Leslie, because we think the whole paper of such interest and value, as to justify its republication. It originally appeared in *Hermathena* (No. iv. 1876), a Dublin academical journal to which few American readers have access. Like all of Prof. Cliffe Leslie's essays, it has

a permanent value, and represents a real advance in the development of economic science.]

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Adam Smith called his famous treatise an inquiry into the nature and causes of the wealth of nations. Mr. Senior defines political economy as the science which treats of the nature, the production, and the distribution of wealth. The definition in Mr. Mill's Principles of Political Economy is similar, though broader: "Writers on political economy profess to teach or to investigate the nature of wealth, and the laws of its production and distribution; including, directly or remotely, the operation of all the causes by which the condition of mankind, or of any society of human beings, in respect to this universal object of desire, is made prosperous or the reverse."

These definitions sufficiently indicate the character of the problem of political economy—namely to investigate the nature, the amount, and the distribution of wealth in human society, and the laws of coexistence and sequence discoverable in this class of social phenomena. The solution offered by the method hitherto chiefly followed by English economists—know as the abstract, *à priori*, and deductive method—may be briefly stated as follows. The nature of wealth is explained by defining it as comprising all things which are objects of human desire, limited in supply, and valuable in exchange. Of the causes governing its amount and distribution the chief exposition is, that the desire of wealth naturally leads, where security and liberty exist, to labor, accumulation of capital, appropriation of land, separation of employments, commerce, and the use of money; whence a continual increase in the total stock of wealth, and its distribution in wages, profit, rent, and the prices of products, in proportion to the labor, sacrifice, amount of capital, and quantity and quality of land, contributed by each individual to production. It is added that, inasmuch as human fecundity tends to augment population in a geometrical ratio, while the productiveness of the soil is limited, the proportion of rent to wages and profit tends to increase in the progress of society.

This theory, it is here submitted, is illusory as a solution of the problem. It throws, in the first place, hardly any light on the nature of wealth. There is a multitude of different kinds of wealth, differing widely in their economic effects. Land, houses, furniture, clothing, implements, arms, ornaments, animals, corn, wine, money,

pictures, statues, books, are but a few of the different kinds of wealth; and of each kind there are various species. No inconsiderable part of the present wealth of the United Kingdom consists of intoxicating drink. Wealth, moreover, undergoes great changes in kind in different states of society, and one of the most important features of economical history is the evolution of new kinds, profoundly affecting the material as well as the moral condition of nations. The wealth of Rome under the Cæsars differed from its wealth in the first age of the Republic, in quality as well as quantity; and there are essential differences, as well as resemblances and historical relations, between the constituents of mediæval and modern wealth. Some of the fundamental distinctions between Oriental and European wealth have been vividly brought before us in the last few months. One of these is that the movable wealth of rich men in the East consists chiefly of precious stones, gold and silver ornaments, and splendid apparel. An English writer long ago described a religious ceremony in Turkey, at which a prince of eleven years old "was so overloaded with jewels, both on himself and his horse, that one might say he carried the value of an empire about him." That is to say, the wealth which might have made a territory prosperous, and been distributed in wages through many hundred families, was concentrated on the bodies of a child and a horse. The correspondent of the *Times* recently remarked on the appearance of the officers of an Indian municipality: "It would have rather astonished the members of an English Town Council to have seen these Punjabees in turbans of the finest tissue, gold-brocaded gowns and robes, with coils of emeralds, rubies, and pearls around their necks, finer than any Lord Mayor's chain." This allusion to the surviving finery of English official dress illustrates a change which has taken place since the French Revolution in the ordinary dress of men in Western Europe. Another description of a reception of native chiefs at Calcutta a few months ago seems to give indication of the beginning of a similar change in India. While one Maharajah "dressed in black satin and silver lace, wore a cap which was literally covered with diamonds, said to be worth £100,000," and another was "resplendent in a dress of mauve embroidered with gold," Holkar and Sir Salar Jung "presented a striking contrast from the extreme simplicity of their attire." It is no unimportant example of the mutation in the nature of wealth, in the progress of

society, that diversities exist in Western Europe, in respect of splendor and costliness of apparel, between masculine and feminine wealth, which did not manifest themselves conspicuously before the present century. The accounts of the dresses of the princes and nobles of India during the Prince's visit read like one of the dresses of a number of great ladies at a London ball; but even in England, the fashion of wearing silks, satins, velvets, diamonds, and jewels, was formerly not confined to one sex. There was a time when men "wore a manor on their backs." The remark of Addison in the *Spectator* that "one may observe that women in all ages have taken more pains than men to adorn the outside of their heads" is inaccurate. An Eastern Prince still sometimes wears precious stones on his turban to the value of half a million; and probably no lady ever wore such a weight of diamonds as the Shah of Persia displayed in London. It is at least conceivable that the attire of an English lady may one day rival in simplicity and inexpensiveness that of a gentleman. The wealth of all but the stationary part of mankind of both sexes undergoes various changes in the nature as well as in the number of its constituents; and the differences and changes in the character of Eastern and Western, medieval and modern, masculine and feminine wealth, of which some indications have been given, ought surely to meet with investigation, as regards both cause and effect, in a true Science of Wealth. The definition already referred to, that wealth comprehends all things which possess exchangeable value, is a mere abstraction throwing no light on these differences and mutations, or on the laws of society and social evolution by which they are governed. It originated in opposition to the Mercantile theory, and amounts in fact to little more than a negation of doctrine erroneously imputed to the Mercantile School, that money only is wealth. What that school really taught was that money is the most durable and generally useful kind of movable wealth, and their chief error lay in the measures by which they sought artificially to increase its amount. Money really had acquired great additional usefulness by its substitution for barter and payments in kind, and by the extension of international trade; and money is one of the kinds of wealth the invention and variations of which form a most instructive chapter in economical history. Adam Smith, it should be observed, did not fall into the error of later antagonists to the Mercantile theory. His doctrine was that wealth consists chiefly,

not in money, but in consumable commodities; in the necessities, conveniences, and luxuries of life. Although he did not systematically investigate the subject, he has in several passages indicated important differences in the economic effects of different sorts of wealth, and pointed out some essential changes which have taken place in its component elements, in the progress of society.

Closely connected with the illusory exposition of the nature of wealth to which attention has been drawn is the doctrine of abstract political economy, that the mental principle which leads to its production and accumulation is "the desire of wealth." No other branch of philosophy is still so deeply tinctured with the realism of the schools as economic science. A host of different things resemble each other in a single aspect, and a common name is given to them in reference to the single feature which they have in common. It is, properly speaking, only an indication of this common feature, but it puts their essential differences out of mind, and they come to be thought of in the lump as one sort of thing. The desire of wealth is a general name for a great variety of wants, desires, and sentiments, widely differing in their economical character and effect, undergoing fundamental changes in some respects, while preserving an historical continuity in others. Moralists have fallen into a similar error, though from an opposite point of view, and, in their horror of an abstraction, have denounced under the common name of love of wealth, the love of life, health, cleanliness, decency, knowledge and art, along with sensuality, avarice, and vanity. So all the needs, appetites, passions, tastes, aims and ideas which the various things comprehended in the word wealth satisfy, are lumped together in political economy as a principle of human nature which is the source of industry and the moving principle of the economic world.<sup>1</sup> "That every man desires to obtain additional wealth, with as little sacrifice as possible, is in Political Economy," says Mr. Senior, "what gravitation is in Physics, or the *dictum de omni et nullo* in Logic, the ultimate fact beyond which reasoning cannot go, and of which almost every other proposition is merely an illustration." The division of labor, the process of exchange, and the intervention of money, have made abstract wealth or money appear to be the motive to

<sup>1</sup> More than thirteen years ago I endeavored to draw attention to the error of both economists and moralists on this subject, in an essay on the Love of Money, in the *Exchange*, November, 1862.



production, and veiled the truth that the real motives are the wants and desires of consumers; the demands of consumers determining the commodities supplied by producers. After all the reproach cast on the Mercantile School, modern economists have themselves lapsed into the error they have imputed to it. If every man produced for himself what he desires to use or possess, it would be patent and palpable how diverse are the motives summed up in the phrase "desire for wealth," motives which vary in different individuals, different classes, different nations, different sexes, and different states of society. Hunger and thirst were the first forms of the desire of wealth. A desire for cattle is its principal form at the next social stage. A desire for land comes into existence with agriculture, but the desire for land is itself a name for different feelings, aims, and associations in different ages, countries, classes, and individuals; producing at this day widely different effects in two countries so close to each other as England and France. Adam Smith's historical and inductive mind here again preserved him from the realistic error. He has even attempted to indicate the actual order in which the desires of wealth succeed one another in the progress of history, and although his generalizations on this point are scanty and inaccurate, they ought to have suggested a fruitful line of investigation to his followers, and doubtless would have done so but for the dominion over their minds which the abstract method acquired. His illustrious successor, John Stuart Mill, has indeed made some instructive observations on the point in the Preliminary Remarks of his Principles of Political Economy, but he had been brought up in the straitest sect of the abstract economists, and his method was formed before his mind was matured; so that there is no systematic application of historical and inductive investigation in his treatise, although it abounds in luminous suggestions, and corrections of the crude generalizations of the school in which he was taught. An investigation of the diverse and varying desires confounded in the phrase "desire of wealth" would be requisite, were we even, with some of that school, to regard political economy as a mere theory of exchanges and value. For the value of commodities rises and falls with changes in the degree and direction of these desires. Both in England and France, the love of land, for example, raises its price out of proportion to the income it yields, but this may not always be, as it has not always been the case; or, on the con-

trary, it may display itself hereafter in increased price. At this day it is a national passion in France, but felt only by a limited number in England. Works of art, again, undergo extraordinary variations in value with the currents of fashion and taste; and diamonds would lose almost all their value, were the indifference towards them, already felt by one sex in this country, to extend to the other, and to become general throughout the world.

It is true that a love of accumulation or of property, an acquisitive propensity, a desire of wealth apart from its immediate or particular uses, is a principle of social growth of which the economist must take account. But this principle opens up another neglected chapter in the science of wealth, for the love of property, or of accumulation, takes very different concrete forms in different states of society. Were there no divisions of labor, it would take forms—land, cattle, houses, furniture, clothing, jewels, etc.,—determined by the existing or anticipated wants of the accumulator himself, or his family. In the actual commercial world in which we live, its forms are determined, either by the wants and demand of other consumers, or the accumulator's own desires, anticipations and associations. The holder of a share in a mine may never see his investment, and may have no desire for the coal, iron or silver it contains, yet the form of his accumulation is determined by the demand for these particular kinds of wealth on the part of surrounding society.

The questions we have been discussing are immediately connected with the conditions which govern the *amount* of wealth. The abstract theory on this subject is of the most fragmentary character. It exists only in the form of a few propositions and doctrines, such as that under the influence of the desire of wealth, human energy and effort are constantly devoted to its acquisition; that its amount is largely augmented by the division of labor; that of the three great instruments of production, the supply of two, labor and capital, tend to increase, but that of the third, land, remains stationary, while its productiveness tends to decrease with the growth of population; that wealth is increased by productive and diminished by unproductive expenditure and consumption. The first of these propositions really throws as little light on the amount, as on the nature, of wealth. The desire for it is by no means necessarily an incentive to industry, and still less to abstinence. War, conquest, plunder, piracy, theft, fraud, are all modes

of acquisition to which it leads. The robber baron in the reign of Stephen, and the merchant and the Jew whom he tortured, may have been influenced by the same motives. The prodigal son who wastes his substance in riotous living is influenced by the same motives—the love of sport, sensual pleasure, luxury, and ostentatious display—which impel many other men to strenuous exertion in business. Good cheer, meat, beer, and tobacco, are the chief inducements to labor with the majority of working men, and to beggary and crime with another part of the population. Unproductive expenditure and consumption, on the other hand, do not necessarily tend to diminish wealth. They are the ultimate incentives to all production, and without habits of considerable superfluous expenditure, as Mr. Senior himself has observed, a nation would be reduced to destitution. Moreover, the effect of expenditure on the amount of wealth depends on the direction which it takes, for example, whether of services and perishable commodities, or on the contrary, of durable articles. Here, once more, Adam Smith opened the way to a line of investigation which abstract political economy afterwards closed. He observed that a man of fortune may spend his revenue, either in a profuse and sumptuous table, or in maintaining a great number of menial servants and a multitude of dogs and horses, or in fine clothes, or in jewels and baubles; or, again, in useful and ornamental buildings, furniture, books, statues, pictures. “Were two men of equal fortune to spend their revenue, the one chiefly in the one way, the other in the other, the former would, at the end of the period, be the richer man of the two: he would have a stock of goods of some kind or other. As the one mode of expense is more favorable than the other to the opulence of an individual, so is it likewise to that of a nation. The houses, the furniture, the clothing of the rich become useful to the inferior and middling ranks of the people.” Consumption and expenditure in abstract political economy have become misleading terms. Both have come to denote the using up and destruction of things, whereas expenditure properly denotes simply the purchase, and consumption simply the use, of the article in question. If the things purchased be of a durable kind, unproductive consumption so called may amount in reality to a form of accumulation. It was, in fact, one of the chief forms down to recent times. In the fifteenth century, and long afterwards, one of the chief modes of laying by for a man’s wife and family was the purchase of plate, fur-

niture, household stuff, and even clothing. Some modes of expenditure, although intended simply as such, may be actually productive, as in the case of articles which, like rare works of art, or land for purposes of enjoyment and amusement, acquire increased value with time and the growth of surrounding wealth. Even a stock of wine in a private cellar may, on the death of the owner, prove to have been a good investment for his family. The main questions respecting the influence alike of the "desire of wealth," and of expenditure and consumption are—to what kinds of wealth, what modes of acquisition, and what actual uses do they lead in different states of society, and under different institutions, and other surrounding conditions? To what laws of social evolution are they subject in the foregoing respects? On these points we learn nothing from abstract political economy. A distinguished English economist and a man of science, has lately admitted, in the following passage, the absolute necessity for a true theory of consumption: "We, first of all, need a theory of the consumption of wealth. Mr. J. S. Mill, indeed, has given an opinion inconsistent with this. 'Political Economy,' he says, 'has nothing to do with the consumption of wealth, further than as the consideration of it is inseparable from that of production, as from that of distribution. We know not of any laws of the consumption of wealth, as the subject of a distinct science of wealth; they can be no other than the laws of human enjoyment.' But it is surely obvious that political economy does rest upon the laws of human enjoyment. We labor to produce with the object of consuming, and the kinds and amounts of wealth must be governed entirely by our requirements. Every manufacturer knows and feels how closely he must anticipate the tastes and needs of his customers; his whole success depends upon it; and in like manner the whole theory of Economy depends upon a correct theory of consumption."<sup>2</sup> No such theory, however, respecting the effect of consumption on either the nature or the amount of wealth can be forthcoming without a study of the history and the entire structure of society, and the laws which they disclose.

But further, in order to form any approach to an adequate estimate of the influence of human desires on the amount of wealth, it must surely be evident that we need an investigation, not only of the motives and impulses which prompt to the acquisition of wealth,

<sup>2</sup> *The Theory of Political Economy.* By William Stanley Jevons. Pp. 46-7.

but also of those which withdraw men from its pursuit, or give other directions to their energies. What abstract political economy has to teach on this subject is stated by Mr. Mill in his *Essay on the Definition and Method of Political Economy*, and also in his *Logic*, as follows :

“Political economy is concerned with man solely as a being who desires to possess wealth. It makes entire abstraction of every other human passion or motive ; except those which may be regarded as perpetually antagonizing principles to the desire of wealth, namely, aversion to labor, and desire of the present enjoyment of earthly indulgences. These it takes to a certain extent into its calculation, because these do not merely, like other desires, occasionally conflict with the pursuit of wealth, but accompany it always as a drag or impediment, and are therefore inseparably mixed up in the consideration of it.” Abstraction has here clouded the reasoning of the most celebrated logician of the century. Had Mr. Mill looked to actual life, he must have at once perceived that among the strongest desires confounded in the abstract “desire of wealth,” are desires for the present enjoyment of luxuries ; and that the aversion to labor itself has been one of the principal causes of inventions and improvements which abridge it. Frugality, as Adam Smith has observed, has never been a characteristic virtue of the inhabitants of England ; commodities for the immediate consumption and luxuries have always been the chief motives to exertion on the part of the bulk of the English population. The love of ease is the motive which has led to the production of a great part of household furniture, and is one of the chief sources of architecture.

“A great part of the machines,” says Adam Smith, “made use of in those manufactures in which labor is most subdivided were originally the inventions of common workmen who naturally turned their thoughts towards finding out easier and readier methods of performing it. . . . One of the greatest improvements (in the steam engine) was the discovery of a boy who wanted to save his own labor.” By what logical principle, moreover, can economists justify the admission of “two antagonizing principles” into their theory, while excluding or ignoring others? In fact no economist has ever been able to limit his exposition in this manner. Mr. Mill in his own *Principles of Political Economy* follows Adam Smith in including in his doctrine of the causes which govern the choice of occupations, and the rates

of wages and profit, many other motives, such as the love of distinction, of power, of rural life, of certain pursuits for their own sake, of our own country, the consequent indisposition to emigrate, etc.

The real defect of the treatment by economists of these other principles is, that it is superficial and unphilosophical; that no attempt has been made even to enumerate them adequately, much less to measure their relative force in different states of society; and that they are employed simply to prop up rude generalizations for which the authority of "laws" is claimed. They serve, along with other conditions, to give some sort of support to saving clauses,—such as "allowing for differences in the nature of different employment," "*cæteris paribus*," "in the absence of disturbing causes," "making allowance for friction"—by which the "law" that wages and profits tend to equality eludes scrutiny. Had the actual operation of the motives in question been investigated, it would have been seen to vary widely in different states of society, and under different conditions. The love of distinction or of social position, for example, may either counteract the desires of wealth, or greatly add to their force as a motive to industry and accumulation. It may lead one man to make a fortune, another to spend it. At the head of the inquiry into the causes on which the amount of the wealth of nations depends is the problem—what are the conditions which direct the energies and determine the actual occupations and pursuits of mankind in different ages and countries? A theory surely cannot be said to interpret the laws regulating the amount of wealth, which takes no account, for instance, either of the causes that make arms the occupation of the best part of the male population of Europe at this day, or on the other hand, of those which determine the employment of women.

Enough has been said in proof that the abstract *a priori* and deductive method yields no explanation of the causes which regulate either the nature or the amount of wealth. With respect to *distribution*, it furnishes only a theory of exchange (or of wages, profits, prices, and rent) which will be hereafter examined. The point calling for immediate attention is, that such a theory, even if true, must be altogether inadequate to explain the distribution of wealth. One has but to think of the different partition of land in England and France, of the different partition of real and personal property in England, of the different partition of both between the two sexes,

of the influence of the State, the Church, the Family, of marriage and succession, to see its utter inadequacy. Take land, for example. Sir Henry Maine has justly observed that exchange lies historically at the source of its present distribution in England to a greater extent than most modern writers on the subject seem aware. The purchase and sale of land was active, both in the Middle Ages and in the age of the Reformation; and the original root of the title of the existing holder, in a vast number of cases, is a purchase either in those ages or since. But it is only by historical investigation that we can mount up in this manner to purchase; and the present distribution of land, descending from such a source, is none the less the result of another set of causes, among which that great historical institution, the Family, which has never ceased to be one of the chief factors in the economy of human society, holds a principal place.

The truth is, that the whole economy of every nation as regards the occupation and pursuits of both sexes, the nature, amount, distribution and consumption of wealth, is the result of a long evolution in which there has been both continuity and change, and of which the economical side is only a particular aspect or phase. And the law of which it is the result must be sought in history and the general laws of society and social evolution.

The succession of the hunting, pastoral, agricultural and commercial states is commonly referred to as an economic development; but it is, in fact, a social evolution, the economical side of which is indissolubly connected with its moral, intellectual and political sides. To each of these successive states there is a corresponding moral and intellectual condition with a corresponding polity. With the changes from savage hunting life to that of the nomad tribe, thence to fixed habitations, and the cultivation of the soil, and thence to the rise of trade and towns, there are changes in feelings, desires, morals, thought and knowledge, in domestic and civil relations, and in institutions and customs, which show themselves in the economic structure of the community, and the nature, amount, and distribution of its wealth.

The celebrated German economist, Wilhelm Roscher, has remarked that every economical system has a corresponding legal system as its background; but the more general proposition may be advanced that every successive phase of social progress presents inseparably connected phenomena to the observation of the

economist, the jurist, the mental, the moral, and the political philosopher. The same institutions—marriage, the Family, landed property, for example—may be regarded from a moral, a legal, a political, or an economical point of view. Both an intellectual and a moral evolution is visible in the successive modes of satisfying human wants,—by hunting and cannibalism; by the domestication of animals, with slavery instead of the slaughter of captured enemies; by agriculture, with serfdom gradually superseding slavery; and by free industry and commerce, instead of conquest and piracy. And it may be affirmed that the means by which wealth is acquired in successive states of society are subject to regular laws of social evolution, as a whole, although only in the earlier stages is their operation easily traced. Slavery would exist in England at this day but for the co-operation of moral and political, with what are specially termed economical, causes. The successive evolution of the hunting, pastoral, agricultural and commercial states is intimately connected with “the movement from status to contract,” to employ Sir Henry Maine’s appropriate formula; one which affords striking evidence of the indissoluble nature of the connexion between the moral, intellectual, legal, political and economical phases of social progress. Sir H. Maine has considered it chiefly in its legal aspects, but it is easily shown to involve the other aspects referred to. To that primitive state in which there are no individual rights, in which the legal position of every one—law then appearing in the embryo form of usage—is determined by blood, birth and sex, there is a corresponding polity, that is to say, a rude tribal organization, not without analogy to that of a herd of wild animals; and there is a correlative economic structure, limiting individual possession to certain articles of personal use, recognizing no property in land, making sex and age the sole bases of division of labor, and leading to no exchanges between individuals. The moral condition is of a corresponding type. Communism in women is one of its original features; another is an entire absence of the feeling of individual responsibility. Tribes and groups of kinsfolk collectively are responsible for offences.

The intellectual state is strictly analogous. There is no mental individuality, no originality, or invention; all think, as well as act and live, alike. The savage is a savage in his intellectual development and ideas as in his morals, his institutions, and his economy.



The movement from status to contract, on the other hand, evolves not only individual property from communal ownership, and rights based on individual agreement from the transactions of whole communities of families, but also individual responsibility and individuality of thought and invention. It is likewise inseparably connected with a political development, with the gradual growth of a central government, and the substitution of the control of the state for that of the family or kindred. Every institution relating to property, occupation and trade, evolved by this movement, is an economic, as much as a legal, phenomenon. Changes in the law of succession, the growth of the testamentary power, the alienability of land, its liability for debt, are economical, as well as juridical, facts; they involve changes in the economical structure of society, and in the amount and distribution of wealth. And every successive intellectual discovery, every new employment of the mental energy, has its part in determining the economical condition of the nation. *A priori* political economy has sought to deduce the laws which govern the directions of human energies, the division of employments, the modes of production, and the nature, amount and distribution of wealth, from an assumption respecting the course of conduct prompted by individual interest; but the conclusion which the study of society makes every day more irresistible is, that the germ from which the existing economy of every nation has been evolved is not the individual, still less the mere personification of an abstraction, but the primitive community—a community one in blood, property, thought, moral responsibility and manner of life; and that individual interest itself, and the desires, aims, and pursuits of every man and woman in the nation have been moulded by, and received their direction and form from, the history of that community.

Both the desires of which wealth of different kinds is the object, and those which compete with them, are in every nation the results of its historical career, and state of civilization. What are called economical forces are not only connected with, but identical with, forces which are also moral and intellectual. The desires which govern the production, accumulation, distribution and consumption of wealth are passions, appetites, affections, moral and religious sentiments, family feelings, æsthetical tastes, and intellectual wants. The changes which Roman wealth underwent after the conquest of Asia Minor represent moral changes; the new desires

of wealth which became dominant were gluttony, sensuality, cruelty, and ostentation. These moral changes, again, were inseparably connected with the political history of Rome, and they had intellectual aspects which the author of the *Dialogus de Oratoribus* has vividly portrayed. Allusion was made in an earlier page to the passion for jewels which distinguishes the men of the East from the men of the West; and this form of the desire of wealth has sprung mainly from the absence for many ages of the conditions essential to general prosperity, economic progress, and the accumulation of wealth in really useful forms. Where insecurity has long prevailed, not only are those aims and distinctions which take the place, with the growth of civilization, of personal display, prevented from emerging, but a desire is generated for the kinds of wealth which contain great value in a durable and portable form, and are easily hidden, easily removed in flight, and nothing the worse for being buried for months or years. The wealth of England at this day, it should be observed, although dissimilar in some essential respects to that of Asia, ancient Rome, and medieval Europe, displays also features of resemblance, alike to oriental, to classical, and to medieval wealth—for example, in architecture, both ecclesiastical and civil, in the structure of landed property and the associations surrounding it, and in the surviving passion in women for jewelry—which are, in fact, historical features. Our wealth is historical wealth, has been made what it is by historical causes, and preserves visible traces of its history. How long a history lies behind the feelings with which land is regarded, and its price in the market, as well as behind its existing distribution! Our whole national economy is a historical structure, and in no other manner to be explained or accounted for.

Recent apologists for the *à priori* and abstract method of economic reasoning feel themselves constrained to confine its application to the most advanced stage of commercial society; they seem even prepared to concede its inapplicability to every country save England, and to confine it to the latest development of English economy. The position which they take up seems to be, that the social evolution, already referred to as a movement from status to contract, issues in an economy to which the assumptions and deductions of abstract theory respecting the tendencies of individual interests fit. In modern England, they say, there is such a commercial pursuit of gain, and such a consequent choice of occu-

pations, as to effect a distribution of the produce of industry to which the doctrines of Ricardo respecting wages, profits, prices and rents may be fairly applied. They thus abandon at once the claim formerly made on behalf of political economy to the character of a universal science founded on invariable laws of nature. "Political Economy," said Mr. Lowe, only six years ago, "belongs to no nation, it is of no country. It is founded on the attributes of the human mind, and no power can change it." It is now restricted by Mr. Bagehot to "a single kind of society—a society of competitive commerce, such as we have in England."<sup>3</sup> The economic society which we behold in England, and which is the result of the social evolution referred to, is, however, one which displays on every side the influence of tradition, custom, law, political institution, religion and moral sentiment; it is one in which the State, the Family, and even the Church, are powerful elements directly and indirectly, and in which the pursuits of individuals, the nature and value of different kinds of wealth, the structure of trades and professions, are incapable of explanation apart from history. It is one in which, as Mr. Bagehot himself has remarked, "there are city families, and university and legal families—families where a special kind of taste and knowledge are passed on in each generation by tradition; and in which the system even of banking and the money market is the product of a peculiar history. Not even looking exclusively to the purely commercial side of the English economical structure; not even as a mere analysis of "business" or "commerce," in the narrowest sense, is the abstract theory which used to claim rank as a Science of Wealth able to hold its ground. It is, in fact, as inapplicable to the most advanced stage of commerce as to that primitive state of nature from which Ricardo deduced it by a process which deserves a high place in the history of fallacies, and which was not present to Mr. Mill's mind when arguing that "no political economists pretend that the laws of wages, profits, values, prices, and the like, set down in their treatises would be strictly true, or many of them true at all, in the savage state."<sup>4</sup> The principal foundation of Ricardo's theory of value, prices, wages, and profits is the assumption that "in the early stage of society the exchangeable value of commodities depends almost exclusively on the comparative quantity of labor expended on each.

<sup>3</sup> Fortnightly Review, February, 1876.

<sup>4</sup> Auguste Comte and Positivism. By J. S. Mill, page 81.

Among a nation of hunters, for example, it is natural that what is usually the produce of two days', or two hours', labor should be worth double of what is usually the produce of one day's or one hour's labor."<sup>6</sup> The minor premiss in his syllogism is the assumption that it is "natural" that in a tribe of savages things should exchange in proportion to the labor required to produce them; the major premiss is, that what is natural in the earliest, must be natural in the most advanced state of society. The minor involves a *petitio principii*, and one entirely at variance with fact, for savages work only by fits, and have no measures of labor and sacrifice. The produce of the chase is determined largely by chance. Such exchanges as take place are of the special products of different localities, and between groups of communities, not individuals. If any exchanges took place between individuals within the community, they would obviously be governed, not by cost of production, but, like the exchange between Esau and Jacob, by the urgency of the respective needs of the parties. The major premiss, on the other hand, involves the fallacy of undistributed middle, the two states of society being entirely dissimilar. Thrown into a form less unfavorable to Ricardo's conclusion than the one he has himself given to it, his argument is, that in a small and stationary community—in which employments are few and simple, and every man knows all his neighbors' affairs, how much they make, how they make it, and can transfer himself to any more gainful employment than his own—the values of commodities and the earnings of individuals depend on labor and sacrifice; and therefore, in a great commercial nation in which there is an infinite sub-division of labor, an immense and ever-increasing variety of occupations, incessant change in the modes of production and in the channels of trade, constant fluctuations in speculation, credit and values, and in which each man has enough to do to mind his own business—wages, profits and prices, and the distribution of the gains of production are determined by the same principle, namely, the labor and sacrifice undergone by producers. It is the conclusion thus arrived at by Ricardo which Mr. Bagehot sets forth as the first fundamental assumption of abstract political economy, applied to advanced

<sup>6</sup> "That this is really the foundation of the exchangeable value of all things," he continues, "excepting those which cannot be increased by human industry, is a doctrine of the utmost importance in Political Economy." Ricardo's Works, Principles of Political Economy, chap. i.

commercial society, though with an exception with respect to one sex which illustrates its essential weakness. "The assumption," he says, "which I shall take is that which is perhaps oftener made in our economical reasonings than any other, namely, that labor (*masculine* labor I mean) and capital circulate within the limits of a nation from employment to employment, leaving that in which the remuneration is smaller, and going to that in which it is greater. No assumption can be better founded, as respects such a country as England, in such an economical state as our present one." It is an assumption equally ill-founded with respect to both the extremes of economical progress, the earliest and the most advanced;—to the former, because there is no regular labor, no calculation of gain, and no exchange between individuals; to the second, because each of a vast multiplicity of occupations needs unremitting attention, and exchanges are infinitely numerous, and subject to perpetual variations in the conditions affecting them. Ricardo ignored both the homogeneousness of primitive, and the heterogeneousness of advanced society; Mr. Bagehot ignores the infinite heterogeneousness of the latter. The assumption really made its only approach to truth in the intermediate economical stage to which Adam Smith expressly limited it, when he restricted it to well-known and long-established employments, in the same neighborhood, undisturbed by speculation or other causes of fluctuation, and between which there is perfect facility of migration<sup>6</sup>—in other words, to a small and stationary world of trade. Consider the complexity of the causes which, in the modern commercial world, affect the price of a single commodity, and judge of the possibility of estimating the relative profit to be made by the manufacture and sale of every article. The following passage, written by the most eminent living social philosopher, with no reference to political economy, will enable the reader to form some conception of the demand which the abstract economic assumption makes on his faith: "The extreme complexity of social actions, and the transcendent difficulty which hence arises, of counting on special results, will be still better seen if we enumerate the factors which

<sup>6</sup> "In order that this equality may take place in the whole of the advantages and disadvantages of the different employments of labor and stock, three things are requisite, even where there is the most perfect freedom. First, the employments must be well known, and long established in the neighborhood; secondly, they must be in their ordinary or natural state; and thirdly, they must be the sole or principal employments of those who occupy them." Wealth of Nations, Book i., c. 10.

determine one single phenomenon, the price of a commodity, say cotton. A manufacturer of calicoes has to decide whether he will increase his stock of raw material, at its current price. Before doing this, he must ascertain, as well as he can, the following data:—Whether the stocks of calico in the hands of manufacturers and wholesalers at home are large or small; whether by recent prices retailers have been led to lay in stocks or not; whether the colonial and foreign markets are glutted or otherwise; and what is now, and is likely to be, the production of calico by foreign manufacturers. Having formed some idea of the probable demand for calico, he has to ask what other manufacturers have done and are doing as buyers of cotton—whether they have been waiting for the price to fall, or have been buying in anticipation of a rise. From cotton-brokers' circulars he has to judge what is the state of speculation in Liverpool—whether the stocks there are large or small, and whether many or few cargoes are on their way. The stocks and prices at New Orleans and other cotton ports have also to be taken note of; and then there come questions respecting forthcoming crops in the States,<sup>1</sup> in India, in Egypt and elsewhere. Here are sufficiently numerous factors, but these are by no means all. The consumption of calico, and therefore the consumption of cotton, and the price, depend in part on the supplies and prices of other textile products. . . . Surely the factors are now all enumerated? By no means. There is the estimate of mercantile opinion. The views of buyers and sellers respecting future prices, never more than approximations to the truth, often diverge from it widely. . . . Nor has he got to the end of the matter when he has considered all these things. He has still to ask, what are the general mercantile conditions of the country, and what the immediate future of the money market will be; since the course of speculation in every commodity must be affected by the rate of discount. See then the enormous complication of causes which determine so simple a thing as the rise or fall of a farthing per

<sup>1</sup> Mr. Spencer, of course, means "the United States," but we might fairly expect of well-informed English writers that they avoid this slovenly and inaccurate designation of our country, which originated with commercial travelers and other illiterate cads, and seems out of place except in their mouths. Even the term "United States," though commonly used, is in strictness no more appropriate than it is to speak ordinarily of "the United Kingdom," when there is no need to call attention to the fact of the Union. Our true name is that given us by all our Southward neighbors; we are Americans, and our country is America.—*Ed. P. M.*

pound in cotton some months hence."<sup>8</sup> To admit the assumption on which the abstract doctrine of the equality of profits rests—and on which, again, the doctrine of indirect taxation is based—one must be prepared to admit that men in business are able to make, and do make, similar calculations respecting every other commodity, and thus are enabled to estimate the relative profits of different businesses.

The only verification adduced in support of the assumption is, that capital and labor desert employments *known* to be comparatively unremunerative, for those which are known to yield better returns. Even this proposition is far from being universally true, and, if it proved the conclusion, would prove that the migration of labor from Europe to America must long ago have equalized European and American wages. Mr. Mill in stating the doctrine has granted that individual profits depend, among other things, "on the accidents of personal connection and even on chance," adding, "that equal capitals give equal profits, as a general maxim of trade, would be as false as that equal age or size gives equal bodily strength, or that equal reading or experience gives equal knowledge." He supposed, however, that bankers and other dealers in money, by lending it to the more profitable trades, put the various employments of capital "on such a footing as to hold out, not equal profits, but equal expectations of profit." In like manner, Mr. Bagehot argues that "the capital of the country is by the lending capitalists transmitted where it is most wanted." If individual profits vary to the extent which Mr. Mill admitted, since there are no means of knowing what individual profits really are, it is hard to imagine how bankers and bill brokers can gauge the existing profits of different trades, and still harder to imagine how they can foreknow them. How much they really know of the matter has been recently exemplified by the transactions of the banks and bill brokers in the cases of Messrs. Overend and Gurney, and Messrs. Collie and Co.<sup>9</sup> Mr. Bagehot himself, writing on the money market and joint-stock banks, has observed: "The old private

<sup>8</sup>The study of Sciology. By Herbert Spencer, pp. 18-19.

<sup>9</sup>On the failure of these firms a commercial writer observes: "The nation entrusted most of its floating capital to the bill brokers, and the public found that they had no check on their discretion: . . . Bankers took the bills as security because bill brokers did, and hardly stopped to test the bills or study their nature."—The Rationale of Market Fluctuations, pp. 52-3.

banks in former times used to lend much to private individuals; the banker formed his judgment, of the discretion, the sense, and the solvency of those to whom he lent. And when London was by comparison a small city, and when by comparison every one struck to his proper business, this practice might have been safe. But now that London is enormous, and that no one can watch any one, such a trade would be disastrous; it would hardly be safe in a country town."<sup>10</sup>

If there is one lesson which the history of trade and the money market in the last ten years ought to have brought home to us more clearly than another, it is that both the lending and the borrowing capitalists, both bankers and traders, are singularly ill-informed and short-sighted with respect even to the condition and prospects of their own business. The Deputy Governor of the Bank of England told a meeting of Turkish bondholders a few months ago, that he had gone into these bonds largely himself, and had advised others to do so. A man of business of considerable experience had asked my own opinion, as an economist, of that very security, and afterwards complained that I had dissuaded him from a good investment.

Such is the stability of the main proposition of abstract political economy. The nature of the superstructure built on it may be judged from the doctrine that all special taxes on production fall, not on the producer but on consumers, the former receiving the tax with "average" profit on its advance; although in fact the producer may make no profit, may never sell the articles taxed, may even be driven from the trade and ruined by the impost, as the last load which breaks the back of the camel, for taxation has notoriously contributed to drive the smaller capitalists from several branches of business, for example, distilling and brewing. I must leave it to physicists, geologists, and naturalists to judge of the analogy for which Mr. Bagehot contends, of reasoning of this kind to the processes by which their sciences have been built up; nor may I attempt to pass judgment on the sufficiency of the method which Mr. Darwin in particular has followed. But where it is urged that the abstract economist, like Mr. Darwin, reasons deductively from "one *vera causa*,"<sup>11</sup> the rejoinder is obvious that the "desire of wealth," which in abstract political economy

<sup>10</sup> Lombard-street. By Walter Bagehot. 6th ed., p. 251.

<sup>11</sup> Fortnightly Review. February, 1876, p. 223.



occupies the place of gravitation in astronomy, and of natural selection in Mr. Darwin's theory, so far from being a *vera causa*, is an abstraction, confounding a great variety of different and heterogeneous motives, which have been mistaken for a single homogeneous force; and that Mr. Darwin's hypothesis was based on many previous inductions, and followed by minute and elaborate verification, for which the sole substitute in political economy has been an *ignoratio elenchi*. Mr. Cairnes, indeed, emphasizes in Italics the proposition that "*the economist starts with a knowledge of the ultimate causes*;"<sup>12</sup> adding: "He is already, at the outset of his enterprise, in the position which the physicist only attains after ages of laborious research. If anybody doubts this, he has only to consider what the ultimate principles governing economic phenomena are." First among these "ultimate principles" he places "the general desire for physical well-being, and for wealth as the means of obtaining it." Yet the desire for physical well-being is so far from being identical with the desire of wealth that they are often in direct antagonism to each other. And the title of such an abstraction as the desire for wealth to rank as an ultimate principle has been, it is hoped, sufficiently refuted.

The abstract *a priori* method, it ought not to be overlooked, has almost entirely lost credit in Germany, and has never had undisputed possession of the field in either England or France. It is repudiated by M. de Laveleye, and by some of the most eminent economists in Italy. Malthus and Say, the two most eminent contemporaries of Ricardo, emphatically protested against it. Mr. J. S. Mill's treatise on the Principles of Political Economy often departs from it, and in his later writings he showed an increasing tendency to question its generalizations. Nor did the founders of political economy, either in England or France, intend to separate the laws of the economical world from the general laws of society. Their error lay in the assumption of a simple harmonious and beneficent order of nature, in accordance with which human wants and propensities tend to the utmost amount of wealth, happiness and good. Mercier de la Rivière, whom Adam Smith calls the best expositor of the doctrines of the *Economistes*, entitled his work *L'Ordre Naturel et Essentiel des Sociétés Politiques*; and with Adam Smith himself political economy was part of a complete system of social philosophy, comprising also natural theology, moral

<sup>12</sup> Logical Method, &c., p. 75.

philosophy, and jurisprudence. He regarded the economical structure of the world as the result of a social evolution, but the dominant idea of a natural order of things disposed him to dwell chiefly on "the natural progress of opulence;" and led him to regard its actual progress as "unnatural and retrograde" wherever it diverged from the imaginary natural order, in place of being the result of the real laws of nature at work. He followed nevertheless the historical, as well as the *a priori*, method, the latter being simply an offshoot of the eighteenth century theory of Natural Law; and the same language may be used in reference to political economy, which Sir H. Maine has employed in describing the influence of that theory on jurisprudence: "It gave birth or intense stimulus to vices of mental habit all but universal, disdain of positive law, impatience of experience, and the preference of *a priori* to all other reasoning. . . . There is not much presumption in asserting that what has hitherto stood in the place of a science has, for the most part, been a set of guesses, the very guesses of the Roman lawyers."<sup>13</sup>

Ricardo's fundamental assumption is a "guess" respecting the natural principle regulating value and the distribution of wealth in the early stages of society, or in a state of nature; and he proceeds to determine by the same process the "natural" course of wages, profits, and prices in advanced society. In proof that every improvement in the processes of manufacture which abridges labor is attended with a corresponding fall in the price of the product, his argument is: "Suppose that, in the early stages of society, the bow and arrows of the hunter were of equal value and of equal durability with the canoe and implements of the fisherman, both being the produce of the same quantity of labor. Under such circumstances, the value of the deer, the produce of the hunter's day's labor, would be exactly equal to the value of the fish, the produce of the fisherman's day's labor. The comparative value of the fish and the game would be entirely regulated by the quantity of labor realized in each, whatever might be the quantity of production, or however high or low general wages or profits might be." To prove that profits are equalized in the modern world by the flow of capital into the more profitable trades, he resorts, in like manner, to a "guess:"—"It is, perhaps, very difficult to trace the steps by which this change is effected: it is *probably* by a manufacturer not actually changing his employment, but only lessening

<sup>13</sup> Ancient Law, pp. 91-113.

the quantity of capital he has in that employment." How far this conjecture was well founded, appears in his own words in the same chapter. "The present time appears to be one of the exceptions to the justice of this remark. The termination of the war has so deranged the division which before existed of employments in Europe, that every capitalist has not found his place in the new division which has now become necessary."

Mr. Cairnes defines political economy as "the science which traces the phenomena of the production and distribution of wealth up to their causes in the principles of human nature and the laws and events, physical, political, and social, of the external world."<sup>14</sup> This process has been exactly reversed by the *a priori* and deductive method. The economist "starts," according to it, with the assumption of a "knowledge of ultimate causes," and deduces the phenomena from the causes so assumed. What has still to be done is to investigate the actual phenomena, and discover their ultimate causes in the laws of social evolution and natural history. The bane of political economy has been the haste of its students to possess themselves of a complete and symmetrical system, solving all the problems before it with mathematical certainty and exactness. The very attempt shows an entire misconception of the nature of those problems, and of the means available for their solution. The phenomena of wealth may be made the subject of a special inquiry by a special set of inquirers, but the laws of co-existence and sequence by which they are governed must be sought in the great Science of Society, and by the method which it holds out. And that science itself is still in its infancy. Auguste Comte's System of Positive Philosophy (not his System of Positive Polity) is a work of prodigious genius, yet it did but suggest and illustrate, it did not create the science—that could not be done by a single mind, nor in his time; still less did it work out the connection between the economic and the other phases of the social evolution. If Political Economy, under that name, be not now bent to the task, it will speedily be taken out of the hands of its teachers by Sociology.

Inadequate as is the exposition contained in this Essay, it is submitted as establishing, on the one hand, that the abstract and *a priori* method yields no explanation of the laws determining either the nature, the amount, or the distribution of wealth; and, on the

<sup>14</sup>Logical Method of Political Economy, 2d ed., p. 57.

other hand, that the philosophical method must be historical, and must trace the connection between the economical and the other phases of national history. As regards the nature of wealth, it has been shown that essential differences in its kinds and constituents, profoundly affecting the economical condition of mankind, manifest themselves at different stages of progress, and that their causes must be sought in the entire state of society, physical, moral, intellectual, and civil. The amount of wealth has been proved to depend on all the conditions determining the direction and employments of human energies, as well as on the state of the arts of production, and the means of supply. And the distribution of wealth has been shown to be the result, not of exchange alone, but also of moral, religious, and family ideas and sentiments, and the whole history of the nation. The distribution effected by exchange itself demonstrably varies at different stages of social progress, and is by no means in accordance with the doctrines of *à priori* political economy. Every successive stage—the hunting, the pastoral, the agricultural, the commercial stages, for example—has an economy which is indissolubly connected with the physical, intellectual, moral, and civil development; and the economical condition of English society at this day is the outcome of the entire movement which has evolved the political constitution, the structure of the family, the forms of religion, the learned professions, the arts and sciences, the state of agriculture, manufactures and commerce. The philosophical method of political economy must be one which expounds this evolution.

T. E. C. LESLIE.

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## THE ORIGIN OF THE WILL.

### I. THE DEFINITION OF THE WILL.

**D**EFINITIONS of the term "Will," as we find them in metaphysical writers, are not identical; and much apparent difference of opinion depends, as usual, on this diversity of statement. Locke regards the concepts "will" and "freedom" as entirely distinct in their nature, and not essentially related to each other. He says, "Freedom belongs as little to the will, as swift-

ness to sleep, or squareness to virtue. Freedom to do is one power, will to do is another: will, a power of the mind exerting dominion over some part of a man by employing it in or withholding it from any particular action; freedom, again, a power which a man has, to do or to forbear doing any particular action." It appears that what Locke here denominates will is that common activity of the mind which expresses itself in action, which may be readily considered apart from the question of choice. This doubtless expressed something to the metaphysicians of that time, but merely signifies to the physiologist of the present day, the movement derived from the metamorphosis of nutritive material in the arterioles of the brain, which when consciously performed, are called thoughts, and feelings, and are the necessary precursors of a class of muscular acts. The question of will properly so called is not yet entered on at this point. Doctor Willis<sup>1</sup> elaborates Locke's position in the following language: "But there is, in fact, no one particular primitive faculty that wills in the human mind; will is a general term, and belongs to and is expressive of the activity of each of the primitive faculties of our nature; the benevolent faculty being active, causes us to will to do good and charitable offices; the reverential faculty being active, to will to feel respectfully or reverently; the musical faculty active, to will to sing or hear music, etc.; and the willing here is necessary; but whether we yield to the impulse of the benevolent, reverential, or musical faculty, and indulge therein their various willings is not so; here we are free, and can yield or abstain as we list." This passage renders it the more clear, that the latter part of Locke's statement, in which he defines freedom, is that in which he really refers to the will as generally understood; and Dr. Willis's assertion of the existence of our ability "to yield or abstain as we list," grants all that the advocate of "the freedom of the will" could desire.

The modern automatic school only avoid discarding the term will altogether, by using it in the sense of Locke's definition. They make it merely the conscious mental activity that precedes the act; the direction of that activity being necessary in its character; *i. e.* the result of impinging stimuli. In other words, on the automatic theory, the spontaneous activity of the body is directed or deflected by stimuli, whose ultimate form depends on the existing mental machinery through which they pass. There is avowedly

<sup>1</sup> Benedict de Spinoza: his Life, Correspondence and Ethics. 1870. p. 145.

no room for a self-determination in such a process, and its existence is therefore denied by this school. Inasmuch as a faculty of self-determination is what is here understood by the term will, and the question in the present article is, whether there be or be not such a faculty, the inquiry to which we address ourselves is whether a human will exist or not. Says Dr. Carpenter:<sup>2</sup> "The psychologist may throw himself into the deepest waters of speculative inquiry in regard to the relation between his mind and its bodily instrument, provided that he trusts to the inherent buoyancy of that great fact of consciousness that *we have within us a self-determining power which we call will.*" The existence of such a faculty is in these words assumed by Dr. Carpenter, but I have looked in vain in his writings for a demonstration of the truth of this position. The same is true of the works of many other metaphysicians.

Will may be considered in two aspects: first, as a control over the origin of mental or bodily movements; and second, as a control over the direction which those movements take. The latter case is the one chiefly considered here, as the one involved in customary definitions of human will.

It need scarcely be added that the concept will, is an abstraction from supposed special exhibitions of it, and represents a supposed mental property.

## II. THE NATURE OF ACTIONS.

The discussion between the advocates of the freedom of the will on the one hand, and those of the doctrine of necessity on the other, has often been obstructed by a *petitio principii*, which yields the case to the latter side at the outset. This is the dictum which has often passed unchallenged by both parties, that "human action is the product of the strongest inducement," or, otherwise stated, that "the will is the result of a balancing of opposing motives;" or that "the will obeys the strongest motive." This is simply the statement in reversed order, of what we might suppose without examination to be a general truth, viz: that the motives which precede the acts which we observe, are stronger than all others at the time. If this proposition be true without qualification, there is no further need of discussion, since it involves the negation of freedom, or of a power of choosing. But as such, it is an assump-

<sup>2</sup>Mental Physiology, p. 28.

tion in advance of a conclusion in the case under consideration; a begging of the question in a clear sense. Such a position can only be adopted as a result of the fullest investigation into the phenomena; it cannot be accorded before examination into the facts.

But the statement may be admitted with this important qualification, by which the argument is transferred to another stage of the subject, viz.: that we do not thereby explain why the inducements to act thus and so do, in many obvious cases, overbalance all others in a given human mind? This inquiry is not fruitless, so long as we have before us every day examples of men acting differently under identical circumstances. If there be any "liberty," it is exercised at the point of permitting inducements or motives of one kind to occupy the mind to the exclusion of those of another kind; and secondly, such occupation being granted, freedom might be exercised in removing restraint from the pressure of the present motive, so that the act can take place. If there be no inherent power of controlling the attention, and none of restraining the pressure of motive, then there is no will in any proper sense of the word, and man is an irresponsible automaton. The proof or disproof of this proposition must be the end, not the beginning of the discussion.

An inquiry into the origin of actions must be preceded by an examination into the nature of the acts themselves. The following classification is offered as expressing as nearly as possible their relations to the general developmental position of active beings, without any pre-suppositions as to their automatic or voluntary character. It is necessarily assumed that all acts are performed with reference to the acquisition of pleasure or the avoidance of pain; in other words, that all acts are due to motive, and are the expression of design on the part of the actor. This is as true of the simplest as of the most complex actions of animals, whether consciously or unconsciously performed. The movement of the *Amoeba* in engulfing a Diatom in its jelly, is as much designed, as the diplomacy of the statesman or the investigations of the student. And the motive may be the same in all three cases; viz: hunger. But as the unconscious acts have been probably derived from conscious ones by organization, a fundamental classification must first recognize their relations to the two necessary

terms of consciousness, the subject and the object. All actions may then be divided into two classes; those which are performed with the design of securing the pleasure of the subject, and those whose motive is to secure pleasure for the object as distinct from, *i. e.* opposed to, that of the subject. The tendencies thus defined have been named, in other connections, the *appetent* and the *altruistic*, and these names may be preserved as equally appropriate for the present purpose. Actions of the appetent class differ according to the developmental grade of the animal displaying them, or the grade of the organ of the body to which they are proper. In their simplest form they are mechanical movements, following a stimulus without the intervention of any rational process; the end being attained by movements, whose directions are determined by mechanical or physical laws only. Such acts belong to the lowest type of animals, and are also seen in the organic functions of all animals; they may be called the *anaesthetic* division. They may be performed consciously or unconsciously. Acts of another order are those which, while due to stimuli, are directed by a process of ratiocination. They are higher than those of the previous order because they successfully accomplish their object under changing circumstances, to which they adapt themselves as the others cannot. Like them they may be performed in consciousness or in unconsciousness, or in a still higher state of the mind, that of self-consciousness. The last condition is only possible to animals of a high order of intelligence, since it not only demands an exercise of the rational faculty, with reference to objects, but also with reference to itself—the subject. These three groups form the *rational* order. The unconscious actions of both the anaesthetic and rational kinds, are called “reflex;” and all of them are “automatic,” in so far as they are performed without will; terms more fully defined in the following pages. The process of intellection in unconsciousness is called unconscious cerebration.

Actions of the second great class, the altruistic, demand for their performance the attributes necessary for the highest of the appetent class. They require intelligence enough for the perception of what is the pleasure of the object, and self-consciousness, to know that that pleasure is inconsistent with its own, or subjective pleasure.

The arrangement may be summarized as follows:—



## I. Appetent class.

- |                 |   |  |
|-----------------|---|--|
| 1. Anaesthetic. | { | Unconscious (reflex).<br>Conscious.                    |
| 2. Rational.    | { | Unconscious (reflex).<br>Conscious.<br>Self-conscious. |

## II. Altruistic class; rational and self-conscious.

Under the definition of will above given, it cannot be present in unconscious or reflex actions, and the inquiry is limited to the conscious groups exclusively. It may then be well to add a few words on the nature of consciousness.

This faculty is here understood in its broadest sense, namely, subjective perception. The term consciousness expresses the knowledge by the subject of the effects of stimuli on itself, which ranges all the way from the mere sense of contact, to the sense of an idea. An unprejudiced scrutiny of the nature of consciousness, no matter how limited that scrutiny necessarily is, shows that it is qualitatively comparable to nothing else. The attempts to correlate it with the physical forces have so far been utter failures, although the vital forces, to which it gives direction, are evidently not excluded from the laws of quality and quantity. The common hypothesis that consciousness is the product of evolution, appears to the writer, in view of this primary fact, to be irrational; while the converse, that evolution is a product of consciousness, is far more likely to receive ultimate demonstration. From this stand-point it is looked upon as a state of matter, which is coëternal with it, but not coëxtensive. Itself in its totality a reservoir of force, it is the source of all physical and vital forces, with which it has therefore an equivalency of quantities, but not of qualities. The cause of the difference between conscious and unconscious force must be secondarily due to different conditions of matter as to its atomic constitution; consciousness being only possible, so far as we can ascertain, to matter which has not fallen into fixed and automatic relations of its atoms. The condition appears to be one of tension, in which the automatic (crystalline) tendencies antagonize each other, the material being all the while in the metastatic condition of nutrition. This idea is closely parallel to that of Heraclitus, who held that the essence of all things lay in perpetual modification, a universal becoming, an eternal emergence and disappearance.

In accordance with the preceding views, the relations between

consciousness and matter are thus depicted as of a mutually necessary character, the movements of conscious force involving consequences to itself from which the properties of matter necessarily preclude its escape.

If we trace the consciousness of animals to such an origin, it may be asked, why have not such beings the powers and perfections of their source, in quality if not in quantity? The answer to this query, in view of the fact that they have not such qualities, is only to be found in an investigation of the nature of memory. The absence of memory of the past would be equivalent to ignorance; while a new material vehicle might render memory possible for the future, and thus education, under new surroundings, create diverse beings from a primal common source.

We must include in our estimation of the distributions of consciousness and forces, not our planet alone, nor our system only, but the universe. Hence Sir William Thompson's idea that consciousness ("life") was originally exotic to our earth, is an altogether permissible hypothesis.

If there be such a state of consciousness as will, it must have appeared in course of the evolution of animals, at some point in the series of stages of progress through which their mind has passed. Yet it is maintained by some thinkers that the doctrine of evolution necessarily excludes the idea of freedom from the nature of the minds thus produced. The case is, however, involved in that of consciousness, and the investigation of it must proceed in the same manner. If it has been shown that will does exist in connection with evolution, we must proceed to discover, if possible, the relation between the two facts.

The proof of the existence of a freedom, power of choice, or will, is found in the origin of the altruistic class of acts, which are probably only possible to the human species. These have been above defined as those in which the pleasure of the object, as distinct from, and therefore opposed to that of the subject, is the design of the act. This definition excludes acts for the benefit of others, in which the actor is also gratified, since the motive may be in that case the pleasure of the subject. No doubt, many generous acts are of this character, but they were not such the first time they were performed, since experience of their pleasurable character had not then been acquired, and the evidence of all past experience was of a diametrically opposite character. In

other words, the motives already organized in the mind of the subject, were all in favor of the subject. The laws of evolution render the introduction of a new element of character at this point absolutely necessary. It is well known that the development of mind, and through it of all the acts of the first or appetent class, has been due to the pursuit of pleasure and avoidance of pain on the part of the subject. The pursuit of an opposite course, by animals whose pleasures and pains are those of the successful fulfillment of the necessary functions of life, or the reverse, would insure their speedy extinction. Their survival has been due to their prompt discrimination of favorable and unfavorable conditions through their sensibilities, and the human species, as the product of evolution, displays these sensibilities in their highest form. Under these circumstances it is obvious that since none but the inherited motives, with refinements due to more complex circumstances, can be found in his mind, that without the intervention of will, an altruistic act is impossible.

It has also been pointed out that such can only be performed by a being capable of the highest state of consciousness, *i. e.*, self-consciousness; in other words, by a being capable of recognizing its own mental states. Under such circumstances only can it distinguish the mental states of a being apart from itself, towards whom the altruistic act is directed.

It being then conceded that will is exhibited in certain human actions, it becomes important to determine, if possible, the conditions under which it appeared in the course of the evolution of man.

### III. THE ELEMENTS OF MIND.

Prior to considering the origin of states of mind, it is necessary to go over the well-trodden field of its original constitution.

There are three primary conditions of consciousness, which naturally grade into each other, viz: pain, indifference, and pleasure. Consciousness is of one or the other of these types in all animals. The constant flow of activity either in movements of the whole body or of particular parts of the body, has brought animals from their beginning into contact with other bodies, either at rest, or animated by active forces, as light and heat, which have varied their sensations, rendering them more positive in each of the three directions named. These sensations soon cease, leaving consciousness where it was, but not without marks of their former presence

in the organism. They are recorded, and continue in unconsciousness so long as the organism remains unchanged. This is the first part of memory, *i. e.*, retention. Under the influence of what is called cohesion, the impressions may be returned to consciousness in a less distinct form by the occurrence of new impressions which have some near relation with them as to time, place, or qualities of other kinds. This is the second part of memory, or reminiscence. The sum of the impressions which are necessary to memory, constitutes experience. It is evident that reminiscence is pleasurable or painful, as the experiences recalled were pleasurable or painful. Another quality is rendered possible by the two faculties of retention and cohesion, *viz*: classification. This consists of a re-arrangement of retained impressions in accordance with different kinds of cohesions, *i. e.*, different kinds of likenesses. The products of classification may be brought into consciousness just as sensible impressions are revived; but unlike these, they constitute in their totality a new experience of internal origin. When a cohesion between two circumstances is due to a repeated experience of the one as following the other, men entertain the idea that one is necessary to the other. From memory of the necessary results of our own activity, we have come to regard necessary sequences as the result of activity somewhere. If activity be discerned in the first of two coherent events, we regard it as a cause of the second; if the first be passive, the idea of cause does not arise in connection with it, but in some other active agent. Finally, all processes involving reminiscences are less distinct than the original impressions. Spencer calls the former *faint*, the latter *distinct*; the faint order are the processes of reason; the distinct, of perception.

Whether these processes are pleasurable, painful or indifferent, depends on the characteristics of the reminiscences which are their subjects. As the reminiscence is less distinct than the original impression, so there comes to be, as pointed out by Spencer, a faint order of pleasures and pains, which, with the indifferent class, form the material of the processes of reason. These mental states of pleasurable and painful consciousness, constitute that primary division of the mind, the feelings or affections, as distinguished from the intellect.

The feelings co-exist with intellectual operations of all grades of complication, since pleasures and pains are states which follow all kinds of activities, and therefore reminiscences. To seek pleasure

and to avoid pain constitutes the business of the lives of all conscious organisms ; and hence the feelings, as derived from experiences, are the directive and often originative conditions of movements or actions. In animals with higher intellectual powers, the general classification of experiences of given objects or actions results in a higher order of the mental feelings, which are called likes and dislikes. When these forms of consciousness assume an intense condition due to stimuli, they become emotions or passions.

These details are entered into in order to show that the feelings in their various grades are the motives of action in all animals, from the *Amoeba* to man. In the former they are mere reminiscences ; in the latter, they are so generalized as to become enduring principles of action, which put the intellect to every conceivable labor. And it is evident from this foundation fact, how the intellect itself has been constructed. The activity stimulated by the feelings has resulted in new experiences, and the accumulation and elaboration of these into new combinations of the faint type of consciousness, has been the law of their development. This we can observe in the education of one generation of living animals, and it has doubtless been the law of the generations of the past as well. We may then review the probable method of development of mind through the ages of past time.

#### IV. THE DEVELOPMENT OF MIND.

In the first place, it is evident that the evolution of mind has been due to the activity of animal life. Although not asserted, it is sometimes implied that "circumstances," in which the animal is passive, have been the efficient cause of mental development. That this could have been the case is inherently impossible, and since animals of the lowest types possess powers of movement, their activity has necessarily been an immediate cause, while surrounding circumstances have exercised a controlling influence.

Animal activity must be traced to the generation of force or motion by a protoplasmic body which is constantly supplied with nutriment. This production of force is the basis of the acts of animals, up to and including man ; often, as remarked by Prof. Bain, displaying itself in aimless discharges or playful movements, as in lambs and boys.

But we observe even in very simple organisms, as the *Amoeba*, etc., that many movements are not aimless, nor without design.

We observe that these mere specks of jelly devour nutritious substances, and reject the innutritious, that they even distinguish between the Diatom which contains protoplasm within its shell, and the empty shell. Many facts of this kind lead us to believe in the consciousness of these pioneers of life, and seem to show that they have experiences of the pleasures of nutrition, and of the pains of retaining insoluble substances in the seats of assimilation. It would also appear that they *remember* these sensations, so as to seek the pleasures and reject the pains, when in the course of their wanderings they again come into contact with the material objects which have caused them. Given these two terms, sensibility (consciousness) and memory, and we have the conditions by means of which the entire complex superstructure of the affectional and the intelligent acts has been elaborated out of mere movements.

This has been accomplished by the well-known laws of organization of habits, and heredity. The performance of an act under stimulus, so modifies the structure of the bioplasts of the brain, as to facilitate its repetition. With further repetition the organization is soon complete, and action follows the stimulus without direction, so long as no adverse influence affects the consciousness. Whether the act be one of the Rational or Anæsthetic orders, from this habitual stage it becomes automatic in the true sense, between which and the reflex act no line can be drawn. It is evident that the degree of consciousness present in animals will depend on the number of changes appearing in their surroundings, whether due to modifications of the external world, or movements of their own bodies. Inasmuch as the habits of the lower animals are few and simple, most of them must be automatically performed, the consciousness being only present at the commencements of the several processes. It is probable that the organization of mental functions was at the first identical with the so-called organic functions,<sup>3</sup> so far as they consist of mechanical movements; and that the latter early became reflex and devoid of consciousness, developing subsequent forms through mechanical causes. The organization of mental functions, on the other hand, was by continued education, which requires the presence of consciousness at every step.

The well-known fact of the inheritance of mental qualities,

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<sup>3</sup> See On Consciousness in Evolution, Penn Monthly, 1875, Aug., where this view is held.

shows that the evolution of mind has advanced by a continued process of accumulation as the product of animal experiences. The new generation has inherited the organization of the old, and all the reflex and automatic activities entailed by it, and has proceeded in proportion to its activity to acquire new experiences, habits and organization.

#### V. THE BEGINNINGS OF DEVELOPMENT.

##### (a) THE FEELINGS.

The intellectual faculties of every animal thus belong to two classes: first, those which have been inherited; and second, those which it has acquired by its own experiences. Of course progress consists in accessions to the latter class, since inheritance without addition is mere repetition. If no acquisitions were made, or to be made, the mental, *i. e.*, the cerebral organization inherited by animals would continually repeat the form of their actions as unerringly as the nature of a machine gives the character to the movements propagated through its wheels and cranks. That much the larger proportion of animal acts are of this class, that is, *are automatic*, there can be no room to doubt. With an impetus to movement given, the strongest liking or disliking selects the object or direction, and the reason furnishes the mode of acquisition or avoidance. The known past teaches of the unknown future, and the established circle of the functions of life is fulfilled. But without acquisitions, development is impossible.

Acquisitions to experience are gained by movements of the body, and hence by the mental activity to which the latter are due. But it is evident that the primary movement has precedence in the order of time over the feeling which deflects it, or the experience which directs later actions. In the lowest animal the first movement was doubtless a mere discharge of force; but the first designed action, the appropriation of food, was due to a sense of want or hunger, which is a form of pain. This was followed by gratification, a pleasure, the memory of which constituted a motive for a more evidently designed act, *viz.* : pursuit.

These two mental states, the one painful, the other pleasurable, form the basis in the feelings of all appetent acts. The painful sense of want is the motive to the performance of the primary class of actions, and the experience of pleasurable gratification furnishes the motive for a class which must be regarded as secondary.

The primary organized feelings of animals are not numerous.

In man, the most highly developed, Professor Bain enumerates<sup>4</sup> only eleven types, and some of these he states may be further resolved. From the stand-point of the evolutionist this is evidently necessary, and a corresponding reduction in number can be made. The development of the feelings has proceeded from the early beginnings above described, in subsequent ages, *pari passu* with that of the intellect. It is necessary in the nature of things that it should be so, since the finer and fuller the sensibility to pleasures and pains in all directions, the greater will be the complexity of experience, and hence of intelligence. It is not practicable to trace the history of the feelings here, but I allude briefly to one class of them—the social affections—as they have been treated by Herbert Spencer, whose contributions to this department of knowledge have been very important.

This author maintains that the social affections are the product, in the department of mind, of the function of reproduction. They are the organized products of experiences of pleasures derived from fellow beings, just as other kinds of likes and dislikes are derived from experiences of the qualities of various objects. It is sufficient that this faculty must survive, and the social instincts become more and more refined or specialized. It is a remarkable fact in the successional relations, and hence evolution, of the *vertebrata*, that the only system that has accompanied the nervous in its progress from generalization to specialization and perfection, is the reproductive. Man, standing at the head of the series by his developed brain, possesses also the most specialized reproductive system. He is inferior to many other *Mammalia* in his osseous and muscular type, and in his digestive organs, including dentition, etc., but the orders which are his superiors in these respects yield to him the supremacy in the two systems mentioned.

Functionally the two systems oppose each other, and that exercise of the one is at the expense of the other is a physiological law. Health of the individual, and persistence of the species, depend on the maintenance of the equilibrium between them. This is because success in obtaining food on the one hand depends on intelligence, and undue power cannot be expended in other directions without starvation. Thus the law of evolution lends full support to the doctrine first formulated by Kant, of the dual nature of the human mind, in its division into the intellect and the affections.

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<sup>4</sup>The Emotions and the Will, p. 36.



## (b) IN THE INTELLIGENCE.

The intellect includes a record of experiences of resemblances and differences, of causes and effects, arranged in orders of place, time, and of qualities of all kinds. The importance of an intellect depends on the number of experiences it contains; on the clearness with which qualities can be brought into consciousness; on the correctness with which the classification expresses the qualities; on the relation which the qualities preferred bear to an object of pursuit; and on the rapidity with which any or all of these functions may be performed. The triumph of reason is foresight or predication, in which it brings into consciousness the unknown, by reproducing its experiences of the known. This is the service rendered by education, by the acquisition either of experiences themselves, or of the experiences of others.

Acquisitions then do not imply a predication of the unknown from the known, but an actual addition to the stock of the known. The automatic life above described includes no such process, but is a routine varying only in unimportant details, and changing in no great feature. Progress evidently depends on something besides knowledge, for in proportion to the degree of progress is the departure from the known, and in proportion to the novelty of a situation is experience worthless as a guide.

Designed actions which are performed without a basis of knowledge which is sufficient for predication, are not automatic. That is, while the activity may be physically spontaneous and compulsory, the direction it takes and the mode of its execution cannot be automatic, unless the machinery which must give the direction, and which creates the mode, be already in existence.

The field of the known is very limited, as compared with that of the unknown, in the experience of the *Amoeba*. In its first movements, it has absolutely no basis on which to establish an anticipation of the future. Such is also the situation of the young of every animal. But the cases of the inferior and superior species present the important difference, that in the former there are few or no mental powers derived by inheritance, while in the latter such exist in proportion to the position of the species in the scale of intelligence.

The facts of evolution teach that the habits of animals have been modified during past geological ages, under the influence of changes in their physical surroundings. While these changes may

perhaps, have furnished the stimuli to the adoption of new habits, the conditions have not often been so rigid as to define exactly what those habits should be, in some or all of their details. The animal has necessarily proceeded blindly in many instances; in others, his mental darkness has been illumined by a low grade of imagination. This may be believed in view of the many attempts which animals often make before succeeding in attaining a desired end. Imagination plays an important part in the origin of motives and of actions, and is related to predication. It is defined as the presentation or construction of images or representations from items of experience, which representations so far differ in the connection of their details from actual experience, or so far lack the qualities of experiences, as not to constitute a predication of future events. Predication may be defined as the certain knowledge of the unexperienced from the experienced; while imagination includes the grades of probable, possible, and impossible concepts, constructed from the same material as predication. Whether this faculty exists in the animals which cannot speak, is not readily ascertained; but, inasmuch as many of them predicate, it is probable that they possess some degree of imagination also. But it is obviously a quality of the highest types of mind, since its development depends primarily on the furniture of memory, derived from a long period of experience, whose amount depends on receptivity and retentiveness.

#### VI. THE ORIGIN OF MOTIVES.

It has been said that the operation ordinarily called choosing, in which the will is popularly supposed to be free, consists merely of a sum in addition and subtraction, where various inducements are balanced, the resultant preponderance being expressed in the act. It will be easily seen that while this statement is true in regard to cases where the elements of the calculation are known, it is not true where any or all of them are unknown. The difference in the two cases is very great. All likes and dislikes are based upon experience or knowledge; and when there is no knowledge, likes and dislikes cannot be said to exist. Since likes and dislikes constitute motives, where the former are wanting the latter are also wanting. Whatever inducements are presented from beyond the field of knowledge, are derived from the imagination, and are in self-conscious minds relatively weak as motives, or absolutely without weight. They might be regarded as motives in embryo, ready to become

such on the acquisition of a corresponding experience. The imagination can prefigure one alternative as well as another, in a direction where experience is wanting, and might indeed be said under such circumstances to have no existence, and the expression, "I can't imagine," be thought to have foundation in fact. The influence of such a guide is not imperative, and raises no obstacle to the origin of a new feature of consciousness by an act of choosing, when the pressure to act at all, is sufficiently great.

There is, perhaps, but one situation of the mind where the pressure of feeling is strong enough, and predication and imagination sufficiently excluded, to develop a will which shall create motives rather than obey them. This is in the cases where self-interest is weighed in the balance against the interest or good of other people. Here the feelings are most severely pressed, and the future results to self most uncertain. Self-sacrifice may be beneficial to self, or it may not: one may be the gainer by the general prosperity, or he may be the looser. Morality may promise future good to the community, but why sacrifice self for the community? Gratitude for services rendered is an uncertain anticipation. Man's most limited knowledge and greatest inability in predication is in the field of human motives and actions, and chiefly in respect to those which belong to his moral feelings. As already remarked the complication in this direction is so great, as to produce the effect of novelty: so that man, come into possession of an intellect which is the product of ages of development, finds before him a new field of his own making where his inherited powers fail.

This is the field where the most momentous decisions possible in human life are made. Since questions of right and wrong relate to the happiness of men in their relations to each other, the social affections are the stronghold of the motives that bear on this result. It is evident that a thousand subordinate motives take their direction from the primary decisions between these two original alternatives of feeling.

It is true that the predication of human actions necessitated by bodily functions alone, is easy, even when they come to be of a highly complex character, as in the mercantile transactions of a populous business center. But so soon as the ethical element enters into the calculation, the difficulty is greatly increased, and with the majority of men predication ceases, and faith begins. This is illustrated in the many credit transactions, without which

it is well known that trade on any but the most limited scale is impossible. So it must be admitted that many men practice faith in many affairs, and that this faith is chiefly reposed in the moral excellence of other men. Under these circumstances, that state of the affections arises in most men which is termed faith, and which is only present in the highest form of progressive action, whether the results of that action be beneficial or not. It is a condition of the affections, as imagination is a condition of the intellect. The lowest animal, when attempting a novel act in obedience to imperative stimuli, doubtless moves blindly, and adopts one of two or more alternatives through pure accident. In animals of a higher grade of intelligence, new situations are known to be such, and fear or suspicion is the usual result. Generally, animals of the higher orders do not adopt new habits excepting under severe pressure, and the majority of them have perished in past geologic ages, on account of their inability to assume new modes of life. Nevertheless, in so far as an animal or a man ventures into an unknown field of action, where he is without the guidance of a past experience, he or it performs an act of trust in the broad meaning of the word. So far as this state of mind is known to the subject, the act is one of true faith in the restricted or proper sense of the word. Imaginations may and do assume to men the importance of truths, and in so far they are such to them. But in proportion as this is the case, faith in its proper sense is wanting, and the action following is automatic. The highest form of intellect is necessary to the highest form of faith, since it is only by a knowledge of the absence of knowledge, that an act of faith is possible. In proportion to this knowledge of self is faith enlarged; in proportion to certainty, or supposed certainty in affairs, is faith diminished in its scope.

It is evident then that, abstractly speaking, occasions must arise in human experience where a decision between two alternatives is dependent on choice alone. That these occasions have arisen, and the choice been made, is shown by the existence of the altruistic class of actions. The number of these occasions may not be very great, but the consequences are very important. In whatever direction these decisions are made, long series of automatic actions are organized.

Although the existence of the altruistic class of acts affords the clearest proof of the origin of will, it is not denied that correspond-

ing situations may not occur in other directions. It is also probable that will, once organized as a faculty of consciousness, can be exercised in many acts in opposition to habits, differing in accordance with the constitution of the individual; and that it can be inherited like any other quality of mind. But I will show later, that the organization of altruistic habits has narrower limits than that of those of the appetent class, because self-preservation depends on the latter, and not on the former, so that the appetent qualities are more certain to be inherited and survive.

The conclusion of this portion of the subject is, that that department of mind called the feelings<sup>5</sup> is the primary source of action: that they act automatically with or without the aid of the reasoning powers, when dealing with the known; but when dealing with the unknown may develop, in self-conscious beings, the state of faith, and acts of will: that this freedom is born of tension of the affections and of inability of the intellect.

Thus have the irregular and fortuitous decisions of animals been replaced by volition, as the highest quality of the mind, and therefore the crown of evolution. No new "physical" force is here called into requisition. The determination of the direction of such forces already existing in or passing through the brain in executive action, neither adds to nor subtracts from them. Will is, under these circumstances, looked upon as developed consciousness.

All this is of course opposed by the doctrine of the origin of moral excellence by development, on the basis of the utilitarian theory of morals. I therefore proceed to a brief examination of its claims in this direction.

Good is well defined as the greatest happiness of the greatest number; and by a natural transfer, the term is applied to whatever is conducive to that object. It therefore includes not only present pleasures, but also the influences which conduce to future pleasures, and which may be sown in the mind long before they bring forth fruit. As present pleasures are not always consistent with greater ones in the future, so present pleasure is not always good. Evil being the reverse or negation of good or happiness, is avoided by all beings to whom it is consciously known; but what they regard as evil will of course depend on their intelligence in deter-

<sup>5</sup> Which appears to be identical with what Schopenhauer calls the will.

mining or predicating the future effects of actions. But no matter what the degree of intelligence, no responsibility, as usually understood, can be expected of beings which have no power of choosing, or will.

The utilitarian theory of the evolution of morals asserts that the development of goodness is simply due to the discovery and enforcement of the law of self-protection and preservation. The selfish interests require the protection of person and property without which a community is an impossibility. Law being thus established and enforced, moral habits are imposed upon men, which become incorporated into character and transmitted to succeeding generations. This is all doubtless true, but whether it is a fundamental or secondary truth is the point requiring attention.

The fundamental objection to this hypothesis is, that the altruistic affections are not inherited or transmitted. This is because the pains and penalties of wrong-doing as inflicted by law, cannot and ought not to overcome the inherent instinct of self-preservation in man. It is true that moral character is inherited, and that changes in this department for better or worse are transmitted to offspring. The mental organization of a race may be improved by the weakening of the emotional or the strengthening of the rational faculties. But since the affections are at the foundation of all activity whatsoever, of wrong-doing as well as of right-doing, it is obvious that no amount of legal restraint can render them innocuous. Their existence is necessary for self-preservation, and law only restrains their activities to certain directions. That intelligence tends to restrain wrong-doing is true; but although intellect is inherited, the manner in which its teachings are applied in practice is not. Each man must learn the merits of different courses of action in regard to morals for himself; his intelligence places before him the facts, and shows him how to execute his wishes, but the state of his affections determines the general direction. Moral amelioration has attended the progress of intelligence on the one hand, and moral abasement on the other. Intelligence is the condition of the perception of moral truth; in other words, intelligence, as applied to moral questions, is the conscience. Consequences of acts are understood, and their relations to the pleasures and pains of men are weighed. Thus, no doubt, the world has advanced in the knowledge of good and evil, and of right and wrong. That it has improved in the practice of right has not been due to the inheri-

tance of respect for law, but to the self-destructive nature of wrong. That continued wrong sooner or later ends in the destruction of the wrong-doer, either from within or without, must be generally admitted. Thus is the truth of the doctrine of "the survival of the fittest" vindicated in moral as in natural law. But it is also true that this law is *restrictive* only, and that the school of Hume and Bentham has overlooked the deeper *originative* law in moral philosophy, as the school of Darwin has done in biological philosophy.

It may still be urged that, if it be granted that experience of the pains of evil-doing be not transmitted as an intellectual acquisition from generation to generation, nevertheless such experience is sufficient to educate each separate generation as it passes, without any other than automatic action on their part. It may be replied to this that the results thus obtained are not due to will, but simply follow compulsion, the motive thus created only varying in strength with the characters of the individuals. Its success is restricted to circumstances where the penalties are sufficiently certain to constitute counter-inducements to effect the necessary restraint. This<sup>6</sup> can only be the case with the weaker members of society. Wherever there is sufficient power to escape penalties, wrong-doing has no restraint. Under such a system might and right are identical; for the strongest needs no protection of law. It is true that society can combine against a single malefactor, but it is also true that malefactors can combine. In fact, it is one of the usual phenomena of human society, to find men becoming malefactors as soon as they attain to power; or to find society governed by a few malefactors who have an army to enforce their pleasure.

While then inheritance does not secure the performance of altruistic acts, appetent affections may be so increased by accumulation in descent as to become uncontrollable, so that will either does not come into existence, or is extinguished, so far as regards those affections. In such a situation there is no such equivalency between opposing motives as gives opportunity for the will, the experience of appetent pleasure being too strong to allow of hesitancy in the face of vague representations of imaginary consequences on the other side. Even in highly intelligent men, to whom consequences are best known, knowledge may be thrust from consciousness, by strong feeling in favor of one alternative at the moment of action.

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<sup>6</sup> Which expresses the quality called the Will by Schopenhauer.

## VII. CONSEQUENCES.

It is now well to consider how far an automatic mind has any claim to personality or individuality, as generally understood. From the usual stand-point, a being without "liberty," or will properly so called, is without character, and is in so far a nonentity. Even the character of the Deity cannot escape this destructive analysis; for according to Spinoza, if He is good, but a single line of action, without alternatives, lies open to God, if He be at the same time omniscient. All this is changed if the element of spontaneity in character be pre-supposed. The existence of such a quality renders foresight of its decisions in some cases no more than a calculation of chances, and in other cases impossible; thus offering the only conceivable limit to omniscience, and hence to omnipotence. And as we regard the goodness of God as the anchor of the universe, if that goodness be in some respect inconsistent with omnipotence, we are strengthened if we discover that there is ground for correcting our traditional suppositions in regard to the latter. Can we not find this ground in a liberty or freedom which is the condition of what we suppose, in the absence of knowledge, to be the characteristic of the highest class of conscious existences?

E. D. COPE.

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NAVAL ADMINISTRATION.

NAVAL government may be defined as that system of fundamental rules by which a navy is governed; or by which the members of the Naval Service are to regulate their official actions. The chief desideratum is that these rules shall be so framed as to ensure an energetic, efficient and economical administration of naval affairs.

A brief review of the history of one of the oldest naval governments extant—the English—will serve to illustrate the principles on which that species of government should be based.

The Board of Admiralty of Great Britain may be likened to one of those imposing Elizabethan structures to be met with occasionally in England. Begun originally in a natural and unpretending way, but added to by successive generations, they have grown into



what we find them to-day, rambling and incongruous edifices, yet wonderfully substantial, and of the utmost practical utility. It needs a life-time, almost, to become familiar with their wilderness of nooks and crannies, their conveniences, and, it must be admitted, their inconveniences. The head of the house must often in the course of nature change; but the old retainers, with their seemingly perpetual existence cling to the estate, bringing down with them and transmitting to their descendants the traditions and the secrets of the place. Like the science of English law the Board also has its inexorable *lex non scripta*.

One of the earliest attempts in England at the formation of a Navy Board was in the first year of the reign of Richard I. (1189) when five commissioners, including an archbishop and a bishop, were appointed with the title of "Leaders and Governors of all the King's Navy." During several years of the reign of King John, the principal management of the navy was entrusted to a priest named William de Wrotham, archdeacon of Taunton, for most of the high offices in England were filled at this time by priests. He was designated "Keeper of the King's Ships," or "Keeper of the Seaports." But in these early days the seas were infested with pirates, for which reason "Wardens of the Sea" were appointed. Their duties were to guard the seas and coasts about England and to try offenders against the laws of the sea. In 1224 "the lord the King," committed "to Geoffrey de Lucy the guardianship of the sea-coast of England from Pevensey to Bristol." In this manner were the coasts of England portioned out to be guarded by the navy, the warden or admiral of each district being not only "Keeper of the Coast," but invested with judicial functions as well. It was in very much the same way that the *quæstors* of the Roman fleet, after the Pyrrhic war, had been appointed to the guardianship of the coasts of Italy and to form a war marine for their protection.

In 1297, Sir William de Leybourne was appointed "Captain of the King's Mariners," and was the first to be styled "Admiral of the Sea of the King of England." The commissions issued at this time to admirals imposed a two-fold duty. All details respecting the equipment and management of ships and crews were confided to the admirals who were from time to time appointed to command the King's fleets—those which environed the coasts. In addition to this, they were to hold courts within their several jurisdictions for the administration of "*le ley marine a'ancien droit*," and offend-

ers against the maritime code were ordered to be delivered up to one of the King's admirals, who was to proceed "according to marine law." The admiral's court had cognizance of all proceedings on the sea, and, in general, of such matters as our Federal courts sitting as courts of admiralty have to-day.

The *civil* management of the Royal Navy was at this time confined to the King and privy council. When information or advice on naval affairs was required, two or more of the inhabitants of each of the principal sea-port towns, or others supposed to be conversant with the subject under advisement, would be summoned. Here we see, however rude the form, the true principle of naval government, growing spontaneously in obedience to a natural law of development. The civil government of the navy is retained by the civil power; the military branch, subordinate to the civil, is left to the military; while questions of a special nature are referred to experts. In the reign of Henry VIII., an improvement was made in the practical application of this principle. Instead of each admiral having the equipping and fitting out of his own fleet, a central office, called the Admiralty Office, was established in 1512; commissioners were appointed to inspect ships of war, and a court for the trial of marine causes was erected, the latter in 1514. In other words, there was established a Navy Department and a Court of Admiralty.

At the time of which we are speaking, peers and persons of high military reputation were appointed as admirals, instead of eminent seamen, for "the sailors," it was said, "would only obey a great man." In this way it came that the command of fleets and the management of the navy was sometimes entrusted, either through favoritism or other cause, to unprofessional and incompetent hands, and the navy suffered accordingly. In 1604, James I. issued a commission for "an enquiry into the general state of the marine." This was followed in 1618 by a second commission, issued by the King for regulating the affairs of the navy.

This latter commission was composed of men of rank and great naval experience, without whose advice no affairs of importance relating to the navy were to be undertaken. Its appointment was to cover the gross incapacity of the Lord High Admiral, the elegant and witty, but shallow and corrupt, George Villiers, Duke of Buckingham, and prime favorite of the King. In this commission we see the origin of the present Board of Admiralty: it was the off-spring of necessity.

At the Restoration (1660) the Duke of York became **Lord High Admiral**. One of his first acts was the appointing of a **commission** to report on the state of the navy. And this example of referring difficult questions to a commission is all the more **valuable** from the great capacity exhibited by the Duke himself for **naval affairs**, and from his splendid record in the great naval battles with the Dutch. In his case it may be truly said, a good **admiral** was spoiled to make a bad king. On the retirement of **the Duke of York**, Charles II. assumed the government of the **navy** himself, but soon after abandoned it to favorites. James II., on his accession, exercised in his own person the regal authority and the authority of **Lord High Admiral**, which was merged in him as sovereign. The Admiralty was not therefore in commission during these two reigns.

The prostitution of the important office of **High Admiral** by granting it to court favorites for corrupt purposes had its natural effect. Immediately after the revolution of 1688, Parliament passed (2 sess. William and Mary) an act establishing a **Board of Admiralty**; in other words it legalized and rendered permanent the customary commission of experts that incompetent ministers had long rendered necessary. By this act it was "declared and enacted that all and singular authorities, jurisdictions and powers which, by any act of Parliament or otherwise, have been and are lawfully vested \* \* \* in the **Lord High Admiral of England** for the time being, have always appertained to, and may be exercised by the commissioners for executing the office of **High Admiral of England** for the time being according to their commissions." Although passed in 1690, this act was not put in force till two years afterwards, when it was resolved in the House of Commons that the House be moved that His Majesty be advised "to constitute a commission of the Admiralty of such persons as are of *known experience in maritime affairs: that for the future, all orders for the management of the fleet do pass through the Admiralty that shall be so constituted.*" In 1702 Prince George of Denmark, consort of Queen Anne, was created **Lord High Admiral**, and in 1827 William Henry, Duke of Clarence, for about 15 months filled the same high office. With these exceptions the office of **Lord High Admiral** has been in commission for 184 years.

The Admiralty patent, as it is called, places in the hand of "Our Commissioners for executing the office of Our High Admiral," full

power to administer the affairs of the navy. It enjoins upon all persons belonging to the navy to observe all such orders as "Our said Commissioners, or any two or more of them, give," \* \* "as if Our High Admiral had given it." But the distribution of responsibility contained in the patent has not been conformed to in practice, and it is believed that the First Lord has a far greater share of the labors of the Admiralty than he can properly attend to. "According to the patent, all the members are equal, with co-ordinate powers, and with joint responsibility. According to *usage*, the responsibility rests almost entirely on the First Lord." (Evidence of the Duke of Somerset before the select Committee on the Board of Admiralty, 16 April, 1861.) As he nominates the other members "at his pleasure," the First Lord is, practically, supreme; for, if opposed by the members, he may break up the Board. Besides the First Lord, who is a cabinet officer appointed generally from civil life by the Prime Minister, there are three naval members of the Board, and one other member, who is always taken from among the members of the House of Commons. In addition to the Board proper, there are one naval and two civil Secretaries. The Board meets every week-day at noon, except Saturdays; and two Lords and a Secretary form a quorum for business. Certain orders may be signed by the Secretary alone, and are regarded as the order of the Board collectively: but an order that authorizes the payment of money, requires the signatures of two Lords. The Secretaries have jointly charge of the Secretariat, and the First Secretary has important duties in Parliament, in connection with the department.

In March, 1861, a select committee was appointed "to inquire into the Constitution of the Board of Admiralty, and the various duties devolving thereon;" also, "as to the general effect of such system on the navy." No material change took place, however, until the 14th January, 1869, when, at the instance of Mr. Hugh C. E. Childers, then First Lord, the Board was re-organized by Her Majesty in Council, as follows: First Lord of the Admiralty, First Naval Lord, Third Lord and Controller, Junior Naval Lord, and Civil Lord, with the Parliamentary Secretary, and the Permanent Secretary—the First Lord, being responsible to Her Majesty and to Parliament, for all the business of the Admiralty; the other members of the Board were to act as his assistants.

On the 19th March, 1872, the order of January, '69, was re-

scinded, and the Board constituted as follows, and **as it now stands** :

(1) The First Lord of the Admiralty, **First Naval Lord**, Second Naval Lord, Junior Naval Lord, Civil Lord.

(2) The Parliamentary Secretary, **Permanent Secretary**, Naval Secretary.

(3) The office of Comptroller of the Navy was re-established as an office to be held for a fixed period by an officer, **not a member** of the Board, and to be assisted by a permanent officer to be called Deputy Comptroller and Director of Dockyards, whose duties are mainly concentrated on the management of the dockyards.

(4) The First Lord is responsible to Her Majesty **and to Parliament** for all the business of the Admiralty, the **business to be transacted** in three principal divisions :

(a) The First Naval Lord, the Second Naval Lord, and the Junior Naval Lord, to be responsible to the First Lord of the Admiralty for the administration of so much of the **business relating to the personnel** of the Navy and to the movement and condition of Her Majesty's Fleet, as shall be assigned to them, or each of them, from time to time by the First Lord.

(b) The Comptroller to be responsible to the First Lord for the administration of so much of the business as relates to **the matériel** of Her Majesty's Navy, the Comptroller to have **the right** to attend the Board, and to explain his views whenever the First Lord shall submit to the Board for their opinion, **designs for ships** or any other matters emanating from the Comptroller's Department.

(c) The Parliamentary Secretary to be responsible **to the First Lord** for the Finance of the Department, and for so **much of the other business** of the Admiralty as may be assigned to him.

(d) The Civil Lord, the Permanent Secretary, and the **Naval Secretary**, to have such duties as shall be assigned to **them by the First Lord**.

A number of other officers are by the same order **established at the Admiralty, Whitehall**, as :

Director of Naval Ordnance, Chief Naval Architect, **Engineer-in-Chief**, Accountant General, Director General of **Medical Department**, Director of Transport Service, Chief of **Hydrographic Division**, Adjutant General of Marines, etc., etc., etc.

It may be here noted that, counting from 1801, when the Earl of St. Vincent was at the head of naval affairs, and including the Duke of Clarence, who was Lord High Admiral from May 2, 1827, to Aug. 12, 1828, and including, also, the present incumbent, the Hon. Mr. Hunt, the official life of a First Lord may be assumed to be about two years and seven months, while that of a Secretary of the Navy of the United States, for the same period, averages two years and nine months.

Now the theory on which this Board is founded has obtained from the earliest times as already explained, and is entirely consistent with sound principles. The First Lord has general control of the whole navy, in the name of his Sovereign, to whom he is responsible for its management. But he represents the civil power, and concerns himself more immediately with the civil affairs of the navy. It is for this reason that in the more liberal forms of government the First Lord or Minister of Marine is selected from civil life. Associated with this civil office, but subordinate to it, is the military branch of the establishment. This is presided over by the senior Sea Lord, and his coadjutors, the other Sea Lords and Naval Secretary. Here we have a division of labor of such obvious propriety as to need no argument for its support.

This distinction between the civil and military has never fully obtained in the organization of the navy department of the United States. With us, the Secretary of the Navy has generally endeavored to assume the duties of both civil and military branches, and, as a natural consequence, he has generally failed, as the gradual but certain decadence of the navy during the last half century fully attests. The relative positions of a Secretary of the Navy and a First Lord of the Admiralty, it may be observed, are analogous; they both derive their authority from sources precisely similar, viz.: the Chief Magistrate. The Chief Magistrate of a State, be he Prince or President, is the constitutional or acknowledged military head. Thus James I. declared himself to be Lord High Admiral and Lord General, a claim that was subsequently confirmed to the reigning sovereign by Parliament. (13 Car. II. c. 6.) So in second section of Art. II. of the Constitution of the United States, the President is declared to be the commander-in-chief of the army and navy.

That the President might actually take command of troops in the field, was contemplated as a possibility by the framers of the

Constitution, and during the late war of the Rebellion he really did exercise the functions of commander-in-chief by changing the plan of a campaign which had been laid down with consummate military skill; but no such contingency was ever imagined for his Secretaries of State, either for War or for the Marine. In the name of their common chief, they have general control of the two arms of the public service, but it is solely in a civil capacity that they act. They have no military existence whatever. For this reason there should be associated with the Secretary of each of these departments a military executive, subordinate to the administrative or civil branch, but having certain duties connected with the service proper, so clearly defined as not to be subjected to the caprice of the ephemeral and ever-varying interests of party politics. The only question to be considered now is, whether this executive power should be vested in one or in several persons. In the army it has never been questioned that this power should lie with the commanding general. But in the navy, through some misapprehension, a plurality of executives has found much favor. The present navy department has nine separate and independent executives, a fact which goes far to account for the unsatisfactory state in which we find the navy to-day. To remedy this great evil, various boards, such as of admiralty, commissioners, etc., etc., have been proposed. An examination of the British Board of Admiralty, however, has shown that that body originated as a commission appointed for a specific purpose, and that now certain general duties are distributed among its members much in the same way that similar duties of our navy department are distributed among chiefs of bureaus. But we have no need of such a board with our bureau system, where the chiefs can be assembled at pleasure for consultation. We simply require a military executive, and experience and reason concur in pointing to a single person to hold the office. "That unity is conducive to energy will scarcely be disputed;" observes the Federalist, in discussing the form of the Executive branch of our government, "decision, activity, secrecy, and despatch will generally characterize the proceedings of one man in a much more eminent degree than the proceedings of a greater number; and in proportion as the number is increased, these qualities will be diminished." "Timidity, indecision, obstinacy, and pride of opinion," says Mr. Justice Story, in continuing Hamilton's forcible argument against an Executive Council, "must

mingle in all such councils, and infuse a torpor and sluggishness destructive of all military operations." These arguments apply with irresistible force to the government of a navy. Summing up, then, we are led to the conclusion that a navy department should consist of a Secretary of the Navy, to administer the civil affairs of the navy—the Admiral of the Navy, or a naval officer of high rank, to act as his executive, or assistant, in the management of the affairs of the navy proper, and the bureaus as they now exist, but with the strangely anomalous clause of the law stricken out, which makes the orders of an inferior, a chief of bureau, equal to those of his superior, the Secretary of the Navy. (See Sec. 420, Revised Statutes.)

A naval government based on such sound principles as we have endeavored to elucidate, could not fail in the desideratum we set out with:—an energetic, efficient, and economical administration of naval affairs.

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#### MR. DARWIN ON THE FERTILIZATION OF FLOWERS.

IN 1862, Mr. Darwin's *Fertilization of Orchids* first appeared. Leading botanists knew that most of this tribe were unable to fertilize themselves, and some knew that insects were necessary agents in successful fertilization; but no one knew how varied and how beautiful were the arrangements by which fertilization was effected, and few knew that the pollen of one flower was brought to another as a regular thing by insect aid. To demonstrate these facts was Darwin's great work. He tells us that it grew out of his *Origin of Species*. He there gave general reasons for a belief that no "hermaphrodite fertilizes itself for a perpetuity of generations." Having been blamed, he says, for propounding this doctrine without giving ample facts, he issued this book "to show he had not spoken without having gone into details." Even with this work on the fertilization of orchids, he seems to have felt that something further was necessary to prove

<sup>1</sup>CROSS AND SELF-FERTILIZATION IN THE VEGETABLE KINGDOM. By Charles Darwin. New York: D. Appleton & Co. 1877.

ON THE FERTILIZATION OF ORCHIDS BY INSECTS. By Charles Darwin. 2d Edition. New York: D. Appleton & Co. 1877.



the point. Thus it appears, *Cross and Self-Fertilization* was suggested. The experiments on which this book is founded, were commenced a year or so afterwards, and continued for several subsequent years. This piece of history is important, as it shows that Mr. Darwin was strongly prepossessed in favor of the doctrine he propounded, before these last experiments were begun. At the same time, it is but fair to say, that the world has seen few more patient, conscientious workers than Mr. Darwin; and if it be possible for any human being to be wholly uninfluenced in his judgment by preconceived opinions, he surely is that man.

*Cross and Self-Fertilization* is a monument of wonderful scientific industry. Every one of its four hundred and sixty-nine pages contains some distinct fact worth weighing—and in general, there is food for reflection in every line. The student will want to read the whole carefully, but he will find it take a long time to thoroughly digest the work. The general reader will, perhaps, be content with the introductory chapters, and those at the end, which give in a concise manner the conclusions drawn from the details given in the chapters that have gone before. It will be well, however, for those who are specially interested in the subject, to study the experiments as given; for, we think, that in many cases they will not draw the same conclusions from the same facts that the author does.

The general proposition as given in the last page of the new edition of "Orchids," is this: "It is hardly an exaggeration to say that nature tells us in the most emphatic manner that she abhors perpetual self-fertilization." Mr. Darwin proceeds to narrate the story, and this is about what it is:—A large number of plants have their flowers so constructed that it appears easier for them to receive pollen on their stigmas from other flowers by the agency of the wind or insects than to receive it from their own stamens. Some are so arranged that it seems impossible for them to be able in any way to make use of their own pollen; while there are many cases where flowers undoubtedly and continuously self-fertilize. The inference derived from a study of Mr. Darwin's book is that the numbers in these two classes about balance one another. Mr. Darwin it is proper to state, insists that self-fertilizers are frequently intercrosses. His work hardly proves this, but if it did there is so little chance of anything coming of it, that it is not worth considering. Supposing a plant with a thousand flowers, producing a thousand

seeds, had but ten of them influenced by cross-fertilization,—the chance of these ten in a thousand falling into conditions favorable to germination are very small indeed. Very often not ten in a thousand of seeds of any kind get any chance to grow. Hundreds of pounds of seeds are every year produced in our fields and forests for every pound—we might almost say for every single seed that gets a chance to grow.

The only material point for consideration is then this as stated by Mr. Darwin, "As plants are adapted by such diversified and effective means for cross-fertilization, it might have been inferred from this fact alone that they derived some great advantage from the process, and it is the object of the present work to show the nature and importance of the benefits derived" (p. 2). Mr. Darwin frequently uses this argument, *i. e.* certain arrangements exist which produce certain results, therefore some great good must be derived by the individual possessing the arrangements whereby the results are accomplished. Students of Natural Philosophy know how defective such an argument is. Every part of nature contains within itself not only the elements of construction but of destruction. There are adaptations for gradual growth, and there are adaptations for gradual and final decay. There can be no doubt that nature intends races as well as individuals to die, and she naturally urges them onward in the belief that what they are doing is really for their good. Large numbers of male insects die very soon after having fulfilled their mission, while the females live only so much longer as will enable them to safely deposit their eggs. They were impelled to take on the family relations by an impulse which seemed pleasant enough to them, but which really terminated in their early extinction. It is as true of races—even of human races. The Indian finds himself well adapted for war. If he had chosen peace and friendship—had he the philosophy to bear the injustices heaped on him by the white man, and chosen to bear the ills he had instead of risking war, he would have been mighty in numbers to-day. But his "adaptations" have proved his ruin. Is there any *a priori* reason why the adaptations for cross-fertilization which Mr. Darwin finds, *must be* for some great good to the individual or race? It may be good in the general economy of nature, and that be all. That part of the proposition in which Mr. Darwin proposes to "show the nature and importance of the benefits derived" is the only part which is fairly within the line he has marked out for us.

We thus come directly to Mr. Darwin's experiments. He takes a large number of garden plants, applies the flower's own pollen to its own stigma in some cases, pollen from other flowers on the same plants in others, in others pollen from other plants in the vicinity, and sometimes pollen from plants brought from a distance. He sows seeds of these various classes; raises plants, sows again from them, and so on, continuing through several generations in many cases. The plants from these self-fertilized seeds and from the crossed plants are suffered to grow together under the same circumstances; and their time of seed germination, of first producing flowers, the rate and final extent of growth, the number and weight of the seeds, are carefully compared; as well as the longevity of the plants under unfavorable circumstances. Among the plants experimented with are *Linaria*, our common yellow Toad-flax; Indian corn; the common Morning Glory; the common Monkey flower (*Mimulus*); Fox-glove, a small Scarlet Sage (*Salvia coccinea*); *Thunbergia*; Cabbage; *Escholtzia Californica*; Pansy; *Hibiscus Africanus*; Geranium; *Limnanthus*; Scarlet Runner Bean; Garden Pea; Scotch; Broom; *Clarkia*; *Mentzelia aurea*; Parsley; a Passion Flower; *Lobelia*; *Nemophila*; the common Borage; *Petunia*; Tobacco; *Cyclamen*; *Anagallis*; Primroses; *Abutilon*; Clover; *Cineraria*; Mignonette; Madagascar Periwinkle; and some others. This list shows how varied were the families used in the experiments, and makes as fair a selection perhaps as could be made.

To determine which had the best average growth, Mr. Darwin employs a system of averages. He generally has from five to seven sets of comparative experiments with each kind in each year. He then selects an equal number of the largest plants in each set, measures the plants, and counts and weighs the seeds. There is rarely a case where some of the self-fertilized plants have not beaten the cross-fertilized, in some cases they have completely beaten them, but in the majority of cases the final figures favor the crossed plants. It is interesting to note that this final advantage is often the result of some single great stroke. It is as if we were to count up the loss by fire in a dozen cities, and just as we are finishing, get a Chicago thrown in. For instance here is a case where the average foots up 189 cross-fertilized as against 199 for self-fertilized, but some further trials are made and these give 257 for the crossed and only 176 for the selfs. The last experiments give the case to the cross-fertilized, but why should that last trial

prove a natural law any more than the first, even though it does decide the average? It is, however, a very interesting fact that though a very large number of plants showed greater advantages by self-fertilization than by cross-fertilization, the totals in the vast number of trials made give the greatest vigor to the cross-fertilized by an average equal to about one-fifth of the whole.

But here comes in another very interesting question. The crossed plants are shown to have a greater *average* growth, to produce flowers on *the average* earlier, to mature on *the average* more seeds, and to live on *the average* under a struggle better than self-fertilized ones. Are these characteristics "advantageous" when we consider all that is understood by the "struggle for life" or the "development of the race?" Cellular development—a more luxuriant growth, is by no means synonymous with that phase of vital power we recognize in endurance, and precocity is the reverse of a strong argument. So in regard to the number of seeds, the greater this be, the more draft there is on the forces of nutrition, and the general result is less power to each. The (not many) cases Mr. Darwin gives, where the plants were equally grown under unfavorable circumstances, and the average favored the cross-fertilized, may be taken as the strongest point of all.

Again it must be noted that most of the experiments were made with exotic plants, and under glass. The natures of both plants and animals change when removed from wild life. The domestic animals, now of so many colors would have been of an uniform shade if left to nature. Plants partake much in these respects of a similar character.

"In all places then, and in all seasons,  
Flowers expand their light and soul-like wings;  
Teaching us by most persuasive reasons,  
How akin they are to human things."

Mr. Longfellow has here the poet's perception of a natural truth. Flowers pine in captivity as human beings do. Some less sensitive are resigned to fate; others, easily excited by the hopes of escape; and the act of cross-fertilization would find just the occasion for a joyous bound in their finer natures! The reader will pardon these metaphors for the sake of the truths beneath. Mr. Darwin's artificial experiments seem to show, not that self-fertilization produces any injury to the race, but that cross-fertilization brings about a more excitable condition of growth and reproduction. For the

self-fertilizers rarely went backwards. Suppose, for instance, a self-fertilized plant gave a growth related as 75 to 100, and the cross-fertilized 95 to 100; no matter how many generations of self-fertilizers were tested, the average does not decrease, while continued cross-fertilization in each succeeding generation is required to keep the other average up. Mr. Darwin, though he continually sees the expression that self-fertilization must be very injurious, admits that it is only after many generations that the evil becomes apparent. His experiments show that no advantage is derived from a cross with a flower from the same plant; and yet, in large plants or trees especially, this is nearly all the cross-fertilization they can receive; as bees or other insects generally exhaust the vicinity before flying elsewhere. A tree with a thousand flowers may possibly have the first flowers that a newly visiting bee touches pollenized from another plant, but even this is dependent on the merest accident that such flower had not been previously visited. Indeed the first morning bee and the first flower visited make up all the chance for cross-fertilization. But even here the fact that perhaps only one per cent. of the seeds which mature gets the opportunity to grow, allows but a small chance to this cross-fertilized seed to be that one. And we may keep on with this calculation of chances, for if that one seed actually get the opportunity to grow, hundreds of others crowd it, and with accident on accident following, it can scarcely be the one to endure. And, when we consider that according to Mr. Darwin's experiments, cross-fertilization is only a temporary good—it must be continuous in order to be permanently effective—the theory of cross-fertilization *practically* amounts to nothing at all.

But the deductions from Mr. Darwin's experiments may be extended to a wider circle against his own theory. He tells us that "the advantages of cross-fertilization do not follow from some mysterious virtue in the union of two distinct individuals, but from such individuals having been subjected during previous generations to different conditions, or to their having varied in a manner commonly called spontaneous, so that in either case their sexual elements have been in some degree differentiated" (p. 442). In regard to the marriages of cousins and closely related persons he was surprised by his son's statistical investigations to find that on the whole the injury is "very small," and even with this small degree in view he writes "from the facts given in this volume we may

infer that with mankind the marriages of nearly related persons, some of whose ancestors had lived under very different conditions, would be much less injurious than that of persons who had always lived in the same place and followed the same habits of life," and he adds that "widely different habits counterbalance any evil" there *might* be in these closely related marriages. So that for any benefit to the plant race from the cross-fertilization, the pollen must be brought by the insect from very distant plants, growing "under very different conditions," that is to say in ordinary cases miles away!

In the work *On the Fertilization of Orchids by Insects*, the considerations we have just entertained, must strike the reader with much more force. It is taken as a generalization that orchids cannot fertilize themselves, but Mr. Darwin shows that there are some that can. The great majority seem dependent on the aid of insects, and they "cross-fertilize;" but orchids are generally confined to special localities. They usually grow only in very peculiar situations. We find a quantity in a bog here, and then it will often be many miles before we meet the same species again. The only "cross-fertilization" can be from plants growing under the same conditions, which under Mr. Darwin's own teachings is practically not cross-fertilization at all.

We are still left with the problem on our hands, why are these peculiar arrangements? Here are plants which have their separate sexual organs perfect in the one flower, yet are unable to exercise their functions except by the agency of insects as they visit flower after flower. Mr. Darwin is evidently prepossessed by the idea that it must be useful because such arrangements exist. It may be useful,—but as we have already seen, useful in the ordination of nature, as being her mode of gradually getting rid of a tribe which she has no longer any desire to preserve! That this is just as likely as not, is rendered more than a probability by Mr. Darwin's own facts. He says that it is must be of more importance in the economy of plant-life to seed by self-fertilization than not to seed at all through failure to cross-fertilize. Yet orchids of all plants the oftenest fail to seed. "The frequency with which throughout the world members of various orchideous tribes fail to have their flowers fertilized, though these are so excellently constructed for cross-fertilization, is a remarkable fact" (p. 280). Large numbers of species have been obliterated. Of *Cypripediums* he

says, "An enormous amount of extinction must have swept away a multitude of intermediate forms, and has left this single genus, now widely distributed, as a record of a former and more simple state of the great orchideaceous order" (p. 226). And yet he thinks the order is a comparatively modern one in the line of creation. "Can we feel satisfied that each orchid was created exactly as we see it? \* \* Is it not a more intelligible view that all orchideae owe what they have in common, to descent from some monocotyledonous plant?" (pp. 245-246.) Evolutionists will, no doubt, assent to this view. A writer in the *Proceedings of the Academy of Natural Sciences*, of Philadelphia, some years since, suggested that orchids were but irids gone mad! They have all the elementary parts of the great Iris family, but differ mainly in having normally separated parts united and consolidated, so that it is almost impossible to detect by direct reasoning this close relationship. There is also in some irids, a tendency to "abhor self-fertilization" and coquette with the insect tribes, but some of them, and of these the pretty and very common *Sisyrinchium Bermudianum* is a notable example—have not evolved to this modern tribe, but have preserved their original simplicity and habits of self-fertilization, and keeping *Sisyrinchium* in mind, have gained a foothold over a district thousands of square miles in extent, and which no species of orchid can ever hope to equal. There is never any difficulty in a student's finding *Sisyrinchium* for examination, but he may have to go miles for an orchid. Is it therefore not remarkable that so modern an order should be subject to these exterminating conditions, if the usefulness of the arrangements is to be interpreted as Mr. Darwin does? A poet would even take the extreme beauty of these flowers as in a living sense unnatural, and build on it an argument for speedy dissolution. "I trust," says Byron, in notes to *The Giaour*, "that few of my readers have ever had an opportunity of witnessing what is attempted here in description, but those who have, will probably retain a painful remembrance of that singular beauty which pervades, with few exceptions, the features of the dead, a few hours, and but a few hours, after the spirit is not there." This idea that the orchideae, with their elaborate arrangements for cross-fertilization, are on the high road to extinction, is not a new one. It is suggested in a paper on Cross-Fertilization, published in the Detroit (1875) volume of the *Proceedings*

of the American Association for the Advancement of Science, and certainly is supported by the facts and suggestions Mr. Darwin gives in the work under review. Even man takes advantage of the orchid's beauty only to destroy it. M. Ortgies, a noted collector has recently stated in the *Gardener's Chronicle*, that of some species which formerly existed in abundance, in certain districts in South America, not a single individual can now be found within a circuit of three hundred miles. If they took on beauty to shun self-fertilization, they have but hurried to a sadder fate. It is a new illustration of avoiding Scylla only to strike on Charybdis.

To review Mr. Darwin's two books properly would require space almost equal to the works themselves. The biological student will want to read them carefully for himself. He may become satisfied that nature has some great object in view by these arrangements for, and the facts of, cross-fertilization. If an enthusiastic son of science he will hardly know how to feel grateful enough for the patient, laborious work of Mr. Darwin, in piling up the facts here presented; but we shall be very much surprised if he do not conclude that there is infinitely more self-fertilization among flowers than advocates of insect agency have of late years been contending for; that cross-fertilization, as developed to advantage by Mr. Darwin's artificial experiments, is an almost impossible occurrence in most cases in nature; and where it must and does occur, the fact is capable of a very different explanation. THOMAS MEEHAN.

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### TRANSCENDENTALISM IN NEW ENGLAND.<sup>1</sup>

MR. FROTHINGHAM'S recently published work on "Transcendentalism in New England" has opened up a most delightful and curious field of inquiry in the history of American Literature. The Boston school of writers, always a strictly indigenous growth, has in these latter days ramified so exceedingly and assumed to itself such a peculiar and fascinating mode of thought and expression that it becomes a study of no little importance to trace back the several streams to their hidden source, and as far as possible,

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<sup>1</sup> By O. B. Frothingham. New York: G. P. Putnam's Sons.



determine their productive and shaping fountain head. For this inquiry Mr. Frothingham is by nature and education most peculiarly fitted. He has performed the task with striking ability and truthfulness. It is not my purpose to review the work before me; it is too profound and exhaustive, too strictly philosophical, ever to become a popular book, and a conscientious critique would of necessity partake largely of the same character. Leaving, therefore, that task to others, relying on Mr. Frothingham for authority and inspiration, and referring to his work for a full history of the movement in its European and American phases, I pass to the consideration of the remoter effects of Transcendentalism upon more recent New England writers, as shown in their published works.

The influence which Mr. Emerson and that enthusiastic band of men and women drawn together by the strong ties of kindred passions and beliefs and kindred longings for the universal improvement of Mankind, who found a messenger in the "Dial" and an "Utopia" in "Brook Farm;" the potent influence which these men and women have had in shaping and guiding the subsequent literary activity of New England, has always been a subject of most intense interest to me. Like Carlyle in England, the seer of Concord, and his brother zealots, have created a very pronounced school, and drawn around them a most devoted and intelligent band of followers. Emerson was and is the oracle and master spirit, and to the growing literary generation his writings have been strongest intellectual food, which, however diluted with foreign matters or digested into originality and native vigor by others, fails not to retain some little of his "form and feature." He has thrown out his thoughts in terse sentences and pithy aphorisms: Hawthorne, and Howells, and Aldrich, and Lowell, have translated them into weird, gauze-like, festoons of poetry, and many-colored, delicately-set, mosaics of life and adventure, making them fresh and fascinating with the stamp of original, creative genius. With the master Transcendentalism is a book of life; it colors his thoughts, it shapes his religion, it guides his actions. There is no territory of belief, of science, or of art, too mean or too great for its application. *Religion* viewed through it becomes antinomistic and super-scriptural; God may contradict himself, does contradict himself, miracles still are performing, ecstasies and inspirations are still potent, not to be despised. *Nature* is merely a projection of man's individual consciousness; not that she may not and does not exist *per se*, but her appearances

are so different, so deceptive, showing green to one and blue to another, pessimistic to this man and optimistic to that, that after all idealism (not real but demanded) is our only refuge. "Everything flows out from an invisible, unsounded, center in (man) himself." *Ethics* follow. Man is self-sustained, self-dependent. "Everything real is self-existent." We are not children of circumstance, hence solitude, hence separation from society. *Art* is but the reproduction of shapes and scenes spirit-created and spirit-cast upon the foreground, the world, which is nothing, hypothetically, but a bare canvas. So much for the master. Transcendentalism bears a very unlike, less comprehensive part, in the culture of the pupils. With them it is only a literary Bible. It spiritualizes, if I may use the word, their style, makes their writings mythical, grotesque, supernatural,—if poetry, perhaps obscure; gives their sketches a psychological character; encourages the declaration of resemblances and correspondences between things spiritual and things material, likenesses at once new and startling. The "Scarlet Letter" sewed upon Esther Prynne's breast, and the "Scarlet Letter" burning in her bosom: Cranch's poem "Correspondences," which speaks of natural forms and objects as letters and words of an universal language appreciated and understood by Adam before the fall, but then lost, and now gradually coming back to us in the progress of scientific research and investigation: Oliver Wendell Holmes' likeness of the "Scarabee," in his "Poet at the Breakfast Table," and the wonderful way in which he works out the resemblance even to minutest particulars: Thoreau's boat, which was painted "green below with a border of blue, with reference to the two elements in which it was to spend its existence:"—the whole modern Boston school of writers abounds in just such delicate, fantastic, thrilling, fancies. Transcendentalism has stamped itself thus visibly and appreciably on almost every recent work.

Let me show by a powerful example how Emerson's Transcendentalism has been handled by Hawthorne. I do not deny Hawthorne's possible originality, but the sequence is so exact as almost to exclude such an explanation. "Nature," writes Emerson, "wears the colors of the spirit." Turn to Hawthorne's "Scarlet Letter," where Pearl, the child of sin, snatches the "Scarlet Letter" from her mother's breast and tosses it into the brook. Do you remember the great change? Before, when the emblem of her transgression was still with her, clouds brooded black; the wind

sighed sadly among the pine tops; no birds' voices made liquid melody in the air; the brook flowed sullenly and dark; nature seemed the very mirror of her sin, as when, once before, the "sky was darkened and the rocks rent, and the graves gave up their dead." But Pearl, in a wayward freak, seized the scarlet sign and threw it far away out of sight into the brook—in an instant all was fair and glad and bright; the sun peeped out through a hole in the clouds, and lit up a thousand bright flowers, and transfused the whole landscape with a quick glory; the woods rang out with clear, loud melody; the wind played a "rolling organ harmony" with swaying limbs and leaves and branches; the brook babbled and flashed and danced gayly on its course. The transition is a most tremendous one—a pure spiritual radiance gleams into and out of every nook and cranny of the wood and field—the very spirit of Transcendentalism is abroad in its power and beauty. I might multiply examples. The whole literature of New England, within the last forty years, shows unmistakable signs of transcendental thought and transcendental teachings. They radiate from those exquisite *Twice-told Tales* of Hawthorne's; they flare and flicker in Thoreau's lonely journeys through forests and on rivers; they breathe through Howells' fine touch, and choice, elegant diction, and well-nigh divine fancy; they color and transfigure with "the light that never was on sea or land," all the sweet, wistful, sad, poetry of Aldrich, and Cranch, and Holmes; they add to "Elsie Venner" and the "Guardian Angel," an exquisite frenzy and a super-human horror and pathos; they nod and beckon with piquant coyness in Constance Fenimore Woolson's sketches and Henry James, jr.'s stories: they burn with clear, pure flame in the golden lines which Longfellow and Whittier have written, which are dear and very "household words" with us all; they lift Clarke, and Weiss, and Samuel Johnson to lofty heights of spiritual insight and catholicism.

Let me point out more particularly the influence as it exhibited itself in the works of Hawthorne, Thoreau, and others.

Hawthorne, as the earliest and dearest disciple, shows the clearest signs of the leavening. His novels and tales are weirdness incarnate, the very form and face of all distorted and shadowy shapes. On most intimate terms with Emerson, Parker, Ripley, and Alcott, and breathing largely their transcendental atmosphere, their mysticisms and socialisms, their sublimed passions and theories, moulded into

his thoughts came from his pen in new and delightful forms. Mysticism becomes a hazy, strange, puzzling, and yet striking, correspondence and coincidence in facts and events of world-wide difference; the natural and common grotesquely typical of the supernatural and unusual. Socialism crystallizes into a delicate, but positive and irresistible, band and bond of connection between souls of far unlike passions and in far different conditions. Witness the weird, strong, spiritual, connection between the natures of Zenobia and Hollingshead and Westervelt's sinister designs; the prevailing spiritual atmosphere which enveloped and swayed and fated the "House of the Seven Gables." Sin, weaving its dragging, strangling meshes closer and closer around young, pure hearts; the agony of remorse, the palsies of horror, the exquisite and cruel renderings of conscience. Every character is a psychological study: Donatello, that most wonderful of literary creations, a sort of softened Caliban, a missing link with all the bestial sympathies and none of the beastly appetites. Every actor is a distinct, disembodied soul, with apparent physical curves and angles, but the mirror of its inner graces, or crotchets and idiosyncrasies, the very face of nature visionized into a shadowy, intangible, panorama of ghost-land and spirit-land.

"The Transcendentalists," says Emerson, "are lonely; the spirit of their meetings and conversation is lonely; they repel influences; they shun general society; they incline to shut themselves in their chamber in the house, to live in the country rather than in the town, and to find their tasks and amusements in solitude." Was there ever a better picture of the lives of Hawthorne and Thoreau, particularly the latter, who spent all his life in closest communion with wildest nature, hearing from trees and waters, and flowers, and insects, and birds, and beasts loud oracles, clear prophecies, unmistakable spiritual utterances, and subtlest sayings whose only voice was, and is, and shall be the "voice of silence," strongest and loudest in deepest and stillest woods and floods and galaxies! Nature seemed more willing to communicate her thoughts when he was with her; seemed to be less sphinx-like and at times even very voluble. He was a most quiet and patient observer, and like Donatello, very near in sympathies to the animals and plants. The sighing of the wind among the trees was a personal reproof to him. For him, as for Bryant, the forest was a great temple whose choristers were birds,

a building "not made with hands," through whose green roof the sun, and moon, and stars, betimes peeped as angels with mild, holy, eyes; whose services were soft zephyr-breathed prayers, and loud, wild litanies, and sermons in stones, and brooks, and trees. I cannot do better than quote one of his exquisite descriptions: "As we have said, nature is a greater and more perfect art, the art of God. \* \* \* Our art leaves its shavings and its dust about; her art exhibits itself even in the shavings and dust which we make. She has perfected herself by an eternity of practice. \* \* \* The landscape contains a thousand dials which indicate the natural division of time, the shadows of a thousand styles point to the hour. \* \* \* In deep ravines under the eastern sides of cliffs, night forwardly plants her foot even at noonday, and as day retreats she steps into his trenches, skulking from tree to tree, from fence to fence, until at last she sits in his citadel and draws out her forces into the plain. It may be that the forenoon is brighter than the afternoon, not only because of the greater transparency of its atmosphere, but because we naturally look most into the west, as forward into the day, and so in the forenoon see the sunny side of things, but in the afternoon the shadow of every tree." You see how he seeks the substance and the type below forms and appearances.

Again in Oliver Wendell Holmes' novels and poems the effects of transcendental education are very apparent. How powerfully the influence shows itself in "Elsie Venner," and makes of the whole tale a strange, strained, inhuman, superhuman, story! Insanity running mad and yet strangely rational freaks; "Elsie" herself not of earth, not of hell, least and yet most of heaven. There seems to be a spiritual principle let loose in nature, there beset by adverse circumstances and hindering motives, largely bent on evil and yet often effecting good. In "Elsie Venner" we again, as in the "Scarlet Letter," and "Septimius Felton," stand on the brink of that strange, unsolved, question—the "Mission of Evil in the World,"—its critical and intricate relation with good—a most fascinating and most unsettling inquiry. There is a decided vein of transcendentalism running through Holmes' later and humorous works, some of the spiritual likenesses in "The Autocrat at the Breakfast Table," are exceedingly quaint and curious. So it is especially with his poetry. I call particular attention to the unusual, but striking line of thought pursued in "Lovesick in

Heaven," "Under the Violets," and "The Voiceless." I hold that these three tender buds are manifest nurslings of the Boston Transcendental School.

And so, with the same assurance of like effects following like causes, I might examine at length the works of Howells, Aldrich, Stoddard, Warner, James, Miss Phelps, Miss Woolson, Lowell, Whittier and Longfellow, confident of discovering well-marked traces of the same spiritual and literary renaissance. The task, however, would be a very long and perhaps unsatisfactory one, and I think I have said enough to establish my point. The contemporary Boston writers have lately been influenced not a little in their style and education by the doctrines of the English Art School, including Tennyson, Matthew Arnold, Rossetti and others. The Art School, however excellent it may be of itself, is essentially opposed to the Transcendental School of Boston. The first preaches grace and finish and polish; a completely harmonious and artistic literary form; faultless and rounded expression which has found its most perfect type in Alfred Tennyson. The second goes deeper, affects substance more vitally, and in its earlier phases demands a certain natural ruggedness of thought and finish.

In conclusion I may say that I have not mentioned any of the older writers, such as Emerson, Parker, Ripley and Margaret Fuller, except to quote from the first. All these prophets of the faith are fully and clearly portrayed and criticised by Mr. Frothingham.

SAML. M. MILLER.

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### NEW BOOKS.

**SIX WEEKS IN NORWAY.** By E. L. Anderson, Author of "Northern Ballads." Cincinnati: Robert Clarke & Co. 1877.

To any one about to make a trip to Norway this book would be valuable "Where to go and what to see;" to the large number of those who are not it will afford a moderate amount of entertainment.

The means and the method of getting from place to place seem to have engrossed rather a disproportionate share of the writer's attention. Most of his traveling was done in a light calèche which conveyed himself and his wife, with luggage and supplies of pre-

served meats, wine, etc., the houses of entertainment for man and beast being not always reliable as to provision for the nobler animal. Horses and post boys are readily procured at the post stations; and with a courier, who is necessary for those not understanding the language, one can journey very pleasantly in Norway, and, it would seem, at no very heavy expense.

This is the usual way of journeying by land, as railways are not numerous. Occasionally, the post-boy is a pretty girl, as happened to Mr. Anderson, and to others of whose experience we have read.

The scenery in Norway is grand and peculiar, unlike almost any other in the world, with its magnificent combination of sea and mountain. One could imagine that a range of Alps had been partly submerged, and that the sea had invaded its deeper valleys.

The description of the Geirange fiord, "the grandest in Norway," brings to mind that of the great cañon of the Colorado. "The water is hardly more than a mile in width, while on either hand rise smooth rocks, with hardly a break in them, to a height of nearly 5,000 feet, apparently even greater. On the right a winding path, cut into the side of the cliff, leads to a house built upon a ledge, where a venturesome mountaineer has sought to win a living from the little earth that has there found a resting-place. We could well believe, as we were told by the master of our vessel, that the children were, for safety, tied to the door-posts, and that those of the family who died on the farm were lowered by ropes 1,000 feet to the water below."

Yet there is no monotony; each fiord has its own peculiar features, "always magnificent." On the Nord fiord there is a view of the Insteral glacier, "rising even with the high peaks," and seventy miles in extent.

Naturally the chief means of communication on the fiords is by water, and there is a very suggestive description of the fiord on Sunday, lit up by the morning sun, and covered with a fleet of little boats filled with gaily dressed peasants on their way to the little church whose bell is tolling near by.

At the various halting places the travelers met very pleasant company, mostly English, who visit Norway in numbers. It is a favorite resort for English sportsmen; the finest trout and salmon abound in the streams, while grouse, blackcock, reindeer, bear, and elks are found on the mountains.

For the Norwegians the author entertains a hearty liking and admiration, which will be shared by his readers. Intelligent, honest even to the couriers, sober and energetic, they prosper in a country "little better than a range of rocky mountains." The government is essentially a popular one, the parliament being elected by the people, and the upper house chosen from the lower by itself; the king is much loved, how much power he has is not stated; there are no titles of nobility. Such people as these we gladly welcome to our shores, whither many of them have come. They

are worthy descendants of those grand old Northmen, once the terror of Europe, whose daring seamen, in their little vessels, crossed the vast, unknown ocean to America nearly five hundred years before Columbus.

At the close of his book the writer, much to his reader's gratification, like the ancient Scalds, breaks into a song in honor of one of Norway's heroes, King Harold Hardrada, who invaded England almost simultaneously with William the Norman, and was defeated and slain at Stanford Bridge by the Saxon King Harold.

The poem gives a stirring picture of the invasion and the battle, and then turns to a lament over the death of the Norwegian hero, and the destruction of his army. Mr. Anderson has been fortunate in his publishers, who have put this work into a very attractive shape.

THE LIFE OF MARIE ANTOINETTE, Queen of France. By Prof. Charles Duke Yonge, of Belfast. Pp. 473. 8vo. New York: Harper & Bros.

The ill-fated Marie Antoinette is one of the representatives of the old Regime, whose sorrows and misfortunes, and womanly dignity have secured her the sympathetic regard of the Democratic world. Burke's passionate eulogy of her excites perhaps more of response and less of dissent, than any other of his utterances in regard to the French Revolution. And yet when we trace more closely her exact relations to the men and the movements of that time, we are compelled to see in her the evil genius of the King and the monarchical party, and the remote author of all the misfortunes which befell her husband, her children and herself. For 1789 might have been 1830, or at the worst 1848, had not the misplaced spirit and energy of this daughter of Maria Theresa brought the royal family into collision with the wishes and purposes of the people.

Mr. Yonge might have taken Burke's eulogy as the motto of his book. To him she is the embodiment of all that is wise, gracious, good and womanly. Even when he narrates such mischievously wrong steps as the part she took in the dismissal of Turgot, her gambling, her levity and frivolity, and indifference to the King, it is with light touch, and in a tone of apology, while everything that can be construed as redounding to her credit is emphasized. His book is interesting and readable—more so than any of his previous works—but it is not trustworthy as a history. It gives us the English Tory's view of the French Revolution; it is based in part upon documents of doubtful authenticity. The six volumes of letters published by M. Feuillet de Conche, except so far as they are authenticated by the collection of M. Arneth in four volumes, are not yet in a position to take rank as sources for history. They lie under grave doubts of being in large part the product of one of those clever literary *supercheries* of which France



has seen so many in our own time, and the impression which would be drawn from the two collections is a very different one.

Still, it is well that we have some better English account of a Queen so much superior to those around her—if so far inferior in understanding of her times to such women as her mother—than we had in the *Memoirs* of Madame de Campan. And Mr. Yonge writes in the same chivalrous spirit as Burke spoke in, so that his narrative is always vivacious and readable. We notice some slips, as when he speaks of France in 1778 making a treaty "with the United States, as the insurgents called themselves." American history is not his strong point.

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#### BOOKS RECEIVED.

- Hours with Men and Books. By William Mathews, LL.D. 12mo. Pp. 384. Cloth, \$2.00. Chicago: S. C. Griggs & Co. [Claxton, Remsen & Haffelfinger.
- Gatherings from an Artist's Portfolio. By James E. Freeman. 16mo. Pp. viii.; 297. Cloth, \$1.25. New York: D. Appleton & Co. [Porter & Coates.
- Petites Causeries, or Elementary English and French Conversations for Young Students and Home Teaching, to which are added Models of Juvenile Correspondence in French and English. By Achille Motteau. 12mo. Pp. 150. Cloth, \$1.25. New York: D. Appleton & Co. [Porter & Coates.
- A Practical Treatise on Lightning Protection. By Henry W. Spang. With Illustrations. 12mo. Pp. xii.; 180. Cloth, \$1.50. Philadelphia: Claxton, Remsen & Haffelfinger.
- After Many Days; a Novel. By Christian Reid. 8vo. Pp. 212. Paper, \$1.00. New York: D. Appleton & Co. [Porter & Coates.
- The Northern and Asiatic Defenses of Turkey; with an account of the military forces and the armament of the belligerents. With Maps. 8vo. Pp. 52. Paper, 50 cts. New York: D. Appleton & Co. [Porter & Coates.
- Personal Immortality and Other Papers. By Josie Oppenheim. 12mo. Pp. xvi.; 98. Cloth, \$1.00. New York; Charles P. Somerby. [J. B. Lippincott & Co.
- The Anonymous Hypothesis of Creation: A brief review of the so-called Mosaic account. By James J. Furniss. 12mo. Pp. 54. Cloth, 50 cts. New York: Charles P. Somerby. [J. B. Lippincott & Co.
- Eugénie. By Beatrice May Butt. *Leisure Hour Series*, 16mo. Pp. 234. Cloth, \$1.25. New York: Henry Holt & Co. [Porter & Coates.
- Turkey. By James Baker, M. A. Lieut. Col. Auxiliary Forces. With two colored maps. 8vo. Pp. xxii.; 496. Cloth, \$4.00. New York: Henry Holt & Co. [Porter & Coates.

THE  
PENN MONTHLY.

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JULY.

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THE MONTH.

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**T**O our telegraphic and telephonic age, the war seems about as slow as that war against Troy, in regard to whose historic reality, Gladstone and Schliemann are reviving the faith of this generation.

In the Asiatic field of operations the Russians are making some progress, but they are not going to merely invest Kars, while they advance upon Erzeroum. They mean to take that fortress before proceeding farther. The Turks made a good stroke by seconding an insurrection of the Moslems in the Caucasus, the Tscherkesses, and the Abkhasians, but both the mountaineers and their Turkish allies met with a prompt and vigorous resistance, terminating in their defeat. It is reported that a good number of Moslems from the Volga provinces serve without scruple in the Russian army in Asia.

The army on the Danube seems to have been detained chiefly by the impossibility of getting across a river swollen by the melting of the snows. That the Czar has come to take his place among them bodes no good for the result of the campaign. Alexander II. is a man of ability, but a hypochondriac of the most pronounced type. He is irresolute, unpractical, and altogether devoid of that executive genius which scorns every obstacle. If John Sobieski were alive,—and the old hero must be stirring in his grave—the Christians would have been in Constantinople before now.

The Turks seem to feel their need of external aid, if the struggle is to be a long one, and to have adopted a very peculiar way of summoning it. For several days the Russian successes in Asia were reported in exaggerated terms, seemingly with a view to alarming England, and bringing her to the rescue. Close as has been the friendship of the two countries, the Turk has not yet learned the character of his English friends. John is in so far a true Moslem that he worships nothing so heartily as success; all Europe must have laughed at this gross misunderstanding of the principles of his Christian civilization.

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ROUMANIA has declared her independence of the Turkish Empire, adding another to the sisterhood of free European States. But she does not seem to have been received with open arms, or any other effusion of affection. The country and its people are a sufficiently curious study, and may be said to have been discovered during this war. It is full of the reminiscences of that old Roman Dacia, from which the people have inherited their Romance language and their Romance origin. Isolated to a great extent from the later currents and movements of European history, it seems to have transmitted to modern times at least as much of the life of an old Roman province, as Greece has of the ancient Hellas. But the graft taken from a decayed tree bears in itself the element of decay; and it is chiefly the self-indulgence, the love of luxury, and the vices of the Imperial era of Rome that they have inherited. Their nominal Christianity seems to have served them only as an opiate for the conscience. They have been intellectually, politically, and in every other sense a stagnant people, while they ape Paris fashions, English institutions, and Slave brutality as regards the Jews, with a fine facility. By reason of their situation in the far north and of their relations to Russia, they have suffered less at the hands of the Turk than his other Christian victims, and they have manifested very little interest in the struggles of the Bulgarians and the Servians for their freedom. They excite no sympathy and no hope.

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THE violent overthrow of the French Ministry of Jules Simon by President MacMahon, and the transfer of power to a coalition of reactionaries under the lead of the Orleanists, becomes more intelligible but not more excusable as the fuller accounts of what pre-

cedes that event reach us. The struggle between the Ultramontanists and their antagonists of course underlay the whole event. The *parti pretre* is everywhere hoping and striving for a new crusade against Italy, with a view to the restoration of the temporal power of the papacy, and like all fanatical and one-idea-ed parties, they look upon every disturbance as the beginning of their victory. Just as some Protestant enthusiasts of the Cumming type are sure that every great event portends the immediate overthrow of the papacy, so the Ultramontanists can read the story of what occurs in Europe only as bearing upon the release of "the Prisoner of the Vatican." With every excitement, they are excited, and a great war seems "the beginning of the end."

Nor are their opponents a bit less fanatical. Dr. Newman says somewhere in his *Apologia*, that there is a sort and degree of wickedness in Catholic countries, of which Protestant countries are incapable. There is certainly a wide-spread hatred of the Catholic church and even of Christianity among the Radical parties of Latin Europe, to which there is no parallel even in Germany. The notion of treating the priests and their followers as entitled to equal rights before the law with other citizens is fast disappearing from the Radical mind, as utterly as it did from that of the French Revolutionists. All the old hatred divided about equally between the monarchy, the aristocracy and the hierarchy, is now concentrated upon the last alone, and the murder of the Archbishop of Paris by the Communists was but the solitary outburst of a dark abyss of unreasoning malice, which underlies half the life of France. It needs but to look at the latest and most popular Parisian prints and engravings, to see how much of fierce sarcasm is aimed at the priesthood, and how rapidly the light, mocking, tolerant, or at least not consciously intolerant spirit of Voltaire is again giving way to the atrabilious, intolerant spirit of Marat. The old type of anti-clerical picture,—the fat abbott detected by the roguish boys and vainly hiding his Friday fowls under the table, and the like,—was consistent with and even implied some degree of contemptuous sympathy with the weakness which was satirized. But nothing short of contemptuous hate is indicated by this new type of picture, of which the best representative is one called "After the Sermon." The priest seems to have just come from the pulpit; he is standing in one of the splendid vestry rooms of the church, holding his sides in convulsions of laughter—laughter whose object must be the audi-

ence he has addressed, the ritual at which he has assisted, the words he has spoken. A more hateful object can hardly be depicted. And this new type of radicalism is that which is spreading through French society—spreading all the faster for the forced hypocrisies which prevailed under that saviour of society whom France so recently lost. M. Gambetta has at last—it is charged—made himself its mouthpiece, and thus arrayed France in two hostile camps before the recent quarrel broke out.

As usual in French politics, the technical wrong is chiefly on one side, but the essential wrong is on both. Both parties put the thing they like before the thing they ought to do; in neither is there that higher devotion to any large common aims whose contemplation would diminish the sharpness of party antagonisms. France by rejecting the Reformation, and failing to achieve any equivalent reconciliation of faith and science, has condemned herself to irreconcilable antagonisms and violent reactions. We do not say that Protestant communities have always realized in actuality any such reconciliation; but they have accepted it in idea, and they have the possibility of it.

The most hopeful sign for the future is found on the Republican side. All the sections of the Left have shown a masterly reserve and self-control under great provocation, whose motive we would fain hope is more directly patriotic than the dread of the President and his soldiers repeating the *coup d'etat* of 1851. Rejecting the Budget, and declaring by an overwhelming majority their want of confidence in the DeBroglie Ministry, they have yet abstained from all extreme measures, nominated M. Thiers as their candidate for the Presidency should MacMahon resign it, and quietly submitted to the exercise of the power of dissolution vested in the President and the Senate.

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THE notice given by M. Thiers during his brief Presidency, that the Commercial Treaty of 1860, between France and England, would cease to be of force at a given date, has not been canceled by his successors in power. The French ministry in 1874 sent out notices to all the various Boards of Trade asking their views on the matter, and the majority asked for a revision of the duties. These were referred to the Superior Council of Commerce, which in spite of all the influence brought to bear upon it by the Free Trade and the English interests, recommended that the Protective

system should be adopted in general for the country, and that whatever changes should be made by treaty should be of the nature of reciprocal concessions. In the course of this discussion one point, was brought forward which has been strongly insisted upon by Protectionists, but never before admitted by any of their opponents. "In vain it was shown," says *The Saturday Review*, "that the commercial treaties only exchanged a prohibitive for a protective tariff; that for example iron . . . and yarn, both cotton and woolen . . . are taxed more heavily than in almost any other European country. . . . The Council decided that the tariff of the treaties should be adopted as the general tariff. . . . The Government has introduced a bill in accordance with the decisions of the Council. Another decision of great importance was that specific duties should in every case be substituted for *ad valorem*."

Now observe the effect of this preliminary action upon the negotiations. Only a Protectionist country can secure any other terms than those of that Tariff of 1860, which we have always asserted to be protective, and which is now admitted to be so. For only Protectionist countries can make concessions, and thus secure reciprocity. England in 1860 wiped out her last Protective duties on articles whose import concerns France, and she cannot now reimpose them. She has nothing to offer, nothing to expect. She had something to offer in 1860, because for fifteen years after her nominal adoption of Free Trade she went on protecting her silk manufacturers. French competition has now driven them out of their home market. Macclesfield and Coventry were hardly represented at our Centennial Exhibition; they told the British Government very plainly during this present year that without Protection they cannot go on. They were thrown in 1860 as "a tub to the whale;" but there are no more such tubs to throw, unless it be the duty on wines. "But a proposal to reduce the wine duties would raise in arms the landed interest of the United Kingdom, and the whole liquor trade as well. The agitation for the repeal of the malt duties would revive in full force, and the complaint of Ireland that she is overtaxed . . . would gather fresh strength, and would be reinforced by the complaint that she was sacrificed to foreign interests."

And furthermore the substitution of specific for *ad valorem* duties will make the "protective tariff" of 1860 far more protective than it was. Specific duties bear hardest on the coarser and

cheaper varieties of goods. "But the English trade with France in textile fabrics," says our London contemporary, "is almost exclusively on the coarser and cheaper goods. The French manufacturers can more than hold their own in the finer qualities."

We are not surprised to hear that when the French and English Commission to revise the Treaty of 1860 met, they found their task not an easy one. The English had their proposals all neatly ready, as to what France should do:—so much duty to be taken off this now, so much off that, so much more five years hence. But when met by the answer that the French Government had decided to maintain the Tariff of 1860, except as modified by reciprocal concessions, and to convert all duties into specific, they found they could make no headway. They adjourned their sessions, and went home for fresh instructions. On the other hand nearly all the chambers of commerce, on whose support they had relied, have pronounced against their proposals.

On the whole we shall not yet take France out of the list of the countries which owe their prosperity to protection; and a country which can save a quarter of a milliard every year is likely to enjoy economic prestige enough to lead others to follow her example. How the present troubles have affected the pending negotiations, we cannot say. We do know what will be the effect of the triumph of the Republicans, and of the accession to the Presidency of the great Protectionist statesman who is the true choice of the French people; and England knows.

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THE Ridsdale judgment, forbidding the use of any vestments in the services of the English Church, which are not used at all times and in all services, has created no little excitement in ecclesiastical circles, and even some signs of organized revolt. The ritualists who protest against the decision, seem to have good ground to complain of the whole relation of the church to the legislation by which she is controlled. There is no "voice of a living church" nor even of a living state to adjust the law to the needs of a new generation. What was enacted in the reign of Elizabeth to revive and legalize the usages of the reign of Edward VI., is the standard by which clergymen of the reign of Victoria must be governed. For the recent legislation on the subject merely provided a tribunal and a method for the prompt punishment of offenders. The need of new adjustments is very evident, but is prevented by

the absence of some adequate representative body to legislate on the subject. Parliament no longer represents the laity of the church; the Convocation represents but a fraction of the clergy; and in the absence of any adequate method of securing a conference of their views, the breach between laity and clergy is rapidly widening. That during the present not very rational excitement against the ritualist party, any extension of liberty as regards the matters now involved in dispute would be granted, is not probable. But if the Ritualists will but adopt the old Tractarian motto: "In patience and quietness shall be your strength," they will see this like other excitements, notably that which culminated in the Ecclesiastical Titles Bill, pass away and be forgotten. We speak not merely from the sympathy engendered by seeing well-meaning people treated with unreasonable harshness, but also from the conviction that the type of thought which they represent, has, while no exclusive claims to men's adherence, yet a great and permanent importance in the development of the Christian church.

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THE student of social methods and ideas will not fail to be amused by the curious conflict of feelings with which Gen. Grant's reception in England is regarded by his fellow citizens in America. The instinctive sense of propriety, the growing respect for social forms, and the sense of the General's representative character as standing for the American people, all incline Americans to approve of the action of our government and its English representative in suggesting a distinguished reception, and the cordiality and spontaneity of our English friends in conceding it. But on the other side is the powerful tradition first established by the Jeffersonian Democracy, and now come to be regarded as essential to our national character,—the tradition that "republican simplicity" is not consistent with display and a formal etiquette, and that our public men should imitate the supposed simplicity of Cincinnatus and Cato. Simplicity and the absence of pomp has certainly not been identified in history with republican government. The republics of Greece and Italy affected as much style as any monarchy could, and for the reason that they found it of use. George Eliot in her *Romola* makes Cennini speak of the public processions of Florence as "the great bond of our republic expressing itself in ancient symbols, without which the vulgar would be conscious of nothing beyond their own petty want of back and stomach, and never rise to the



sense of community in religion and law. There has been no great people without processions." The old Federalists were much of that way of thinking, as we learn from the recently published *Recollections of Samuel Breck*, who ascribes the change in this respect to "that leveling philosopher Jefferson" and the slave holding planters who succeeded him in the Presidency, and who managed everything in the slovenly style of their plantations.

But the pseudo-classicism of our "republican simplicity" will not long maintain itself in the face of the revival of the artistic instinct among our people. It will come to be seen that the elective character of our magistracies is no reason for the absence of those outward symbols of dignity and authority, with which other peoples have always sought to invest the representatives of their social unity and political dignity. Even the throne, as the symbol of the permanence of the governmental system, while rulers come and go, is far more fitly the seat of a republican chief magistrate than of the "personal" ruler. The old tradition will remain as an element of wholesome restraint to ensure moderation, but will lose its present normative force.

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THE month has been an eventful one, as regards the development of the financial policy of the Administration. Secretary Sherman has the fullest confidence in the wisdom of the Resumption Act, and of his own power to execute it by contracting our paper currency. And he has not been sparing of declarations to that effect, and has pointed out various ways in which he will be able to do what has no direct sanction in the laws of the United States. For instance the currency reserve of the Treasury has been used in canceling the twenty-two millions of greenbacks, replaced by national bank notes under the new banking law. This amount he claims the right to replace by buying up that amount of greenbacks with the gold received for new issues of bonds. Then again, the law providing for a Sinking Fund, though clear enough as to its intent, is so loosely worded that the Fund could be converted into a receptacle for redeemed treasury notes, probably on the principle on which some of our railroad corporations make their Sinking Funds the depository for "pups."

On the other hand, by throwing his new four per cent. bonds in the market, he hopes to secure the control of vast sums of gold, which he is at full liberty to spend either in legitimate funding

operations, or in hoarding gold, or in cramming the Sinking Fund or the Treasury reserve with greenbacks, the two latter operations being meant to facilitate resumption. He stopped the sale of four and a half per cents, when a hundred millions of their amount were still undisposed of, and presented the four per cents to the public for popular subscriptions at par, while money commands eight and nine per cent. on the best security.

At this point a question was raised which brought into the sharpest light the conflicting forces which are brought to bear upon the Treasury. The four per cent. bonds are redeemable in coin "of the standard of 1870," and at that date silver was legal tender, the double standard not having been abolished till 1873. Now four per cent. bonds purchasable at par in gold, but redeemable in silver, are a ridiculous investment to offer in the European money markets, much more in those of America; and a Treasury official at once came forward with the declaration that in spite of the explicit and unmistakable statement on their face, they are redeemable only in gold.

But then came the outcry from the Western Republicans, that Sherman had surrendered them to the Democrats. All parties in the West have seized upon the silver solution of the financial problem, as the best compromise between the hard money and soft money positions, and the coming elections in Ohio or Indiana are expected to depend on the extent to which the party declarations on this subject harmonize with the views of the public. The Administration is anxious for a Republican victory, especially in Ohio, and also for an approval of the President's policy by his home constituency, and was ready to go so far as to approve of a remonetization of silver on the same footing as paper, but not as the equivalent of gold. What value this distinction has in the minds of those who expect to raise paper to a gold value a year hence, it is hard to say. At any rate, they would not be too hard on the Argentine Republicans, and the official's letter was quietly snubbed, in compliance, it is believed, with pressure from Ohio.

But now "t'other dear charmer" lifted up her voice in protest. The syndicate could do nothing with the new bonds either at home or abroad, without some security for their redemption in gold. And in view of the very distinct wording on their face, the silence of the Treasury would be fatal. Whether its speech in such a matter is worth much may be doubted, but speak it must. At

whatever political risks, Mr. Sherman, with the support of President and Cabinet, undertook to explain away an enactment of Congress, and to bind the United States to do what the competent authority had made no promise of. Had this question been raised after the sale of the bonds, public faith might have been pleaded for such a construction. And had there been any urgent and immediate necessity for their sale, the nation might have felt itself bound by the act of its official, just as it would by any arrangement he might make at present for the payment of the army. But such conduct, under the present circumstances, shows that Mr. Sherman and his colleagues have some very peculiar notions as to the extent of the executive authority; and if the bond-buyers are simple enough to suppose that Secretary Sherman's letter is worth more than the paper and ink expended in its production, they are more innocent than they are generally thought.

The national banks and the banking firms are rapidly dividing into two parties on the resumption question. On the one side are the syndicate and its friends, who are at present the controlling force, as they have the Treasury at their service. On the other, are nearly all the rest of the banking interest, including multitudes who were formerly zealous for resumption. The national banks in particular are beginning to count the costs of a forced resumption, and many of them have threatened the Treasury with a wholesale cancellation of their issues if they are to be required to redeem them in gold, while that metal is so scarce and costly.

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THE country has lost nearly at the same time its best and its worst historian. Mr. John Lothrop Motley, historian of William the Silent, and Mr. John S. C. Abbott, the eulogist of Napoleon the Little, have died within a month of each other.

Mr. Motley was descended from one of that little group of Scotch-Irish settlers in Northern New England, to which we also owe Greeley and the Websters. His first venture in literature was as a novelist, and happily failing in that he devoted himself to historical study. He showed great judgment in the selection of his theme, as there is hardly any subject in modern European history more provocative of enthusiasm, or more happily central to the European history of the time, than the creation of the Dutch nation by the Calvinistic Reformation. The merits of his books at once commanded European recognition, and brought him the gratitude of the Dutch

people. It was seen that he had so much surpassed Leo and other modern historians of those events, as they had the older writers Strada and Brandt. His last work on Dutch history, John de Barneveld, has not met with such universal favor in Holland, because it gave great offence to the conservative party, and Groen van Prinsterer has shown that Mr. Motley is not always happy in his grouping of facts.

His career as a diplomatist at Vienna and London was honorable to himself, but its termination not so to two Presidents of the United States.

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THE Temperance Reformation which is now spreading in this and in other cities, would excite more hopefulness if we had not had repeated experience of the inadequacy of its method to effect any thorough and extensive cure of the evil. To reach individual drunkards, to secure from them a pledge of total abstinence, and to throw around them the sympathetic influence which will hold them in the right way, is well and good so far as it goes. And it must be said that Mr. Murphy and his friends are working on a higher plane than most of the Temperance Reformers. Himself formerly a dealer in liquors as well as a drunkard, he has written "With Malice toward none, with Charity for all" at the top of the pledge, and his exhortations are quite free from that acrid and passionate pharisaism, with which the very name of Temperance seemed likely to become identified. Nor would we at all depreciate the value of his results. We have high authority for believing that the repentance and amendment of "one sinner" occasions in very high quarters a sensation not justified by the science of statistics and the "law of average."

And yet prevention is needed as well as cure; and to a very great extent the power to prevent this evil rests with society and nowhere else. We should not go on by our neglect of precautions creating drunkards for Mr. Murphy and Murphies as yet unborn to cure by their efforts. The friends of the new movement repudiate, as a rule, all dependence upon political measures, therein separating themselves from the older Temperance Associations who desire the legal prohibition of "the traffic." But the Prohibitionists are quite right in maintaining that social and political action is needed to effect a true reform in this matter. They were only wrong as to the sort of action that was needed, and were led

into that error by the extremeness of their views on the main question. Those who hold that alcohol is a poison, and its use a sin, could not be expected to reach any moderate conclusions on the subject of the State's action; and they have failed, because those two propositions never have been and never can become integral parts of a permanent public opinion. And therefore a law which is based upon them will always have the appearance of a meddlesome interference with individual liberty, and the popular sympathy will go with the lawbreaker rather than with the law.

The temperance reform must now take a shape which will carry public opinion with it, and thus secure an effective regulation of the traffic. It must reduce the number of establishments engaged in the traffic within reasonable limits, and exact precautions for its orderliness. It must raise the payment for licenses to such a figure that those who buy them will dread the forfeiture of a license as a heavy pecuniary loss, and will find it to their interest to put down all unlicensed trading, such as is carried on in two hundred and twenty taverns and saloons of our own city. It must prevent the adulteration of the liquors sold by a careful scientific inspection, so that poor alcohol shall no longer be burdened with the offence against health and sanity committed by a thousand noxious poisons.

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THE recent successes accompanying the efforts to bring American manufactured goods to the attention of foreign purchasers, has raised the question of establishing direct and extensive commercial relations with those countries, with whom we now deal but sparingly and through the medium of England. The manufacturers of Great Britain enjoy very exceptional facilities for reaching every market of the old world, because of the lines of steamers which connect her ports with nearly every commercial emporium. These lines were very largely called into existence by government patronage and subsidies. That form of "taxing the people at large for the benefit of a few producers" has never been found inconsistent with the English theory of free trade. And our own country can with far more consistency take the same step in the promotion of our own commercial interests. The Centennial Exhibition made a good beginning. Already, in consequence of it, our agricultural machinery and implements have supplanted those of England in Russia; American locomotives are going to Eng-

land and to Australia; American watches are superseding those of Switzerland on the Continent of Europe; exports of glass, cotton and paper are making to England itself. But a battle is chiefly utilized by the vigor with which the victory is followed up; and our Exhibition should not prove a Gettysburg through our remissness. We need a more direct and satisfactory communication, first of all, with the people of South America. By all the peculiarities of their situation, they are our natural customers; and if commerce is equal to any of the grand things claimed for it, we may thereby do some incidental good to the political life of our sister republics. Next we need more direct trade with the great silver consuming nations of the East *i. e.* with all the people of Asia and Africa. The bad management of East Indian finance has practically and finally closed the avenue through which our surplus of silver once found its way to them through London. We must now open a new channel of our own. In every quarter of these hemispheres, they need the goods which we are fully able to supply them, and what they do sell us, we now import through London. Mocha coffee, spices, tapioca, and a thousand other commodities reach us after paying half a dozen profits on their way through London and Liverpool, while a direct trade with these countries would be more advantageous and fairer to both parties.

The plan of the new administration to make our consular service a world-wide agency for the collection of useful information on commercial topics, is eminently timely. The English Consuls have been engaged in that service for a long period, and every opening for the extension of English trade has been carefully watched and utilized. And the day may even come when the commercial class will take a pride in the extension of our national interests, and thus rise from being mere "importers," into the higher position of the true merchant.

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We cannot entirely sympathize with the principles upon which the Administration is carrying out the Civil Service Reform. We see in its action and its plans, no assurance of any permanence of result. We feel that it is sometimes attacking not the root but the branches of the mischief, as in forbidding its officials to take a prominent part in political management. Nor can we understand why such men as the Collectors of New York and Boston are suffered to

retain their position. But the Administration errs chiefly by defect of action: when it does act, it generally acts **rightly**, as for instance in announcing that the branches of the **public service** must be managed on the same business principles as a wise and thrifty merchant would adopt in the management of his private affairs.

Of all the appointments made thus far, the selection of James Russell Lowell as Minister to Spain is that which **commands** the most general approval. Had the destination **been** London, it would have been even better. Still it will be a **good thing** for our poet to have seen a country worse than his own, while quite free from the vices which in his despondent moods he **seems** to regard as the certain augury of our destruction. For the "**statesmen**" of Spain do not steal; hence the promptness,—caused by **pure indignation** and utter want of sympathy,—with which **they voluntarily** sent Tweed back to us. And no doubt our literature will be a gainer from Mr. Lowell's residence in that illustrious land. Cervantes, Calderon, Mariana, Theresa—and who can **say** how many more—may be revealed to us through our poet's mission to the land they loved, and become "**familiar in our mouths as household words.**"

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#### HOW TO ELECT THE PRESIDENT.

**P**LANs for election of President are now in **order**, and people are in a frame of mind to consider them; as, **realizing** the great danger through which they have just passed, all **admit** that something must be done. Knowing the perils we **have escaped**, it is criminal to risk them again. "**The Constitution as it is**" will no longer do, and already several well matured plans for its amendment have been presented, all of which propose a **new mode** of electing the President, while Mr. Charles O'Connor suggests a still more radical change that would do away with the **office** of President altogether. He would also have but one **legislative body**, from which the Chief Magistrate should be elected by lot every month, so that the Executive could have no **policy** and no **duties** except to enforce the decrees of the Legislative Chamber. Such a

government as the great lawyer proposes might prove the best ever devised by man, but as it is not possible that it will be adopted till something less innovating has first been tried, we may glance at the other plans which have been proposed, and then consider whether there is not yet "a more excellent way."

The plan of Senator Morton is perhaps the most likely of all to receive the popular support, for the reason that it does not so much disturb the present routine of elections as do the others, and keeps up the illusion of an electoral college after it has ceased to exist. The people under this plan are to vote directly for President and Vice-President, and in each state the candidates having the highest number of votes would be entitled to the two electoral votes at large, while in each congressional district the persons having the largest number of votes would receive the electoral vote of that district. There would be no electors chosen, yet the states would have the same relative strength in making the choice as under the present mode.

The Maish or Buckalew plan also provides that the people shall vote directly for President; that the states shall have the same number of votes respectively in the electoral count that they now have, but that they shall be divided between the parties proportionally, according to the number of votes cast for the different candidates.

Another plan, not new, has recently been revived and approved in high quarters, called the Hillhouse or Nicholas plan. This is thus described: "The electors are to be chosen for each million of inhabitants, and they are to be divided alphabetically into six classes, \* \* \* the members of each class to choose one elector from the class next succeeding it, except class six, which is to choose from class one. \* \* \* Each class is to select one member from the class next in order. From the members so selected two are to be designated by lot, and from the two so designated the President is to be elected by the whole body of electors; and the one not elected President is to be Vice-President." Each state having less than a million inhabitants is to have one elector, and those states having over one and less than two millions, are to have two electors, and for each million above that a state is to have an additional vote.

This plan, which seems to be the one most favored by the editor of *Harper's Weekly*, has the merit that under it an election could



have but very little of a partisan character; and it would to a great extent meet the objections of Mr. Charles O'Connor to the present mode of electing President, as the uncertainty of the result would be such as to deter any leading presidential aspirant, his friends or followers, from making any very strong efforts to secure him a place among the electors, as, if successful in this, the chance of winning the first prize would still be very remote. Yet this chance, while it might and probably would incite "the paltry little wrens of faction" to strive for a place on the electoral ticket, would not be sufficient to induce "the lordly eagles of the land" to stoop from their flight to obtain it. Hence, while by the Nicholas plan it would be by the merest chance or accident that a leading statesman would ever be chosen President, it would not give the advantages of Mr. O'Connor's plan, which depends on "the brevity of the term to prevent serious mischiefs from incompetency." Under both systems there would be the danger of having an incompetent at the head of the government. In the one case it would be only for a month without hope of change; in the other it would be for four years.

Apart from the other objections to both of these plans, the fact that the element of chance enters into them probably would, and certainly ought, to prevent their adoption. Under the Nicholas scheme, the electoral college in 1880 would contain about sixty electors. These being divided into six classes, each class would choose from another class, in round-robin fashion, one elector who should have a chance to "shake" for the presidential prize. From the six thus chosen, two would be selected by lot for President and Vice-President, and then the whole college decide by vote which should have the first prize, while the other would be the Vice-President. The successful candidate in this case might, by a possibility, be the fittest man for President of the whole body of electors, and, indeed, the fittest of the whole country. And so might the tallest or the shortest, or the one having the most clearly defined strawberry mark on his left arm. But the chances are he would be a very ordinary and very respectable man, who would have more reason to be thankful for his good luck than for his eminent ability.

The chief merit of this plan is that under it a presidential election would be a very tame affair; that its occurrence would hardly cause a ripple in the current of business, or an anxious thought in

the public mind. These are important objects, scarcely less important than the avoiding the dangers of a doubtful election, such as we have just escaped. All admit that something more is necessary than to secure an honest and satisfactory counting of the votes; that something should be devised to save the people from the excitement, the intense partisan feeling, the enormous expense, the suspension and derangement of business, to which the country is now subjected every four years. All agree that the object to be had in view in adopting a new plan is to get the best possible President with the least possible disturbance. In the uncertainties of the future, no one can count on gaining personal or party advantage by any new plan; and hence, under the common instinct for fair play, all ask only for what is safest and fairest. It is not therefore only to provide a mode for the election of President which shall give a true expression of the popular choice, but to avert the violent party contests which are so damaging and discreditable to the country, that is to be considered in the proposed change in the Constitution. The intense partisanship engendered under the existing system is not only calculated to drive the best and ablest men from political life, but to leave the field to demagogues who depend on party zeal to give them prominence and power. An end of all this artificial patriotism that is stimulated by selfishness, is what the people generally desire; and the proper time to accomplish it is now, while the dangers just passed are fresh in the minds of the people, and their attention is directed towards a remedy.

The periodical tumults that have been incident to all presidential elections for the last forty years, have been the wonder of foreign observers. How a people could pass through them so many times and yet accept the results without civil war, has astonished the rest of the world. That it cannot always be so is as certain as that the pitcher carried too often to the fountain will be broken at last. This ever-recurring danger, with its accompanying financial and industrial derangements, is often cited by political economists as an argument against republican government; as if it were impossible to choose a chief magistrate at regular stated periods, without a repetition of the same scandals, the same excitement, and the same costs, both in time and money. They allege that though hereditary sovereigns may sometimes prove weak, dissolute and wicked, yet it is safer to tolerate them rather than trust to the

popular choice; that though it might reasonably be expected of an intelligent people that they would elect one of their ablest and most eminent men as their chief magistrate—one far superior to the average of royal princes—yet experience has shown that remarkable abilities are rather a hindrance than a help to this preferment; that it is very long since any man has been elected President, who had, previous to his election, been conspicuous as a statesman, or had shown any peculiar fitness for the office; and that, therefore, it is safer to risk the imbecilities of monarchy rather than trust to the frenzy of popular elections.

Now it would seem that in a nation like this, made up of many states, each sovereign within certain prescribed limits, a way out of this difficulty might be found so that the people of each State might be represented in making choice of a President, and in a manner which would be unattended with partisan excitement or popular tumult. It would seem to be a very simple thing to do, if people could only divest themselves of the idea that there is something so grand and mysterious in statesmanship, that simplicity and common sense, such as are essential to success in business affairs, are quite out of place in the administration of government. A sensibly managed business corporation, in entering on any important undertaking, would pay little regard to tradition or "the wisdom of our ancestors," but would look directly to results, to obtain which they would seek for that practical knowledge possessed by men of experience in different departments. If they were to build a railroad, or a factory to be run by water power, they would first get the advice of the best civil engineers; if they were to start a line of steamers, they would before building them consult those who had made it a life business to build steamers, and knew what would be the most profitable style of vessels. If an observatory were to be built, the mathematician and the telescope makers would be applied to. To choose a President, the framers of the Constitution went to work on business principles. In fact, that wonderful instrument of human wisdom was the work of men who revolutionized the science of government, by improvising what the exigencies of the country required. They realized as by prophetic inspiration that a direct vote of the people was liable to give the results which have been experienced; that the ablest and best men would be pushed aside for available mediocrity, and that it would be safer to trust the election to a college of electors,

chosen expressly to elect on their own judgment and responsibility the man best qualified for the high and honorable position. The intention was that the electors should choose the President, and not merely pass forward the votes already cast by the people. Having been entrusted with what was intended to be an office of high honor and responsibility, it was taken for granted they would exercise their best discretion, and choose one of the most eminent statesmen in the country. But party spirit ere long became so rife that the purpose of the plan was entirely subverted, and electors were nominated and elected to do a specific thing : that is, to vote for a particular man. Thus the system was soon seen to be a failure, though it has been tolerated till it has come near to involving the country in general disaster ; and now it is universally admitted it must be changed.

That the plan of those who formed the Constitution may be carried out, it is necessary that a new mode of choosing the electors should be substituted for the one that has been found to work so differently from what was expected of it. The electors should be men who are not nominated or elected for the single object of voting for a particular candidate ; but who have previously filled the highest positions in their respective states. If, for instance, the law provided that the electoral college should consist of one elector from each state, and this elector should be the chief justice of that state, or the judge in the highest court who had been longest on the bench ; no one can doubt but that such a body would elect one of the very ablest and most eminent statesmen in the whole country. It might be objected that such a body would be too conservative, and would be too prone to prefer a man eminent for legal knowledge and attached to the traditions of the past, to one distinguished for executive ability and in full sympathy with the spirit and progress of the times. Again, if this body of electors were to consist of the heads of the highest educational institutions in each of the different states, it is equally certain that the choice would fall on a man of great eminence and great learning. But as the members would be nearly all clergymen, the danger is that they would be influenced by a sectarian spirit, to the disregard of those worldly interests which Presidents are chosen to guard and protect. A proposition of this kind, it is quite sure, would never be entertained by the people ; and, therefore, it is not necessary to consider it.

Now if there can be found, in each state, one or more individuals

who is a representative man and proved to be such by the popular indorsement, in having been elected and re-elected to the highest office of the state by the direct vote of the people, and who is retired from public life, certainly it would seem that to a body composed of such men might safely be entrusted the choice of the President. Let us suppose then an amendment to the Constitution to be adopted, to take the place of "Article XII.," providing for an electoral college, to be composed of men who have not only received such indorsements, but who are and must be men of large political experience. Let the elector for each state be that citizen who has served for the longest period as governor of his state, and who has not held the office for the last two years preceding the time when he may be called upon to act as elector. This would give us an electoral college composed of men of distinction in their respective states, if not of eminence throughout the country; of representative men who had received the highest proofs of respect and confidence from their people, and that, too, when the honors given had little reference to presidential aspirants. As a security against improper influences, it might be well to provide that not only should no elector be eligible to the Presidency, but no one should receive any federal appointment during the term next succeeding. Should any ex-governor decline to act as elector on such conditions, he might do so, and relieve himself of the disabilities by resigning at a period of six months or a year preceding the assembling of the electoral college.

The electoral college being thus constituted, the members of it would have that responsibility thrown upon them which it was expected they would have when the present method was adopted. It is not an innovation in spirit or principle; it is a new way to do what the Constitution, as made by its framers, was intended to do, but for which the adequate means were not provided.

The electors being created in this way, there would, of course, be no such thing known as a presidential campaign. The interest felt in the future policy of the government would be directed to the election of members of Congress and of Senators through State legislatures. Long before the time for casting the votes for President it would be known who the most of the electors would be, and there would be no occasion for ambitious aspirants to make combinations, to pack conventions, to forelay for delegates, to trade off votes for promised cabinet seats, or foreign missions, or for in-

fluence in making senators. All these evils, great and trying as they are, and inseparably interwoven with our present system, would be done away with. There would be no more partisan campaigns as we have known them in the past, making heroes of demagogues, and arousing the worst passions of the people to their own impoverishment and disquiet; no eager anxiety as to the result; for though there would be great uncertainty as to who would be chosen, yet it cannot be doubted there would be full confidence throughout the country, that such a body as would make up the electoral college would never elect an untried, an obscure, or an unsafe man. Their own self-respect would prevent them from preferring mediocrity to acknowledged ability. Instead of having the press and the party leaders engaged in arousing partisan feeling and marshaling the people to stand by old issues and party lines, the public attention would be directed to the measures and policy of government, as represented and advocated by the most able and advanced statesmen of the country. Such men would naturally come to the front, and such a moral pressure would be brought to bear that when the electors should come together it is very certain that the number of those who would be reckoned as even possible candidates would be very small. Before the meeting of the electors, what with the thorough discussion in the press, the pronounced opinions of leading writers and speakers, the scrutiny of acts and character, the public sentiment might be relied on to limit the choice to one of less than half a dozen of the very first men in the country.

The whole responsibility of the election being thrown on a small number of men of established character, they could not do otherwise than try to make a choice that would be creditable to themselves. Responsibility compels self-respect. It is found as a rule it is safer to give the appointment of judges to the governor than to trust their election to the people. A governor may be a weak man, or a violent partisan; but he is sure to be much above the average of the voters; and the responsibility of his position, his pride and self-respect, would cause him to select a competent lawyer, while the people vote for the party candidates, even though they be but pot-house politicians and nominated in defiance of the best men of all parties. Dividing responsibility is very apt to produce inferior work, as a multitude will often assent to what each individual would be ashamed to do. A crowd will flee before

a single armed man, each encouraging the others by his example to get out of danger. Yet in the same crowd might be a dozen or a hundred who, had either of them met the bully alone, would have knocked him down and disarmed him. So in a popular election in time of high political excitement, the most conservative people vote for the party candidates whom few of them would ever appoint, had they the appointing power and its attendant responsibility.

Now, while it is almost as hard to tell what would have happened under other circumstances in the past as it is to predict the future, it can hardly be doubted that had our Presidents heretofore been elected in the way here suggested, the weakest Presidents we have had, as well as the weakest party candidates who failed of an election, would never have been heard of in connection with the office. Instead of such it may be presumed the list of our Presidents would have been made up of the names of the really great men whom the country has produced, and the honor of the office would now be a very different thing from what it is, since it has been filled by some of its later incumbents.

In the times before the civil war, while slavery was the great issue that arrayed the North and South in opposition to each other, such a change as is here proposed could hardly have been considered on its merits, as it would have been favored or opposed according as it bore on that great question. But that source of sectional jealousy being removed, it is scarcely possible that the people will ever array themselves again face to face on a single issue. In a country so vast as this, made up of states having such a variety of interests, in which Texas and Maine, and Oregon and Florida, may be especially benefited by the same line of policy, any danger that the country may be again divided on sectional questions is purely imaginary. It cannot be; and, therefore, it is scarcely possible that the people of any section will ever be united in support of any candidate because of any expected local advantage to be gained by his election. What they will look for in a President is broad, national, comprehensive statesmanship; and with an electoral college created as this would be, all the miserable party feeling, which has in late years so disturbed the social, political, and business harmony of the country, will be a thing of the past, and the constitution will be safe beyond the worst breakers that lay in its way.

An argument that may be made against this plan, and which at first glance might appear to be a serious objection, is that the small states would have an equal representation in the electoral college with the large ones. This, if rightly considered, is no objection at all. There is no reason to suppose that an ex-governor of Delaware—a state now entitled to only three electoral votes—would not be as competent, as impartial, as free from local prejudice when called to vote for President, as would the ex-governor of Pennsylvania, that now casts twenty-nine votes in the electoral college. There can be no reason in the world why he should not be moved by an equally liberal and patriotic desire to cast his vote for the best man, as if he had been governor of the most populous state in the Union. Locality should have nothing to do with the selection, nor would it have under the plan here proposed. On the other hand it has, under the present system, a great deal to do with it; and so very likely it would have under the Morton, the Buckalew, or the Nicholas plan. The leader of a state organization, by the skillful use of party machinery, frequently has his state delegation united in his support at a nominating convention. If he be from a great state like New York or Pennsylvania, this united delegation may make him a prominent candidate, who may perhaps be nominated, and if not he may dictate the terms on which a competitor may succeed.

In the late Convention at Cincinnati, the Governor of Pennsylvania was regarded as a possible if not probable nominee, solely because the delegation from his state was instructed to support him. Had the same gallant soldier and excellent Governor hailed from a small state like New Hampshire or Arkansas, and been backed by the united vote of his state, the fact of his having the delegation instructed for him would hardly have caused his name to be mentioned in the list of candidates. And so with the eloquent senator from New York: having nearly thirty votes from his own state, he was a power in the Convention. So it was with the other prominent candidates. Each one started in with a delegation from his own state, in most cases, unanimous in his favor; and what the result would be soon became a question of sharp practice, of lobbying, of promising, of trading and endurance. Fitness and character were no longer thought of, and even availability was but lightly considered in the turmoil that followed the assembling of the convention. It is true that the outcome was better than could reasonably have been expected; but are we always to trust



to the chance of a wild scramble in which passion and noise preclude the possibility of wisdom and deliberation ?

But the objection that the smaller states would have an undue influence, and out of proportion to their population, may be obviated under this plan so effectually as entirely to remove it. Though the number composing the electoral college should still be one from each state, yet the electoral votes need not necessarily be restricted to the same number. The elector of a state having a population of 500,000 might be entitled to one vote in the college, the elector of each state having over 500,000, and less than 2,000,000, might have two votes, and those from states having over 2,000,000, three votes. This would probably work better in practice than having more than one elector from a state, as in the latter case they might neutralize each other, and so the larger states have less influence in the result than the smaller ones.

But whether each state be allowed one vote in the electoral college, or more according to the population, the popular wish, the general sense of the people can hardly be so little regarded as it now is, when our national conventions are composed of politicians, the most of whom have been elected because of their devotion to the fortunes of certain Presidential aspirants, and when he is most likely to have the greatest positive strength among these picked and packed men who has done the most disreputable work in manipulating party machinery.

As a rule, the people only want the best man for President, and do not care a straw from what state he comes. Yet under the present system, the candidate from a large state, if backed by his delegation, enters the convention with a great advantage over another with ten times his ability from a small state. As nominations are now made, what chance has a state like New Hampshire, with only five votes in the convention, even though she have a statesman like Webster to present as a candidate, against a state with twenty-five or thirty votes, and no statesman at all, but only a party manager ; and what claims could Delaware, with her three votes, present in behalf of Bayard, as against Tilden, backed up by the thirty-five votes of New York ?

That an idea may be formed of how a plan of election, such as is here suggested, would work, let us suppose that a President is to be elected in this way one year from next December ; that the ex-governor of each state, who had served as governor for the

longest consecutive period, and whose term had expired previous to December, 1876, should, by the organic law, be constituted a member of the electoral college, and that then this body should proceed to the duty of electing a President and Vice-President. The first matter that would engage public attention would be the political antecedents and present party affiliations of the men who were to be electors. It would soon be known how many were pronounced and declared Republicans, and how many were Democrats; how many who had once been Democrats were now Republicans; what were the peculiar views of all of them on the important living issues before the country; how many were inclined to be Liberal Republicans, and how many Protectionist Democrats; how many were for hard money, and how many for inflation. It is very certain that this inquiry would show such a variety of opinions and principles to be held by them as to render the election of any man on mere partisan grounds at least quite improbable. Presumably they would many, if not the most of them, be men of loose party ties, whose career as ambitious party leaders would be finished, and which they would all be glad to crown with an act creditable to themselves and creditable to the country.

The merits and qualifications of the different statesmen would next be most thoroughly reviewed and discussed; and though many names would doubtless be suggested, it may be presumed that before the day of election the lighter ones would be winnowed out by the breath of popular expression, and only a few of the very first men in the country would remain as formidable candidates. The earnest men of all parties, and all who had deep convictions as to government policy, would labor to create a public pressure to influence the electors already designated; not by partisan appeals, but by setting forth the superior qualifications, the patriotism and integrity of their ablest representative men; and in the open sea of public sentiment the larger craft, from their inherent moral and intellectual weight, would gravitate to the inner circle to the exclusion of those smart party managers whose strength consisted in their liberality of promises and their ability to pack conventions. The debasing doctrine of availability would never be heard of again, nor would the country ever again be astonished to find unknown men nominated, who had been put forward because nothing but their insignificance could be alleged against them.

Were a plan like this here sketched adopted, it may safely be assumed that civil service reform, thorough and complete, would inevitably follow, and there would be no good reason for making the presidential term longer than it now is, as the evils incident to a general campaign could never occur again.

CHARLES A. WASHBURN.

AMENDMENT PROPOSED IN PLACE OF "ARTICLE XII."

Each state shall be entitled to one elector, and he shall be that citizen of the state who has been elected to and filled the office of governor for the longest consecutive period, not counting the two years next preceding the day fixed by law for casting the votes for President and Vice-President; and in case there shall be two or more citizens of the same state who have served as governor for an equal length of time, then the oldest in years shall be the elector. But no member of the college of electors shall be elected President or Vice-President, nor shall a resignation as elector remove this disability unless it shall be filed with the Vice-President at least one year before the day fixed for the meeting of the electors. In case the elector of any State shall, for any reason, fail to attend the meeting for the election of President and Vice-President, the ex-governor next eligible to the office of elector shall be entitled to cast the votes of that state. But no person holding an office of trust or profit under the United States shall be an elector. The electors shall meet in the national capitol in the month of November next preceding the commencement of every Presidential term, and a majority of two-thirds shall constitute a quorum. They shall vote *viva voce* for President, and the person receiving a majority of all the votes cast shall be the President, and if no person shall have such majority, then a second vote shall be taken, but no votes shall be counted for any person who was not voted for at the first vote; and after two votes have been taken, if no choice has been made, the person having the smallest number of votes on each succeeding vote shall be no longer eligible to an election. After the election of President, the Vice-President shall be elected in the same manner.

No person holding the office of President shall be eligible to an election for the next succeeding term.

## THERMAL SPRINGS AND GEYSERS.

**T**HERMAL SPRINGS are those whose mean annual temperature exceeds that of the locality in which they are found.

Springs, the temperature of which does not vary from 85° F., may therefore be included under that head. Bischof, indeed, asserts that all springs which have a constant temperature are somewhat warmer than the climatic temperature, and consequently are thermal springs.

They may, and usually do, contain mineral ingredients, and may be classified like other mineral springs, still the proportion is generally smaller than in cold springs.

They are distributed all over the globe, but it is in regions of volcanic rocks where there are volcanoes, active or extinct, that they are found in their greatest development. There is not a known volcanic-region that has not its accompanying hot springs. They are found in Iceland; in Java; on the slopes of Vesuvius; in Mexico; in Asia; in South America; and lastly, but by no means least, in our own Rocky Mountains.

The intimate connection of hot springs with volcanic action has been repeatedly noticed. Three examples will suffice to illustrate it. Strabo tells us that the sulphur springs in the island of Euboea, after an earthquake, disappeared for several days and subsequently reappeared at several points. At the time of the great earthquake in 1755, the Carlsbad springs ceased flowing for three days.

In Mexico, in the year 1759, the volcano of Jorullo was suddenly upheaved, and caused the disappearance of two rivers, which were engulfed. In their place appeared several warm springs.

This gives a clue as to the source of the heat of the springs. They are generally found in fissures in igneous rocks, or near the line of junction of sedimentary rocks with those of igneous origin.

The water sinking into the fissures becomes heated by contact with the rocks in the depths below. The nearer the heated rocks are to the surface the less is the amount of heat lost by the water in the passage upward. It is well known that as we descend beneath the surface of the earth the heat increases regularly, and the existence of an internal incandescent centre or layer is generally conceded.

It was at one time held that the heat was due to chemical combinations between the various constituents of the earth. Bischof shows the fallacy of this in his treatise on the Internal Heat of the Globe. Sir Humphrey Davy at one time held the chemical theory, but after mature deliberation and investigation abandoned it in favor of the mechanical.

In the Greek Anthology is a poem on the Pythian Hot Baths, by Paulus Silentarius, Chief Silence Keeper to the Emperor Justinian, in which he speculates as to the cause of the heat of springs as follows: "It is conceived by some that there are narrow fissures below the earth; that opposing currents meeting from various quarters are compressed, and by that compression acquire no ordinary heat. Others on the contrary, say, that in recesses of the earth there are somewhere sulphureous ores, that the neighboring stream, therefore, meeting with a violent heat, from the inability to remain below, rushes upwards in a mass. Which opinion will my readers adopt? The former? I do not myself embrace this. I agree with the latter, for there is a mephitic offensive stench clearly proving it." "'Twas thus the hot bubbling fluid issued for the benefit of mankind, an inanimate Hippocrates, a Galen untaught by art." The phrase "hot bubbling fluid" refers to the bubbles of sulphuretted hydrogen, as is evident from his description of the odor. This was written probably about the year 550 A. D., and it is remarkable that modern travelers, Browne, at the close of the last century, and Hamilton, in 1836, have described this very spring, and from their accounts it is evidently still the same, giving off the same sulphurous gas.

Sophocles refers to the evolution of gaseous bubbles from the hot springs at the foot of Mt. Ceta, in Thessaly (from which springs the celebrated pass of Thermopylae is named), and makes a poetical use of it in the play of the "Trachiniae."

Dr. Clarke, in his travels in Greece, found the same springs still giving off sulphuretted hydrogen.

These facts attest the permanency of thermal springs. The temperatures may also remain the same for long periods. In the report of Fremont's explorations, the temperature of a spring on Bear River, in Idaho (then Utah) territory, is recorded as 85° F. In 1871, after an interval of over 25 years, I found the temperature still 85° F.

The pages of ancient Latin and Greek writers contain frequent

references to springs both mineral and thermal. The ancient Athenians resorted in summer to the thermal sulphur baths of Ædipsus, sixty miles from Athens. Herodotus tells us of an intermittent spring near the Temple of Jupiter Ammon, and Pliny in his Natural History mentions cold and hot springs, springing "wholesome from the earth on every side and in a thousand lands." In the Scriptures (Genesis, chap. xiv. v. 10,) the following passage appears, "And the vale of Siddim was full of slime pits." It is said the latter part of this ought to be translated "full of *fountains of bitumen*." Mr. Henderson in his "Travels in Iceland" says that the word Siddim is derived from a Hebrew root meaning "to gush out," which is the meaning of the word *geyser*. In Iceland is a valley called Geysadal, meaning the valley of geysers, consequently corresponding with the valley of Siddim. He thinks, therefore, that the latter should be translated "the valley of gushing fountains;" and is of the opinion that phenomena similar to those of Iceland took place in this locality.

Volcanic phenomena of all kinds are terrifying and well calculated to impress the human mind; and it is not to be wondered at, that the appearance of fountains of hot water gushing from the earth, and streams of gas which when lighted, burned without intermission, should inspire a superstitious people with feelings of veneration and afford them objects of worship. Hence we find they were so regarded among the ancients, and temples were erected near the sites of springs; as for instance at Delphi, the temples of Æsculapius in Greece, and the temple of Jupiter Ammon in Egypt.

The "Spontaneous fires issuing from the peaks of Parnassus," were doubtless streams of lighted gas coming from the earth.

At Baku and other places near the Caspian sea, jets of gas springing from the earth were regarded with veneration by the fire-worshippers. Volcanic phenomena are still occurring in that country and in January, 1872, the town of Schemacha, on the road between Tiflis and Baku, was destroyed by an earthquake.

Henderson thinks that "Sheddim," the object of idolatrous worship on the part of the Israelites, translated "Devils," (Deuter. xxxii. 17; Psalm cvi. 37,) were really boiling springs derived from volcanoes; and Danberry adds in corroboration that similar phenomena at the Lacus Palicorum, in Sicily were the objects, among Greeks, of a peculiar and equally sanguinary superstition. In regard to this locality he says "The singular qualities possessed by

the exhalations given out from this spot, rendered it at a very early period, an object of peculiar veneration, and we may perhaps recognize in the fable attached to it some traces of its volcanic origin. It was called the Fons or Stagnum Palicorum, from two sons of Jupiter by the Nymph Thalia, the daughter of Vulcan, who was concealed by the god from the vengeance of Juno by being buried under ground, so that when the time of her delivery was come, the earth opened and brought into the world her two children, hence called Palici, because they returned into the world after being buried under it. This fable may perhaps allude to the first origin of the gaseous emanations from two apertures; whilst the worship paid to these deities, the human sacrifices at first offered up, the temple built on the spot, and the oracle that was consulted in the sanctuary, show the fear that had been inspired by the noxious qualities of the vapor exhaled."

Strabo says that the springs of Hierapolis imparted a red quality to the roots of trees and shrubs, and the juices of the latter mixed with the water produced a purple dye.

Not only did the ancients ascribe supernatural properties to the waters of thermal springs and erect temples near them, but they also made them the sites of medical schools, hospitals, baths, and resorts for the amusement of the sick. Their curative effects were widely celebrated.

Philostratus says that the Greek soldiers wounded in the battle on the Caicus were healed by the waters of Agamemnon's spring, near Smyrna. The wife of Constantine, in 797, and still later the Sultan Soleiman, are said to have been restored to health by the thermal waters of *Broosa* or *Prusia* in Asia Minor. *Yalova*, also in Asia Minor, was formerly called Helenapolis after Constantine's mother, the Empress Helena, who was restored to health by its thermal springs.

Herod is said by Josephus to have sought relief from his terrible disease in the thermal springs of Callirrhoë.

The springs of Tiberias were used by the Romans, and with those of Ischia, still maintain their reputation.

The most celebrated bathing place of the Roman Empire was the hot sulphur springs of *Baia*, on the gulf of Naples.

In their conquest of Northern and Western Europe, the Romans sought out the springs of the country, and in *Acqui*, *Aix* or *Aachen*, *Dax*, etc., the names of modern towns derived from the Latin *aqua*, we have testimony of their former celebrity as watering-places.

The reputation of thermal springs for medicinal and bathing purposes has descended to the present day, as the spas of Europe and our own watering places prove. In this practical age, however, we have shorn the springs of the superstitions of the ancients, and the busy habits of modern times do not admit of the time and elaborate preparation that was bestowed upon the bath in the luxurious days of Imperial Rome.

In the limited space at command here it is obviously impossible to describe all the springs of our own country, and much less those of the world. I shall therefore content myself with referring to a few of the most noted localities, and comparing them with our own celebrated region, viz: the Yellowstone National Park in Northwestern Wyoming Territory.

Thermal springs, like all mineral springs, may be divided according to their mineral constituents. For the purposes of this article a division into Simple Springs, Mud Springs or Salses, and Agitated Springs, and Geysers, is sufficient. By simple thermal springs, I mean those that are always quiet and whose temperature does not reach the boiling point. They are found all over the world, and may be pure, chalybeate, saline, sulphuretted, or carbonated. In the United States we have them in the Appalachian region, in Arkansas, and in the Rocky Mountains and westward.

I have already referred the source of the heat of thermal springs to subterranean heated rocks, and have spoken of the frequent relation of that heat to volcanic action.

In the Appalachian region we have comparatively low temperatures, and we can not usually explain the heat of the water by reference to volcanic action, unless we suppose the volcanic rocks to be so far below the surface that a large portion of the heat is lost by the water on its passage to the surface. Rogers attributed the temperature of the springs of the Appalachians to the normal downward increase of temperature. This is, in part, at least, probably due to the motion attending the uplifting, plication, folding, and crushing of rocks, in the process of mountain building, which Mallet has demonstrated to be an efficient source of heat and of geological work.

Mr. G. K. Gilbert has pointed out the fact that the distribution of thermal springs coincides with that of mountain corrugation, there being none in undisturbed regions and few in regions of little disturbance. The Arkansas hot springs can be referred to the



Ozark mountain disturbance. In the Rocky mountain regions we have generally higher temperature, which may be accounted for in part, perhaps, by the geologically recent age of the mountains, and in part, by the presence of volcanic rocks at or near the surface. The latter is especially the case in the Yellowstone Park, and it is not to be doubted that the origin of the heat of its springs must be sought for, in part at least, in the causes which have led to the floods of igneous material that cover the area in which they are found.

Another interesting point to notice is the source of the water. Aristotle taught that there were large cavities in the interior of the earth filled with air, and that this air condensed to water on the cold roofs, and made its way to the surface through fissures. Vitruvius believed that springs were due to an accumulation in subterranean reservoirs of rain and melted snow. Descartes imagined that the source of the water was the sea, from which water flowed into subterranean caverns, was vaporized and afterwards condensed, finally escaping to the surface through crevices in the rocks. Mariotte and Halley independently demonstrated that the fall of water in the form of snow, rain, and dew, is sufficient to account for all the water of rivers and springs. There may also be some truth in the idea of Descartes, and certain springs may be due to communication with the ocean.

Water penetrating the earth dissolves some of its mineral constituents, and when it reappears we have a mineral spring, the temperature of which depends, as Arago proved, upon the depth from which it comes, or the presence of volcanic rocks.

The springs of the Yellowstone National Park were first investigated by the Geological Survey of Dr. Hayden, in 1871, although in previous years there were rumors of burning plains, boiling springs, volcanoes of mud, and other wonders of which most astounding tales were told. A pleasure party had also visited some of the localities in 1870, but Dr. F. V. Hayden took the first *scientific* party into the region.

One of the most remarkable developments of thermal springs discovered by the Hayden expedition, is that of the "Mammoth White Mountain Hot Springs of Gardiner's River." They are on Gardiner's river, a few miles above its junction with the Yellowstone river. The deposits are white, and composed mainly of carbonate of lime, left as the sediment of both extinct and active

springs. They occupy an area of about three square miles, filling a gorge that extends more than two miles from the river, and the elevation of which, at the head, is 1,000 feet above the river. The greater part of the area is occupied by the ruins of springs, which are often covered with soil, and even overgrown with pines that commenced to grow long after the springs became extinct. Some of them must be hundreds of years old. Still in many places the outlines of the old basins can be traced. The principal springs are located about half way up the ravine. Leaving the river we ascend the hill of calcareous deposit, which gives forth a hollow sound beneath the tread of our horses. This hill must have been the seat of active springs ages ago. Turning to the left we come suddenly upon the marvelous scene. Before us rises one of the finest of nature's architectural efforts, a mass of snowy white deposits 200 feet high. Words are almost inadequate to convey to the reader a satisfactory idea of this mass, which is fringed with beautiful semicircular basins, having regular edges with exquisitely scalloped borders. These basins have been called Jupiter's baths and Diana's pools. They are irregular in size and shape, and filled with water of different temperatures, ranging from cold almost to the boiling point, forming most commodious bathing basins as elegant as could be devised by art. The springs are arranged on irregular terraces rising one above the other in steps. There are fourteen of these terraces with active springs. In 1871 the principal springs were on the ninth terrace, which is the top of the main mass of deposit, covering the space of about a square mile. The color of the water in these springs was of the purest azure. Clouds of steam were constantly rising from them, obscuring the view; but ever and anon a puff of wind would part the misty curtain, revealing the boiling surface bubbling in the caldron-like basins. In 1872 these springs had disappeared and new ones had made their appearance on the higher terraces.

The water flowing from the upper terraces becomes very much reduced in temperature by the time it reaches the lower ones. In many places are long rifts or fissures in the deposit, lined with sulphur. From them escape hot air and steam, laden with sulphurous odors, and the rumbling of the boiling waters far beneath can be distinctly heard. It requires but little exercise of the imagination to think that the giant Typhæus is confined somewhere below and struggling to escape from his prison.

On the lower terrace the basins are shallower and on the same general level. From among them rise several curious chimney-like masses, composed of layer upon layer of the hardened deposit. One of these, from its peculiar shape, was named the Liberty Cap. It is fifty feet high, and about twenty feet in diameter at the base. These chimneys probably mark the positions of former geysers. Near the head of the ravine are several miniature geysers. To appreciate the beauty of these springs and their wonderful formations, one must climb from terrace to terrace, and study them in detail.

The temperatures of the water range from 92° F. to 162° F., the boiling point at the locality varying from 199.5° to 200.9°, according to elevation. The hot water coming up through fissures in the igneous rocks passes through limestones, from which it derives the greater part of its calcareous ingredients. The deposits rest partly on limestone and partly on igneous rocks.

In New Zealand is a formation which in appearance resembles the Mammoth White Mountain Springs. It is called the "Te-Tarata," or tattooed stone. Instead of being calcareous it is silicious, and would properly, therefore, be classed with geysers, especially as it is an agitated spring. I quote the following description from Hochstrether, and the resemblance to our own formation will be at once apparent:

"About eighty feet above the lake (*Rotomahana*) on the fern-clad slope of a hill, from which in various places hot vapors are escaping, there lies the immense boiling caldron in a crater-like excavation, with steep reddish sides, thirty to forty feet high, and open only on the lake side towards the west. The basin of the spring is about eighty feet long and sixty wide, and filled to the brim with perfectly clear, transparent water, which, in the snow-white incrustated basin, appears of a beautiful blue like the blue turquoise. Immense clouds of steam reflecting the beautiful blue of the basin curl up, generally obstructing the view of the whole surface of water; but the noise of the boiling and seething is always distinctly audible."

The native who acted as guide to Hochstrether, informed him that sometimes the whole mass of water is thrown out of the basin with immense force. "If this be true," says Hochstrether, "then the Te-Tarata spring is a geyser playing at long intervals, the eruptions of which equal in grandeur the famous eruptions of the Great Geyser in Iceland. The Te-Tarata basin is larger than the Geyser basin; the mass of water thrown out therefore must be immense." "The

deposit of the water is like that of the Iceland springs, silicious, not calcareous, and the silicious deposits and incrustations of the constantly overflowing water have formed on the slope of the hill a system of terraces, which, as if cut from marble, present an aspect which no description nor illustration is able to represent. It has the appearance of a cataract plunging over shelves, which, as it falls, is suddenly turned into stone." "The flat-spreading foot of the terraces extends far into the lake. There the terraces commence with low shelves containing shallow water basins. The farther up, the higher grow the terraces; two, three, also four feet high. They are formed by a number of semicircular stages, of which, however, not two are of the same height. Each of these stages has a small raised margin, from which slender stalactites are hanging down upon the lower stage; and each encircles on its platform one or more basins resplendent with the most beautiful blue water."

The springs at the site of the ancient city of Hierapolis, in Asia Minor, six miles from Laodicea, are similar to those of Gardiner's river, and those of New Zealand just described. The following is the description of them by Prof. J. Lawrence Smith: "The site is seen for many miles before it is reached, as it rises abruptly from the north side of an extensive plain, and the sides of the hill are covered with an incrustation of dazzling whiteness for upward of a mile in length, and from this it has received its present name, *Pambuk-Kelescy* (cotton castle). Its thermal waters have always been its principal object of note, as evinced by the extensive ruins of baths. In fact, the very hill upon which the city stands owes its formation to the deposition of carbonate of lime from these waters, and it now rises upward of a hundred feet above the plain, with a width of about six hundred feet. Immediately behind the city rises another set of hills of calcareous rock, from which flow the waters in question." "The amount of water is very great, and it is so highly charged with carbonate of lime, as to incrust all bodies that it comes in contact with; and it takes place so rapidly that the concretion does not possess great solidity, and frequently has a granular form, resembling driven snow."

"In some places, as the waters flow over the steeply-inclined sides of the hill, it forms a succession of terraces at regular distances, that require but little effort of the imagination to liken to an amphitheatre with its marble seats. At other places it flows over the precipitous sides sixty or seventy feet high, and one or two hun-

dred feet wide, incrusting the precipice with a snow-white sheet, which might be likened to a consolidated cataract; and, what adds to the delusion, at the base the incrustations have accumulated an irregular mass not unlike foam. This petrified stream extends several hundred feet into the plain. It has formed walls and dikes, and incrusts the grass and vegetation that it flows over, and many of the tufts of grass, in perfect verdure, are thickly incrustated near the roots with this white carbonate of lime."

The resemblance of these springs and those of New Zealand to our Gardiner's river springs is apparent. In all three we have the arrangement in terraces and the general resemblance to a frozen cascade. The petrifying quality of the springs is particularly true of all calcareous and silicious springs. At the "Soda Springs" on Bear river, in Utah, are plants coated with calcareous material, the shape of each twig and leaf being perfectly retained. The settlers call the springs, "Petrifying Springs." At the springs on Gardiner's river, the same thing is noticed in process of formation; and in the Geyser region of Fire Hole river, in the Yellowstone Park, wood is in process of silicification, by being permeated by silica from the water of the springs. Pine cones, and even butterflies that had fallen into the springs, were noticed rapidly becoming encrusted. The springs of Iceland all present similar phenomena. Strabo relates of the waters of the springs of Hierapolis that the people of the city conducted the waters along the vineyards and gardens, wherever they wanted a wall, and the channels became long fences, each a single stone, formed from the deposits left by the water.

In connection with this subject, the following legend related by Quintus Smyrnaeus, in reference to the *catacecaumene* or burnt district, in Lydia, about 100 miles east of Smyrna, is interesting. "When formerly divine Luna, viewing above from heaven Endymion sleeping by the side of his oxen, came down to him, for a passionate longing for the youth had seized upon the immortal lover. And of her nuptial bed there exists even now a memorial underneath the oaks, for round about this spot the milk of the cows was shed among the trees, and mortals behold it with astonishment; for seeing it from afar you would say that it was white milk, and yet fresh water gushes out from it; and when you have drawn near, it concretes around the very currents and becomes at length a marble floor."

Some of the most interesting forms of Thermal springs are Salses, or mud springs and mud volcanoes. When the springs force their way through beds of clay we have a mud spring, the consistency of which will depend on the amount of water in it. Some of these springs appear to dry up in the summer when the amount of surface water draining into them is small. The mud will often be so thick that it will be formed into conical masses by the steam in its efforts to escape, and when it succeeds in freeing itself the mud will be projected to some distance with a thud-like noise.

Some of them are real geysers, others turbid or quiet mud springs, and still others are constantly agitated. They assume, therefore, the same forms as the other springs, simply modified by the water passing through beds of clay. Some springs resemble kettles of boiling soap, while others look like pots of thick mush. The Yellowstone region is full of examples of mud springs, most of which are described in full in the reports of the Hayden Geological Survey. I shall refer to but a few of the localities here.

A place named Mud Volcanoes, a few miles below Yellowstone Lake, on the river, is the typical locality of mud springs for the Park. There is a large collection of mud springs of different kinds, and the dense clouds of steam rising from them point out the locality some time before the traveler reaches it, and as he draws near the noise produced by the throbbing of the agitated mud becomes more and more distinct until he is in the midst of the seething caldrons. The first spring that attracts notice is the Giants' Caldron. It is located on the side of a small hill, and is remarkable for several things. It does not boil with an impulse like most of the mud pots, but with a constant roar which shakes the ground. It has a circular orifice some twenty feet in diameter, and from it there is ever rising a dense column of steam, which obscures the view of the constantly agitated mass of thin, black mud, seething and boiling some twenty feet below the surface. The trees within a radius of a hundred feet or more from the caldron are coated with mud. It is a question whether this mud was deposited during an eruption, or from having been carried up in the steam and left on the trees by evaporation. The constant agitation of the spring is evidence against its being a geyser. Another interesting spring in the group is the "Grotto." At regular intervals of a few seconds a vast column of steam bursts from a cavern in the side of the hill with a pulsation that shakes the ground. The

roaring of the waters in the cavern and the noise of the waters as they surge up to the mouth of the opening are like that of the billows lashing the sea-shore. The water is clear as crystal, and the steam is so hot that it is only when a breeze wafts it aside for a moment that one can venture to look into the opening. This is the only spring in the group which is not a mud spring, and it is the only one that does not pass through a clay bed, the cavern being in sandstone. The most interesting of them all, however, is the Mud Geyser. The following is the description of one of its eruptions, which take place about every four hours :

The water gradually rises in the basin until it is filled, this process taking place in the interval. When it is entirely full, a slight bubbling is noticed in the centre, and suddenly, without any further warning, it becomes violently agitated, and an immense mass of muddy water, mingled with clouds of steam, is thrown into the air. This action lasts a few minutes, and is followed by a lull, the action not ceasing entirely. Then it begins with renewed violence, and the waves fill the entire outer basin as well as the inner, the water striking the banks in a succession of waves. The water is thrown up in a succession of impulses that follow each other rapidly; and sometimes the water is thrown obliquely, and seems as though it would overwhelm one standing on the bank. The mass of mud and water seems immense. After the maximum height (forty feet) is obtained, the jets become smaller and the eruption ends as suddenly as it began, the water disappearing from sight. It is very impressive, and the stopping is like a calm after a storm. The water of the geyser is very muddy, and bluish in color. Mud springs are found at various points on the shores of Yellowstone Lake, and also in the Geyser Basins of Fire Hole River. I shall describe only the "Mud Puffs" of the Lower Basin. It is a large elliptical caldron filled with thick mud of various colors, pink and white predominating. The surface is depressed below the edge of the basin, and resembles a large mortar bed. The sputtering surface is covered with small cones or puffs by the escaping steam, and as they burst the mud spurts upwards for several feet. The mud is almost impalpable, having been worked and reworked by the escaping steam for ages perhaps.

Among the many descriptions of mud springs in New Zealand by Hochstretcher is the following: "The bottom of the ravine is formed by fine mud, and thick, burst and broken plates of deposit

lie scattered about like cakes of floating ice after a thaw. Here and there a deep basin full of water is boiling; next to this lies a terrible hole emitting hissing jets of steam; and farther on, small mud-cones are seen, from two to five feet high, vomiting forth, volcano-like, from their craters, hot mud with a deadened rumbling, and imitating, on a small scale the play of large fire volcanoes." Iceland has long been celebrated for its hot springs and geysers, and among them are found the same kind of mud springs seen in other localities. S. Baring Gould, in his "Iceland," gives a graphic description as follows: "Picture to yourself a plain of mud, the wash from the hills, bounded by a lava field; the mountains steaming to their very tops, and depositing sulphur, the primrose hue of which gives extraordinary brightness to the landscape. From the plain vast clouds of steam rise into the air, and roll in heavy whorls before the wind, whilst a low drumming sound proceeding from them tells of the fearful agencies at work." "It is not pleasant walking over the mud; you feel that only a thin crust separates you from the scalding matter below, which is relieving itself at the steaming vents. These vents are in great numbers, but there are especially twelve large caldrons in which the slime is boiling. In some the mud is thick as treacle; in others, it is simply ink-black water. The thundering and throbbing of these boilers, the thud-thud of the hot waves chafing their barriers; the hissing and spluttering of the smaller fumaroles, the plop-plop of the little mud pools, and above all the scream of a steam whistle at the edge of a blue slime pool, produce an effect truly horrible. In some of the caldrons the mud is boiling furiously, sending sundry squirts into the air; in others bells of black filth rise and explode into scalding sprinklings; in one a foaming curd forms on the fluid, and the whole mass palpitates gently for a moment, then throbs violently, surges up the well, and bursts into a frenzied, roaring pool of slush, squirting, reeling, whirling in paroxysms against the crumbling sides, which melt like butter before its fury. One or two of the springs have heaped themselves up mounds around their orifices; others, however, gape in the surface without warning; and the steam is so dense, and the sulphurous fumes so suffocating, that one becomes bewildered and can hardly pick one's way among them."

I have quoted this description somewhat at length, for the phenomena described are so exactly similar to those of the Yellowstone region, that one could almost imagine the writer to be speaking of them, rather than of the Iceland springs.



Salses also occur abundantly in Java. Dr. Horsfield describes one locality as follows: "About the centre of the limestone district is found an extraordinary volcanic phenomenon. On approaching the spot from a distance it is first discovered by a large volume of smoke, rising and disappearing at intervals of a few seconds, resembling the vapors arising from a violent surf, whilst a dull noise is heard like that of distant thunder. Having advanced so near that the vision was no longer impeded by the smoke, a large hemispherical mass was observed, consisting of a black earth mixed with water, about sixteen feet in diameter, rising to the height of twenty or thirty feet in a perfectly regular manner, and, as it were, pushed up by a force beneath, which suddenly exploded with a dull noise and scattered about a volume of black mud in every direction. After an interval of two or three, or sometimes four or five seconds, the hemispherical body of mud or earth rose and exploded again."

M. de Verneuil gives a description of a mud-volcano in the peninsula of Taman. He states that, "in the peninsula of Taman and on the eastern side of the Crimea, the country is covered with hills of a conical form, more or less regular, which rise to the height of two hundred and fifty feet, and owe their origin to eruptions of mud. The eruptions are accompanied by subterranean noises, jets of viscous matter carried to a great height, quakings of the ground, evolutions of gas and flame, smoke and springs of water charged with bitumen."

Mud volcanoes have been among the most terrific in their effects. Whole islands have been due to their agency. The island of Taman, which seems to owe its origin to mud eruptions of an early period, is surrounded by others owing to the same causes, which are constantly at work. That some of them have been upheaved within the historic era may be inferred, says Sir Roderic Murchison, from the fact that on the walls of the fortress of Suda, near Theodosia, in the Crimea, are some stones procured from coast cliffs which contain species of shells now living in the adjacent Black Sea, and which we are disposed to think must have been thrown up on the line of the eruption of the mud volcanoes, and parallel to the axis of the Caucasus. It is probable that the island which Aristotle notices as having made its appearance off the coast of Pontus was due to the operation of mud volcanoes. There is a notable mud volcano at the hill of Macaluba, near Girgenti, in Sicily, to which Plato, in his *Phædon*, probably alludes when he speaks of the torrent of mud which is in Sicily.

Mud volcanoes appear to hold about the same relations to mud springs that geysers do to the quiet springs. The word geyser is derived from the Icelandic word *geysa*, to rush, to be impelled; and is applied to those hot springs from which a column of water is expelled at intervals. The three principal geyser fields of the world are those of Iceland, New Zealand and our own Yellowstone National Park. The geysers of California are a collection of interesting hot springs, but the water is not thrown to a greater height than fifteen or twenty feet, and the phenomena are not analogous to true geysers.

The earliest mention of the geysers of Iceland is made by Saxo Grammaticus, in his preface to the History of Denmark, which proves them to have existed for more than 600 years. The area occupied by them does not exceed twelve acres, and besides the "Great Geyser" and the Strokr, which are the principal geysers, it contains large blue springs, steam jets, and mud springs. The "Great Geyser" is on a mound of silicious sinter of a brownish-gray color, thirty feet in height. It slopes on all sides to the distance of about a hundred feet from the large basin on its summit. The basin or bowl in the centre is funnel-shaped, about fifty feet in diameter and four or five feet deep, sloping gradually to the centre, which is about sixteen feet in diameter, decreasing to ten or twelve feet. From this orifice the water is projected during an eruption, one of which is thus described by Baring Gould: "Five strokes underground were the signal, then an overflow, wetting every side of the mound. Presently a dome of water rose in the centre of the basin and fell again, immediately to be followed by a fresh bell, which sprang into the air full forty feet high, accompanied by a roaring burst of steam. Instantly the fountain began to play with the utmost violence, a column rushed up to the height of ninety or one hundred feet against the gray night sky, with mighty volumes of white steam-cloud rolling about it, and swept off by the breeze to fall in torrents of hot rain. Jets and lines of water tore their way through the cloud, or leaped high above its domed mass. The earth trembled and throbbed during the explosion, then the column sank, started up again, dropped once more, and seemed to be sucked back into earth."

Erasmus Darwin, in his *Botanic Garden*, has the following lines on the Great Geyser :

“High in the frozen North where Hecla glows,  
 And melts in torrents his coeval snows,  
 O'er isles and oceans sheds a sanguine light,  
 And shoots red stars amid the ebon night;  
 When, at his base entombed, with bellowing sound  
 Fell Geyser roared, and, struggling, shook the ground;  
 Poured from red nostrils, with her scalding breath,  
 A boiling deluge o'er the blasted heath;  
 And wide in air its misty volumes hurled  
 Contagious atoms o'er the alarmed world;  
 Nymphs your bold myriads broke the infernal spell,  
 And crushed the sorceress in her flinty cell.”

The height to which the “Great Geyser” throws the water probably varies with the time of the year and with each eruption. The following are the estimates given by different travelers:

Olafson and Povelson, . . . . .	360 feet.
Von Troll, . . . . .	92 “
Sir John Stanley (by quadrant), . . . . .	96 “
Dr. Hooker, . . . . .	100 “
Mr. Henderson, . . . . .	150 “
Sir Geo. McKenzie, . . . . .	90 “
Mr. Barrow, . . . . .	80 “
S. Baring Gould . . . . .	90 “

The first—360 feet—is probably an exaggeration, as the others agree closely. The temperature of the water is from 180° to 190° F.

The natives assert that animals have fallen into one geyser and their bones afterward been projected from another. Some of the effects attributed to the geysers would be most wonderful, if only true. Thus Horrebrow says that if some of the water be put in a bottle, whenever the geyser has an eruption the water in the bottle, probably by some sympathetic action, will also be agitated, and if the bottle be corked, it will be burst.

The New Zealand geyser field has already been referred to.

Our own region includes three geyser fields, viz: the Lower and Upper Geyser Basins of Fire Hole river, and the Shoshone Geyser basin. These include thousands of springs, which like those of Iceland may be divided into three classes: 1st. True geysers, from which the water is thrown at stated intervals. 2d. Constantly agitated springs, or those which are always boiling. 3d. Those which are always tranquil. These are generally lowest in temperature.

The Lower Geyser Basin of Fire Hole river contains between twenty-five and thirty square miles in which the springs are scattered in groups. There are several important geysers, of which the Architectural or Great Fountain is the largest. The following description is by Mr. Holmes, of the Hayden expedition: "Surrounding the crater is a table raised about two feet above the general level and 120 feet in diameter. This is formed of silicious sinter, with exquisitely modeled pockets or basins with ornamented rims depressed below its surface. The crater is in the centre, about ten feet in diameter, lined with an irregular coating of beaded silica. The water soon began to rise, plunging from side to side in great surges, sending up masses of steam and emitting angry rumbling sounds. An irregular mass of water was thrown into the air in the utmost confusion, spreading out at every angle and whirling in every direction, some jets rising vertically to the height of sixty or eighty feet, then separating into large glistening drops and falling back into the whirling mass of water and steam; others shooting at an angle of  $45^{\circ}$  and falling upon the islands and pools thirty or forty feet from the base. The eruptive force for a moment dies away, and the water sinks back into the tube. Then, with another tremendous effort, a second body of water is driven into the air, but with a motion so much more simple than before that the whole mass assumes a more regular form, and is like a great fountain with a thousand jets, describing curves almost equal on all sides, and forming a symmetrical whole more varied and more grand than any similar work by man. The intermittent action continues for nearly an hour, but is so constantly changing that at no two moments during that time are the forms or movement the same. The eruptions are repeated at irregular intervals of a few hours. The temperatures of the springs in the Lower Basin range from  $106^{\circ}$  F. to  $199^{\circ}$  F., or almost to the boiling point, which is a fraction over  $199^{\circ}$  F. in that region. The Upper Geyser basin of Fire Hole river, although smaller (only about two miles long by an average width of half a mile), contains within its limits the principal geysers. For descriptions of all, the reader will have to refer to the Reports of the United States Geological Survey, as the space here permits of but a few being described. Unless the eruptions of the "Grand Geyser" had been witnessed, one would scarcely take it for the most important geyser in the basin; for unlike most of the others, it has no raised cone or crater,

its basin or bowl being sunk below the general level. The basin is fifty feet in diameter, and one foot in depth. In the centre the mouth of the Geyser tube measures four by two feet. The first eruption of the geyser was witnessed in 1871. We had just camped on the opposite side of the river when a tremendous rumbling was heard shaking the ground in every direction. It would be difficult to describe the feelings of excitement with which we saw the immense mass of water and steam shoot from the crater to a height of over 200 feet from the earth, utterly unaccustomed as we were to such phenomena. The eruption consisted of three distinct periods, after each of which the water sank completely out of sight. During the spouting, the water is carried up in a succession of jets, the main mass of water being very large. Through it a column shoots at intervals to the maximum height (175 to over 200 feet). The shape of the entire column is pyramidal. Immense clouds of steam accompany the water, and the latter in falling back shakes the ground. After the eruption, the water disappears, to fill the basin again gradually until the next eruption after an interval of twenty-five to thirty hours.

The Giantess is another geyser that has no mound. It is a pool  $23\frac{1}{2}$  by  $32\frac{1}{2}$  feet, and 63 in depth. Its eruptions usually occur at long intervals. Mr. N. P. Langford, who was the first to witness an eruption, thus graphically describes one: "The grand eruption continued for twenty minutes, and was the most magnificent sight we ever witnessed. We were standing on the side of the geyser nearest the sun, the gleams of which filled the sparkling column of water and spray with myriads of rainbows, whose arches were constantly changing—dipping and fluttering hither and thither, and disappearing only to be succeeded by others, again and again amidst the aqueous column, while the minute globules into which the spent jets were diffused when falling, sparkled like a shower of diamonds, and around every shadow which the denser cloud of vapor, interrupting the sun's rays, cast upon the column, could be seen a luminous circle, radiant with all the colors of the prism, and resembling the halo of glory represented in paintings as encircling the head of Divinity. All that we had previously witnessed seemed tame in comparison with the perfect grandeur and beauty of this display." The Castle has a cone 11 feet high. The eruptions often last nearly two hours, consisting first of water and afterwards of steam. The noise is indescribable. Imagine a gigantic

pot with a thunder storm in its stomach, and to the noises of elemental war add the shrieking of steam pipes, and one may then have a faint idea of it. After the eruption the exhausted geyser sinks into complete repose. The Bee Hive has a peculiar action. From a cone 3 feet high, a steady, fan-shaped stream of water and vapor is projected 100 to 250 feet. No water falls back, but it seems to be all resolved into vapor. "Old Faithful" has an eruption every hour, and was named from its regularity. Scattered throughout the valley are several blue hot springs, like those of Iceland and New Zealand. One near the Castle Geyser has been fancifully named "Circe's Boudoir." The water is perfectly transparent, and so intensely blue, that one involuntarily plunges the hand in to see if it is water. The basin is of pure white silica, looking like marble. It is about 20 feet in diameter, and has a beautiful and regularly scalloped margin. The white basin slopes inward to a funnel-shaped opening which is 40 feet deep, and over this the water is most intensely blue, its temperature 180° F. The Geysers of the "Shoshone" Basin, although less active than those of the Fire Hole, are unsurpassed in beauty. They are at the extreme western end of the western arm of Shoshone lake, at the head of one of the branches of Snake River. The "Union," the "Minute Man," and the "Shield" are the principal geysers. The first is the most important, and is named from its combining the various forms of geyseric action. It will be easily seen that our geyser region not only exceeds all others in extent, but also in the variety of the springs and their products. Almost all the springs are at the boiling point in the upper Geyser Basin, and the deposits are silicious geysersite.

Following are the heights of the eruptions of the principal geysers :

	<i>Height in feet.</i>	
Fountain.....	Lower Geyser Basin, Fire Hole.....	30 to 60
Architectural.....	" " " ".....	60 to 80
Steady.....	" " " ".....	5 to 20
Young Hopeful...	" " " ".....	10
Grotto.....	Upper Geyser Basin, Fire Hole.....	25 to 60
Giant.....	" " " ".....	140
Giantess.....	" " " ".....	39 to 250
Castle.....	" " " ".....	50 to 250
Grand.....	" " " ".....	173 to 250
Turban.....	" " " ".....	25 to 30
Bee Hive.....	" " " ".....	100 to 219

Old Faithful.....	Upper Geyser Basin, Fire Hole.....	100 to 150
Saw Mill.....	“ “ “ .....	15
Solitary.....	“ “ “ .....	50 to 70
Union.....	Shoshone Geyser Basin.....	70 to 92
Minute Man.....	“ “ “ .....	30 to 40

I shall conclude with a few remarks on the theory of the geyser. One of the oldest was that of McKenzie. He thought there were underground cavernous recesses containing air, the pressure upon which, after an explosion, caused the action of the geyser.

Mr. Dony, of Ghent, discovered that water long boiled becomes more and more free from air, by which its molecular cohesion is greatly increased, and when the heat is great enough to overcome this cohesion, the production of steam is instantaneous. Bunsen, in a series of investigations among the geysers of Iceland, found that just before an eruption at no point in the geyser tube was the water at the boiling point. He also noticed, as has always been noted in the Yellowstone geysers, that immediately preceding the eruptions the water always rises in the basin. In descending the geyser tube the temperatures increased; so also does the boiling point. Now suppose the steam coming in by ducts below raises the water. The heated water is then raised to a level where its temperature is in excess of that necessary to make it boil, and this excess of heat is applied to the generation of steam, and as a consequence the column of water is raised still higher. More steam is formed; from the middle downwards the mass suddenly bursts into ebullition, and the column of water mingled with steam is projected into the air. Dana in his *Manual of Geology*, substantially in agreement with Bunsen, ascribes the geysers to—

1. Access of subterranean waters to hot rocks, producing steam which seeks exit by conduits upward.

2. To cooler superficial waters descending those conduits to where the steam prevents farther descent, and gradually accumulating until the conduit is filled to the top.

3. To the heating up of these upper waters by the steam from below, too near the boiling point, when (4) the lower portion of these waters becomes converted into steam, and the jet of water or eruption ensues.

Bischof's idea is that "the intermitting springs of Iceland are probably caused by the existence of caverns in which the vapor is retained by the pressure of the column of water in the channel which leads to the surface. Here this vapor collects and presses

the water in the cavern downward until its elastic force becomes sufficiently great to effect a passage through the column of water which confines it. The violent escape of the vapor causes the thunder-like subterranean sound and the trembling of the earth which precedes each eruption. The vapors do not appear at the surface till they have heated the water to their own temperature. When so much vapor has escaped that the expansive force of that which remains has become less than the pressure of the confining column of water, tranquillity is restored, and this lasts until such a quantity of vapor is again collected as to produce a fresh eruption."

Prof. Theo. B. Comstock, who visited the Yellowstone National Park in 1873, while thinking Bunsen's theory adequate to explain the prominent features of geyser eruptions, believes that a modification of Bischof's theory should be combined with it in order to explain some of the phenomena observed. Bischof's theory is easily demonstrated by experiment. If an iron tube about six feet in length, surmounted by a basin, be filled with water, heated below, and, to imitate the high temperature at a corresponding point of the geyser, also about two feet from the bottom, every five minutes the water will be projected from the tube into the air, being thus a miniature geyser.

We have learned just sufficient to know how desirable further investigation and study is. No locality in the world presents such a favorable field as our "National Park," and it is to be hoped that systematic researches will be prosecuted there at no distant day.

It is well known that the geyser water deposits no sediment, no matter how long it is kept. How then are the tube and crater formed? Simply by evaporation. Tyndall gives the following description of the process: "If we place a quantity of the geyser water in an evaporating basin the following takes place: In the centre of the basin the liquid deposits nothing, but at the sides, where it is drawn up by capillary attraction, and thus subjected to speedy evaporation, we find silica deposited. Round the edge a ring of silica is laid on, and not until the evaporation has continued a considerable time do we find the slightest turbidity in the middle of the water. This experiment is the microscopic representant of what occurs in Iceland. Imagine the case of a simple thermal silicious spring, whose waters trickle down a gentle incline; the water thus exposed evaporates speedily, and silica is deposited. This deposit gradually elevates the side over which the



water passes, until finally the latter has to take another course. The same takes place here, the ground is elevated as before, and the spring has to move forward. Thus it is compelled to travel round and round, discharging its silica and deepening the shaft in which it dwells, until finally, in the course of ages, the simple spring has produced that wonderful apparatus which has so long puzzled and astonished both the traveler and the philosopher."

Hot springs are therefore similar the world over, and are modified by various circumstances. It is a remarkable fact and one gratifying to us as Americans, that within the tract known as the "Yellowstone National Park," we can find such a variety of springs as no other part of the world can present. The setting aside of this area by the Forty-first Congress was the result of the Expedition of Dr. F. V. Hayden, in 1871, and was due largely to his personal efforts, for which all students of science will ever be thankful.

A. C. PEALE.

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## HAECKEL'S GENESIS OF MAN, OR HISTORY OF THE DEVELOPMENT OF THE HUMAN RACE.<sup>1</sup>

[THIRD AND CONCLUDING PAPER.]

PHYLOGENESIS.

THE fundamental biogenetic law that ontogenesis is an abridged repetition of phylogenesis, that the transformations through which the individual passes during its ante-natal and post-natal existence in the brief period of its career are a mere reflection of those through which its race has passed during the long ages of its slow development, and that the latter process is the strict physical and mechanical cause of the former,—this deepest of all biological laws Haeckel no longer treats as a *theorem* requiring demonstration, but employs it as a *postulate* by the aid of which all the most troublesome gaps left in the anthropogenetic series by the evidences of comparative anatomy, paleontology, and geographical distribution (*chorology*), are satisfactorily closed. Such gaps have existed along the entire line, rendering it difficult and in many cases impossible

<sup>1</sup>Anthropogenie, oder Entwicklungsgeschichte des Menschen, von Ernst Haeckel, Professor an der Universität Jena. Leipzig, 1874.

to trace it, and leaving so large a part of the whole theory of descent a matter of conjecture, that it was easy for those so disposed to point out unanswerable objections. But once admit the facts of ontogenesis, and miracle alone, and this of the most incredible kind, is the only alternative to the acceptance of the fundamental law, which candidly viewed in the light of these facts, bears every mark of inherent probability. Not only does this law fill out numerous voids and supply many wholly "missing links" in the phylogenetic chain, but it also confirms in the most remarkable manner nearly every item of the evidence furnished by the other sources of proof of the doctrine of descent.

Great indeed was the step which this doctrine took when the remarkable revelation was made in the domain of comparative anatomy, that the *Amphioxus* possessed a *chorda dorsalis*, and that the *Ascidian* larva contained an even more distinct trace or rudiment of a vertebral column. Professional naturalists without preconceived ideas could no longer resist the inference that here was the true *nexus* between the worms and the vertebrates. Consider now the almost crucial verification which this hypothesis received when it was found that the embryonic stages of every creature higher in the scale of being than the *Amphioxus* presents phases identical with those of that animal and of the *Ascidiae*, that even the human embryo has its worm-stage immediately succeeded by its *Chordonium* stage, and this again by its *Acranial* stage; the collateral proofs extending even to the germinative layers, and thus rendering the correspondence complete and the inference irresistible. Equally pointed illustrations might be drawn from many other points along the line of common descent.

But valuable as is this class of evidence at these comparatively advanced stages, it is still more so far down toward the dawn of organic existence. For while in the former it only serves to supply the omissions or verify the testimony of an array of paleontological, anatomical, and chorological facts, in the latter it stands alone as the sole evidence of a tangible character of the development of living forms out of the primordial and unorganized *plasma* of nature, and indeed from inorganic matter itself. These ontogenetic stages have already been considered, and unavoidable mention made of many of the forms to which they correspond, and whose stamp they bear.

The deeper problem of the origin of life on the globe is one

which strictly belongs to phylogeny, and one which Haeckel has not hesitated squarely and boldly to meet. The doctrine of spontaneous generation, or *archigonia*, is by no means so simple as many suppose, and is not to be settled by either the supposed success or failure to originate bacteria, diatoms, and monads, under certain conditions, in organic infusions.

The only form of generation which has ever yet come within the scope of human observation, and which, from the nature of things, can ever be expected to be directly witnessed by human eyes, is, of course, that wherein the offspring proceeds directly from a known and distinct parentage. This form of generation is called *tocogonia*, and genesis itself in its widest sense is therefore primarily divided into *archigonia* and *tocogonia*.

The exceedingly complicated subdivision of *tocogonia* must be passed over, as we need consider here only the simpler but still somewhat complex one of *archigonia*, or original spontaneous generation. Although nothing is perhaps empirically known respecting this process, its existence as forming the first link in the phylogenetic chain possesses the highest degree of probability *a priori*, which is not at all lessened by any empirical failures to subject it to the testimony of the senses.

The problem divides itself into two, which Haeckel considers distinct and independent. The phenomenon assumed by the one he calls *plasmogonia*, in which the genetic process is conceived as taking place in a fluid containing organic matter, which is supposed by some to be essential to the origination of life. The other form of *archigonia*, on the other hand, conceives the process as taking place in a medium consisting wholly of inorganic elements, and Haeckel accordingly denominates this process *autogonia*, *i. e.* unaided self-generation. It will be observed that the great majority of the experiments thus far tried have been confined to the first of these classes, or *plasmogonia*. If we now consider the second class, or *autogonia*, we perceive that this also presents a twofold problem. It is either a process which under certain rare and favorable conditions is going on at all times in some parts of Nature's domains, or it may be one which was only capable of taking place at one period in the geological history of the globe, when conditions existed which were quite different from those now existing, and that all the life now found on the globe has descended through the *tocogonic* process from the primordial organisms then created.

To all these questions but one answer can be given; but this is an answer which either must be given, or else the whole monistic theory must be surrendered. This answer is that *somewhere and at some time the organic world must have developed out of the inorganic.*

This is all we really *know*, but this we do know just as well as we know that the surface of the earth has undergone the changes which geology teaches that it has undergone. One of three things is certain; either organic life must have existed from eternity, or it must have been created specially, or it must have had a natural origin out of inorganic matter. The first of these contradicts all the facts of geology and all our modern ideas of the cosmogony of our system. The choice lies, therefore, between the other two, and for the consistent *dysteleologist*, there remains no alternative.

Haeckel, however, is undoubtedly too hasty in many of his sweeping assumptions respecting this problem, as for example, that of the direct autogonia of his moners, such as *Bathybius Haeckelii* of Huxley, who dredged it from the bottom of the Atlantic, where it exists in vast quantities as a strange unorganized mass of living protoplasm. Even this would doubtless be too great a *saltus* for Nature to make. It is certainly far more in harmony with Nature's processes generally, and with the whole tenor of the monistic or genetic philosophy, to conceive that between the two divisions of archigonia which he establishes, autogonia and plasmogonia, there is in Nature a regular gradation, as throughout the rest of her domain, and that she first develops the plasma, that is, some combination of organic matter, consisting of the necessary nitrogenized and carbon compounds in a high state of complexity and instability, and then, as a mere continuation of a uniform process, impresses this, first with the lowest and then with higher and still higher vital properties. For life is unquestionably a product of organization.

While, therefore, inorganic matter must be regarded as the primordial ancestor of all organized beings, the first stage in the genealogical development of all living things, and hence also of man, must have been some form of *moner*. Haeckel enumerates eight genera of moners now existing on the globe, and there can be no doubt that there are many more still undiscovered, and their extreme and absolutely structureless simplicity renders it highly probable that they are really the first form of life which was developed on the globe.

The direct descendants of the moners are undoubtedly the various forms of *amoeba*. About the only observable differentiation required to effect this transformation, is the development of a nucleus in the interior of the protoplasmic substance of the former creature. This change converts the *cytode* into a true *cell*, and such is the character of the amoeba, a simple individual of the first order. According to Haeckel, neither the moner nor the amoeba can be strictly classed either with animals or with plants. They belong, together with many other lowly-organized beings, such as the *Flagellata* or lash-cells, the diatoms and the rhizopods, to his famous *third kingdom*, the *Protista*. As moners, however, are the lowest of all forms of life, he divides these into three classes, animal moners, vegetable moners, and neutral moners. The first class develop into the lowest animal form, the *Protozoa*; the second into the lowest vegetable form, the *Protophyta*; and the third into the neutral form, the *Protista*. He also speaks of animal amoebæ, and seems to regard these creatures more nearly allied to animals than to plants. At least, he places both the moner and the amoebæ at the base of the animal scale, as the first and second terms of the phylogenetic series.

From the amoeba-group proceed the true Protozoa, which therefore stand in the anthropogenetic line. Applying now the biogenetic law to the *Morula-stage* of ontogenesis, and we are able to conclude that these animal amoebas, at one period in their history of development, formed societies or compound individuals (*Synamoebia*), which therefore constituted the corresponding third stage of development in the anthropogenetic line.

There must have next existed, as the fourth stage, a family of creatures standing at the base of the protozoa, whose bodies consisted of a simple hollow sphere, the walls of which were formed of a single layer of cells. These were the *Planæada*, and they find their embryonic recapitulation in the blastosphære stage. These creatures are not yet so far extinct but that representatives of them still exist in Haeckel's *Magosphaera*, in *Synura*, and in other marine and fresh-water forms.

The gastrula-form of embryonic development, barely traceable in the higher vertebrates, but common to both Amphioxus and Ascidiæ, as well as to many lower forms, is all there is to warrant the assumption of a class of beings once peopling the waters of the globe, whose bodies consisted of a simple sack open at one end

and formed of two cellular layers. These were the interesting *Gastreaeda*, which have given to all the forms that have descended from them the warp and woof of all their tissues, the primary germinative layers. They must have developed directly out of the *Planaeada*, and form the fifth stage in the descent of man.

Ontogenesis next points, as a sixth stage, to an extinct race of primordial worms, *Archelminthes*, which originated from the *Gastreaeda* by the formation of an intermediary germinative layer, from which the two inner secondary layers eventually differentiated. These creatures belonged to the lowest sub-division of the worms, the *Acoelomi*, which, as their name implies, possess no cavity of the body (*coelom*) distinct from the sack-like stomach. They are also without any vascular system, heart, or blood, but manifest the first traces of the formation of a nervous system, the simplest organs of sense and rudiments of secretive and reproductive organs. The typical representatives of the *Archelminthes* are the *Turbellaria*, but they also closely resembled the parasitic Trematoda and Cestoda, which belong to the group *Acoelomi*. Thus is man connected by blood relationship with the loathsome tape-worm that infests his stomach!

Out of the *Acoelomi* were developed the *Coelomati*, which, still low in the scale, nevertheless possess a distinct *coelom*. The now extinct race which effected this transition have been called the *Scolecida*, and form the seventh stage of anthropogenetic development. The exact gap which they seem to have bridged over lay between the *Turbellaria* and the *Enteropneusta*, the last of which are represented by the well-known *Balanoglossus*. From this point the great articulate branch swung off, and a little higher the important branch of the Mollusks.

To arrive at the eighth stage we are again compelled to resort to the fundamental biogenetic law, and reason from the chordonium stage of embryonic development of all vertebrates to an extinct form, which must have possessed the rudiment of a vertebral column in the form of a *chorda dorsalis* as a permanent character of its adult state. It would have been wholly impossible to say whether this assumed creature should be placed in the department of articulates, mollusks or worms, were it not for the flood of light which the anatomy of the Amphioxus and the Ascidian has within the past few years shed upon the whole problem.

The existence of such a *chorda* in the former of these animals,

and its presence also in the larval forms of the latter, are two facts which point unmistakably to the type *Vermes* as the one which has furnished the transition to the vertebrata. No creatures have been found in any of the other types which afford the least intimation of any such transition, and neither in the Protozoa, the Zoophytes, the Echinodermata, the Crustacea, the Arthropoda, nor the Mollusca, has any trace of a *chorda dorsalis*, either in the larval or adult state, been detected after the most thorough examination. The conclusion is, therefore, irresistible, that the sub-kingdom Vermes and the class *Tunicata* have furnished the true progenitor of the vertebrates. This transition form itself has probably long been extinct, but it has left lineal representatives in the Ascidia, Phallusia, etc., which, while through long adaptation to a fixed existence during their adult state they have lost their *chorda*, still retain that distinctive character during their free larval state, as the unquestionable ontogenetic expression of an organ which they have inherited from their extinct chorda-bearing ancestor. This ancient and primordial ancestor of the vertebrate sub-kingdom to which so many facts, both of ontogenesis and of phylogenesis, with so great certainty point, Haeckel denominates the *Chordonium*. As if to put the solution of this important question beyond the possibility of a future doubt, it is now found that a member of this same group, the *Appendicularia*, actually preserves its chorda during life, and this creature may therefore be regarded as a now living representative of the true *Chordonium*.

The Amphioxus forms the ninth stage in the anthropogenetic line, and furnishes the first link in the vertebrate chain. It is the only known representative of the once great subdivision of vertebrates called by Haeckel the *Acrania*, or skullless vertebrates.<sup>2</sup> Of this wholly unique and extremely interesting creature sufficient mention has already been made.

The tenth stage is that of the *Monorhinæ* or *Cyclostoma*, which have for their best known representative the *Petromyzon* or lamprey. These arose out of the *Acrania* through a simple enlargement of the anterior extremity of the spinal nerve and the differentiation of the corresponding part of the *chorda dorsalis* into a rudimentary cranium. The distinctive circular mouth-orifice Haeckel regards as a mere adaptive character not present in the original progenitor of the *Craniota*.

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<sup>2</sup> See note to second paper (May) page 364.

The transition to the eleventh, the Selachian or primordial fish-stage, took place through the formation of a pair of nostrils and a pair of jaws out of the simple circular mouth-orifice of the *Cyclostoma*. This transformation led to the *Amphirhinae*, a branch of the *Craniota*, systematically coördinate with the *Monorhinae*, but embracing all the rest of the vertebrate sub-kingdom. With the higher fishes (*Ganoides* and *Teleostei*) human genealogy is not immediately concerned, but only with the lowest sub-class, the *Selachii*, whose present living representatives are few, and comprise the sharks, rays, etc., but which formed in the Devonian age the chief population of the waters of the globe, as their singular heterocercal remains found in the rocks of that period abundantly attest.

The transition from the Selachians was next to the *Dipneusta*, which constitute the twelfth stage. It was brought about by the natural adaptation of the organs of the body to a partially terrestrial existence. The swim-bladders were transformed into imperfect lungs, the nasal orifices, which in fishes have no communication with the interior of the mouth, established such a communication, and the single auricle of the heart divided into two, thus correspondingly improving the circulation of the blood. The *Dipneusta* therefore employed their gills, which they retained, when in the water, but breathed through their lungs when on land. They form therefore a very anomalous and interesting transition group connecting the lowest fishes with the lowest amphibians. They were a very large class in paleolithic time, as their dental remains testify, but at present only three genera are known, each with a single species, viz.: *Protopterus annecteus*, of the rivers of Africa, *Lepidosiren paradoxa*, of tropical America, and *Ceratodus Forsteri*, from South Australian swamps.

Gegenbaur has demonstrated that the real character of the fins of fishes is that of many-toed feet. The changes that led from the fish to the *Dipneusta* seem not to have affected the number of these toes, although a certain adaptation of the fins to terrestrial locomotion was perceptible. The next important transformation was to concern this part of the animal anatomy. The animals nearest related to the *Dipneusta* are unquestionably the amphibians, with which the former are frequently classed; but they differ from them in the important respect of possessing regular five-toed feet. But one conclusion can be drawn from this fact, and this is that among the many and varied forms of the once great *Dipneusta* class, there



was one whose locomotive organs had become transformed through adaptation and natural selection into five-toed feet, and that from this long extinct five-toed progenitor, the present amphibians have descended. The human embryo itself, and that of all the higher vertebrates, pass through an analogous transition.

With frogs, toads, and other higher amphibians, as we are most familiar with them, the anthropogenetic line has no direct connection. It constantly hugs the base of the whole group, exhibiting direct relationships only with the *Sozobranchia*, which therefore form the thirteenth, and the *Sozura*, which form the fourteenth stage.

The former of these sub-classes comprises the *Proteus*, the *Siren*, and the *Siredon*, as among its best known representatives, while the latter belong the Triton and the Salamander. These once abundant but now comparatively rare creatures have furnished naturalists with some of the most interesting examples of what may be almost called the *visible transmutation of species*. It is well known that frogs and toads (*Anura*), the more highly differentiated amphibians, instead of possessing both lungs and gills during life, as do the Dipneusta, undergo a complete metamorphosis after birth, passing from a true fish-form, in the tadpole state (in which, in addition to the well known external fish-like characters, they also possess gills and no lungs and a corresponding piscine circulation), to the familiar batrachian form in which their respiration is through lungs only and their circulation through two auricles. Now the two sub-classes above named furnish the most perfect and characteristic transition stages between the larval and adult states of the higher amphibians. The *Sozobranchia*, as the term implies, preserve their gills through life, but also acquire lungs, and are therefore strictly amphibious. They live, however, chiefly in the water, and there perform all the functions of their existence. The greatest excitement in scientific circles has been recently called forth by the extraordinary conduct of a member of this group. The Mexican Axolotl (*Siredon pisciforme*) was observed in the Paris *Jardin des Plantes*, where large numbers of these creatures were kept, to frequently take to the land, and several individuals so far habituated themselves to terrestrial life that they actually lost their gills in the manner of the higher amphibians. Individuals thus behaving were scarcely distinguishable from the *Amblystoma*, a genus of the *Sozura* which acquire lungs.

An equally remarkable phenomenon, but of exactly the opposite class, was manifested by the Triton, which belongs to the last named sub-class, and therefore habitually undergoes the metamorphosis common to frogs, etc., only without the loss of the tail. Before it arrives at maturity, the Triton, under ordinary circumstances, loses its gills and leads a sub-terrestrial life, breathing only air. But by placing it in a tank so shaped that it was unable to get out of the water, it was thus compelled to retain its gills through life, and even propagated in the water.

All animals above the amphibians are characterized by the possession, during their embryonic stages, of the important organ called the *amnion*, which is wanting in all below them, and in the amphibians themselves. The facts of ontogenesis as well as those of comparative anatomy justify the assumption of the former existence, probably in the beginning of the Mesozoic age, of a lizard-like animal whose fossil remains have not yet been discovered, and whose affinities with any known living form are not close, but which must have been the first to develop this particular organ, and was thus the progenitor of all that now possess it, and hence of man himself. This creature, which forms the fifteenth stage of man's genealogy, Haeckel calls the *Protamnion*. Out of it was developed primarily the great reptilian class, from which proceeded later the birds, with neither of which has man any direct connection. The origin of the mammals, however, must also be sought in the *Protamnion* stock, from which this class too must have proceeded, perhaps simultaneously with the reptilian branch, though in quite a different direction. The skull of all reptiles and birds is articulated to the atlas by means of a single condyle, while in mammals this condyle is double. From this circumstance the reptiles and birds have been designated by the common term *Monocondylae*. In them also the lower jaw is composed of several pieces, and movably joined with the skull by a special process, while in the mammals it consists only of a pair of pieces, and is immediately connected with the temporal bone. The further distinction between the scales and feathers of the former, and the hairs of the latter, is likewise an important one. The complete diaphragm of mammals, dividing the thoracic entirely from the abdominal viscera, and which is only partial in the *Monocondylae*, is a further very characteristic distinction. Finally, the existence of mammary

glands in the latter, from which the class takes its name, and which are wanting in all other creatures, not only indicates a very distinct position for the mammals, but combines with other characters to place them at the head of the animal series.

A very distinct race, which Haeckel styles the *Promammalia*, forming the next or sixteenth stage of man's descent, must have developed out of the *Protamnia*, and transmitted all these marked peculiarities to the entire mammalian class. Man himself possesses all these special mammalian characteristics, and is therefore a genuine mammal.

The nearest known living representatives of these hypothetical *Promammalia* are the curious and remarkable *Monotremata* of Australia and Tasmania. Of the entire sub-class only three forms are known, the singular *Ornithorhynchus paradoxus* and the *Echidna*, of which there are two species, *E. hystrix* and *E. setosa*. These animals seem at first sight to form an immediate connecting link between the birds and the mammals, as they possess the beak of the former with the lacteal glands of the latter. They further agree with the birds in having the anterior extremities of the clavicles united to the sternum, forming a sort of merrythought. A still more fundamental point of resemblance to the birds, and that from which the sub-class takes its name, is the possession of a common *cloaca*, the urino-genital duct opening within the body. The monotremes, however, agree with the mammals in all the characteristic attributes above enumerated, such as double occipital condyle, complete diaphragm, etc., while the cloaca, the merrythought, and other apparently avian characters, may have been inherited as well from the amphibians as from the birds. The beak, however, can only be accounted for as having developed independently from adaptation to conditions of existence similar to those which evolved the toothless jaws of turtles, from which it is believed the beak of birds has been derived. The beak of the *Echidna* differs from that of the *Ornithorhynchus*, and exhibits an approach towards the snout of the ant-eaters. The beaks of monotremes and of birds must therefore be regarded as simply analogous, and not as homologous organs.

The *Promammalia* no doubt differed in many respects from the *Monotremata*, and Haeckel is inclined to believe that they possessed regular teeth, which the latter lost through adaptive modification. At least the earliest fossil remains that paleontologists

have been able to refer with certainty to the mammals, and which occur in the triassic formation, consist of teeth only. From a few small molar teeth found in Germany, and also in England, the *Microlestes antiquus* has been constructed; and from similar dental remains found in this country, the *Dromatherium sylvestre* has been described.

Although the Monotremata differ from the *Monocondylae* (reptiles and birds) in so many important respects in which they agree with the higher mammals, they, nevertheless, also present many points of difference with these latter. In addition to those already mentioned (cloaca, united clavicalae, etc.), the absence in these animals of any teats upon the mammary glands is very peculiar and anomalous. In consequence of this omission, the only way in which the young are able to obtain their nourishment, is by a process of licking against the porous breast of the mother; and Haeckel, therefore, proposes as a synonym for the ordinary name of the sub-class, that of *Amasta*, or mammals without teats. Again, the *allantois* is never transformed into a placenta, the *corpus callosum* is not developed, and there exists a pair of rudimentary marsupial bones. This last character affords almost conclusive proof of the descent of the marsupials from the monotremes.

The *Marsupialia* must therefore be regarded as the next group of animals in the regular line of descent which terminates in man, and as forming the seventeenth stage in the development of the human race. Here the cloaca is divided by a horizontal partition into two distinct orifices, both opening externally; nipples are formed on the *mammae*, to which the young attach themselves, and the clavicles are distinct from the sternum. In these respects, the marsupials agree with all the higher mammals. The distinguishing character in which they differ from them, and that from which the name of the sub-class has been taken, is the existence of a remarkable pouch or sack (*marsupium*) on the under side of the female, in which the young are placed at a very early period, and there retained until they are able to take care of themselves. This pouch has been aptly likened to a second or supplementary uterus, and the marsupials have accordingly been called by some, *Didelphia*. Our well known Opossum (*Didelphys*) is our only North American representative; but in Australia, this group of animals constitutes the greater part of the mammalian fauna.

The absence of a placenta is the only other important particular

in which the marsupials differ from the higher mammals. Indeed, the marsupium seems to constitute a sort of substitute for a placenta, and the want of the latter may be regarded as the physiological cause of the development of the former. The monotremes, however, are without either, and those who know would do well to explain how these animals are able to dispense with them both.

The so-called true *Mammalia* all possess a fully developed placenta, and are therefore distinguished from the two groups last mentioned as forming a third sub-class, the *Placentalia*. This organ is of great importance in the classification of the higher mammals, its mode of attachment furnishing excellent and reliable general characters. In some, for example, the placenta is deciduous from the inner wall of the uterus, while in others it is not, and on this distinction is based the primary division of the whole sub-class into the *Deciduata* and the *Indecidua*. The latter are the least perfectly organized, and comprise the Edentata, the Cetacea, and the Ungulata. In man the placenta is deciduous, and he can therefore have descended from none of these.

The *Deciduata* again fall into two divisions according as the embryo is attached by the placenta to the uterus upon a single small area or disk, or by a band or girdle extending entirely around it. The former are called *Discoplacentalia*, the latter *Zonoplacentalia*. The *Zonoplacentalia* embrace the *Carnaria* (*Carnivora* and *Pinipedia*) and the *Chelophora*, to which the elephant belongs. The *Discoplacentalia* comprise the rodents, the *Insectivora* (moles, etc.), and the *Chiroptera* (bats), the lemurs (*Prosimiæ*), and the apes (*Simiæ*). To this last legion also belongs man, who differs in this respect not at all from the mouse, mole, bat, lemur, or ape.

Now it is a remarkable fact that in one order of the marsupials, the *Pedimana*, embracing the two families *Chironectida* and *Didelphyida*, to the last of which our opossum belongs, the hind feet are modified in a peculiar way into organs for grasping resembling hands. This group can therefore only be regarded as exhibiting the earliest marks of that important course of transformation which culminated in the apes and in man. The course of development was from this group of marsupials directly to one within the *Deciduata*. Leaving all other animals wholly out of its course, the line of descent of man passes immediately from the *Marsupialia* to the *Prosimiæ* or lemur group, an order which Haeckel takes out of Blumenbach's *Quadrumanæ*, because it is so much farther sep-

arated from the other apes than any of these are from one another. They are ape-like creatures, but shade off in a very interesting way into nearly all the remaining orders of the *Discoplacentalia*. The *Chiromys Madagascariensis* forms the transition to the rodents; the *Galeopithecus* of the Sunda Islands, to the bats; the *Macrotarsi*, to the insectivora; and the *Brachytarsi*, particularly the Lori (*Stenops*), to the true apes. They also exhibit close affinities to the Sloths (*Bradipoda*), which have been regarded as an order of the *Edentata* in the Indecidua; but recent investigations have proved that they have a deciduous placenta, and therefore it must be at this point that the Deciduata and the Indecidua join. The lemurs are harmless and melancholy nocturnal animals of a graceful form, and are chiefly confined to the islands south of Asia and east of Africa, and particularly to Madagascar. Their frequency on the islands of the Indian Ocean led the English naturalist Sclater to name this once continental but now mostly submerged region *Lemuria*, a circumstance to which Haeckel has given special prominence by pointing out the many facts which conspire to justify us in the conjecture that here may have existed the true "cradle of the human race." The lemurs form the eighteenth stage in the anthropogenetic line.

From the lemurs to the true apes the transition is comparatively easy. They evidently developed out of the *Brachytarsi*, the *Stenops* forming the nearest approach to a connecting link.

Linnaeus, with almost prophetic ken, notwithstanding his dualistic proclivities, classed man with the apes, lemurs, and bats, in his celebrated order, Primates. Blumenbach fancied he saw in the human foot a pretext for rescuing man from this association, and accordingly erected for him a separate order which he called *Bimana* (two-handed), distinguishing the apes, etc., as *Quadrumana* (four-handed.) This classification was adopted by Cuvier, and is the one which has generally prevailed among naturalists, down to Huxley and Haeckel. Huxley, however, gave the whole subject a complete re-investigation, and arrived at the conclusion that Blumenbach's order *Bimana* cannot be maintained on anatomical grounds. He shows in the most convincing manner that the distinctions alleged to exist between the posterior hands of apes and the feet of man are apparent only, that they were based on *physiological* and not on *morphological* considerations. The apes are just as good *bimana* as men are, and men are just as good

quadrumanas as the apes. In neither are the posterior limbs in all respects homologous to the anterior. The tarsal bones are differently arranged from the carpal bones, and there are three distinct muscles serving to move the foot that are wholly wanting in the hand. But all this is as true of the apes as of man. The limited opposability of the great toe in man is only a functional distinction. The muscles of opposability are all present; they are merely atrophied by disuse and adaptation to altered conditions. Traces of this power are found in many savages who hold on with their toes to the branches of trees in the forests where they live, and otherwise employ this posterior thumb in a variety of ways which Europeans cannot imitate. There are moreover many instances on record of men acquiring extraordinary dexterity in the use of their toes. Every one in this country has seen the exhibitions of the armless man who traveled through our towns and displayed marvelous feats performed with his toes. Again, infants make far more use of their great toes than adults do. Watch a new-born babe as it lies in its cradle and amuses itself with exercise of its muscular activities; compare the movements of its hands with those of its feet, and you cannot but be struck with the comparative indifference with which it manages both. The human foot, whose careful study has been said to constitute a sure cure for atheism, and whose wonderful adaptation to the purpose to which it is applied has been regarded as an unanswerable argument for the doctrine of design, can therefore be nothing more than a natural result of the modification of the posterior hand of the ape, in simple obedience to the mechanical law of adaptation to changed conditions, while in it are found all the visible elements of that ancestral organ which the equally monistic law of heredity has transmitted from our simian progenitors. Huxley therefore restores the Linnæan order *Primates*, removing only the *Chiroptera*. Haeckel, however, would adhere to his order *Prosimiæ*, the lemurs, for the reasons above stated.

The true apes are primarily divided into two great groups, which are as distinct geographically as they are anatomically. These are the *Catarrhinae* or Old World apes, and the *Platyrrhinae*, or New World monkeys. They differ chiefly in two important respects. The *Platyrrhinae* have a flat and broad nose, like other animals. The nostrils open *outwardly*, and are separated by a broad interval. They have also 36 teeth, 18 in each jaw. In both these respects

they *differ* from man. The *Catarhinae*, on the other hand, have a somewhat projecting, laterally compressed, and often arched or acquiline nose, with the nostrils close together and opening *downwards*. They have only 32 teeth, or 16 in each jaw. In both these respects they *agree* with man. The clear-cut, much projecting, and elegantly formed nose of the Nose-ape (*Semnopithecus nasicus*) would adorn the face of any European nobleman, while the countenance taken in its *ensemble*, of *Cercopithecus petaurista* would be sure to call to any one's mind some not very bad-looking person of his own acquaintance. And yet these handsome apes are endowed with long tails. Not only is the number of the teeth of the *Catarhinae* the same as in man, but they are distributed in precisely the same manner, namely: 4 incisors, 2 canine or eye teeth, and 10 molars or grinders, in each jaw.

The *Catarhinae* are further divided into two groups of tail-bearing and tailless apes. The tail-bearing apes have most probably been developed directly from the lemurs, and therefore constitute the nineteenth stage in the descent of man. Our ancient forefathers in this group were perhaps similar to the now living *Semnopithecus*, from which the tailless apes, forming the twentieth stage, were differentiated chiefly by the loss of their tail. These latter bear the greatest resemblance to man, and are called anthropoid apes, constituting the family *Anthropoides*. This family consists, as far as known, of but four genera, *Hylobates*, the Gibbon of southern Asia; *Satyru*s, the Orang of Borneo and the Sunda Islands; *Engeco*, the Chimpanzee of southern and western Africa, and the Gorilla, first discovered by the missionary Wilson in 1847, on the Gaboon River, western Africa, and afterwards by Du Chaillu. The Gorilla is the largest of known apes, and exceeds the human stature.

To none of these four anthropoid apes, however, can we point as being in all respects the nearest to man. The Gibbon resembles man most in the form of the thorax, the Orang in the development of the brain, the Chimpanzee in the formation of the skull, and the Gorilla in the differentiation of hand and foot, and also in the relative length of the arms. It is therefore evident that man cannot have descended directly from any known living ape. His real progenitor must, in a greater or less degree, have combined all these characters, and has no doubt been long extinct. It is from paleontology that we alone hope for aid in the discovery of this "missing



ink." The fossil remains of this extinct genus (*Pithecanthropus*) may be looked for with some confidence in the still little known region of south-eastern Asia, the Malay Archipelago, and throughout central and western Africa.

The comparative anatomy and osteology of these four genera of anthropoid apes has been exhaustively studied by Carl Vogt, Huxley, and others. The final conclusion to which Huxley comes, and which he expresses in the most unqualified and emphatic manner, is that no matter what system of organs we take, a comparison of the modifications in the Catarhine series leads to one and the same result: that the anatomical differences that distinguish man from the Orang, Gorilla, or Chimpanzee, are not as great as those which distinguish these latter from the lower *Catarhinae*, (*Cynocephalus*, *Makako*, *Cercopithecus*.) Therefore, as Haeckel remarks, it is incorrect to say that man has descended from the apes; *he is himself an ape*, and belongs as strictly to the Catarhine group as the Gorilla or the Orang-outang! He therefore establishes another family within that group, together with the *Anthropoides*, which he calls the *Erecti* or *Anthropi*. This family he divides into two genera, the first embracing the now extinct ancestor of the human race, the *Pithecanthropus* or ape-man, which therefore forms the twenty-first genealogical stage, and the second being the genus *Homo*, or man as we find him, forming the twenty-second and last stage in his development from the moner.

Three anatomical distinctions of any importance are all that exist to separate the two families *Anthropoides* and *Anthropi*. One is the more erect posture of the latter—a difference of degree, however, which varies both with the apes and with men. The second is the higher brain development of the latter, which is also only a quantitative distinction. The third and only distinction which can be called qualitative, is the differentiation in the *Anthropi* of the larynx into an organ of speech. And not even this, much can be now fairly said, since it is found that the larynx of monkeys exhibits a much higher state of development than that of other animals.<sup>3</sup> Haeckel, however, regards *Pithecanthropus* as a speechless man, having the erect posture and differentiated brain, but who had not yet acquired the power of articulate language or the necessary organs for its utterance. For this reason

<sup>3</sup> Emile Blanchard, Voice in Man and Animals, in *Pop. Sci. Monthly*, Sept., 1876, page 519.

he offers also as a synonym for his name *Pithecanthropus*, the equally appropriate one, *Alalus*, the speechless. This, however, is only theory. In point of fact the erect posture, size and quality of brain, formation of vocal chords, and the origin of articulate speech, must have all advanced *pari passu*, mutually promoting one another, and developing by insensible degrees according to the universal method of all nature.

To the various races of men as recognized by ethnologists, Haeckel, in harmony with his general system, gives the rank of *species* of the genus *Homo*. All definitions of the term *species* having failed to unite upon any absolutely constant character as a condition to its application, the use of it here is justifiable, notwithstanding the ease with which the human races hybridize, and no matter what theory may be preferred of their origin or relationships. Of these species he makes out twelve, and advances an interesting theory of their origin and geographical distribution over the globe; but upon this new field we can here follow him no farther.

In casting a retrospective glance over the vast subject thus hastily passed in review, there are a few salient points which will have most probably in an especial manner struck the mind of the reader.

One of these is likely to be the great brevity of the anthropogenetic line, considering the variety and multiplicity of living forms found on the globe. We perceive that of the seven subkingdoms of animals now recognized, only three are touched by it, viz.: the Protozoa, Worms, and Vertebrates. The zoophytes, echinoderms, arthropods, and mollusks, all branch off either below or at the worm stage, and the transition from the *Tunicata*, a worm-form, is direct to the vertebrata. This, when adequately appreciated, is an astonishing fact, and one which would never have been conjectured but for positive anatomical evidences. Those who believed in a law of development were looking vainly for proof of the derivation of the different types one out of another, and discussing which should be considered lowest, the articulates or the mollusks. They expected to find proof of a series with the radiates at the bottom and the vertebrates at the top.

The truth, as it has at last dawned upon us, dispenses with all such speculations. Equally surprising is the shortness and directness of the transition from the lowest to the highest vertebrates,

from the Amphioxus to the Ape. All the vague surmises of some extensive course of descent and lineal relationship among the numerous classes and orders of vertebrates are also now brought to an end. The higher fishes and higher amphibians, the reptiles and the birds, are all left to pursue special routes of their own; and a brief series of easy and rapid transitions through the lowest fish-form, the *Selachia*, and the lowest amphibian-forms, the *Sozobranchia* and *Sozura*, brings us at once to the lowest mammalian stage. But perhaps the most surprising part of this whole course is its one great stride through the entire mammalian class, from the marsupial to the lemur. All the vain expectations of finding some thread of relationship that should lead through the labyrinth of varied mammalian orders, and connect us with the horse, the dog, the elephant, etc., are thus happily set at rest, and we are permitted only to claim such consanguineal relationship with the opossum, the lemur and the ape.

In fact, instead of a long concatenated "*chaîne animale*," as Lamarck supposes, the animal kingdom presents rather a tree, spreading from very near the base with almost a whorl of unequal branches or subordinate trunks, each of which is again variously branched, giving the whole the form of an inverted cone or pyramid. At the upper extremity of each of these branches, which have come a long way independently of each other, is found one of the great groups or types of now living creatures, man occupying the highest summit of the vertebrate branch.

Contemplating now the great number of branches that arise at different points, some of which are short and apparently stunted, while others push upward with different degrees of vigor, only one or two reaching truly lofty and commanding positions, the thought forcibly strikes us that this picture reveals the universal tendency of nature to develop organic forms. We realize that this vital force or *nisus* is constantly pressing at every point, but that as the conditions of life are limited, success is possible only at a few points; that in consequence of obstacles of many kinds, not the least of which are offered by organic conditions themselves that have pre-occupied the field, the degree of success at these points varies widely, and produces all grades of vigor, size, length and ramification among the branches. The highest and most thrifty branches mark the line of absolutely least resistance; the shorter and less vigorous ones indicate lines offering varied degrees

of resistance; while the stunted, dwarfed, and retrograde branches show lines of resistance so great that the vital force barely overcomes it. Finally, all points from which no buds or branches arise teach us over how large a proportion of nature the resisting agencies wholly overbalance the organic tendencies, and no life can originate.

Another thought to which the attentive contemplation of this theme gives rise is the greater antecedent probability of like organs occurring in different animals being *homologous*, than of their being *analogous*. The conditions in which life finds itself placed are so infinitely variable that the chances are almost infinity to one against the development of the same organ independently at two different times and places. Where the same organ is unexpectedly found in two animals which had not been supposed to be at all related, it affords the strongest evidence that they are either immediately connected by blood, or at least that they have both descended from a common ancestor that possessed that organ. Hence the irresistible force of the testimony afforded by the so-called rudimentary organs, which none but those who realize this important law can properly appreciate. That analogues do sometimes occur in obedience to the law of adaptation cannot, however, be denied; but they usually betray their origin by being formed on an essentially different principle, though in such a manner as to accomplish the same purpose. The wings of birds, bats and insects are such cases of analogy, in each of which the morphological differentiation is wholly different, while the physiological function is the same. The beak of the *Ornithorhynchus* is perhaps as near an approach as we have to a true morphological analogue, the descent of that animal from the birds being overruled by a preponderance of evidence against it.

It is this principle, too, which conclusively negatives the presumption which some have advanced that the aborigines of America may have descended from the New World monkeys. Catarrhine man could never have sprung from a Platyrrhine ape.

It is moreover this same biological law which justifies Hæckel in the assumption of so many hypothetical and long extinct ancestral forms, although no warrant for them is afforded by paleontology. The *Gastræa*, the *Chordonium*, the *Protamnion*, the *Pro-mammalia* and the *Pithecanthropus* are all creatures, not of his imagination, but of stern logic, based on a profound famil-

ilarity with all the facts and principles that bear upon the problem. The common origin and blood relationship of all creatures that possess a spinal column, of all that are endowed with five-toed feet, of all that develop an amnion, of all that have the double occipital condyle, of all that suckle their young, of all having the fore and hind feet differentiated into hands, of all that have the catarrhine nose and identical dentition—these are propositions whose demonstration, by the aid of the law of heredity, is as complete and absolute as that of any proposition in Euclid. There is no other way to account for these facts. The chances of these organs being so many independent morphological analogues, produced by adaptation to identical conditions, are but as one to infinity.

Either the dualistic conception of teleological design, *i. e.*, miracle, must be admitted, or else there is no alternative from this explanation.

LESTER F. WARD.

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#### CAREY AND RICARDO IN EUROPE.

**M.** MAURICE BLOCK, in his review of foreign publications in the department of political economy, in the *Journal des Economistes*, of January last, mentions an attack made on Ricardo's theory of rent, which appears in a Berlin periodical, but is from the pen of Louis Felix of Vienna. M. Block says, "We are far from adopting all the opinions of Ricardo, but we are obliged to acknowledge that neither Mr. Carey, with all his talent, nor M. Louis Felix with all his science, has presented any valid objection to his theory .....When Mr. Carey says [*i. e.* objects] that population begins with the settlement of the mountains, where the soils are less fertile, he has not understood Ricardo. There is no need to take the word 'fertile' [as used by Ricardo] in a literal sense; he means simply 'advantageous'.....The theory of rent has become an engine of warfare; the socialists have seized upon that theory, and maintain that an individual should not profit by a lucky accident, that all the profit of accident should be covered into the Treasury of the State; but rent being represented as a spontaneous, gratuitous product of nature, the proprietor of the good lands ought to be taxed in such a manner that there shall be left to him no advant-

age from the difference in quality. It is in order to snatch their prey from the socialists that M. Louis Felix seeks arguments against Ricardo from every quarter, even from Liebig. Rent deserves neither such honor nor such indignity. If space permitted, we would show: (1) That it is pure envy which inspires these attacks upon the fortunate possessor of the rent of the soil, so far as it exists. (2) That it is not easy to assign its several share to [*a*] the capital employed; [*b*] the ability of the cultivator; [*c*] the fertility of the soil (the gratuitous gift of nature). (3) Rent ceases to exist as soon as the field, which has been favored by accident, is sold. The purchaser buys the property at its actual value; whatever be the fertility of the soil, it will not yield its owner more than the current rate of interest, the mean of profit from all possible soils. Lastly, we do not see why the owner of the soil should not profit even by its advantages, as well as an orator, a great singer, an able tailor, or any other sort of man or woman who happens to be born with a talent. As regards Mr. Carey, he, like another Monroe, lays down a special doctrine for America, out of the pure transatlantic patriotism, that is, which has no regard for Europeans."

Thus far M. Block. And now let us look at some of the concessions and some of the inaccuracies of this able and excellent writer.

First of all, let us note the new attitude of the orthodox political economy towards European socialism. Thirty or forty years ago, the Economists were regarded as the great bulwark against the destructive and subversive teachings of these wild theorists. They had shown, it was thought, the sufficient reasons for maintaining the existing edifice of society, in spite of all the misery and suffering which were found in seemingly inseparable connection with it. For the theory of population showed the natural and necessary origin of poverty and want; and did not the theory of rent do the same for the inequality of wealth? Or, as an American disciple of the school bluntly puts the case: "It is natural, and if natural proper, though we may not see the reason, that poverty, and want, and disease, and misery, should be the next-door neighbors of wealth and unbounded prosperity." All this seemed conclusive, until the socialists, instead of fighting their economical enemies front to front, outflanked them and began an attack on their rearward. We do not, at this writing, recollect of any one

before Frederick Lassalle who attempted this. The idea seems to have originated with that brilliant, but dissolute and unprincipled demagogue, or with his master, Karl Marx, who gave Europe a demonstration of Ledru Rollin's conclusions from Ricardo's premises. Since that day, the attitude of the European economic mind towards Ricardo's theory seems to have been undergoing a steady but gradual change. Some indeed stand by the old principles, in sublime indifference to any consequences which they have not themselves drawn. Some, like the *Katheder-socialisten*, seek to throw discredit upon the very method of the orthodox economists, and to establish a more inductive one in its stead. Others, like M. Block, are trying to modify the formulas of the school, so as to prevent their being of use to its enemies, and to bring them into a better harmony with observed facts.

M. Block would save Ricardo from Mr. Carey's criticisms by substituting the word "advantageous" for "fertile." Would Ricardo have accepted the new term? Would Ricardo's school of thirty years back have accepted it? Would his best scholars of our own times, Cairnes, Mill, or Fawcett, have accepted it? We fear not. They would have said that to substitute that term was to eviscerate the whole doctrine, and to convert it into a truism not worth enunciation. The forms in which they stated the doctrine would, many of them, become sheer absurdities after this substitution of M. Block's term for that of the master. Take for instance Mr. Mill's statement, that, "after a not very advanced stage in the progress of agriculture.....in any given stage of agricultural skill and knowledge.....every increase of produce is obtained by a more than proportional increase in the application of labor to the land." Now the premise of which this is the conclusion must be that the first settlers take the most *fertile* lands; and to make the alteration proposed by M. Block is merely to introduce a useless ambiguity. For if they take merely the most advantageous land, the land whose occupancy will produce the greatest benefit to themselves, it is quite possible that the lands most "advantageous" to cultivate, when the population is become denser, are left idle by those first comers. And if Mr. Carey's position as to the order uniformly pursued in the settlement of land, (a position sustained by a multitude of observed facts, and not directly questioned by M. Block,) be true, then as society advances in the power of numbers and of co-operation, the results secured by the occupation of new soils must be larger in proportion to the labor expended upon them.

Now if Mr. Ricardo is right, then land-holding is a part of the great system of *privilege* which existed throughout Europe some centuries ago, and which M. Block's country did so much to discredit and to overthrow. And the principle of equal rights cannot be allowed to prevail in some departments of society, and that of privilege in others. In the long run, one or other will prevail everywhere; and whatever cannot prove itself to be free from all complicity with the discredited and condemned principle, will share in its fate. This the logic of the situation; the socialists who appeal to Ricardo are simply Ricardists, who have the courage of their opinions.

Now, when we look at M. Block's proposed answers to the socialists, we are struck by their exact analogy to those which were urged by the champions of the *Ancien Regime*. They may easily be translated into terms which will cover both cases. (1) "Your motive, gentlemen, is pure envy." Even so; if the envious man, the Marat or the Robespierre, have objective right on his side, the conscience of the race, which formulates itself in history, will accede to his plea, with no regard to motive. (2) "Privilege may be the starting-point of the monopoly, but the vested rights you assail have other bases. Admitted right and possession do largely coincide. All the grounds on which you concede that men should be allowed to exercise this function, are here united with those which you deny to be sufficient. No one can draw the line between the two elements, so as to do justice to the former and get rid of the latter." And the answer might be, as once before, that hardship must be inflicted, where society cannot endure the existing state of things. (3) "These vested rights you assail have in some cases been transferred from hand to hand by purchase. The new purchasers paid full market price for them. They have taken no unfair advantage." The case is precisely that of the owner of a slave, who should admit that there was injustice in his capture, but assert that there is none in keeping him in bondage. For if land is like political right, national property by natural right, and derives its value from nature, no number of private transfers can alienate it. (4) "These privileges and vested rights of ours, are like a fine voice or other gifts of nature to which a man is born." Modern science, by the doctrine of heredity, explodes this argument. It shows that labor and education are at the basis even of inherited gifts. And Mr. Carey cuts the whole tangled knot by his doc-



trine that land, like every other species of property, owes this quality, which you call value, this power to command a price or yield a rent, to the labor expended upon it.

At the conclusion of our quotation M. Block speaks of Mr. Carey's theory of land as a sort of Monroe doctrine, devised expressly for the transatlantic market. If we regard M. Block's meaning rather than the facts, we shall see this to be a singularly unhappy comparison, unhappy in the selection of both its members. The Monroe doctrine was not of American origin; it was suggested and inspired by Canning. It was not for the American, but for the European market; it was a warning to the Holy Alliance that they would not be allowed to deal with the Spanish Colonies as they had dealt with Spain. Its second great application was in that despatch to a European government, which has not yet been printed in its diplomatic correspondence, although it was obeyed to the letter,—the warning to the gentleman who for ten years played the part of patron to the English school of Economists in France, that his troops must leave Mexico.

Mr. Carey's doctrine of land and of its settlement is American only in the happy accident of its origin. We say "happy accident:" rarely has a great inductive student of social science been placed in a community in which the formative processes and all the successive stages of social development have been transacted before his very eyes. The instinct which drew Friedrich List to America to study society in the making, was a wise instinct. In Mr. Carey's surroundings it has found the fullest satisfaction; and these surroundings have left their impress upon his works. While European economists at their best give us no more than the *statics* of Social Science, derived from the study of the present of a society economically fixed and stable, Mr. Carey gives us the *dynamics* of that science. All his formulas and definitions are dynamical, notably so those of wealth, value, price, and money. Hence the insight and the sympathy with which he has scanned the economical history of every European nation. As Niebuhr found in the *marks* of his native Dittmarsh the clue which solved the riddles of Roman history, so has Mr. Carey found in the economic history of his native country the clues to that of Europe. To say this, is not to claim any special distinction for America; it is merely to say that, as a new country, she furnishes exemplifications of the laws of social growth, such as are not to be found in

older populations. An economist who has climbed the hillsides to talk with the founders and first settlers of great states, and has seen the Mississippi Valley occupied by the millions whose votes now control the destinies of the Republic, must have had very little use for his eyes, if he has not seen some things unknown to the London stock-broker, who devised the theory under discussion.

The particular thesis here in question, the law of settlement, Mr. Carey has confirmed by facts drawn from a study of the actual history of almost every country of the old world, as well as the new. He has shown the same law of *progress from worse to better, in land, in labor, and in food*, to underlie the social facts, wherever these facts are still within the reach of the student. He proved it true, equally of the great historic movements of population, and of the history of the same farm in the hands of successive generations of occupants. Furthermore, his facts have never successfully been called in question, either singly or on the ground of their insufficiency as a basis of induction. And since he first announced them in *Past, Present, and Future* (1848), and again in *Principles of Social Science* (1858), they have received additional confirmation from historians and sociologists without number. So large has been this supplementary evidence that the present writer was able recently to go over the ground anew, and while drawing hardly anything from Mr. Carey's statements and his witnesses, to substantiate his results.<sup>1</sup> The only evidence we have seen alleged to the contrary, is that presented in a recent article in the *London Academy* by Mrs. Edith Simcox, who alleges the *Laws of Manu* as on the side of Ricardo. We very cordially concede to the Ricardoists all the weight which can attach to such testimony. The best orientalists have pronounced that famous code a fiction of the same class as the Apostolical Constitutions—an ideal code which never was, and never could have been in force in any age, or any country. And when we remember that this code was devised in the interest of a selfish aristocracy of priestly landlords, we may well avoid surprise in learning that it divides between landlord and tenant on the Ricardoan principle of giving the former a larger proportion of the product, the more fertile the soil.

To pass from romance to history, we find in the comparative prominence of different districts of France at different eras, sufficient evidence of the drift of population from the poorer to the

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<sup>1</sup> See *Social Science and National Economy*, Philadelphia, 1876 (Pp. 98-128).

richer soils. Mr. Carey has called especial attention to the early importance of the mountain province of Limousin, which was at one time so strongly represented among the Roman Cardinals as to control the conclave. A writer in the *Fortnightly Review* of May last, writing therefore since M. Block, thus speaks of the district:

Arthur Young thought the Limousin the most beautiful part of France. Unhappily for the cultivator, these gracious conformations belonged to a harsh and churlish soil. For him the roll of the chalk and the massing of the granite would have been well exchanged for the fat loams of level Picardy. The soil of Limousin was declared by its inhabitants to be the most ungrateful in the whole kingdom, returning no more than four net for one of seed sown, while there was land in the vale of the Garonne that returned thirty-fold. The two conditions for raising tolerable crops were abundance of labor and abundance of manure. But misery drove the men away, and the stock were sold to pay the taxes. So the land lacked both the arms of the tiller, and the dressing whose generous chemistry would have transmitted the dull earth into fruitfulness and plenty.

Crossing the channel to the native land of this theory, we find Mr. Carey's account of the early settlement of England very fully confirmed by very recent authorities,<sup>3</sup> who give us notices more or less extensive of the movement of population in the early ages; and, although none of them holds the clue which explains these movements, they all confirm Mr. Carey's law of settlement. They tell us that the early Celtic occupants of Britain occupied merely the hill countries on the south and west of the Island of Britain; that traces of their presence on the island are to be found in none of those fertile plains which now are the pride of the island; that the possession of those bare hills was contested by the Irish from the west and the Saxons from the east, the former seizing on Northern Wales and the Western Highlands, about the time when the latter landed on the eastern shore, and founded the kingdoms of Wessex, Kent, &c. They tell us that even in Saxon times the population was found in districts where it was necessary to catch and save rain water, and that kingdoms in the hill country enjoyed a predominance which they afterwards lost, while the rich midland shires, now the pride of English agriculture, were a desolate,

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<sup>3</sup> Mr. C. H. Pearson, in his *Historical Maps of England* (London, 1870); Mr. Llewellyn Jewett, in his *Grave Mounds and their Contents* (London, 1870); Mr. Thos. Hughes, in *Life of Alfred the Great* (London, 1871); Mr. John Hill Burton, in his *History of Scotland* (Edinburgh, 1873); and above all the Duke of Argyle, in his *Iona* (1871).

marshy and forest-grown wilderness, the terror of travelers and the peril of armies. They tell us that the great division between Northern and Southern England, which produced the separation of Scotland from the southern kingdom, and is still recorded in the ecclesiastical separation of the provinces of York and Canterbury, was due to the existence of that impassable region, which now smiles with the richest and best crops of the island. And they show that the whole history of the island has been "the progress from worse to better in land, labor and food."

The Duke of Argyle is a witness of special importance. His position at the head of the Cobden Club makes him, one may say, the official representative of the orthodox English economists; while the regard in which he is universally held as a man and a thinker, ensures attention to anything he says. Just about the time of his son's marriage to a daughter of the royal house, Mr. Robert Buchanan, the Scottish poet, published a work on the Highlands, which he obtained permission to dedicate to the Marchioness of Lorne. That permission should never have been asked. The book was little more than an attack upon the Marchioness's father-in-law on the ground that his conduct as a landlord had stripped the Highlands of their people, robbed the queen of many loyal subjects, and reduced the area of tillage while it extended that of sheep-farming. Many of the facts offered in evidence were misinterpreted by Mr. Buchanan, and it seems to be not without reference to this that the Duke writes in his *Iona*. He is speaking of the great Irish missionary, Columba or Columcille, (so well known to readers of Montalembert's *Monks of the West*,) who, from the little island of Iona, directed the great missionary work by which the Celtic people of the Highlands were Christianized.

"At a time," he says, "when artificial drainage was unknown, and in a rainy climate, the flats and hollows, which in the Highlands are now generally the most valuable portions of the land, were occupied by swamps and moss, on the steep slopes alone, which afforded natural drainage, was it possible to raise cereal crops. And this is one source of that curious error which strangers so often make in visiting the Highlands. They see marks of the plow high up upon the mountains, where the land is now very wisely abandoned to the pasturage of sheep or cattle; and, seeing this, they conclude that tillage has decreased, and they wail over the diminished industry of man. But when these high banks and

braes were cultivated, the richer levels below were the haunts of the otter, and the fishing places of the heron. Those ancient plowmarks are the sure indications of a rude and ignorant husbandry. In the eastern slopes of Iona, Columba and his companions found one tract of land which was as admirably suited for the growth of corn as the remainder of it was suited to the support of flocks and herds. On the northeastern side of the island, between the rocky pasturage and the shore, there is a long, natural declivity of arable soil, steep enough to be naturally dry, and protected by the hill from the western blast. And so here Columba's tent was pitched, and his Bible opened, and his banner raised for the conversion of the heathen."

Similar evidence we have of other countries of Europe<sup>3</sup> and Asia, but, like M. Block, lack the space. But we cannot omit one quotation from a Surgeon-General of the British army in Burmah. He is looking at the facts he records through the spectacles furnished him by Ricardo, but his testimony has its value :

In Burmah the land is superabundant, and where it has a saleable value, that value consists, not of the soil, but of the labor, skill, and capital which have been invested in its improvement. In the technical sense, signifying the difference in productive power between one kind of land and another, rent has no existence ; for the best land is still abundant, and awaits only the investment of capital.

These are some of the facts which have weight with Mr. Carey and his school in leading them to maintain the great law of settlement, which he enunciated in 1848, and the related principle that the price of a piece of land represents, not the inherent and natural properties of the soil, but the labor and capital expended upon it. They deny that there is any essential difference between landed property and any other species of property,—or, as Lord Dufferin puts it, between a farm and a ship. Standing on this ground, they have confidence both for the present safety and the future prosperity of society. They are convinced that the Providence which orders the world will not suffer the overthrow of the institutions which have been built up by human toil and suffering, because false theories with the sanction of great names have been put in currency. And they are assured that the path of progress, heretofore trodden

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<sup>3</sup> See Mommsen's *History of Rome* for Italy ; Grote's *Greece* ; Laveleye's *Economie rurale de Belgique* ; Geijer's *History of Sweden* ; Pauthier's *Chine* ; Hunter's *Annals of Rural Bengal*, and Bunsen's *Egypt's Place in Universal History*.

by the feet of our race, is not to come to an end to-morrow or the day after. They still look for great advances, *from worse to better*, as in all other departments of the world's life, so *in land, labor and food*.

ROBT. ELLIS THOMPSON.

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### THE NEW DEPARTURE AT THE MEDICAL SCHOOL OF THE UNIVERSITY OF PENNSYLVANIA.

A LONG looked-for, much-debated change in the course and curriculum of the Medical Department of the University of Pennsylvania, has at last been made. Encouraged by the promise of sufficiently large money contributions, and relying upon the interest and support not only of the entire medical profession, but also of all intelligent and thoughtful persons, the Trustees, after much thoughtful and earnest deliberation and discussion, determined at a recent meeting to adopt the proposed changes and initiate a new order of things at the Medical School, to go into effect with the matriculating class of 1877-78. Much has been said and written, in this city, both explanatory and critical, within the past few weeks, concerning the various items of the reform. At the risk, however, of needless repetition, it has been deemed advisable to put into print a full and succinct statement of what has been done, with a brief survey of the ground covered by the movement. It will be well to consider the subject under four heads, viz.: What changes have been made, the reasons for them, their advantages to the medical student, and the objections critically considered.

I. Formerly attendance upon but two terms of five months each was required to prepare for a degree: the student could prolong his labors over a third term, but this was entirely voluntary. Henceforth three terms of five months each are to be obligatory. There was some talk of lengthening the terms to eight or nine months each, but upon further deliberation this was not thought advisable at present. Under the old system, the fees were \$140 for each year, \$5 for matriculation, \$10 for the dissecting ticket, and \$30 graduating fee. The fees were paid to the respective professors upon the issue of their course tickets. In future, the fees will be paid to the Secretary of the Faculty, who will issue a ticket

admitting to all the lectures. They will amount to \$140 for the first and second years each, and \$100 for the third year; the matriculating, graduating and dissecting fees to remain the same. The Medical Faculty will be composed, as during the past year, of eleven Professors of whom three will devote themselves exclusively to clinical teaching, though other members of the Faculty will also take part in this teaching, in addition to their didactic courses. Examinations will be conducted by a committee of seven selected from the whole Faculty. As the course of instruction will be carefully graded, the student will be examined at the end of the first year in General Chemistry, Materia Medica, and Pharmacy; at the end of the second year in Anatomy, Medical Chemistry, Physiology, General Pathology, and Morbid Anatomy: at the end of the third year in Therapeutics, Theory and Practice of Medicine, Surgery and Obstetrics. The studies of the three successive years will be classified accordingly. During the third year particular stress is to be laid upon clinical work at the bedside in the Hospital, in medicine, surgery, and diseases of women and children. Practical instruction will be given also in physical diagnosis, minor surgery and bandaging, ophthalmology, otology, dermatology, and electro therapeutics. In conducting these courses the class will be divided into sections of convenient size, so that each individual student may receive direct personal instruction. In addition to this, thirteen general and special clinics will be given each week, before the full classes. It will be seen at a glance that this curriculum is much more comprehensive and thorough than the previous one, and that five new branches, viz.: Pharmacy, Medical Chemistry, General Pathology, Morbid Anatomy, and Diseases of Women and Children, will be taught in future. In the first and second years, systematic laboratory training in the fundamental medical sciences will be given. These changes will not affect any students who had matriculated before June 1st, 1877, unless at their expressed desire. The great importance of a preliminary examination was fully recognized, but it was not deemed practicable to establish it at present. It is however confidently expected that ere long it will be possible to add this important feature to the plan, as well as to increase the length of the courses to eight months. For the present it is thought that the yearly examinations will do all the weeding needful.

II. The *reasons* for this new step forward are evident. The high

reputation of all the European schools, from which the new system is borrowed, is an unquestioned guarantee of its educational value. And with the Harvard School at Boston on one side, and the Johns Hopkins University at Baltimore fast developing upon the other, Philadelphia, the birthplace of American Medicine,—and particularly the Medical Department of the University of Pennsylvania, founded in 1765, the earliest American School of Medicine,—can not afford to lag behind in the march of improvement. If circumstances were favorable and the moment propitious, it was right that the change should have been made: no one denies this proposition. So long as money to support it was wanting and plans were not thoroughly matured, it would have been abortive to attempt it, and ruinous to put it into effect; but sufficient moneys to fully meet all expenses, have been promised by certain liberal friends of the School, and will be forthcoming, while the plans just now put into practical shape have for a year, or more, been under consideration by a Board of twenty-four Trustees, who, as a body, are among the most thoughtful, conservative and far-seeing citizens of Philadelphia. The circumstances were favorable and the time was ripe for the change. The change was not lightly made, but upon much mature and grave consideration. Again, there is a strong argument to be drawn from the manifest defects and deficiencies of the old system. The average young American physician, fresh from his examinations, and with all "his blushing honors thick upon him," knows practically next to nothing of the vital part of his business, the diagnosis and treatment of disease. He may have all the knowledge of the schools and books at his fingers' ends; may know, perhaps, the names of all the articles of the *Materia Medica*, their source and application; but when he is brought to the bedside of a sick patient and asked to tell what is the matter and what the proper remedy, he is quite likely to be utterly and foolishly at sea. The senses of the doctor must be educated upon the living subject, and not upon the dead manikins of the text books. There is no science in the whole circle of knowledge where the theory and practice may be at times so much at variance—physiological actions and clinical facts. From all this it follows that the young city graduate, who has as a general thing more time and means at his disposal, never considers that he has put on the full armor of his calling until he has spent a couple of years as Resident Physician in some hospital. How his country brethren rise to skill and success it is hard to imagine:



probably their paths to fame are not unstrewn with corpses. The great desideratum of medical education in this country has been and is clinical experience; the average graduate has not any of it. If he goes straight into a practice upon graduation, he picks it up slowly as best he may, and stumbles over obstacles and mistakes to final experience. The bungling work of badly educated physicians is everywhere a matter of notoriety. This defect is to be remedied, as far as the University of Pennsylvania is concerned, by the change. The third year is to be largely devoted to clinical work in the hospital, so that the diploma of the School will hereafter certify that its possessor is experienced in the recognition and treatment of disease in all its insidious and deceptive forms. All this ground was gone over excellently well in an article on "Medical Education in the United States," by H. C. Wood, jr., M. D., in *Lippincott's Magazine* for December, 1875. It has only been by dint of pounding these stubborn facts into the people's heads and driving these nails of logic home, that the University has the opportunity to stand again where she stood twenty years ago—at the head of American medical colleges. Enough money has been made sure of to pay at least \$3000 a year to each of the seven didactic chairs and \$1000 per annum to the clinical professors, with sufficient surplus to meet the annual expenses. This means partial endowment; this puts the School pecuniarily beyond the question of success or failure, as dependent upon the number of its students. It is evident, however, that much larger endowment is desirable and even necessary, in order to enable still further advances to be made in the system of teaching, to found a larger number of free-scholarships for poor but highly deserving students, and to increase the salaries of the various Professors to a higher and more proper point. Medical schools, without endowment, it has been justly said, inevitably resolve themselves into money machines—you put in your penny and the wheels begin to move, but they move only a penny's-worth. Professors may be very high-minded, but you cannot expect them to teach medicine for a five-month additional, while their pockets are empty. Evidently this argument, strong as it may be elsewhere, will not henceforth apply to the University. The studies of the successive years are to be graded; there is a good reason why this should be so. Medicine is a progressive science; one must rise from facts to principles, from thought to action, from theory to practice. Chem-

istry, *Materia Medica*, Pharmacy, Physiology and Anatomy must be mastered before Surgery, Practice and Obstetrics or special branches are attempted. After examination in the primary branches they may be laid aside with propriety, for Anatomy lives again in Surgery, a good practitioner must be a good physiologist, and Therapeutics is but the application of Chemistry, Pharmacy and *Materia Medica* to the cure of disease.

III. The *advantages* of the new system to the medical student are many. The diploma of the University will in future be recognized as the guarantee of its owner's superior standing and experience, and will be more valuable to him accordingly. Formerly, \$335 was paid for the two years' course, exclusive of charges for laboratory work, private courses in special branches, and private clinical instruction; \$435 will be the total cost of the three years' course, inclusive of the best hospital work possible, with exhaustive didactic and clinical teaching in all the general and special branches. This will render the new three years' course in reality no more expensive than the old two years' course, while the clinical and practical advantages which the new system offers are far in advance of anything heretofore possible. So it will be an actual gain to pursue the longer and more arduous course, in view of its superior attractions. It is true that at some other schools a small proportion of the students voluntarily spend more time in medical studies than is required of them; but as there are no special facilities provided, they cannot employ this time to the best advantage, and are burdened with heavy additional expense for private instruction in practical branches. The absolute necessity of hospital residence as *interne* after graduation will be to a large extent done away with. Of course, such post-graduate instruction will always be desirable, if it can be had with convenience; but in future the University, like Harvard, will send forth her graduates fully equipped for immediate entrance upon the active duties of the profession: this will be a saving, not only of money, but also of time. The young University graduate will hereafter be able to make a living by his profession much sooner than before the change. He will outrun his less fortunate brothers, graduates from other schools, in the race for renown and fortune. The new system will cut short those interminable years of hard work and no pay, the horror and necessity of young doctors, the wilderness to their land of promise beyond. It will make phy-

sicians more scientific, hence more trustworthy. They will be recognized as men of complete preparation, and able to grapple at once more successfully with disease. It will give more time for study and cause less distraction and overwork. Only three or four examinations are in future to be passed every year, instead of seven at the end of the second year as formerly. The passage of the examinations on the fundamental branches at the end of the first and second years, will leave the mind free to devote all its energies to the mastery of new subjects during the third year, and better able thoroughly to understand the intricacies of Obstetrics, Therapeutics and Surgery. It will be more natural and easy—the passage from what is elementary and preparatory to what is practical, and of immediate importance in the profession. Lastly, the crowning advantages of the personal, bedside instruction in the hospital in the third year: the benefit of being able daily to witness disease treated by the most experienced authorities and with all the modern surgical and therapeutical appliances. The great clinical facilities available in the neighborhood of the University will enable the instruction given during the third year to be as complete and of as great value as can be found in any European capital. The conclusion is plain. There is nothing to repel and everything to invite the student to trial of the new plan.

IV. It only remains finally to consider whether there have been any objections urged to the new system of medical instruction, and how they are to be answered.

It is, of course, unnecessary even to allude to the various controversial publications which appeared last year. It is inevitable that when any large and complicated question, such as the reorganization of the Medical Department of the University, is under discussion, widely different views will be held by men equally well informed and equally desirous of promoting the best possible solution of the problem. Undoubtedly, however, one of the reasons which led to a longer continuance of such difference of opinion in the present case, was the difficulty of determining how strong and wide-spread was the support which was extended to the new movement. In fact, though owing its initiation to a few members of the medical profession, the Board of Trustees was from the first deeply interested in the subject, and devoted to every step of the movement that careful and deliberate consideration which its importance demanded. There is the best authority for

stating that these changes in the curriculum of the Medical Department represent the carefully matured convictions of the entire body as to the course which is demanded by the feelings of the community in regard to this extension of the term of medical education. In like manner the public utterances of many of the most influential members of the Faculty show clearly that they have long advocated such a change, but have hesitated to advise its immediate adoption because they were well aware that preliminary endowment was necessary. Now that this great desideratum has been supplied, at least to an extent which has satisfied the Board of Trustees that it is safe to adopt the much-needed improvements in medical teaching, there appears to be no longer any room for doubt that the new system is approved of by the vast majority of the profession. Indeed, in order to show how desirable a three years graded course of medical study is thought to be by all who are most immediately concerned, it is sufficient to call attention to the fact that provisions are made in almost every medical college in the land by which such a course may be taken by such students as may voluntarily elect it. Again, the American Association of Medical Colleges, at its recent meeting at Chicago, considered the question of a three years *obligatory* period of study at medical schools, and offered to vote in favor of such a plan if any one desired to press the motion. The Trustees of the University of Pennsylvania have therefore only carried into effect the reforms which so many other institutions have tacitly conceded to be desirable.

Some have said that such an elevation of the standard of medical education at Harvard, and at the University of Pennsylvania, and at a few other schools, will lead to the graduation of a limited number of physicians, educated above the average wants of the community, who will find it impossible to secure appreciation and esteem for the longer time and larger amount of money expended in obtaining diplomas. Such a view, however, is palpably a fallacy. In other branches of knowledge the American public has shown its full comprehension of the need of thorough and complete education, by the most generous support of institutions where the same system exists as in European countries. It is safe to say that it will be found that in regard to this most essential subject of medical education, the general intelligence of the people has already led them to condemn the present hasty and superficial

method of teaching, and that they will heartily indorse and support those schools which, like the University, are courageous enough to take this important step of advancing their standard of education.

It has been objected that, although it was possible to Harvard, standing comparatively isolated and without close competition in New England, to carry such reforms into successful effect, yet that the different results which must follow such a course at the University, will be to break down her classes and to increase correspondingly the number of students in attendance at the Jefferson Medical College and at the New York Schools.

The facts and reasons that seem to indicate that any such reduction in the classes at the University will be to a far less degree and for a much shorter period of time than has been feared, have been briefly stated. But even if the falling off be more serious than it promises to be, the University could well afford to leave the larger classes and greater profits to other schools, and to rest proudly content with the reputation of providing the community with a class of physicians of far higher attainments and greater practical ability than can possibly be furnished by the old plan of teaching. It is the confident belief of all those interested that the action of Harvard, followed as it has been by the University of Pennsylvania, will soon compel all medical schools which aspire to occupy the front rank in the estimation of the public to make similar reforms in their system of teaching; or if they do not, to find their *prestige* gradually slipping away from them. M.



#### NEW BOOKS.

THE CHILDHOOD OF THE ENGLISH NATION, or the Beginning of English History. By Ella S. Armitage. Pp. xii., 247. 12mo. New York: G. P. Putnam's Sons.

The new school of English historians has its weaknesses and its prejudices, but it has made English history readable and credible. Freeman, Green, Stubbs and their associates are not infallible; we could even break a lance with them as to Roman elements in English history and civilization; but our indebtedness to them is past estimate.

Mrs. Armitage's little book belongs essentially to their school, though she does wickedly and profanely speak of "the Anglo-

Saxon Chronicle," and allege Wright and Pearson among her authorities, and is perhaps hardly aware of the antagonism of views which she traverses. She makes a womanly slip here and there, as when she ignores the part played by Scotch and Irish missionaries in Christianizing England; but she writes good English with vivacity and accuracy, and tells the story of the nation down to Richard the First's time, in a very intelligible and readable way. In one point she far surpasses her masters. She writes on religious topics with more insight and far less superficially than do Green and Freeman, reminding us in this respect of Mr. Pearson's *Early and Middle Ages*.

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LITERATURE PRIMERS—PHILOLOGY. By John Peile, M. A. 12mo., pp. 164. New York: D. Appleton and Company. 1877.

To compress a treatise on philology within the limits of less than two hundred duodecimo pages, making it measurably complete and yet sufficiently elementary to be labeled a "primer," requires a good deal of ingenuity as well as a thorough mastery of the subject. The author of this little work has, however, shown himself equal to the task, and has written a book which, containing but "little Latin and less Greek," and as free as possible from technical phraseology, will give the readers for whom this series is designed a very good idea of what philology is and what it has accomplished. At the outset the reader is led "in medias res," with a long chapter on "The Constant Change in Language"—change in the form, meaning, and pronunciation of words—illustrated by well chosen examples from the English, and he is half way through the book before he fairly becomes aware that he is doing more than learning curious facts in the history of his own tongue. The remainder of the volume covers a broader field, and here the novice in the study of languages will, we apprehend, find much that is dry reading, and much that is so rapidly passed over as to be quite unintelligible. The author has attempted, in fact, to give too much information, particularly in the chapters which treat of "How Languages Have Been Formed," "How Words were Made," and "The Beginning of Syntax." A smaller number of points illustrated and explained more fully, to the exclusion of a host of less striking points, would have imparted more real knowledge. There are these defects, but as a whole the book is excellent both in design and in execution, and will add materially to the value of this neat series of "primers."

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HAMLET. Edited by Horace Howard Furness. 2 vols. J. B. Lippincott & Co. 1877. Philadelphia.

The last anniversary of Shakespeare's birthday was suitably commemorated by the publication in this city of the Variorum Edition of Hamlet, by Horace Howard Furness. It is the third play of the series, following Romeo and Juliet, published in 1871, and Mac-

beth, in 1873, and it is uniform with them. With the usual mechanical excellence, characteristic of the publishers, each volume is in itself complete, giving the reader a perfect digest of all the wealth of literary research expended on the play; and if the services of the editor be spared to complete a similar edition of all the plays, it will remain unequalled as a monument of persistent and successful labor. Over a hundred years have elapsed since the first Variorum, that is, an edition giving all the readings of the text of Shakespeare, as found in the various early copies of his plays, and it is more than half a century since Malone published the Variorum which has been the standard up to this time. Furness' is, however, the first to give every reading and all the suggestions and comments of any authority, and at the same time to furnish an abstract of all the historical and philological learning that has been so freely expended in illustrating Shakespeare. It keeps pace with the progress that has been made in Shakespeare literature, in the study of the sources whence the poet and dramatist drew his inspiration, in the knowledge of contemporary learning of his time, in the philological analysis of his language; it brings us up abreast with all that wealth of literary activity devoted to the study of Shakespeare, such as has not been expended on any purely secular book, only the Bible has produced a literature of its own greater than that which owes its existence to Shakespeare. Mr. Furness has devoted himself to gathering, from all quarters, the vast amount of material thus provided, and he has exhausted it in the preparation of his Variorum Edition, giving in brief the gist of all his study. Few men have been able to bring together, from all the ends of the earth, the immense amount of material that has been published, in the pious effort to illustrate and elucidate Shakespeare. Although the largest proportion of books on the subject, in all its diversities of method and treatment, are those in the English language, the contributions of Shakespeare scholars in German are of capital importance, and a knowledge of their books is necessary for any intelligent discussion of the subject. It has been a task of infinite labor thus to accumulate the mass of books treating of Shakespeare, and Mr. Furness has gathered a Shakespeare library which counts within its numbers every edition of the plays, and every book written about them and about the author, which can in any way add to and elucidate the original text.

Messrs. J. B. Lippincott & Co. have lent the valuable help of the large resources of their great publishing house, to make this Variorum Edition a standard that will serve at least as long as did its predecessor. *Macbeth*, and *Romeo and Juliet*, were published each in a single stout volume, and now *Hamlet* has appeared in two goodly octavo volumes; and formidable as this may appear at first, it must be borne in mind that in them we find the best results of many hundred volumes specially devoted to this one play. Mr.

Furness has carefully abstained from setting up any theories of his own as controverting those of other Shakespeare commentators, devoting himself sedulously to the task of adding to the text of the edition received as of most authority, every suggestion from the early editions, from the later copies, and from the newest sources, that could help the student to ascertain all that has been said about Shakespeare's Hamlet. The historical apparatus, as the Germans are fond of calling it, that is, the collection of all the sources from which Shakespeare could have drawn for his use consciously or unconsciously, has been industriously made and studied by Mr. Furness, and now in his Variorum Edition are brought together all that Shakespeare himself could have read or heard on the subject that he has made his own and immortalized by his Hamlet. The steadiness of purpose with which Mr. Furness has worked in gathering his material, is not more commendable than the uniform modesty with which he subordinates his own views, and adheres rigidly to his plan of supplying the substance of what others have said.

As a rule, Shakespeare commentators have allowed their subject to run away with them, and few editions of Shakespeare, and still fewer discussions on his plays, or his language, or his plots, or his life, are free from theories and vagaries that may well startle the reader and make him wonder whether studying Shakespeare is not of itself a sort of madness not unlike Hamlet's,—hard to tell where it is real and where feigned. Mr. Furness, however, has shown himself a consummate master of the most difficult of all arts, that of knowing when to speak and when to be silent. With an intense love of his subject, he has illustrated it by all that could be gathered from every authoritative source; and that no matter what the language or the purpose of the author, so that it seemed to inform the reader as to the true meaning, the right place and the possible purpose of any word, phrase, verse, or part of Shakespeare's own writing. Even in the dangerous and seductive field of suggested readings and emendations, Mr. Furness has bravely withstood the temptation of offering solutions of his own, while he has carefully given every help that could be of use to the most exacting student. In this way he has given to the public an edition that is in the highest degree creditable to his modesty, his perseverance, his scholarship, and his learning. It is a very great satisfaction to find that he has known so well where to get help from those nearest at hand, and he makes grateful acknowledgement to his associates of the Shakespeare Society of Philadelphia, and especially to the late Professor George Allen, whose knowledge of Shakespeare was like all his attainments, profound and of practical value.' The service rendered to the public by the labors of a little knot of men devoting themselves to the thorough study of Shakespeare, is rarely appreciated or appreciable, and their work has its best and often its only reward in the self-improvement that comes of diligent



work. But the debt due to Mr. Furness for his long and laborious task in preparing his Variorum edition, is one that calls for instant acknowledgment from all who love Shakespeare, and from that still larger number of those who are grateful for the devotion of years of laborious study, more for the benefit and instruction of the public than for any personal glory or gratification. Of course, without an intense admiration of Shakespeare, and the help and encouragement of those immediately about him, Mr. Furness could never have carried on his work to its successful results; and if to the influences that have thus borne such rich reward, be added the encouragement of knowing that those for whom this work has been done really appreciate it, we may yet see a complete Variorum Edition of Shakespeare, furnished by the same hand that has contributed the volumes that so nobly open up the series. The largest meed of praise has come to Mr. Furness from abroad, but both in England and in this country there is a general expression of surprise that any single individual could gather together the library necessary for his task, or could alone study its contents and make so exhaustive and successful a contribution to the Shakespeare literature of the time. While the infinite credit and honor all belongs to Mr. Furness, the excellence of his work has redounded to the benefit of Philadelphia, while the whole country shares in the distinction of his Variorum as the best edition of all.

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### BOOKS RECEIVED.

- Turkey. By James Baker, M. A. 8vo. Pp. xii.; 495. Cloth, \$4.00. New York: Henry Holt & Co. [Porter & Coates.
- The Washington-Crawford Letters, being The Correspondence between George Washington and William Crawford, from 1767 to 1781, concerning Western Lands. Chronologically arranged and carefully annotated, by C. W. Butterfield. 8vo. Pp. xi.; 107. Cloth, gilt top, \$1.50. Cincinnati: Robert Clarke & Co.
- History Primers. Edited by J. R. Green. "Geography." By George Grove, F. R. G. S. With Maps and Diagrams. 16mo. Pp. 126. Cloth, 50 cts. New York: D. Appleton & Co. [Porter & Coates.
- Garth: A Novel. By Julia Hawthorn. 8vo. Pp. 291. Paper, \$1.00. New York: D. Appleton & Co. [Porter & Coates.
- Recollections of Samuel Breck, with passages from his note-books (1771-1862). Edited by H. E. Scudder. 12mo. Pp. 316. Cloth, \$2.00. Philadelphia: Porter & Coates.
- In Change Unchanged. By Linda Villari. 16mo. Pp. 308. Cloth, \$1.25. New York: Henry Holt & Co. [Porter & Coates.
- Overland Tales. By Josephine Clifford. 12mo. Pp. 383. Cloth, \$1.50. Philadelphia: Claxton, Remsen & Haffelfinger.
- The Eastern and the Western Question. Turkey and the United States: How they travel a common road to ruin. Addressed by way of warning to President Hayes. By Henry Carey Baird. 8vo. Pp. 16. Paper, 10 cts. Philadelphia: Henry Carey Baird & Co.
- The American. By Henry James, Jr. 12mo. Pp. 473. Cloth, \$2.00. Boston: Jas. R. Osgood & Co. [Porter & Coates.

THE  
PENN MONTHLY.

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AUGUST.

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THE MONTH.

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RUSSIA has both gained and lost ground. Her Asiatic campaign has proved a failure, because of her putting too many irons at once into the fire, and her not reckoning on the possibility of disturbances in the Caucasus. Her advance into Turkish Armenia was in three columns, whereas it ought to have been in one, and should have been aimed at either Batoum or Kars. As it turned out, she succeeded in taking neither, has had to raise the siege of both after waste of men, time and material, and to fall back upon her solitary conquest at Bayazid. Only a general of the first order could successfully invade such a country as Armenia, without an overwhelming force at his disposal, and clear connections in his rear. Russia has no such general; the troops who would have made up one strong column were divided into three weak ones; and the uprisings in the Caucasus have not only drawn off a part of the troops intended for service in Armenia, but have seriously interfered with the communications.

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If anybody could have access to the reports sent to the Imperial Government by its civil representatives in the Caucasus since Christmas last, he would find that that district never was more assuredly loyal and peaceful than before the outbreak of the war. The Lesghians had forgotten their old struggles under

Schamyl and his predecessors; the remnant of the Tscherkesses had been thoroughly cowed by the vigorous measures taken when the bulk of their people were deported from their native soil; the Abkhasians had forgotten the story of an unsuccessful rising, and the brutality with which it had been suppressed and all their hereditary chieftaincies swept away. This is one of the weaknesses of despotic governments—they have no thermometers to gauge the feelings of their subjects, for they have childishly broken all such in order that the temperature may be kept to their liking. And so for months, perhaps for years back, Turkish agents went to and fro under the eyes of the civil officials, organizing the uprising which set the three nations in a blaze, but not a sign was made that would keep a tint of rose-color out of any report to St. Petersburg. And on the other hand, with what unction did the Porte deplore to Europe the faithlessness of her neighbor and rival in keeping Russian agents hard at work among the Christian populations of Turkey. The truth is that neither power is a whit better than the other on this point. Each has for half a century been making a careful study of the weak points of its rival, and the story of these reciprocal intrigues would furnish some of the most curious of chapters for the secret history of Europe. One such was the setting up an Old Dissenter patriarch on Austrian territory, as the centre of a political propaganda for the spread of disaffection among the millions of that sect in Russia.

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THE Bulgarian campaign of the Russians has thus far been a surprising success. Crossing the Danube at Sistova in force, blockading Rustchuck, the next fortress down the river, and seizing Nicopoli, the next one above, detaching bodies of troops to hold in check the garrison of other great fortresses on their left, they seem to have dashed boldly across the province, and after a sharp struggle siezed on Ternova, its ancient capital. But Ternova is on the slope of the Balkans, the mountain range which forms the last great strategic line of natural defence between them and Constantinople, and on the 13th of July, the Cossacks swept across the Balkans into Roumelia. The Bulgarian refugees, who hold the secret passes and upland plains of that range against the Turks, had already met the Russian commanders at Bucharest, had sketched out the line of the campaign, and offered to guide them across the mountains.

As might be expected, the Turks have been taking up the cry of outrages, with regard to every severity of the Russian invasion. The Muscovites cannot bombard a town, without the number of shots that hit private houses, consulates and hospitals, being solemnly telegraphed to each of the other Great Powers; and if persons are burnt alive in the destruction of a building under cannonade, or if three or four wagon loads of Moslem peasantry think it safest to make their way into the Turkish lines, the Porte must hold up the authors of such atrocities to the horror of the civilized world. War is not child's play, and the Russians are not in the humor to show much consideration for the people who stood by while men of their own race and creed desolated Christian villages, outraged women and girls, and heaped the streets, the churches and the graveyards with corpses of all ages and sexes. Nor need the government, which saw these things done and then denied them, and now rewards those who did them with high and responsible positions, expect for its complaints the ear of any one not utterly insane with Russophobia. The Russian army has probably done in this war many things that we could wish undone, but it has not done the thousandth part of what the Turks did in time of peace. And the Porte's denunciations are but another case of "Satan reproving sin."

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THE lesser powers on the Russian side are to be more passive than was expected, a fact which does not indicate any want of ambitious plans on Russia's part. The Roumanian army is to cover the Danube simply; Servia is to keep out of the struggle, though there are rumors of an Austrian occupation of the province in certain contingencies. The Hungarian half of that unequally yoked empire must be irritated beyond expression by the course of events, and if the Vienna Government should take any steps, it will probably be with a view to pacifying the Magyars.

The Turkish invasion of Montenegro was one of those successes which are frightful blunders. A large body of soldiers were sacrificed on the invasion of a little district, whose conquest was of no military importance, and only served to relieve the dull monotony of check and repulse which up to that time had attended the Turkish management of the war. And even then, before the eyrie capital was reached, Austrian influence in Montenegro's favor was brought to bear upon the Porte with such energy, that the Turkish

troops were at once withdrawn, after great losses and no permanent gains. The withdrawal from Montenegro, under such circumstances, helps us to see how great is the Turkish need of outside help and sympathy, and also how likely it is that Austria has understandings with the Porte which may at some stage of the war be of a sinister importance to Russia. On the other hand, both Italy and Germany seem to have a thorough understanding with Russia, and it is said that the movement of the Italian fleet in the Adriatic was not without its influence on the Austrian intervention in behalf of Montenegro.

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IN France the De Broglie ministry proceed with their policy of timid repression of hostile opinion. Municipal councils and newspapers are the small game at which Jove hurls his thunderbolts, while the work of patching up a compromise between the three anti-Republican parties, in the selection of official candidates for the Government's support, goes on not so happily as could be wished. The Buonapartists claim that one hundred of their candidates are already thus accepted, and others under consideration; but the utter hollowness of the truce between them and the Legitimists is made clear to everybody by the election addresses of these candidates. They cannot honestly address a French constituency without proclaiming principles and assuming facts which are far more offensive to the true Monarchists than to any other party; and the one chance of any of them being elected, lies in his cynical candor in proclaiming his adherence to Napoleonic principles. It is no wonder that the Legitimists have come forward with the declaration that they prefer the Republic to the Empire. Of course they do; they would be fools if they did not. Meanwhile the Orleanist authors and patrons of the compromise cry for peace and harmony, and warn M. Rouher and his friends that they must roar as gently as a sucking dove, if they expect Government support. The spirit of jobbery, which once before ruined the chances of Louis Philippe's dynasty, seems to cling to his children and their adherents unto the third and fourth generation. Even those who think a limited monarchy better for France than such a republic, cannot but confess that limited monarchy has no chance, since its representatives do not understand the first principles of political honesty.

A CABLE despatch recently announced an election victory for the Protectionists in the Australian colony of Victoria, and the consequent resignation of the colonial ministry. The despatch is grossly absurd, for the simple reason that all parties in this, the most independent and prosperous of the Australian colonies, are Protectionists. Of eighty-five members recently elected to the Lower House, not more than fifteen at the outside are Free Traders. The real question at issue was the reform of the Upper House of the legislature, which is thoroughly obstructive, and the imposition of a "progressive" land tax upon the holders of great estates. The party which carried the elections was formally and explicitly committed to the Protective principle, but no issue on this point was made by its opponents. "A Free Trader" writes to the *Spectator*, "there is no doubt the vast majority of our people believe that the prosperity of the country is due to its protective tariff."

The issue not raised in Victoria has recently been raised in a country at the other side of the world. There is a small group of *doctrinaires* in the Swedish Parliament who are laboring to overthrow the national tariff, and the question came before that body during the present spring. The result was such a reassertion of the Nationalistic or Protective principle as surprised both parties. The defeat of the Free Traders' proposals was not unexpected; but the antagonism which they excited in the Parliament was quite outside their expectations.

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THE English have been celebrating Caxton's birthday by an exhibition of old books, and speeches by Mr. Gladstone and others. One of the more modern curiosities exhibited was an English Bible completely printed in Oxford from stereotype plates already prepared, and bound in London, within sixteen hours. This is pretty good time, but it was beaten by the publishers of the cheap edition of the first two volumes of Macaulay's *History of England*, which was issued in this city immediately after its appearance. The whole of the two volumes was set up, corrected, revised, stereotyped and printed within forty-eight hours after the sheets of the English edition reached the publisher's hands. The wonderful speed attained in printing the *Times* was also alleged in the same connection; but certainly no visitor to Machinery Hall during the Centennial Exhibition could fail to be impressed with the slowness of the Walter Press when compared with the Hoe's Fast, which

was then there, printing our *Times* at the rate of 500 per minute. Try it again, John.

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THE old astrologers would have said that the month was passed under the influence of an unlucky star, so far as this continent was concerned. Perhaps it occurs to few of us that we are saying exactly the same thing in speaking of the *disasters* which burden its record.

It has been a month of vast elemental agitations, earthquakes in South America, hurricanes and floods in our own territory, and the destruction of the capital of a neighboring province by fire, to the utter impoverishment of great numbers of its people. The fire in St. John's, though not as extensive as that of Chicago and Boston, was far more so relatively to the size of the place, and it will be long before the kindly, hospitable and intelligent people of that city can recover from its effects.

Still more disastrous have been the agitations of human passion on both sides of our Northern border. The Twelfth of July celebration in Montreal, and its unhappy termination in the murder and subsequent brutal treatment of one of the Orangemen, besides other lesser breaches of the peace, is one of those events which most Americans find it hard to understand. The perpetuation of party virulence and animosity for century after century, the readiness, nay eagerness, to offer insult simply for the sake of insulting, the association of malevolent passions with the religious profession which requires their utter renunciation—these are things which are happily as alien to our ways of thinking and acting as to those of any people in the world. And these are the heritage which seven generations of the Irish people have inherited from the seventeenth century—an inheritance unhappily common to both the factions into which they are sundered. If we should regard the acts which were indulged in by the rioters at Montreal apart from their historic background, we might think their perpetrators mere maniacs. But what must we think of the evil influences at work in the hearts of two parties, (both distinguished by many natural excellencies), which have made such acts natural and to be expected.

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THE great railway strike on the trunk roads is another occurrence which cannot be correctly appreciated apart from the back-

ground of the event. It derives its chief significance, not from the resistance of railway employees to reduction of wages and to regulations which they disliked, but from the general support they have received from mobs of workmen of other classes, which enabled them to interrupt traffic on the road, and to offer dangerous resistance to the civil authorities, leading to riot and bloodshed in several cities. The state of public opinion among the working classes has been undergoing a great change for the worse during the past four years. The depression of the great producing interests, the want of employment and the constrained lowering of wages, the wide spread of actual distress and suffering, and a multitude of similar circumstances, have produced an embitterment of feeling such as has hardly been paralleled in our history. The consequence has been that a vast amount of inflammable human material exists at all our great centres of population, and there have not been wanting demagogues to foster its inflammability into actual conflagration. Men of limited insight into the complexity of our industrial relations, and destitute in great multitudes of cases of any religious or other principle to elevate their thoughts above the bare needs of back and stomach, are not likely to make loyal and contented citizens in a time of general distress and actual want. And Pittsburgh was exactly the centre at which such an explosion might have been expected. It is the only large city on the continent whose position is like that of Lyons, Manchester or Sheffield, having all its industrial eggs in a single basket—the manufacture of iron. Now not only is our iron industry the most thoroughly depressed of all, and, in some sense, the cause of the depression of all the rest, but the very fact that the working people are all of the same craft, tends to produce among them a community of understanding and of action, which is impossible in such a city as our own; and besides this, the city, to some extent, resembles New York in that a very large proportion of the wealthier class live in the suburbs, thus increasing the preponderance of the artisan class within the city proper. It has been quite obvious, even to careless observers, that the state of feeling among the working classes in that city has been such as has portended trouble for some time past.

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THE time of these disturbances is as natural as the place. For four years matters have grown pretty steadily worse as regards nearly every branch of productive and commercial industry, while every



month, and still more loudly every quarter, we have heard the predictions of revival of business. The disturbances in the political atmosphere, which followed the Presidential election, were loudly proclaimed as the great obstruction to a renewal of business confidence, and the working people were assured that with a President peaceably in possession everything would go right. But things have been worse than ever; the long lane seems to have no turning. The popular impression that only some temporary obstacle was in the way, has vanished, and the suspicion has spread far and fast that the control of affairs is in the hands of those who do not wish to see things better, because they find their profit in business depression rather than business revival.

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THE certain truth which underlies all this vague suspicion, is that the actual governing classes of the country have failed the people. Here is a useless and unmeaning depression of every interest of the country, which has lasted for nearly four years, and no relief seems to be in prospect. To theorists, this may seem merely an awkward economic problem; to the workingman it threatens starvation. The latter thinks that "the day of no judgment" is come upon us; that the people he trusted for solutions which would relieve his distress, have proved unable or unwilling to say what is the cause of the hard times, and to do what will put an end to them. We are forced to admit the general truth of this charge. We have as a nation been bowing down to the bramble-bush, and setting up folly in the high places of the land. The financial policy of the country for ten years back has been the one chief cause of our troubles. The national treasury, under the control of a series of mere *doctrinaires*, has produced inflation by the displacement of the capital invested in our national debt, and then intensified the collapse which follows inflation by its policy of forced and hasty resumption. It has brought us into the slough; it is holding us there. The tremendous responsibility of the government for the welfare of the people has once more been impressed upon us. We have seen the basest passions brought into the most destructive exercise of their energies by the enforcement of false and groundless theories of finance. And worst of all, experience forbids us to hope that the lesson will be taken to heart.

But it is none the less distressing and humiliating to discover

that large bodies of our fellow-countrymen are so devoid of respect for the authority of law, and so easily misled into gross offences against the very existence of society. Times like these and crises like this try men's souls ; they show how much of coherence there is in society itself, and how it fares with the progress and the permanence of the great principles of social order. And the result is not creditable to us. Our democracy has not created identity of interest and feeling ; our public education has not implanted principles of order in the minds of the people ; the great dualism and antagonism of rulers and ruled has been as little *aufgehoben* on our free soil, as in the monarchies of Europe. Nor is it to be wondered at. All our current ideas of what constitutes success, commercial and other, are disintegrating forces in society. Our selfishness, our mammon-worship, our wretched ambitions, may be very respectable-looking things so long as they are confined to classes who live under special social restraints ; but when they percolate downward to the lower classes, as sooner or later they must, they translate themselves into lawlessness, mob violence, and incendiarism.

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NOR is it surprising that the great railroad lines have been the first to suffer by the outburst of impatience, suspicion and hunger-bred frenzy. The estimate of them which has led to such restrictive legislation in the west, is by no means confined to the west. The feeling is common that they are vast and utterly selfish corporations, invested with privileges which the State should never have granted, emancipated from a control which the State should never have renounced, ready to secure legislation in their own favor by any and every means, managed by men of no principle. This cynical estimate of them is especially common among their own employees, and does much to divest them of the protection derived from the popular abhorrence of interference with proprietary rights. Now we do not believe that railroad officials are men of lower morality than the rest of the community, but we must say that the present crisis has shown these "captains of industry" to be utterly devoid of those higher qualities of leadership, which society has a right to expect in men who have been invested with great privileges. They have been allowed to enlist and organize a vast army of men, who possess peculiar facilities for interrupting the commerce of the country, and yet they have

not managed to create any harmony either of interests or of feeling between that army and themselves. They are unable to exert the slightest moral weight on their employees. When a mutiny occurs, instead of the Napoleons and the Wellingtons of rail-roading rushing to the spot to electrify their men into good will and obedience by the magnetism of their presence, they can but telegraph hither and thither to the civil authorities for troops. Indeed, what American railroad official is there whom any one would think of asking to undertake such a work? If it were the engineering a bill through the legislature, or a battle on Wall Street with the brokers, they might do something. But as for appealing to any confidence felt in them by their own force, there is nothing to go upon. The day will come when our railroads, if they still continue to hold their place as private corporations, will be obliged to seek men of another stamp to direct their affairs.

That nothing in America is so badly managed as politics and government, is the one popular reason for keeping this function of the common carrier, and others like it, out of the hands of the State. But in this crisis, as in so many others like it, our governing class is that upon which we have to fall back when all others fail us. And there is probably not a peaceable man among us who would not vote to-day to raise the United States army to fifty thousand men, and even to abolish a large part of the absurd constitutional restrictions, which prevent the general government from acting directly as the preserver of the peace.

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GIBBON says that Hildebrand showed himself inferior in statesmanship by making large announcements of his plans at the start. Something similar might be said of President Hayes and his Cabinet, in the matter of Civil Service Reform. They began to build a tower without counting the cost—the degree of resistance which would be offered to their movements by fixed traditions and the office-holding element. And so at every step they have been forced into qualifications and exceptions, which greatly impair the moral force of their movement.

The truth is that both Mr. Hayes and Secretary Schurz have approached the matter from the popular, rather than the statesman's point of view. They have seen this and that abuse connected with the service—incapacity here, dishonesty there—and they proceed

to cut off the branches of the evil, rather than to strike at the root. The root of the mischief is want of security of tenure. Offices refilled every four years will always be full of incapable men, and the men who get the appointments will always be tempted to seek the shortest ways of filling their pockets before their brief tenure expires. And so long as a change of Administration endangers official position, politicians will labor (openly or secretly) for the victory of their party, and will exercise a vast and undesirable influence upon the politics of the country. And at the same time the virulence and the expensiveness of our presidential elections will not be abated so long as the result of the choice is the immediate disposal of a vast number of places to the political class. In fine, nothing but a Constitutional Amendment making the term of office for life or good behavior, and a law of Congress, pensioning all who have served a given period, and requiring promotion by seniority in all but "staff" offices unless for reasons shown, will effect any permanent amendment of the system.

Mr. Hayes's Civil Service Reform has been briefly summed up as meaning the removal of undue congressional influence in the matter of appointments. But it is an essentially shallow and unstatesmanlike view which sees the root evil in congressional influence. A Congressman is, at least, as much entitled to consideration in the matter of appointments as any other citizen; if his selection to represent his fellow citizens mean anything, he is entitled to more. It is true that, as matters now stand, there are behind every congressman a large body of professional politicians, to whom he owes his nomination, and who expect to be recompensed by appointments. But so long as the present system of arbitrary and wholesale removal from office exists, professional politicians will stand around waiting; and the only change effected by the new plan will be in concentrating in the hands of the President and the heads of departments a vast power for evil, which is now rendered comparatively harmless by a wider distribution. Permanence of tenure and promotion within the departments, would so reduce the number and the value of appointments, as to make it a matter of small importance to the Congressman whether he was consulted or not.

Nor do we see what right the President has to proclaim that the officials of the United States shall not occupy positions in any of

the voluntary organizations and committees for the management of politics. A man renounces no rights of a citizen in becoming an office-holder, and all experience shows that "self-denying ordinances" of this sort have been invariably productive of unforeseen mischief. What we do need is such a reform as will make the office-holder just as zealous about politics as any other citizen and no more; which will leave him free to devote his leisure and his money to the service of the party if he pleases, but will set him free from all necessity of doing more than he pleases.

*Summa.* Mr. Hayes and his Cabinet have taken hold of this thing by the wrong handle. And that they have done so is but one part of a very much larger mistake they have been making. They seem to think the Executive is the Government of the United States, and that what it decides on doing can be done without anybody's help.

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THE Free Traders of New York, it is announced, are very much dissatisfied with the efforts of Mr. Morrison, of Illinois, to secure a revision of the Tariff in a Free Trade sense, and are determined to be ahead of him at the next Congress by preparing a plan of their own. Now, it may seem as if this were none of our affair; but we do protest against this mean spirit of depreciation, which has made Mr. Morrison its victim. In the first place, he is the only genuine Free Trader before the American public. He actually believes his theories, actually says what he means, and has again and again asked Congress to endorse the principle at stake, instead of trying to humbug the public by plans which can be represented as half-way Protection to one constituency, and whole Free Trade to another. In the second place, he has a just right to this proud pre-eminence, for he represents the only unanimously Free Trade constituency in these United States. It is ten years since we visited the highly favored district—commonly called Egypt—of which Mr. Morrison is the political miniature or embodiment; but from all the indications of progress we saw, it must be much the same to-day as it was then. A rich and rolling soil, the very finest wheat and fruit lands in the Valley of the Mississippi, but pestered with two of the worst plagues that can infest any country—dense ignorance and dense malaria. Its people are chiefly "poor whites"

from the South; and they live by scratching the high and dry places of their soil, wear homespun, and spend little money—except for whisky, which they do not *always* distil privately. It is the region of the Hard-Shell Baptists and similar sects, who will excommunicate a member if he join a Sunday-school, or sign the Temperance pledge. The school system is conducted on the principle of hiring the teacher who asks the least pay, and (except on the line of the railroads, in Randolph county—otherwise called Goshen—and among the Germans who are spreading down from St. Louis,) the darkness is such as might be felt. That community will never quarrel with such a representative; it is just the district to choose for its congressman a man of the most advanced and enlightened views in political economy. And lastly, Mr. Morrison evidently stands *en rapport* with the very fountain head of Free Trade inspiration—Sheffield. The little plans and proposals of his tariff, as well as those proposed by Mr. David A. Wells at an earlier date, were known to the English iron men earlier even than to Congress itself. Why this jealousy of our Western Free Trader then? Is not his bosom also open to the inspiration of great cosmopolitan ideas?

We may add that the recent organization of the Associated Industries of the country, which already embraces one hundred and sixty large firms, may be taken as evidence that the Protectionists are studying the same question from another side, and do not mean to be taken unprepared. The names of the principal officers (President, Henry C. Carey, LL.D: Vice-Presidents, Gen. Robert Patterson and Hon. Morton McMichael, LL.D.) show that they mean to organize on no merely partisan basis, but intend to make their appeal to men of all parties, who are interested in the industrial development of their country.

## THE USE OF ALCOHOL IN DIET.

THERE is no substance except the barest necessities of life which affects more deeply our whole social system than alcohol. Its effects on a large scale concern the jurist, legislator, moralist, reformer, physician and physiologist, while in private life there are few who do not have occasion to ask or answer, in a more or less distinct form, some of the questions touched upon in this paper; but while all are thoroughly agreed as to the enormous evils attending its habitual and excessive use, views differ widely as to its action in smaller quantity, and are represented on the one extreme, theoretically, by the rabid "Temperance" lecturer, and on the other, practically, by the so-called "moderate" drinker.

The teetotaler ignorantly represents, or willfully misrepresents, alcohol as an unmitigated poison, entirely foreign to the organism and to be at once rejected. The habitual user thereof, and in fact many persons who would strongly condemn its habitual use, seem to consider it a sort of concentrated nutriment or bottled up strength and vitality.

Is alcohol a food? Dr. Edmunds,<sup>1</sup> an English advocate of total abstinence, gives the following definition of a food which will serve our purpose.

"A food is that, which being innocent in relation to the tissues of the body, is a digestible and absorbable substance that can be oxidized in the body and decomposed in such a way as to give up to the body the forces which it contains."

(A) That alcohol is absorbable and absorbed needs no extended proof. It has been found chemically in substance, in the blood, and in the excretions, and it cannot be found except in very small quantity in the feces.

That it can be and always is oxidized or in some way decomposed in the body, can be just as clearly demonstrated, although statements lending support to the contrary view have proved so useful to lecturers and writers, and are apparently regarded by them as so essential to their argument, that they are most reluctantly abandoned even on the presentation of the strongest possible evidence on the other side.

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<sup>1</sup> The Medical Use of Alcohol; and Stimulants for Women. Jas. Edmunds, M. D. M. R. C. P. L., M. R. C. S. New York: National Temperance Society Publication House, 58 Reade st.

Liebig's original view, accepted without careful examination, assigned to alcohol a place among the other hydrocarbons, like them to be burnt up into carbonic acid and water; burnt up, that is, in the body with the same *final* result as if burnt in a lamp, but more slowly and perhaps with more intermediate stages. This theory, however, was subverted by another, proposed by Lallemand, Perrin, and Duroy, and, as it appeared at first sight, sustained by their experiments.

They found by a delicate qualitative test (chromic acid and sulphuric acid) that alcohol, soon after it was taken, made its re-appearance in the secretions of the kidneys and the lungs. The amount, however, thus obtained was, even according to their own estimates, entirely insufficient to account for the quantity taken; but not deterred by this fact, they *assumed* that a great amount of alcohol was lost during the chemical process necessary for its separation, and, further, that this elimination went on for a long period after the ingestion, long enough, according to them, to get rid of the whole of it.

They accordingly stated that alcohol left the system, "en totalité et en nature," and consequently could not be a food.

The examinations which this doctrine has undergone at the hands of various experimenters are too numerous to be described here. It has been shown by many of them that it is possible so to conduct experiments that the loss shall be small, and calculable within certain limits of error. Results have been arrived at by several different chemical procedures, some of which I have myself, in a rough way, repeated, from which it appears that the amount of alcohol gotten rid of by all the secretions together is an exceedingly small percentage of the amount taken, not *more* when the dose is moderate, than one or two per cent., and usually less than this. When the amount taken is large, and narcotism is produced, the amount eliminated increases both absolutely and relatively, but even the largest proportion ever demonstrated by accurate chemical analysis (Subbotin), the animals used being so confined that *all* excreta were completely retained for analysis, and the doses of alcohol given simply enormous in proportion to the size of the animals, leaves considerably the larger part of the dose still to be accounted for; that is, retained in the body or excreted under some other form than that of alcohol.

Twenty-five per cent. will cover the largest excretion ever de-



monstrated under any circumstances, even those of extreme narcotism.

An experiment made by Dr. Anstie, and called by him a "final" one, as indeed it was in a more melancholy sense, is so thoroughly conclusive, and includes so many of the previous ones, that I will briefly state it.<sup>2</sup>

A dog received for ten days an ounce of brandy in two doses per diem, equaling 191 grains of absolute alcohol. On the tenth day the dog was enclosed in an air-tight box, through which moist air constantly passed and deposited its condensed water and alcohol in an appropriate receiver. This distillate (representing the excretion by the lungs and skin) gave, with a proper allowance for loss, an amount of alcohol equivalent to an elimination of 1.13 grains in the 24 hours. The other excretions were *nil*.

Since as much, or more, alcohol was probably eliminated on this day as on any previous one, we have certainly not more than about twelve grains disposed of in this way during the whole ten days. On the next day the dog was killed two hours after having taken its usual equivalent of 95 grains of absolute alcohol in the shape of brandy. The whole body with its contents was at once carefully, but rapidly, cut into small pieces and immersed in a jar of water, which, after some time, was submitted to analysis, and the total product of alcohol found to be 23.66 grains.

We have, therefore—

	<i>Grains.</i>
Alcohol ingested, a little over - - - -	2200.
Eliminated, not more than - - - -	14.
<i>Recovered after death,</i> - - - -	24.
Disappeared in the body, and no longer existing in the form of alcohol. }	2162.

If it is objected that results obtained from dogs cannot be applied to human beings, it may be fairly replied that alcohol is at least as foreign to the canine as to the human organism; and what is more to the purpose, that numerous previous experiments upon man, which for several reasons could not be quite so complete, had shown that a similar conclusion was in the very highest degree probable for him. It is to be noticed that in the experiment detailed the amount of alcohol taken was in the same proportion to the weight of the dog (9 lbs., 12 oz.) as 14 oz. of brandy to an av-

<sup>2</sup> Practitioner, Vol. 13, p. 15.

erage adult, a dose which would produce intense alcoholic narcotism (or, in other words, make a man very drunk indeed), a condition in which the elimination of alcohol is much increased; so that really the dog is a very extreme case, and represents much more than the physiological amount of elimination.

In some other experiments, Dr. Duprè found that when a given amount of alcohol was taken per diem by man, that the amount eliminated did not increase as the experiment went on, as, of course, it must have done, if the excretions had to dispose of the whole of it. This negatives the supposition of long-continued elimination, and is really an extremely satisfactory test.

For if a certain amount of alcohol is given per diem, one of four things must happen: Either (1st) the amount eliminated in 24 hours must from the beginning equal the amount ingested, a theory which has been over and over again disposed of in the most decisive manner by all quantitative experiments upon the matter, not excluding even those of Lallemand, Perrin and Duroy, their theory to the contrary notwithstanding; or (2d) the quantity eliminated must gradually rise day by day, until it equals the amount ingested, which was the alternative disposed of by Dr. Duprè in the last experiment quoted; or (3d) the man must after a sufficient length of time be completely transformed into alcohol—a condition which, however nearly it may have been approached in the very numerous and faithful experiments of which we, unfortunately, see so many, has never been quite reached; or (4) the alcohol must be gotten rid of in some other way than by elimination “*en nature*,” which is, undoubtedly, the true alternative.

It may thus be regarded as one of the best established facts in physiology that by far the larger part of any dose of alcohol, and for all practical purposes the whole of any moderate dose, is in some way decomposed or oxydized in the organism, and that the so-called elimination is, in fact, but a trivial overflow, which may be left out of the account in determining the fate of the alcohol ingested, and is of very little value in getting rid of a poisonous dose. This fact is now so well known and so thoroughly grounded upon careful chemical analysis that there is *no excuse* for any one who attempts to discuss the question scientifically, either ignoring it or denying it, unless he is himself prepared with sufficiently accurate experiments to show where the error of previous chemists and physiologists has been.

It may be stated as bearing on this point, though not essential to our present enquiry, that a substance very closely resembling alcohol in its behavior, if not identical with it, has been discovered by two independent observers, (Duprè and Lieben) in the urine of persons who have used no alcohol whatever, and moreover that Dr. Ford, of New Orleans, has found alcohol, or some substance which he was unable to distinguish from it, in minute quantities in the blood of oxen.

(B) As to the innocence of alcohol in relation to the tissues of the body, certain extreme points can be easily fixed, though certain other intermediate ones are still *sub judice*. The deleterious influence of alcoholic excess is so commonly acknowledged that it is hardly necessary to enter at length upon this branch of the subject. The production of various forms of dyspepsia, frequently going on to actual structural change in the stomach, is due partly to the influence exerted by alcohol, when but slightly diluted, in preventing the solvent action of the gastric juice and consequent non-digestion of food; and partly to its direct irritant action upon the stomach itself. The morning nausea and vomiting, to be cured by a "hair of the same dog," the loss of appetite, the abdominal distress, and the induration of the stomach sometimes called cancer, testify that too much strong alcohol is certainly not innocent in relation to the coats of the stomach.

Cirrhosis of the liver is notoriously frequent among drunkards, and is in fact almost, though not absolutely, confined to them, as is indicated by the name sometimes given to it, viz., "gin-drinker's liver."

The relation to Bright's disease is not so clearly made out as is assumed by some writers, though I must confess to myself sharing the popular belief that alcohol is one among its most important causes.

There are many slighter, but almost as important, changes probably due to alcohol, which could be less clearly defined, and would be less easily proved by statistics. I cannot help regarding the statements of Dr. B. W. Richardson, in his recent popular work on "Diseases of Modern Life," as being a little stronger than could be strictly proved, but many of them are undoubtedly near the truth.

The deposit of fat on some parts of the surface and in important organs, is no more than might be expected from an agent, itself a

hydrocarbon, which checks the destruction of tissue and leads to a storing up of the products of imperfect metamorphosis.

The loss of nervous power, as indicated by paralysis and neuralgia, delirium tremens and loss of mental vigor, is sufficiently familiar. The more decided forms of insanity are often distinctly traceable to alcohol. On examination of some statistics, I find alcohol assigned as a cause of insanity among the inmates of various hospitals in this country and abroad in proportions varying from five to twenty-five per cent. In determining the relation of causation between two such common affections as alcoholism and insanity, much allowance must be made for the individual opinions of superintendents and persons furnishing statistics, but ten or twelve per cent. would probably be a fair average of the opinions held by a considerable number of experts, among whom we should undoubtedly find some prejudiced in each direction.

The general deterioration of constitution, the "Säufer-dyscrasie" of the Germans, perhaps connected with progressive degeneration of vital organs, is of quite as much importance in estimating the loss of health from alcohol as more clearly defined diseases. It is well understood that the habitual drunkard has a decidedly smaller chance of recovery from an acute disease than a temperate man.

On the other hand it would not be difficult to find numerous proofs that the habitual use of wine or even of brandy in small quantities, at meals, (which secures their dilution) and in some exceptional cases a much less careful consumption thereof, is far from being incompatible with a healthy old age. Perhaps the most remarkable instance is that of George Stravarides, whose case was recently reported by Dr. Arnstein, of Athens, and who died at Smyrna, aet. 132. He had consumed an average of more than 100 drachms of brandy daily, retained all his senses and a good set of teeth, and worked at his trade of baker. Less striking but sufficiently conclusive instances are by no means rare.

It is to a great extent a question of quantity, of dilution, and of time, and if it can be shown that alcohol but slightly diluted in the form of distilled liquors is far from being innocent, but is first an irritant and then a narcotic poison, it may with equal truth be asserted that diluted and with meals, especially in the form of beer or light wines, alcohol is one of the mildest of irritants and one of the slowest of poisons, and that the duration of time necessary for it to produce fatal effects is far in excess of an ordinary life-time.

I wish distinctly to say that I do NOT mean here to refer to the habit of so called "moderate drinking." This term includes everything short of that which produces obvious and offensive drunkenness, even that specially dangerous and not uncommon condition in which a man is hardly ever drunk and just as seldom sober. The occasional debauch is the worse for a man's reputation, but the steady soak is by far the worse for his tissues.

If I should be asked to state more definitely what is much and what is little, I should say that the line is to be drawn by effects and not by arbitrary measure, and that it varies for different individuals. Any quantity, be it only a teaspoonful, which produces flushing of the face, obvious smell of alcohol in the breath, (except what may for a few moments adhere to the mouth,) and especially a confusion of thought perceptible to the person himself or to others, is an overdose. It has begun to be a narcotic.

How far my views would differ from those of Dr. Richardson in the work above referred to, I do not know; probably not very widely. From occasional sentences in his chapter on alcohol, I should infer that he was speaking in reference to a use of this substance, which I should call excessive, and should have no hesitation in charging like him with pernicious effects.

He says he has found that a proportion of 30 grains of alcohol to a pound weight of animal causes drunkenness, and 60 grains is dangerous, a proposition not difficult to accept when we find by calculation that the smaller dose means for a man of 150 pounds, more than half a pint of alcohol or over a pint of brandy, and for the larger dose over a quart of brandy. Any results drawn from such doses obviously affect but little the argument as to a limited and reasonable dietetic use of wine.

(C) Is alcohol decomposed in such a way as to give up to the body the forces it contains?

If decomposed in the body, it must, in accordance with all the laws of chemical action and force, give up to the body in some form or other the forces it contains, although it by no means follows that it is available or useful force. It might be, and very probably is, in the form of heat, an increase compensated or overcompensated by the diminished consumption of other tissues, and also by a more rapid loss of heat, a loss which is directly favored by alcohol, owing to its property of dilating the cutaneous veins, increasing the rapidity and volume of the cutaneous circulation, and consequently the

radiation and evaporation from the surface of the body. An increased production, however, has never been either proved or disproved, for small doses.

The slight fall of temperature observed after the use of alcohol is not of itself enough to prove diminished production of heat any more than the subjective sensation of warmth, proves increased production. Both are probably mere changes in the distribution of heat, results of the action just spoken of upon the cutaneous vessels. More blood going to the skin makes it feel warmer, and at the same time carries off heat from the interior.

We are met too by the fact that under the use of alcohol the excretion of urea, representing nitrogenous waste, and of carbonic acid representing the destruction of hydrocarbons, is diminished, so that, if we accept a definition of food somewhat more comprehensive than that with which we started, including substances which "prevent the removal of any of the necessary constituents of the body," we may upon this basis apply the title to alcohol.

According to recent theories urea may in part represent a mere waste of the nitrogen in the food, which has never formed an essential portion of the tissues, and which has therefore in no way contributed to the production of useful force. It is possible therefore, that alcohol may restrain waste without interfering with the normal and necessary combustions which must take place for the liberation of useful force from whatever food is taken. Neither is there anything to contradict the assumption that alcohol may sufficiently diminish the general production of carbonic acid to more than compensate for the increase which would naturally follow from its own oxidation.

Chemistry, although presenting a number of possibilities and some probabilities, has not yet told us exactly how far alcohol contributes to the useful forces of organism, nor in what way it controls the metamorphosis of tissues, and for the present we must find our answer to the question in more direct experiments which may give us a "yes" or "no" without saying much about the "how" or "why."

Ordinary unskilled observation cannot tell us whether alcohol gives up to the body useful force, for it is represented largely by the two extremes of popular opinion alluded to at the beginning of this paper. To a large part of the community alcohol means either poison or something to give strength.

In the last few years, competent and unprejudiced observers have told us what the effects of moderate doses of alcohol are upon the capacity for work. Dr. Hammond found that when he was living upon a carefully regulated diet, upon which he neither gained nor lost weight, that alcohol to the amount of four drachms with each meal for five days, somewhat disturbed the general health, caused headache and increased heat of skin, and diminished the clearness of the mental faculties. There was also general lassitude and indisposition to exertion.

Here the alcohol not only failed to give increased force, but clearly diminished the capacity for work of any kind.

When, however, in a second series of experiments he reduced his diet, so that he was gradually losing weight and felt exhausted after exertion, with increased hunger, the same amount of alcohol produced almost the contrary effect. The pulse fell from 88 to 83 per minute, there was no headache, the intellectual faculties were clear, and of normal energy, the quantity of food ingested fully satisfied the appetite, sleep was sound and refreshing, and all the functions of the organism were performed with regularity. In short, the alcohol had taken the place of the bread and meat omitted and at no apparent disadvantage to the general economy.

The extent to which this substitution of alcohol for other food may in rare and exceptional instances be carried, is shown by several cases narrated by Dr. Austie, some observed by himself and others reported to him.

The first of these was a man of eighty-three, who took a bottle of gin a day, with no food except one small finger-length of bread, usually toasted. This state of things had lasted for many years. He was a man of active habits, for his age, and not often drunk.

Dr. Inman speaks of several cases where nothing but spirit and water was taken for weeks or months, the persons remaining in some instances in apparently good health and condition.

Less striking instances it would not be difficult to find in considerable number, especially if we were to include the use of alcohol in disease, when, it is quite generally recognized, a sort of toleration for alcohol is established and patients take large amounts not only without affecting disadvantageously the nutrition, but with great benefit thereto, and what is equally remarkable, without the usual effects upon the nervous system.

It is hardly possible to sum up these facts in simple language

better than by saying that alcohol may take the place of a part of the food, and under some circumstances of a large part; and that consequently it is to be looked upon as itself a possible food.

Whether it is an economical or indeed usually advantageous food, is another question, which is undoubtedly to be answered in the negative for all cases where ordinary food can be taken and assimilated.

The more highly organized principles, such as starch and sugar, it is true, represent a larger amount of stored-up force which is liberated by their decomposition in the organism. Sugar during its transformation into alcohol by fermentation produces a certain amount of heat, which is of course loss to the organism if this fermentation have taken place outside, and the alcohol be used instead of the sugar which produced it. But if this sugar cannot be properly digested and assimilated, it certainly stands as an available aliment below the alcohol obtained from it, provided the latter can be, as we have shown it is, at least sometimes, usefully consumed. Even outside of the body, where we have no nerves and mucous membranes to be consulted, alcohol is for many purposes a more convenient and useful fuel than starch or sugar. Here again we must be ruled by experience and the circumstances of the individual case, rather than by a purely chemical theory.

The position of alcohol, however, as a substitute for or an addition to ordinary food cannot be correctly assigned without reference to its effect upon the nervous system—an effect to which, far more than to its influence upon the general nutrition, its social and moral importance is due.

The habitual over-user of alcohol seldom has any well-considered ground of economy or health for his indulgence (though somewhat prone to allege such), but merely desires the immediate agreeable effects.

The argument in favor of the use of alcoholic liquors because the taste for some stimulant is so universal, is worth but little. Men, unfortunately, wish to do many things which they had better not, and without much regard to ultimate results.

The effect of alcohol in any dose, other than a very small one, may be stated as a gradually progressive blunting of the sensitiveness of the nervous system. Beginning with the higher intellectual manifestations, confusion of thought is among the earliest symptoms which betray its influence. As this increases, we have a grad-



ual removal of the restraints which reserve, timidity, habits, education, conscience, or a sense of decency impose upon the lower, nature, while the impulses and passions come unrestrained to the surface. *In vino veritas*. Finally, even these disappear in a temporary imbecility and stupor.

Parallel with these changes we find also a loss of motor co-ordination, as shown by the thick speech and uncertain gait, which also pass, at a later period, into complete paralysis, until only those functions remain which are necessary to keep the animal machine in motion, and even these may, by a sufficiently large amount of alcohol, be permanently extinguished.

This is narcotism, resembling in its general features, and especially in its later stages, the effects of some other drugs, and of various diseases interfering with the functions of the nervous system.

There will be little dispute about the truth of this statement as applied to the later and more marked stages of alcoholic intoxication; but the correctness of placing diminution of mental power among the earlier effects may not be so readily acknowledged, since it is generally assumed and stated that previous to narcotism a period of *increased* activity of mind and body exists, when there is more vigorous action of the intellect, clearer as well as more copious ideas, and increased ability for bodily labor. This is called *stimulation*. It may well be doubted, however, whether such a condition as true stimulation by alcohol exists, *for the perfectly healthy man in normal condition*. If it does, it takes place previous to those phenomena usually supposed to indicate it. The early phenomena, if carefully observed, are better explained as the beginning of intoxication. At any rate, it would be difficult to say where stimulation leaves off and narcotism begins. The increased flow of words, or even the expression of ideas which would otherwise remain in silence, will be readily granted, but their quality and value is another matter.

Few men who might wish to have possession of the full vigor and acuteness of their intellects, as, for instance, a lawyer matched against a keen and watchful antagonist, an accountant disentangling a complicated page of figures, or a surgeon about to perform a critical operation, would attempt to increase their legal acumen, sharpen their perceptions, or give calmness to the judgment, with alcohol. It is difficult to say whether the praise occasionally bestowed upon a dissipated country doctor, that he knows more drunk

than his neighbors do sober, reflects most discredit upon him, his rivals, or his admirers.

Even as to the imagination and fancy, which are supposed to be peculiarly susceptible to the influence of drugs, their stimulation by alcohol is by no means an assured fact, at any rate for most persons.

Dr. Chambers, who, as will be seen by another quotation, is by no means an advocate of total abstinence, says: "I very much doubt the quickening or brightening of the wits which bacchanalian poets have conventionally attributed to alcohol. An abstainer in a party of even moderate toppers finds their jokes dull and their anecdotes pointless, and his principal amusement consists in his observation of their curious bluntness to the absurdity of their merriment."

In those cases where true stimulation takes place—that is, where we have increased mental power, and precision as well as rapidity of thought—we probably have to deal with a strictly medical or remedial action of the drug, and the persons thus affected are not likely to be found among those who can be fairly considered well and strong. It is by no means improbable that the previous condition has been one of cerebral anemia, which is more or less temporarily relieved by an increased supply of blood sent to the brain by a heart to which alcohol has given a slight and short renewal of strength. The relief of syncope or fainting by a glass of wine is the most marked example of this action. A bringing up of the brain to its proper working level by alcohol implies that it must have previously fallen below it. It is a restoration rather than a stimulation in the etymological sense.

For the stump speech or the after-dinner witticism, when possibly audience as well as orator is good-natured rather than critical, and values fluency and smoothness as much as accuracy, a little loosening of the tongue, especially if it be one habitually restrained, may do no harm; but the world is but little the wiser, though it may be the merrier, for the words which thus "escape the hedge of the teeth."

The bodily activity and restlessness is rather the blunting of the sense of fatigue (which, in the order of nature, ought to be felt and respected), or sometimes the loosening of the restraints of timidity or propriety, than capacity for increased work—a condition which direct and careful experiment shows not to exist as the result of

alcohol. Though this condition may, under certain exigencies, be desirable, it is evanescent, and not easily to be obtained again by a repetition of the dose. Successive attempts to secure this result by successive doses, and to "keep up the strength" with liquor, usually end in disastrous failure.

On the other hand, after the occasion for the exertion is over, and before the force expended has been made good by the digestion of food and by sufficient rest, the period of fatigue and depression may well be bridged over by a little alcohol.

Under these circumstances, perhaps, as nearly as under any in the healthy man, the *true* stimulant action of alcohol is exerted, and it is remarkable that we do not usually then have the effects to which the word stimulant is conventionally applied—that is, the symptoms of approaching drunkenness.

The observations collected by the late Dr. Parkes, Professor of hygiene at the Army Medical School, at Netley, from the medical officers and others who served in the Ashanti campaign, are of great value on this point, especially as the prejudices on either side were not strong and the observers intelligent.

Surgeon W. R. Kynsey, first field hospital, Ashanti force, says: "After this I continued to take a small quantity of spirits when I could get it, whether in camp or on the march. In camp I only took it at dinner, and in small quantities, or on going to bed at night. For one accustomed to take some kind of alcoholic fluid at meals, it is a serious privation to abstain from it, still I feel certain that I would have been better without it in camp. I have formed an equally strong opinion in the opposite direction, as to its necessity on the line of march in a climate like the Gold Coast. I would give a small ration of spirit after each march, either with the dinner or immediately after it. Some of the marches were very long. On a few of these occasions, I was induced to try, from excessive fatigue, the effect of a little spirits, with the following result: At first the fatigue seemed to me to be less; I felt decidedly better; but as I marched on and the effect of the spirits disappeared, I felt decidedly less able to march, and the sense of fatigue became much more intensified, so much so that I never took the smallest portion of spirits during a march but I regretted doing so; and on all subsequent occasions, when I felt fatigued, I took some beef-tea, never spirits."

Sergeant Perrin, army hospital corps, (a temperate man, never

takes spirits, usually takes one pint of beer a day, seldom more), says: "After a hard march, the men did not go to their halting ground until the evening. There was no rum, only tea and biscuit. About 2 o'clock in the morning, the rum arrived and was served out immediately. He felt a great deal better for it; it took away languor and made him feel warm. The march recommenced between 5 and 6 o'clock, and was well done; but then it was shorter and there were no swamps, so the men were not much tired. All the men, so far as he knows, thought the rum did good; the quantity was enough. If the rum had been given *on the march itself*, it would have done no good, only harm. His reason for saying so is, that on two or three occasions, on the march, one of the doctors gave him a glass of grog; the effect was reviving for a quarter of an hour, and after that he felt a great deal more languid than he did before. He was so convinced of this that he would have refused it had it been offered again."

Sir Anthony Home, K. C. B., late principal medical officer on the Gold Coast, says:

"I believe if a very varied diet were always issued the men could get on without alcoholic stimulants in all climates whatever, tropical as well as temperate; but it is visionary to hope that this can always be the case in war. Sutlers do a little in this way. Government can do nothing directly. Men cannot keep in health on poor, insipid, badly-cooked rations. Under these circumstances I believe that, *after their day's work*, rum is desirable (beer and wine are impossible of attainment). There is a moment in which we may so keep up the system of a man tired to death by over exertion, as to bridge over the period in which lassitude ends in the beginning of disease. Good food will probably do this best, but it is rarely at hand when wanted; and even if it were, the digestive powers participate in the general lassitude, so that neither digestion nor assimilation go on sufficiently. At this time a glass of beer or rum sends the machine on again." In another place, he says: "If given in the morning before a march, in the delusive idea of adding to a man's strength, it (rum) will be simply pernicious."

Dr. Parkes also reports several experiments with careful and intelligent men performing measured amounts of work, as to the comparative value of beef tea, coffee, and rum, in sustaining power during a march, the result in all cases being against the rum.

Some very extraordinary facts are also stated in his book as to

the diet of men employed in changing the gauge of several pieces of railroad, which of course had to be done as rapidly as possible, the men working seventeen or eighteen hours a day for nearly a fortnight. No drink was taken except a thin gruel of oatmeal and water, and in some cases beer after the work was over. One of the engineers "concludes by saying that as the result of many opportunities for observing the best means of keeping up the energies of men undergoing great exertion, (I) he is not in favor of spirits."

The habitual or occasional use of alcohol with diet or as a beverage is also to be looked at from another and less strictly physiological point of view, so wide that I must restrict myself to a few suggestions and inquiries;—that is, as a luxury and promoter of cheerfulness and good fellowship.

Admitting all that has been said of the action of alcohol upon the intellect, does it necessarily follow, that that incipient narcotism which loosens the tongue and brushes away reserve is harmful? The ground is dangerous, and the question cannot be answered alike for all persons. If this narrow line is passed, alcohol, or perhaps I should now change my phraseology and say wine or beer, becomes hurtful. If the intending user is conscious that a little wine means for him unlimited wine, there is no doubt that for him abstinence is the only safe condition; or if a man conscious of his own ability to stop at the proper point is aware that his friend, who may be influenced by his example, is really unable to refrain, there can be little question of the sacrifice that charity requires him to make. These cases, however, as I think, cover much less ground in real life than in the imaginations of lecturers.

But if use does not mean excess, have we a right to relax a little on suitable occasions under the influence of wine? If it promote cheerfulness and good fellowship, does it not indirectly tend to health rather than disease? Dr. Chambers in his book upon diet, before quoted, sets forth the affirmative in the following words. After speaking of certain aromatic wines, he says: "All these five classes of wines prudence will reserve for festive purposes and occasions; the wise man who wishes to enjoy life, will make them always exceptional; for as idlers have no holidays, so perpetual feasters miss all the pleasures of variety; but I am quite sure that the not unfrequent manufacture of occasions for domestic rejoicing, a birth-day, a wedding anniversary, a harvest home, a horse sold,

the planting of a tree, the calving of a cow, a daughter presented at court or cutting her first tooth, or any other good stroke of business, is a good promoter, not only of love and happiness, but of personal health. Let the beverages which celebrate these occasions be chosen for their peculiar and exceptional flavors. If they are good of their class, the moderate use will not shorten, but both cheer and lengthen life."

It would be easier to quote poetry than prose on the subject, but so much can easily be supplied from memory that I content myself with the suggestion. Accurate statistics are evidently not to be had, which should show the exact effect of the limited and occasional use of wine; but it would be safe to compare with ourselves the upper and middle classes in England, or even on the Continent, who are undoubtedly more habitual users of wine and beer, and who would hardly admit, nor could we claim, any superiority of health or mental vigor due to more abstemious habits.

Even if we do not admit all this, we can hardly help, I think, as practical philanthropists, rejoicing in the change which is said to be taking place in the drinking habits of our fellow citizens;—I mean the substitution of beer for stronger liquors, and a consequent partial abandonment of the pernicious American habit of "perpendicular drinking."

Whether we look upon beer and light wine as actually useful, or only as being less harmful than gin and whisky, there can be no doubt that the substitution is an improvement, and should be favored by all those who recognize the repeated failures of coercive legislation to alter the habits of a community and make it virtuous against its will.

#### CONCLUSIONS.

I. Under some circumstances alcohol may be a food. These are:

1st. Deprivation of nourishing and sufficiently varied and abundant rations, as in the case of soldiers, sailors, laborers, etc.

2d. When for any reason ordinary food is not well assimilated or the system has become habituated to alcohol, as in some rare instances of habitual topers and in some wasting diseases.

This substitution should be a matter of necessity and not of choice.

II. The healthy man with a full and varied supply of food needs absolutely no alcohol.

Wine with food sometimes assists in its digestion, but the diges-

tion which needs this aid is either enfeebled or overburdened. The most severe and long continued labor can be carried on better without alcohol than with. This is in most cases especially true of mental labor.

III. In the few cases in which this is not true, and where a small quantity of alcohol merely suffices to restore the normal vigor without excitement, the previous condition is probably one of somewhat impaired vitality, perhaps more especially affecting the heart.

As an addition to a diet already sufficient, alcohol is, to say the least, useless in perfect health.

IV. An occasional use of light wine or beer is a luxury—not a necessity. Experience shows that such a use cannot be regarded as seriously detrimental either to bodily health or mental vigor.

V. After a fatiguing day's work, as a relaxation and agreeable change, or as a prelude and assistance to the digestion of more appropriate food, alcohol may be looked upon as approaching more nearly to a true stimulant or restorative action than under any other circumstances in health. We then expect from it neither intoxication nor reaction.

VI. An habitual overdose of alcohol leads to degeneration of important organs, and undermines the vital powers.

VII. There may be *moral* reasons for total abstinence, entirely distinct from the physiological.

VIII. The introduction of the use of light wine and beer, though not desirable in a community already in a state of ideal physical and moral perfection, is highly desirable as a substitute for the use of stronger liquors.

ROBERT T. EDES.

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## SATAN ANTICIPATED.

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### I.

I PROPOSE to illustrate how God, after having determined to create man in his own image, foreseeing that sin would come and that struggle would follow sin, left his physical, intellectual and moral creations in the form of germs, gifted with tendencies to growth, and subject to such laws that their unfolding and final perfection should be reached through this very struggle; thus not

only thwarting Satan in his designs, but converting him into a most important, though unwitting instrument in the development of both the nobility and the joy of mankind.

When the sun's heat reaches the buried seed there ensues a struggling of forces, the germ forcing moisture from the soil against inertia and gravity, separating elements chemically knit together, grouping them into new compositions, bursting their coffins and crowding up their heads for breath. Every leaf is a field of conflict, decomposing and assimilating gases and liquids. Trees battle with the winds, and that they may not be worsted strike their roots still deeper and bind their sinews in stronger cohesion. Thus plants struggle through every period of their growth. When they cease their contendings they breathe out their lives.

In converting vegetable into animal tissue there appears the same phenomenon of destroying old and forming new chemical compounds, that exists in the growth of flower and leaf. Animal as well as vegetable life enters through infancy and weakness, and reaches maturity only through struggle. This fierce chemical conflict that ceaselessly goes on while dead matter is thus being developed into plants, and plants into muscle, is but preparatory to a fiercer one, that of animal with animal, developing tribal characteristics among the brutes. Rarely is one born, from mote to mammoth, but comes battle-proof at birth and gifted with instincts for fight. A microscope will reveal a contest going on among the million occupants of a drop of vinegar. The fish for defense have coats of mail; for attack, weapons of bone. The ants of Africa marshal their Lilliputian forces with Napoleonic skill, and endure with fortitude worthy of Greek antagonists. From chaos until now, between bill and spur, claw and tearing tooth, heel and horn, sting and tightening coil, has this universal war been waging. From now until the world burns it will continue to wage. God armed the warriors, meant the fighting, planned the issue.

Mind, like plant and animal, commences in the germ with no visible signs of power, and its development is effected by giving it to live in, act through and preserve, a strange compound of flesh and bone possessing impulses in direct antagonism to its own. The mind, forced to feed and clothe the body, is placed upon an earth for the most part either hopelessly deluged by water, piled into mountains, or spread out into long reaches of burning desert and bleak moor. Only a few small plats of ground are capable



of bearing fruit or fit for habitation, while even these are governed by laws of reproduction so hidden that only after an apparent waste of vast energy and material, patient experiment at last discovers them. The metals are distributed through swamp bogs, mingled with the shifting sands of rivers, or poured into the crevices of metamorphic rocks. Storms beat pitilessly about the body, frosts bite it, sunbeams scorch it, winds buffet it. Yet the mind, thus compelled to shelter this foundling of flesh entrusted to its keeping, finds Nature tantalizingly giving building material in the rough, trees and quarries, without furnishing even a saw or an axe for the hands of industry. Forced to move about this cumbersome body, and soon tiring of its slow paces and searching for easier and swifter modes of travel, it sees the wild horse without a rider; but when it tries to mount him, "catch me" he saucily whinnies and bounds away over the prairie. Dangers beset it on every hand, deserts puff simooms in its face, waves toss their mad-caps over it, mountains belch flames at its coming or try to crush it with the avalanche. From this continual opposition to the mind's efforts to care for that over which it is placed guardian, the issue is, it becomes an Aladdin's lamp, and the elemental genii, the slaves of the lamp. It touches forests and they melt; it yokes steam power to machinery, and trains of carriages bear the freighting of nations through tunneled mountains, and monstrous sea-gulls of commerce flap their wings around the world. It looks through telescopic tubes, and banks of nebulous mist are resolved into universes of stars. It mounts electric steeds, and swifter than light dashes along the telegraphic highways of modern life.

These are but the beginnings of its trials and triumphs. Often after it has built its cities and secured its comforts, it finds them consumed by tongues of fire, poisoned with malaria, or crushed under the tread of earthquakes. But out from this fiercer strife come increased intellectual vigor, deeper knowledge of natural law, and wider views of a ruling God. Its strivings with these outer forces are still but faintest echoes of those with the inner, in which the angels and devils of human nature are desperately battling for moral mastery.

Through struggle material beauties find origin and unfolding. Sunbeams by forcing their way through a semi-transparent atmosphere or drifting banks of mist, paint the golden glories of autumnal skies, and form the twilight with its waking dreams and thron-

ing memories. Rainbows bend only on the clouds of passing storms and above the plunge of Niagaras. From contests come those charmed eddyings of waters before they leap, the windings of rivers, curlings of waves, billowed beauties of lakes and woods, prairies and drifting clouds. Curves come always from contests between centripetal and centrifugal forces. By gravity contending respectively with the force of projectiles, cohesion and the upward tendencies of plants, fountains are gifted with their graceful overflow, dewes globuled, and boughs of trees trailed in beauty.

So all the finer beauties in thought and feeling are children of struggle. Thence came Hood's touching plea for Christian charity, "The Bridge of Sighs," Whittier's "Maud Muller" voicing the "might have been," the tenderness of Tennyson's "In Memoriam," "The Court Lady," that choice offering of Mrs. Browning's genius to English literature. It is through watchings at the sick bed, tears and prayers for the erring, the fading of cherished hopes, that are developed life's rarest graces. Unrivaled for loveliness will ever be the smile of trust that lights the face of sorrow.

No less truly has struggle been chosen for the development in character of the attribute of grandeur. As its chief source in inorganic matter is the display of power, seen in the violent commotions of the elements, as earthquakes, volcanoes, conflagrations, lightnings and tempests; and as among brutes the highest grandeur is found in their deadly contests, where serpents strive with eagles, tigers with rhinoceri; where lionesses brave dangers, suffer fatigue or close in death grapple in defense of their young; so with more marked emphasis human lives grow grand in dungeons, on racks and beds of torture, at the stake and amid thunderings of artillery; because there the greatest amount of spiritual force is concentrated and is in greatest activity. Only through the mighty martyr strugglings of the world's benefactors does the Creator's image become manifest in his creatures.

From times of fable until now, freedom has had her votaries. Neither arctic coldness which fetters seas in frost nor the enervating influence of tropical heat can still the heart's throbbings for freedom. This instinctive aspiration may be found even among the savage tribes of men. It is the very last of the nobler promptings that dies out in the soul. The Esquimaux' huts of ice and the shifting tents of Arabs are among the strongholds of liberty. Pawnees defend with avenging tomahawks the hunting-grounds of

their people, and in the mountains of the Orient gleam in jealous guard the drawn cimeters of the worshipers of fire. With advancing civilization this love grows stronger, and its manifestations clothe with sublimity the records of individual and national life.

Equally prevalent is the passion for tyranny. Desire for glory and power, at first ennobling, when once grown morbid holds the rights of others in light esteem. Red-handed War, Conflagration with his flaming torches, and hollow-eyed Hunger, are its ministers. The halls of legislation echo with its sophisms and sordid appeals. Thrones are filled with its minions. Its poisons infest the avenues of trade. Art with her hundred hands forges on her anvils the chains that clank about the necks of commoners and kings. The holy offices of the church itself it pollutes with the proselyting lust of its mitred bigots.

These are of necessity deadly antagonistic passions. Their war-cry has sounded since the first transgression, and under their opposing banners have rallied millions in every age. Their contests widen from individual breasts to fields where battalions decide the destinies of empires. But this fierce contest, thus inseparable from liberty's life, is indispensable to its growth, gifts it with immortal youth, and unveils the splendor of its ideal. It is the struggle that follows sunlight on the soul, quickening into verdure the germs lying latent within it.

Earth is sown thick with battle-fields. Indeed, where is the country that has not had its age of heroes, days of aspiration, tokens of promise, whose soil has not been made sacred by the blood of its sons? Golden memories are woven with the shadows that rest upon the hearthstones of Greece. Xerxes by Malian treachery gained entrance through the pass of Thermopylae only to become an unwilling witness to the sea fight at Salamis, and add lasting lustre to Grecian fame by the final discomfiture of his forces on the plains of Platea. Afterward in that defile a marble lion commemorated those who loved liberty better than they loved life. When Spanish hordes threatened the throne of the Montezumas thousands of Aztecs sprang to arms at the sound of alarm in the temple of their war-god; and not until the noble Guatamozin was taken captive, and his palace and people lay together in helpless ruin, could haughty Castile claim place among the dynasties of the New World. The Netherland provinces, drilled to arms and taught self-reliance by frequent battle, after eighty years of vic-

ories and defeats brought to successful issue a revolution which for brilliant exploit and heroic constancy stands yet without a single historical parallel. Across the Channel liberty experienced through centuries crimsoned with blood the same painful processes of growth, slowly transforming tribes of barbarian Britons, and bands of adventurers from the swarming hives of Northern Europe, into a nation whose commerce whitens every sea, and on whose Westminster marble are chiseled the proudest names among the world's gifted and good. Dismembered Poland once had her Kosciusko. The lives of her citizens grew grand in struggle and sacrifice. Hungary had her Kossuth, and his counsel still lives in the Magyar's memory. Switzerland, fearless and favored to day in the very midst of jealous despotisms, has a past of almost unbroken conflict, reaching far back into the legendary times of Tell's championship and victory. We Americans fondly revert to the checkered experiences of our own country's battle-birth. We pronounce with pride the names of Otis and Henry, who dauntlessly threw down the gauntlet to Europe's mightiest monarchy, and by their eloquent denunciations of royal writs kindled thronged assemblies and lit the fires of revolution. We keep green the memory of the matrons who fought monopolies with their spinning wheels. We speak in glowing panegyric of Washington and his men, who finally at Yorktown secured the Commonwealth's unchallenged entrance into the brotherhood of nations.

In the religious world we find the same innate love of freedom inspiring mankind, the same spirit of despotism seeking its overthrow, yet serving only the more to intensify and invigorate it, developing in the struggle wider mental range and loftier aspirations. Against theological despotism religious freedom has struggled into being, and to lasting permanence finally fought its way. The pages of European history drip with the blood of martyred multitudes of the world's best men. But such splendor of virtue as blazed out in the sixteenth century, rendering it forever memorable, how rich a return for the struggle and suffering caused by the tyranny that called it forth! The ordeal through which the nations were caused to pass, though thus fiery and terrible, served to develop as none other agency could, sustained sublimities of purpose in the hearts of many who now walk in light.

Relentless as are these despotisms without, shadowing with their inhumanities the domains of political and religious belief, a sterner

one seeks to rule within, to darken with a deadlier curse the soul's inner life.

God has kindly gifted man with nerves that tingle at touch of zephyr and sunbeam, thrill to harmonies of sound, cool flavor of fruits, odorous incense of flowers, colorings and curves of beauty. He has gifted him with memory, to daguerreotype into pleasing permanence these impressions of the senses; with fancy, to pattern them into new combinations of loveliness; with powers of discrimination, to explore the laws that underlie phenomena; and with fountains of feeling whose streams nourish his germs of thought. He has also gifted him with moral attributes fashioned after the Divine image, and has by the freedom of his will made him the arbiter of his own destiny.

The different parts of man's nature are knit together in closest ties, each aiding the other in its development, each over the other exercising an influence from which there is no escape. The intellect is forced into thoughtful cognizance of messages from the senses, forced to carry the case before the judgment seat of conscience, between whose decisions and the pleadings of passion, the will, though free in choice, is yet compelled to choose and issue its decrees to the waiting muscles of the flesh. Only the wand of a dreamless sleep can check this interplay of forces once begun.

Constituted for mutual helpmeets, when healthfully confederated there is no obstacle so formidable as to successfully baffle them in their purpose, and no height of moral grandeur beyond the reach of their attainment. However, a prescribed sphere of influence and effort has been assigned to each. A disregard for established laws by any usurping appetite or faculty threatens the overthrow of republican rule within, infringes upon inviolable rights, and if continued, the whole nature through the rapidly multiplying power of habit lies manacled by a despotism from which there is ever lessening hope of rescue.

Let republican rule be maintained among the elements, and the whole earth ceaselessly gladdens with the blended smiles of spring-time and autumn. But when among them the balance of power is lost; when either, ruthlessly violating the laws of confederation, usurps the throne, what was once an indispensable agent in the processes of nature is transformed into a frenzied Titan. Our mountain ranges, the crystallized waves of a troubled sea, record tyrannies of fire in the æons of the past. For the thrones of their

summits the dynasties of Frost and Flame stoutly contend. For centuries will Enceladus seem peacefully sleeping in the caverns of the hills, unmindful of his chains of ice and adamant, until in an unexpected moment he bursts every barrier, crimsoning the sky with his breath and melting the snows of unnumbered winters by the kindling fervor of his passion. Here a Herculaneum and there a Pompeii, with their genius-touched marble and throngs of life, he smites in the hour of his anger, and only after generations have flourished and fallen does some traveler chance upon the forgotten grave of their greatness. The Arctics down whose voiceless valleys the torpid glaciers creep, the parched deserts of the Tropics, the smittings of lightning, destructive delugings of spring floods, the rush of tornadoes that uproot forests and engulf the proudest navies of the seas, miasms that dry with plagues and fever the fountains of life, all betoken the overthrow of republican equality among the elements, and testify to the fearful dangers that beset the least disturbance of the balance of power.

In the first human organism these same physical agencies, in perfect equipose, were mysteriously linked with spiritual. There was not a note of discord or throb of pain. Through arterial channels flowed from heart to finger-tips pure waters of the River of Life, while along delicately branching lines of nerves harmless lightnings flashed telegrams of stainless thought.

But the Creator, in order that moral worth might be developed in his creatures, was necessitated to expose their innocency to the possibility of taint. They must be held amenable to fixed codes of law and at the same time be endowed with perfect freedom of choice. Strength must come through struggle; liberty be twin-born with power to enchain. A Tree of Probation must be planted in the Garden of Delights. Had Jehovah never suffered Satan to hold intercourse with mankind, or had he by his visible presence overawed alike the tempter and the tempted; had he at once and forever torn away every mask of deceit and unearthed evil from every hiding place; rendered impossible all attempts at sophistry by placing his intelligencies in such perfect *rapport* with each other that the inmost recesses of the mind, emotions and motives in their very incipiency, should lie exposed to every eye; sin and suffering would never have found lodgment in the soul. But humanity, thus rendered safe, would have been left hopelessly ignoble, occupying the low plane of brute-life without prospect of progress or vestige of

royalty. The danger was imminent, but indispensable ; for man never could have become God-like had it not been possible for him to degenerate into a fiend. The permitted temptation came, man fell, and behind him exiled and disconsolate, commissioned cherubim closed the gates of his lost Eden, and the flaming sword of Providence guarded the unplucked fruit of the Tree of Life. Since then galling manacles of guilt have fettered limb and thought.

By persistent misuse of mental and physical functions habit turns jailer, thrusting individuals into the prisons of disease. There are none but have felt the tightening chains of this tyranny, but have taken Mazeppa's ride on Passion's wild courser, painfully experiencing the penalties of violating the Divine command. Laws of inheritance, social and domestic ties, the ever importuning necessities of daily life, all the multiform influences that beleaguer the soul from birth, perverted add chain to chain, until at last self-induced personal tyrannies end in those organized evils of Church and State which we have seen poisoning nations and perpetuating themselves through centuries. As at the beginning so now the tempter masks his designs, offering larger gifts of freedom, wider ranges of thought, fuller cups of pleasure, loftier seats of power ; garlanding his chains with roses and frescoing his dungeons with endless vistas of delight. Above every foot we find fetter-marks ; in every voice, sadness ; in every life, sin. Mastery over these inner usurping forces, freedom from prejudices, inordinate appetites and passions, disorganizing thoughts that corrode within, can never be secured except through the most persistent struggle. Yet this fierce battle with self, thus universal as the race, from which neither class nor age is exempt rarely a waking hour, a battle fought often at fearful odds, often terminating in irremediable disaster, furnishes many signal instances of the overthrow of evil, and the enthronement in the soul of the attributes of the true and the good.

All of men's mental and moral greatness we thus find to have a beginning far back in undeveloped germs, and finally to reach perfection only by means of long processes of growth through unremitting struggle. Equally true is it that this same struggle has also been rendered absolutely indispensable to the realization of all men's *nobler* joys. The Delectable Mountains are gained only after a perilous and fatiguing pilgrimage and a hand-to-hand encounter with some armed Apollyon. To the illustration and proof of this, the second division of our theme, we now direct attention.

First, man is placed in the midst of mysteries, and at the same time gifted with an intense desire to solve them. But as soon as one is made to yield the thing or thought in its keeping, the lively joy that follows strangely proves as transient as it is lively, and the soul is again left craving, perpetual pleasure coming thus only through perpetual struggle. Part of the human race God walls in with mountains; pilgrims climb their summits, for they must see beyond. He sends drift-wood over the ocean, and ships plow through peril and pain to spy out the hidden land. He hems in the poles of the earth with ice and darkness; hardy mariners cut their path through the ice and bear the blight of the darkness. He hides Sir John Franklin somewhere on the bleak coasts or in the frozen seas; expedition follows expedition to solve the mystery of his fate. He lifts a tea-kettle's lid; trains of thought thus started are soon followed by trains of cars. He drops an apple on Newton's head, shoots a meteor across the sky, wheels the stars in their orbits; Newton is filled with earnest questionings; then come years of struggle; then "Principia." The subtler the mystery the more persistent and painstaking becomes the search for it. Ease, money and lives are freely given to gratify this intense and universal passion of mankind.

Hope is a second source of pleasure whose existence depends upon struggle. In the darkest hours, while sorrows are busiest in their blighting, there is laid the foundation for the most comfortable and ennobling hopes. We are apt to lose sight of the glories of immortality when earthly schemes prosper, for we then find satisfaction in present social excitements, in the bustle of business, in the conscious possession of power. A state of perfect satisfaction precludes the possibility of hope even in matters of a worldly nature. Especially true is it that the soul's privileged Pisgah of spiritual prospect rises from the vale of tears. The preparatory work of disappointment and sorrow, intensifying desire, is imperatively needed to kindle and exalt the imagination. Not a worse calamity could befall us than to have our earthly ambitions reach fruition, and have this prove the very end we seek, for then our mental states would never reach higher than the present low level of this world, the other life remaining curtained and uncared for. Religious intolerance imprisoned John Bunyan, and his mind at once began to fill with those grand conceptions of his "Pilgrim's Progress," which have since then given to multitudes such solace



and such spiritual elevation. Dante conceived and wrote his "Paradoso" while in forced exile and in deep mourning for the object of his earthly love. His desires and anticipations all lay beyond death's river. How frequently the Good Shepherd carries away the lambs in order that the flock may follow them into greener pastures! Frequently, too, the very clouds of time are golden while they float in the sky of the future, we happily mistaking their character until the very moment they burst and deluge us with grief. The joy in looking for their coming far exceeds the pain at the bursting of the grief. God evidently purposed in His kindness that we should ever people the air with bright phantoms, and thus entice our souls into a ceaseless singing of gladness.

This office of struggle is again seen in our love of adventure. It is a strange phenomenon of the heart for it to so cling to life and then find one of its greatest pleasures in its periling. It involves a paradox, but note its mission. Man's highest virtues are developed from germs by strugglings amid dangers. There are lurking everywhere dangers of storms and billows, of fires and earthquakes, of precipices and poisonous airs. They swarm land and sea; they watch outside the door; their greedy eyes glare in at the windows, their red tongues dart from between the logs in the fire place. God might have made us tremble from morning till night for fear of life or limb, but that would have thwarted his plans for our development, for we would only have cowered in the corner and died of fright. He might have made us indifferent, but this would have resulted in equal disaster. We would not only have lost much of the discipline of the struggle, but have been robbed of almost all its joy. There could never have been a show of true courage, for it comes only from a conscious periling of what we prize. So God, while he made us value life, caused the near presence of danger to be exhilarating. At such times we possess greater intellectual and moral vigor. This phenomenon is one of the evidences of our immortality, for it shows we count many things of greater value than the present, evincing an intuitive desire to climb some eminence where we can get a glimpse and feel the shining of the other life. Earth is clasping us less tightly. We get a foretaste of the freedom that comes after the death pangs are over and the body gone.

Another illustration is found in the desire of excelling. This is one of our strongest passions. The Creator designed not only

that man should strive with the elements for food and shelter, but also with his fellow for possession and power. He crowned him monarch over the beasts, the fowls and the fishes, the forces of fire and water, simply by filling him with imperative physical wants whose satisfaction could be secured only by such mastery, firing him with restless curiosity to search out secrets, with love of adventure that turns perils to pleasures, and lastly with this intense passion for power. He has made us monarchs of men in the same way by sending us forth weak and ignorant, yet aflame with desires to know and rule, thus bidding us search before we know, conquer before we rule. Those sitting crowned on thrones once cried in cradles, and those that now cry in cradles God invites to sit crowned on thrones. His invitation is found in this inborn passion for power. There are other than political empires. Humboldt held a sceptre; Hugh Miller swayed a wider province than Alexander's. John Howard was not without dominion, and the sick one that patiently waits the coming of the death-angel is wrapped about in the ermine of royalty. The desire to rule does not necessitate a clashing of rights or true interests. The consciousness of sovereignty may be gratified by all, but only through that agency employed to develop our virtues, the agency of struggle.

This principle again appears in our love of the perfect. Plants will fight persistently against opposing gravitation, send out rootlets to forage for food, let no leaf fall without supplying its place with a bud, will endure every manner of harsh treatment, if they can but perfect the implanted ideal. They are never tempted to relinquish their purpose, never feel disheartened nor tremble with fear, and so there never comes a single joy to gladden them in the battle or after the battle is ended. Inexorable fate drives them to completion. To each one of us have been entrusted germinal ideals, instinct with growing life. We are all created imperfect designedly. Only by surmounting difficulties are we enabled to advance toward perfection. Unlike plants, we may become disheartened, and so God has given us alike for incentive and reward the love of the perfect. Instances might be cited to an indefinite extent, illustrating the intensity of this desire of the mind to realize its implanted ideals, and the compensating joys that accompany and crown a work's completion.

Memory in one characteristic of its power furnishes a further and

most apt illustration. It is a marked fact that there never was a struggle, however painful in the present, though it wring out blood and tears, even though it end in bitter failure, but that if stamped with manly purpose, it served in retrospect greatly to enhance and multiply men's nobler joys. The world's sweetest memories are memories of its sorest griefs. Now after the pain and passion are gone, after the fire that flamed to purify has expired in the ashes, we experience at the recall of the nations' colossal battlings for freedom that brighten the centuries, the most exalted joy at witnessing the development of the sublime in man.

Pleasure comes, too, from tears shed at the graves of genius, of friendship and of the heart's dead hopes. The darkest passages of our own former lives, if filled with noble endeavor, are counted by us, when freed from the stinging of the sorrow, among the brightest, gathering about them far pleasanter associations than characterize the remembrance of those scenes which while passing seemed so prodigal of joy. If we watch our musings we will find ourselves loving to linger at the graves of our once fond hopes, at the places where we struggled and suffered most, if for worthy ends, where our hot tears fell and our sad hearts sighed for rest. Often we pleasantly recall the trials of other days filling our talk with histories of our sorrows. Strong upon us is the power of their fascination. Intense and subtile is the pleasure that thrills us looking upon the scenes where the light of memory rests upon the moss-grown ruins of what we once held dear. The sadness we feel at such times is a tender sadness, hushing into holy quiet the boisterousness of mirth. *Gone*, that is the Mountain of Grief's Transfiguration.

WM. W. KINSLEY.

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### KNIES' REFUTATION OF WOLOWSKI'S BI-METALLIC THEORY.

Translated from the German,  
BY F. M. COPPOCK, PH. D., (HEIDELBERG.)

[NOTE OF THE TRANSLATOR.—The following article is from Prof. Knies' book on "Money," published in 1873. (Das Geld, von Karl Kneis, Berlin. 1873). Prof. Knies' standing as one of the

greatest living political economists of Germany, makes any word he may utter in regard to the question which is now perplexing our legislators, worthy of attention. It will be remembered that he belongs to the "professorial-socialistic" school of German political economists, or "Socialists of the Chair," (Kathedersocialisten). His book, "Die Nationaloekonomie vom geschichtlichen Standpunkte," is the standard work upon the ideas of this school. His book on "Geld," which is the first part of a large work which he is publishing on "Money and Credit," is very exhaustive, and shows his great learning, breadth of reading, and ability in logical argument, in every particular, in an equal degree with his former works, which established his reputation. He continued his book on "Money" in a *brochure*, in which he handles the question of a "World's Money," (Weltgelt und Weltmuenze). Most of the arguments of the advocates for a double standard are based upon the compensation-theory of Wolowski; this the Heidelberg Professor has refuted in such a clear and compressed form, that I have thought it not unworthy the task to put it in an English dress.]

**I**N 1867, L. WOLOWSKI came forward with a new argumentation in favor of the double standard; and his defense of it, as ingenious as it was interesting, won in its way a singular success, (see. *La question monétaire, par L. Wolowski, deux. édit. Paris, 1869*) and whoever cannot agree with him must, nevertheless, acknowledge that the controversy has, through his instrumentality, been enriched in thought and intensified in interest.

Wolowski explained to his countrymen—without, however, keeping in view at all times the difference between measure of value and standard for prices—that one cannot speak of a standard of value in the same sense that one speaks of a standard for the determination of length, weight, etc., with its unchangeable quality. Neither was he for a double standard in the place of a single. The question was in regard to the measurement of the value of commodities by means of an equivalent in a third ware, which has also a changeable value; and, for this, gold as well as silver have always and everywhere shown themselves especially suitable. The question in regard to a standard was not as to a double standard, but as to a "double legal money," a "double legal mode of payment." The understanding and intention of the law of the 7th of Germinal of the year XI. (28th of March, 1803), was by no means to fix the

relation of value between gold and silver at 1:15½; it was well known that no law could fix this. For the unavoidable changes which occur in trade would have brought about the alternative use for payments, at one time, of the gold which had become cheaper; at another time, of the silver which had become cheaper.

This would without doubt involve a certain favor to the debtor, but that would correspond to the spirit of the French laws generally. For "our code, by a provision both wise and humane, has always had care to spare the position of the debtor; in doubt, it always desires that the legal interpretation should be in his favor." From the validity of this double medium of payment, there would result the greatest possible constancy in the value of the legal measure of value, and a much greater constancy than with either a silver or gold standard. For, as soon as one metal would sink in price, all debtors would make their payments in this cheaper metal. The increasing demand for the cheaper metal and the decreasing one for the other, would stop the depreciation of the first, and would confine the oscillations of the relative value around the point named in the law. On the other hand, with a single standard, the depreciation or appreciation of one of the standard metals would be able to go on unrestrained. By this fact it is explained why, on the whole, such moderate fluctuations from the relation of 1:15½ have been experienced. The development of this glorious result of the alternating standard, legal in France since 1803, has been aided by the fact, that, within the boundaries of the English empire, there has in reality existed at the same time a gold and a silver standard (by reason of the silver standard in East India); farther, by the fact that the different states of the earth, taken as a whole, represent one great country with the double standard, because some use the simple silver, others the simple gold standard. As soon as the pressure for the universal extension of the single gold standard shall have been given up to, there will not only take place an immense rise in gold and fall in silver, to the greatest injury to all lands, but the greater constancy in the value of the legal medium of payment based upon the mixed standard will be lost."

The former grounds against the possibility of the use at the same time of two measures of value with a relation fixed by law, did not suffice against this statement of the question. The commercial disadvantages of the existing alternative standard would

remain as before, and still appear to be out-weighed by unthought-of advantages.

However instructive this argument of Wolowski's is, we will nevertheless attempt to show that he is in error, even on the point upon which, especially, the practical execution of his proposal depends.

It dare not remain as something of little importance, that the state, with intention and effective means, is disposed to give special advantages to one portion of its citizens, the debtors, at the cost of another portion, the creditors. If "favoring in doubt" can be looked upon, at best, as an unavoidable evil, "favoring in every case" is certainly an open, glaring injustice. It is an aggravation of this assumption, that we as yet do not know how to free ourselves from the delusion that in our modern commerce the creditors are only to be regarded as rich, lazy landlords, against whom we are to aid the poor, depressed creditor; just as in former centuries they were taken under the arms and lifted out of their troubles by means of prohibitions and restrictions of interest, by *moratoria*, and release from debts. Can the state, the joint-stock company, the member of an insurance company, etc., be allowed to appear to us as the weak member which legislation must prop up against the thousands and thousands of persons in the lower and middle walks of life, who have gathered together a modest income for a rainy day in savings banks, stocks and securities? The trading class will not be slow in taking advantage of this intended injury to creditors, by means of opportunely carried out operations in the international trade with the precious metals. But every one should be far from reproaching this class of traders for trying to realize something out of the double standard. On the contrary, these operations are, where the double standard exists, unavoidable and to be seen beforehand. When, however, as in the French *Enquête* of 1868, and often at other times, "the highest authorities upon French trade," as the banker Alphonso Rothschild, declare themselves against the abolition of the double standard, one can add to their grounds another: The maintenance of the double standard is a fine fountain of gain for the international trade of these very "authorities."

If then the double standard is to avoid the *greater* changes in value which have to be undergone with the single standard, the acknowledgment must at once be made that the double standard, for the very reason that it acts in that peculiar manner, brings

about changes in the value of the value-measurer which remain unknown to the single standard. For the mixed standard is subject to the changes in the value of the gold, as well as to those of the silver. In the place of a strong fluctuation in the measure of value with the single standard, which is only noticeable in the course of a long time, we have a chronic vibration of the same with the double standard. However far, in the end, comparisons are from convincing one, it is nevertheless instructive to illustrate the here existing error by means of the compensation pendulum which Wolowski himself has proposed. Every state of the temperature has necessarily, with this pendulum, an equalizing effect. The same temperature which expands the iron, expands also the zinc, and these two contemporaneous expansions are so used, that they at the same time operate against the expansion and contraction of the pendulum. And this extension of both metals is the result of the same operating cause. How different from this do we find the price-movement of the precious metals. It can be in the same direction (towards cheapness or dearness), or in opposite directions; the movement of the price of one metal can be as strong as that of the other in the same direction, or that of one much stronger than that of the other; the use of them as a medium of payment is *one* element in determining their price, but there are others at work at the same time.

And what a frightful view does the increase in the cost of coinage present for a modern state, when the compensative power of the alternative standard really comes into operation. France coined, by reason of the demand caused by the relative value, francs:

	Gold.	Silver courant.	Silver change.
1825-30.....	52,918,920	631,914,637 ½	
1830-48.....	215,912,800	1,750,273,238 ½	
1848-49.....	66,807,310	326,179,759	
1850-.....	85,192,390	86,458,485	
1850-67.....	5,806,423,015	383,109,971	
1868-.....	340,076,685	93,620,550	35,814,718
1869-.....	234,186,190	58,264,285	9,911,612
1870-.....	55,394,800	53,648,350	15,403,906
<i>There was coined:</i>			
1825-49.....	about	Gold. 11 per cent.	Silver. 89 per cent.
1851-67.....	“	94 “ “	6 “ “
1868-70.....	“	70 “ “	30 “ “

When we compare with Soetbeer, from whom we take these fig-

ures, the average yearly amount of coinage in Germany (1857-70), in France (1851-70), in Great Britain (1857-70), reduced to dollars in round numbers, we find:

	Gold.	Silver.	Total.
In Germany.....	\$577,725	11,926,950	12,503,675
In France.....	64,360,800	6,498,750	70,859,550
In Great Britain.....	26,989,000	1,605,000	28,594,000

When every 3100 francs are coined at a cost of 6.70 francs in silver, and 23.25 in gold, we cannot by any means consider unimportant the cost of recoinage which the double standard necessitates. When a land like France is necessitated to coin in a single year (1859) 702,697,790 francs in gold, it can only think with the greatest earnestness of the possibility of being necessitated to produce an equivalent amount of silver coin in the next following year.

But the chief thing is, that the real principle of Wolowski's theory is false. And, since the principle is wrong, the theory cannot be made to hold in any land.

The starting-point is not established by fixing the relation of value between gold and silver (as for instance, 1 kilogramme gold =  $15\frac{1}{2}$  kilogrammes silver) in the sense that this official act shall work this relation and keep it in trade—according to Wolowski, no command of the state can carry this through—but in the sense, that the relation of  $1:15\frac{1}{2}$  shall be recognized in law, where the question is in regard to legal payment; that a man can free himself from a debt of 3100 francs as well with 155 twenty-franc pieces as with 620 five-franc pieces (silver), notwithstanding that in open trade at the time the 1 kilogramme gold in the 3100 francs is not equal to the  $15\frac{1}{2}$  kilogrammes silver contained in the 620 five-franc pieces. This legal, though contradictory, relation of value, shall have the power to stop this movement in trade, to bring it back to the legal relation, to *confine the oscillations about the legal valuation, as the governing center of gravity of the fluctuations*. That is an impossible hypothesis, a supposed axiom which is entirely false! If the alternating standard—the one which Wolowski supposes—had the power to hold the fluctuations in the relative value of the precious metals about the point fixed in 1803, viz.,  $1:15\frac{1}{2}$ , it would have to be able to do the same about any other point, as  $1:10$ ,  $1:11$ ,  $1:12$ , and so on; for there is nothing taken for granted farther than the efficacy of the double medium of legal payment. It would be absolutely inconceivable how the large European states, which have this



alternating standard, could be necessitated by trade to be forever changing this legal relation of value, if the alternating standard had that power of holding the relative value within an oscillation about one point. Let us suppose an isolated land, with or without its own production of gold and silver; join to this the supposition—which must be used here for a trial of the example—that a lasting and extensive change takes place in the production, and, of necessity, in the quantity of one of the precious metals—conditions which are possible with both the metals—why should be here possible, what would with every other commodity be impossible, that the use of silver or gold as the legal medium of payment could of itself cause the price to remain at a certain height? The use as a medium of legal payment, even the most extensive, is *one* element in determining the height of the price of the precious metals, but by no means the *only* one. Suppose the case that we had a single standard, for instance, the gold standard, in all lands of the earth; the possibility of a lasting rise or fall in gold as compared with the present would not be questioned. Even so impossible is it, that a double standard which should extend itself over the whole earth, could prevent the relative value of to-day, be it as 1:10 or 1:20, from slowly changing, if circumstances favor a change.

It must be considered, however, that certain countries have the double standard, some others at the same time have the simple gold standard, while still others have the simple silver standard; and this in itself forms a powerful, and for the time being, almost deciding element, against any strong change in the immediate future in the relative value. As soon, however, as the circumstances have so matured that the elements for a change in the previous relation get the upper hand, then will every land with the double standard become *in fact* a land with a single standard, and all lands with a single standard will have to accept the rise or fall in this standard metal.

The states with the double standard are, with all that takes place in their interior, the objects of an entirely independent, international branch of trade. They repay its costs, and furnish its gains, and set a magnet in operation which brings about a special flowing movement in the precious metals. One flow of the precious metals is governed by the local production of the same. From the mines they go as a ware to all those places where they are wanted as raw material for coinage, for manufacture, and for the

scientific laboratory. The second flow is brought into motion by the effective interlocal functions of money, by the interlocal medium of purchase, of payment, and of transportation of value, so far as the trade requiring this is not supplied in another way. The double standard produces a third flow: the double motion of the precious metals in opposite directions across the boundaries to relieve one another in service as money. That metal which in the legal valuation within the boundaries is over-valued, as compared with the judgment of the world's market, flows in; the under-valued one flows out. The difference in value must of course be greater than is just necessary to cover the cost of transportation from one place to the other, and the eventual cost of coinage. In order, therefore, in France to overcome the check caused by the cost of coinage, the price of gold must sink below the relation of 1: 15.46, and that of silver rise above that of 1: 15.62. A departure of  $2\frac{1}{2}$  per cent. from the relation of 1: 15 $\frac{1}{2}$ , either up or down, appears to be the maximum which the export from the London market, in part to Paris, in part to Asia, has so far allowed.

This third flow of the precious metals is, therefore, not the result of a previously grounded balance of trade, but rather these transportations of metals, as of other commodities, form items in the balance of trade. Galiani has shown by a very drastic exemplification how this double passage of the boundary foots up: "Suppose that gold stands in reality to silver as 15:1, but in law is valued only at 13. Now 100,000 ounces of gold go out of the country, and are paid for with 1,300,000 ounces of silver. If now, one wants to buy back gold with the 1,300,000 ounces, he would receive by importation only 86,666 ounces" (cited by Roscher). Wolowski would hardly be able to find this example correct, for he would think that if the state had fixed the relation at 1:13, the rate could only oscillate around this point. It must, however, come to pass, that France will have to change its present legal relation of the two metals, or be the prey of the false relation, or, lastly, change the legal requirements in regard to coinage, and, in reality, go over to the single standard.

[These two last deductions in regard to France have proved abundantly true within the last year and a half. She was, at the beginning of the late disturbance in the price of silver, the prey to an immense amount of her false valuation, and then, in fact, went over to the single standard by forbidding the coinage of silver altogether.—TR.]

INSANE ASYLUM MANAGEMENT.<sup>1</sup>

THESE two publications are replete with convincing arguments that one needs to have a sound mind in order to receive the benefits of that liberty, concerning which we, as Americans, are too much disposed to be vain-glorious. In fact, we could dispense with many so-called liberties, in order to enjoy some of those protections bestowed by a paternal government, and which tend so directly to promote individual health and comfort. In this country the need of some powerful centralized government is felt in two important matters—that of sanitary inspection, and the management of insane asylums. The book of Mr. Julius Chambers has had several predecessors, all tending to establish the disgraceful fact that the United States exists alone of all the civilized nations of earth as the country in which insanity closes all channels of protecting human sympathy, that when once the victim is confined within the walls of an asylum he is swept out of existence as an object whom the law can shield from the lash, or clear from filth or vermin, or for whom it can provide light and air and warmth, or after paying for the food, can make sure that it is placed at the lips of the lunatic.

The story that Mr. Chambers tells in his little book is a very simple one, rendered at times with dramatic intensity and a realism that must prove startling to any one with weak nerves. The author, we believe, is a member of the editorial staff of the *New York Tribune*, and, in a spirit of journalistic enterprise, gained a legal commitment to the Bloomingdale Insane Asylum by feigning insanity. Mr. Chambers trained himself for the part he was to act with unnecessary care, we are disposed to believe, in view of the fact that he did not see a doctor, professionally, during the time of his incarceration in a ward of the Asylum. Mr. Chambers' book possesses the merit of being a description of simply what the author saw, and to this feature, more than any other, is due the effect of vivid truthfulness which it produces. Containing in itself evidence of accuracy and veracity, it establishes the following facts in relation to the Asylum in which he was committed:

<sup>1</sup> A MAD WORLD AND ITS INHABITANTS. By Julius Chambers. New York: D. Appleton & Co.

CASE OF MRS. JANE C. NORTON. *American Journal of Insanity*, January, 1877. Utica, N. Y., State Lunatic Asylum.

(1) That a patient may be admitted to an insane hospital without any examination as to his condition by the medical officers in charge;<sup>2</sup> (2) that he may be an inmate of such a hospital an indefinite time without any so-called expert treatment that it is supposed insane people require; (3) that the physicians are irregular in their attendance upon patients and negligent in their duties; (4) that food is bad in quality and insufficient in amount; (5) that there is no supervision of "nurses;" (6) that nurses are insulting and abusive to patients; (7) that patients are cruelly treated and punished in some unknown manner on the slightest offence; (8) that patients, be they violent or not, are kept under restraint through a fear of punishment; (9) that the medical attendants and nurses of the Asylum are habitually untruthful in their statements as to the condition of inmates.

Happily for his own peace of mind, Mr. Chambers was ignorant of the fact, that but for the panic into which he threw the doctors of the Bloomingdale asylum, he could have been detained for months; that this irresponsible medical control possessed the power belonging by right of law to but one man, and to that man only in time of public danger, to suspend the writ of *habeas corpus*. For instance, the writ is issued returnable with the person of the

<sup>2</sup> Within my own knowledge is an incident which well illustrates the importance of a prompt and careful examination, by an expert, of all persons admitted to the custody of an asylum. Conceive of three men, partners in business, united as plaintiffs in a suit against a number of insurance companies, to recover the amount of policies, the payment of which was resisted by the defendants on the ground of criminally burning the property for the purpose of securing the insurance. During the progress of the trial, one of the plaintiffs became so entangled in the network of his own evidence that he confessed the plot. Succeeding this trial, and pending the criminal prosecution which was to follow, this weak conspirator turned state's evidence. So terrible had been the cross-examination to which he was subjected during the civil trial, that his nervous system was seriously undermined. Advantage was taken of this; the aid of two physicians was secured, who made the affidavits required by law alleging the insanity of the man, and one of the medical conspirators accompanied the witness to the asylum at Utica. The theory of the defendants, undoubtedly, was that several weeks must elapse before the fact of the sanity of the witness was fully established, and, meanwhile, the prosecution, on bringing the case before the grand jury, would find their principal witness confined in a mad-house. Owing to the honesty and thorough competency of the superintendent, Dr. Gray, the plot miscarried. Within an hour the superintendent discharged the man as perfectly sane, who, to the amazement and disgust of his medical examiner, returned home in the same train. Any doubt or delay in this case would have defeated the ends of justice. This incident belongs to what is known in the criminal annals of Central New York as the *Bennett arson case*.

alleged lunatic upon a certain day. On that day the doctor appears in court, and makes affidavit that the condition of the patient is such that he cannot be produced in court with safety to his life. Courts of law are human, it is an essence that belongs inalienably to their composition. God forbid, therefore, that the learned judge should be guilty of murder. The return day is adjourned until such time as the *doctor believes* the patient may with safety be produced. The adjourned day is in due course of time reached upon the calendar, the same return is made; and thus the heartless delay is prolonged month after month. Meanwhile, where is the person of the alleged lunatic? Incarcerated beyond the reach of human vision other than that of his legal keepers. He cannot write to his friends, nor can they write to him, or see him. He may be a raving madman, or quiet, docile and sensible. Whatever condition he may be in, that fact can not be known, except to the "doctor." Suppose, however, that the patient, after an escape, charges the doctor with falsehood or perjury, who will believe an insane man? Dr. Ordonaux, the New York Commissioner of Insanity, holds that he may be capable of telling the truth, but not capable of establishing a fact that bears any possible relation to his own person. Suppose further, which is nearly an impossible supposition, that the doctor is called upon to answer the charge of falsehood before such a learned judge and incarnation of majestic law and impotent, insane truth as a State Commissioner in lunacy; the "insane expert" replies that it is an error of judgment. The law requires of an insane expert nothing but ordinary human knowledge, diligence, and skill, and regards him as one in whom such an error is possible, if not reasonable. This is the end of the matter, and the expert has suffered nothing in reputation, or in that which he cares most for—his pocket. It is possible, however, that if it is a case of aggravated assault, such as a terrible laceration of the throat, upon a delicate and quiet lady, a frightful penalty may be inflicted: a State Commissioner may direct that the nurse should, in future, keep a diary.

Taking into consideration the fact that this institution claims to represent the most exalted humanitarian spirit of the age, these charges are appalling. Measured by other offences against law and humanity, they stand alone, colossal in atrocity, fiend-like in cruelty! And why, considered as crimes against humanity, are these charges nameless through sheer intensity of wrong? It is

not alone that they are offences against sick and helpless human beings. If this were so simply, we might say that, being sick, sensibility was blunted, and it mattered not what they ate or drank, provided they were not starved, or in what way they were treated. The insane man, however, generally feels in mind and body all that the well man either suffers or enjoys; but bodily and mental impressions are multiplied and refracted and given exquisite keenness by reaching his consciousness through the diseased organ—the mind. Thus, the insane man is not dead to feeling. On the contrary, he is quivering through every fibre with diseased emotions; every conscious condition of life is exalted, intensified, quickened; emotional and physical sensibility is endowed with an acuteness, compared to which the finest nerves of normal womanhood are rude and strong. The mind is ceaselessly at work, expending nothing upon outward objects, but bringing all its powers to an introspective focus within the hyper-sensitive body until scarcely restrained by its frayed and lacerated boundaries. To such a man insult, neglect and cruelty comprise the sufferings of death. Bad and deficient food and filth are not only present miseries magnified by his diseased consciousness into mighty wrongs, but are prolonged into the future, and close against him every avenue of escape from intellectual destruction.<sup>3</sup> When we consider that these unfortunates are sent to this institution for the purpose of being cured, we are able to answer the question, and I am content to let the reader find for himself standards among the common offences against humanity by which to measure in the aggregate the nature of the charges that Mr. Chambers lays upon the officers and attendants of this Asylum.

The author makes another and minor charge, which, as it does not bear directly upon the personal treatment of the inmates, is not in itself of great importance, and yet in an institution of the kind in which it is an habitual practice it lays the management open to more serious abuses. During Mr. Chambers' confinement a visiting committee of the governing board made a hasty inspection of the institution. For several days prior to the visit, the slipshod management roused itself to unwonted activity. The whitewash brush, the mop and broom, were industriously plied; while several

<sup>3</sup> The condition of exaltation does not, of course, include dementia in its varying phases, but those forms of insanity in which an insane delusion is interwoven like a discolored thread in the harmonious design and fabric of a normal mind.

inmates, who were in habitual need of greater personal care, were clarified of filth and made to share in the general, intermittent cleanliness. It is to be hoped that there were but few insane asylums in which inspection was more necessary, or accomplished greater good. I shall make but one comment. The fact that the medical and administrative control of the Asylum existed under the relations of false pretense, as to the hygienic and medical care of the buildings and inmates, to the only authorized representatives of the public, makes probable every other charge that Mr. Chambers brings against the institution.

The author occupies considerable space in character sketches of the more interesting among the inmates; some of them amusing, others tragic, or pathetic, and all well drawn. Important, however, as is Mr. Chambers' book, I should not have given this space to it, if it were not for the fact that it bears a certain relation to one of the most remarkable legal investigations ever had in this country. Whether the investigation was public or private, and whether the witnesses and parties to it were ever confronted with each other, I have, from the published report of it, no means of knowing. There undoubtedly exists in human affairs an undercurrent which drifts men as well as events out of the benign channel into the malignant; that deflects them out of their original direction of goodness toward that of evil; we may not be able to discover in the actor any color of wrong, nor see behind the event an evil motive, and yet it is cursed by misdirection beyond hope of retrieval. This is the grim sarcasm that fate throws into our lives,—evil in the masquerade of goodness and justice. Of this character was the investigation to which I refer. Neither in the law under which it was held, nor in the man who conducted it, is there any intent of wrong to be discovered. The noblest humanity inspired the law, and doubtless the man also. Fortified on all sides by good intentions, nevertheless, the law, which was enacted for the purpose of restoring public confidence in the management of insane asylums, was perverted into a means of deepening the shadow of suspicion; and, instead of protecting the most helpless of human beings, closed against them the only legal avenue of escape.

This brings us to the second stage of the review. In all that follows I shall take the facts from the legal authority in the case, except such corroborative evidence as Mr. Chambers brings to bear, which does not in the least affect the facts.

On the 22d day of January, 1873, Mrs. Jane C. Norton, was "duly committed" as a lunatic to the Bloomingdale Asylum, which "is a department of the New York Hospital," and under the control of the Board of Governors. She suffered from the form of insanity known among physicians as puerperal, and was subject to fixed delusions. She was removed by her husband after a confinement of eleven months, while still "uncured." About a year after her removal from the asylum she complained to her husband of having been maltreated while there. These charges are of a fourfold character: That while being fed forcibly by two attendants, a large spoon was forced into her mouth the convex side up, at the same time moving it up and down, whereby her throat was injured and permanently disfigured; that her hand and wrist was "purposely and violently jammed in the crack of a door;" that insulting language was used to her; and that she was needlessly confined in a straight jacket, or camisole.

Mr. Norton thereupon instituted proceedings before the State Commissioner in Chancery, Dr. John Ordronaux, "praying that the same might be duly inquired into, and such remedy applied as is provided by the statute." On the part of the "relator," Mr. Norton, the evidence was of a dual character, namely, that of Mrs. Norton herself, and that presented by an examination of her injured throat. In regard to Mrs. Norton's ability to testify to the alleged injury I am laboring under a disadvantage. As Dr. Ordronaux's "opinion," contributed to the *American Journal of Insanity*, was written in the interest of science, so-called, instead of justice, and as one has to contend with a studied obscurity of style, it is difficult to reach the exact status of Mrs. Norton as a witness in her own behalf. Lest the reader may believe that I exaggerate the difficulties that exist in the Commissioner's use of language, I submit the following as a specimen: "The exact limits of occultation of her memory, and the varying degrees of obscurity exhibited by it during the passage of an umbra or penumbra over her mental horizon, form curious phases of disordered action in the process of recollection, and impart to her testimony a character very difficult to weigh in the balance of intellectual veracity." I shall take the hint from the Commissioner and divide Mrs. Norton's veracity into two kinds: First an "intellectual," and second a physical veracity.

In regard to the first, such is Mrs. Norton's reputation for probity and honor, that not even the Commissioner, who is disposed



to question everything that the lady does or says, casts any doubt upon it. But the question turns upon the accuracy of Mrs. Norton's memory during this, a confessedly sane period, of what took place during a former and insane period; and this suggested to the mind of the Commissioner a further doubt, whether her present recollection did not mentally pre-figure a phantasm of her diseased brain rather than a real occurrence. After citing a large number of legal authorities the Commissioner at once proceeds to argue the case in behalf of the respondents, the Society of the New York Hospital. To make this part of the story short, the Commissioner says, "Judged by all the above established rules of evidence, it must be conceded that she has failed to establish her allegations." The steps by which this conclusion is reached are remarkable. Dr. Ordranax tests the fairness of Mrs. Norton's memory of the laceration of her throat by her capacity to remember other events that occurred during her confinement; in other words, he refuses to credit her memory of one fact by her inability to remember all other facts. For example, here is a specimen of Dr. Ordranax's judicial fairness: "Did she cough?" he asks, "Did she strangle while the spoon was in her throat? *Did she remember all that occurred?*"<sup>4</sup> Dr. Ordranax is a medical man, as well as a Commissioner in Lunacy, and he ought to know that of course Mrs. Norton both coughed and strangled; and as an alienist (our Commissioner is an expert in lunacy) he ought also to know that these are reflex acts, that they in no sense require an effort of will, or the least trace of a mental operation, and consequently, of all physical acts are least memorable in their nature. There is yet other evidence to show that Mrs. Norton did not possess a definite memory of events during her periods of insanity. In this additional evidence we are shown the straits to which the officers of the asylum were reduced to impeach Mrs. Norton's testimony, and the strong bias under which the Commissioner was acting, as well as his inability to weigh in mass, fairly and justly, all the evidence. "Dr. Burrall testified that on *several occasions* he *unconsciously* closed the door upon and pinched the fingers of Mrs. Norton, who had thrust them into the crack, without her being *conscious* that anything had touched them." Here Dr. Burrall is allowed to testify to several events of which he was confessedly unconscious at the

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<sup>4</sup> Impossible as it may seem, these are the very words.

time, and of which any man, be he learned or unlearned, ought to know that he could have no memory ; not only this, but he is allowed to testify, and his testimony is admitted, of the effect of events upon Mrs. Norton's consciousness, of which he was, at the time, senseless and unconscious. It will be observed that Dr Burrall's evidence was received upon the very grounds upon which that of the victim was rejected.

The closing of the door upon Mrs. Norton's fingers—upon her hand and wrist the relator says—is, when accidental, a trifling occurrence—in this case it possesses all the elements of the tragic. It teaches us that tragedy does not reside in the act alone, but in the mutual relations of the action, and in the moral atmosphere that surrounds it. In itself, as here related, it was an act of cruelty, but it was unconscious cruelty, it was habitual cruelty to the extent that its infliction and repetition produced no memory on the part of the actor ; it was also inflicted upon a sick and helpless and delicate woman, whom Dr. Burrall was bound by law and humanity to shield from hurt and pain.

One thing is related by the Commissioner in regard to Mrs. Norton's intellectual veracity, about which the reader may come to a conclusion opposite to that of Dr. Ordronaux. A number of witnesses were introduced to testify to the excellence of Mrs. Norton's memory, both before and during her stay in the asylum, and "*many facts* were stated by her relating to this period which *were fully corroborated.*" Upon this statement of the fact the doctor makes the comment : "But this excellence of memory in several particulars, does not justify the conclusion that it was so in all." This is a conclusion based upon negative evidence. We have, however, the better, more just conclusion with a positive basis in fact, namely, that having remembered some facts she had not forgotten all.

One word about what I have called Mrs. Norton's physical veracity. Her lacerated and deformed throat was a fact that could not be ignored. In rejecting her oral testimony the Commissioner had rejected but half her evidence. The asylum people were obliged to admit it. Dr. Choate, "an expert," and Dr. Brown, Superintendent, had neither of them seen "a case previously like that of Mrs. Norton's throat," and the circumstances were such as to lead these gentlemen "to infer that an injury did in fact so occur to Mrs. Norton." Thus we perceive after rejecting the oral testi-

mony of the relator he has yet evidence sufficiently strong to prove the main charge in the allegation.

I shall give but a few words to the nature of the evidence on the part of the society of the New York Hospital. From the effect of this evidence upon the Commissioner I draw conclusions unfavorable to the impartiality of Dr. Ordronaux. I am perfectly aware of the seriousness of charging bias to a man in the *quasi* judicial position that he occupies. But the bias is venial. He is an expert in lunacy, an alienist by profession. He has cultivated the familiarity with the insane that leads to contempt of their mental status under any circumstance. He has a professional pride in his class that prevents his believing wrong on the part of asylum authorities when injuries occur to a violent lunatic. Education and training are stronger than sympathy for misfortune, or impartiality in justice. Let me say for myself, and let Dr. Ordronaux take to himself whatever measure of comfort he may be able in this fact, that I am finding no fault with that gentleman personally, I am objecting to him impersonally as the State Commissioner in Lunacy, and I deplore the fact that in this case the office and the man cannot be separated.

The evidence of the respondents consists of three parts, first Jane Eaton, the person against whom the criminal violence is alleged, Jane Gordon who was present and an accomplice. On behalf of the first named it is stated that she was of good moral character and had been employed for fourteen years as a nurse; and for the last that she was also "in their opinion trustworthy." By both of these women the charge of Mr. Norton is denied. Now, Dr. Ordronaux in his "opinion," which is a paper of a purely psychological character, says nothing of the degree of credibility of a witness as deeply interested in the issue as is Jane Eaton, contrasted with that of a witness in the peculiar position of Mrs. Norton. It is an open question whether the profound interest of Jane Eaton in the result would not color her narration of the facts, unconsciously of course, as deeply as would the defective memory of Mrs. Norton. That it did affect Jane Eaton's testimonial capacity to the extent of inducing her to prove altogether too much for her own good, even Dr. Ordronaux could not overlook. "It is difficult," says the doctor, "to believe that the accident to Mrs. Norton's throat can have entirely escaped the notice of Jane Eaton; such an accident must have so altered the anatomical proportions of

the parts as to have seriously impaired their functional activity, . . . . there must have been great difficulty of articulation, and manifest alteration in the tone of her voice. Some of these symptoms, if not all, must have been present for over a week. Yet during all this time, she does not appear to have made any complaint, and none of those about her, although feeding her, and conversing with her daily, discovered any indications of her injuries. This is to say the least very *remarkable*; and in seeking for an explanation of it we are placed between two alternative propositions; for either Mrs. Norton was so insane that her sensibility was seriously blunted, and that she showed no suffering, or else Jane Eaton knew of the accident and concealed it." Yet we know that Mrs. Norton was sensible of the accident, and revealed it to her friends. I shall venture the remark that to any one but an insanity expert the fact is very evident that Jane Eaton did know of the accident and did conceal it. The Commissioner, however, is content to remain stretched between these two alternative horns of the dilemma.

The second point of defense is, "that injuries to the mouths of insane patients, when such patients forcibly resist taking food, and coercive measures in consequence have to be employed, were liable to happen, and were not, therefore, of infrequent occurrence." This is the evidence of Dr. Choate, an expert in insanity, and Dr. Brown, the Superintendent of Bloomingdale. I have made myself acquainted with the opinions of a number of medical men with experience in this matter, as to whether such an accident in feeding refractory patients was frequent and liable to happen. They are unanimous in saying that such accidents, with modern appliances and ordinary care, need not and do not occur. Yet Dr. Ordranax does not order the authorities of Bloomingdale to provide themselves with the necessary apparatus, or to adopt the modern improvements in feeding patients. The unprofessional reader can see for himself how far it is a defense to the complaint of Mr. Norton.

The third is that the injury was due to contributory negligence on the part of Mrs. Norton. This plea is given but little importance by the Commissioner. He says that the doctrine of contributory negligence cannot apply to her acts any more than to a child's. Yet he adds that she cannot profit by her own wrong, nor charge "her self-produced misfortune to the disadvantage of another."

Mr. Chambers, in his book, refers to the case of this lady. He

gives some of the details of her treatment—such as being driven nearly naked through the halls to the bath room; foul and insulting language being used to her; and of confinement in the straight jacket as a means of punishment. It is not by these statements, however, that Mr. Chambers so fully corroborates the charges of Mrs. Norton. He shows, from his personal experience, how impossible it was for a patient to communicate with his friends; that a private interview was never permitted; that attempts at surreptitious correspondence with friends were punished; that irresponsible and ignorant nurses administered punishment and the confinement of the camisole; and lastly and most serious of all, that the medical authorities of the Asylum did not give regular, active, or efficient supervision of the nurses or of the medical treatment. In such an institution we may well believe Dr. Brown, the Superintendent of Bloomingdale, that such injuries as were inflicted upon Mrs. Norton “were liable to happen, and were not, therefore, of infrequent occurrence.”

In the remedy that Dr. Ordranax thought proper to suggest in his judicial position, he shows the restraint he is under and the etiquette he is bound to show to his brother alienists. He merely suggests to Dr. Brown, or the Board of Governors, “believing that they will carry the same weight in their estimation as attaches to a legal promulgation,” that the nurses and attendants make daily written reports to the medical authorities, and that “supervisors” of nurses be employed.<sup>5</sup>

I have thought it the better way to illustrate insane asylum management by reviewing evils that actually take place in them, by examining the remedy for these evils and the manner in which this remedy is applied. It would be difficult otherwise to convince the average reader that these institutions were not the very acme of human philanthropy embodied in palatial structures of brick and stone. I do not wish the reader to infer that all asylums are subject to gross abuses, and that the maltreatment of patients generally is practiced in them. I desire to show that what has taken place in one may take place in all others under the existing laws of the State of New York, and the method of applying them.

Dr. Ordranax says, in the official report of the Norton case, that he intends “making a precedent of this case \* \* \* by which

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<sup>5</sup> Dr. Gray has had this regulation enforced in his very perfect and well-regulated asylum at Utica for many years.

I shall hereafter be guided in disposing of similar issues." We may understand from this what we are to expect in the future from the Commissioner in Lunacy.

The American system of asylum management has some features peculiarly its own; but these peculiarities are less the result of the men who have made the treatment of the insane a special study than of the conditions out of which has grown the present system. The States have discouraged private asylums, and assumed the direct control of the mass of the insane population in State institutions. This has been going on for years without any system of supervision, or any authority to stand between the people and the agents of the States—the superintendents and their assistants. This independent and absolute control has created a class feeling that has in many ways rendered insanity experts less efficient, and has retarded the study of morbid psychology. This may be noticed in the literature of the subject. In other special departments of medicine American experts have presented to science many and valuable monographs and treatises. The literature of insanity is all foreign, and notably English. These State asylums receive rich and poor alike, so that the absence of private asylums in the American system is most marked compared with the English. The benefits that might have resulted from an active competition between private asylums for public favor and confidence have been lost. The few private institutions have, therefore, copied the exclusiveness and independence of the large State asylums.

Superintendents, as well as assistant physicians, are as a class of professional men underpaid. The result is that the assistants are recruited from among the least competent and efficient of young medical men. I do not believe that I err in saying that the majority of young physicians who are found as assistants in asylums, are men who have failed in the private practice of their profession, either through actual incompetency, or want of sufficient practical tact and energy to hold their footing with their rivals. The specialist in medicine ought, before he attempts special practice, to be a good general practitioner. In no way can he apply special knowledge and expertness except in the light of his general professional knowledge. And yet the asylum physician comes quite generally from the class mentioned, or else he is a recent graduate without general practical experience. Another evil, in a measure connected with this, is that the disproportion between patients and physicians

is so great that anything like careful individual treatment is impossible. The result is that asylum treatment, whatever the competency of the physician, drifts into the lowest form of routine practice, mechanical, and involving as little of scientific thought or knowledge as it is possible to conceive of. We may sum up this style of practice in American asylums in two words, restraint and opiates.

The superintendents of asylums are, almost without exception, medical men who are selected by the managing boards for business qualifications, and not on account of their medical fitness for the post. The administration of the affairs of a large asylum occupies nearly, if not all, the time of the chief officer. The medical attendance falls entirely upon the assistants, who do their work without any supervision from their chief. This is the point at which the loose management and want of control begins. The assistants throw many of the duties which they ought to perform upon the ignorant and irresponsible nurses; they in their turn perform some of the assistants' work, leaving many of their own duties unperformed. Such an important treatment as restraint is prescribed by a nurse on his own responsibility without either the orders or knowledge of the medical staff. Many complaints made by a patient are set down as insane delusions. For instance, a lady patient complained of her eyes to the physician while upon his rounds. He assured her that there was nothing the matter with her eyes, without taking the trouble to examine them. It was only when her husband upon visiting her, insisted that her eyes be examined, it was discovered that an *iritis* had nearly destroyed her sight.

If our system of asylum management is to be changed, the remedy must be applied to the root of the evil. In the first place the over-crowded State institutions must be depopulated; and to this end the States must cease making a monopoly of insanity. The State must not undertake to do that which private enterprise can do better. The taxpayers ought not to be asked to support State insane asylums except for the relief of the indigent and pauper classes. The paying patient ought to be sent by law to the private asylum. The result of this would lead to a healthy competition among the asylums, each basing the claim for public favor and confidence upon the direct personal and kind care of patients and an increase of the percentage of cures. The standard of medical

qualification in asylum physicians would be at once raised. I have no doubt that the advantages of the English system over the American had its origin in the number of private asylums and in rigid government supervision. If we cannot, owing to the difference in social factors, make the number and efficiency of private institutions proportionately equal to those of England, we may at least raise the professional standard of asylum physicians. I can see no way of doing this, in the present relations of these institutions to the States, but by increasing the pay of assistants and requiring a careful examination of candidates by a State board of examiners composed of insanity experts and general practitioners. The theory now seems to be that an alienist physician may be manufactured out of any kind of raw professional material. There is no medical specialty so difficult to master in its details as that of the alienist. He can not understand the complicated relations of mental to bodily disease except by a practical knowledge of general diseases.

In the great State institutions another reform is very necessary. The financial and business management ought to be intrusted to a business man; the medical superintendent giving his time and exclusive thought to the legitimate duties of his position,—the *treatment* of the insane patients committed to his care. At present the superintendent as a medical man is practically useless. The business details are so vast and complicated that no man is able to master them and have any time or thought left to either the general medical care or treatment of the patients. The successful asylum superintendent is now a successful business man, and for his capacity as such he is appointed to his responsible place, and not on account of his success in treating the disease called insanity.

And lastly, the most needed reform lies in the direction of constant and rigid government supervision by boards of commissioners and not by a commissioner in lunacy. The worthy position held by English asylums both in public confidence and in their large percentage of cures is due to the British boards of lunacy. Dr. H. B. Wilbur, of Syracuse, after a careful personal inspection of the workings of English asylums, made an able report to the State Board of Charities of the State of New York. In this report he says: "In Great Britain, as everywhere else, there has been a strong prejudice against asylums for the insane. This has gradually given way to a different feeling. Among the influences that have contributed to this change may be mentioned first, a thorough and in-



telligent government inspection ; next, very liberal regulations as to the admission of visitors related to patients and others." Speaking of the boards of lunacy the author says in another part of his report: " They represent the government in their relations to all the institutions that have the care of the insane. Their care and protection even penetrate to the insane individual in the custody of friends. They guard the personal liberty of every person in the realm, of high or low degree, against its infringement on a false plea of insanity. At certain periods they see personally every patient in every institution, and, if desired, grant a private interview, apart from the officers in charge, to listen to any alleged grievance. When occasion calls they follow any charges against the administration with an impartial and vigorous investigation." One of the commissioners of lunacy remarked to Dr. Wilbur: " With the boards of lunacy the question is not what is most convenient or most agreeable to the officers of institutions, but what most concerns, first, the recovery, and then the welfare and comfort of the patients. All personal considerations must bend to these."

The contrast between this and the system with us is vast. Patients are placed in the most absolute seclusion, friends and relations are allowed to see them only on rare occasions. Correspondence is discouraged, and when patients are allowed to write, the letters are suppressed by the arbitrary, and in many cases cruel, orders of the medical officers. They act on the conviction that there is no authority that will call in question their acts; or if a weak and biased commissioner should investigate an alleged offense, they seem to be equally certain that a mantle of so-called professional courtesy will be thrown over the offense.

What we need is a board of commissioners of lunacy, and not one man so invested with authority, and that man an alienist who finds it impossible to believe that an insane person can speak the truth about himself. Had we had a good lawyer upon the board to share the solitary grandeur of our commissioner, such an instance of wrong as that of Mrs. Norton would not have led to such an impotent conclusion. If every superintendent knew that he had to deal with a body of men whose sole thought was the care of the helpless beings confided to his care, with not a thought as to what his wishes or feelings might be ; if he knew that these men held him to a strict accountability, and that quick justice followed wrong doing or carelessness on his part, or that of his subordinates, in-

stead of a long-winded legal investigation, he would himself attend more closely to his duties and demand constant care and watchfulness from the assistants and nurses.

The Norton case is just as simple as this: Complaint is made to the *board* of lunacy, the throat of the patient inspected, the nurse charged with having inflicted the injury is examined. She denies all knowledge of the accident. Upon the face of it, the nurse is either incompetent or tells a falsehood; in either case she ought to be discharged, and she is discharged. In this manner would the Norton case have been disposed of by one of the British lunacy boards.

Let us see how restraint is managed in England. We know that with us nurses apply it without orders or the knowledge of the medical authorities. "A very complete set of books are required to be kept, embodying" (among other things) "the record of every occasion for seclusion, or the use of restraining apparatus, and all casualties." It will be observed that restraint is looked upon by British alienists as a very serious matter, and one not for a moment to be carelessly delegated to a nurse. In the matter of correspondence of patients we may copy the method of the English boards with advantage to the patient, and as a means of gaining the confidence of the public. I again copy the report referred to: "All letters addressed to the Commissioners of Lunacy are forwarded by the medical superintendent *unopened*. Letters written by the patients to their friends are forwarded, unless the medical superintendent disapproves. All letters *not sent* must be endorsed thus—'*Not to be sent*,' and initialed by the medical superintendent, and placed before the Commissioner in Lunacy at the time of his next visit."

This system has been in operation in England for thirty years. In our management of asylums, both as to medical treatment and the comfort of patients, we are just that number of years behind the rest of the world. In the relations of asylums to the public at large we are half a century in the rear of civilization. In the ridiculous attitude of superior wisdom and disregard of all opinion but their own in the management of the insane; in the seclusion and obscurity which it has been a part of the system to throw round the insane asylum, the American superintendents have shown themselves unworthy of the generous people who support them, and who have trusted their skill, and honor, and good faith.

Reform will never come from the ranks of the alienists. We have waited in vain for it ever since the dawn of the better management in other countries. Reform must grow out of public indignation and agitation.

ELY VAN DE WARKER.

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## UNCONSCIOUS CEREBRATION, AS EVIDENCED BY MNEMONIC ACTION.

BY EDWARD M. GALLAUDET, LL. D.,  
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“ARE there any mental processes of which we are unconscious at the time [of their occurrence], but which we recognize as having taken place by finding certain results in our minds?”

This question, ably discussed by Oliver Wendell Holmes, in his essay entitled, “Mechanism in Thought and Morals,” is presented in but slightly different form by Sir William Hamilton, in his Eighteenth Lecture on Metaphysics, as follows:

“Are there, in ordinary, mental modifications—*i. e.*, mental activities and passivities—of which we are unconscious, but which manifest their existence by effects of which we are conscious?”

Hamilton and Holmes answer the question in the affirmative, adducing arguments and offering pointed illustrations in support of a theory which runs counter to the philosophy of Plato, Cicero, St. Augustine, Descartes, and the English metaphysicians whose writings antedate those of Hamilton. Neither Holmes nor Hamilton claims originality for their theory, both ascribing the honor of its authorship to Leibnitz. Given to the world by this writer as early as 1714, the doctrine escaped the notice of English and French philosophers for more than a century, and was even put forth as original by Cardaillac, whose claims were for a time sustained by Damiron.

The terms employed by different writers to express this phase of mental action are various. Leibnitz speaks of “obscure ideas, obscure representations, perceptions without apperceptions;” and in this choice of words is declared by Hamilton to have “violated the universal usage of language.” But Hamilton himself is, in the opinion of Stuart Mill, hardly less unfortunate, for the expression

"unconscious mental modification" involves, according to the latter, "a contradiction of terms." Mill falls short of an absolutely satisfactory terminology, but improves on his predecessors when he says, "I am inclined to agree with Sir William Hamilton, and to admit his unconscious mental modifications in the only shape in which I can attach any very distinct meaning to them, namely, *unconscious modification of the nerves.*"

It seems, however, to have been reserved for the physiologists to apply strictly scientific terms to this so-called function of the mind. Holmes, in discussing the doctrine which he says "has been of late years emerging into general recognition in treatises of psychology and physiology," speaks of "latent consciousness," "obscure perceptions," "the hidden soul," "reflex action of the brain," and "unconscious cerebration." This last expression, which Holmes prefers, is attributed to Dr. Wm. B. Carpenter, and by him made the title of a chapter in his recent work on Mental Physiology, in which he collates the fragmentary materials furnished by earlier writers, such as Hamilton, J. S. Mill, Herschel, Hartley, Holland, Brodie, Laycock, Abraham Tucker, Holmes, Lecky, and Miss Cobb. Arranging the suggestions of these writers in an orderly manner, Carpenter gives a lucid and full statement of the theory they more or less clearly perceived, but failed to enunciate in adequate terms. This doctrine, which by many metaphysicians, more especially in Britain, has been considered altogether untenable, and even most objectionable, seems destined to secure a place in the science of Mental Physiology, greatly weakening, if not altogether destroying, the force of the famous saying of Descartes, "*Cogito ergo sum,*" and utterly overthrowing the cardinal doctrine of the Cartesian philosophy: "*La pensée constitue le nature de la substance qui pense.*"

It is not intended in this paper to discuss at any length the doctrine of *Unconscious Cerebration*, for this would be, in the main, to repeat Dr. Carpenter's chapter already referred to. Nothing farther will be attempted than to call attention to certain familiar mental phenomena, bearing upon the doctrine, which seem to have escaped the notice of the pure metaphysicians, and of the mental physiologists as well. These are the phenomena which belong to the act of *recognition*.

Two friends meet. At the instant the eye of one falls on the other, a "mental process" occurs, wholly beyond the control of the

will, quite outside of consciousness, the effect of which is manifest in the recognition which has taken place, and each says to himself, "Here is my friend." An attempt to describe this "mental process" will show it to be incapable of analysis, simple, single, unaffected by any succession of associated ideas. There is a word and a blow, with the blow first.

It is not alone through the sense of vision that the mind is forced to the performance of this act. The avenues of hearing, smell, taste, and touch, bring impressions which will compel similar automatic action of the brain, and it is interesting to observe how the absence of either of the senses precludes the possibility of that particular mental activity which depends for its existence on the missing sense. The act of involuntary recognition in such a person as Bulwer's ideal character of Nydia in his *Last Days of Pompeii*, must bring a completely abnormal perception to the mind: and the flower girl touchingly reveals her imperfect mental development when she says in her soft:

"The blind girl's home is the house of night,  
And its beings, empty voices."

Yet in her the mental *process* would be as perfectly performed as in others—the automatic action of the brain would be as surely compelled by the tone of a familiar voice, as in instances of visual recognition.

The purely automatic character of the act of involuntary recognition is shown by its unexpectedness, which distinguishes it from the mental act which often follows conscious efforts to recognize people, objects, or places, which something tells us have been subjects of thought before. An instance of involuntary and absolutely unexpected recognition occurred not long since in the experience of the writer, which seems worthy to be related in this connection.

Early in September, 1874, I was about leaving New York in the Boston express train, on my way to Hartford, Connecticut. Entering a parlor car and securing a seat, I noticed a gentleman behind me whose appearance attracted my attention, but in connection with whom no suggestion came to mind that I had ever seen him before. I went so far in a little speculation, judging merely from his looks and manners, as to think he was probably some Wall Street banker, getting off on an excursion to the country. Presently the train started. I took up a newspaper, and in a few minutes the conductor came for my ticket. Stopping behind

me at the side of the supposed New York banker, the conductor asked a question, the purport of which I did not understand. The gentleman made his reply in a single word—*Hartford*, pronounced with a decided foreign accent, *Hartfort*. Within a few seconds the thought flashed into my mind that the gentleman behind me was Dr. Brown-Sequard. I am certain that in no way had the person or the name of the distinguished Doctor been suggested to me on that day, nor for many days preceding. My surprise and curiosity were very great at the decided conviction which presently took possession of my mind that my traveling neighbor *was* Dr. Brown-Sequard, for neither consciousness nor any power of memory under my control afforded any satisfactory ground for this conviction. Soon, however, I found myself dimly remembering having met the Doctor. I regarded his features intently for some seconds, in the hope of confirming or rejecting my conviction. Failing in this, I ransacked the storehouse of my memory for an occasion on which we had met, but with no better result. I knew I had not seen the Doctor when he lectured in Washington, in the winter of 1873-4, for I distinctly remembered circumstances that had prevented me from attending his lectures, much to my regret. A half hour passed, during which time my mind was wholly occupied with futile endeavors to account for the idea that possessed me. My neighbor had by this time fallen asleep, and I ventured to ask a gentleman beyond him, whom I thought was his traveling companion, if he *were* Dr. Brown-Sequard. The reply I received left me as much in doubt as ever, for the two were strangers to each other. A stop of the train ended the nap of the subject of my inquiries, and as we moved on I resolved to settle the question of identity, at least, if I could not account for my seemingly absurd mental possession; my reason all the time declaring most emphatically against the probability of my having rightly named my companion. With an apology for intrusion I said: "Am I right in thinking I am addressing Dr. Brown-Sequard?" The quiet answer "You are," surprised me as much as the incoming of my inaccountable conviction had done. I hastened to explain the peculiar mnemotecnic condition in which I found myself, and added that I was mortified, in claiming acquaintanceship with so distinguished a person, to be utterly unable to remember where I had met him. When I mentioned my name and residence to the Doctor, he said he had an indistinct remem-

branch of having met me, but could go no further towards completing a train of associations which should lead us back to the time and place of our meeting. As we chatted together an undetected current of thought went on in my mind, in which, after thinking of Washington, New York, Boston, Hartford, London, Berlin, Brussels, Vienna, and other cities, Paris came prominently up as the place in which we must have met. I asked the Doctor if he knew Mr. T., an American banker in Paris, and if it could have been at his house that we had met. He replied that while he knew Mr. T. well, he had never visited at his house. "But," added he, "I have another American friend in Paris, who lives very near Mr. T.'s bank, at whose house we may have met—Mr. H. W." With the mention of this name my mental embarrassment was at an end for I at once remembered having dined in company with Dr. Brown-Sequard at Mr. W.'s, in the spring of 1867, more than seven years before.

My interest was next aroused to determine, if possible, whether the suggestion to my mind of the name of Brown-Sequard was to be attributed wholly to the effect of his voice in the utterance of a single and most common-place word; for it seemed not improbable that the doctor's face had, unconsciously to me, prepared the way for the recognition completed by his voice; and I asked if it were possible that I had recently seen his portrait in some illustrated paper. He replied, laughingly, that he thought not; for though often asked to allow the publication of his likeness, he had never permitted it to be printed; and so I came at length to a very positive conclusion that my recognition of the doctor was to be attributed solely to a mnemonic resonance within me occasioned by the mere sound of his voice. No other sense-impressions seem to have been combined with this. No train of thought, depending on any association of ideas, led up to the recognition. On the contrary, long continued conscious cerebration failed to bring up any such association. The mental process presented nothing further than the utterance of a single word with a peculiar accent, in a tone belonging to a certain individual whom I had met but once, more than seven years previously, and the almost instant sounding forth in my mind of the name of the person.

President Porter, in his *Human Intellect*, very properly separates the phenomena of memory into two classes, which he terms respectively the spontaneous and the intentional memory. He is

compelled, however, in analyzing these phenomena, to refer them all to what he calls "the power of passive representation" or of "spontaneous suggestion."

After making clear the classification just referred to, he says :

• "In the intentional memory the active element is prominent. But it happens from this very circumstance that the passive element is thereby brought into more conspicuous and striking contrast. Indeed, it is often when we are straining our active energies to the utmost to recall, that the power of passive representation, or of spontaneous suggestion, seems to delight to make itself felt, and to assert its independent energy.

"It would seem to delight to tantalize us by the wantonness of its caprices, as now it flashes those very thoughts upon our mental vision which we are most desirous to hide out of sight, and then most provokingly hides those which we are most desirous to uncover. At one time we are disappointed by a strange and unaccountable forgetfulness of the most familiar objects ; at another, we are surprised by the appositeness and affluence of unexpected thoughts.

"The sole and single function which the mind, as active, can exert, is to apply the force of its attention to the object or objects which it is certain have reference to that which is sought for. To these only we have access. These only we have at our command. Energetic and prolonged attention is all which the mind can do at the moment of remembering. It may indeed create, compare, refer, etc., and in these ways relieve and assist its attention ; but as far as any function proper to simple memory is concerned, it can do nothing more than to hold the object which is in part recovered, hard home to the attention, and force the passive soul to represent more of the unknown."

With all respect to the eminent writer whose words I have just quoted, I feel constrained to say that the expression "the power of passive representation" seems to involve contradiction ; for the instant "the passive soul" is forced to represent more of the unknown, it necessarily assumes an attitude of activity.

I think it would have been more precise to have spoken of the dormant faculty of memory having been forced to an act of representation. But to return to the point especially before us as the subject of this paper.

I have said that the "mental process" of recognition, or as Por-



ter calls it, "spontaneous memory," is simple—incapable of analysis. That this is so in such instances as the one drawn from the personal experience of the writer, will, it is believed, be readily admitted. The dormant faculty was roused into action by the conveyance to it through the auditory sense of a simple vocal utterance. Instantly this dormant faculty presented to consciousness its response in the name of the person who uttered the vocal sounds. The whole transaction was as simple as striking a blow on a tuning-fork; and if we could conceive of a musical instrument as endowed with consciousness, it would not be difficult to understand how it would recognize the individuality of different players by a process not dissimilar from that I have termed mnemonic action.

Let us now go further, and inquire whether all mnemonic action is dependent upon unconscious cerebration. Referring to Porter's explanation of intentional memory, we see that after the active, willing mind has by its comparison, inferences, creations even, brought all its energies to bear, the "passive soul" may still "tantalize us by the wantonness of its caprices" and "provokingly hide" those treasures of memory of whose existence we are assured, and "which we are most desirous to uncover." And then, when exhausted conscious cerebration is allowed to refresh itself in sleep or in diversions of effort, the dormant faculty rises from its repose, performs its sub-conscious processes, and in due time surprises us with the name, definition, train of thought, date, tune, or whatever else the active, conscious-seeking mind had labored for in vain. And even when the dormant faculty gives a prompt response to appeals directed by conscious mental effort, is it not equally true that the final act of remembering or of re-presenting is beyond the control of will and without the sphere of consciousness?

Mnemonic action appears to be either (1) the immediate result of a sense impression, as in the case of the meeting of two familiar acquaintances, or (2) the immediate consequent of a series of conscious mental efforts; or (3) the deferred consequent of an apparently unsuccessful effort of the mind to recall something from the region of the forgotten, or to recognize what there is reason to believe ought to be recognized.

In the first instance it occurs without any effort of the will; in the last, the will often fails to compel it; in the second case, to claim that it obeys the will would seem nothing more than the argument—*post hoc ergo propter hoc*.

From which we are led to conclude that all mnemonic action is independent of the direct control of the will, is automatic so far as the conscious ego is concerned, and is therefore to be regarded as unconscious cerebration.

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### THE ANNIHILATION OF THE MIND.

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THE *Popular Science Monthly* for April publishes an article said by its author to be on *The Annihilation of the Mind*.

After stating that "there are some subjects which are unapproachable by any of the present methods of scientific investigation," the writer proposes to discuss what he regards as one of the most important of them, "from a purely scientific point of view." Accordingly, he proceeds to approach the unapproachable subject, and bravely attempts to discuss it scientifically without employing scientific methods. The result is a curious compound of physics and spirits, in which an attempted connection between the material and the spiritual is veiled in the convenient obscurity of misty phrases and unsupported statements; and we are unavoidably reminded of the dark cabinet which plays so important a part in the production of the so-called phenomena of materialization. There is this important difference, however, in the two cases—the writer evidently believes (or tries to do so) in his own prestidigitations.

In alluding, somewhat vaguely, to scientific minds, "not of a quantitative cast," the author leads us to infer the possibility of an affirmative of this negation. Now I submit that when such a phrase as that is launched upon the non-scientific public, the author is bound to furnish an explanation.

The writer goes on recklessly to ask, "What makes the difference between the energy of the blooded hunter and that of the dray-horse?" We might reply by inquiring what makes the difference between a horse and a donkey? These are puzzling questions, and it must be admitted that the article under consideration throws but little light on either of them!

It is confidently asserted that "without the sun there would be an annihilation of force." This is certainly a most remarkable state-

ment. On what can it be founded? Observation? Experiment? By what species of ratiocination has the writer arrived at such a conclusion? It seems to me that the doctrine of *the persistence of force* has foundations not to be shaken by a mere surmise as to how things would be, if they were not as they are. Employing this method of reasoning, we might legitimately inquire—"if your grandmother had been your uncle, where would *you* have been!"

In a certain connection we are told that "no transformation of energy can take place in nature, without degradation or dissipation of it;" and in another, that "we may have, by the same means, an exaltation of spiritual potential energy which is unexplained by our doctrine of the conservation of force;" also, in still another connection, that "when energy is dissipated, we find the sun exalting it again." Do not these exaltations of energy come under the head of transformations, just as truly as when energy is degraded or dissipated? Not only so, but these upward transformations are essential to the completion of the chain of correlation; otherwise, instead of a cycle, there would be an inclined plane; the clock would be always running down, and no provision made for winding it up again. This exaltation of energy—the development of higher kinds of force through transformations of lower kinds—is exactly what "our doctrine of the conservation of force" *does* explain, if it explains anything.

The writer continues: "We are forced to acknowledge" (on the ground, apparently, that conservation of force does not account for its upward transformation) "that there must be something which is called the principle of life. If there is such a principle (a 'must-be' is not well backed by an 'if'), does it die at the physical death of each individual?" Principles, my dear sir, never die! Nevertheless, on the strength of a mere "if," following weakly on a still weaker "must be," you propose to "modify the all-embracing scope of the doctrine of conservation!"

It is next assumed that "with the cannibal, our equation of the conservation of force would require a small term to represent the mind and soul (!), but a comparatively large one, it may be, to account for that stress of the particles, *so to speak*, which manifests itself as life." Is this what is previously referred to as the principle of life, *a stress of the particles*? Surely, no scientific mind (unless, perhaps, it be of a quantitative cast), can ever again look upon life as a mystery: not at all—it is only a stress of the particles, so

to speak. Let the troubled soul henceforth find profound peace in that lucid phrase!

After this seemingly satisfactory settlement of the long-vexed question, What is life? we are again plunged into doubt by the statement, that "with matter endowed with life, we must join an unknown function which we may term life-function." Why join a life-function to matter already endowed with life? Is not that "stress of the particles" equal to every emergency?

The "spiritual or non-physical nature" is spoken of as "the mind"—"the mental and moral power of man;" and it is argued that, as in the case of the energy derived from the sun's heat, we have a cycle of operations, in which there is no annihilation of physical force; so, applying the principle of conservation to the forces of the mind, we must adopt the idea of another and independent cycle of operations, in which there is no annihilation of spiritual force.

What does the scientist know of mental and moral power apart from brain substance? How is he to accept the idea of "a great spiritual world" of pure force, intercommunicating with the physical world, illustrating the same law of conservation and correlation, manifesting itself through matter, yet independent of it?

If this sort of reasoning be not akin to that of the dark cabinet, then I have not rightly comprehended it.

When the *Popular Science Monthly* assumes to enlighten the non-scientific public on scientific matters, it is bound to discuss them in well-considered and clearly-defined terms. It should not lend the weight of its authority to the speculations of a mind evidently floundering among confused thoughts and incomplete chains of reasoning, taken up at random, and not logically followed out in either direction.

F. E. W.

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### BOOKS RECEIVED.

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- The Eastern Question.** A Brief History of Turkey. Translated from the German of Dr. Johannes Blockwitz. By Mrs. M. Wesselhoeft. With Maps. 32mo. Pp. 176. Cloth, 50 cts. Boston: Jas. R. Osgood & Co. [Porter & Coates.
- The Eastern Question.** A Brief History of Russia. By Francis A. Shaw. With Maps. 32mo. Pp. 123. Cloth, 50 cts. Boston: Jas. R. Osgood & Co. [Porter & Coates.
- The Eastern Question.** Russia and Turkey. By James M. Bugbee. With Maps. 32mo. Pp. 81. Cloth, 50 cts. Boston: Jas. R. Osgood & Co. [Porter & Coates.

- The Scripture Club of Valley Rest, or Sketches of Everybody's Neighbors. By the author of *Helen's Babies*. 12mo. Pp. iv.; 188. Cloth, 50 cts. New York: G. P. Putnam's Sons. [Claxton, Remsen & Haffelfinger.]
- Other People's Children. Illustrated. By the author of "*Helen's Babies*." 16mo. Pp. vii.; 303. Cloth \$1.25. New York: G. P. Putnam's Sons. [Porter & Coates.]
- Lectures on the History of Protection in the United States. By W. G. Sumner. 8vo. Pp. 64. Cloth, \$1.00. New York: Published for the International Free Trade Alliance. By G. P. Putnam's Sons. [Claxton, Remsen & Haffelfinger.]
- Fruit and Bread. A Scientific Diet. By Gustav Schlickeysen. Translated from the German. By M. L. Holbrook, M. D. 12mo. Pp. vi.; 227. Cloth. New York: M. L. Holbrook & Co. [J. B. Lippincott & Co.]
- Virgin Soil. By Ivan Turgeneff. *Leisure Hour Series*. 16mo. Pp. 315. Cloth, Lola. By A. Griffiths. *Leisure Hour Series*. 16mo. Pp. vi.; 354. Cloth, \$1.25. New York: Henry Holt & Co. [Porter & Coates.]
- Poet and Merchant. By B. Auerbach. *Leisure Hour Series*. 16mo. Pp. iv.; 460. Cloth, \$1.25. New York: Henry Holt & Co. [Porter & Coates.]
- Living Questions of the Age. Discussed by James B. Walker. 12mo. Pp. 315. Cloth, \$1.50. J. B. Lippincott & Co., Philadelphia.
- First Love is Best. A Sentimental Sketch. By Gail Hamilton. 12mo. Pp. 305. Cloth, \$1.50. Boston: Estes & Lauriat. [Claxton, Remsen & Haffelfinger.]
- What Think Ye of Christ? The Testimony of the English Bible. By Gail Hamilton. 16mo. Pp. 107. Cloth, \$1.00. Boston: Estes & Lauriat. [Claxton, Remsen & Haffelfinger.]
- The Physical Basis of Mind. Being the Second Series of Problems of Life and Mind. By George Henry Lewes. With illustrations. 12mo. Pp. xii.; 556. Cloth \$3.00. Boston: Jas. R. Osgood & Co. [Porter & Coates.]
- The Eighth Annual Report of the State Board of Health of Massachusetts, for 1877. With maps and plans. 8vo. Pp. xxv.; 498. Paper. Boston: Albert J. Wright, State Printer.
- Tangled. A Novel. By Rachel Carew. 16mo. Pp. 218. Cloth \$1.00. Philadelphia: J. B. Lippincott & Co.,
- Report upon the Census of Rhode Island, 1875; with the Statistics of the Population, Agriculture, Fisheries, and Shore Farms, and Manufactures of the State. By Edwin M. Snow, M. D., Superintendent of the Census. 8vo. Pp. 318. Cloth. Providence: Providence Press Company, State Printers.
- Bulletin de L'Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, 1877—No. 4. Brussels: F. Hayez, Printer of the Academy Royal.
- Strength of Men and Stability of Nations. Baccalaureate Discourses, 1873-7. By P. A. Chadbourne, D. D., LL. D., President of Williams College. 12mo. Pp. 113. Cloth 75 cts. New York: G. P. Putnam's Sons. [Porter & Coates.]

THE  
PENN MONTHLY.

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SEPTEMBER.

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THE MONTH.

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THOSE who expected that the march of the Russians on Constantinople would be after the fashion of 1828, had some show of reason for their belief at the opening of the month. By July 23d, the forces operating in and across the Balkans, had possession of the Shipka Pass, and had seized Kirkilissa, thus putting themselves between Adrianople and the capital. If the distance to Constantinople from Sistova—where the Danube was crossed—be measured as the bird flies, it will be seen that the Russians had thus already got over three-fifths of that distance, leaving in their rear all the mountain passes, crooked roads, and natural obstacles to their advance. It is true that the Russians held little more than a narrow pathway southward, in places narrow as a mountain pass, and secured by few strong places like Tirnova, while on each side and in their rear were considerable Turkish armies. Osman Pasha held Plevna on the west; Mehemet Ali on the east was based on Varna, Shumla and Rasgrad; while Suleiman Pasha resisted further advances on the south. But on the other hand, there were no transverse roads by which to attack the Russians. The Turks have destroyed an empire to create a capital, and all the roads lead southward for military and fiscal convenience. And in the rear of Suleiman Pasha a Russian corps occupied the Dobrudjna at the Danube's mouth, and threatened Silistria. Everything promised such a result as would enable a speedy and favorable termination of the war.

But the Russian generals, perhaps very wisely, did not regard such a method of advance as prudent, and proceeded to strengthen their position in Bulgaria by attacking Osman Pasha at Plevna. An earlier assault on that post (July 19th) had been repulsed; a second in much greater force (July 30 and 31) resulted in the most important defeat of the war. The Turks fought like tigers. They had all the advantages of a position strongly entrenched. The Russians were driven back with great loss in killed and wounded. A disheartening blow was dealt, which caused a virtual cessation of all operations on a grand scale, until great reinforcements could arrive from Russia. The troops south of the Balkans were withdrawn, and all the passes except that of Shipka were abandoned, while a vast army, variously estimated at from sixty to eighty thousand men, was gathered once more around Plevna, awaiting further supplies.

This repulse and cessation of operations is the more important as the winter season is approaching, and it is now certain that beyond the expulsion of the Turks from Bulgaria, Russia can accomplish nothing farther by this campaign. But it is noticeable that just at the heels of the repulse at Plevna, the Porte comes forward with the offer of negotiations for peace, on the basis of the virtual autonomy of Bulgaria, or at least on that proposed in the Andrassy Note. But Russia is too proud to negotiate after a defeat, as probably the Porte knew very well. The proposal may have been honest, or it may have been intended merely to put Russia in the wrong before Europe.

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THE renewal of operations in Turkish Armenia has led to nothing. Attacks on obscure posts, mutual repulses, artillery duels, fill the dispatches. Both parties have their heart in a different struggle, and the Russian forces have been too much weakened by the withdrawal of troops to the Caucasus, to allow of their taking a vigorous initiative. They do seem to have succeeded in putting down the revolt among their Moslem subjects in their mountain ranges. The Turkish troops have retreated to their fleet, and a large emigration of the people to Turkish soil has followed. The dispatches describe these emigrants as Circassians, but then everybody in the Caucasus—Abkhasians, Lesghians, Daghesians, even Schamyl—are Circassians with the newspaper and telegraph people.

THE dispositions with which the neighboring, and otherwise related nations, view the struggle in European Turkey, is undergoing some noticeable changes. Serbia is clearly bent on preserving her neutrality. The defeat at Plevna occurred before the Servian Legislature adjourned, and doubtless helped the peace party in carrying the vote to continue the payment of the annual tribute to Turkey. But the war party are strong and noisy; they hope to see the country carried into the struggle indirectly by effecting an alliance with Roumania, and the anti-Russian papers in Austria seek to excite alarm by reporting that such an alliance is already effected, and though not proclaimed, is recognized by mutual salutes.

Montenegro has resumed the offensive, and is besieging the fortress of Nicsics. Greece is in the chills and fever, warlike and peaceable fits succeeding each other with great rapidity, and exhibiting in their sequence a close relation to the military movements on either side of the Balkans.

The English Government excited some alarm at the opening of the month, by the announcement that the garrisons at Malta and other points of the Mediterranean must be reinforced at once. At the same time, it was proposed that the English should occupy Gallipoli, the old town at the Western end of the Sea of Marmora, where the Turks first landed in Europe, and which the English and French fortified in 1855. This place is about a hundred and ten miles from Constantinople. The excitement which followed led to pretty full explanations in Parliament—so full indeed, and so satisfactory, that the session was allowed to close without any further questions being put to the Government. The Liberals seem to be satisfied that the Administration are honest in their professions of neutrality; that is, that the anti-Disraeli party are too strong in the cabinet to be overborne.

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ANOTHER European nation has had about enough of free trade. The theorists and speech makers who succeeded to Prim in the control of Spanish affairs, and who managed to wreck the ship of state on half a dozen rocks at once, were, of course, grandly cosmopolitan. They got rid of the Spanish tariff, and managed during their brief term of office to heap up such a burden of public debt as absorbed the whole revenue of the kingdom in paying the interest, thus forcing a partial repudiation. They met with some opposition, indeed. The Catalans who occupy the North-eastern



corner of the Peninsula, and who are the most industrious and business-like people imaginable, voted steadily for protection. They are quite different from the ordinary Spaniards; they speak a language in which short words are nearly as abundant as in English, and which, though derived from the Latin stock, differs nearly as much from Castilian as from Tuscan. They are proud of their country, their speech, their history, their literature, and their industries.

Under the new sovereign they are again trusted advisers, being confessedly the best financiers in Spain, and the ministerial reports as well as the addresses from the throne talk of protection of national industry, of the duty of Spain to take care of her own interests. A law to increase all the duties leveled upon foreign goods has been prepared by the ministry, and its passage by the Cortes is conceded to be certain. Thus from end to end of Europe, the principle of nationality is becoming the ruling force in the industrial as well as the political sphere, and the shallow cosmopolitanism of thirty years ago is losing its hold.

On the other hand, Switzerland, a country most favorably situated for commercial intercourse with the centre and south of Europe, and fond of boasting that her industries owed nothing to protection, is beginning to suffer terribly from the competition of our American watch-makers. Attention was first called to this by the report of her Commissioner to our International Exhibition. Since then, attempts have been made to introduce American methods and machinery in bootmaking, but they have failed utterly. The capitalist who undertook the experiment visited an American establishment, learned all its processes with great care, and taught these to his countrymen. But the results were utterly disappointing, and he was obliged to confess that the dearer labor of America was in reality far cheaper than that of his Swiss employees. The intelligence, the mental alertness, the adaptability of the American workmen, were things he could not ship to Lausanne, and without them he could not obtain American results.

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THE general termination of the railroad strike, by the workmen resuming work at the reduced wages, and the speedy suppression of violent resistance by the national and state troops, closes one of the most painful chapters of our recent history. The civil and the military authorities behaved exceedingly well, except at Pittsburgh,

where the citizens and their magistratical representatives seem to have utterly lost their heads, and are now making up for their lamentable inactivity by abusing the Philadelphia troops and everybody else who tried to do anything. The evidence that the strikers at Pittsburg lost control of the situation, and that matters were carried to such extremes chiefly by a miscellaneous and utterly unorganized mob, is abundantly presented by subsequent events. One of these is the circulation of a pledge among the railroad men, that they will contribute from their reduced and certainly scanty wages to pay for some part of the damage done to railroad and other property. Thus shows that, with the return of calmer thoughts, they realize the danger of appealing for aid and sympathy even by an act to the lawless people who have collected at our great centres of population. And it is to be hoped that the warning will not be lost on them.

The other great lesson of the strike is the immense predominance of the party of simple "law and order" above all others. In a community organized as is our own, the interest of the majority is against all disturbance of the peace. If our system have no other merit, it has that at the least. Even the sneers of its sharpest and most cynical critics confess it. "A monarchy," says Fisher Ames, "is a good taut ship, which sails well, but it may strike a rock and go to the bottom. A democracy is like a raft; *you can't sink it*, but your feet are always under water." And above all, a democracy in which two-thirds of the people own property, and know that their property is directly or indirectly endangered by every riot and outbreak, is not likely to be sunk by the "have nots" of the minority.

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WE must confess to some surprise when it was announced by the Treasury that the "popular" subscription to the four per cent. loan had proved even larger than was anticipated, reaching over sixty-seven millions of dollars. A loan of that rate, purchasable in gold and redeemable in silver, seemed to us so poor an investment, that we were obliged to conclude that either we knew nothing of the state of the money market, or that the patriotism of the American people had for once kept their business instincts in abeyance. So we held our peace, since we could say nothing comforting to the generous hearts who had rallied to the support of the Treasury.

But alas! our new-found confidence in the magnanimous patriotism which controls the bond market, has received a violent, a mortal shock. The "popular" subscription is closed; the Syndicate have proceeded to place as many of these bonds as possible in the home market, before proceeding to those of Europe, only to discover that the Four-per-cents are everywhere offered in large quantities at less than par—that if they themselves want a supply of them, they can get them cheaper "on the street" than at the counters of the Treasury. The grand "popular" subscription was after all no *bona fide* investment of the people's capital; it was a speculative transaction carried out by a group of New York banks and brokers, who thought that they might have a share in the profits just as well as the Syndicate. Indeed, it has transpired that there are two Syndicates, an older and larger, which dealt in the Four-and-a-half per cents, and a new and a smaller, which was gathered out of the first, and which controls the new loan. Those members of the former who were left out in the cold, were determined not to be treated in that fashion. Sharing in the confidence felt by the Treasury and their former friends, that the new loan was placeable in large quantities among home investors, the ex-Syndics seem to have subscribed for nearly the whole amount which we had supposed to be taken by the people, and held it for the rise which would follow the closing of the popular subscription. The result has been that they were badly bitten so far as profits go; they have helped their unfriends in the new Syndicate to procure their bonds more cheaply for the European markets, and they have enabled the Treasury to make a temporary display of success and popular confidence.

But now the farce is ended, and the pretences laid bare. Thus far no *bona fide* investors on this side the Atlantic have subscribed for the new loan. No one has taken for granted that the Secretary of the Treasury can upset the plain meaning of an Act of Congress by his *ipse dixit*, and make an unsold bond redeemable in one metal only, when the law gives the government its choice of two. What success the Syndicate will have in Europe it is hard to say; but most certainly an action for fraud will lie against them in any London or Frankfort court, if they represent these Four-per-cents as redeemable only in gold.

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OUR Secretary of the Treasury has showed his acquaintance

with the financial methods of the nation by announcing, first in the newspapers and then in a speech made at Mansfield, Ohio, that there are sixty-six millions of unused and unneeded greenbacks lying in the Treasury, the property of the National Banks. From this he drew the easy inference that our national currency circulation is vastly in excess of the needs of the people, since more than twenty per cent. of its amount lay thus idle. This mare's nest of a discovery was loudly welcomed by some newspapers and newspaper correspondents, who busied themselves in triumphing over real or imaginary objectors by showing that these millions formed no part of the reserve required by law.

It is hard to believe that neither the Secretary nor his editorial friends were aware of the real state of the case, which they could have learnt from a reference to the national Statute Book, or to any well-informed official of a National Bank. These Treasury notes are in as active use as any part or portion of our currency. They are the security upon which the Treasury has issued those certificates of deposit, by which the banks discharge their obligations to one another. By their deposit, these notes are thus converted into a special form of currency, which is of no use to any one but bankers, and is the only one the Clearing Houses will accept in the settlement of balances. The certificates are for large amounts; they are of no value to any one but the banks, so that there is no risk in their transfer from place to place, and in case of their loss they can be easily and safely replaced by reissue. All this is written at large in the Act of Congress providing for the creation of such a bankers' currency. But neither Secretary Sherman nor any of his advisers in or out of office betray the slightest knowledge of the fact.

One of the best things in the Secretary's Mansfield speech was the unintentional but unavoidable admission that the Resumption policy of the Government is at the root of the prolonged cessation of business enterprise and confidence. Speaking of the "discount of five per cent." on our paper money, he proceeds: "Until this is removed, there will be no new enterprises involving great sums, no active industries; but money will lie idle, and wait and watch the changes that may be made before we reach the specie standard." Now the Secretary can hardly be supposed to mean that business enterprise, activity and initiative cannot co-exist with a depreciated paper currency, nor even with one which is by unfore-

seen steps approaching "the specie standard." All our experience during the years 1866-1873, contradicts such a notion. Our currency rose during these years far more than five per cent. in value, but no one could count on the rise, and there was no threat that at a given date every bank note must be redeemed in gold, and all outstanding obligations must be discharged in a metal of which our supply is almost infinitesimal. And those were years of enterprise and industrial activity to an extent even beyond the limit of health and sanity. It is the definite threat of a change, whose consequent disasters none can compute, that now keeps money lying idle, and prevents "new enterprises involving large sums." Industry is "saved by hope," by enterprise; but the hope of our industry is like that of the condemned felon, who hears the carpenters at work in the jail-yard, and has heard his death-warrant read, and whose only hope is a respite. Men face the uncertain risks of the battle-field without flinching; but the certainty of a doom whose day and hour is fixed, paralyzes the most energetic and terrifies the bravest.

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THE Republican Conventions thus far leave us in doubt whether President Hayes enjoys the support of the party. Iowa roundly censures; Ohio guardedly approves his "efforts for the pacification of the country;" while Maine tables resolutions eulogizing and censuring the President, and holds her peace. Mr. Blaine wants peace and harmony at home, but whether he will be equally prominent in that character next winter remains to be seen.

Most interest, of course, attaches to the Ohio election, as in some sense bearing most directly and personally upon the President. The Democrats have nominated for Governor, Ex-Mayor Bishop, of Cincinnati, whose good even more than his bad qualities tend to prevent enthusiasm in his behalf. It seems he is a zealous temperance man and a good churchman, two things which a Western Democrat does not appreciate. He is certainly a man of no personal weight, unable to make a speech, and apparently more goody than good. The Republican nominee, Judge West, only secured the nomination because his rival, Judge Taft, was thought unfriendly to the Administration. He seems to be a man who has views of his own, and can give them utterance, although he has not thought out to their results some of the principles he has espoused. Both are men of unimpeached probity, but the Republican is the abler man.

The two platforms are of chief interest, especially their financial planks. The Democracy are for preserving the greenback currency, for unlimited coinage of silver, and for the repeal of the resumption act, while they roundly charge the Republican party with the responsibility of the labor troubles. The Republican platform is one of those carefully drawn documents meant to escape all objections, but sure to satisfy nobody. It says nothing about Resumption, but favors the recoinage of silver at gold rates, with a mysterious restriction about our foreign relations, which we cannot fathom. But the most original and positive thing in the platform is a proposal that Congress shall so exercise its right to regulate commerce, as to assume the responsibility of adjusting the relations of labor and capital, so far as the great carrying companies are concerned. To this end are proposed (1) a Bureau of Industry; (2) appropriate legislation; (3) statutory arbitration. The chief blunder in this proposal is the assumption that the great carrying companies are the only or the chief centres of the labor trouble. To be worth anything the same remedies must include the iron and glass industries, the mining industries, and indeed all the greater industries of the country. As regards these, Congress could only interfere by an invasion of private rights, while it would simply excite a general dissatisfaction if the Government were to dictate to the railroad managers, but leave other capitalists to do as they will. And even as regards the carrying companies, it is questionable whether the relation of the companies to their employees is brought within the purview of Congress by the letter of the Constitution. There is no precedent for such an interference, and none such was intended by the authors of the Constitution. As to statutory arbitration, it is like nothing so much as "forcing a man to volunteer." It is of the very essence of arbitration that both parties submit to it voluntarily, and no statute could have more than an enabling force.

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THE Conservative Convention of Virginia narrowly escaped committing the party to the further repudiation of the State Debt. The creditors of the State have certainly had hard enough treatment at its hands already. Of the forty-five millions owed at the opening of the war, one-third has been repudiated as the share of West Virginia, which refuses to assume a cent of it. Of the re-

maining thirty millions, two-thirds have been funded in six per cent. bonds, whose coupons are receivable in payments to the State Treasury, while the holders of the remaining third receive nothing whatever. As a consequence, the money payments of taxes to the State are not sufficient to meet its current expenses, and as everybody is opposed to raising the land-tax, and no one has been able to suggest any other way of relief, an entire or partial repudiation of the debt seems imminent. Nobody would say "repudiation," of course; the honor of the Old Dominion is too sensitive for that. But a very large party in the Convention were ready to vote for a "forced adjustment" of the debt. Fortunately, the honest men prevailed, and Col. Holliday was nominated for the Governorship, with a platform distinctly committing the party to honest dealing. We do not envy him the post.

Georgia, on the other hand, under the lead of her redoubtable hero, Robert Toombs, has voted by an immense majority in her Constitutional Convention to repudiate the debt incurred by the "Carpet-bag Government" of the State. To read the argument by which this act is defended, one might suppose that no copy of any treatise on international law had ever found its way into the State. All the great text-writers accept the principle that, except in case of a suppressed rebellion, debts incurred by a *de facto* government, even one constituted by a temporary conquest, are binding on its successors in power. The only exceptions recognized are such as have not the remotest pertinency to the present case. And this action is all the more foolish in Georgia, a State more dependent on capital from outside than any other in the South.

Both cases are clear proofs of the necessity of a reconstruction of the relation of the States to the general Government. It is most preposterous to invest these local authorities with the power to inflict shame and disgrace upon the American people at their own good pleasure. We are responsible for them in the eyes of all mankind, and power must be made co-extensive with responsibility.

## CONCERNING PRE-EXISTENCE.

## FIRST PAPER.

“Who dreams not life more yearful than the hours  
 Since first into this world he wept his way  
 Erreth much, maybe”—

says Philip James Bailey, in the opening lines of his turgid and verbose, as well as ill-named poem, *The Mystic*. The problem at which his words point, the insoluble problem of pre-existence, at one time or other is pretty sure to excite the interest of every person who takes heed to the course and the connection of his own thoughts. That human life extends no farther back than the space which falls within our empirical observation is the assured belief of the great mass of mankind, even while they hold, with equal tenacity, to the conviction that it does not cease when at death it passes beyond our observation in the other direction. And yet the other view has champions enough to forbid its being dismissed as the fanciful private notion of a few isolated thinkers. The belief in pre-existence is an essential part of the theories of metempsychosis held by more than a third of the race,—by the millions of Hindoo Brahminists, and the hundreds of millions of Asiatic Buddhists. From Egypt, if not from farther Asia, it made its way to Europe in the philosophy of Pythagoras and Plato, and re-appeared in the Neoplatonism of Plotinus and Proclus. From the Hellenic thinkers it passed over to Judaism through Philo of Alexandria, the Pharisees, and the doctors of the Kabbalah, and to Christian theology through the Alexandrian Gnostics, and Origen and his school. It has been revived among the thinkers of Christendom by More and the other Cambridge Platonists in the seventeenth century, as also by the younger Helmont; it has obtained the sanction of such philosophers as Kant, Schelling, and the younger Fichte, of poets like Lessing, Wordsworth and Coleridge, and of such theologians as Julius Müller, H. Ernesti, Rückert and Edward Beecher. These names warrant us in treating the opinion as worthy of serious and earnest discussion.

The first general consideration, which meets us *in limine*, is that the instincts and practical considerations which lead men to believe in immortality, are to some degree of like force as regards the belief in pre-existence. As the thread of life passes into the



dark and beyond our ken in one direction, we shudder at the very notion of its final severance. We are without a choice as regards our faith in its prolongation; we are forced to that faith by our conviction of the worth and dignity of human nature, and of the preciousness of the ties which bind those who have gone *ad plures* to those who still remain. But where is our human dignity if we are but the upstarts of yesterday? May not that which so recently was not, with equal right as soon lapse out of being into oblivion? It was, as Cudworth points out, this argument which had especial weight with the old Greek philosophers in this regard. They asserted the eternity of the soul, in order to vindicate its immortality. They held that nothing which has being can have originated out of nothingness, or can return again to nothingness; and as they were assured of their own existence, they held that that existence could have had no temporal beginning. This present life must be at most no more than one stage in a vast number of stages.

Now the Christian conception of creation, which involves, however, the correlative conception of annihilation, does, when accepted, deprive this argument of its literal force. And yet our instinctive belief in immortality implies a half-conscious acceptance of some such view of the matter. We are conscious of an existence whose quality raises us above the shifts and changes of time, and assume that this change called death will matter to us as little as all the rest—

“If my bark sinks, 'tis to another sea;”

Or as old Jerome Cardanus puts it: *Animæ immortalitatem non nunc primum, sed semper agnovi; sentio enim aliquando intellectum sic Deum esse adeptum, ut nos prorsus unum cum Eo esse intueamur.* We reach this conclusion by no arguments; we have always in the intuition of God, and our fellowship with Him, felt so united to Him as to be assured that His continuance is the pledge of ours. But is not birth as well as death one of those temporal changes, which belong to a shifting and changing sphere, which is not the native and proper air of our spirits? Is it not merely because we have our backs to the earlier change and our faces to the later, that we fail to reason about the one on the same principles as we use about the other? If we lived in the reversed world of “Dr. Mises” (D. Th. Fechner) in which old things grew new, and men began by a reversed dying, and ended in like manner by a

reversed being born, we should probably cease to think of death, and begin to devise arguments to show that life was not limited by our birth, as zealously as we now reason against the supposition that it terminates with our physical death.

It is sometimes said, and with much force, that the study of infant psychology is opposed to the theory of preexistence. The little child's mind is so utterly unfurnished with all results of experience, so devoid of independent character and of habits of thought and action, as forbids us to suppose that it had already passed a long period of conscious existence before coming into our world. What it already possesses can be accounted for by the principal of heredity ; it has received from its parents or its more remote ancestors certain dispositions and undeveloped capacities. But it brings with it nothing of what we would expect in a being which had come to this out of a pre-existent state, after enjoying an educational experience in that state. To this there are three answers possible, none of them quite final, and yet none of them without force. The *first* is that acute observers have been so struck by the nature and extent of the mental furniture which we already possess, apart from all experience of this world and not traceable to any such experience, that they have been obliged to resort to the theory of pre-existence to account for it. This was the case with Plato and his school, and is the source of the philosophical form of the theory. The *second* is that the moral character of children, and especially the existence of radical evil in their hearts, long before the unhappy experiences of this life could have implanted it there, have forced many men of equally acute observation to assume that the human spirit had made choice of the evil before its birth into this life, and in a state of freedom to choose such as is not enjoyed in this world. They point out to us that every human being at some stage of his life's experience becomes conscious of the fact that he is a sinner, and that however early in life this consciousness is awakened in him, he is aware that sin is not an external something received into his life, but the disclosure of a darkness, a depth of evil within him. And this experience is generic ; it belongs not merely to individuals of the race, but to the whole race. It is as widely diffused as any of those universal human gifts which belong to man as man. But on the other hand it is not the true state, the ideal state of man. It cannot be that in which he was created ; it must be the result of some resistance of

the human will to the divine, not here and now, but in a previous stage of existence. This was the view of Origen, Kant, Coleridge, Müller and others, and this may be called the theological form of the theory. The *third* point is that in the case of second childhood we see that the spirit of man is capable of being divested for a time of the accumulated experience of a long life, and of returning to just such a condition as that of the child who is but newly gifted with the powers of speech and motion. The great and good prelate, Frederick Christian von Oetinger of Wurtemberg (1702-1782), became in his old age a devout and innocent child, after a long life of usefulness, partly spent in the composition of works profoundly speculative as well as thoroughly edifying. The change began with a gradual loss of speech, so that for three years he was dumb. Leaving his study and his library, whose books were now sealed to him, he would go to the streets and sit down on the ground to join the children in their plays, and by his passionate eagerness in their games, and his sharing their rapturous delight in field, in wood, in flowers, he showed himself as much a child as any of his playmates. The waters of Styx, which the ancients represented as drunk to produce forgetfulness in souls who were about to re-enter upon this earthly life, were not altogether fabulous.

On the other hand there are very common mental experiences, which have the tendency to excite a belief in pre-existence. These have been shared in by many of the avowed opponents of the doctrine, so that there is no room to doubt their reality. Persons tell us that in the midst of some action, or in view of some set of circumstances, they are suddenly impressed with the conviction that this is exactly a repetition of some past experience, and yet they know that they can have had no such experience in this present life. Sir Walter Scott among others was so impressed by this, that it led him to a qualified belief in pre-existence. Prof. Bruch, of Strasburg, who has written against the belief, speaks of this experience as nearly universal, and tries to account for it as the actual but imperfect recollection of previous experiences in this present life. I am convinced that that explanation is erroneous; but I cannot attach any weight to the more ordinary instances of this appearance of recollection; they seem to be nothing more than cases of double mental vision, corresponding to the physiological phenomenon of double sight produced by drunkenness and

other deranging influences. We seem to see the same thing in two aspects, and the mind, by an instantaneous but illogical inference, refers the more distinct view of it to perception, and the less distinct to memory, whereas both in fact were due to perception. Nor is it necessary to suppose that the two impressions are contemporaneous. They may be successive, but not properly connected in the mind, through some irregularity of mental action, while at the same time the one has followed the other with such rapidity that we infer (in our ignorance of the swiftness of the mind's activity) that there was not time for us to have twice contemplated the act or the group of circumstances.

Such would be my inference as regards ordinary cases of this sort of reminiscence, especially as they are observed to accompany any impaired health of the organs of mental action. But there are more extraordinary instances of this mental phenomenon, of which I can give no explanation. Three of these have fallen within my own range of observation. A friend's child of about four years old was observed by her older sister to be talking to herself about matters of which she could not be supposed to know anything. "Why W.....," exclaimed the elder sister, "what do you know about that? All that happened before you were born!" "I would have you know, L....., that I grew old in heaven before I was born." I do not quote this as if it explained what the child meant it to explain, but as a curious statement from the mouth of one too young to have ever heard of pre-existence, or to have inferred it from any ambiguous mental experiences of her own. The second case is that of the presence of inexplicable reminiscences, or what seem such, in dreams. As everybody knows, the stuff which dreams are ordinarily made of is the every-day experience of life, which we cast into new and fantastic combinations, whose laws of arrangement and succession are still unknown to us. In the list of my acquaintances is a young married lady, a native of this city, who is repeatedly but not habitually carried back in her dreams to English society of the eighteenth century, seemingly of the times of George II., and to a social circle somewhat above that in which she now lives. Her acquaintance with literature is not such as to give her the least clue to the matter, and the details she furnishes are not such as would be gathered from books of any class. The dress, especially the lofty and elaborate head-dresses of the ladies, their slow and stately minuet dancing, the deference of the servants to

their superiors, the details of the stiff, square brick houses, in one of which she was surprised to find a family chapel with mural paintings and a fine organ—all these she describes with the sort of detail possible to one who has actually seen them, and not in the fashion in which book-makers write about them. Yet another, a more wide-wake experience, is that of a friend, who remembers having died in youth and in India. He sees the bronzed attendants gathered about his cradle in their white dresses; they are fanning him. And as they gaze he passes into unconsciousness. Much of his description concerned points of which he knew nothing from any other source, but all was true to the life, and enabled me to fix on India as the scene which he recalled.

It is not worth while to accumulate such evidence as this; one case proves as much as a thousand, for one is suggestive of a possibility, and a thousand would go no farther. It is more interesting, and will carry us much farther in an understanding of the subject, if we will look at the various theories of pre-existence which have grown out of these and similar suggestions.

I. The theories of *metempsychosis* which are found in the ancient Ægyptian belief, and in the Brahminical and Buddhist religions of Eastern Asia, may be classed among the theories of pre-existence, since they all regard any human life as possibly one term of an indefinite series, and not necessarily the first. The Brahmin and the Buddhist are here practically at one, for the great Buddhist revolt against Hindoo sacerdotalism merely made this doctrine more complete and philosophic than it had been. "The common end of every system studied by the Hindoos is the ascertainment of the means by which perpetual exemption from the necessity of repeated births may be won," Prof. Wilson tells us. There are indeed differences of very marked character, which modify the views taken of metempsychosis. While both Brahmin and Buddhist regard personal and individual existence as a delusion, and the escape out of it as the true salvation, the means of escape, and the end which is the refuge of the saved, are very different. The Brahmin seeks absorption in Brahm as "the reality at the heart of things;" the Buddhist believes in no such reality. The individual is to the Buddhist no more a delusion than is the universe itself, and to its vanity and its unrest there is no contrast to be found anywhere, save in the silence and the peace of nothingness. Nirvana is the path to that rest, not the rest itself. It is the state of one who is

now and here so free from all desire, that when this life ceases no wish or desire will go forth to perpetuate existence in another birth—another life. To Nirvana succeeds at death the Pan-nirvana of utter silence and annihilation. And, of course, the means to these different ends are very different. To the Buddhist the one duty of life is mortification, the extinction of affection and desire—the will not to exist, as Schopenhauer says. But the Brahmin's duty is contemplation, illumination, religious asceticism, the communion with Brahm in the study of the sacred books and attention to religious forms. Another great distinction is the contrast of Brahmin exclusiveness with the democracy, the universalism of the Buddhist creed. Only the Brahmin, the wearer of the sacred thread, can directly aspire to the felicity of absorption into the Source. The inferior castes have no such felicity within their reach, until by undergoing the prolonged and painful penances of the fakir they attain to the privilege of the Brahmin caste. But the Buddhist ascetic may come from any class, and in his successive births may pass from the highest to the lowest, or *vice versa*.

The range of metempsychosis, in the Hindoo conception of it, embraces all sentient existence. From the fellowship of the gods to that of the insect which disports itself in filth and slime, from the joys of heaven to the torments of hell, birth is the gate which opens into every state, and merit is that which determines into which it shall open. This earth, and still more human life, seem to occupy a sort of intermediate position between the extremes thus included; and to this earthly life of man the sentient being may again and again return, leaving behind it all memory of its past experiences, but carrying with it the wings of its merits or the weights of its demerits. These two indestructible results of past conduct are kept as separate accounts to be wrought out in independence of each other, and without any striking of balances or computation of averages. Every merit is to be rewarded by births in heaven or on earth; every demerit to be punished by births on earth or in hell.<sup>1</sup> Thus all sentient existences from the highest to the lowest are bound by the one great "chain of the law;" the tenant of heaven may be already the predestined occupant of hell, or *vice versa*. To escape from this necessity by absorption into Brahm or lapse into Pan-nirvana, is the true salvation.<sup>1</sup>

<sup>1</sup>Mr. Alger points out the curious resemblance of the language used in the Apocalypse to the aspirations of the Indian believing in metempsychosis: "Him that over-

Zoroastrianism, with its usual antagonism to Hindoo ideas, knows nothing of a metempsychosis. But the Egyptian doctrine of a future life taught that the human spirit, if found unworthy of heaven after death, was condemned to pass through all the different lower forms of animated existence, or was given over to "the prince of the power of the air," to

"Be imprisoned in the viewless winds,  
And blown with restless violence round about the pendent world."

Both these methods of purgation were preliminary to a second probation as human beings, after a lapse of three thousand years. But the worst sinners were at once plunged into a fiery hell, and this sentence seems to have been final.

II. The amount of intercourse between ancient India and ancient Greece seems to have been much more extensive than we are generally inclined to suppose. The great Eastward march of the Greeks under Alexander (who entered India B. C. 328) was not the first lifting of the veil which hid India from the Greeks; individual travelers had already most probably penetrated either country from the other. But with Alexander the amount of contact reached its maximum, and the influence of Hindoo ideas upon the Hellenic intellect is from that time beyond question. Even Aristotle, it is believed, owed much to the rationalizing Sânkhya philosophy of Kapila and his school.

A Greek tradition pointed out Pythagoras as one of the Greeks who visited India before the age of Alexander. It is almost certain that he traveled into Egypt, and from the Egyptian priests he possibly received the suggestion of the theory of metempsychosis which he taught in the Greek cities of lower Italy (B. C. 529). He seems to have taught the Ægyptian doctrine of "the great year," an era at whose conclusion all things should once more return to their starting point. According to Plato's *Phædo*, he regarded the body as a prison in which the soul was enchained as a punishment; while from Aristotle and Diogenes Laertius we know that he taught that on its release by death it must pass through a whole circle of living forms. On this and other points

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cometh will I make a pillar in the temple of my God, *and he shall go no more out.*" The spiritual truth which gives these notions and theories their vitality is well expressed by one of J. H. Hasenkamp's correspondents: *Gott hilft uns aus einer Noth in die andere, damit wir lernen sollen, Ihm allein anhangen.* (*Christliche Schriften, I. 137.*)

it is extremely difficult to determine exactly what the views of the Pythagoreans were. From himself we have received only a group of brief aphorisms of practical wisdom; from his earlier disciples a few doubtful fragments; from the later, abundance of incredible statements. The school which he established was a religious and ascetic order with political aims, not unlike the priesthoods and priestly castes of Egypt. In fine, everything about the doctrine and the school, points us to Egypt, and authorizes us to assume that if we possessed a full and authentic account of what Pythagoras taught, we should find that he had learnt on the Nile what he taught in Italy. Some of his later disciples, especially the author of the work which passes under the name of Timaeus the Locrian, denied that Pythagoras taught the doctrine of metempsychosis in any literal sense, and said that he meant merely to point out the truth that men are assimilated by their vices to the beasts. This view is also taken by Prof. Maurice in his *History of Moral and Metaphysical Philosophy*.

Pythagoras belongs to the fifth, and Plato to the third century before Christ. In the intermediate century Empedocles, the Greek Schelling, sought to explain the universe to himself and others, by the action of the formative principles of love and hate, attraction and repulsion, acting on "the four elements." He regards nature as a vast formative process, in which many monstrosities were evolved, but perished by "survival of the fittest," and in which the higher forms of life are evolved out of the lower. His doctrine of pre-existence was a Darwinian metempsychosis; each single man has already passed through all the lower forms of life before attaining the human dignity; and every lower existence is the possibility of a man on its upward march.

Plato has been called by Mr. Emerson the synthesis of Europe and Asia, and a decidedly Oriental and non-Hellenic element pervades his writings. He had traveled in Egypt and in Asia Minor, besides visiting the Pythagoreans of lower Italy. As he died (B. C. 348) twenty years before Alexander's invasion of India, he had no opportunity to profit by the new knowledge of Hindoo systems and thinkers which resulted from that event.

His theory of pre-existence, while it may have been suggested by that of the Ægyptians or of the Pythagoreans, cannot be said to owe its place in his teaching to any such extraneous influence. In fact it grows out of his theory of knowledge; or more exactly, his



doctrine of ideas. His great aim, as that of his master Socrates, was to vindicate the reality and validity of truth from the scepticism of the sophists of his time, who taught that *truth* is that which each man *troweth*—is mere subjective opinion. Socrates spent his life in leading men from opinion to knowledge, but he never solved the difficulty presented by the question whether our perceptions ever reach beyond the phenomenal, the mere appearance of things, to their reality. If knowledge goes no farther, if the reality of things is not cognizable, then the sophists are right in teaching that this is a mere world of shadows, a delusion, or in Hindoo phrase, *maya*.

The classic passage in which Plato presents the relation of the human soul to the noumenal world is the *myth* in the Phædrus. As one reads the passage it is impossible not to feel that it was suggested by the splendid religious procession which closed the Pan-Athenæan festival, and in which nearly the whole population of the city took part. It wound its way first through the finest streets of the city, and then up the steep ascent of the Acropolis, the horses struggling for a foothold as they went. That elevated site on the citadel, one thousand by five hundred in length, commanded the view of the busy city at the base of the citadel, of the plains that sloped outward and upward to the encircling mountain ranges, of spacious sea in the distance, while over all was spread the untroubled, deep blue sky of the Greek heavens—the view thus presenting to the worshiper's sight at once all the changing aspects of human life, and the most perfect type of heaven's calm repose. But the imagination of the poet-philosopher conjures up before us a sublimer procession, marshaled not by an Athenian Archon, but by the King of gods and men; and the city's ways through which they pass are the heavenly orbits of movement, until at last they ascend the celestial dome itself, and from its outer curve as from the summit of a loftier Acropolis gaze upward on that which is more splendid, more peaceful, more soothing, more full of nourishment for the best and highest nature of man, than even the calm deep beauty of the Athenian sky.

The Socrates of the dialogue first likens the soul to "a winged team and their charioteer. In the case of the gods both horses and charioteer are all good and of good breed; those of the rest are mixed. And first of all, our charioteer drives a pair; in the next place, the one is good and noble in itself and by breed, while the

other is the opposite in both regards. And so the management of the chariot must needs be difficult and harassing. Just how the living being which is immortal is distinguished from that which is mortal, I must endeavor to tell you. All that is soul has the charge of that which is soulless, and traverses the whole heaven, appearing now in one form, now in another. When perfect and possessed of wings, she moves in mid air and controls the whole world (*kosmos*). But if she lose her feathers, she is borne hither and thither until she lays hold of something that is fixed and solid, and there making her home, and taking to herself an earthly body, which seems to be self-moved by reason of the force she furnishes, soul and body are fastened together and come to be called mortal. . . . But let us take up the reason of that stripping off the feathers by which the soul is brought to its fall. It is as follows: The power of the wing is designed to bear up that which is heavy through mid air, where the race of the gods dwells, and of all that is corporeal this has most in common with the divine; for the divine is the beautiful, the wise, the good, and every thing of the sort, and by these the wing of the soul is nourished and groweth especially. But by what is base and evil, and whatever else is the opposite of divine, it wastes away and is destroyed.

“Now Zeus, the great Leader in heaven, leads the van, driving a winged chariot, the marshal and guardian of all. And he is followed by the host of the gods and demons marshaled in eleven bands, for Hestia alone remaineth in the house of the gods, and those of the rest who belong to the number of The Twelve [Great Gods] lead on as captains of their companies, each in the order to which he has been assigned. Now there are within heaven many and blessed views and ways of passage in which the race of the happy gods pass to and fro, each of them doing his own work, and whoever can and will follows, for envy stands aloof from the choir of the gods.

“But whenever they go to banquet and to feast, then they proceed all together up towards the lofty vault of heaven. Now the chariots of the gods being well balanced and obedient to the rein, proceed easily, but the rest with difficulty. For the horse that partakes of evil slips downward, sinking and gravitating towards the earth, if he has not been properly broken in by the charioteer. Then it is that toil and extremest conflict press hard upon the soul. But those souls which are called immortal, when they reach the

summit, go forth and stand upon the back [the convex] of the heaven, and as they stand the revolution [of the sphere] carries them around with it, and they behold the things which are outside of the heaven.

“Now the place which is above the heaven no earthly poet has ever praised as it deserves, nor ever will; but it is thus. For I must dare to tell the truth, especially when I am talking about Truth. The colorless, formless and intangible Being which *is* Being, is visible only to the Reason (*nous*), which is the governor of the soul. Round about this [pure Being] is located the true sort of knowledge. Since then the intelligence of God—like that of every soul in so far as it is to receive what best befits it—is nourished on Reason and pure Knowledge, in beholding at last the Being it loves it, and in contemplating the Truth is nourished and gladdened, until the revolution [of the sphere] brings it round again to its starting place. And in this circuit it beholds Righteousness itself, beholds Temperance itself, beholds Knowledge—not that which has origin, nor that which differs in the different things to which we ascribe existence, but Knowledge which has a real being in that which is Being indeed. And other equally real existences she beholds and is feasted upon, and then re-entering the heaven she returns homeward. And when she has come thither, the charioteer, staying his horses at their stall, foddors them with ambrosia, and waters them with nectar. And this is the life of the gods.

“But as to the other souls, that which best follows God and is most like Him lifts up the head of the charioteer to the place outside the heaven, and is carried around the revolution with Him, disturbed indeed by the horses, and beholding the things which have true being with difficulty. Another lifts up the head at times, at others draws it in because compelled by the horses, and therefore beholds some and not others; the rest one and all desire and follow that which is above, but not being able to reach it, they are carried around submerged beneath the heaven, they tread and fall upon each other, each trying to get precedence of the other. Noise, and rivalry, and sweat to the last degree ensue, whereupon many are maimed in their wings by the fault of their charioteers. And all of them, after long toil, depart uninitiated into the vision of Being, and when they have gone are fed on the food of opinion. Whence then that great desire of theirs to behold the plain of Truth?

Is it not because the pasturage which befits what is best in the soul happens to grow in that meadow, and the growth of the wing by which the soul soars, is nourished with this?

“And this is this law of Adrastea [or Nemesis, the inevitable Order]: whatsoever soul has shared with God, in beholding any of those things that are true and real, is unharmed until the next period, and if she is always able to do this, is always unhurt. But should it happen that she cannot follow on to know, and by any mischance grows heavy through being filled with forgetfulness and faultiness, and through that heaviness loses her feathers and falls to the earth, then the law is that this soul shall not take upon her the nature of any beast in the first generation [or birth], but the soul that has seen most shall come to the birth of a man who is to be a philosopher, or an artist, or of some musician and lover; and the second [to the birth] of a lawful king, or warrior and ruler; the third of a statesman, or of some financier, or man of affairs; the fourth of a toil-loving gymnast, or of some one who is to be a physician; the fifth the life of a soothsayer, or some hierophantic function; to the sixth the life of a poet, or of some other sort of mimic, will be suitable; to the seventh that of an artizan or a husbandman; to the eighth that of a sophist or a demagogue; to the ninth, that of a tyrant. And whoever in any of these positions conducts himself rightly, receives a better lot; but whoever behaves otherwise, a worse.

“No soul arrives at that place from whence it came for ten thousand years, except it be that one who is honestly a philosopher, or a lover who has a share of philosophy. These in the third period of a thousand years, if thrice successively they have chosen this manner of life, and have thus received their wings, depart thither in the three thousandth year. But the rest, when they have finished the first life assigned them, undergo a judgment. And after the judgment, some of them proceed to the prison-house under the earth and receive punishment; and the others, having been raised by the judgment to a place in the heaven, pass their time in a manner worthy of the life they lived in human form.

“And when, in the thousandth year, they come to a casting of lots and a choice of their second life, each chooses whichever she wishes. And thereupon a human soul comes to the life of a beast; and one that has been a man, becomes from a beast a man again.

“But that soul which has never beheld the Truth, will never come

into this [human] form; the understanding of general truth collected from many perceptions into unity by rational thought is an essential of humanity. And this is the recollection of those things which our soul has once seen when accompanying God, and disdaining those things which we now speak of as being, and lifting up our heads to behold true Being. Wherefore it is just that the intelligence of the philosopher alone receives wings; for he is ever with all his might busied with the recollections of these things, occupation with which makes God what he is. And only the man who makes right use of such recollections, and thus continually attains initiation into perfect mysteries, becomes truly perfect; and for giving up human pursuits and becoming enwrapt in the divine, he is esteemed by the many as beside himself, for they fail to see that he is God-possessed.

“ . . . . . As has been said, every human soul is by nature a beholder of Being, else she would not have entered into this form of life. But it is not easy for every soul to awaken those recollections which she brought from thence, or they may then have had but scant vision of what was there, or since they have fallen thence they may have had the mischance to be diverted by bad associations to that which is unjust, and to fall into forgetfulness of the holy things which they then beheld. A few are left, who retain enough of the recollection; but whenever they behold any resemblance of what is there, they are struck with astonishment, and are no longer masters of themselves; but they know not why they are thus affected, because they have no adequate perception. But there is no brilliancy in those earthly likenesses of justice and temperance, and whatever else is precious to the soul; for through obscure instruments, it is given with difficulty and to but few to draw near to those images and behold what manner of thing it is that they represent. But then it was permitted to behold Beauty in all its splendor, when along with the blessed chorus, we [philosophers] following Zeus, others some other of the gods, we shared in the beatific vision and contemplation, and were initiated into mysteries which it is just to call the most perfect of all, and whose rapturous feast we kept in innocence, and while still inexpert of those evils which were awaiting us in a time still future. And we beheld visions innocent and simple and peaceful and happy, as if spectators at the mysteries, in pure array, ourselves pure, and without a sign upon us of this which we now carry about with us and call a body, and are bound

thereto like an oyster to his shell. Let us indulge in these memories, whereby we are led to speak the longer from desire of the things which we then saw."

Such is the great "myth" of the Phædrus. As we compare its teachings with those of Plato's predecessors, it is impossible to avoid seeing that he is not original in what he says of the nature of the judgment upon mankind, and their subsequent return to human bodies, or to the bodies of other animals. The coincidence of his statements with those of the Oriental religions, points to a common source. The Egyptian doctrine of metempsychosis, of which we possess so meagre an account, and upon which Plato as well as Pythagoras evidently drew, must have been in all its main features identical with those of India, whether that resemblance was the result of some influence exerted by the priests of either nation upon the thoughts of the other, or whether both were indebted to some older but now vanished source.

It is certain, if we may believe Plato himself, that his view of metempsychosis was no private opinion of his own. In the last book of the Republic he quotes the narrative given by the Pamphylian Er, who had been killed in battle, but came to life again on his funeral pyre, and declared that he was sent back to earth to disclose the nature of that future upon which the dead enter. He found things much as Plato's myth describes them, the good and the wicked who had just died being assigned their places in heaven and under the earth respectively, and a number of souls, whose thousand years of one or the other experience had expired, were made to cast lots for a choice out of a large number of human and animal lives, and, after making their choice in the order determined by lot, were made to drink of the River of Indifference and to traverse the Plain of Forgetfulness, before proceeding to the world again. The importance of this story is in the fact that all such visions simply reflect the opinions already held by those who experience them. Protestant visionaries always discover a Protestant heaven and hell; Catholic ecstasies always supplement it with a purgatory. The American clairvoyant or medium talks broad and loose theology; the English spirits are orthodox and evangelical. Swedenborg found the gardens of heaven laid out in the Dutch fashion, which was that of his time. Er's visions reflect as in a mirror Er's notions, which were doubtless those of his time. When, therefore, a vast body of Greeks

were expelled from the eastern provinces of the Alexandrian Empire by the rise of the Parthians, and made their way into India, they well might accommodate themselves to the predominant creed of the Hindoos—the Buddhism which got the upper hand under the low-caste dynasty founded at Magadha by Chandragupta<sup>2</sup>. It was his grandson Asoka who embraced the less exclusive and more democratic creed of Sakya-Muni. As the final revolt of the Parthians occurred 210 B. C., it was either he or some of his more immediate successors who welcomed the Greeks, and persuaded them to change their creed for a kindred one. As Buddhists they ruled for centuries in Orissa, and colonized the the Island of Java, to which they gave their name.

The original element in Plato's myth is his super-celestial plain, the dwelling-place of the substantial ideas, the essential Truth, the absolute Knowledge, in which the pure Being holds the supreme place our theology assigns to God, but the polytheist would not ascribe to his gods. These mighty beings, whose existence was assured by venerable tradition, had above and beyond them One whose nature was not disclosed to men; personality, intelligence, character, even life, were audacious assertions in regard to this One. The Highest might be the abstract, the impersonal, but must be the most Real and the centre, nay the locality, of those Realities, of which the so-called realities of earth were but dim shadows. And the blessedness of all rational beings, gods as well as men, must be in feasting upon that vision. The difference between the gods and lower forms of life must be in the freedom of the former from the antagonism of the desires to the reason (*nous*), and to its faithful servant, the passionate principle.<sup>3</sup> But did our author seriously and deliberately deny the vision of these Realities to a man here and now, embodied in the flesh, and did he mean that the only knowledge we have of them is that of recollection? Some of his best interpreters say that the lesson of the *Phaedrus* is "that only he who governs himself, who has his lower nature in subjection, can be fit for the highest exercise of his faculties, for the contemplation

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<sup>2</sup> Called by the Greeks Sandracotta. He was the contemporary of Seleucus Nicator (*circ.* 354–279 B.C.) who, in the great scramble after Alexander's death, founded the dynasty and the kingdom of the Seleucidæ. Asoka therefore would belong to the latter part of the third century before Christ,—the period of Hannibal and Scipio.

<sup>3</sup> Reason (*nous*) is the charioteer of the soul; passion (*thumos*) the noble horse; and desire (*epithumia*) the base one.

of that which indeed is." Hegel also attributes the whole doctrine that knowledge is reminiscence to a desire to escape from the common notion of learning the truth, which is that of receiving into the mind an alien substance, a process of mechanically filling up an empty space with matters which are alien and indifferent to that space. Such a notion he pronounces contradictory to the Platonic conception of the *Nous*, in which that which is or is to be the object of its activity must be already present, and at most but needs to be brought forth into consciousness. He thinks therefore that reminiscence was an unhappy expression, as it suggested that these truths, which are always present to the reason, and have their roots in it, had been received at some point of time in its existence. But this, we hold with Prof. Hoffman of Wurtzburg, is confounding the conceptions of general truth which Plato regarded as universally present in men's minds in this present life, with the ideas of which these conceptions are mere copies in thought, and faint copies at that. Others, such as Mr. Taylor (T. C. D.) in his *Essay on the Platonic Idea*, maintain that Plato, anticipating Kant, means by his pre-existence a purely super- and extra-temporal, or eternal existence, in regard to which earlier and later are conceptions of no validity; but that in the myth, and in the numerous passages which describe knowledge as reminiscence, he speaks in the only language in which he could have conveyed any notion of his meaning—a language necessarily imperfect and likely to mislead.

Now if Plato was not in earnest with the pictorial representation which conveys his theory of Knowledge, if he was there expressing himself in mere parables and resemblances, we can have no certainty that he was in earnest as regards his theory of pre-existence. There is far more evidence for the former than for the latter; for the reminiscence theory is again and again reiterated in sober scientific discussion, while the notion of pre-existence fully presents itself only in the myths, whose proper nature and position in the range of Plato's teaching are altogether uncertain. As F. C. Baur says, the myth in the *Phaedrus* finds its best parallel in the third chapter of Genesis, which describes the fall of Adam and Eve.<sup>4</sup> Whether either or both of them are meant to state historical

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<sup>4</sup>Baur well describes the essential and philosophical difference between the two representations: "It is clear that the fundamental conception of the Platonic myth is not so much a fall into sin, as a falling away of souls. The cause of this, even though



fact, or merely to present general truth in the form of parable, depends upon the intention of their authors, and every one will construe that for himself.

II. A Jew of Alexandria, who was about twenty-five years old at the birth of our Saviour, but who in his writings has left no trace of any acquaintance with the most important events in the world's history, although they happened in his time, has given us a version of the Platonic philosophy adapted to the religious beliefs of his own people. Philo was a man of no ordinary ability, and only the unhappy direction of his literary efforts, in allegorizing the Old Testament Scriptures into a theory resembling the Platonic philosophy, has prevented him from obtaining a far greater name in literature. He thought those old stories of Hebrew tribes, tents and flocks, wars and wanderings, too vulgar and commonplace to be regarded as divine words. He turned the story into such deft Platonic allegories that the world said "Either Moses platonizes or Plato mosaizes," and went its way.

Philo's theory of pre-existence, which chiefly concerns us here, is much the same as his master Plato's. He had to elect between the Mosaic and the Platonic account of the Fall as to which expressed the essential truth, and, though a Jew, decided for Plato. The chief difference from Plato is in the character he ascribes to that ideal world—the sum of the ideas—calling it the Logos, the Word or Reason of God, and also the Wisdom of God, the Spirit of God. These divine ideas differ from those of Plato, in being forces which realize themselves with plastic energy in the world of matter. At times Philo personifies them as "angels;" at times he personifies the Logos which is their totality, and speaks of the Logos as sustaining a definite personal relation to God, and even as his first born son, and as a second God (but infinitely distinct from the Father), and as creating the world. Here he presents the steps of transition from his own to the Christian idea of the Logos. Some

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it be their own fault, is yet in its last resolution a deficiency in intellectual force, the inability implanted in them by nature to elevate themselves to that which truly is. Although the souls are all originally equal and follow the same impulse, yet a very great difference is discovered as soon as their intellectual power attains its development. While Christianity places the origin of the fall in a self-determination of the will by which man turns away from the Divine, and renounces the subordination of his will to that of God, Platonism traces this falling away from the incapacity to know the Divine." *Das Christliche des Platonismus, oder Socrates und Christus*; Tübingen, 1837.

of his interpreters would fain identify his doctrine with that of John, declaring the Apostle a mere copyist. But a close study shows a very marked divergence, as well as a marked coincidence, in their views. As has well been said, to study the force of New Testament words in the writings of those who had previously used them, is like trying to ascertain the character of the wine of Cana from a chemical investigation of the water furnished by its wells.

Men are fallen spirits attracted by material desires, and thus brought into this prison house of a material body, and yet of kin to God and the Logos on the spiritual side of their nature. The philosophic life is the means by which they must escape with aid of the Logos, from the eternal reprobation of which they are in danger, and effect their return to the blessed fellowship from which they have fallen. In this view of the matter, the Hebraistic tendency of Philo comes into view, but not in his speaking of this regeneration as a purification from matter, and a voluntary renunciation of all earthly ties and relationships. Philo renounced much of what was best and greatest in the creed of his fathers, in order to refine and etherialize it.

Philo was not the first who undertook to fuse Greek philosophy and Jewish religion. The Septuagint translation, made in the third century before Christ, gives evidence of such a purpose in its suppressing the strong anthropomorphic expressions by which the Old Testament described God's actions and attributes. Aristobulus, a Jewish-Greek poet of the second century, defends the Sabbath on Pythagorean principles and speaks of the divine Power much as Philo does of the Logos. Similar phrases are found in Aristeas and in the Second Book of the Maccabees. But the apocryphal *Wisdom of Solomon*, which is also probably older than Philo, teaches the eternity of matter, the pre-existence of souls, and of wisdom as the reflected splendor of the divine light, the mirror of the divine efficiency, and in similar phrases. Pythagoreanism seem to have been blended with Judaism in the beliefs and practices of the Jewish Therapeutæ of Egypt, and their brethren the Essenes of Palestine.

How soon the Jewish Cabbala originated, and from what source its doctrines are derived, is a matter of disputes interminable. The theory which assigns it to a date before or immediately after the beginning of the Christian era is now generally rejected, and it is believed that its two great text books, the Sohar and the Sepher

Jezirah, were composed during the middle ages. At the same time it seems highly probable, if not quite certain, that many of its teachings had been handed down by tradition from much earlier times, and that parts are due to the Jewish philosophers of Alexandria and others to the Neoplatonists and the Gnostic heretics who at a somewhat later date taught in the same city. One of these doctrines is that of pre-existence, not in the speculative form presented by Philo, but in one much simpler and more matter-of-fact in its character. We have the high authority of Josephus for ascribing it to the Pharisees. It is the belief that human spirits are again and again born into the world, after long intervals, and in entire forgetfulness of their previous experiences in life. This is not a curse, as with the Oriental religions, but a blessing; it is the process by which elect spirits are purified by repeated probations. This belief already existed among the Jews in the time of Christ. "Which did sin?" his disciples asked him, "this man or his parents, that he was born blind?" "Whom say men that I am?" he asked his disciples; and they answered: "Some say Elijah; others Jeremiah; others, one of the old prophets." We shall see this very form of the theory commending itself to Lessing, Pierre Leroux, and to other less notable thinkers of our own times.

III. Returning from Hebrew to Hellenic ground, we find pre-existence taught in its Platonic form by the Neoplatonist philosophers so-called. This group of thinkers embraced Ammonius Saccas (175-250 A. D.), Plotinus (204-269), Porphyry (232-304), Iamblichus (*ob. circ.* 330), Proclus (411-485) and Damascius (*fl.* 527-533), besides others of lesser note. Its activities extended over quite three centuries of the Christian era, and by reason of the appropriation of its ideas by Christian theologians, (beginning with Origen of Alexandria,) it has never ceased to influence the thinking of both Eastern and Western Christendom. It stands in especially close relation to Christian, Jewish and even Mohammedan mysticism, while in the philosophy of Mr. Emerson we have substantially a revival of that of Plotinus, without its distinctly Pagan features or the modifications by which the theologians have adapted it to Christianity. And Plotinus is by far the best writer of the school, as he is also the oldest whose works are preserved. "Plotinus," says Coleridge, "was a man of wonderful ability, and some of the sublimest passages I ever read are in his works."

On the other hand, Neoplatonism can claim but little originality

for any of the ideas which it has helped to popularize and disseminate. It was thoroughly eclectic, for it gathered up into one all the various doctrines of previous teachers (Pythagoras, Plato, the Hellenic mythology, the Oriental religions, and even Aristotle) which it felt to be in harmony with its favorite type of thought, *i. e.* which would enable it to construct a philosophical theology which might make headway against the Christian religion, by satisfying those wants and desires of the human spirit to which the Christian revelation especially addresses itself. Did Christianity disclose to men the reality and the nearness of a spiritual world? The Neoplatonists would do no less for them. Did the church offer to men a reconciliation with God by expiation of sin, and a restoration of communion between the human and the divine? They also would show men the path by which to return to the Source. But there was one very striking difference between the two beliefs. Christianity addressed itself to all alike—to the slave as well as his master—to the beggar at the gate as well as to the philosopher in his chair. Neoplatonism would seek only the enlightened, the cultivated, the refined. It passed by the vulgar with uplifted nose. It pledged itself to disclose the path to glory and immortality, but only to the elect few, the lofty-minded and the enlightened, while the great mass being mere animal men, would perish as do the animals.

In common with some of the Oriental religions, Neoplatonism accepts a principle, which distinguishes it at once from Christianity and from all the earlier Greek philosophies,—the principle of *emanation*, which took the place of the idea of *creation*. Thus Plotinus asserted that the highest principle of all is not intelligence (*nous*) but *unity*,—a unity devoid of intelligence because above it, and bringing forth all things by a natural necessity, without the exercise of volition or intelligence. From this Unity proceedeth Intelligence, which, however, exists only in the duality of itself and its object, and, therefore, cannot be the highest principle. In it is embraced the world of substantial ideas. From the *nous* proceeds in like manner the multiplicity of souls which complete the compass of the intelligible world, and of which the world-soul is the highest. Such a system is monistic, and most easily bears a pantheistic interpretation. But its expositors, especially Plotinus, spared no pains to avoid a pantheistic construction of their views, and to assert an individuality in that which had emanated, which

was qualitatively quite distinct from that of the Source. The Source is indivisible and immovable; the souls are manifold and movable, and by virtue of this last property they beget the material and sensible world. Matter has no real being; it is the non-existent, the *maya* of the universe, the necessary boundary-line between being and not being. The souls who have descended into it did so from pride and the desire of a false independence. They now more or less forget their first estate and the Father whom they have deserted. Some are buried in sensual delight; others are capable of civil morality, but no more; men of a divine nature are capable of rising once more to the communion from which they fell. It is their mission, not to regenerate or enlighten the dormant mass of humanity, but, in the dying words of Plotinus, "to bring the divine within them into harmony with that which is divine in the universe." But in justice to them it must be said that they saw no necessity for the redemption of the two lower orders of mankind; each had already attained the highest position in the scale of being of which it was capable, and one might as well mourn for the tree that it was not an ox, or for the ox that it had not attained humanity, as for these lower orders of human life that they were not spiritually-minded philosophers.

We have followed Plotinus chiefly in this slight sketch, omitting everything but what was needed to explain his view of the past and the future of human souls. But the theories of the school underwent very great modifications in the hands of its later masters. Theurgy and magic, fascination and mystification, visions and ecstasies, clairvoyance and table-rapping, animal magnetism and ghost-seeing, and all "the night side of nature" as known to that age, were taken up into its teaching and its practice. It had no choice but to resort to them; its position as the pagan rival of the Christian Church forced it to resort to every fancied channel of communication with the spiritual world. Christianity put itself forward as able to show to men the avenue of access which had been opened from above; Neoplatonism must find rival avenues from below. The best men of the school—notably Plotinus and his biographer, Iamblichus—resisted the earliest of these steps downward, but in vain; human nature was too strong for them.

IV. There existed in Alexandria, earlier even than the school of the Neoplatonists, a school of thinkers called the Gnostics, with whom Plotinus and his friends had much in common and might

fairly have been expected to sympathize. They also were eclectics, who sought to furnish the new Christian church with a philosophical version and completion of its own creed; and the masters of the school in Egypt had resort to Plato as well as to the Oriental religions. They too were seeking to construct a ladder from earth to heaven by theories which ended in dubious practices, and they too denied to the Founder of the Church that unique place as the Head of humanity which ordinary Christians claimed for him, and coördinated him with a vast number of other beings who stood midway between man and God, but were neither. Yet they seem to have excited more direct antagonism in the mind of Plotinus than did the Church, and it is the teaching of the brightest, most philosophic, most Platonic of the Gnostics, the doctrines of Valentinus, to whose refutation he has devoted a whole book of his *Enneads*. His first objection is that the multiplication of Principles in the system is unphilosophical; but Valentinus begins with Depth as Plotinus with the One; whence in the teachings of both emanate Reason (*nous*), and from this again the multiplicity called by the one the Soul and by the other Wisdom. Better taken is the exception to that contempt for the world which the Gnostics borrowed from Parsiism; in the system of Valentinus it is the creation of Wisdom (the Platonic Soul) after her fall from her first estate, and the body is a source of evil and degradation. To Plotinus the world of matter is indeed the least divine part of the universe, as farthest removed from the divine centre, the One, the Good; but it is good after its kind, and worthy of no such contempt. It is indeed the emanation, not the creation, of the soul, which neither has fallen nor can fall. Man's relation to it is ideally a perverted one, but in reality the best possible for each, and the only redemption is the emancipation by death of those who by their virtues have attained immortality. He thus emphasizes for us once more the contrast between Platonism and Christianity, between a fall into sin in the exercise of free choice and the rejection of God, and a descent into a lower stage of existence through an innate weakness of intellectual powers.

This Gnostic theory of the creation of the world by some fallen spirit or principle, and the enticement of men's spirits into the slavery of the material body by the world's creator, involved the pre-existence of men in a higher stage, but denied their descent by individual fall. They are here by a deceit; the evils and sins of life

have their seat in the material prison-house of the spirit. Virtue they at first made consist in the severest asceticism, and then, on the principle that "extremes meet," they latterly ran out into the wildest antinomianism. Their influence died out before the spread of Manicheism, the more logical and even extreme form of Parseeism in union with Christian and also with Buddhist ideas. In this simple faith, the world is the creation, not of a fallen spirit but of the primary and uncreated evil Principle, while the spirit of man is the creation of God, and the conflict between flesh and spirit is that between the power of light and the power of darkness. We call this an offshoot of the extreme form of Parseeism; for Mani belongs to the discredited sect of the Magusaeans, who, in opposition to the great body of the Parsees, denied the existence of any highest power of good, any Zeraune Akerene above both Ormuzd and Ahriman. The milder and more orthodox form of Parseeism finds its Christian adherents in the sect of the Euchytists.

The Gnostic and Manichean notions of pre-existence perpetuated themselves in some of the mediæval sects of that stamp, but not in all. The Bogomiles and Paulicians for instance, though ascribing the creation of the world to Satan-El, represent him as cheating God into the creation of the human race. On the other hand it was held by the Priscillianists in Spain (fourth to sixth century,) seven of whom were put to death A. D. 385, the first infliction of the death penalty for heresy by any Christian magistrate or at the instance of any Christian Church. It was also a tenet of the Cathari, that strangely organized sect which spread from a Slavonic centre in the Herzegovina through Northern Italy, Southern France and parts of Germany. It was against them that the Albigensian Crusade of the elder De Montfort was directed, and the inquisition devised by St. Dominic. Descended through Slavonic lines of tradition from the old Manicheans, they perpetuated in secret an organized hierarchy, the exact counterpart of that of the Church, and seem, like all other sects of this type, to have vibrated between extreme ascetic rigor and the wildest Antinomianism. Traces and fragments of them long survived the violent measures adopted in the West for their extermination; and in the East most of them in Herzegovina became Moslems at the Turkish invasion out of hatred for the persecuting Greek church and Empire. Similar sects—the theological descendants of the old Gnostics and Manicheans—still exist on Slavonic soil, especially among the Russian

dissenters. The Skoptsi or Mutilators, the Morelschiki or Fire Baptists and the Chlistovchini or Scourgers all seem from their practices to have perpetuated that fusion of Parseism with Christianity which originated in Syria and Egypt in the first centuries of Christianity. But of their more specific opinions we know very little.

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### CUSTER'S LAST BATTLE.

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IN his *Complete Life of Gen. George A. Custer*—a work not less remarkable for the style in which it is written than for the many and glaring inaccuracies with which it abounds—Captain Frederick Whittaker, the biographer, sums up the result of “Custer's last battle” in the two following conclusions:

1. *Had Reno fought as Custer fought, and had Benteen obeyed Custer's orders, the Battle of the Little Big Horn might have proved Custer's last and greatest Indian victory.*
2. *Had not President Grant, moved by private revenge, displaced Custer from the command of the Fort Lincoln column, Custer would be alive to-day, and the Indian war settled.*

Whittaker concludes: “The Dakota column would have been confided to the best Indian-fighter of the army; Reno and Benteen would never have dreamed of disobeying their chief had they not known he was out of favor at court; Custer and Gibbon would have coöperated, as men familiar with Indian warfare; and cross-purposes would have been avoided.”

Unfortunately for himself and his readers, Capt. Whittaker is not qualified to express an intelligent or impartial opinion upon the subject of the last battle, for two very good reasons: First, he had to rely upon the conflicting and unreliable newspaper reports published at the time, and upon several equally conflicting letters from officers, for his information upon the subject; and, however conscientiously he might endeavor so to do, it is difficult, nay, impossible, for one far removed from the scene of action, unacquainted with the peculiarities of Indian warfare, and ignorant of the many minor facts and incidents having a bearing upon the subject, which cannot be reduced to writing, but a knowledge of which is neces-



sary to a clear understanding of the whole—it is impossible, under these circumstances, for such an one to form a just conclusion upon the subject. Second, he is prejudiced in favor of his hero, in his self-appointed task of apotheosizing him at the expense of every one else, living and dead, and therefore can see no wrong in any thing he did, and no right in anything any one else did if it conflicted with his hero's interest.

To properly answer Capt. Whittaker's "conclusions," it will be necessary to answer the several statements and charges he makes in detail. To render the discussion of the subject more intelligible to the reader, the following order to Gen. Custer and letter to Lieut.-Gen. Sheridan are given:

CAMP AT THE MOUTH OF ROSEBUD RIVER, }  
June 22, 1876. }

*Lieut. Col. Custer, 7th Cavalry:*

COLONEL: The Brigadier-General Commanding directs that as soon as your regiment can be made ready for the march, you will proceed up the Rosebud in pursuit of the Indians whose trail was discovered by Major Reno a few days since. It is, of course, impossible to give any definite instructions in regard to this movement, and, were it not impossible to do so, the Department Commander places too much confidence in your zeal, energy and ability, to wish to impose upon you precise orders which might hamper your action when nearly in contact with the enemy. He will, however, indicate to you his own views of what your action should be, and he desires that you should conform to them unless you shall see sufficient reason for departing from them. He thinks that you should proceed up the Rosebud until you ascertain definitely the direction in which the trail above spoken of leads. Should it be found, as it appears to be almost certain that it will be found, to turn towards the Little Big Horn, he thinks that you should still proceed southward, perhaps, as far as the head-waters of the Tongue, and then turn toward the Little Big Horn, feeling constantly, however, to your left, so as to preclude the possibility of the escape of the Indians to the south or south-east by passing around your left flank. The column of Col. Gibbon is now in motion for the mouth of the Big Horn. As soon as it reaches that point, it will cross the Yellowstone and move up at least as far as the parks of the Big and Little Big Horn. Of course its future movements must be controlled by circumstances as they arise; but it is hoped that the Indians, if upon the Little Big Horn, may be so nearly enclosed by two columns that their escape will be impossible. The Department Commander desires that on your way up the Rosebud, you should thoroughly examine the upper part of Tulloch's Creek, and that you should endeavor to send a scout through to Col. Gibbon's

column with information of the result of your examination. The lower part of this creek will be examined by a detachment from Col. Gibbon's command. The supply steamer will be pushed up the Big Horn as far as the forks of the river are found to be navigable for that space, and the Department Commander, who will accompany the column of Col. Gibbon, desires you to report to him there not later than the expiration of the time for which your troops are rationed, unless in the mean time you receive further orders.

Respectfully, etc.,

E. W. SMITH, Captain 18th Infantry.

Acting Assistant Adjutant-General.

CAMP BIG HORN, July 2.

I think I owe it to myself to put you more fully in possession of the facts of the late operations. While at the mouth of the Rosebud I submitted my plan to General Gibbon and General Custer. It was that Custer, with his whole regiment, should move up the Rosebud till he should meet a trail Reno had discovered a few days before, but that he should not follow it directly to the Little Big Horn; that he should send scouts over it and keep his main force further toward the south, so as to prevent the Indians from slipping in between himself and the mountains. He was also to examine the head waters of the Tulloch's Creek, as he passed it, and send me word of what he found there. A scout was furnished him for the purpose of crossing the country to me. We calculated it would take Gibbon's column until the 26th to reach the mouth of the Little Big Horn, and that the wide sweep I had proposed Custer should make would require so much time that Gibbon would be able to co-operate with him in attacking any Indians that might be found on the stream. I asked Custer how long his marches would be. He said they would be at the rate of about thirty miles a day. Measurements were made and calculations based on that rate of progress. I talked with him about his strength, and at one time suggested that perhaps it would be well for me to take Gibbon's cavalry and go with him. To the latter suggestion he replied: that, without reference to the command, he would prefer his own regiment alone. As a homogeneous body, as much could be done with it as with the two combined. He expressed the utmost confidence that he had all the force that he could need, and I shared his confidence. The plan adopted was the only one which promised to bring the infantry into action, and I desired to make sure of things by getting up every available man. I offered Custer the battery of Gatling guns, but he declined it, saying that it might embarrass him, and that he was strong enough without it.

The movements proposed by General Gibbon's column were carried out to the letter, and had the attack been deferred until it was up, I cannot doubt that we should have been successful. The

Indians had evidently prepared themselves for a stand; but as I learned from Captain Benteen that on the 22d the cavalry marched twelve miles; on the 23d, twenty-five miles; from 5 A. M. till 8 P. M. of the 24th, forty-five miles, and then after night ten miles further, resting, but without unsaddling, twenty-three miles, to the battle-field. The proposed route was not taken, but as soon as the trail was struck it was followed. I cannot learn that any examination of Tulloch's Creek was made. I do not tell you this to cast any reflections upon Custer, for whatever errors he may have committed, Custer's action is unexplainable in the case.

A. H. TERRY, Brigadier-General.

Referring to the foregoing order, Capt. Whittaker says; "Nothing, however, was said in the order about rates of marching, and Custer was left entirely to his own discretion as to what he should do if he struck the enemy first. The only limit placed to his time in the order is the period for which his troops are rationed. That period was fifteen days." No, there was no time named in the order, but there was a very distinct and definite understanding between Gens. Terry, Gibbon and Custer—as stated in Gen. Terry's letter, as corroborated by many other officers cognizant of it, *and as afterwards expressed by Gen. Custer himself to some of his own officers*—that Gibbon would be at the mouth of the Little Big Horn River on the evening of June 26th; and the wide sweep around prescribed for Custer was for the double purpose of bringing him south of the Indians and to allow Gibbon time to reach the designated point at the time named and thus hem the Indians in between them in the valley of the Little Big Horn, whence escape would have been next to impossible. The clause about reporting at the end of the fifteen days was inserted merely to provide for the contingency of Custer not finding the Indians on the Little Big Horn, as anticipated, in which event he was left free from "precise orders which might hamper his actions when nearly in contact with the enemy." Whittaker thinks Custer's orders were "merely advisory and permissive," and therefore he could not be held responsible for any departure from them. Admitting for a moment that they were so in letter, they certainly were not so in spirit. It is not customary in time of war for a general commanding to map out a plan of campaign in the presence of the enemy, and then give his subordinates to understand that while he intends to carry out his part of the campaign strictly according to the plan agreed upon, they are at liberty to carry out their part or not, just as they think proper, and without any regard to the written orders given them. But were the

orders *merely* "advisory and permissory?" Gen. Terry "desires," (which in military life is equivalent to a peremptory order,) Gen. Custer to conform to his orders, "unless you shall see sufficient reason for departing from them." Such "sufficient reason" for a subordinate departing from the orders of his superior could only be some cause unforeseen and unprovided for by the orders, or the physical impossibility of carrying these orders out. Such was not the case with Custer. He was ordered to examine Tulloch's Creek on his way up the Rosebud. He did not do it nor attempt to do it. He was ordered, in case he found the trail turning off toward the Little Big Horn, to "still proceed southward," in order to get the Indians between him and Gibbon, and, *as distinctly understood between them*, to give Gibbon time to get within co-operating distance. He found that the trail turned off toward the Little Big Horn, as was anticipated and provided for by the order; but instead of proceeding still southward he continued following up the trail, in deliberate disobedience of his orders and in violation of the plan of operations previously agreed upon. His motive for this will be explained hereafter.

Whittaker next endeavors to prove that Custer did not exhaust his men and horses by forced marching, but actually kept within the limit of 30 miles a day as agreed upon. Hopelessly bewildered by the many and conflicting statements of distances given, he naturally seeks refuge behind the figures most favorable to his hero. The following figures may add to his bewilderment on the subject, but the reader can rely upon them as being the *least inaccurate* of the many figures given: Leaving camp at noon, Custer marched 12 miles on the 22d, 33 miles on the 23d, 35 miles on the 24th, from 5 a. m. to 1 p. m. and again from 4 to 9 p. m., 10 miles from 11 p. m. on the 24th to 2 a. m. on the 25th, 10 miles from 5 to 8 a. m., on the 25th, when the Indian village was discovered, and the regiment divided into battalions, and 23 miles from 8 a. m. to 1:30 p. m., when Reno's fight began in the valley. This makes a total of 123 miles in three days (not 90 according to Whittaker's "best accessible map"), 78 of which were made in the last 32 hours. If this was not exhausting to both men and horses, it is difficult to conceive what could be more so. Whittaker endeavors to make a very cheap point by saying that as Reno's battalion was able to take a fast trot to the ford, and then drive the Indians two and a half miles farther, the horses could not have been exhausted.

Captain Whittaker, having been in the cavalry service, ought to know, as the reader certainly knows, that the excitement of a chase or conflict will reanimate exhausted horses as well as men, which will explain what might otherwise remain an inexplicable phenomenon to Capt. Whittaker.

Whittaker next states that Custer's invariable method of attack on an enemy was the same which he adopted on the Big Horn, "an attack on front and flank at all events, both flanks and front if possible, from all sides at once if he had time to execute it \* \* \* so as to attack an enemy on several points at once." The very best plan possible!—but unfortunately he did *not* adopt it on the Big Horn. Where the division into battalions took place, already referred to, he sent Col. Benteen, commanding one battalion, off to the left, directing him to "send a well-mounted officer and five or six well-mounted men to ride ahead of the battalion rapidly, to proceed at an angle of about 45° to the left of the trail to a high line of bluffs about five miles away, and to pitch into anything he came across, sending back word if he found anything." Soon after leaving on this mission, Col. Benteen received two messages from Gen. Custer, one to the effect that "if he found nothing after reaching the first line of bluffs, to proceed to the next," and the other one to "look out if he could see anything in the valleys; if he found a valley with nothing in it, to go on to the next, but if he found anything notify" Custer. Soon after sending Benteen off in this way, Custer ordered Reno to "move forward at as rapid a gait as he thought prudent, and charge (the village in the valley beyond), afterward, and the whole outfit would support him." Having thus disposed of Benteen and Reno, Captain McDougal's company with the pack train being some miles in the rear, Custer then started off to the right with the remaining five companies, *leaving the other three small and widely separated parties to whatever fate might befall them.*

Reno, with his little band of one hundred and forty-five men, charged down the valley, was met by the main body of Indians, outnumbering him at least twenty to one, and finding that he was in danger of soon being completely surrounded, with no sign of the promised support near, he wisely retired into the adjacent wood. Whittaker says Reno did not support Custer! The Captain seems to be suffering from a very distressing case of mental obliquity. Will he please explain why Custer did not support Reno as he

promised to do, and as he was morally bound to do? If the Captain desires a specific answer to his query, it may be replied that Reno did not know where Custer was to support, and at that time he needed support himself much more than Custer did. So far from the attack being general and simultaneous, Reno made the attack first, and after his handful of men were compelled to retire, Custer attacked on the flank, and was met in his turn by the main body of Indians, who soon surrounded and destroyed him as they would have done to Reno, had he not been fortunate enough to retire when he did, Benteen being out of the fight altogether, carrying out his original orders. If this was not an "unfortunate division of the regiment into three commands," as Major Reno mildly characterizes it, and for which Whittaker takes him to task for saying so, the result merely belies the act, which, according to the impartial biographer, was an eminently wise one, and failed only through the "cowardice and disobedience" of Reno and Benteen.

Captain Whittaker next asks, "Where was Benteen all the time of this fight?" in his efforts to prove that the latter delayed on the road and disobeyed his orders. The best reply to this is to give a detailed account of Benteen's movements from the time he left the main body till he rejoined Reno.

Seeing nothing after reaching the first ridge, Col. Benteen continued on, according to orders, to the second ridge, marching eight miles on an oblique, over a painfully rough and hilly country. As there was nothing to be seen, and as the men and horses were very much exhausted, Benteen deemed it prudent to return to the main trail, which he did, returning at about the same angle at which he left it, striking it at a slow trot just in advance of the pack-train, which followed the main trail. After following the main trail a few miles, Benteen came to a small stream where he halted and watered his horses, the advance of the pack-train arriving at the stream just as the rear of the battalion was leaving it. A couple of miles farther on, a sergeant met Benteen with an order from Custer to the "commanding officer of the pack-train," to "hurry it up." The sergeant was sent back to Captain McDougal to deliver the order. About a mile beyond, the Orderly Trumpeter of the day was met with a note from Lieut. Cooke, Adjutant, saying: "Benteen, Come on. Big village. Be quick. Bring packs. P. S. Bring packs." As the pack train had already received the order to hurry up, Benteen did not think it necessary to send back a mile or

two to repeat the order, but continued on at a steady trot. About two miles farther on, the battalion came to the point where the road turned to the left, going into the valley, from which point they could see into the valley, in which masses of horsemen were apparently charging and recharging one another, while another mass was seen ascending the bluffs on the right. Halting for a few minutes to decide whether he should descend into the valley or go towards the party ascending the bluffs, the figures being indistinguishable, they soon discovered that the latter party was Reno's command, and Benteen immediately moved towards it, joining Reno at half-past two, just as the last of Reno's men reached the top of the bluff. Captain McDougal arrived with the pack-train half an hour afterwards.

It will thus be seen where Benteen was "all the time of the fight;" it will be seen that he did not disobey his orders, did not delay on the road, and did not take "two hours and a half to cover a distance of three miles," as Whittaker wildly charges. He had a longer and much more severe road to travel over than Reno or Custer, who followed the main trail, yet he joined Reno only one hour after the latter formed his skirmish line in the valley when he was checked by the Indians. It is self-evident, therefore, to any reasoning mind, that he could not have delayed on the road nor taken "two hours and a half to cover a distance of three miles,"—unless time was more elastic with him than with the others.

As to the charge that Benteen did not "hurry up" as ordered, it may be said that he kept up a steady trot all the way, which was as much as the jaded condition of his men and horses would permit. After the continuous march of the day and night before, and the severe strain of that long oblique march, his horses were almost completely exhausted, and it was simply impossible for them to take or continue a more rapid gait over the rough country they were then crossing.

The real cause of Captain Whittaker's errors upon the subject is the fact that he is compelled to rely for his information wholly upon a few disconnected and, apparently or really, contradictory letters and reports which, while clear enough or reconcilable enough to one acquainted with all the facts, only serve to mislead or confuse one who is not so acquainted. This is but too evident from the manner in which his article is written—a labored effort to make a connected and convincing narrative out of the most

meager and contradictory materials. The result is seen in the grave errors into which he has fallen; and as it is shown how he has erred in the more important facts, it might also be shown how he has erred in the less important ones; but it is sufficient for the present purpose to prove how unreliable is his narrative and how false are his conclusions.

If the foregoing corrections have not proven to the reader how unjust to Reno and Benteen is the assumption contained in Whittaker's "Conclusion" No. 1, the following comments may be more convincing. As for "Conclusion" No. 2, the writer hereof has only to say that he has no admiration whatever for ex-President Grant, and therefore has no personal object to serve in defending him other than a desire to render a simple act of justice to him, because, like all the others involved, he cannot impartially defend himself. The charge made by most of the newspapers at the time, (simply because they did not know the truth of the matter,) and reiterated by Capt. Whittaker, that Grant displaced Custer from the command of the Dakota column merely to satisfy his private revenge, has about as much foundation in fact as most of Whittaker's other charges,—and their foundation is an "airy nothing." There were other, and far more serious, causes for Grant's treatment of Custer—causes which few outside of the Army know anything about, and which, for the sake of the dead, it were charity to leave buried with him. The fact is that, leaving these causes out of consideration altogether, it was never seriously intended that Custer should go out *in command* of the Dakota column—Captain Whittaker and his supporters to the contrary notwithstanding. From the first indication of serious trouble with the Indians, Gen. Terry, commanding the Department of Dakota, announced his intention of taking the field personally, and merely reiterated this intention in his letter of May 6th, when he said: "Whether Lieut.-Col. Custer shall be permitted to *accompany* my column or not, I shall *go in command of it*." Capt. Whittaker quotes this letter, but very conveniently neglects to notice this most important sentence in it. The impropriety of the government putting a lieutenant-colonel in command of the operations against the Indians when there was a full colonel—Gibbon—already in the field, and the General commanding the Department going into it, should be so conclusive to the reader as to make further discussion of the subject unnecessary. Whittaker's after remark that *Custer alone was fit to com-*



*mand*, is a gratuitously impertinent expression of personal opinion as uncalled for as it was unjustified in fact.

Having thus answered Capt. Whittaker's principal statements, it may not be out of place, nor altogether uninteresting, to give a more comprehensive review of the incidents and results of the battle by one who, having had exceptional opportunities for learning not only the truth but the whole truth, and having no interest or prejudice to serve, can express himself fully and freely and without fear or favor, so that the public may know where the credit and responsibility belong.

Speaking first of Major Reno, it may be said that up to the time of his retirement into the wood after being checked by the Indians, his conduct was unexceptionable. Had he not halted just when he did, he would have plunged into the midst of the Indians awaiting him, and his handful of men have been annihilated in five minutes. Had he not retired his skirmish line when he did, he would in a few minutes have been surrounded in the open valley. It is true, he would have been able to cut his way into the wood finally, but not without some—perhaps great—loss. As it was, he got in with only one man wounded. But he committed an egregious blunder in leaving the wood after he got his men safely into it. The men and horses were there well sheltered on all sides by the heavy timber, the river running around the edge of the wood. 100 soldiers could have held that position an indefinite length of time against 5000 Indians. When his immunity from loss during the half hour he was in the wood is compared with the terrible loss he suffered on his disastrous retreat out of it, and afterwards in his unsheltered, unwatered position on the bluffs, it will be seen how serious his mistake was. It may be said that if he had remained in the wood neither Benteen nor McDougal could have reached him. But they could have reached him in the wood as well as they did on the bluffs. The comparatively few Indians remaining at that end of the valley (the main body having gone down the valley to meet Custer, who was then making his attack on the flank), could not have prevented the junction of the three; and with such a force, with an abundant supply of rations and ammunition, they had little to fear from an after siege. It may also be objected that if Reno had remained in the wood he would have had no chance whatever to co-operate with Custer on the bluffs,

little chance as he did have afterwards. This is very true; Reno in the wood could not, under the circumstances, assist Custer on the bluffs; but to this it may be replied that Reno did not know where Custer, Benteen or McDougal was. Custer had promised to support him with "the whole outfit," and then, without waiting to see the result of his charge, left him to his fate; so that Reno, apparently abandoned by all, had only to think of, and act for, the safety of his own immediate command. He had no more certainty of obtaining relief on the bluffs than in the valley, and for the reasons stated he should have remained where he was—in the wood.

The next question, and the most serious one of the whole fight, is: "After gaining the bluffs, should Reno have gone to Custer's relief?" A prime factor of this question is, "Could he have saved Custer or any of his men if he had done so?" To the question the writer answers, "He should have made the attempt." To the factor he answers, "No."

For half an hour or more after Reno reached the top of the bluffs, heavy firing was heard off to the west, where Custer was naturally supposed to be. Reno in his official report of the fight admits that—"We had heard firing in that direction, and knew it could only be Custer." Yet they remained standing on that bluff for one hour before moving forward, although they had heard firing which they knew indicated where Custer was! Great God! What soldiers! What men! 350 *males* standing idle on that bluff, listening to the volleys that told them their comrades were fighting for their lives against hopeless odds less than four miles away, and not make a move to see whether they could assist them or not! And herein was Major Reno criminally responsible. It was his duty, not less as a man than as a soldier, as soon as Benteen arrived, to move forward in the direction in which he heard the firing that told him "it could only be Custer," to see the latter's position, and, if possible, form a junction or co-operate with him. There were but a few Indians around Reno at the time, and nothing to oppose his advance; the wounded would have to accept the fate of war, and the pack-train, which was in no immediate danger, could be left behind, as Custer left it. Under the circumstances, therefore, it was Reno's imperative duty *to have made the attempt* to reach Custer—that is, he should have gone forward to see what position Custer was in, and if, after seeing his position and sur-

roundings, he thought he had any earthly chance of saving Custer or any of his men, he should have made the attempt at all hazards. It is true he did move forward at the end of the hour, when the dread tragedy was all over, but that does not relieve him from the grave responsibility of not having moved at the beginning of the hour.

But, leaving that question, and assuming that Reno had gone to see Custer's position as soon as he could have done so, it is now a generally admitted fact that he could not have saved Custer or any of his command, while it is most probable that if he had made the rash attempt to reach him it would only have been to share his fate. To explain: Reno's fight began in the valley at half-past one; Custer's fight began at two; Reno reached the top of the bluffs at half-past two; Custer's fight was over at three.<sup>1</sup> By the time Reno reached the top of the bluffs, Custer's fight was half over, and it is to be supposed one half the officers and men were killed; by the time he had given his men a few minutes much-needed rest, had become satisfied as to Custer's whereabouts, and, in company with Benteen's battalion, had marched three or four miles, it is probable that Custer's fight would have been practically over. Coming in thus at the close of the fight, Reno, had he been a mad-

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<sup>1</sup> That Custer's fight was over at three, as stated above, is corroborated by many circumstances. First, the heavy firing heard by Reno's command did not last more than half an hour, though light firing was heard some little time after that; second, when Captain Weir, who went forward with his company some distance in advance of Reno, arrived within sight of Custer's battle-ground, *the fight was all over*, only an occasional shot being heard, the Indians then being engaged in mutilating and plundering the dead; third, the Indians having thus "finished" Custer, immediately returned to "finish" Reno, driving back Weir's company and compelling Reno to return to his original position on the bluffs, fighting all the way back. Captain Whittaker quotes the Indian chief's (Kill Eagle's) statement that Custer's fight "was not finished till near sunset," to prove that Reno had sufficient time to assist Custer if he had made the attempt. The writer hereof saw Kill Eagle, and conversed with many Indians and half-breeds on the subject of that fight, and here expresses his belief, after receiving the most extravagant and contradictory statements from Indians upon all subjects, that Indians are not to be believed on oath, simply because they have no more definite idea of time, distance or numbers, than the most ignorant plodders around us—and the consistency and value of their testimony on important points are too generally known to require enlargement upon. Kill Eagle says that he and his people took advantage of the confusion of the fight to steal away from Sitting Bull's camp, so that his knowledge of the details of the fight is very limited. As a concluding proof that the fight did not last till near sunset, it is sufficient to point out the impossibility of Custer's small party, unprotected as they were, holding out very long against the overwhelming numbers surrounding them.

man, might have plunged in to the relief of the few survivors—and soon have been as completely surrounded as Custer was, and with no more chance of escape. Once in among those narrow ravines, hemmed in by hills covered by thousands of Indians, defence and escape were alike impossible; and it is not only probable but certain that if all twelve companies had gone in with Custer, they would have shared the fate of the five that did go in. *The Indians could not have chosen a more favorable battle-field, nor Custer a more unfavorable one.* The result that followed was inevitable.

From these facts it will be seen that to charge Reno with being responsible with Custer's disaster or death, is as absurd as it is unjust. As shown, in the first place, it is very doubtful whether he could have reached the scene before Custer's death; and, in the second place, if he had been rash enough to go as far as the battle-field the probabilities were that he would not only not have saved any of Custer's, but would have lost all his own command. Reno, however, did not know this at the time; for aught he knew to the contrary, Custer might have been in a position in which the two commands could have joined or coöperated; and he is to be censured for not having moved forward early enough and far enough to see Custer's position, and satisfy himself and his officers on that important point. Where there is a doubt, however, as to what should have been done, it is fair to pass judgment only upon what was done. Judging the act by the result, it can only be said that Custer went into that fight and lost all; Reno went in and saved nearly all. If there be a doubt, therefore, upon certain points, Major Reno is justly entitled to the benefit of the doubt, with the commendation proper thereto.<sup>2</sup>

Capt. Whittaker also lays much of the responsibility for Custer's disaster and death upon Benteen, because he did not "hurry up" in obedience to the last order he received. But it must be remembered that in obedience to his original orders, directing him

<sup>2</sup> Captain Whittaker may cite part of the foregoing criticism to sustain his charge that Reno did not properly support Custer; and in anticipation of that, the opportunity is here taken to reaffirm all that was previously said on the subject. Reno, when in the valley, did not "support" Custer, because he could not, as already explained. To "support" another, one must first know where the support is required, and then have the necessary support to give. Reno, after gaining the bluffs, did not at first know positively where Custer was, and even if he did know and had gone to him immediately, he could not have "supported" him, as Whittaker claims. Reno has enough to answer for already, and it is hardly fair to make him responsible for his chief's errors as well as his own.

to continue on from one ridge to another, and leaving him to infer "and so on *ad infinitum*," Benteen might continue on indefinitely; and therefore, when Custer sent back his last order to "hurry up," he could not have known whether Benteen was five or twenty miles away. Indeed, for aught Custer knew, Benteen might at that moment have been fighting for his life in one of those valleys into which he had been so blindly ordered, and without hope of relief. Even if Benteen had "hurried up" in time to go into the fight with Custer, no one now believes that his three companies would have changed the result of the fight except to prolong the contest a few minutes, add one hundred and fifty to the list of victims, and, by leaving Reno with his small force, probably lead to his destruction soon after, thus completing the utter annihilation of the regiment. Under the circumstances, it was a most fortunate accident that prevented Benteen from going into Custer's fight. As for his action in the matter after joining Reno, that was of course dependent upon the latter, who was the senior officer, and who assumed command of the surviving companies.

As for Custer, the last and chief of the three, the task of the commentator is a most painful one, because to criticise is to condemn him.

It is evident from all the facts of the case, that when he started out on that trail Custer resolved to act only for himself, independently of Gen. Terry and his orders. The letter written by Gen. Terry to Gen. Sheridan, copied in the beginning of this article, is again referred to, not only as an official statement of facts that might otherwise be called into question, but also to relieve Gen. Terry of many unjust aspersions that were cast upon him by many who, at the time, held him responsible for results which, the facts now prove, could never have occurred if his advice and orders had been followed. From that letter and the preceding order, it will be seen how well formed was the plan, and how clear was the understanding between the three officers as to the manner in which the plan was to be carried out. It will also be seen, from the narrative of Custer's movements, how deliberately he disobeyed his orders, disregarded the understanding, ruined the plan of coöperation, brought disaster upon his command, and indirectly became responsible for the long and costly campaign that followed.<sup>3</sup>

<sup>3</sup> In speaking of the results that would have followed if President Grant had not "displaced Custer from the command of the Fort Lincoln column," Whittaker says,

The cause of Custer's conduct in the affair is obvious. Resting "under a cloud" with the army officials generally, he hoped in a brilliant Indian fight to retrieve his lost favor and add to his laurels as a hero. Thus urged on by interest and ambition, his only desire was to overtake and attack the Indians alone, believing that his success (he did not dream of the possibility of *failure*) would not only relieve him from the responsibility of having disobeyed his orders, but would reflect greater credit upon him, in having achieved success without the coöperation of others and contrary to the plan adopted by his commanding officer. He refused the additional cavalry and Gatling guns offered him simply because he intended it should be "a Seventh Regiment affair," or as he is reported to have said—"a Custer fight," the glory of which should be for him and his alone. It was for this reason that when he saw the trail turning off toward the Little Big Horn, as had been predicted it would, instead of continuing southward and then sweeping around in order to get the Indians in the valley between himself and Gibbon, as he had been ordered to do, he continued following up the trail, not because he feared the Indians would escape, but because he wished to overtake and attack them before Gibbon could come up and pluck even one bay leaf from the victor's crown.

So much for his conduct preceding the first sighting of the Indians; now for his management after that time.

When the regiment was divided into battalions on the morning of the 25th, twenty-three miles from the Indian villages, Custer *did not know the strength or position of the Indians, or the topography of the country around*. That he did not know is but too evident from the after results. Yet, ignorant of these three facts, a knowledge of which is so essential to success in forming a plan of battle—though told by his scouts that there was "an immense" village ahead, large enough, as one of the Indian scouts said, "to keep him fighting three days"—he divided his small force into four parts, which immediately separated. His previous acts were merely disobediences—if they can be mitigated by saying that they

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"Custer and Gibbon would have co-operated as men both familiar with Indian warfare; and cross-purposes would have been avoided." When explaining the many other interesting points of difference, will Capt. Whittaker please explain whose fault it was that Custer and Gibbon did not co-operate when they had the opportunity of so doing, and through whose disobedience and recklessness the "cross-purposes" finally ensued?

were *merely* so—but this division of his command under such circumstances was a stupendous, fatal blunder that an inexperienced Second Lieutenant would not, and that an experienced Indian fighter could not, commit. If he must precipitate the attack—exhausting his men and horses by marching seventy-eight miles in thirty-two hours in order to do it—he should at least have assured himself of the strength and position of the enemy before forming any plan of attack, and dividing his force in an unknown country. But, no; common prudence and ordinary strategy might do for old fogies, but he was superior to such weaknesses. “Custer’s Luck,” which had carried him through all his previous exploits, would carry him through this. And so, sending Benteen off to the left on a vague order that might take him five or fifty miles away; sending Reno down the centre, with a promise to support him; and leaving the pack-train with one company away in the rear, then Custer galloped off to the right with his five companies, leaving the others to take care of themselves. Four small parties widely separated in a hostile country, and with an unknown force before or around them! Shades of Mars! what generalship! Custer believed that the village first discovered<sup>5</sup> was the only one in the immediate vicinity, and as that was on the “stampede,” there was no danger to be feared. But he soon discovered that there was another and a larger force in the valley, and that those who were retreating were simply drawing him into the trap in the valley—an old Indian ruse that Custer should not have been deceived by. And as there was an unknown force concealed in the valley, ready to fall on Reno, so there might have been an unknown force concealed on either side, ready to fall on Benteen, McDougal, or himself, and thus destroy the four parties in detail. Yet the man who thus jeopardized his whole command—dividing it so that in case of attack the divisions could neither escape themselves nor assist the others—is described as “one of the greatest soldiers,” and “the best Indian fighter” of the army.

Coming down to the time when, looking down the valley at the turn of the road, he saw the main body of the Indians coming up to meet Reno, and resolved to go round to attack them in the rear,

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<sup>5</sup> This was a small village on the east side of the Little Big Horn, which hastily retreated down the valley to join the main village, on the approach of the troops. The main village in the valley, being concealed beyond the trees, was not discovered till Reno had charged some distance down the valley.

and a few moments later saw from the bluffs the scene in the valley, had he exercised any reasoning power at all he must have appreciated the fearful odds against him, and realized how hopeless was the attempt he proposed to make. Had the attack been an early morning surprise, or had the three battalions made a simultaneous attack from opposite sides, there might have been some hope of the success of so few over so many; but the attack was made at midday, when the Indians were prepared for it and could anticipate every movement the troops made; and was made, as before stated, first by Reno and then by Custer, Benteen being some miles in the rear and out of the fight altogether. *Custer could not have made a much more unfortunate disposition of his force if he had planned its destruction*, and it was only a series of fortunate accidents that saved the surviving companies.

But Custer was not to be daunted nor turned back by a few thousand Indians, more or less. Again deceived by the Indians "retreating" down the valley when they saw him riding along the bluffs, (they were running down the valley to meet him at the fords,) he pressed on to overtake them before they could "escape." Poor Custer! Too blind to see whither he was going, and trusting to "luck" to see him safely through, he rode heedlessly into that awful valley of death, to meet quick destruction at the hands of those whom he thought in his folly to destroy.

It may be said that Custer, by his death, atoned for whatever errors he may have committed in the matter! Does he who needlessly sacrifices a hundred innocent lives on the altar of his selfish greed or ambition atone to the widows and orphans of his victims by his own death? Do Mars and Mammon demand such holocausts, that their votaries shall be condoned and commended in offering them up? When they alone suffer the consequences of their own selfish acts, then indeed do they atone for the evil committed, but not otherwise. Custer went into that fight, not as a soldier, to perform a duty—not as a patriot, to serve his country—but as George A. Custer, to gain a victory and be hailed as a hero. He would make a dashing charge, defeat overwhelming numbers, win the greatest Indian battle ever fought, and Custer's star, then under a cloud, would burst forth with a splendor that would eclipse the lesser stars around! It was "a Custer fight," all the glory of which would be Custer's; and so he plunged blindly in, dragging to their destruction the helpless victims of his wild am-



bition. They went down to their death, not at the call of their country, that asked not the sacrifice, but at the order of their leader, who demanded it. They had nothing to gain in his success—because the glory would all be his—but they had everything to lose in his failure. He failed—and they were sacrificed that he might be made a hero and a demi-god, while they, the ladder by which he ascended Olympus, were consigned to cold obstruction and oblivion. Has he atoned for their sacrifice by his death? Go into the desolated homes and ask the stricken widows and orphans, the bereaved fathers, mothers, sisters and brothers of his victims—go ask them whether he has atoned for the loss of their loved and loving ones; not ask those who, having suffered no loss, can easily forgive one who has not wronged them, and charitably say, “he has made atonement!”

It is proposed to erect a monument to commemorate this sacrifice of two hundred and eighty-four lives to make a hero of one! Well, so be it! Let it be erected as soon as possible, and in as conspicuous a place as possible, that the world may see how noble an act it is, and how worthy of emulation and commemoration, for a soldier to disobey his orders and to sacrifice his fellow-men in the attainment of selfish ends.

The writer opened a young lady’s “scrap-book” recently, and found therein the following newspaper extract, with the marginal note: “A monument to such a man, forsooth! Here is his monument!”

“A letter from a lady at Fort Abraham Lincoln tells the melancholy story of the receipt of the news of Custer’s massacre. The writer, the wife of an army officer at that post, says when the news of the fate of Gen. Custer’s command reached there, there went forth a wail of grief that is seldom the lot of any human being to witness. The agony and wretchedness it has caused are something terrible. It was the announcement to twenty-four women that they were widows and to more than twice that number of children that they were fatherless. What is the most painful of all is that most of these poor women are left utterly penniless, without means to take them away from the fort, or to subsist should they get away.”

Aye! This is his monument, indeed! Twenty-four widows and more than twice that number of orphans at one fort, with as many more elsewhere, and the numberless other bereaved ones of that disaster, are a living monument than which nothing could be more

plaintively eloquent or could more fittingly symbolize the deed they commemorate. They are the monument of Custer's own design and execution, and the story of his last battle is the inscription thereon. Let those whom he plunged into agony, wretchedness and poverty commemorate him, and when they shall have passed away let the Recording Angel of History drop a tear of pity and forgiveness on the blood-stained page, and blot out the memory of the dead forever. #

"Men's evil manners live in brass!" Shall they who would be Custer's best friends prove to be his greatest enemies by perpetuating in bronze the evil he did—the misery he caused? Do they wish to see him "damned to everlasting fame," by perpetuating the record of a deed that charity and friendship alike should seek to have destroyed and forgotten? Monuments are supposed to commemorate deeds worthy of the gratitude or emulation of after generations. Were Custer's disobedience, rashness and selfish, o'er-reaching ambition worthy of the gratitude or emulation of the generations to come? If a monument must be erected to commemorate him, let it be to his previous career, omitting the record of his last battle; if it must be erected to commemorate that battle, let it be to those who earned and who deserve that poor reward. Let it be to Sturgis, the youngest and the greatest hero there<sup>4</sup>—to Reily, a widowed mother's only hope and consolation—to Harrington, who left a young wife and three children helpless pensioners on the pitiful bounty of the government—to all, officers and men, who went into that fight, not to gain a selfish end, but to perform a soldier's duty, and who, at the word of command, charged "into the jaws of death," though they saw that victory was hopeless, and destruction sure. They were the heroes—they were the martyrs—and theirs were the deed and example worthy of emulation and commemoration.

The writer must now beg the reader's indulgence while he obtrudes his personality in a few remarks in explanation of his relation to the subject, and in anticipation of charges that might be made against him.

It may be asked—"Who art thou who darest to deny and to

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<sup>4</sup> Second Lieut. James G. Sturgis led the charge into the valley at the head of "E," the gray horse company. His body was not identified among the dead after the fight, but there is no earthly doubt that the "boy-officer," as the Indians called him, fell at the head of his company in that gallant charge.

destroy one of the gods of the people? What knowest thou of that whereof thou speakest? And what interest or prejudice hast thou, that thou shouldst corrupt the truth to thine own ends?" In reply, I have but to say that I went out to the seat of the Indian war immediately after Custer's fight as a newspaper correspondent, remaining with the troops in the field and on post till within a few weeks of the date of this writing. As a newspaper correspondent, I therefore enjoyed exceptional opportunities for seeing and hearing everything of interest or importance going on. Thus I learned, from time to time, the general facts and incidents of the battle of the Little Big Horn, directly or indirectly from those who took part in it. More recently, during a constant companionship with the surviving officers, I learned the minor, and in some respects the more important, facts and incidents of the battle and the movements preceding it; but while the officers generally declined to express their opinion upon the facts, a few questions *discreetly* asked at different times would accomplish my object in learning their opinions and obtaining the truth. Such, then, is my knowledge of that whereof I have written; a knowledge not received from unreliable hearsay, but from those who took part in what is narrated—not confined to general facts, nor to the statement of a single individual, but cognizant of every important detail that could affect the whole, and founded upon a comparison of the statements of nearly all the surviving officers who took part in the fight.

As to any interest or prejudice I might have to serve in commenting upon the subject, I need only say that at the time I went into the field I did not know a single soul who went into that fight, and I have now no more interest in those who came out of it than I have in the thousands of others with whom I have been thrown in contact during some years of travel. I never even saw Gen. Custer, but I entertained the generally expressed admiration of his dashing soldierly qualities and brilliant career, and I went out prepared to add my humble tribute to the many and fulsome eulogies written upon his death. It will thus be seen that my "prejudices" were for Custer; and thus predisposed in his favor I was inclined to speak not only well, but eulogistically, of him. But as I slowly learned the full truth of the affair—how grievously he had erred, how wantonly he had imperiled and destroyed, and how selfish had been all his acts and motives—I was sadly forced to acknowledge that my idol was a false god, and shattered it at my feet. As

a knowledge of the truth thus taught me how false were the charges made against those who were held responsible for a result that Custer brought upon himself by his own recklessness and ambition, and how unjust were the aspersions cast upon those who dared to make any reflection upon his conduct or motives, I deemed it a duty to them and to the public that, being in possession of all the facts, and occupying a position in which I had neither interest nor prejudice to serve by their publication, I should proclaim the truth and set history—and Capt. Whittaker—aright. I did not think it just, however far charity might go, that the living should undeservedly suffer for the dead; that the honor and fame of many should be dimmed in order that the halo of glory might shine the brighter around the name of one—and that one undeserving of it. Such was my motive—such my task—in writing this article; in the writing of which my earnest endeavor has been to, “nothing extenuate, nor set down aught in malice.”<sup>5</sup>

JAMES JOSEPH TALBOT.

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<sup>5</sup> Since this article was written and sent in for publication, the main points stated therein have been somewhat singularly verified by no less an authority than Sitting Bull, the most prominent chief of the hostile Indians. The most important fact established is the duration of the fight with Custer. In an interview (published in the papers about the end of June,) between Sitting Bull and a white man named Howard, married to the former's niece, Sitting Bull stated that the fight with Custer was over in *half an hour*. There was of course some light firing after that with scattered parties, so that it will be seen that my estimate of *one hour* fully covered the entire period of the fight from the firing of the first to the last shot. This completely demolishes Captain Whittaker's theory of the fight lasting till near sunset, and all his comments and conclusions based upon that unreasonable hypothesis. Among other points corroborative of my conclusions, Sitting Bull also stated that the young officer (Lieut. Sturgis) who led the charge into the valley was surrounded, dragged from his horse and shot and knived to death in the valley, thus verifying my assumption that he fell at the head of his little band of heroes in that magnificent charge, and was not carried off alive (to be afterwards tortured) or killed in the retreat with Custer, as was generally supposed. Such was his fate—the truest hero of that heroic fight—and if ever a hero deserved a commemorative monument, he must assuredly deserve that poor tribute now.

J. J. T.

## SATAN ANTICIPATED.

## II.

AMONG all our many sources of joy in undoubted prominence ranks that of sympathy, an influence that knits together friends, endears home circles, incites philanthropy, fires the breasts of patriots and consecrates the Cross. To an *expose* of its nature and of the necessity of struggle for its birth and development we invite special attention.

Tennyson, in his "Palace of Art," pictures with inimitable fancy the utter dreariness of solitude to the soul, though it be within apartments tapestried and hung with canvas to suit every mood, paved in skillful mosaic, stored with sculptured graces, crimsoned with colored light, filled with chimes of bells, looking in upon open courts where fountains leap and murmur, or out over wide vistas of landscape loveliness. Under the portals of this palace for three years there never pass any of the social ills of life, its baffled hopes or sharp encounters, its burdens of care or death-sundered ties of love's relationships. But when the fourth year comes, phantom-shapes people the spirit's vision. A loathing and a longing succeed this unshared splendor from which with all her subtle reasonings she fails to flee. Chillness and stupor, the blank stare of corpses and the heated closeness of prisons, settle with blight and mildew upon her thought, while the distant hum of human voices adds to the stifling stillness of her isolation.

In "Alastor" the same conception comes glowing from the heart of Shelley. A poet of rare gifts and ripe culture vainly seeks in self-centred seclusion the lasting satisfaction which noble human sympathies alone have power to bestow. His deeply-seated social yearnings being repressed by wider travel and more absorbing contemplation, finally break out into avenging furies, dethroning those matchless powers to which is so persistently refused companionship. Earthlier natures escape insanity, but fall victims to stolid stoicism, a far more abject and inglorious fate.

But the heart to which sympathy is of such vital moment, responding as Memnon to morn in rich musical answer to its unbeam's softest touch, is necessitated, not only by the asperities that mark the world's life, but by the nature of its own organism, to derive these its social joys from seemingly social ills, social joys

being predicated on social virtues which are the names of victories won in many a fierce encounter. That sympathy can thus thrive only in an atmosphere of strife and sorrow will clearly appear in an analysis of its nature, while biography and history everywhere abound in corroborative proofs. We will consider it in its separate phases.

When death's fingers freeze love's lips to marble, failures eclipse, foes plot or calumnies poison the air, under any discouraging or saddening circumstance, in the first bursts of grief the stricken heart craves solitude, but afterward the consolations of friendship never find warmer welcome or kindle nobler joys. There is an undoubted pleasure in the simple unburdening of sorrow. In the woe itself, of course, there is none, but there is in its unburdening. The novelist, cognizant of this fascination of tears, would deem himself violating one of the first canons of his art did he not dip his pen in pathos. Should Ristori unclasp her robe of tragedy how soon would the spell of her enchantment be broken. Powers, our great sculptor, left the ideal of his highest inspiration chained. Strike off the Greek slave's marble fetter, and you darken the sunlight of her beauty. Hood's "Bridge of Sighs" and "Song of the Shirt" outlast the flash and sparkle of his wit. Whittier's "Maud Müller" and Burns' "Highland Mary," we never tire of nor ever forget. Deepening interest centres about exiled Evangeline's life-long search for her Arcadian lover, till silvered with age and broken with sorrow she is privileged at last at his death-bed to exchange words of parting. Minor strains in music, pictured grief on canvas, irresistibly win their way to the heart, eliciting an admiration that soon deepens into love. We have witnessed the simple melody "Pass under the Rod," a most touching epitome of crushed hopes, hush thronged parlors into felt quiet, the gay revelers gladly exchanging their sunnier mirth for more subdued and profounder pleasure. Both author and artist clothe their fictitious personages with the garments of the world's real grief. They either transform us by the magic wand of genius into our former selves by revivifying the experiences of the past, or else quicken in us a sympathetic answer to another's woe. Voicing grief kindles joy. There is undoubted luxury in tears. The phenomenon of this attractiveness of gloom in literature and art can be accounted for on no other hypothesis.

This same law operates with greater directness and consequently

fuller force in the free recital of friend to friend of trying incidents in personal history. The more vividly outlined past adds pungency to feeling, arousing as by a trumpet call. Every trace of stupor is gone. The soul overwhelmed with loneliness and dependence in its rudely shaken self-trust, alert, spiritualized, intensely responsive, adds to the joy of a more complete unburdening of its load a keen sense of gratitude, a comforting consciousness that the trial is known, appreciated and generously shared by a companion spirit; a bleeding hope revived by the oil of consolation, of encouragement, of openly avowed confidence, of undimmed faith and proffers of needed aid. The state in which a noble nature is left after the tempest of sorrow has swept over it is therefore beyond doubt the most favorable of any to the birth and growth of friendly sympathies.

Furthermore, acquaintanceships cast into the crucible of affliction are subjected to the most searching test; the dross of selfishness is burnt to cinders; the gold of self-forgetting love is purified and brightened by the process. Confidence once thus firmly established, the curtain is drawn from before the inner life of emotion and motive, and guarded conventionalism gives place to a cordial intercourse whose influence, extending beyond the painful experiences in which it first found origin, goes on enriching thought and feeling through all the departments and periods of the soul's growth. Corresponding results by additional agencies leave their impress also on him whose heart overflows in sympathy to these urgent appeals. To generously share in and thus lighten another's grief, to be admitted into confidence, be an invited witness to the hidden life where spiritual forces are evolving elements of character from their contests, where what is grand and God-like stands in unveiled splendor, to be nobly conscious of one's own potent, transforming presence there, afford delights which only they who have felt them know. They can come through no other channel. They are the star-glories of Life's night. Even where congenial tastes alone give birth to friendly feeling, to secure for it permanency and worth there must enter in also the ingredient of nobility of motive, for unless the disclosures necessarily resulting from intimate fellowship end in well-founded admiration familiarity soon breeds contempt, and there can be no other nobility than that developed and proved in battle.

But even admiration of this general nature arising from discov-

ering in another amiable or heroic traits though thus vital to friendship's very existence and often its cause, is in itself powerless to feed its fires. The relation is continually demanding greater intimacy, more direct declarations in word and life of self-sacrificing regard. The more positively personal those declarations are, the brighter will the fire burn. Again, this sympathy is in its very nature aggressive. The heart cannot long contentedly remain an inactive recipient. It craves constantly recurring opportunities for earnest work. It knows no higher pleasure than to do, to dare, to suffer for the object of its devotion. Only through suffering and sorrow can these coveted opportunities come. The thirst moreover becomes insatiate. Past reminiscences will not suffice. Ennui ensues when the heart's activities are dead, while the pleasures of friendship grow nobler, more satisfying with each interchange of kindness and relief, the relation more intimate, the attachment stronger, the mutual revelation and development of souls more complete. Friendly sympathies may also be found closely interwoven with those absorbing passions of men, already mentioned, to solve mystery, indulge hope, seek adventure, grasp power, realize the perfect and transfigure the past, intensifying, directing, encouraging, rewarding.

To this sympathy that knits together friends, that which endears home-circles is so closely allied the same arguments for the necessity of struggle to its birth and development apply with equal force, while in every point of variance we find additional proof. There is between the sexes a marked difference of endowment. Each is made possessor of gifts essential to the other, gifts which can, in fact, become the other's only through an intimate companionship. The wife needs the husband's strength of muscle, the boldness, dash and decision of his thought, while she is peculiarly fitted to offer in exchange sympathy, caution, refinement and unfaltering faith. Man is enabled to reach only by slow processes of reasoning conclusions arrived at by woman in the flash of her intuitions. His bravery, defective without her fortitude, when combined with it forms an impregnable tower of defence against every besieging force of ill. Life's rude shocks of battle alone serve to unfold and render useful these individual traits, to discover the indispensable necessity of each to the other, and to open the fountains of joy which flow from their generous interchange. Cares and trials call forth on the one hand chivalric guardianship and de-



votion ; on the other, sacrifice and staunch loyalty. Each other's work shines out in the acts of each other's love. The more herculean their tasks, if directed to the attainment of a common benefit, the more conspicuous becomes their devotion, the closer their union, and the more permanent their delight.

Parents in the discharge of their trusts, while called to pass through repeated privations of physical comforts and ease, to withstand social enticements, to spend anxious nights at the sick-bed, often painfully to devise and execute effective methods of reproof that love may blend with law to win back to right the erring feet of their darlings, find compensation a thousand-fold for it all in witnessing the imperishable impress of their own thought and life in the unfolding traits of these their second selves. He alone who can measure the true mother's joys as she pictures the glorious possibilities of her children, can measure the worth of these privileges of sacrifice granted to her affection by the seemingly cruel necessities of the present life. The hunger of her heart can nowhere else find satisfaction. It is love's very nature to forget self: sacrifice is its vital air. Had it been from the first impossible for her to promote the present comfort or fashion the future fortune of her children, impossible for her ever to dry their tears with her kisses, or plead their case before the Throne ; had their character and destiny been from birth fixed as fate and fair as Heaven, she might have had power to admire, but never could have felt those thrills of joy that follow the acts that now grow out of her tender solicitude, her motherly yearnings for her offspring, exposed as they are to the world's dangerous gusts of sorrow and of sin. Even were it possible for her affections under such circumstances to be born into life, they would soon beat out that life against the unyielding bars of such a prison. Should her children ever fail of the fulfillment of her hopes, she covers them still with the mantle of a mother's charity, still dreams of some possible future when the long watched-for turn in the battle-tide of passion and pain will surely come. Her importunate prayers at last bring her priceless blessings of peace. Nothing can shake her faith that Jehovah will yet reward the free outpouring of her wealth of love ; that she will not fruitlessly strive to lift the objects of her devotion from their low ambitions to those heights of goodness that tower in the millennium of her musings. Through the hiding veil of destiny, rent as by inspiration, she seems to see the fullness of the splendor that is

in waiting. Should the frosts of death blight her buds of promise here she feels she will yet see them opening in fadeless bloom in the Gardens of the Lord. How blessed at such a time the memories of her sacrifice! They accompany her like troops of angels. The air about her throbs with their song. With her, earth's attractions may fade with the fading forms of her dear ones, but her favored feet are thereby guided to the very border-land of the other life. On her lifted face already rests the radiance of its rising day. Only because the world's firesides have thus been its battle-grounds and thereby revelators of its virtues, have they become almoners of its benefactions, centres of its choicest memories, prototypes of its Better Land.

The sympathy that incites philanthropy is cosmopolitan. It responds to wider claims than those of friendship or of family ties. It finds its birth in any scene of sorrow, in the presence of any accomplished or attempted wrong. Its blessings come from conscious acts of kindness, the restoration of violated rights, the return of sunshine into the hearts of the stricken and the disconsolate. Few who follow its behests ever live lives of ease or secure from society a fit recognition as its benefactors. Stern, self-denying, dangerous, often thankless tasks are apportioned those who worthily worship at its shrine. It summons them to battlefields, to hospitals of wounded and sick soldiers, even to lazarettos where pestilences riot in human ruin. The fallen, those who glory in their fall, frequently become ungrateful objects of their care. To reform the world's abuses they must encounter its selfishness, fortified by capital, entrenched behind perverted opinion, sheltered under established custom, intimately allied with powerful parties in church and state. Reformers must ever be in advance of their age. Their intelligence, and even the purity of their motives are often made matters of question. Calumny, while it blackens their fame, provokingly checks, if not wholly thwarts, their enterprises of love. The desired progress is slow at best, advancing perhaps in the face of fixed bayonets, it may be amid the howlings of the mob whose good it seeks. Its votaries are sometimes forced to test their fidelity in bonds and imprisonments, sometimes they end their careers on crosses of shame.

John Howard was comparatively purposeless until his inhuman treatment on board a French privateer and afterward inside a French dungeon vividly impressed him with the wide prevalence

of cruelties that had, unnoticed, already dug the graves of multitudes of his countrymen. And doubtless he would have rested with the righting simply of that wrong had not death subsequently entered the circle of his home and loosened the silver cord of life of one he most passionately loved, and had not pain from an incurable disease finally lifted his thought by its purifying process above every enticement of time. Not until he had been thus schooled was he prepared, without prospect of preferment, at his own expense, upheld by no word of encouragement, year after year so resolutely to prosecute his mission of mercy, to visit the prisons of Briton and the Continent, to submit to many tedious weeks of confinement in the loathsome rooms of a Venitian lazar-house, breathing noisome and pestilential airs, going where contagions lurked, where the bravest physicians durst not enter, forcing himself daily into the presence of the most appalling miseries and sins, that he might publish them to the world and thereby, if possible, effect their cure. His enterprises for the rescue of society's outcasts and the cleansing of its places of plague, carried forward by such indefatigable industry amid privations and perils, always met the scorn of the indifferent—the weak, contemptible pity of those at ease in Zion. He died near the Crimea of an infectious fever contracted in the very act of philanthropic love. We cannot overestimate his sacrifice. Wealth, comfort, time, safety, life itself, were John Howard's princely gifts to the criminal, the unfortunate, the forgotten.

After Dr. Jenner had spent twenty years of patient thought and experiment in proving and perfecting his discovery of the disinfectious properties of vaccine, and had issued a carefully written treatise, in which he detailed twenty-three cases of successful vaccination, he visited London to instruct physicians in the process, but only met first cold contumely, afterward, open and relentless warfare. He was caricatured, accused of malpractice, of "bestializing" his victims, of introducing the diseases of cattle among his kind. Some of his patients were pelted with stones in the streets. Pulpits hurled at him their anathemas. The whole medical profession, incited by pride and envy, fostered the prejudices of the populace, until overborne by his success they were forced to yield. Then, adding insult to injury, many of them sought by presenting fraudulent claims to discovery to basely rob him of his laurels. The doctor became an old man before he was awarded recognition

as a benefactor, though vaccine was of such intrinsic worth to the race that to discover it, as Cuvier has since remarked, would alone have rendered illustrious any era. Dr. Harvey was the same patient worker, and his theory of the circulation of the blood met with the same inveterate hate. He was ridiculed as a crack-brained impostor, even charged with designs to undermine religion and public morals. For years he was without a convert or a patient of any sort, almost without a friend. A quarter of a century passed before what is to us one of the plainest of scientific truths gained credence and wrought that revolution in medicine and surgery whose streams of beneficence water the world to-day. Sir Charles Bell spent forty years studying the nature and functions of the nerves, only to meet the same rebuffs, incredulity and ingratitude.

Granville Sharpe, an humble Ordinance clerk, by a life of unremitting mental industry and generous self-sacrifice, set rolling waves of influence that swept the seas of every English slaver, and eventually broke the shackles of every English slave. Possessed of an imperfect education, and absolutely without knowledge of law, he bravely began that celebrated defense of Jonathan Strong single-handed against the settled convictions of the entire English bar. By indefatigable research through mountains of dry documents, decisions of courts and acts of parliaments, he succeeded in summoning an array of facts that overthrew every antagonist. Case after case he carried through with the same persistency, until Chief Justice Mansfield was absolutely forced by the irrefragable logic of this tireless advocate to declare that whoever stepped foot on British soil was thenceforth forever free. Though the meagre salary of his clerkship barely sufficed to keep him from debt, still every leisure moment through his entire life he scrupulously used to secure the rights of the negro, studying while others slept, and that without support from sympathy or hope of reward. Of course, such zeal proved a destroying firebrand in the camp of the enemy. Quickened by his example into the same sublime purpose, Clarkson, Wilberforce, Brougham and Buxton, after prodigies of labor, finished the work which he had with unconquerable courage carried forward without means, without a helping hand, against the adverse criticisms and declared wishes of an entire kingdom.

Anti-slavery agitators in our own times and country have not only been forced to encounter indifference and the curled lip of

scorn, but to endure privations, to feel the relentless grasp of the law, often to perish at their posts stricken down by the hands of ignorance and hate. The same incarnate evil that murdered a Lovejoy and dragged a Garrison through the streets of Boston, when finally threatened with overthrow by the irrepressible advocates of reform, desperately clutched at the throat of the nation and refused to let go its grasp until driven back by thrusts of bayonets and storms of canister.

The sympathy that incites philanthropy we thus see calls not to diverting pastimes, but to the endurance of incessant toil, to the discharge of the sternest duties in the face of obloquy, of danger, sometimes of death; for while the serpents of selfishness bruise the heels that crush them, how frequently those snatched from them stone their deliverers and leave their children to garnish their tombs. Only one of the ten lepers ever turned back to thank Christ for healing. Are then the lives of earnest philanthropists barren of joy? Is such love left without requital? Rather, we might ask, does not a single moment of conscious likeness to Christ yield profounder pleasure than a life of the empty worship and wealth of the world? And whence can such consciousness come except through just such tests of love's loyalty? Strip a man of every worldly incentive, let him seek to benefit his age, not from selfish interest, not because of any possible prospect of pecuniary return or of social advancement, but from some deeply seated sympathy for suffering, some intense desire to place upon the plane of virtue any victim of vice, and his soul's freed pinions lift him into the very sunlight of heaven. When misinterpreted and maligned by reason of the bigotry and conservatism of the ignorance he seeks to instruct and the fierce hate felt by the tyrannies he seeks to destroy, when thus rudely driven back from the world's broken cisterns of pleasure, then out of the flooding fullness of his enthusiasm to render real his conceptions of reform there well living fountains of sweet water.

In the sympathy that fires the breasts of patriots, we find struggle and suffering equally indispensable in the creation of human joy. Not only are tyrannies armed facts necessarily to be met and mastered before mankind can be free, but unconsciously most powerful agents in enhancing the value of the very rights they fight like fiends to destroy, enriching freedom through the discipline of the conflict with those imperishable associations that give it worth

commensurate with the sacrifice. Freedom is a word of relative meaning, taking rank with the interests it conserves and the capacities for enjoyment of those over whom its influences operate. The freedom of the bird, though perfect of its kind, ranks as far below the angel's as the angel's thought and feeling transcend the bird's. If man rises in the scale of sentient intelligences through the developing power of struggle when that struggle results from his heroic loyalty to any of his nobler impulses, the conclusion follows by irresistible logic that the joy-giving power of freedom is measured by the sacrifices and struggles of its votaries. Intimately associated with this conclusion, indeed inseparable from it, is a second, the immediateness and absolute surety of the reward. The moment an individual boldly asserts his freedom and courageously purposes to maintain it, that moment he is free, and so long as that high resolve is in the ascendant, directing and unfolding his powers, though it lead through inquisitorial fire or the carnage of battle, it kindles enthusiasm and lifts into ecstasy by the intensified consciousness of newly developed and nobly consecrated worth. Under such influences man seems to be treading upon the confines of the other life, to feel the bracings of its inspiration and catch glimpses of its glory. There is also generally, if not universally, blended with this passion for personal freedom a warm attachment for the father-land, as under its protecting shadow cluster the many endeared relations of our social life, and with its honor and safety are intimately involved our own. Therefore, those political conflicts that serve at once to call out and to gratify this double attachment become sources of double joy.

Meagre as was the freedom under the reign of the Montezumas, yet rather than have that snatched from them by Spanish hordes, a brave people gave to history the scenes of that memorable night when the waters that shut in the Island City grew crimson, and dead and dying were heaped along causeways drenched in blood. To fiercer ordeal Cortes afterward brought Aztec bravery, but to no purpose. One by one fell the proud and costly fabrics of their capital. Famine and disease became rivals of fire and sword to conquer their indomitable purpose, still they sublimely refused to ask for quarter. There must have been a wonderfully compensating joy following the promptings of this love for liberty and country, unknown to life's more even tenor, to have sustained the enthusiasm of the Mexican and to have nerved him to such unflinch-

ing fortitude amid cruelties that still live in memory a marvel and a shame. There must have been thrills of ecstasy following that vigorous quickening of mind, and that noble mastery of immortality over the pleading anguish of the flesh. If a people semi-civilized and idolatrous could have found in these strugglings pleasures commensurate with the pain, what may not be predicated of battlings for enlightened freedom with wider vision and a Christ-born promise, whose tender budding escapes the plucking fingers of failure?

William the Silent seemed peculiarly fitted for a life of elegant and luxurious ease. A gifted conversationalist, high-born and wealthy, familiar with the teachings of the schools and the refinements of courts, he had thrown open the parlors of his Nassau palace in genial hospitality, and at his loaded tables given daily welcome to the titled and the learned of Europe. But liberty's impending ruin touched the grander impulses of his nature, awakened longings that neither society's elegant repose nor the fascinating excitements of the feasts, culpture, nor song, nor literature's lettered ease, had power to quiet with their enchantments. Afterward when he saw the foreign mercenaries' cruelties and license, the intruding *espionage* of the Inquisition, the States-General ignored, the professed concessions of the "Joyful Entrance" a mockery and a cheat, he promptly exchanged the most enticing political prospects of any Netherland grandee for the nobler consciousness of worth that recompenses the dangerous duties of the patriot-hero. Nothing could daunt his courage or dampen his ardor. Though the delusive lull of tyranny that followed Granville's recall was soon succeeded by the blood-council of Alva, though he saw himself deserted, his offices given to another, his estates confiscated, coat of arms dishonored, his son held prisoner, himself an exile, the last of his plate, his furniture and his credit turned into soldiers to end only in fruitless forays and the stricken field of Jemmingen, yet with an unflinching faith devoutly waiting God's providence he steadfastly watched the heavens for the gray dawn of liberty, until at last the glad tidings came that the "Sea-Beggars," driven from English shores, had captured Brill and on its walls gallantly unfurled the trampled banner of the Republic. And when a few brilliant victories again ended in defeat, sublimely purposing to perish rather than surrender, he uttered that memorable saying, "I go to Holland to make my sepulchre." The subsequently brave de-

fense of Harlem and Leyden was followed by new disasters threatening the life of the Commonwealth, but this only so intensified the love for freedom that it culminated in the lofty ardor of that grand design of Prince and people to give their Fatherland with all its hallowed memories back to ocean, and, with their wives and little ones gathered on board the remnants of their once proud fleets, set sail for friendlier skies and a brighter destiny. But God smote Requiesens with fever, and the tide turned.

There is but one other phase of sympathy to which I wish to direct attention. It is that which consecrates the Cross. The Gospel story is so familiar, a simple allusion to a few of its leading facts will doubtless suffice.

Through the Incarnation, which was solely designed for the rescue of a lapsed race, we have revealed to us as nowhere else the resources of an infinite love, the tenderness, the yearning solicitude of the heart of God towards the sinful and suffering of earth. In the magnitude of this condescension and sacrifice, we discover his estimate of the worth of the soul's limitless capabilities of virtue and bliss. We have also here an example of what weak man can become through the discipline of struggle when he is over-shadowed, as it is ever his privilege to be, by the Divine influence. We of course can never solve many of the mysteries that shroud the nature of Christ, but that he was human we have as incontestable proofs as that he was superhuman. In intellect, sensibility and will, as well as in body, his powers were at first as germinal as those of any son of Adam, equally requiring the attrition of this world's experiences for their expansion and maturing. Christ passed through no mock childhood; indeed, up to the time of his death, every year witnessed some new growth, revealed some new weakness against which to contend, over which gloriously to triumph. Luke expressly states that he "*increased* in knowledge and stature," thus predicating of him what is true only of the finite. Christ would never have wept at the grave of Lazarus had he known that in an hour he would be seated with him at table. The nearness, almost immediateness of Lazarus' recall to life, the glorious proof the miracle was to give of Christ's mission, the rapturous welcome with which Mary and Martha were about to greet their again living brother must necessarily have precluded on the part of the Saviour, had he then foreseen the future, the possibility either of sympathetic or of personal grief. It was the *man* whose



voice was broken with sobs; it was the *God* whose voice afterward quickened the dulled ear of the dead. He was also evidently full of weaknesses, of constitutional besetments to sin, from whose influences he was never exempt, and to withstand which he summoned moral forces differing neither in nature nor amount from what he has vouchsafed every disciple. The declaration that he was tempted in all points as we are, necessitates this conclusion. The temptations in the wilderness were possible only to a youth comparatively inexperienced, suddenly made conscious of miraculous gifts which seemed readily convertible into purposes of self-seeking. Selfishness is a species of short-sightedness, promptings to which can never arise in a mind of infinite range. The prayer in Gethsemane, the cry on the cross, betrayed a shrinking, a sense of weakness and dependence, distinctively human. When thus once deeply impressed with the genuine completeness of Christ's humanity, a fact never questioned by his apostles, when led to consider him as our veritable elder brother, then his holiness, his matchless ardor of love, more than excites admiration; it nerves endeavor by kindling hope of successful discipleship, it prepares for that deep peace that accompanies and rewards the grateful consecration of a life. To draw men thus into sympathetic nearness with himself was also the aim always manifest in the acts and teachings of his ministry. Though within his ready reach lay ease, luxury, learned leisure, high social rank, political preferment, the glory of arms, even the crown of kingdoms, when he found them threatening to thwart this purpose he promptly put from him every tempting offer, choosing rather to be identified with the poor, the illiterate, and the weak, there to work his miracles and there to gather the witnesses of his Messiahship. He thereby made men feel that humbleness of station furnished no barrier to a welcomed and esteemed companionship with himself; that he held in lightest regard the conventional distinctions of society, the classifications which prevailed because of accidents of birth, unequal distributions of fortune or differences of mental power; that with him right states of heart were the sole passports to favor; that true dignity comported with moral worth, ranking him first who lived the noblest, loved the most. He not only con-sorted with the poor and illiterate, but with publicans and sinners. Even those whose lives were blackened with guilt, if repentant and believing, were welcomed and forgiven. "Neither do I

condemn thee ; go and sin no more," were his golden words of encouragement to an abandoned woman. Paradise was promised the thief on the cross. "Go and tell Peter" he especially charged the women who came early to the sepulchre, though that same Peter only the Friday before had denied him with bitter blasphemy. He clothed with becoming dignity the ever-recurring duties of daily life. He manifested profoundest sympathy for those oppressed with care, filled with weakness, apprehensive of evil and disheartened by frequent failure. To this intimate acquaintanceship and sympathy he added also a superhuman power to help, assuring his followers that he would ever live their earnest and able advocate with the Father.

Thus by a life of generous sacrifice, possible only in the midst of suffering and struggle, He laid the foundations of a friendship broad as humanity and lasting as the soul.

A little while before his crucifixion he gathered his disciples about him to bid them good-by and give some word of cheer as parting token of his love. At first glance it seems strange he should have there said, "My peace I leave with you" thinking thus to comfort them, for his life had been a fierce warfare, and on his brow had so often stood the sweat and blood of battle ; while just behind the lifting curtains of the future lay that night of bitter, passionate pleading, that crown of thorns, that cross of infamy and of anguish. He, too, at this same time, was summoning them to a life of similar toil, privation and shame. Bonds and imprisonment he knew awaited them. Yet unless this bequest was meant for cold irony, the hollow laugh of despair, the jest of a man made mad through crushed hopes, Christ's gift of peace must have been both possible and priceless. In exaltation and abiding fullness of joy he must have gone beyond all past human experiences. That joy must have been a present possession, else he could not have bequeathed it. It must have been secured, not despite his sufferings and struggles, but because of them, for had he not himself said, "He that loveth his life shall lose it." That joy must have been within the reach only of those who emulated his sacrifice and reciprocated his devotion, consenting as willingly to die for him as he for them, for had he not also said, "He that loseth his life for my sake the same shall save it."

WM. W. KINSLEY.

SUMMER ANSWERS.<sup>1</sup>

LOVE, love—yes, love !  
 All up the wood the faint aromas creep,  
 Sonorous bells are pealing from the lake,  
 And wide-eyed night is drinking, breathless deep,  
 A marsh-born chorus, glorious for the sake  
 Of some great joy ! But we are couched on mould  
 Where webs of steep trees etch a mellow moon ;  
 From rhythmic water pulsing to a tune  
 Our low lids catch a shifting foil-of-gold :  
 For you are found, the riddle, known not of,  
 But longed for long—my sun-moon-stars of love

Mine, mine, ay mine !  
 At break of day two mortals seen by me,  
 Their parting sighs, each warm and clinging breast  
 Their reeling eyes that begged yet could not see,  
 My smooth joy brake in flocs of wild unrest,  
 Until you came with blue-birds !—whether deep  
 In waves you slept, or far in tropic land  
 You waked to life on some warm, oozy strand,  
 Or from my frame were slow shaped in a sleep,  
 Or great god Sun, henceforward yours and mine,  
 Did lend me you for life's completest sign.

Ah, rare day—rare !  
 A hill-close, warm, and brimmed with smell of spring,  
 Laid thick with petals apple-orchard strewn  
 Your feet that day were kissing. Every wing  
 That wafts a bird-voice to your path had flown.  
 I too, till then by my caprices led,  
 So arrowy whirred, swift as a hive-shot bee,  
 That close-enlaced, you learnt all things thro' me  
 Before once veered that tawny golden head,  
 When, hid by dazzle of your sunshine hairs,  
 We kissed, to blush and love all unawares.

Peace, peace, yea, peace.  
 The wizard moon shall never chill that breast,  
 Too rare in charms for mortal maid to own.  
 This mouth shall kiss your broad eyes to a rest  
 Neath snowy lids, neath shadows forest-thrown ;  
 Your tawny frame with languor dewy-sweet  
 Pervades my veins, while folded light and warm,  
 Slim limbs of gold-dust with my opal form  
 In full-blown flowers of spotless passion meet :  
 Oh woods were waiting, nor has thick life ceased  
 Its pulsing since, in grass, in bird, in beast.

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<sup>1</sup> See "Spring Asks" in the May number of this magazine.

Yea, life, life, life!

At my first change the glad earth rustled green,  
 At thy first coming sharper grew the shades,  
 But now, close-linked, the tasseled maize between,  
 We guide the hurrying sap, we part the blades  
 Where thin ears peep; we fill the buckwheat head,  
 And as we pass the peach turns golden-brown;  
 Great roses blow; the blackberry its crown  
 Sinks heavily while deeper grows its red.

Oh! love is work; our life-work, love; we strive  
 In love for new life, and our aims arrive!

High, fair those aims!

The Sun is god. 'Tis he our being's root  
 Blows roundly out to life's perfected sphere.  
 The glorious sun is mimicked in each fruit,  
 But moons are childless, icy-calm, and clear.  
 When noon gleams hot, and while the rich sap yearns  
 Along our veins, we'll broaden our delight  
 With help for all that lives, be guard by night  
 To all fair things within whose fibre burns

The central Sun. Thus his great will he frames  
 In two glad slaves, two close-entwinèd flames.

CHARLES DE KAY.

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## VAN LAUN'S FRENCH LITERATURE.<sup>1</sup>

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IN all primitive states of society there exists a tendency to attribute the phenomena of nature, especially the more unusual ones, to the direct and special agency of the higher power. The brook, the tree, the wind, are personified. A famine, flood, fire, storm, or an eclipse, is an exhibition of the controlling will in the particular instance to warn, to protect, or to destroy. Each man thinks that all the thunders in the heavens are for him. So likewise in the intellectual world, the wise man, the poet, the prophet, are each under the care of some special divinity. Enterprises of great pith and moment go awry for the act or omission of the managing king or statesman. Every misfortune is attributed to the sufferer. In short, men are regarded separately; each is, roughly speaking,

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<sup>1</sup> History of French Literature. By Henri Van Laun. New York. G. P. Putnam's Sons. 1876. Vols. 1 and 2.

capable of becoming anything. Every life is a distinct and independent problem. In the Jews this tendency to individualize was greatly increased by their own strange experience, and among the early European nations by the influence of that experience as recorded in the Bible, which has for centuries held up before mankind for consideration very extraordinary and important careers of individuals. Adam eats the forbidden fruit and the destiny of the race is changed. Lot's wife looks back and becomes a pillar of salt. Gideon asks for proofs and the wool is wet while the earth is dry. Joash at the direction of the prophet shoots from the window, but he shoots only three arrows and Israel smites the Syrians but thrice. To mention a few is to suggest many examples of the recorded lives of men, whose welfare or distress, and that of others, depended in this way on single distinct acts, and whose lives were guided as in the case of Moses and Joshua by direct communication with the Deity, and in other cases by dreams and prophetic messages. In lands where the Bible was read generally or by the teaching class, there was developed a strong disposition for every man to feel that there was between him and his Maker a regular account, and so to regard the lives and works of others; and the more powerful the man, the more important he thought his life and the due performance of it. From this appreciation of singleness there came an intense feeling of personal responsibility, resulting in an overestimate of personal importance, to which we owe many persecutions by those who considered themselves not only servants of the Lord, but very important servants and intensely responsible for extending His interests. To discuss this intellectual tendency almost exclusively in the light of religion will not be thought narrow, when it is considered that all intellectual processes among the nations who inhabited Europe after the incursions were religious.

But when observation and opportunities for comparison have become greater, comes the spirit of classification. First, the phenomena of nature are described, then thrown into groups, then they are compared and differentiated, then their laws are developed. Science has applied this method, first merely descriptive, and then explanatory, to the phenomena of nature, until a school-boy's head may hold and understand and formulate a mass of facts which would have staggered Aristotle. And now the scientific method, after having described and distributed races, nations, governments, proceeds to explain religion, philosophy, art, politics,

and the expression of them by general rules, drowning individuals in formulae. Returning for a moment to the religious phase, the old school believes in the efficacy of prayer and special interferences, while the scientific school refers men and their needs to universal laws not to be altered or stayed for any one.

Last perhaps, of all, the subjects of this method of investigation, comes the literary history of a man or a nation. The poem or the series of poems which the old school would attribute entirely to the writers, even *theirs* though inspired, in the sense of being individual and distinct, the new school proceeds to analyze and explain piece by piece, until, if the system professed to be perfect enough, we might put our fingers on the spring of every sentence. As there are varieties of dogs and pigeons, so there are varieties of minds, which are not only described by certain incidents, but are produced by certain things more or less traceable by the critic.

Is there not something wanting in this analogy? The chemist can analyze a grape into its minutest cell, and write down upon his blackboard its elements captured to the thousandth of a scruple, but he can not produce the fruit; he can not unite the factors into life; he can not even explain the bouquet or the taste; at best, he may only say this and this and this make a grape.

Pre-eminently, the late Sainte-Beuve, of whom Matthew Arnold said, "He was the father of us all," and M. Taine, "We are all his pupils," applied the scientific method to the art of criticism. M. Taine has followed him in the same process in his *History of English Literature*—a book beyond all praise, and for which every student of the subject must own him a creditor. In a masterly introduction M. Taine traces the expression of religion, politics, philosophy, in every country, and the spirit, style, theme and treatment of every writer to the three elements of race, epoch and surrounding circumstances. Taking up the English writers one by one, he shows us at the same time with their work the every-day life, and fashions, and the politics of their times, so that we are thrown at once into the period and the very audience of the author. The method has a vividness and thoroughness that speak for themselves. Mr. Van Laun, in his introduction of the *History of French Literature*, very properly remarks that the factor which M. Taine calls "circumstances," taken in the usual sense, would include almost everything; and then complains that if M. Taine has any defect, it is in not giving enough weight to the effect of political changes and institu-

tions upon literature. These, in the case of France, Mr. Van Laun considers almost paramount. But however expressed the method, taken beyond the describing and classifying of genius as a theory to explain or predict it is unsatisfactory. Indeed, the more the theory is carried out, that is, the more fully it shows the author's race and his epoch, and his whole surroundings, the less will it explain. Because every new fact being a contribution to the effect produced, the less distinct the cause and its particular effect become. And those who consider whether there be such a thing as a race-characteristic reliable as a guide, or whether the literature and art of a period accurately represent its every-day life, may be excused a little skepticism. We have, for instance, no knowledge of a people so distinctly marked and indestructible as the Jewish, and yet there must have been some great departure in the race characteristic which has made traders and money-lenders of the greatest warriors, poets and historians on record. What has become of the race-characteristics of the Greeks, that the descendents of Leonidas, Themistocles, Aristotle and Plato should be husbandmen and bandits? Nor are we more certain that the contemporary productions of artists, poets and novelists accurately—for it is accuracy of which we speak—represent contemporary dress and habits. In page 30 of Vol. I, Mr. Van Laun shows his confidence in such records by describing the general appearance of Gallic chieftains from an ancient medal before him. Our feeling is that the chieftain so represented would in all probability be a very unusual one, having more "tassels" and "knots," and "rings of bronze or gold," than Gallic warriors generally carried. And this judgment we rest upon our own experience of pictures in a far more accurate age of Italian and Swiss peasants, the like of whom are never seen out of the studios. It is in the nature of an author to choose unusual themes and characters, and to exaggerate; just as an actor representing Hamlet or Julius Cæsar must, to hold the attention of the house, mouth and roll his eyes in a manner quite unbecoming a soldier, a scholar, and a gentleman. Historians, no doubt, do differently; but we are speaking of creative genius. And even in mere description and narration we can test from our own experience how very imperfect and unsatisfactory an account we are able to give of any place or country where we have been; and how imperfect are the opportunities of a single observer for the reproduction of the lives and habits of a large number of people! Many

having experienced ill-treatment at the hands of a sailor or a soldier, generalize that all sailors and soldiers are discourteous; or having been cheated in a French store, conclude that French traders are dishonest; or like the English traveler, who, having seen one, that all the women in a certain Swiss town had red hair. This is a tendency too universal to be neglected in forming literary judgments, and many instances of it might be mentioned in high quarters.

Finally, when we come to "surrounding circumstances," the bewilderment is complete. The better off we are for circumstances, the worse off we find ourselves for cause. The value of our judgment upon the effect of the surroundings we may speedily learn from our own case, by considering how impossible it is for us to attribute our own bents and peculiarities to any certain cause; and frequently we are aware that the most marked have flowed from trivial causes, impossible for others than ourselves to measure. Add to this what Mr. Van Laun himself points out with great force, that a writer and a literary period are to a large extent the product of the past of former writers and literary periods, and it will be seen that a series of phenomena are presented altogether too complicated for any theory to explain.

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As a compromise, then, we are willing to accept the critical method of Sainte-Beuve and M. Taine for the full understanding and appreciation of a literary work, without requiring explanation of the power and manner of the author.

In the actual execution Mr. Van Laun's work suffers by comparison with M. Taine's magnificent History of English Literature. It is neither so full nor so brilliant. Brevity, generally to be commended, in so vast a work as this reduces the treatment to a list of French authors and their works, with occasional quotations. It is only in the longer sketches of Rabelais, Racine, Molière, Pascal, and others, that we get a glimpse of the personal character of the subject and of his relations with other men of his time.

The quotations, as a rule, are furnished in the original and in translation, so that the reader acquainted with French has all at his command necessary to form a judgment of both. But one great obstacle, the reproduction of the poetry, Mr. Van Laun has not overcome. One of two alternatives, neither of which is entirely satisfactory, must be adopted in such a work. Either the transla-



tion must be literal, to the loss of the idiom and spirit of the author, or it must be loose, to the disadvantage of introducing another genius, the translator. Mr. Van Laun has adopted the former, and the verse has suffered dreadfully in the translation by the loss of rhyme and metre, the English reader being offered a literal line by line translation, like the school-boy rendition of Virgil. Form is of the essence of poetry, and when it is sacrificed not much more than the argument is left. Dislocate English verse in the same manner and see whether it is worth keeping. For instance, the first stanza of the Bugle Song of Tennyson :

“The splendor falls on castle walls  
 And snowy summits old in story,  
 The long light shakes across the lakes,  
 And the wild cataract leaps in glory!  
 Blow, bugle, blow ! set the wild echoes flying,  
 Blow, bugle, answer echoes, dying, dying, dying !”

“The castle walls are bright in the sun  
 And so are the old summits covered with snow  
 The light is shaking over the lakes,  
 And the cataract leaps in splendor,  
 Start the echoes flying with the bugle  
 And let them answer as they die.”

Or this from Browning's *Pied Piper of Hamelin* :

“Into the street the Piper stept,  
 Smiling first a little smile,  
 As if he knew what magic slept  
 In his quiet pipes the while.  
 Then like a musical adept,  
 To blow the pipes his lips he wrinkled,  
 And green and blue his sharp eye twinkled,  
 Like a candle flame where salt is sprinkled ;  
 And ere three shrill notes the pipe uttered,  
 You heard as if an army muttered.”

“The piper walked into the street,  
 Smiling a little smile at first,  
 As if he knew what magic  
 Was contained in his silent pipe.  
 Then like a professional musician,  
 He prepared his lips to blow the pipe,  
 And his sharp eyes twinkled green and blue,  
 Like a candle flame on which salt has been thrown ;  
 And before the pipes had uttered three shrill notes,  
 A noise was heard like an army.”

A great deal is lost, but not nearly enough to illustrate the depreciation of the French poetry of which we speak.

On the other hand, it must be admitted that it would be frequently impossible to preserve the sense and beauty of the original in English verse, and to versify all the quotations made would be a work of the greatest difficulty ; but it is none the less true that the reader gets from most of the quotations not as just an idea of the French verse as the versions we have offered above of Tennyson and Browning give of theirs. That a less literal translation preserving the spirit better may be made, will be seen from a comparison of the translations of a stanza from a song of Claire D'Anduse, the first by Mr. Van Laun and the second by Mr. Roscoe, both printed on pp. 126 and 127 of Vol. I.:

“ In grievous trouble and in grievous care,  
Have (they) plunged my heart, and in great disturbance  
The liars and the false surmisers,  
Depressers of joy and youth ;  
Whereas thee whom I love more than aught in the world,  
They have caused to depart and stay away from me,  
So that I can no more see or gaze on thee,  
And thus I die of grief, of ire, and of rage.”

“ Into what cruel grief and deep distress  
The jealous and the false have plunged my heart,  
Depriving it by every treacherous art  
Of all its hopes of joy and happiness,  
For they have forced thee from my arms to fly,  
Whom far above this evil life I prize ;  
And they have hid thee from my loving eyes.  
Alas! with grief, and ire, and rage I die !”

Or still better the charming version to be found in an article from Longfellow, on *Les Trouvères* of a *rondeau* of the Duke of Orleans, quoted on page 242 of vol I., as follows :

“ The weather has doffed its cloak  
Of wind, and cold and rain ;  
It has donned embroideries  
Of sparkling clear and handsome sun.  
There is not an animal or bird  
But in its own tongue sings or shouts.  
The weather has doffed its cloak  
Of wind, and cold, and rain,  
River, fountain, and small stream  
Wear a handsome livery  
Of drops of silver, finely wrought ;  
Each one puts on new clothes.  
The weather has doffed its cloak  
Of wind, and cold, and rain.”

“ Now Time throws off his cloak again,  
 Of ermine frost, and wind, and rain,  
 And clothes him in the embroidery  
 Of glittering sun and clear blue sky.  
 With beast and bird the forest rings,  
 Each in his jargon cries or sings;  
 And Time throws off his cloak again  
 Of ermined frost, and wind and rain.  
 River and fount and twinkling brook  
 Wear in their dainty livery  
 Drops of silver jewelry;  
 In new-made suit they merry look;  
 And Time throws off his cloak again  
 Of ermined frost, and wind, and rain ! ”

The dramatic specimens have been rendered into excellent blank verse.

It is with a lively sense of our own incompetence for such a task that we venture to say the translations generally are not happy. To speak from the book, we offer the following examples from volume 2, which in the English preserve the idiom or sacrifice the thought of the original: “As a rule he took a decision very well. Il prenait d'ordinaire très-bien son parti,” p. 258. “He had me up from Amiens to make a *Swiss* of me. Il m'avait fait venir d'Amiens pour être Suisse,” p. 285, *i. e.* a porter. “I should leave to vanity the charge of honour and vanity. Je laisserais à la vanité le soin d'honorer la vanité,” p. 322. This may have been a typographical error. “That he retakes by his own virtue a *very happy* and immortal life. Qu'il reprend par sa propre vertu une vie bienheureuse et immortelle,” p. 326. “You are the cause of his loss. Vous causez sa perte,” where the context plainly shows it should be “destruction,” p. 102, volume 1. “Egypt *in other respects* so wise. L'Egypte autrefois si sage,” p. 316. “They asked who leader was; I gave my name; they yield. Ils demandent le chef; je me nomme; ils se rendent,” p. 93. “Because it is eternal and powerful as God *itself*. Parce qu'elle est éternelle et puissante comme Dieu même,” p. 142. “He who is liberal is not amiable (it should be lovable) if he extols himself or boasts of his liberalities. Celui qui est liberal n'est point amiable s'il s'élève on se vante de ses liberalités,” p. 351.

Whether he adopt in its entirety the critical method pursued in this book or not, the reader will derive from it pleasure and improvement; and it is no disparagement of the author to say that he falls short of M. Taine, in his similar study in English literature.

# THE PENN MONTHLY.

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OCTOBER.

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THE MONTH.

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IT would have given us very great pleasure to have been proved mistaken in our predictions that the Russians would encounter such a resistance from the Turks as no Moslem army has offered since the days of Solyman the Magnificent, and that the outcome of the struggle might be the final repulse of the Christian forces. The month has seen the hardest fighting of the war. The Turkish attack upon the division which holds the Shipka Pass, and the Russian assaults upon Plevna, have been carried on with a disregard of losses, and a determination to win at whatever cost, which are rarely or never seen in modern warfare. The perfection of modern fire-arms makes war very much a matter of calculation as to the number of lives it is worth while to throw away to secure some advantageous position. Such a persistent sacrifice of life as the Germans made at Gravelotte is rarely seen, and is held to require strong and clear proofs of its necessity. But the present war has seen many Gravelottes. Even the Russians seem to hurl regiments at fortified positions, defended by rifled cannon and breech-loading rifles, with as much disregard of consequences as when Romanzoff or Suvaroff exposed their men to a discharge of musketry and hand-grenades. They seem to fight with tactics a century old, but with the weapons of to-day.

As regards Plevna, the central point of the Russian operations, it seems to be admitted after repeated and unsuccessful assaults on

its works, that the place must be taken by regular approaches and a prolonged siege. It is to be the Sebastopol of the war, but with a difference. It is held by troops who will fight harder after the breach has been made and the outworks stormed, than they fought during the approaches,—who will hold every street and every house while they can pull a trigger. And the besiegers will be threatened on every side by strong and vigorous armies, against whom they must vindicate their occupation of every foot of ground between their intrenchments and the Danube, to say nothing of resisting efforts to raise the siége of Plevna or reinforce its garrison. The Russians seem to be fully aware of the difficulties of the task they have undertaken. They have laid their plans to fortify Sistova, Tirnova, Nicopolis and other points, and, if the worst should come, are prepared to fall back upon Nicopolis, where they will make a stand until they are able to resume the offensive. But the very fact that such a programme has been adopted, shows that they have lost confidence in themselves, and therefore will not go much further during this campaign.

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THE death of Thiers, had it occurred ten years ago would have been regarded chiefly as an event in the world of letters. Men would have discussed the merits of his two great histories, and remarked the singular fatality by which the most determined opponent of the Second Empire was made to contribute to its prestige by his brilliant apotheosis of the first Napoleon. And the friends of the National policy in finance would have deplored the loss of the orator, who from first to last denounced the wretched compact secretly concocted between Manchester Liberals and the tools of the French despot, in order to force a high-spirited but enslaved nation into the surrender of its industrial independence. But his sudden death in the present circumstances, when, by the unanimous consent of all classes of Republicans and the express nomination of his only rival, he stood before the people as the next President of France, is a misfortune of no ordinary magnitude. Not all the wretched plotting of Orleanists and Buonapartists has done so much for their cause. Not all the differences of opinion among the Republican majority is so threatening to their unity of action and their consequent triumph at the polls.

M. Thiers was not an ideal statesman. Though in the main a staunch friend of free government, he had a weakness for vigorous

measures of restraint and repression. Both by his conduct in office under Louis Philippe, and by his reasons for leaving it, he showed himself to be subject to that restlessness, which is very often characteristic of men of small stature. He must be doing something, and if possible, something rigorous and emphatic. There was no repose in his nature. His conduct in the repression of the Paris Communists at the close of the war was the most unhappy instance of this weakness. To make the punishment seem as sweeping and loom as large as the offence, the innocent and the guilty were swept away under one common condemnation, and the very slightest evidence of complicity with the insurrectionists was treated as damnatory. But France loved this man, and forgave him many sins for the sake of the great and true love he bore to her. That popular instinct, which discerns a worthy man in spite of defects of temperament and faults of conduct, singled him out for honor. He left a great record of patriotic acts; the author of the Protest against the ordinances of 1830, lived to pay the Five Millions and thus to liberate France from the German army of guarantee. He was one of the last of the statesmen who were prominent in Continental politics before the great cataclysm of 1848, and no revolution in public affairs could keep him from being before the public eye, either as a present or a possible leader. The second Empire was barren of great names and great capacities; it raised up no one who would eclipse the reputation of this octogenarian—no one who could rival him in the command of popular regard.

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THE French Ministry are doing their utmost to make the Republicans of all shades of opinion rally around M. Gambetta as the successor to the place left vacant by the death of M. Thiers. By their almost unprovoked prosecution of him for "insulting the President," and his condemnation to fine, imprisonment, and political disqualification, they have roused in his behalf all the sympathies of the better half of human nature. Those Republicans who differ widely from M. Gambetta, and who regard him as an unsafe leader, may still continue, in spite of their indignation at this ill treatment, to reject his leadership. But the prosecution certainly increases his chances of being accepted as the coming President, and extends the range of his influence. The true motive of the prosecution is a matter of conjecture. It is generally assumed that

the mere purpose to punish the alleged offence cannot have induced a body of such unscrupulous politicians as the De Broglie Cabinet have shown themselves, to take so much trouble and run so many risks. Some think the real object was to provoke a Republican outbreak, and thus justify the re-establishment of military government. They say the De Broglie Ministry feel the rope round their necks, and fight like men in a despair. Their only chance is to provoke their enemies into unwise and hasty action; and the prosecution of M. Gambetta was selected as the best means of doing it. But we think that these wise calculators forget that it is a soldier and not a politician that presides over the French Cabinet—a soldier who wishes to rule France in the style of a drill sergeant, and who is as sensitive to criticism as a petted child. The Ministry owe everything to Marshal MacMahon, and they have to repay him by making any sacrifice that he demands. They must do any foolish thing he proposes, unless they can, in a gentle and roundabout way, convince him of its folly. The things of that sort which they have done already, surpass enumeration: the prosecution of M. Gambetta because the Marshal felt “insulted” by a telling criticism on his actions, is but the last and most foolish in the series.

The military temperament does not take kindly to criticism, except from a superior; and when a soldier has worked his way to the top, he has no intention of taking any more of it. A greater general than MacMahon could not endure the presence of Madame De Stael in Paris; and the associates of the great Frederick had to remember the thickness of the soles of his boots, as a reason for not pushing a logical triumph too far. Even General Grant, with all his experience of Republican freedom, rather resented the liberty taken by those who discussed himself and his policy with freedom, and gave us reason enough for seeking a President among those who are not soldiers by profession. Marshal MacMahon resents M. Gambetta's speech, as he would a similar utterance from one of his military subordinates. He calls a meeting of the Cabinet, and not a single minister dares to stay away, or to vote for discretion and common sense. And half the world stands wondering what De Broglie and Fourtou mean by proceedings which are to Fourtou and De Broglie nothing but a hard necessity.

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By the death of Brigham Young another is added to the list of

those problematical characters, upon whose merits the world takes some time to make up its mind. This man, who made Mormonism the success it has become, who built up an anti-Christian and despotic empire on the soil of a free Christian nation, and who successfully resisted all the disintegrating forces brought in recent years to bear upon it—was he an honest enthusiast, or a hypocrite, or a mixture of the two? Certain it is that he was not, like Mohammed and perhaps Cromwell, a man who started well and honestly in the championship of a good cause, but became spoiled more or less by success. His conduct was all of a piece. He neither improved nor deteriorated throughout his long career as President of the Church of the Latter-Day Saints. And while a man of more than ordinary capacity, he was not characterized by that transcendent capacity, that “something daimonic,” which enables men of the highest order to fascinate and subdue. He was a tower of strength in the sect, and for years back nothing better pleased a Mormon than to be told how well the President was looking to-day. But while his loss will be severely felt, it is the loss only of the executive hand and not of the intellectual head of Mormondom. The author of the book of Mormon, the first President Smith, and Elder Orson Pratt, especially the last, are the men who made the Church of the Latter-Day Saints what it is. Except in his audacious transfer of his followers from the Mississippi Valley to the borders of the Salt Lake, Young did no more than walk in the road traced for him by others. Even the introduction of Polygamy, with which Young is charged by the Reformed Mormons, was Joseph Smith's doing. The “revelation” was given through Smith, and the practice commenced before the sect was driven from Nauvoo. It is this practice above all others which stamps the “Church” as un-Christian, not merely in doctrine, as is alleged against some nominally Christian sects, but in the essentials of ethical principle. Young was fully conscious of his rejection of the ethical standard of Christianity, else he never would have made the famous speech about non-resistance: “If any man smite me on the right cheek, I will turn to him the other also; and if he hits that, I'll give him .....

As to the effect of his death upon his party, nothing can be safely predicted until his successor has been chosen, and has given some evidence of his ability or his weakness. It will need, and for years it has needed, some strong hand to keep the Mormons loyal



to the church and its creed. It is true that the missionary efforts of the Christian churches have produced but little impression upon it, but the new-fangled theories of the Spiritualists have got a foothold, and have shaken many in their faith. If the nature of the coming choice is foreshadowed by the appointment of John Taylor to fill the place *pro tempore*, then the new President will be at least as earnest and as vigorous as his predecessor, for Taylor is one of the narrowest and most bigoted of the Mormon leaders, and although a very poor man, stands high in the esteem of the faithful because of his rigidity and ultraism.

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THE civil service reform of the present administration reminds one of the famous description of our political platforms. "They open like a broad boulevard, shaded by rows of stately trees, but dwindle first to a common road, then to a foot-path, and at last to a squirrel track, and run up a tree." All the fine and spacious openings of promise seem to have dwindled merely to a notion that appointments should be made with care, that the best man should get the place, unless there is some strong political reason for giving it to the second best, and that pressure should be brought to bear to see that officials do their duty. If this is to be all, and we see no promise of more, then the root of the evil will be left untouched. The power and the motive to sweep into idleness the collective experience of the civil service at every change of the administration, has not been touched. The motive to be dishonest in office, to make the best of the brief opportunity to steal, will remain the same. The offices, for lack of permanence in their tenure, and of a pension system for the superannuated, will be of necessity paid at a rate quite needless if the service were well organized. Even the bad precedent of appointments for political reasons has not been laid aside. The recent appointment of Collector Thomas of Baltimore was made, we are told, in order to harmonize the conflicting elements of the Republican party of that State. And to balance all this, we have an order which all but disfranchises thirty-seven thousand American voters, requiring them to vote merely as units, and forbidding them to enter any organization whose design it is to influence the opinions and votes of their fellow citizens!

The truth seems to be that no person in the Cabinet, and least of all Mr. Carl Schurz, seems to have any clear conception of the

organic character of our political abuses. At best they attack some outlying limb or branch of our abuses, while the tap-root is untouched.

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PRESIDENT HAYES, after perambulating New England and his native State, has been visiting the Southern States, and reaping some of the fruits of his wise and just policy in the cordial welcome there extended to him. We do not think that the manner of this Presidential excursion has been specially happy. There has been a want of dignified reserve, an appearance of popularity-hunting about the proceeding, which has grated on the nerves of many of his warmest friends. A President of the United States should display no trace of anxiety as to the reception of his administrative acts. He should feel that he cannot directly propitiate criticism without putting himself into its power. And his visits to the various sections of the Union should be associated only with the very highest significance of his office, as the highest embodiment of the national unity. All that is temporal or accidental in the history of his administration should have been left at Washington, and he should have come among the people with no thought of their blame—no desire of their praise. Nor is Mr. Hayes the happiest speech-maker who has filled the presidential chair. He has nothing of Mr. Lincoln's terse mother wit, and nothing of General Grant's occasional capacity for epigram. His speeches can be listened to and even read, but they contain no "words that have hands and feet," nothing that takes hold of any human mind. For this reason a more sparing use of the gift of speech would be much preferable, lest people begin to think they see, as Oxenstiern said, "with how little wisdom the world is governed."

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THE Free Trade party seem determined to make an advance all along the line during the session of the coming Congress, and they are evidently confident of some degree of success. The English Cobden Club is about—with true British modesty—to extend its organization to the United States and other benighted countries, making David A. Wells its agent and representative for this continent. Mr. Wells has been writing letters of comfort and assurance to his English friends, which ought to bring substantial aid to the cause. So long as British trade was good, it was never

worth while for the Club to make much effort in this direction. But now that every class of their manufactures for export are depressed to the utmost and "the cotton-lords have ..... for two years many of them been living on the profits they made in prosperous times" (*Spectator*), the Cobden Club cannot readily afford to leave us in darkness any longer. Mr. Wells' utterances are hailed with delight by the English papers, and one of them pathetically announces that England is at last to have a chance.

American Free Traders are not idle. Taking advantage of the meeting of the American Social Science Association at Saratoga, they called a conference of Free Traders to meet in that town September 7th. Had it been a meeting of both sides, some public interest would have been excited, but the conference was "as unanimous as Jonah in the whale," and had nothing to make its proceedings lively. The numbers present were large enough to warrant the selection of a council of whole thirteen, two Bostonians, four New Yorkers, and the other seven distributed over the Union. The council is to call a national convention, and form a national association, two steps whose postponement does not indicate that the conference itself was much of a success.

The chief thing done by the Convention was the adoption of seven resolutions, and we must say that we are surprised that a committee, of which Park Godwin, Francis A. Walker and Horace White were members, could make no more forcible and unquestionable statement of the Free Trade case. We presume that these gentlemen did the best that was possible, and that best is but poor. Far more than for what they say, these resolutions are remarkable for what they omit. Is it possible that the Free Traders have learnt something? We had not thought it possible. A protracted study of their manifestoes and less explosive literature seemed to show it impossible. But these Saratoga Resolutioners say nothing about monopolies, nothing about the elevation of prices (those of ships excepted), nothing about taxes levied on the people to support hot-house industries, nothing about the consumer and the identity of his interests with those of society, nothing about his "natural right" to buy in the cheapest market and sell in the dearest! Protectionists may well take heart as they read; perhaps by the time of that National Convention they may have carried home conviction on one or two other points, even though it may take the millionth refutation of every single fallacy to effect it.

The first two resolutions deal especially with the hard times, which they ascribe to over-production and the want of a market for our surplus, and their pith is "the economic axiom that 'it is necessary to buy in order to sell.'" Upon that the argument hinges. Now an axiom is what nobody can deny without exciting other men's suspicion of his sanity. But we will not excite any such suspicion in the minds even of the authors of this resolution by denying the truth of this statement. It is true only in the sense of those economists who hold that money used in paying the balance of trade is "simply a commodity like any other," and that it is productive only when it is sent out of the country, and thus procures in exchange articles of more direct usefulness than itself. But these gentlemen cannot have used the words in that sense; they are not capable of adopting language in a public manifesto which the common and unsophisticated reader could not help but misunderstand. They meant, of course, that unless we buy goods of other countries, other countries will not buy ours. And to say so is to assert that there is no such thing as a favorable or an unfavorable balance of trade; that nations do not ship gold and silver over land and sea to pay those balances. Why do Europe and America send vast masses of coin to China and India? Is it not because the Chinaman or the Hindoo does not find "it necessary to buy in order to sell?" He sells what he can; he buys what he must; and the rest of the world does the same. And why have the United States and Australia been pouring their gold into Europe ever since the opening of our mines? Is it not because Europe bought what she must of us, and sold us all she could, and when, as was the case till quite recently, her sales exceeded our purchases, we had to pay the balance in cash? Does any man honestly believe that if we adopt Free Trade with England she will increase her purchases of us as fast as her sales to us? And if not, what does this axiom mean?

The hard times, the resolutions say, are caused by over-production, and by the closing of foreign markets to our surplus products. We refuse to buy, and others will not buy of us. Surely the conference had heard that there are hard times in England and Germany as well as here. And there were easy times here under our Tariff, as well as in England under Free Trade. All true causes work uniformly; this assumed cause is found to be a false one by a double test. But why should our Free Trade friends make all this ado about hard times? Surely they do not need us to remind

them of "the economic axiom" that "the interest of the producer is a class interest, while that of the consumer is the interest of society, and is the only thing aimed at in wise and sound financial legislation." Hard times are the Free Trade millennium. They are the times when every thing favors the consumer, that is, society rather than separate classes. Are not all classes of goods more cheap and abundant than ever before, more cheap and abundant than they will be when times improve? and are not Cheapness and Abundance the Great Gods of the Free Trade world, while Dearness and Scarcity are proclaimed the devils which the Protectionists do ignorantly worship? Do the Saratoga conference want to put up prices? to favor class interests? to make things dear? to create scarcity? It is painful to be obliged to recall these gentlemen to their own fundameptal principles, but we do most earnestly recommend them to a course of study in Bastiat's *Essays on Political Economy, English Translation revised (with Notes), by David A. Wells.*

The third resolution, however, shows how much imperviousness to argument can coëxist with the docility we have praised. It is a weak attempt to throw the blame of our decline in shipping on the Tariff, and on the law confining American registration to American built vessels. Absolutely the committee assert once more that these two measures of the Protective policy are the reasons why "our shipping, which had become the second in the world, and was fast becoming the first, has almost been swept from the seas." Not a word is said of the effects of the change from wooden to iron ship-building; not a word of the decline in our shipping which began in 1855, six years before the Protective policy was resumed; not a word of the injury inflicted upon the remnant of it by British-built privateers during the Rebellion, and the consequent transfer of numerous vessels to foreign flags; not a word of the equal decline of ship-building in Canada under a Free Trade policy; not a word of the removal of duties in 1870 from all articles employed in ship-building, without effecting any revival of the business; not a word of the fact that iron steam-ships are now built on the Delaware of the first quality (registered A1 at Lloyd's) and as cheap as on the Mersey or the Clyde, though not so cheap as we could buy the worn-out tubs Mr. Plimsoll denounces. No; the tariff and the tariff only has prevented our building ships cheaply, and the registration laws

from buying them advantageously. As to the registration laws, what difference does it make to anybody on Free Trade principles, whether the carrying trade is in the hands of the English and the Norwegians or our own. All the reasons for being indifferent whether an American registered vessel is American built or not, are of equal force to make us indifferent whether American commodities are carried in vessels of American or of foreign registration. All the reasons for wishing to see the American flag flying at the mast head, are equally forcible reasons for wishing it to float over really American vessels. The present laws do secure to it over eighty millions of coasting tonnage, and perhaps three times as much engaged in inland commerce, while the English ocean marine amounts to but sixty millions all told. And the carrying business has been so much overdone, that there is no opening for any large investment of capital in that quarter. There is "no money in it" now, and there will be none for a long time to come. We will lose nothing by waiting, and perhaps after a while we shall get an ocean merchant marine, when we become thorough instead of half-hearted Protectionists, and impose discriminating duties on goods imported in foreign bottoms.

The fourth resolution is pathetic. The Free Traders are no enemies of the "large and important [manufacturing] interests which have grown up under the erroneous fiscal policy" of 1861-77; they concede that "due regard must be paid to the security and welfare of those interests," but seeing that they are as ill off now as they well can be, and that Protection can do no more for them than it has done, the Conference proposes Free Trade for their revival! The patient is very ill; perhaps dying. Throwing him over the barn may do him some good; at any rate it cannot do him any harm. The proposal is all the more touching because it comes from men who cease not, night and day, to declare that the money question is at the root of all our difficulties, and that we would have had no such hard times were it not for the disorganization of the currency. When these gentlemen speak of Protection, Free Trade is their panacea; when they talk of currency, resumption is their panacea. In which character shall we believe them? For the present let us insist on what they say outside of the Conference. For on all hands it is conceded that the money question must be settled before business can largely and permanently revive. Both resumptionists and anti-resumptionists agree as to

that. Secretary Sherman and Peter Cooper are of the same mind here. Supposing then that the money question should be settled in the wisest way, whichever that is, have we not every reason to expect a safe and moderate renewal of business confidence and enterprise even without "a thorough revision of existing tariffs?" If not, will these gentlemen hereafter have the candor, in their Hard Money speeches and articles, to warn the people of the fact? And will they not show equal candor when they next draw up a series of Free Trade resolutions for the Western and Southern market, by inserting an explicitly Hard Money plank, and warning the nation that even Free Trade will not mend matters without a gold basis to our circulation?

As to effecting the "revival" of our manufactures by taking off the duties from imported articles, it is hard to believe that the authors of the resolution attached any definite meaning to the words they use. They have of course a vague idea that Free Trade is good for everything, and therefore it must be good for our manufactures also. We can understand a Free Trader in maintaining that from the start every nation should leave its industrial development to the hazards of competition with all the world; or in asserting that even if a nation has taken the other course, and has called into existence industries which would not otherwise have originated on its soil and which still need its fostering care, it will best serve its largest interests—"the interest of the consumer"—in retracing its steps and abandoning those producers to their fate. Or we could understand a Free Trader—if such could be found—who thought that policy a wrong one, but that when once adopted it must be persisted in until those industries become self-sustaining, as that would be choosing the less of two evils. But a proposal to "revive" those industries in a time of temporary prostration by withdrawing from them all the advantages which they have been accorded, and depriving them of the home market which they possess, we do not understand. Is it a corollary of the "axiom" that "it is necessary to buy in order to sell?" But what are we to buy? Not food or raw materials, certainly; with all the sorts of which we use great quantities, we are already fully supplied. It must be manufactured goods. The demand for these articles must be largely transferred from the home to the foreign producer, and the amount of home sales now possible to the former must be greatly reduced. Will he acquire a new foreign market by the change?

Let us divide the question: (1) Will our increased importation of European manufactures be repaid by increased shipments of American manufactures to Europe, beyond what we now send with every advantage and facility for export that we can hope for? Or will we go on paying for them, as we have been doing, in United States bonds and those of municipalities and corporations, or, in the last resort, in gold? (2) Will we secure a profitable exchange of manufactured commodities for produce in the countries which do little in manufacturing for themselves, so long as we sit with our hands in our lap and let things take their course? England has secured the trade of Spanish America, of Asia and of Africa by vigorous effort, by government subsidies to steamship lines, and the like. We buy the produce of those countries, with some exceptions, at her wharfs and from her merchants, sometimes after two or three transhipments. We can purchase it from the producers if we do as she does, and not as she says. Her Free Trade policy has saving clauses to cover every sort of outlay of the public money, which will secure commerce and customers for her manufacturers. And if our manufactures are to be revived by the extension of our commerce, it will not be by adopting the *Laissez faire* principle, but by setting it at defiance, as she has done and still does, whenever it comes into collision with common sense.

Lastly the resolutions take up the question of commercial treaties, and especially the proposal of reciprocity with Canada. We shall have something to say hereafter about the mischiefs of commercial treaties in their practical workings and their wrongness in principle. For the present let us note that a *consistent* Free Trader will have nothing to do with them. He must say with Ricardo "we want commerce, not commercial treaties." Believing that the relations of trade ought to be kept as simple as possible, he must repudiate methods which introduce the utmost complexity and confusion. Believing that each nation profits best by giving up all idea of gaining at the expense of another, he cannot take part in the game of international chicanery and trickery, by which the old lies and dodges of diplomacy are mustered into the service of commerce. The beautiful and millennial theories by which Free Trade fascinates the half-thinkers of our day, are not more antagonistic to a high protective tariff, than to a modern commercial treaty.



As regards reciprocity with Canada, the Saratoga Convention and the National Board of Trade may "just haud their breath to cool their kail." It is not the Protectionists who will defeat that little plan; it is their own allies in England and their proposed allies in the Mississippi Valley. Manchester and Leeds, Sheffield and Birmingham, are not going to throw open the Canadian market to their American competitors if they can help it; nor does the Western farmer mean that the Canadian shall have the preference in the New England wheat and provision market. It was these two influences which decided the question the last time it was raised, and they will decide it again in the same way. Whenever Canada is ready for a Zollverein with the United States, we are ready for it also. But a Zollverein would be the first step to her political absorption, and that would be a misfortune to both countries.

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AFTER all the wire-pulling to prevent the election of Mr. Randall to the Speakership of the House, and the attempts to commit him on some issue which would divide his supporters, his election seems to be at last conceded as a foregone conclusion. The New York papers of both parties have displayed in this connection that delicate consideration and that warmth of appreciation which they always manifest when a prominent Philadelphian's good name or success is at stake. They have been especially clear that Mr. Randall was in favor of sowing the South with subsidies; that the Rebel war debt was to be repaid in that form out of the national treasury. Now we hope that Mr. Randall is in favor of generous treatment of the South. We believe that we can better afford to postpone the final payment of the public debt than to see the South a laggard in the march of improvement because of the mischiefs done it by slavery and the war. We want no Ireland of poverty and discontent beyond the Potomac. And if the appropriations are only enough to equalize the distribution of the grants of public money made to the different sections of the country since 1860, they will be nearly, if not quite enough, to bring the South forward and abreast with the Union at large. If President Hayes's Southern policy means anything, it means that the Southern States are to be no step-children, and it ill-becomes those who opposed no grants to their own districts, to begin to talk of economy and the

public burdens as soon as anything is proposed for their neighbors.

These, we hope, are Mr. Randall's views, but neither we nor anybody else have a right to say they are. Every now and then some Northern newspaper has discovered plain and palpable proofs that Mr. Randall is for granting subsidies to the Southern Pacific, and the like; but before the week is out, the same paper betrays signs of hankering after a little clearer and stronger proof of the fact. Oh yes, it knows all about it, and yet it would like to know more. But the more is not forthcoming; and neither is any candidate, and least of all any New York candidate, who can keep Samuel J. Randall out of the Speaker's chair.

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*Populus vult decipi.* As if the exposure of the Katie King humbug were not enough, our city has been treated to another exposure of a series of impositions carried on by persons who call themselves "mediums of spiritual intercourse." And the victims are, many of them, men of keen intelligence and business talents, respected by the community. We might laugh and pass the matter by, were it not that this sort of humbug seems likely to become chronic among us. Society has at all times knaves in plenty, but the direction in which they turn their talents is significant of much. If they have begun to eke out a living by trading in the supernatural, it is because they find that the best market to which to carry their knavery. We are fast becoming a vastly enlightened age—too wise and clever, too well-read in Herbert Spencer and the like, to believe what our grandmothers believed. The old faith in a God who is the home and centre of all spirits, and who by his Spirit discloses himself in the hearts of men, is become altogether incredible to us. But somehow the instinct to believe in some sort of spiritual world, to seek fellowship with those who have vanished from our sight into it, has not been exterminated from men's breasts. And so, as in the old ages of decay and unbelief, men run after "lying wonders." All the trickery of pagan mysteries and mystifications springs up anew, and the deceits so long buried under the dust of ages, are unearthed to become the fashion of the hour. The pet superstitions of the day assume the most vulgar, the most frivolous shapes, and yet men believe in them. The world looks, perhaps, to its cultivated and scientific men, its favorite

teachers at present, to offer a united front in opposing these superstitions, and it finds Crookes and Wallaces themselves succumbing to them. Our skepticism just because it makes nothing certain, makes everything possible. It leaves us in the darkness, which the mind peoples with fantastic and often terrible shapes. "Where the gods are not," Novalis says, "these spectres bear rule." For the sense of spiritual power, and the yearning for spiritual communication, has not passed away with the loss of the conviction that God has revealed to men the nature of that power, and opened a channel of intercourse between heaven and earth. It has merely put dark seances and hidden trap doors in the place of the four Gospels; and any rogue who has wit enough to cheat us, in place of the Son of man. We can now believe in any spirit but the Holy Spirit, and any revelation except that which has stood the test of centuries and has moulded the lives of all the greatest and most civilized nations of the world. Lucian and Apollonius, Voltaire and Cagliostro, Büchner and Home—the old coincidence of extremes forever peats itself.

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### THE ORNAMENTATION OF FABRICS.<sup>1</sup>

L A FONTAINE has said, "We are not able to surpass the ancients; they have left us only the glory of following them well."

What the great fabulist said of literature, is equally applicable to the art which we shall endeavor to describe, and which we may call the ornamentation or decoration of woven fabrics.

Several thousand years before our era, the artificers of India, of Egypt, of Assyria, and of Phœnicia, already made plain tissues, or woven fabrics, as beautiful and as fine as those which to-day go out from our best factories: they were not less skillful in producing embellished fabrics, which they often ornamented with very ingenious designs. It was by embroidery that this ornamentation be-

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<sup>1</sup> From the French of M. Dupont Auberville, being the general introduction of his work, entitled, "L'Ornement des Tissus." Paris, 1875.

gan. With that instinct of delicate coquetry innate in women, our mothers, who knew how to find in everything a help to their charms and natural graces, originated this art, which offered to them such precious resources. They instinctively tried to embroider the first material which offered itself to their hands. One could almost feel assured that at the departure from Eden, woman was able to make herself an elegant attire from that simple garment which was the first of all described to us in the Scriptures; we dare hardly say that she embroidered it.

Among the Jews, the Law of Moses prescribed that the sacred vestments should be enriched with embroidered ornament. The prophet Ezekiel was not willing that this magnificence should extend beyond the porch of the temple. He reproached the women of his time for wearing their clothing over-laden with embroidery. The good housewife described by Solomon in the last chapter of the Proverbs, knew the art of embroidery; "she uses with diligence," we read, "the flax and the wool, she turns the spindle with her own hands, and makes the garments of her domestics."

Among the Assyrians, embroideries of an exquisite delicacy, and marked with thread of gold of the greatest value, were displayed on the garments of persons of distinction. The monuments of Khorsabad furnish evidence of this. The same practice existed in Egypt, India, Persia, and China, everywhere in fact where civilization progressed upon barbarianism. We know that the Babylonians excelled in the art of embroidery. It was at Babylon that they made those wonderful covers for couches, intended for the guests at feasts, for which, they say, a sum equivalent to \$160,000 in our money was paid.

The heroines of Homer: Helen, Penelope, Calypso, Circe, and as many others, employed themselves with needle-work which was really embroidery. The poet, in his immortal verses, always brings them back to their wool and their distaff.

What we have said is enough to show that the art of decoration of tissues was one of the first of human inventions. We find traces of it in the nations the least advanced in industries. Each country naturally employed the materials which were at its doors. For want of silk, cotton, flax, hemp, wool, gold and silver thread, thanks to the skillfulness of hand-workmanship, sufficed to carry the art of embroidery to a degree of perfection which could not be surpassed. For, it must be remembered, China for a long time

kept the monopoly of silk, and it only made its appearance in Egypt two or three centuries before our era, to spread itself thence over the whole of the East. We know that fabrics made of cotton and flax among the Egyptians and Babylonians were in no way inferior to those which they could have made with silk, which, whatever may have been said to the contrary, was entirely unknown to them.

The Hebrews, soon after their emigration from Egypt, from which country they drew their stuffs and precious materials, had only flax and cotton; and it is by an erroneous interpretation of the Hebrew word "*Shesh*" (Ex., Cap. 26), that the opinion has been advanced that Moses named silk among the costly materials, the use of which he ordered for the inner curtains of the Tabernacle.

Silk fabrics existed, nevertheless, in China more than 3000 years before our Era. For 300 years, the Chinese utilized, with more or less success, the precious material which they had been able to find, when a woman, an empress of the Celestial Empire, Si-Ling-Chi, conceived the idea of preventing the hatching of the silk worm, and, by that means, of giving to the precious thread its brilliancy and its natural continuity. By this discovery, the silk fabric received all its splendor, and the gratitude to the ingenious Si-Ling-Chi was so great that the Chinese placed her among the number of their divinities.

Several centuries later, the Chinese historians show us the Emperor *Chun*, traveling over his vast possessions, and receiving at the foot of the mountain *Tai* the homage of his numerous vassals. They bring him for presents, as being most pleasing to him, materials of silk, of flax, of raw silk, and fabrics of various colors. At this remote period, the weaving of silk had made considerable progress; the richest dye colors were skillfully used, sometimes to delineate the design, and sometimes to heighten the brilliancy of fabrics, which delicate embroidery rendered doubly precious.

A long time after, about twelve centuries before Christ, when the Chinese Empire was sub-divided into a great number of tributary states, we read that all the feudal courts of the empire sought to surpass each other in the magnificence of their costumes, and surrounded themselves with the most skillful artificers in the art of weaving and of coloring the "divine thread." In fact, nearly 900 years before the Christian Era, we find the Emperor *Li-Wang* wearing garments of silk brocade, magnificently ornamented in gold.

The most beautiful stuffs were made under the Emperor's own eye, and in the palace itself. The learned author of the history of silk, M. Pariset, to whom we are indebted for all these details, draws from this the conclusion that they were reserved for the great people of the empire. We would rather believe that the Chinese sovereign wished thus to encourage an industry of which he could foresee a glorious future.

How does it happen that an ingenious people, as the Egyptians were, did not profit immediately from the precious discovery which China had made? The suspicious and essentially selfish character of the Chinese can, to a great extent, explain the care they took to keep to themselves, and to hide from the rest of the world, their rich acquisitions; but besides this, the history of China does not show that there was, during a long period, any communication with the extreme East, and the western part of Asia. Silk and silk products, had they become sufficiently abundant to be supplied for exportation, had not found then either an outlet, or a road for commerce. Doubtless, some Jews, after the dispersion of their nation, might happen accidentally to penetrate as far as China, and procure silk fabrics; but, as has been observed by the learned missionaries, who have thoroughly studied the habits and customs of the Chinese, and have left us valuable documents relating to that country, these stuffs were not carried very far, and unquestionably no regular commerce could have been established between Egypt and the Celestial Empire.

The people of Eastern Asia, we have no hesitation in believing, alone had the knowledge of the Chinese textile industry. In the absence of written proofs, we find sufficient evidence in tradition, which carries back to a common origin the symbols used in decoration in these different countries. Nowhere has respect for tradition made itself more felt than in the East; the purity of the spring created a thirst for it. The *motifs* of ornamentation or decoration have preserved the original impress. Whatever may be the ideas of others in this respect, we do not think we go too far in advancing the opinion that up to our own time, the Orientals have repeated from century to century, the first suggestions which came to them from China.

The land of the Pharaohs had to content itself for the manufacture of its fabrics with the materials which it drew from its own soil. Besides flax, cotton and wool, the Egyptians knew of certain

*chenilles*, the thread of which served for the manufacture of a fabric, silky, but without consistency. To this, perhaps, may be traced the errors which arose in regard to our mulberry silk worm.

Before the cotton plant penetrated the fertile plains of the Nile, or before it was cultivated there, Indian cotton fabrics were known in that country, and a large commerce in them was carried on. The Arabian navigators went to find them at *Barigatza*, at the north of the modern Bombay, and carried them to the port of *Adulé*, on the Red Sea. It was there that the Egyptians went to traffic in them. The cotton obtained in this way went to make "the blue striped girdles with a fringe, the worked cloth, the cloths with blue stripes, the plushes and half-velvets" which the learned men attached to the Egyptian expedition found in the tombs, and which served to enshroud the mummies wrapped in *little bands of cotton*, of which our museums show us so many curious specimens.

It is averred that the Egyptians used for their fabrics only flax and cotton. Pliny, whose testimony is so often invoked, does not mention any other productions. (*Hist. Nat., Lib. XIX., Cap. ii., iii., iv., v., vi.*) Cotton was the sacred material reserved for the vestments of the priests and for burials; flax was employed more particularly for secular purposes, and for the fashions of the day. Herodotus speaks of *cuirasses* of linen, for the manufacture of which there were used threads of wonderful fineness; and Denon, in his "*Voyage en Egypte*," has told us about a tunic found at Thebes in a sarcophagus which he had the good fortune to see, that it was composed of "a loose fabric of which the thread was excessively fine; the thread for making lace is not more slender; it is thinner than a hair; twisted and composed of two filaments, which implies either an unheard-of skill in weaving by hand, or else perfected machines."

We see that the products of the Egyptian manufactures were prepared in a manner to satisfy the most delicate taste, and the artificers have since then certainly not been surpassed. We could do nothing better to give an idea of the care and watchfulness which attended the manufactures than to penetrate for a moment with our readers into a factory of linen fabrics. It will be sufficient, in order to do this, to decipher with *M. Maspero* the papyrus No. 3930 of the museum of the Louvre. This papyrus is nothing else than a letter by which "the writer, *Ah-Mis* complains to the

director of the manufactory of Tai that he had taken away one of his workwomen to give her a position under the chief of another workshop; he asked that she should be given back to him. This change had been made at the instance of the mother of the young workwoman, who accused *Ah-Mès* of retaining her daughter as a simple apprentice, to keep her work and appropriate it to himself, although she was fully mistress of her trade; *Ah-Mès*, on the other hand, protests his innocence, and maintains that the apprentice has not yet a complete knowledge of her trade." The rest of the letter is entirely illegible.

This little document, however incomplete, has the merit of carrying us into a real workshop, and initiating us into the habits of the artisans of the ancient Egyptians. Each manufacture was placed under the supervision of a superintendent of the fabrics, or of the weavers, who had under his orders certain foremen. These foremen had charge of a fixed number of workmen, and moreover of *workwomen*; for, in spite of the testimony of Herodotus, it is shown that women occupied themselves more especially with this kind of work.

To each workshop were attached some apprentices, whose work, too imperfect to be given to commerce, was not paid. It appears that the period of duration of apprenticeship was not a matter of special regulation, otherwise the complaint of the mother of our workwoman could not have been reasonably made. It would also appear that the chief of the workshop had found in the silence of the law on the subject of apprenticeship a pretext for fraud and prevarication.

The young apprentice has already become mistress of her trade—so the curious document tells us—why not pay her for the work the price to which she is entitled? We can see that there was wanting in Egypt a law tribunal of skilled men, and that contracts were not always strictly executed.

After being introduced, thanks to the papyrus in question, into an Egyptian manufactory, let us take a glance at the industrial and commercial movements in those distant times from that point of view of our subject which especially interests us.

We are surprised to see the activity and prosperity which united then all the people of Western Asia. Egypt appeared with her embroidered fabrics; India with her muslins and dyed materials; Babylon with her rich stuffs; Phœnicia with her purple. To Babylon, which Ezekiel calls the "City of Commerce," arrive all the



caravans which traverse Persia, Media, and all the country through which the Indus flows. The Arabs and the Phœnicians carry by the Persian Gulf and the Euphrates, the products of Arabia and Southern India; Tyre, the Queen of the Seas, sends also the rich merchandise which she receives from the south by the Egyptian caravans, and from the north by those which have crossed the Caucasian country. It is difficult to leave out of these commercial relations, China, herself so richly gifted. It is hard to resist the disposition to place the silk tissues of the Celestial Empire in comparison with those fabrics of wool, flax, and cotton, brought to this vast Babylonian market; but it is necessary, nevertheless, to make up our minds to leave China still for a long time to her selfish isolation. We repeat, that in spite of what may be said by the translators of the Bible, and by Saint Jerome also, silk was unknown to these ingenious people. The Hebrew word "*Bus*" translated by the word *Sericum*, "silk," which has given rise to so much controversy, is, according to the opinion of Oriental scholars, only the word *byssus*, "flax," although, at a later period, the Romans designated by this word a species of silk which was peculiar to them, and was of a golden yellow.

The Greeks, who followed the Egyptians, and who attended their thorough schools of instruction, brought back from Egypt the art of weaving fabrics, and also the use of paper as employed in Egypt from the year 1872 before our Era. This passed to the Greeks 800 or 900 years later,<sup>2</sup> and we can say that the art of weaving was transmitted to Greece about the same period. Athens at that time consumed a large quantity of textile fabrics, and we know that there was there also a considerable market for wool and flax. The ornamentation of fabrics received inspiration from the works of the great artists, of whom Greece seemed to be the cradle, and designs of exquisite taste spread themselves upon the fabrics which were made at Athens, and the principal cities of the Archipelago. The expeditions of their generals in India and Persia, and especially in the country of the Medes, were not without results for the art of ornamentation of fabrics. The purple and gold which sparkled on the brightly colored garments of this people against whom they fought, made them eager for the spoils, and the clothing of the

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<sup>2</sup> The Romans called "*Biblus*" the bark or rind of the *rusk* from which paper was made.

victors soon equaled, and even surpassed in richness, that of the warriors whom they subdued.

The Romans inherited in turn the civilization of the Egyptians, of the Greeks, and of all the nations with whom they had been more or less in communication, and they learned from them to manufacture fabrics. The Republic had imitated the Carthaginians and the Greeks; the Antonines and the Syrians had had Egypt for a model; the monarchical empire reproduced Persia, from which it borrowed the fashions and the arts. The Romans had no difficulty in equaling their masters and even surpassing them. They brought from Phrygia the workmen *Plumarii*, whose art consisted in representing on linen, with the needle, all kinds of figures, especially birds with the varied colors of their plumage. Gold and silver threads were not spared to heighten the brilliancy of such fabrics, whose exquisite work was universally admired. Thence they called the workmen *Phrygiones*, from the name of their native country.

The Romans were not true artists. They did not understand the dignity of art. The practice of it was ranked by them among the servile occupations, and left to strangers. Artists, free and honored in Greece, were, at Rome slaves, or liberated slaves. Hence a marked difference in their works of art. It would seem, however, that there was an exception in favor of the *Phrygiones*; they enjoyed certain privileges, which can be explained by the taste for luxury which, among the Roman ladies, was always increasing.

Should we not add, that the Romans conceived of work which suggested the idea of lace? The *Scutulata* garment, which was worn by persons of condition in Rome, was a kind of toga, made of a material "of which the borders were worked in a kind of small network or meshes, joined together and embroidered on it with the needle."

Ovid tells us that Lucretia did not disdain this kind of work. Nothing is more charming than the picture which he presents to us of this illustrious Roman working in the midst of her slaves at a "*Tacema*," a kind of garment which she made for her husband. We ought, however, to suppose that she took upon herself the embroidered work, the delicate part, "*pars scutuata*;" upon the slaves fell the duty of sharing among themselves the coarser part of the work. It was, in fact, a duty devolving upon worthy women to make with their own hands, besides their own robes and their

adornments, the garments for their husbands and children, and their slaves. Augustus, we know, wore habitually garments made by his wife, his sister, and his daughters.

After having spun the wool, and the flax, or the "*Byssus*," they made the fabrics in the loom. These ancient customs prevailed for a long time among the Romans, who made them sacred in their espousals by a peculiar ceremony of causing to be carried before the newly married woman a distaff and a spindle.

It was only toward the end of the first century before our Era that silk was introduced into Rome. The pillage of the rich and luxurious provinces of Asia made fabrics of silk so abundant that not only the women, but the men also, adopted them for their garments. It was only a little later, under the consulate of Taurus and of Libon, the 16th year after Christ, that the Senate thought it ought to oppose this luxury; it prohibited men "from dishonoring themselves by wearing fabrics of silk." (*Ne serica vestis viros fœdaret. Tacit. annal., Lib. II. Cap. xxxiii.*)

The art of the "Phrygiones," of these workmen so skillful in the ornamentation of fabrics, reached the height of its perfection at the period when the victors had recourse to their talent. A sort of emulation was thus created among them from that time, and they sought to surpass each other. We know that the robe called "*toga picta*" or "*palmata*," the customary garment of those who had won the honor of triumph, was their work. This robe was ornamented with "palms of gold embroidered or woven in the fabric."

The *Trabea*, a kind of robe of purple, with which they clothed the statues of the gods, was also for the most part woven by them.

We ought not to finish this first glance at the art we are endeavoring to describe without saying a word about the colors employed by the ancients in dyeing their fabrics.

The purple, so esteemed by the Greeks and Romans, and considered among them one of the distinctive signs of sovereign power, was a deep violet, and not, as is generally supposed, a dye of a bright red. The "*porphyra dibapha*" or purple twice dyed, was renowned above all. This custom of dyeing twice with purple dates from the earliest antiquity. In the "Song of Songs" the choir of young girls, addressing the young wife, express themselves thus: "Your hair is as the purple of the King, bound, and *twice dyed* in the vats of the dyers." This rich color came from Asia,

and particularly from Phœnicia. They sold it for its weight in gold. Its chief merits, in the eyes of the ancients, seem to have been its brilliancy, and the quality of deepening in color by exposure to the sun, instead of growing paler, as was the case with most of the red, violet, and blue colors.

It is to chance alone, according to tradition, that we owe the discovery of this beautiful color. Everybody knows the story of the shepherd's dog, who, urged by hunger, broke, on the sea shore, a shell fish (*murex*). The liquid, which gushed out, stained his jaw with a color which carried away with admiration those who saw it. They sought the means of applying it upon fabrics, and succeeded. To the Tyrian Hercules, who was the proprietor of the shepherd and of the dog, was accorded the honor of the discovery.

At Pompeii, they have found near the shops of several dyers, quantities of the shell fish *murex*, and M. de Sauley tells us that he has likewise discovered in the neighborhood of Sidon a mass of shells of the same species. All these shells bear the mark of a blow of a stone, which leaves us without doubt that they were used for the purpose of obtaining the Tyrian purple.

Pliny and Vitruvius point out the plant *Garance* or Madder as entering into the composition of the purple dye. It was thus that a Roman change gave, if not greater brilliancy, at least more solidity to the original color.

The peculiar coloring properties of the *Pastel* (*Isatis*) which we commonly call *Woad* (from the Saxon *Gwœd*) were equally known to the ancients. A fine blue color was obtained by means of this plant, and we know from Pliny that the Roman dyers excelled in the art of preparing it. We should mention the Cochineal, the Gaude, the Indigo, and the Safflower, which, in use in India from time immemorial, became equally well known to the Romans. Vitruvius also tells us that with the sap or juice of several flowers and plants they knew how to imitate all kinds of colors, but he has omitted to specify the nature of these plants and flowers.

Whatever were the processes employed, dyeing necessarily followed, step by step, the movement which was made in the manufacture of fabrics and the art of ornamenting them. They knew how to profit by the use of all the means; skillful combinations produced the richest colors. The *Flammeum*, a species of veil with which the Roman ladies covered their heads when they went out, assumed often the most fantastic shades. We know that it was the color of a flame when worn by a newly-married woman.

Thus the embroiderers on the one part (Plumarii or Phrygiones), and the dyers in the other (Tictori), succeeded well in the ornamentation of fabrics and their manufacture. And we may truly say that this industry, already flourishing in China in the most remote times, in Egypt 1500 years before Christ, in Greece five or six centuries later, was safely preserved in Rome at the period of the Cæsars.

We have not invented since, we have only found again, in perfecting them perhaps, the means employed by those who have gone before us.



## THE OCEAN: ITS ORIGIN AND DESTINY. I.

### (ORIGIN OF THE OCEAN.)

OF all the subjects that ever engaged the attention of man, that which involves the past history, the present aspect, and the future prospect of matter, is one of the most curious, interesting, and instructive.

When we look out upon the universe, and down into the depths of our own souls, and contemplate with complacency the multifarious material and immaterial manifestations, we receive with ecstatic delight the irrefragable fact that there is an all-potent and all-comprehending Being, who is the Author and Preserver of all things.

The origin of our earth, and all that is thereon, as well as of the solar system, of which it is a member, and of the universe, of which it is an infinitesimal part, is involved in much obscurity, doubt and uncertainty—enveloped by the Cimmerian gloom of human ignorance. That which has been wanting in actual knowledge has been abundantly supplied by the fertile imagination of man. It is a notable fact that the human intellect—that divinity within man—is ever active and restless, and has ever been endeavoring to solve the mysteries with which we are surrounded; has ever been searching for the *why* and the *wherefore* of all things. A futile task, in all probability, but certainly a laudable one.

Unrestrained, the mind of man is ever searching for *truth* in all

things ; and when, after years of patient toil and investigation, the light of a new truth is struck from the dark flint of error, ignorance and superstition, it is boldly proclaimed and fearlessly maintained, regardless of what men may think or the world may say.

In its search after truth, in its enthusiasm for discovery, the human mind is too easily led to look upon theory as fact, and plausible conjecture as absolute demonstration. Hence, it has been well said that the power of fearlessly doubting is one of the noblest attributes of philosophy.

Respecting the earth and its origin, together with the creatures, rational and irrational, which people it, three several theories have at various times been maintained, to wit: (1) The Paganistic Conception—according to which the earth and the universe are self-constituted, and have existed from all eternity as they are at present ; (2) What has lately been designated by high authority as the Miltonic Hypothesis—which hypothesis supposes that the earth and the whole universe, at no very distant period in the past from the present day, came suddenly into existence; that the parts of which the one is composed, and the creatures which inhabit the other, made their appearance in a certain and definite order of succession, in the space of six natural days ; and that, too, without any precedent similar condition—in fact, without any precedent condition whatever—from which they could possibly have been evolved ; and (3) the Evolution Theory. This theory of creation—philosophy of the universe—also contends that the present order of the universe has existed but for a limited time. It differs from the Miltonic, however, in this, to wit : according to the Evolution conception the present order of the universe grew, by a natural and inevitable process, out of an antecedent order ; this antecedent order out of another antecedent order ; this last out of a still antecedent order,—and so on *ad infinitum*, until the purely homogeneous is attained—until the first phase of nature is reached.

These theories of the philosophy of the universe may be divided into two general classes, to wit: (1) The Materialistic doctrine, that, though the orderly successions and changes of the universe are finite in duration, yet the material substances are infinite. Under this head have been classed the Paganistic Conception and the Evolution Theory. (2) Second, the Spiritualistic doctrine, that matter and form are simply the effects of a Spiritual Cause ; that they are

each equally finite in duration; while the cause alone is eternal. To this class belongs the Miltonic Hypothesis.

There is still a third class, which may be designated as the Aristotelian doctrine, not because Aristotle was putative father of the doctrine, but because it was adopted and earnestly defended by him. This doctrine denied creation, and contended that the order of nature, in its cosmical relations, is not a progression toward an end—is not an evolution of the heterogeneous from the homogeneous—but simply a succession of changes simple in their elements and endless in their combinations, constituting an order which is without beginning and without an end. This doctrine did not meet with the favor or sympathy of mankind, and is now one of the multitudinous phalanx of discarded speculations.

Whether the Materialistic or Spiritualistic doctrine will ultimately prevail can not be definitely ascertained at the present stage of the contest, though we have abundant reasons for *supposing* that the Spiritualistic will not carry off the palm of victory. The Spiritualistic formerly was as much in the ascendent as the Materialistic is at present. Whether the one or the other of these contending doctrines, the Aristotelian revived, or some new and unheard of doctrine finally gains the universal credence of mankind, one thing is certain, viz.: that it must satisfactorily account, in a reasonable way, for the existence of the universe and all the phenomena of nature, and not by an appeal to blind and unreasoning faith, gross and foolish superstitions, or heathenish and dementing fears.

The Paganistic conception is the one that obtained in the morning of our race—during the days of darkness and ignorance, ere yet the *scintilla* of barbaric intelligence had cast their faint and sickly rays across the sinuous path of our heathen progenitors. The first processes of philosophic thought led to a broadened and more enlightened view of the workings of Nature, and thus wrought the abandonment of the Paganistic Conception.

The second or Miltonic Hypothesis, is the one to which, for the last eighteen centuries, Christianity has tenaciously clung, confidently defended against the attacks of the pagan and the aspersions of the scientist, and reliantly reposed in as the inspired account of creation—that given by the Creator Himself.

It is well known by all who have taken the trouble to familiarize themselves with the subject, that the most ancient philosophers of whom we have any account, have entertained the opinion that our

globe has not always possessed its present characteristics; that it has passed through an infinite variety of stages of progress ere reaching its present condition, that there was a commencement, and that there will be an end to its present career.

These views of the ancient philosophers have been fully confirmed by the investigations and discoveries of modern scientists. The investigations and discoveries of the astronomers and the geologists have all but incontrovertibly established the fact of the existence of an æon when all the material substances of the universe were agglomerated into one highly-heated, uniform, non-luminous, nebulous gathering,—when the constituent elements of the universe were disassociated and diffused throughout the extent of space as

“Far as the remotest line  
That bounds imagination’s flight.”

This is the Gaseous Phase, or the first phase, in the earth’s genesis.

Whence came this diffused world-stuff? Ah! that is the question;—the one which has agitated and perplexed the philosophical mind for ages past, and in all probability will for ages to come; one that has hitherto baffled, and still bids defiance to, the mystery-riddling manipulations of the scientist. It is pretty generally conceded by scientists that worlds were originally evolved from a ubiquitous nebula, and many contend that the process is still in progress in our solar system. But whence came this nebula, remnants of which it is supposed still linger in our solar system, few have attempted to ascertain. Some, however, more bold and confident, as well as rash and arrogating, than the commonalty of their brethren, have made an attempt to lift the veil which shrouds the *modus operandi* of the secret conclave of Nature. Sir William Thomson has advanced the theory that the various groups of supposed nebulae of our solar system, as well as the primordial nebulae from which existing worlds were evolved, are developed from the universal ether which is supposed to fill interstellar space, by means of some mystic process of cosmical chemistry with which we are not familiar, and cannot imitate in our laboratories. As explained by this theory the formation of nebulae is as simple and manifest as that of a rain-drop—is simply a process of condensation. At first a haze stains the clear blue of the sky, then a cloud greets our sight, and then the minute particles of water are gathered into drops and precipitated to the earth in a shower. Similarly the nebulae. The first epoch to which the imagination extends is the period of a diffused



imperceptible state. Condensation transmuted from the imperceptible to the perceptible state. Continued condensation evolved glowing suns and elaborated retinues of planets. This theory, if true, does not solve the difficulty; it simply removes it one step. Sir William's assumptions granted, "Whence came this universal ether?" still awaits an intelligent answer.

This is a very pleasing theory—very fascinating to the searcher after the *modus operandi* of nature. But the fact that recent researches in stellar astronomy have resolved the nebulae into clusters of stars too distant to be individually discernible save by the assistance of the most powerful telescopes, suggests that all nebulousity may arise from the optical deficiency of the astronomer, and not inhere in the constitution of the nebulae, thus dispelling all the pleasing illusions of the theory. In the march of progress, the parent stem, of which this theory is a scion—the Nebular Hypothesis—in its first growth, has become senile, and like a man on the wrong side of fifty, is rapidly passing into its dotage; the great Newtonian doctrine of Gravitation is being superseded by that of Polarity; those of Centrifugal and Centripetal Force are gradually giving way to those of Magnetic Attraction and Repulsion, and a new and unheard of philosophy of the universe seems imminent.

According to the nebular hypothesis the first accident of matter of which we do or can know is the unstable proemial which obtained at the ushering of the Chaotic Stage of the Prozoic Age, *i. e.*, during the Gaseous Phase. Simultaneous with the inauguration of this molecular-chaotic commotion was a flash of light throughout the universe, announcing the work begun, and by its irradiance illuminating the ebon concave of primal chaotic nature.

Since light and heat are simply different manifestations of the same great force, and not two distinct forces mutually dependent with this dissemination of light there must have been a corresponding reduction of heat. Hence, with a continuous illumination there would be an uninterrupted decrease in the volume of heat. In the progress of time this constant reduction of heat—infinitesimal to all appearances though it be—would produce perceptible results upon the incandescent world-stuff. With this inauguration of change commenced the drama of the universe.

After the Gaseous Phase succeeded, in compliance with the requirements of the law of Evolution, or, as Prof. Winchell phrases it, the law of Correlated Succession, (1) the Nebulous Phase—

characterized by the slight condensation of certain mineral gases but all the remaining elements retaining their extreme gaseity; (2) the Fire-mist Phase—representing the farther condensation (through refrigeration) of mineral gases, the *mass*, however, remaining homogeneous and gaseous.

This brings us to the Foci-forming Stage. This stage is characterized by the formation in the chaotic mass of nuclei—by what means we will not stop here to inquire—and the segregation of circumjacent world-stuff. This segregation—by virtue of a well-known law in physics—would inaugurate a rotary motion. This rotary motion would necessarily give sphericity and integration to the rotating mass.

With the installation of this rotary motion through the operation of segregation, two antagonistic forces were necessarily introduced; the one attracting towards, and the other repelling from, the centre. As long as these two forces remained equipollent, the rotating liquid sphere remained an entire unit; but refrigeration accelerated rotation and thus wrought a preponderance of centrifugal over centripetal force, producing a peripheral detachment. Prior to this peripheral detachment, all the planets of our solar system were agglomerated into one revolving gaseous sphere, of which the sun is the residuum.

The parent mass threw off various peripheral detachments, which, because of inequality of density in their constituent materials, ruptured and formed, respectively, Uranus, Saturn, Jupiter, Mars, Earth, Venus, and Mercury. Some of the rings thrown off, instead of spherifying about a single nucleus, collected around two, three or more centres, and formed as many distinct planets. There was a ring thrown off between Jupiter and Mars which, on rupturing, collected about four nuclei instead of spherifying about a single centre, thus forming a quartette of planets in place of a single sphere.

These detached peripheral rings, after spherifying, in their turn threw off one or more peripheral detachments, which ruptured and, spherifying about one or more centres, formed satellites or moons, which are companion planets accompanying their parent planets in their periodical journeyings round the sun.

The sixth ring thrown off by the parent mass, rupturing, spherified and formed what is known as the earth. After the earth had thrown off a single peripheral detachment, the crust became too

rigid to permit of farther detachment. This detached ring, collecting about a single centre, leaves our earth with a single satellite. Some of the planets, such as Jupiter and Saturn, have two or more satellites, while Mercury is presumed to be devoid of any.

Prior to its annulous stage, the earth was a rotating sphere of incandescent liquid matter, incarcerated within a superlatively-heated atmosphere. This period may be designated as the Zonular Stage in the earth's evolution; for if we examine minutely it will be found that neither the liquid globe nor its surrounding atmosphere is of uniform characteristic throughout, owing to the fact that each is made up of different substances, various in character.

Continued refrigeration and chemical assimilation were synergistic agents in the production of this stage. Through the operation of the latter, the constituent elements of the earth and the atmosphere surrounding it, would form numerous and various combinations, the number and nature of which would depend upon the natural affinities of the elements and the relative proportions in which they were respectively present in the admixture of gases and vapors. Simultaneous with the reduction of temperature these newly-formed compounds would be disseized of the power to retain their former gaseous form, and through the influence of this liquifacient would be condensed into a molten-liquid sphere, with an atmosphere of such volatile compounds as could retain their gaseous form maugre the reduction of temperature.

Throughout the liquid sphere thus formed and its circumambient atmosphere alike, would occur an expatriation of that uniform density and diffusion which prevailed notably during the Chaotic Stage, and in a less marked degree during the Foci-forming Stage. This condition of attenuate diffusion was succeeded by that characteristic from which the third—the Zonular—stage derives its name, to wit: the arrangement of the dissimilar and newly-formed compounds—in compliance with the law of gravity—more or less completely in strata or zones, according to their respective densities.

The layers of the stratified liquid sphere and its cinctured atmosphere may be tabulated—commencing at the centre of the earth and progressing upward—as follows:

#### I. *Mineralogical Strata.*

1. A central metallic nucleus of very great density, surrounded

by a zone consisting of combinations with sulphur, arsenic, etc., and the heavy metals;

2. A zone of molten rock, considerably lighter than the former, and in which silica, present in minimum proportions, existed in combinations with a large amount of the bases—lime, magnesium, oxide of iron, and alumina—with but comparatively little potash; and

3. An extensive zone of molten rock of comparatively little density, consisting of silicates with an excess of silica combined with alumina and alkali, but containing very little of the other bases.

#### II. *Meteorological Strata.*

4. Such compounds as are volatile at a very high degree of temperature only; *e. g.*, the chlorides, and particularly the chloride of sodium—the chemist's name for common salt;

5. A great zone of carbonic acid gas;

6. A belt of nitrogen with an admixture of oxygen; and

7. In the form of vapor, all the water that now forms the seas and oceans, and saturates the earth and atmosphere.

The mineralogical stratographical arrangement of the molten sphere may very properly be considered as approximately stable, since it was one which was not destined to be broken up by complete refrigeration, accomplished by the radiation of heat and the heat-absorptive power of the atmosphere.

The meteorological stratographical arrangement, however, was quite different. Here the individuality and continuity of the strata were broken up, alike by the tendency of the heated vapors to diffuse themselves, and the actual congelation and precipitation towards the surface of the glowing globe of those gases and vapors situated in the colder regions of the intensely heated atmosphere.

When this sphere acquired an indubitable permanency of configuration, it may be said to have passed to the crusted-spherical stage in its Prozoic progress.

The earth and its furnace-like atmosphere surrounding it, owing to the refrigeration occasioned by the radiation of the heat into space, would gradually cool down. Under this persistent influence a thin crust or film would soon be formed over the surface of the molten sphere. The film thus formed, constantly receiving accretions from within, gradually interposed a greater and greater impediment to the radiation of heat from the interior of the slowly cooling mass, until the process of radiation was materially impeded.

Eventually the earth's crust was reduced in temperature below red-heat, and our planet became the theatre of life.

With this reduction of the temperature of the earth's crust there would inevitably be a corresponding reduction in the temperature of the atmosphere. This reduction of the atmospheric temperature would be gradually increased by the impeding of the radiation of heat from the interior of the refrigerating sphere.

Consequent upon this reduction of the temperature of the atmosphere was the condensation and precipitation of some of those elements which had previously been held in suspension in the lower strata of said atmosphere; such, for example, as the chlorides, and particularly the chloride of sodium or common salt. From the amount of this mineral substance contained in the ocean and known deposits, David Forbes has estimated that the quantity of common salt alone must have been sufficient to form a crust over the entire surface of the globe some ten feet in thickness.

In speaking of the salt contained in sea-water, Michelet says, that were it practicable to accumulate the entire amount upon the surface of America, it would form a mountain 4,500 feet in height, with a base co-extensive with the entire continent. And Reclus has estimated that, if the ocean were evaporated, for every fathom of water there would be an average deposit of two inches of crystallized salt. Assuming the average depth of the ocean to be three miles—which is not at all improbable—according to the above rule of computation, the ocean's complete evaporation would give us a salt-deposit over the entire basin of the ocean of about 230 feet in thickness.

Chloride of sodium, however, is not the solitary substance to which the sea owes its saltiness, yet it is the principal one. And to this mineral are to be attributed the peculiar flavor and odor of sea-water. The quantity of common salt dissolved in sea-water is always 75.786—or a little more than three quarters of the total amount of mineral substance held in solution. The average quantity of salt contained in the sea—that is, the average degree of salinity of sea-water—has been estimated by Bibra and Bischof to be 35.27 parts in 1000. The more recent and more complete observations of Forchhammer, however, have shown the true proportion to be 34.4.

This saltiness of ocean-water, however, is not a constant quantity, but is subject to innumerable variations, occasioned (1) by the

quantity of chloride of sodium dissolved ; (2) the amount of evaporation and replenishment carried on in the particular region observed ; (3) the amount of fresh water supplies furnished by rain-falls and river-discharges ; (4) the direction of the currents and counter-currents—in short, every variation of temperature, every discharge of fresh-water, every local movement of the ocean, produces a more or less perceptible modification in the relative salinity.

Systematic observations scientifically conducted have shown that the per cent. of saltness is invariably lower in the waters of the ocean in the southern hemisphere than in the northern. And in the northern hemisphere, where the ocean receives no supplies of fresh water from river-discharges, and very little from rain-falls, as in the North Atlantic, off the coasts of Morocco and the Great Sahara, and where the evaporation is very great, the saltness is nearly ninety-eight parts in one thousand. In mid-ocean, and particularly in the neighborhood of those shores where the waters of many large rivers are discharged into the ocean, the saltness is one, two, or three thousandths less.

In all mediterraneous basins, such as the Mediterranean Sea, the Caspian Sea, the Baltic Sea, and the Red Sea, the saltness of the waters is greater or less than in the ocean, according as the evaporation is greater than or inferior to the quantity of fresh-water accretions received from rain-falls and river-discharges.

The following table of comparative salinity may enable us to form some idea of the variability of oceanic saltness.

TABLE OF SALINITY.

<i>Bodies of Water.</i>	<i>Average Degree of Salinity.</i>
Atlantic Ocean.....	36 thousandths.
"    off Morocco Coast.....	38    "
"    off Greenland ".....	35    "
Pacific Ocean.....	35    "
Indian Ocean.....	35    "
Mediterranean Sea.....	38    "
Black Sea.....	39    "
Red Sea.....	43    "
North Sea.....	30 to 35    "
Baltic Sea.....	5    "
Baffin's Bay.....	33    "
Finland Gulf.....	2    "

As already stated, chloride of sodium or common salt constitutes a little more than three quarters (75.786) of the total amount of

mineral substance held in solution in sea-water. This proportion of chloride of sodium to the other minerals, unlike the degree of salinity, is a constant quantity. This has been abundantly shown by the analyses made by various experimentists.

As refrigeration progressed, and the temperature of the atmosphere became reduced and the gathering and congelation of the gaseous particles was inaugurated, a scene of terrible sublimity was ushered in—such a scene as human eye never beheld, and one which earth was destined to witness but once. Wisps of *cirrus* swept along the unobstructed stammel concave; vivid and angular flames lit up with scarlet the Cimmerian gloom; while the deep-toned thunder ever and anon, in world-convulsing crescendoes, pealed forth its sublime and terrifying melody. The *cirrus* which at first did scarce stain ether, gradually deepened, and by swift degrees, spread a thick coat of distended *nimbus* over the canopied void of heaven. The clouds open and the vernal shower descends in one unbroken sheet; but, like the light of the rapid-shooting meteor that darts athwart the concave of “the inverted bowl,” vanishes in mid-heaven and is returned to the upper regions, whence it proceeded. Again it approaches the earth’s blackened and arid crust, and again it is scorched to evaporation and returned to the clouds which were already over-burdened with all the water that now fills the oceans and seas and lakes and rivers, and all that saturates the earth and rock and atmosphere. Eventually in the fierce conflict between the two elements—fire and water—the latter prevails, and the whole ocean is precipitously transferred to the parched crust of the famishing earth.

This seething ocean dissolved the encrustment of chloride of sodium, and with the cessation of its ebullitions it had acquired a salineous quality—which it has ever since retained.

The peculiar characteristic of color remains yet to be considered in endeavoring to account for the origin of the ocean.

The waters of the ocean possess the most vivid colors, the greatest delicacy of tints, and the most highly-graduated susceptibility found anywhere in nature. In the course of the seasons and the succession of day and night, are pictured upon its billowy bosom the sombre gloom betokening the imminent storm; the oppressive loneliness of gray twilight; the glory of “the advancing spars of day” as they quit the chambers of the orient; the gelid prospect of polar ice-locked landscapes, and the brilliancy of a tropical noon-

day. Every twinkling star laughs at its own image, and every passing cloud, though so fibrous, filmy and etherial that it

“—— catches but the faintest tinge of even, .

And which the eye can hardly seize

When melting into eastern twilight's shadow,”

is mirrored upon its glassy surface. Even during the halcyon repose of a tropical noon-day, when the sky is so cloudless, so clear and so purely beautiful that God alone is to be seen in the heavens, and naught else is reflected by the water, then the miniature billows at play break the calm monotony with a thousand brilliant variegations.

But that property of the water which enables it to reflect whatever may be located above or situated beside it, is neither the solitary nor the chief source of its charm and beauty. Its extreme pellucidity discovers to us the manifold creatures which cleave the water and crawl upon the bottom of the sea, adding their own variegated and brilliant colors and vivid hues of gray, rose, green, and silver. Because of this extreme transparency, the fuci and algæ growing beneath the wave, and the various objects held suspended in the water, act a part in the great drama of colors.

In the consideration of the colors of sea-water we are not to take into account the various hues due to the presence of creatures, animal or vegetable, nor such transient phenomena as the effects of the auroral lights and phosphorescence, which ever awaken the wonder and admiration of mankind. These are subjects aglow with interest and replete with wonder.

In the waters of the ocean there may be said to reside sixteen distinct colors, which may be tabulated as follows:

I. Roily or muddy, - - - (1)	III. Indigo, - - - - - (10)
II. Green, - - - - - (2)	a. reddish-blue, - - - (11)
a. clear-green, - - - (3)	b. cobalt-blue, - - - (12)
b. bright-green, - - - (4)	c. ultramarine, - - - (13)
c. strong-green, - - - (5)	d. deep-indigo, - - - (14)
d. yellow-green, - - - (6)	e. black-indigo, - - - (15)
e. olive-green, - - - (7)	IV. Black. (16)
f. emerald-green. - - - (8)	
g. dark-green, - - - (9)	

The first may more properly, perhaps, be considered as a condition rather than as a color. It is now established beyond a probable doubt, that the various other colors, except the last, are the product—principally, at least—of impurities mechanically suspended



in the water. The color of water is a negative quantity, and completely absorptive, and where there are no suspended impurities to reflect the rays of light the water appears perfectly black—that is, has no color whatever.

Where the amount of suspended matter is excessive, or the particles very gross, it produces the condition (rather than color) which we term “roily” or “muddy.” This condition is exemplified in each rivulet and rill during a freshet, is the normal condition of many of our rivers, and is manifested in the ocean wherever the storm-maddened waves lash rocks or shore.

Minute examinations when subjected to a condensed beam of light disclosed the fact that of the remaining fifteen colors the first is thick with suspended impurities, the second contains a less quantity, the third still less, and so on by extremely fine gradations down through each succeeding tint, until in the black—theoretically at least—all impurities disappear.

The blackness of water is indicative (1) of purity and (2) of depth, and has been accounted for on scientific principles by Prof. Tyndall as follows:

“In small thicknesses water is sensibly transparent to all kinds of light; but as the thickness increases the rays of low refrangibility are first absorbed, and after them the other rays. When, therefore, the water is very deep and very pure, *all* the colors are absorbed, and such water must appear black, since no light is sent from its interior to the eye.”

The various colors of ocean water—or what to a careless and superficial observer appear as colors of ocean-water—are not dependent alone upon the presence of earthy impurities. The salinity and transparency of the water, as well as refraction of solar radiation, are fountains of color.

It has long been conjectured that the salts of the ocean influenced its temperature and movements, and it has now been demonstrated by experiment and observation that the presence or absence of salts affects the color also. Observation and experiment have shown that the greater the quantity of salt the bluer the water; and conversely, the smaller the quantity of salt the greener the water. Sea-water confined and evaporated slowly gradually becomes saltier and saltier, and the hue of blue gradually becomes deeper and deeper until just prior to crystallization, when the deep-blue assumes a reddish tint.

It was formerly the opinion of physicists, that transparency was due to the intensity of the light precipitated upon its surface; but it is now known that this is not the case. Late researches have revealed the fact that polar waters are clearer and purer than those of the tropics. The former are transparent, the latter translucent. In tropical regions, to the practiced eye of the mariner, the sea-bottom is frequently revealed at a depth of from 20 to 30 fathoms, but very rarely, if ever, beyond that. Scoresby, the conscientious explorer of polar waters, tells us that in polar seas where pure water prevails, the sea-bottom can be distinctly discerned at the depth of seventy fathoms.

Both in the polar and tropical seas, where the bottom is not distinctly discernible, it reveals itself by the peculiar tint it imparts to the overlying strata of water. As a general rule, the sea is lighter near the coast, or over a submarine table-land, than in mid-ocean. This is due to the proximity of the sea-bottom. Off the coast of Peru the water is a dark olive-green. Numerous soundings made at various times by different experimentalists, have shown the mud which surface-coats the sea-bottom to be the same in color. On one part of the Lagullas bank the overlying strata of water—which are one hundred fathoms in depth—suddenly pass from a blue to a greenish color. This sudden transition in the color of the water is the direct result of an equally sudden change in the sea-bed. Again; off the Loango the water is actually brown. Tuckey and others have found the mud at the bottom to be an intense red.

The question now awaiting conclusive determination, is whether in the cases just enumerated, and all similar ones, the color is produced by the rays of light penetrating to the bottom and being reflected again to the surface; or whether—which is far more likely—as Tyndall and Cialdi think, it is produced by the particles of mud suspended in the water.

What ever may be thought respecting the color of particular pellucid areas of the ocean, whether their color be attributed to the reflection of solar rays or to the impurities held in suspension, or to the proximity of the sea-bottom, it is beyond question that the reflection of solar rays in tropical waters exercises considerable influence in producing the exquisite azure of the Tyrrhenian Sea, the Gulf of Lyons, and the far-famed Grotto of Capri.

J. MANFORD KERR.

## ON THE READING OF HOMER IN SCHOOL.

DURING several years—a decade nearly—it was annually my duty to examine in Greek for admission to college a class to which I afterwards gave instruction in the Freshman year. These classes aggregated, possibly, four hundred students, drawn from all grades of social life and representing every degree of natural ability, of industry, and of taste for the study pursued. And yet, in every year two facts were most painfully apparent:—(1st) That the reading of Homer had seriously impaired the knowledge of Attic forms which the drill in Xenophon had imparted; and (2d) That the Homeric usage of the article, the pronouns, the augment, the subjunctive mood, etc., was invariably carried by even the most careful students into whatever Greek they read in the succeeding half-year. The Homer and the Xenophon had crossed each other, like two lights from opposing chandeliers; and the result was a shadow.

To feel that this was wrong was only natural. That boys should spend their first two years in Greek in studying a grammar and reading an author that were both intended to teach them one form of the language, and then deliberately, through several months, read Greek that availed but little to improve the knowledge they had acquired before, while it certainly confused and embarrassed their later studies—this was entirely too suggestive of the heroic labors of that noble King of France, who “*first* marched up the hill and then marched down again.” It seemed as if the boys knew well enough that nearly all the Greek in college would be selected from Attic writers, and hence had “crammed” the Homer, indifferent to the promise of nourishment that was made in its name, and regardless of the indigestion that was sure to follow so imprudent a gorge. If they had ever heard of the imitations of Homeric diction in the dramatic choruses, they were evidently trusting to study “when the play began,” having adopted meanwhile Dr. Anthon’s view (Preface, p. v.) that Homer is almost repulsive to boys preparing for college, unless it be made attractive by special means. Indeed, they seemed to have shared in the Doctor’s other opinion—which, to be sure he does not state so clearly—that Anthon’s Homer, Glossary and all, is the only edition of the Iliad in which their work would not prove utterly

repulsive.<sup>1</sup> And so the cramming went on. Each class had the same impressions to erase, before they were ready to do good work in the Freshman year; the same deep rust to rub off, before they reached the true substance of their earlier studies. As to any acquaintanee with the story of the Iliad, with its peculiarly simple, yet exalted, style and diction, or with its true character as idealizing heroic honor and courage—O Zeus, how couldst thou sit upon Olympus, and not afflict with thy destroying bolt such ignorance and stolid insensibility!

To remedy this evil, the examination in elementary grammar and the Anabasis was made more stringent, and a test in prose composition so arranged as to compel the continuous turning of English into Greek, till the student came to college. And this plan secured one good result at least. The Attic Greek was measurably "kept up" by the side of the Homeric, and this more surely than by the single process of translating each peculiar form in Homer into the regular form of the later writers. The classes were certainly better prepared than their predecessors to take up an Attic writer and read rapidly. The broad foundation of both etymology and syntax was well laid. Exceptions could easily be referred to general rules, and in this way time be saved for the better work of basing upon the author read studies in history, civil polity, etc. But the Homer was literally sacrificed, and the crossing of the dialect was relieved but in part. The cramming grew worse than ever, and not one step was taken in advance towards a knowledge of the Heroic Age of Greece, or of any of the interesting questions connected with Homer. The pupil reasoned—he certainly acted as if he reasoned: "When Attic Greek is wanted, why spend much thought upon a dialect that was old-fashioned when Æschylus fought at Salamis, and as archaic when Demosthenes bore arms at Chæronea as is Chaucer in our own day?"

It seemed, therefore, that the only possible inference from all these facts, was the utter folly of reading Homer in school. But what a conclusion! Contravening an opinion so long and so generally received, and a practice so universally regarded as orthodox, it appeared impossible. The bare thought suggested the story of

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<sup>1</sup> Perhaps, in accordance with the maxim, "*De Mortuis*," this remark ought not to be printed. But who that hopes for a high standard of scholarship in our American schools and colleges, can ever cease regretting the mischief done by Dr. Anthon's editions of Latin and Greek authors?

Sir Joshua Reynolds standing for the first time before the Raphaels and the Angelos of the great picture galleries, and going away humbled and mortified to find that he did not like them—a parable that needed no Nathan to enforce its application. Of what value, pray, were the presumption in favor of what exists and the consent of the ages, if every new man was at liberty to question the decrees of his betters? The conclusion was surely false, or the field within which the observation had been made, too narrow. The facts had a voice, perhaps, but the voice was not the high-priest's. It remained but to "go and lie down."

And such, doubtless, would have been the end of the whole matter, had not the conviction that Homer was out of place been deepened by further experience, and shared in by a friend whose opinions upon all subjects connected with education are singularly broad and clear. Then it was determined to prepare this paper. The writer does not wish to deprecate criticism, but has felt it necessary to tell this long story, in order that he may be fully understood as stating the results of careful observation and the views to which this observation has driven him, rather than as arguing for the establishment of an abstract proposition that seems to be true *a priori*. He must hurry on, therefore to present *ἐν τῷ στόματι τοῦ λόγου* (cf. Xen. Ages. xi. 15), some reasons why a change in the course in the Greek seems desirable; then to consider some substitutes for the Homer; and, last, to suggest a place where Homer might be read with profit.

In order to catch precisely the point at issue in the question, When shall boys read Homer? let us suppose, for the sake of the argument, that the modern world knew neither the Iliad nor the Odyssey, and then try to put ourselves in the place of a learned professor, who, while rummaging among old manuscripts, should chance upon a copy of these poems. He feasts his own soul upon the wonderful story of the *μῆνιν Πηλεΐάδεω Ἀχιλῆος*—embarrassed, no doubt, through a book or two by the peculiar dialects—and now prepares it a place in his course. Where shall it go? In one sense it is "easy Greek," but, as requiring a gigantic effort of memory to retain its archaic words and exceptional forms, it is very difficult. A charming story, it charms the imagination, not the realistic faculties. Its language, indeed, is exquisite, and its simplicity unapproachable, while at the same time it is a "great" epic, drawing upon the supernatural and attaining the sublime; but it

stands apart from the main body of Greek literature, except so far as the latter is pervaded by certain old-time traditions, which the professor is now amazed to find crystallized in perfect beauty in the Homeric stories. For in them is unfolded a grand panorama of an age about which he has known but little or nothing. Beyond a few scattered notices in Herodotus, Thucydides, and some other later writers, Greek literature has only suggested the mysteries of that past which even we, with Homer in our hands, still call the age of myths and fables. The dramatists, the historians, the orators, all have seemed to know an era long anterior to the earliest of which they write distinctly; but a heavy veil has hung between them and this era, concealing it in deep obscurity. Now the veil is torn away. The age of the heroes and the demi-gods, *ἡμῶν γένος ἀνδρῶν*, the days when Olympus was really inhabited by deities who walked with men, and, like the sun, overlooked and overheard all things, (Il. iii. 227)—this age is now no longer to be guessed at: in Homer the mind may revel in its wonders, its tales of the noble deeds of noble men, its impossibilities. Every one knows, of course, that Homer and Hesiod are widely separated from even their nearest successors, but it is not every one who always remembers how very wide this separation really is. Chronology has never told us satisfactorily when Homer lived, or whether Hesiod was or was not his contemporary. Criticism doubts even yet whether Homer sings of an age in which he himself lived, or of one anterior to his own. Hesiod may write of a time later by a century than Homer's, or, as Mr. Mahaffy thinks, (*Social Life in Greece*, Cap. ii. and iii.,) only of "the other side" of social life in the same day. The world of the lyric poet was as different from that of which Homer writes, as it was from the still later Attic age—and this, although we suppose that Homer wrote of the times in which he lived. If he did not, then the gulf was yet wider between the Homeric period and the earliest lyric poets.

It would seem impossible, therefore, to overestimate the impression which Homer would make upon the professor supposed, and but fair, perhaps, to conclude that his decision of the question at what point in his course he would read the Epics, would be biased completely by this impression. And if this be so, can any one doubt what that decision would be? Would he, in all probability, entrust his new-found treasures to the tender mercies of boys at

school? On the contrary, would not every consideration incline him to reserve them for a later period? If any one doubts this inference, I beg him to read Mr. Mahaffy's book named above, and compare the chapters cited with his own recollections of the dreary toil he gave to dictionary and grammar, while he read wearily enough a book or two of the Iliad or the Odyssey.

And yet it is, doubtless, just this place which Homer holds in relation to the later Greek literature that has set the learned world to reading him so early in the course. Upon these later writers he casts a perfect flood of light; without him, a dictionary of antiquities, much more a dictionary of biography and mythology, would have been almost impossible. The stories of an age of myth and fable are exactly of the sort that poets love. Homer's people are the Arthurs and the Launcelots, the Enids and the Guineveres of the Greek world; and the later Greek poets turned as naturally to the Homeric storehouse as Tennyson to the Legends of the Round Table. Boys must read Homer, therefore, as an introduction to Greek literature. Dialects, uncouth forms, the absence of an interest which boys can feel—none of these things must weigh in the balance: Homer must be read, though the heavens fall.<sup>2</sup>

And all this might be true, if our boys could read the whole of Homer, if they could learn a considerable portion of it by heart—are not the Homeric poems rhapsodies?—or even if they could acquire in what they do read an important fraction of the myths and fables. But what do the first three books contain of Homer—and half of one of them omitted, because it is a dreary catalogue of proper names, worse than those of the Book of Chronicles? Or what boy ever learned his Greek Mythology out of Homer? or knew the plot of the *Hecuba* or the *Electra*, because he had read a fraction of the Iliad or the Odyssey? His Lemprière, his Smith, or some such book of reference, has always been his encyclopædia of classic lore, and ever must remain such. Besides, if it be true that Homer *must* be read before the later writers, does it not follow by analogy, that English boys and girls should read the *Book of the Saint Greal* or *Le Mort d' Arttur*, before they think of Tenny-

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<sup>2</sup>Perhaps another reason may have had some influence in giving Homer its present place. Fifty years ago, many post-classical writers were read in American colleges; copies of Greek books were scarce and dear; and many a professor, even, had hardly the faintest idea of the treasures of thought and imagination stored up in the literature which is now so easy of access through numerous and cheap publications.

son? that later German poetry is a riddle till the *Nibelungenlied* has been mastered? Was ever cart so awkwardly before the horse?

Allusion has already been made to the Homeric dialect as both difficult and barbarous to a boy trained in Attic Greek only. The degree of this difficulty is often underrated, even by the boy himself. For, after a book or so, familiarity breeds contempt of dictionary and grammar, and memory takes the reins from intellect. The process becomes mechanical. The pupil translates and reviews his lessons, and recites on the following day with a facility that is due largely to his powers of observation and localization. He recalls the meanings of many words, only because he knows where they stand in their sentences. Change copies with him, if yours is a different edition, and see what becomes of his readiness. Many and many a time has a candidate for admission excused himself with "I could have read it more freely in my own book."<sup>3</sup> Tell your pupil to take compound words to pieces and trace derivatives to their sources: he will laugh you to scorn, for the simple words are as foreign to him as their compounds, and the root-words as their derivatives. And so with the peculiar syntax. The several ways of rendering the article, for example, are at first a stumbling block. Next they encourage guessing, which succeeds or fails, as guessing always does. At last all articles are demonstratives; and the pupil, brought to bay, defies attempts to teach him to discriminate. Nay, he carries this "rule of thumb" far into his subsequent reading, and renders *ò this man* in Xenophon or in Sophocles. Suppose for a moment that his earlier course had not included Homer. Would not a word *in loco* make perfectly clear and easy the occasional Homeric article in the later writers? Beyond the familiar formula, *ò μὲν—ò δέ*, (which, by the by, the pupil learns long before he hears of Homer,) and a very few similar

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<sup>3</sup> Since writing the above, two friends have told me that at Dr. ———'s school, their class *held races* in reading the first book of the Iliad, which some of them could reproduce in very respectable English *in eleven minutes*. One of the gentlemen, however, did not think he could have read it so rapidly from any copy but his own while the other said he knew he could not, for he always had *some little private marks* in his copy, which kept him straight. The latter told us a story of a clergyman who could say the Apostles' Creed so fast, that he would often give another person a start to "Pontius Pilate," and beat him at the end—a story quite conclusive as to the amount of intelligence involved in reading a whole book of Homer in eleven minutes.



cases, the Attic article is used consistently and upon a principle that is easy, because it is in the main our English idiom. Why confuse the beginner with Homer's usage, which is by no means regular, even on the assumption that the article is always a demonstrative pronoun? (Goodwin's Greek Grammar, § 140.) *Ex ungue leonem*. Even the imitations of the Homeric vocabulary in which the playwrights indulge, could be explained before the class had read Homer, as well as afterwards.

Another "con" which we have fancied our professor would put into his balance, is the ideal character of the pieces. Are boys often imaginative? Will not a fight, a race, a contest for a prize, in which an Entellus sends a Dares from an only half-fought field, yet

"genua ægra trahentem,  
Jactantemque utroque caput, crassumque cruorem,  
Ore ejectantem mixtosque in sanguine dentes,"

entertain them vastly more than the fairest painted scene of maternal love and filial respect, like that between Thetis and Achilles? It is boy-nature to sympathize with Agamemnon bullying poor Chryses, and "adding yet harsher words;" but it is not boy-like to feel the grace or the beauty, the simplicity or the sublimity, of the description of the priest going off in silence, far from the Greeks, to tell his god Apollo, just as the disciples of John the Baptist "went and told Jesus." Were the issue between the priest and the chieftain one that involved fair-play, no honest boy would take Agamemnon's side; but boys see only a captive girl, a slave by all the existing laws of war, asked for by her father in return for a ransom, and refused most flatly by a conqueror in battle. The latter's insolence seems almost right. What matters it that words and metre speak plainly of the brutal harshness of the victor, (vv. 26-32,) and as plainly of the disappointment and broken-heartedness of Chryses (vv. 33-42)? Few boys would understand their teacher upon such a point, or remember overnight a lesson on "sic metaphæsic." Or how many boys would feel the pathos of the following? [Il. xxii. 482 sqq. Lord Derby's translation in Mahaffy's Social Life, p. 29.]

"Now thou beneath the depths of earth art gone,  
Gone to the viewless shades; and me hast left  
A widow in thy house, in deepest woe;  
Our child an infant still, thy child and mine,  
Ill-fated parents both! nor thou to him,

Hector, shall be a guard, nor he to thee ;  
 For though he 'scape this tearful war with Greece,  
 Yet naught for him remains but ceaseless woe,  
 And strangers on his heritage shall seize.  
 No young companions own the orphan boy.  
 With downcast eyes, and cheeks bedewed with tears,  
 His father's friends approaching, pinched with want,  
 He hangs upon the skirt of one, of one  
 He plucks the cloak ; perchance in pity some  
 May at their tables let him sip the cup,  
 Moisten his lips, but scarce his palate touch ;" etc.

Moreover, boys are rationalistic: the supernatural is not within their ken. Ghosts may perhaps be an article of their faith, but gods and goddesses, nymphs and nereids, are never recited in their *Credo*. These were abandoned at the time of that first sad awakening to the truth that fairies and gnomes, Santa Claus and Mother Goose, were not real personages. Of course, the fights and races, the prize-contests and athletic sports, are all in Homer ; but where? Are they usually read in school, except the poor little scuffle of Paris with Menelaus? And no boy ever cared for Paris more than for any perfumed dandy. No, it is surely not assuming too much to say that Homer can hardly touch either the realistic or the rationalistic spirit of boyhood.

But we must turn to another consideration, which is found in the monstrous inversion of the usual practice involved in setting boys to acquire the oldest writer in the language before they have mastered the later and more easily-studied authors. Is it thus we teach them Latin, or French, or German, or English? Fancy a professor of English beginning his course with a reading from Chaucer! Think of his requiring an examination upon Gower's *Confessio Amantis* or Layamon's *Brut* for admission to college! Or weigh carefully the statement, that, before reading Molière or Racine, one must study the *Chanson de Roland*. Do boys read Plautus before they know the Augustan writers? Yet the comparison is by no means unfair. How many boys just entering college could pass upon the following?

UNIVERSITY OF \_\_\_\_\_  
 EXAMINATION IN ENGLISH.  
 For Admission.

- I. Turn into modern English prose :—  
 " And up I rose and gan me clothe ;  
 Anon I wish my hondes both ;

A silver needle forth I drew  
 Out of a *guiler quaint* enow,  
 And gan this needle thread anon ;  
 For out of town me list to gone,  
 The soun of briddes for to hear  
 That on the buskes singen clear."

Chaucer, *Romaunt of the Rose*.

- II. State the principles of word-formation by which *gan*, *hondes*, *enow*, *soun*, *briddes*, *buskes* and *singen* have taken their modern forms.
- III. Give the principal parts of *wish* as a strong verb ; as a modern weak verb.
- IV. Derive the words printed in italics.
- V. Where are *clothe*, *thread*, *me*, *list*, *gone*, and *singen* found?

Did no one ever see a Homer-paper that resembled this?

It would surely appear, then, that the lucky discoverer of the first known manuscript of Homer would hesitate, at least, before he risked his new-found epic in the hands of boys. Nay, it is more than probable that, with no "consent of ages," no presumption in favor of what exists, no prescription of great names, he would save his Homer for a later place in his pupils' studies, and send them meanwhile to the dictionaries for the myths and fables. "They can not understand my marvellous troubadour," he would say; and, tucking his big book safely under his arm, like the Greeks flying from Constantinople in 1453, would run for his life from the Turks who neither would nor could appreciate its value.

So much, then, for the main question here involved. We must turn now to the other two announced above.

*First.* If the Homer be thrown out of school, two plans are possible. The *Anabasis* entire is excellent matter, the most perfect syntax, the style of a greater than Addison for imitation by boys learning prose composition, and full of both history and biography. Besides, it would undoubtedly be well for boys at school to read one work completely. This they do neither in Latin nor in Greek, except so far as Cicero's four orations constitute a whole. If, however, this be deemed unwise, the orations of Lysias would give a most excellent basis for both syntax and history and antiquities. Lysias was "out" with Thrasybulus, through a period of Attic history most full of interest and most pregnant with results for both Athens and all Greece. Nowhere could the pupil be so favorably introduced to the topography of Athens and the Attic civil polity. Moreover, the Greek is easy, and two well-edited

editions, both by American scholars and published by American houses, place the orator within the reach of American schools.<sup>4</sup>

But if a poem is required, the Hecuba, perhaps, or the Medea, might be put in the place of Homer. The more difficult parts (especially the choruses) could be omitted. In a play, the iambic trimeters of the drama would be presented to the pupil, as the heroic hexameters are always learned in Virgil. Nor can I think that Euripides would suffer by being read thus early; for the play selected would be used only as the basis of a further drill in elementary matters already taught in the Anabasis, and there are more difficult plays by this writer—the Hippolytus, for example—which would yet remain as “nuts” for even Juniors or Seniors to crack, and as “literary products” in which to study Euripides in comparison with Sophocles and Æschylus, on the one hand, and Aristophanes, on the other.

*Second.* Homer will serve most admirably for a term or a *semester* in the Junior year. At this stage of his progress, the student might possibly read the whole of the Iliad or the Odyssey in the time allotted; but, whether this were done or not, portions could be studied large enough to ensure a full knowledge of the author and his works, the peculiar character of the “great” epic, the true cast of life in the heroic age, and all those traits of the writings *as poems* which mere boys must ever fail to appreciate. The Homeric question, too, would not be impossible of discussion, as it now is; and the whole range of Greek and Latin philology would lie open to the earnest student. A most interesting comparison, too, would now be possible between the several writers of “great” epics and their works—Homer, Virgil, Dante, Tasso, Milton (to name no more).

In conclusion, the writer would fain hope that, whatever be the judgment of his readers upon the views expressed in this paper, one opinion, which he has taken no pains to conceal, may meet with favor, *viz.*, that after the preliminary drill in syntax, the knowledge of Greek construction should be kept up indirectly, (or, if at all directly, then by translations from English into Greek,) and that the great monuments of a civilization that is still the source of much that is worthiest in our own, should be studied for their own sake, rather than as a means to a knowledge of the lan-

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<sup>4</sup>These are Stevens'—Chicago, S. C. Griggs & Co.—and Whiton's—Boston, Ginn Brothers.

guage in which they happen to be written. The raptures of Lord Macaulay over the products of Greek and Roman thought are barely intelligible to many a professor of Greek or Latin. Why should they be so, more than the similar raptures of an enthusiastic French or German scholar to a professor of English literature?

JNO. G. R. McELROY.

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AUTUMN AND FALL.<sup>1</sup>

This shall guard you 'gainst the moon,  
 This, that oft has sheltered you,  
 Help-mate true!—  
 See, this arm, that once went round  
 You, a slender maiden, found  
 In a June.  
 Close-linked then the fields we paced :  
 Now it may not span your waist.  
 Let the moon with bitter stare  
 Walk in haughty state the sky,  
 Seem to dry  
 Sap in tree and juice in grape,  
 Seem our mighty sun to drape  
 With thick air ;—  
 Still the west-winds smoothly blow ;  
 Mighty rivers calmly flow.  
 What if night's breath now be cool  
 What, if swallows disappear?  
 Do not fear,  
 Your dear cheeks are full as red  
 As the ripe leaf overhead!  
 By the pool  
 Lean the red trees strong of heart,  
 They from life will ne'er depart!  
 We have done our office well.  
 Help we gave before we saw  
 All the law ;  
 Saw, nor we, nor sun, were gods,  
 That the kindly season plods  
 Past our spell ;  
 Yet that earth with joy advances  
 To our sympathetic dances.  
 Much we fathomed in our toiling,  
 Catching many a secret weird  
 By the beard  
 Till its face red plainly. Often

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<sup>1</sup> *Winter Elf, Spring Asks, Summer Answers*, in preceding numbers of this magazine.

Harsh things which a touch would soften  
 Paid for moiling.  
 Soon we'll have return for duty  
 In a child with all your beauty.  
 Eyes that yearn with deepest sadness,  
 Dark as gold-cored gentian,  
 Why so wan?  
 Dreamful days portend no sorrow;  
 From this silent haze we borrow  
 Richer gladness;  
 Hot life grasps the rest it earns,  
 Quivering, to a still flame burns.

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When before the giant cold  
 Through the gateways of the wood  
 Runs a shaking—  
 And red-golden scales are falling  
 Past the brown and staring limbs;  
 When the wet leaf prints its mark  
 On the mud;  
 When the trees' black skeletons  
 Push in view—  
 It is death.  
 This is death:  
 All the leaves, red with health,  
 All are fallen:  
 So the woman  
 Once by me loved, now, and always,  
 So she passes  
 From these fields, these mighty forests;  
 Yet where she goes  
 There go I.  
 Here upon the ground she lies.  
 By her side  
 Stands an infant icy-cold,  
 Without heart or brain to know  
 Whence he comes, who I am—  
 I, whose minutes all are numbered,  
 He, my child!  
 For each leaf,  
 Falling, falling, left behind  
 Each a bud:  
 So shall we—  
 She who has but gone before,  
 I who now am hasting after—  
 Live again in him.  
 What he is  
 Once was I.  
 Far prophetic vistas open  
 To my fading eyes. I reckon

All the days that were and shall be.  
 He shall never know his parents,  
 He will sport as once I sported  
 Through the snowbrush, o'er the mountain,  
 Careless, free as thistle-down.  
 Yonder glassy lake that whitens  
 There, by white sky and by mirror'd  
 Olive ranks of trees divided  
 Into semblance of an icecoat,  
 Only feigns!—  
 I shall never see the real sheet  
 Clear and moveless, yet protecting  
 Lake and lakefolk from the north winds;  
 It will be my bold one's play ground,  
 There the first doubt shall assail him  
 Earlier than assail'd his father—  
 Quicker growth  
 Shall reward his parents' toil,  
 Deeper wisdom  
 Was engendered  
 With his forming!  
 We have learned:  
 Not in vain is any labor  
 Which for good has been perform'd.

CHARLES DE KAY.

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### THE AMERICAN MAURICE MEMORIAL.

**T**HE name of FREDERIC DENNISON MAURICE is not strange to the readers of the PENN MONTHLY. Among its writers have been some of that increasing number of Americans who have rejoiced to acknowledge their indebtedness to him for the deliverance of their minds from the "honest doubt" that Tennyson justly credits to the earnest faith which, in the creative season of youth, stands aghast before the abstract creeds that so rob the statements of theologians of the prophetic unction of the Hebrew and primitive Christian revelations.

Maurice's "Kingdom of Christ," "Theological Essays," "Religions of the World," of which large editions have been republished and sold in America, have given something more and other than a profound and devout thinker's views on the vital questions of the day; they give a *method of thought*, which may effectually save even from the errors of its author, should he like other finite minds

fail to read the truth in all points—for it enables his readers to see farther than himself (which was always Maurice's aim);—while his "Prophets and Kings" of Israel and nine sermons on "The Lord's Prayer" have been during the last fifty years the inspiration of some of the noblest lives amongst us. One eminent person confesses to the fact, that Maurice's Lectures on "Learning and Working," published at the time of the founding of the Workingmen's College in London, gave the direction and shaped the form of his own activity, which is still the energizing soul of the leading university in America that combines learning and working, for both men and women.

When the heavy news of Maurice's death reached this country, in the spring of 1872, there was a quiet gathering in New York, of certain Episcopalian ministers (from places as distant from each other as the Atlantic coast of New England and the Valley of the Mississippi), to a memorial service, at which Dr. Samuel Osgood read a discourse, expressing the common reverence and gratitude of the company to their spiritual benefactor.

But by no means were his conscious beneficiaries confined to the Episcopal denomination. Though his studies in the ecclesiastical history of England had brought him to the conclusion that the *freest* or most independent place for a Christian *Englishman* to stand, was within the National Church, understood broadly, as Coleridge has stated it in his treatise on "Church and State;" yet, in the introduction to the "Kingdom of Christ," Maurice demonstrates that every disciple had the right and privilege of communion of insight at will, with all the dissenting sects, whose reason for being in every instance, was the neglect, at that particular time, of some principle of spiritual or moral growth by the administrators of the Established Church.

Though this remarkable work defends the Episcopal form and canons, as the most natural for the English nation, it does not deny that the Presbyterian form was as legitimate for Scotland; and that the independence of Church and State, which distinguishes the Quakers, Baptists and Congregationalists, is a providential growth in America. That "the Church of Christ is not an Ecclesiasticism," Maurice recognized as clearly as the author of the American pamphlet, whose insight into the distinction of the Divine and Human is so tersely expressed by that title.

And in "The Religions of the World and Their Relation to Christianity," is revealed the only way in which all the kingdoms



of the world are to be conquered for Christ; love taking captivity captive.

To keep alive in America the memory of a personal influence so vital, Maurice's American friends have formed themselves into a society for the publication of his most characteristic works; and, as he had something to say upon all the movements, social and spiritual, of his time and country, it has been found necessary to choose from them those of permanent interest to mankind, and which may not be outgrown. Such are pre-eminently his studies in the Bible, which cannot be called commentaries, but inquiries into the relations of the Hebrew and Christian Scriptures with each other, and to the education of mankind.

Maurice saw<sup>1</sup> that God is eternally revealing himself to the spirit of man, both in individual experiences and in the history of nations, as well as by the symbolism of nature; and that all these revelations are to be studied with the same reverence and personal humility. He saw that science and religion are equally Divine communications which, if properly understood, cannot contradict, but must, on the contrary, mutually illustrate each other.

The Maurice Memorial Union, therefore, has proposed to publish the following seven volumes:

1. The Patriarchs and Lawgivers of the Old Testament.
2. The Prophets and Kings of the Old Testament.
3. The Gospel of the Kingdom of Heaven (by St. Luke, companion of Paul.)
4. The Gospel of the Eternal Word, by St. John.
5. The Epistles of St. John, containing the Christian Ethics.
6. The Apocalypse of St. John, a vision interpreting history; and
7. A volume made up of his Warburton Lectures on the Epistle to the Hebrews, and his great work on the "Unity of the New Testament."

On inquiry, however, it was found that all of these volumes, except the last, are covered by the copyright of MacMillan, which it would be more than a discourtesy to invade during the life-time of Mrs. Maurice, especially as MacMillan has a branch book-store in New York.

But of all these works this last is the most important, explaining the Unity of the New Testament and the relation to it of the

<sup>1</sup> See his great work in answer to Mansell, entitled, "What is Revelation?"

Old (the subject of the epistle to the Hebrews); and it seems providential for our purpose that MacMillan does not publish this, the keystone of the whole triumphal arch. We have learned from the highest authority, that Maurice, in his lifetime, said that he "would rather all of his works should go out of print than his Unity of the New Testament." And well might he say so, for no one of his works so clearly reveals his own method of getting truth. Most men stand in the shadow of their own opaque abstractions. But Maurice turned his back on these, and in the frank humility of the child's worship, looked up enquiringly to the source of Truth; and the reader of this book may share "the light of all his seeing" and wonder what is meant by the obscurity sometimes charged on him. It is true that, like the bird of morning, which Wordsworth celebrates as

"Type of the wise who soar but never roam,  
True to the kindred points of Heaven and Home,"

"a privacy of glorious light is his," for on the wings of hope and faith he soars "to the back point of vision and beyond," yet the voice of his song "thrills not the less the bosom of the plain."

As Lord Bacon went to nature, simply asking "what sayest thou?" and humbly listened for the answer that her phenomena made, so Maurice goes to those who declare that to them the Word of the Lord has come, through Christ Jesus, and asks of each, What are your experiences and insights? and applies the test to the reply which Moses advised of old.

By a happy intuition or inspiration he conceived that every one of the New Testament writers undertook to preach the whole Gospel; and that the unity of the New Testament is to be found, not in dovetailing the several so-called gospels into each other (as Carpenter has so laboriously undertaken to do), but by appreciating the personal temperament and characteristics, the circumstances, and especially the immediate purposes of each writer. MATTHEW, the Hebrew, who points out to the Hebrews the fulfillment in Jesus of their prophetic hope of the Messiah, Shiloh, he that should come to justify the creation of man as the image of God; MARK, the disciple and amanuensis of Peter, to whom it was revealed that the Son of man is also Son of God—as Jesus declared to him, "not by flesh and blood, but by my Father who is in heaven;" LUKE, the beloved physician and disciple and companion of Paul, whose special inspiration it was to preach "a kingdom of heaven," for

both Jews and Gentiles, in progressive communion with "the just made perfect" in heaven, by faith in Christ crucified by sinners, and ascended into heaven in the power of the Holy Spirit, and drawing all men to him; JOHN, who lived to see Jerusalem destroyed, and to become Bishop of the Jews and Greeks (of the Alexandrian school,) at Ephesus, *par eminence* the apostle of the Word which was in the beginning, "without which nothing was made that is made;" that "was made flesh and dwelt among us full of grace and truth," "showing forth the glory of the Father" in the person of the Son, in whom all mankind are called to be one in spirit, though infinitely diverse in form.

All the different classes of human minds are met in their special wants, by these diverse Apostles; whose personal limitations account for all superficial discrepancies, and whose substantial unity *in the spirit* is made manifest by their unconscious harmonies, as to the important facts and essential principles of the life of Jesus of Nazareth—*Jesus' life*.

The American publication of Maurice's selected works by the Memorial Union will therefore be begun by the publication of this single volume, *The Unity of the New Testament*. For this purpose, from six to seven hundred dollars must be raised in advance; and each member of the Union promises to give a component part of this sum. One has already pledged nearly a third of it. The volume will be sold for \$2, retail, being upwards of 600 duodecimo pages. Every subscriber will be entitled to a copy for every \$2. Subscribers, and those who do not desire to put their names among those who form this living memorial, can send their subscription to one of those who do, with the money, and will receive his or her copy in due season.

Subscriptions for the work, and applications for membership in the Union, may be forwarded to Elizabeth P. Peabody, Cambridge, Mass., or to Prof. R. E. Thompson, 2239 St. Alban's Place, Philadelphia.

E. P. P.

## THE UNIVERSITY OF PENNSYLVANIA—ITS NEEDS AND ITS FUTURE.

THE important changes lately instituted in the system of medical education at the University Medical School, though somewhat experimental in their nature, have brought the University very prominently before the medical profession and American public in general. The present moment is therefore a fitting one for the consideration of what has already been the subject of earnest thought on the part of many of her well-wishers and benefactors, namely, the position held by the University in comparison with other colleges as an educational centre.

The high reputation of the University Schools of Law and Medicine is matter of history. They have at times, and occasionally for long periods, completely overshadowed the Department of Arts in the public estimation. Their excellence has been a subject of national congratulation, while what should always be the head and front of the University, her Department of Arts, has again and again fallen away from her earlier promise. Recently, there has been a most gratifying advance noticed in that Department.

A thoughtful examination of the causes which lie at the roots of such checked and irregular growth would, it is thought, be not only a study of much interest to the community which calls the University its own, but also be very suggestive as regards the final solution of the question and the more rapid and mature development in this city of the "University Idea." In order to the clearer understanding of the subject, it will be necessary to separate the various units which go to make up the aggregate, and limit our attention for the present to the conditions which have beset, and shall in future control, the existence of what should always be the main-stay and support of a University, her Department of Arts.

The College of Philadelphia, or Department of Arts in the University, is very old, dating back her foundation to the year 1755, and standing sixth in the order of seniority of American colleges. She owed her origin largely to the efforts of Benjamin Franklin, and the long line of her provosts and professors is graced with many illustrious names. Rittenhouse and Smith, Bache and Beasley, Hare and Reed, still live in the memory of our people. During the long stage of her history in which she was

domiciled in the small buildings in Fourth street, south of Arch, and the still longer one, when she occupied the Ninth street property, the surrounding conditions were almost too constricting to allow of an expansive growth. Large souls may inhabit small and weak bodies; world-widely known and respected firms may carry on their business in dingy, moss-grown quarters; royal institutions may nurse great scientists and give birth to discoveries and inventions of incalculable value in unpretending, inexpensive buildings; but it will always be a question whether growing colleges, with growing classes, demanding better equipments and larger accommodations every decade or so, can do more than keep pace with such improvements. These conditions were met with the erection of the new buildings on an excellent site, a large plot of rising ground in West Philadelphia, just over the river. The new structure was thrown open for use in September of 1872 equipped with every necessity and convenience. The cost of construction was \$236,000, and every one looked forward to the dawn of a new era in the history of the College.

During the five years spent in the new buildings, energy has been the rule and inactivity the rare exception in the management. Their architectural grace and educational capacity offer every possible stimulus to a vigorous and rapid growth. The construction and endowment of the Towne Scientific School; the thoroughly equipped and excellently adapted laboratories; the manifest desire of the trustees to foster the general, common intelligence by the endowment of numerous free scholarships and other gratuitous instructions; the great reputations of many of the faculty, and their unquestioned abilities as teachers and investigators; the adoption of the very latest and best improvements in educational methods; the distribution of from three to four hundred dollars worth of prizes yearly in the department of Arts alone; the recent declaration of the Board of Trustees that both sexes shall hereafter receive instruction in certain subjects in the curriculum; the existence of excellent athletic grounds, rowing facilities and society advantages; all these facts led every one to expect a very large and immediate increase of students and reputation on the part of the Department of Arts: but what has in fact been the result?

At Ninth street there were some 60 to 90 undergraduates each year. In 1872, in the new buildings, there were 99 undergraduates in the Department of Arts; in 1873 there were 89; in 1874,

99; in 1875, 114; in 1876, 131. It is true that the sum total of University undergraduates has increased from some 800 in 1871 to 1022 in 1876-77, but this is to be explained by the steady growth of the classes in the schools of Law and Medicine, and the creation of a new department in the University—the Towne Scientific School—which now has 105 students. The Academical Department starts out with 136 undergraduates this session. It is much to be hoped that future sessions will see great improvement in numbers, but we must not calculate on possibilities. It may be thought that too much stress has been laid upon the matter of size of classes and number of students at the University; that the five departments are naturally calculated to break up the grand total into disproportionate units; but this is not the case: witness the superiority in numbers of the academic departments of Harvard, Yale, Oxford, Cambridge, and all the great German and French Universities. The broad, catholic, cosmopolitan type of the academic curriculum, far outreaches in its scope and hold upon the public interest, the necessarily technical and comparatively narrow range of studies which are inculcated at the schools of law, or science, or medicine. A classical, liberal education is the only kind of an education which is general and necessary, and is sought by a larger and larger part of the community as the world grows older and a more universal love of knowledge spreads among the people. Professional instruction comes afterwards and appeals to a smaller and more limited number; and, though of vital interest to that limited number, is generally void of attraction for members of other professions.

The University Medical School has alumni all over the world. To them she largely owes her high reputation as a centre of medical education. As regards the Academical Department, on the other hand, nineteen-twentieths of her graduates are, and always have been, city men. Harvard, Yale, Princeton and Cornell draw students from all parts of the land. The old, married graduate sends his sons to his own, much loved, and many-memored *alma mater*, and so, like a great spreading plant, the parent college draws her strength from sons transplanted all over the globe. So long as the interest is only sectional, or as in the present case, only urban, no large, promising, prospering growth can be expected. Columbia College in New York City is in exactly the same condition as our own University. Her Academical Department has but

little national reputation, because her influence and her strength are merely local, and not national. Her Law School, like our own Medical School, is known all over the world as the fruitful nurse of great names, while her Academical Department has only about 175 students, and is only a city college. How has Harvard been made what she is? The answer is easy: it has been done by the simple force of her alumni, by their love for her, their whole-souled labor in her behalf, their enthusiasm at her prosperity and growth; and then as a secondary result of all this, her attractive power in a literary way; her magnetism of great names and great deeds; her metropolitan catholic influences; her long array of names, illustrious in camp, in court, and quiet study; the storied grandeur of her halls, and elms, and *campus*; all these facts have assisted in paving her way to renown. This is the true explanation of her present prosperity, and the same theory holds good with regard to other colleges.

How much of that sort of thing do we find here? What enthusiastic reunions of old familiar forms and faces do we see on the *campus* and in our Academy of Music on Commencement Day? How many graduates have we living our praises and sowing our good name in other states and other lands? How much *esprit de corps* have the graduates of the University of Pennsylvania? How much united, silent, telling work have they done in her behalf? Answer all this and then a great many other distressing doubts will be settled. Students and alumni can hardly be expected to take any great or lasting interest in a tumble-down, bankrupt, badly-managed, grass-grown *alma mater*; but there is nothing of the sort here. All the departments are well conducted; the surroundings are attractive; improvements in grounds, buildings, and modes of education are daily and hourly making.

The University is, indeed, in need of funds; only two of her professorships are endowed; scholars must be well paid for fine work. Quite large sums of money have been bequeathed to her, but they are not available at present—may be locked up for years to come. She needs ample, immediate gifts. Her wealthy, generous patrons are watchful and over-liberal, but they are few and unable to bear the whole burden on their shoulders. Let others give, and give liberally. Let them bring the yearly income of the University up to her present and future necessities; by so doing they will remove, if not the greatest, at least one of the chief obstacles to her

rapid growth and increased usefulness and prosperity. Do not let it be for a moment supposed that the University is meagerly endowed. Her future resources are quite abundant, but just at present she cannot realize from them, and wants assistance.

There is a serious question which may be asked with regard to all city colleges, namely, whether the fact that the students spend the larger part of the twenty-four hours at their own homes, or at least away from the college, does not wean them from her influences and make them thoughtless of her welfare? A home is a home to one not only during the day, but particularly at night. Just so with a college. That one which keeps her students with her at night disseminates more of a home feeling, keeps her thoughts more with her, blends their lives more with hers, and so renders them more a part of her, and makes bonds of union more lasting and the partings more unendurable. Colleges, such as Cornell and Princeton, whose students are always with them, except in vacation time, undoubtedly cherish stronger ties, and more lasting and watchful associations, than those which, like Columbia and the University of Pennsylvania, only retain their students during lecture hours. College dormitories, as an undoubted item of college prosperity, might claim with much value the attention of trustees and faculties.

[It is suggested to me that I have overlooked one of the great reasons for the backwardness of the Department of Arts, which is the indifference of our city to literature and to the higher education in any but its purely scientific form. As a matter of fact it appears that fewer students from Philadelphia than from any other city in the Northern states are getting such an education at any college.]

What are the remedies for the present condition of the University? Is Philadelphia apathetic and lethargic where she should be awake and doing? Can it be that there is a want of public spirit and metropolitan instincts? Our citizens roused themselves last year and produced the greatest world's fair the earth had ever witnessed. Does it always require such paramount interests and sea-deep stirrings to wake them to action? They seem to take no pride or interest in lesser matters—matters equally important to their welfare and high repute. Magazines published in this city, "Lippincott's" for example, find no contributors, except three or four, among Philadelphians, and have a larger circulation in New York, and even Germany and England, than in this city.



Private concerns magnify themselves into mountains, and larger city interests are too often neglected. Individuals grow rich and build immense houses and establish a business of world-wide name, or adorn professions with uncommon brilliancy and usefulness; but when it comes to creating a distinctively Philadelphia literary spirit, or supporting a distinctively Philadelphia literary journal, or working together and with unison and good-will for a public, common purpose, they—well, they rarely do it. Our city has hundreds of powerful, wealthy, public-spirited men, whose whole lives are given up to doing work for others, and whose money is continually pouring out for this and that generous purpose of public welfare; but they are unsupported, and they cannot find strength or courage enough to be always working alone. The rest of the city stands apart and gives little or no assistance.

Let us show more public enthusiasm and pride in our city, and endeavor to make our institutions more useful and prosperous. Here is an excellent object to start on. The Medical School of the University has instituted an entirely new system of education, a most excellent one, but perilous financially. It needs well-wishers and endowments. Here is an opportunity to do something for the common good, for the welfare of interests most closely bound up with our own private, household matters. Let our citizens make a beginning. Let them do something in the right direction. Here are the Scientific and Academic Departments in want of funds immediately. Can anything be much dearer to our citizens than the lasting prosperity of the *alma mater* that was once their own instructress, and now is bringing up their sons in paths of usefulness and knowledge? Let them be generous! Let them open their purses and help her.

Another thing the University needs, and needs indispensably, the united, intelligent, enthusiastic, prevailing support of her graduates—through evil report and through good report they must stick by her and work for her. Who shall fight her battles better than they, or who than they have larger share in her victories? As the Alumni of Harvard and Yale and Princeton have done, so let them also do. Let them form Alumni Associations in all the various cities wherever two or three of the graduates are gathered together. Let them take a deep, living, enduring interest in the welfare of the College; always speak a good word for her; help her with money, with advice, with hard work in her behalf. Let

them talk and write of her favorably to others. Let them do all in their power to increase her facilities for instruction, to help the Provost to fill up the classes. Let her be the centre of their helpful thoughts, the recipient of all their good wishes.

It will seem wonderful how much good can thus be done, and done in a comparatively short time. A light ought never to be hid under a bushel basket, particularly in these upstart times, when so many false beacons are daily held up only as lures to misfortune and shipwreck. By thus working and thus hoping, the University will at length enter upon a new path of improvement in the sphere of highest art and science. Her classes will grow larger; her facilities will be increased; her literary tone will be strengthened; her name will travel over the earth: she will become a centre of "sweetness and light," drawing all men towards her; the hands of her Provost and Faculty and Trustees will be held up; her standard of education will be vastly improved; her sphere of usefulness grow and spread among all classes.

"May these things be."

M.

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### BRYCE'S "HOLY ROMAN EMPIRE."<sup>1</sup>

COLLEGE Prize Essays are not an attractive species of literature. Even those of us who have written such things could hardly be induced to read many of them, and the amount of genuine literature thus produced is not very large. Mr. Bryce's "Holy Roman Empire," therefore, must be classed among the curiosities of literature. It is a College Prize Essay, written for the Arnold prize at Oxford, which, since its publication in 1865, has found so many readers that in twelve years it has reached the seventh edition, besides being translated into German, and has taken high rank among the standard historical treatises of our literature.

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<sup>1</sup> THE HOLY ROMAN EMPIRE. By James Bryce, B. C. L., Fellow of Oriel College, Oxford. A new edition, revised. Pp. xxvii. 465. *Tu regere imperio populos, Romane, memento.* Macmillan & Co., London, 1866.

THE HOLY ROMAN EMPIRE. By James Bryce, D. C. L., Fellow of Oriel College, and Regius Professor of Civil Law in the University of Oxford. Seventh edition; Pp. xxvii., 479. New York, Macmillan & Co., 1877.

The theme of the essay was happily chosen. It was all but new to English readers, though quite familiar to German historians. Mr. Freeman and some other English historians had already shown their familiarity with it, but the nature of their special subjects had prevented more than a passing reference to it. And then it was one which enabled a qualified author to sketch the broad outlines of mediæval history with a unity and an effectiveness not possible from any other standpoint. Above all, it enabled him to cast light upon what was obscure, to disentangle what was confused, and to correct much which was erroneous in the statements of innumerable authors, upon whom the public had relied for its information in regard to the period when modern Europe was emerging out of the cosmopolitan confusion of the earlier Middle Ages. And it must be said that Mr. Bryce was fully equal to the task. For his learning he had gone to headquarters, delving into the original sources, while comparing his interpretation of their statements with that of the most trustworthy historians. He had not shrunk from searching through the folios of the *Monumenta Germaniæ Historica* of Pertz, the *Scriptores* of Muratori, the *Cursus Patrologicus* of Migne. And he is never overburdened by his erudition. He walks with the elastic, English step. He writes as a scholar, but not for scholars. His every sentence is clear, limpid English. His sketches are vivid and vigorous; his details well chosen and effective. He has produced a book more useful than any other in our language to the student of history, who wishes to master the great outlines of the process by which our modern world came to be the world it is. And it is surprising how little he has found necessary to change in the different editions of his work. We have compared the second with the seventh (which is a reprint of the sixth), and in spite of the slight touches here and there, the new notes and the enlargements of old ones, and the supplementary chapter, tracing the rise of the new "German Empire," the two books are substantially the same.

The phrase "Holy Roman Empire" is probably no older than Frederick Barbarossa. The thing it designates is one of those historical realities, to which no exact beginning and no exact end can be assigned. The Roman Empire itself began before the Emperors. It was the domination of the imperial city over the vast net-work of cities around the Mediterranean, which Rome, the Republic, had brought under her control. That domination seems to

us odious both in its nature and its methods. We have every evidence that it was regarded by the great majority of its subject peoples as a nearly unmixed blessing. The testimony of ancient inscriptions is uniform and emphatic in this regard. Rome had inaugurated a new era in the world's political history, and they honestly looked back upon the preceding era of civic insulation, as a period of darkness, weakness and barbarism. They were relatively right. Unable, in the absence of the principle of representation, to effect any free unity larger than that of the city, with its *agora* or *forum* for the assembly of all free citizens, they could not be raised to any larger unity except by the strong hand of a master. Rome furnished the strong hand. She made the human race conscious of larger sympathies and more universal bonds, and the price she exacted seemed none too large to pay.

Christianity accepted the Roman Empire as a divine order for the world. It had prepared in the desert a highway for God and his Gospel. It had made the universal proclamation of the Gospel possible, by breaking down the old lines of division and isolation. One God in Heaven, one Emperor on earth, was the Christian feeling before the Papacy put forward its claim to the universal headship of the Church. The overthrow of the Empire by the barbarians was a shock to the traditional conception of the world's order. The fact might be shattered; the idea clung to men's minds, and waited only for some favorable opportunity to embody itself. For a time the powerless and degenerate East was accepted as the best available representative of the idea. But when the truly imperial race of the Franks came forward in European history, breaking the invading flood of the Saracens at Tours, liberating the Papacy from the Lombard terror, setting Eastern Iconoclasts at defiance, extending the sway of the Church and of Civil Order over nations that had never bowed to Pagan Rome, and bidding fair to put all the known world under its feet, it was hailed by the clerical leaders and thinkers of Italy as the providential heir to the Empire, and on the last Christmas day of the eighth century Charles the Great was crowned Emperor at Rome.

This was the beginning of the Holy Roman Empire, which differed in one very essential respect from that of the earlier Christian emperors, and of those who in Constantinople claimed to be their successors. It was the counterpart of a similar, a parallel organization of the Church. Ever since the beginning of the Church,

her organization had been slowly and steadily assimilated to that of the State. The simpler arrangements borrowed from the Jewish Synagogue had given place to a new order, in which Patriarchs, Archbishops, and Prelatical Bishops held place which corresponded in local extent of jurisdiction and in official dignity to the great offices of the imperial administration. And at last the Papacy was "crowning the edifice" by setting up an ecclesiastical Emperor, such as the early Church and the first Emperors had never dreamed of. The Pope and the Emperor were to stand henceforth side by side, as the civil and the ecclesiastical heads of Christendom, with jurisdiction equally absolute, equally extensive, equally divine. The kings and sovereigns of Christendom were to stand in the same relations to the Empire that its metropolitans did to the Pope. Each was to be the supreme judge of all cases and causes in his own sphere, while each was to exercise a special and particular jurisdiction over that portion of Christendom which belonged to him as bishop or as king. It needed no prophet to foresee the arising of conflicts and collisions between two powers whose separate jurisdictions were so loosely defined. "When two ride a horse one must ride behind." In our days the result would be the subjection of the Church to the State. "We will not go to Canosa," Bismarck tells the Ultramontanes; but Henry IV. did go to Canosa. In the long run the Church had the better of it.

The signs of conflict began in the days of Karl's children, but it did not break out in its force till long after his death. The Papacy stood too low in men's respect throughout the ninth and the beginning of the tenth centuries for its champions to venture on such a struggle. For a time the Popes were the tools and victims of petty Italian despots, and were maltreated and even put to cruel and shameful deaths with impunity. The popular assemblies for their election degenerated into bloody brawls; thirty-seven corpses were taken out of a Roman church after one election. It was the Emperors themselves who reformed the Papacy, and gave it the social position which enabled it to resist Emperors. The Empire of Charles had indeed been broken up; France and Germany parted in 843 by the compact of Verdun, and the Carlings of Laon had no authority over the great dukedoms and margravates beyond the Rhine. One German dynasty after another was taken from among the great houses, and German Kings descended the

Alps to receive the crown of the world at Rome, to restore order in Italy, and to purify the Papacy of its scandals. They took the appointment into their own hands, and gave the Church such a series of Popes as made the Holy See once more worthy of its great position and traditions.

When the struggle did come, the Popes (we think) were relatively in the right. It turned upon the measures taken by Hildebrand, and by his predecessors at his instigation, to prevent the Church from being feudalized. Married bishops and priests were securing the investiture of their children with their bishoprics and benefices; secular patrons were seconding their efforts by treating church benefices like any secular fief. There seemed every likelihood that the principle of inheritance would take the place of life investiture in the Church, as it had already done in the State. The frightful danger lay before Christendom that her clergy might sink into a hereditary caste,—as hereditary, as unspiritual, as holy in the hereditary sense and no other, as the Brahmins of India. From this Hildebrand saved the world by establishing the celibacy of the clergy, and by limiting, if not abolishing the power of secular patrons. With his theories of the relation of the Church to the State, and of the relation of the clerical order to society, we have not the least sympathy. These were at best grossly exaggerated half-truths, which served a good purpose, but from which men needed afterwards to be delivered by the whole truth, if they were not to fall into worse evils. But they saved the Christian Church.

The great struggle with the Hohenstauffens is the culminating point of the interest of the history. After its termination the Holy Empire had but a name to live. It became one of the shabbiest facts in history. For its glories the German Kings had bartered away the control of their native dominions, the unity of their country, the prosperity of their nation. Tempted across the Alps by this will o' the wisp which danced over the pestilential marshes of Italy, they allowed their Princes to make themselves sovereign at home, and to crush the cities, which elsewhere became the mainstays of monarchical power and governmental unity. The poison worked in every part and member of the body politic. The sundrance of the Arelate, of the Netherlands, of Poland, of Switzerland, were but the sign of a disease which threatened speedy and utter dissolution. And while Germany went back, the rest of the world went forward. France united under the line of

Hugh Capet; Spain drove out the Moors, and drew into national unity under one head. The Turks took Constantinople, and pushed their conquests up the Danube. A sense of overwhelming danger compelled a partial return to national unity; but the mischief was not so easily undone. Not till our own days have the disasters of the Great Interregnum (A. D. 1250–1272) been fully retrieved, and the German nationality once more reestablished as coördinate with the others of Europe.

But the shabbiest fact in European politics was also the cherished ideal of European Christendom. Men loved to discern a vast order, a distribution of functions, among the great central powers of the West. To Italy God had given the Holy See; to France Learning, the University; to Germany the Holy Roman Empire. Cries of impassioned protest against its humiliation and overthrow by the Papacy, were heard from all quarters of Europe, notably from France. And this regard was not unreasonable. Viewing as they did the Roman Empire as a consecutive whole from Julius Cæsar to the Hapsburgers, they might well see it to have great claims upon men's regard and reverence.

“Municipal institutions, diplomacy and the daily law of Europe, except England, were bequests of this Empire. England is even now dropping its clumsy protest against the Justinian jurisprudence, by seeking to make one combined system out of Common Law and Equity. Even the fantastic science of Heraldry has lived through the attacks of two powerful enemies—ridicule and taxation—and that because it was rooted in the institutions of the Empire as an organization for fixing the relative rank of every armiger, from the Emperor to the squire.”<sup>2</sup>

But dreams are always poor affairs in comparison with reality; and this vision of a Christian Empire was no more than a dream, even though it did influence men's waking hours. The free national governments of the modern world, based on the purely modern principle of representation, present a form of political organization which is a great advance upon any which antiquity has handed down to us, and at the same time they embrace all the good features of ancient polity. It was this, even more than the Papacy which overthrew the Empire; it was this that robbed the Papacy itself of its political predominance, and made its boldest and proudest acts in the Middle Ages the theme of apology and dis-

<sup>2</sup> Burton's *History of Scotland*, vi., 3.

claimer with its modern champions. And it is this national principle whose triumph we have seen in the rise of the two countries who in this fight for a phantom inflicted such deadly injuries upon each other. The Nation, as Mr. Mulford says, is the antagonist of the Empire. The purpose of the one is peaceful, organic and moral progress, by an inward principle of growth; that of the other is the violent subjection of peoples who have no organic, political unity with itself, until it embraces the whole race of man.

There are a few single points in Mr. Bryce's book which we have marked for comment. We are pleased to see his antagonism to some of the absurdities of the Freeman school. For instance, he evidently regards the municipal institutions of England as of Roman origin, and expressly ascribes and traces the trade guilds the Roman *collegia* (p. 259) and not to the early kinship institution of the Teutons.

He speaks (p. 156) as if the False Decretals were a Roman forgery, whereas Gieseler expresses what is now the general opinion when he says: "The false Decretals \* \* \* must have been written between A. D. 829 and A. D. 845 in France." Their authors exalted the authority of the Popes in order to pave the way for a right of appeal to the See of Peter from that of their own Metropolitans. At Rome they seem to have been received in good faith, for in that uncritical age forgery was an easy task.

As regards Scotland's relation to the Holy Roman Empire, Mr. Bryce might have found in Mr. J. H. Burton's excellent *History of Scotland* something more to say than the brief notice on page 188. In the peculiar constitution of Scotland, the Empire played a prominent part. Scotland, as Macaulay says, had the very worst constitution in Europe. Its kings possessed despotic power, whose exercise was only limited by a legalized right of revolt. And the revolt seems to have taken the shape of an appeal to the authority of the Empire. The King's proclamation, made at the market cross of "the royal burghs," had the binding force of law, unless it were met by a general "protestation" on the part of "his Majesty's lieges," executed by a notary public as an officer of the Empire. This was the method pursued as late as 1638, when Charles I. tried to put down the Covenanter rising by a royal proclamation. The Covenanters had the ablest lawyers of the Kingdom at their service, and a solemn protestation in reply to the proclamation was drawn



up and forwarded to every Scottish burgh. Over against every market cross went up a temporary wooden scaffold, of just the same height, and when the King's representatives ascended the cross they found the protesters face to face with them. "The proclamation," says Burton, "was read by a herald—one of the class of officers who of old were not deemed the servants of provincial governments, but were franked by the Emperor as his representatives in all countries. The Protestation was then read with solemn 'taking up of instruments' by a notary, who also was by courtesy, and in name, at least, an officer of the Holy Roman Empire." The crowd of burghers would not allow the royal messengers to depart without hearing the counter *pronunciamento*, "as if one authority had claimed equal audience to both." The recognized force of this action was to deprive the King's utterances of legal force, to give notice of intention to resist their enforcement, and thus to compel "a Convocation of the Estates of the Realm." And the dodges and devices adopted by the Royal Council to evade the Protestation by a sudden and unexpected publication of the Proclamation, shows what weight they also attached to the measure.

The same form of procedure was adopted by the later Covenanters in the times of persecution. Thus at the General Meeting of the Societies, held May 28th, 1685, they "agreed unto a Protestation against proclaiming James, Duke of York, King of Scotland, &c. the lawfulness of the present pretended Parliament, and the apparent inlet of Popery. And it was resolved that it should be published the same day, at the burgh of Sanquhar. According to this conclusion, immediately after the meeting was ended, about 220 men drew up in arms, who went to the said burgh, and at the market cross, after singing a Psalm, and Mr. James Renwick having prayed, the said Protestation was published, and a copy left on the cross; and thereafter the men marched out of the town."<sup>3</sup> It is hard to imagine what the Covenanters of 1685 would have said if they had been told they had been going through the form of appeal to the chancery of Leopold I., the Papistical Emperor of Rome and Germany.

We part from this Holy Empire with no regrets. The new German Empire seems to us to inherit no glory from that which preceded it on German soil. And it is to be regretted that a nation

<sup>3</sup> *Faithful Contendings Displayed* (Glasgow, 1780), p. 166.

so full of all that promises a vigorous and healthy national life, was obliged by circumstances to pick up this wretched rag of a name, which is so unfit a designation of the great German nation. T.

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### NEW BOOKS.

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**PETITES CAUSERIES:** or, Elementary English and French Conversations, for Young Students and Home Teaching. By Achille Motteau, author of "The Civil Service First French Book," and "Questionnaire sur la Grammaire des Grammaire de M. De Fivos." 12mo, pp. 150, price. New York: D. Appleton and Co., 1877.

M. Motteau's plan of teaching children French is to teach them from the first to talk, to give them sentences to commit to memory without bothering their brains with the meaning of separate words, which they can find out for themselves, nor with definitions, and least of all with grammar. His book is, with the exception of a few short vocabularies, simply a collection of English sentences with their French equivalents placed opposite, short at first and gradually increasing in length and complexity, until, in the second division of the book, we reach a series of conversations on various topics, such as interest children. A third part consists of a number of juvenile letters in English and French, forming short reading lessons, and exhibiting the corresponding English and French styles of beginning and ending a letter.

The book is very prettily gotten up. It is printed on fine paper and in good, clear type, contains a number of illustrations, and has a very neat binding. It will please the children, for it is not a whit like a school book, but is worthy to stand in the little library by the side of the fairy-tale books, Robinson Crusoe, Swiss Family Robinson, and the rest.

We are not quite sure, however, that it is all that is required in a text book for teaching the little ones the French language. To expect that a child will remember whole sentences, when he is left very much in the dark as to the meaning of the separate words, is to expect a good deal. This is, to be sure, what we have all done in learning our mother tongue, and what a child does, too, when he learns French or German from his playmates. By hearing a word often used in various connections he is able sooner or later to guess its meaning, and thus forms gradually a little vocabulary of useful words and phrases. But the conditions essential to this process,—the constant drilling, and, more important still, the constant

stimulus of a desire to understand and to be understood, which makes the task of learning light,—cannot be supplied by any artificial method of teaching. The teacher, whose time with the child is limited to an hour or so daily, will set about the task differently. He will abridge the child's labor very greatly by explaining many a difficult point at once. He may teach him that *Je ne vous aime pas* means "I do not love you," and that *Je n'ai pas mon livre* means "I have not my book;" but he will at the same time tell him what he would be a good while in finding out himself, that *ne-pas* with a word or two between meant "not." Then why not have this fact set down in the book, where the child can see it for himself? It would give him great satisfaction, since children always assume that the man who wrote the book knew more than their teacher. These remarks apply to the conjugations of verbs. The child must learn them, one way or another, and it is a great mistake to omit to group them together, where their essential features can be seen at once, on the ground that a child has no conception of grammar.

As a phrase book this little volume will be found very convenient; but it can only be used by a good teacher, who will supply orally its deficiencies.

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#### BOOKS RECEIVED.

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- Mesmerism, Spiritualism, etc. Historically and Scientifically considered. Being two Lectures delivered at the London Institution. By William B. Carpenter, M. D. 12mo. Pp. xiv. 158. Cloth. New York: D. Appleton & Co.
- Samuel Brohl and Company. By M. Victor Cherbuliez. 16mo. Pp. 271. Paper, 50 cts. New York: D. Appleton & Co.
- Village Improvements and Farm Villages. With Diagrams. By Geo. E. Waring, jr. 18mo. Pp. 200. Cloth, 75 cts. Boston: Jas. R. Osgood & Co.
- Disease of the Mind. Notes on the early management, European and American progress, modern methods, etc., in the treatment of insanity, with especial reference to the needs of Massachusetts and the United States. By Chas. F. Folsom, M. D., Secretary of the Massachusetts Board of Health. 8vo. Pp. 109. Cloth, \$1.25. Boston: A. Williams & Co.
- Bulletin de L'Academie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique. 1877. No. 5. Brussels: F. Hayez, Printer of the Academy Royal.
- My Bonnie Lass. By Mrs. C. V. Hamilton. 8vo. Pp. 131. Paper, 50 cts. Boston: Estes & Lauriat. [Porter & Coates.
- Reminiscences of Frederick Froebel. By B. Von Marenholz-Bulow. Translated by Mrs. Horace Mann. With a sketch of the life of Frederick Froebel. By Emily Shirreff. 16mo. Pp. 359. Cloth, \$1.50. Boston: Lee & Shepard. New York: Chas. T. Dillingham. [Porter & Coates.
- Personal Appearance and Culture of Beauty, with Hints as to Character. By T. S. Sozinshey, M. D., Ph. D. 16mo. Pp. 189. Cloth. Philadelphia: Allen, Lane & Scott.
- Gerard's Marriage. By Andre Theuriet. 16mo. Pp. 217. Paper, 50 cts. New York: D. Appleton & Co.

- The Locust Plague in the United States. Being more particularly a treatise on the Rocky Mountain Locust, or so-called Grasshopper, as it occurs east of the Rocky Mountains; with practical Recommendations for its Destruction. By Chas. V. Riley, M. A., Ph. D. With 45 Illustrations. 12mo. Pp. 236. Paper. Chicago: Rand, McNally & Co.
- Bulletin de L'Academie Royale des Sciences des Lettres et des Beaux-Arts de Belgique. 1877. No. 6. Brussels: F. Hayez, Printer of the Academy Royal.
- The Sanitary Condition in City and Country Dwelling-Houses. Van Nostrand Science Series, No. 31. New York: D. Van Nostrand.
- Traps Baited with Orphan, or What is the Matter with Life Insurance. By Elizur Wright, ex-Insurance Commissioner. 18mo. Pp. 80. Cloth 75 cts. Boston: Jas. R. Osgood & Co. [Porter & Coates.
- Count Frontenac and New France under Louis XIV. By Francis Parkman. 8vo. Pp. xiv., 463. Cloth. Boston: Little, Brown & Co. [Caxton, Remsen & Haffelfinger.
- Spirite. A Fantasy. Collection of Foreign Authors, No. 3. By Theophile Gautier. 16mo. Pp. 214. Paper 50 cts. New York: D. Appleton & Co.
- Experimental Science Series. Light. A series of simple, entertaining and inexpensive experiments in the phenomena of Light, for the use of students of every age. By Alfred M. Mayer and Charles Barnard. 12mo. Pp. 112. Cloth. New York: D. Appleton & Co.
- American Addresses, with a Lecture on the Study of Biology. By Thos. H. Huxley. 12mo. Pp. 164. Cloth. New York: D. Appleton & Co.
- Devil Puzzlers and other Studies. By Frederick B. Perkins. 16mo. Pp. xix., 215. Paper 50 cts. New York: G. P. Putnam's Sons.
- Bulletin L'Academie Royale des Sciences des Lettres et des Beaux-Arts de Belgique 1877. No. 7. Brussels: F. Hayez, Printer of the Academy Royal.
- A Miracle in Stone; or The Great Pyramid of Egypt. By Joseph Seiss, D. D., Pastor of the Church of the Holy Communion, Philadelphia, Pa. 12mo. Pp. 250. Cloth \$1.25. Philadelphia: Porter & Coates.
- Egypt as It Is. With a Map taken from the most recent Survey. By J. C. McCoan. 8vo. Pp. xv., 417. Cloth \$3.75. New York: Henry Holt & Co. [Porter & Coates.
- A Vocabulary of the Philosophical Sciences. (Including the "Vocabulary of Philosophy, Mental, Moral and Metaphysical, by William Fleming, D. D., Professor of Moral Philosophy in the University of Glasgow," from the Second Edition, 1860, and the Third, 1876, Edited by Henry Calderwood, D. D.) By Charles P. Krauth, S. T. D., LL. D., Vice-Provost of the University of Pennsylvania. Pp. xxiv. 1044; 8vo. New York: Sheldon & Co.

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THE  
PENN MONTHLY.

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NOVEMBER.

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THE MONTH.

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THE Russians are not about to go into winter quarters just yet. The approach of cold weather indeed will be very greatly in their favor, as they are in that respect hardier than their enemies. And while Plevna has been reinforced and provisioned, and no impression has been made upon its fortifications, the situation has been materially improved. The attempt to embarrass the Russians by an advance from the East, has been decidedly and severely repulsed. The arrangements for supplying the armies have been improved. And a collapse of the Turkish resistance is regarded as quite among the possibilities. Even Moslem zeal cannot bear the strain of disaster and defeat, as was seen in many an earlier page of its history. The bad tactics of the Russians have been surpassed by the worse tactics of Suleiman Pasha; an army has been destroyed in the Shipka Pass to no purpose. And the empty places in the ranks of the faithful are not easily filled. Should Plevna fall, Christmas may see Bulgaria in Russian hands.

The Campaign in Armenia was evidently regarded at the opening of the month as about to close. Mukhtar Pasha was entrenched across the road to Kars, while another Turkish army had crossed the frontier and occupied Georgian territory. Daghestan was ablaze with rebellion, and although the army had been greatly reinforced to prevent a Turkish occupation of Georgia, it was not

known how soon a part of the troops must return to the Caucasus. But it was evidently thought best to make a bit of a spurt before closing the campaign, and after fourteen days fighting Mukhtar Pasha was hastening into Kars with but one of his divisions at his heels, and that demoralized. His army had been cut in two, one half utterly routed and chased, the other surrounded and forced to surrender. As a consequence the Turks retired across the frontier, siege guns were brought up to besiege Kars, and the Russians everywhere took heart and hoped for better times. The worth of this victory is not to be estimated by its immediate results; it will be felt along the lines in the next charges on Plevnia.

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THE French election, though still securing to the Republicans the largest party majority to be found in any legislative assembly of the world, was yet a partial, though utterly unfair, defeat of that party. Some forty seats of the famous three hundred and sixty-three have been lost, under the methods of official pressure which are peculiar to France. Of course this gain, small as it is, is hailed by the Conservatives as an excuse for continuing in power, especially as the time is approaching for the election of the *Conseils Generaux*, who have to choose one-third of the Senate. Indeed, it was admitted that the *coup* of May last had these latter elections in view more than any other, for the Conservatives cannot afford to give up the Senate, their last hold upon the French government. So far, therefore, from the October elections having decided anything, it was never meant that they should do so, and the Marshal and his friends are as loud as ever in declaring that France desires order as well as the Republic, *i. e.*, is as much enamored of the politicians and the policy she has repudiated, as of that for which she has voted. In view of the pledges of ministerial responsibility contained in the Constitution, this conduct is grossly immoral, and would more than justify any measures to dispossess the party in power of its control of affairs. But France has learned that it is wiser to wait under protest than to provoke a collision, and the unfair advantage taken as regards the Senatorial elections will be put up with, and if vigorous measures are taken, we may see a Republican majority in the Senate also.

The outlook for the future of France is certainly brighter, in view of the power of self-control exhibited by the majority, under cir-

cumstances of great provocation. But, on the other hand, the radical evil of French political life has struck only deeper root because of the events of this summer. Each party hates and detests the other more than it loves France. Either would regard with a favorable eye a foreign intervention in its own favor, instead of springing to arms at the first threat of foreign interference. France is the true heir of the old classic world, in which two theories of government could never live peaceably within the same city. The adherents of one must drive out those of the other, and each regarded a city of its own way of thinking as nearer of kin than its own fellow-citizens. This has been, ever since the Reformation and the League, the weakness of France as compared with England; and this is one of our own dangers from the growth and intensity of party spirit.

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GEN. GRANT has been doing so well abroad that it is not pleasant to find fault with him. Especially at Sheffield and Birmingham, which rank next to Manchester in their interest in trade with America, he has been very manful in giving his entertainers to understand that he is quite in accord with the protective policy of this country. Each, of these cities, on the occasion of his visit, got up a sort of after-dinner demonstration on the subject of Free Trade, either as supposing that General Grant has great influence with the Americans, and therefore was worth converting, or as expecting that the speeches got off on such an occasion would reach a great number of persons on this side of the Atlantic. We owe it to the General that the wool-seekers in each instance "went home shorn." He reminded them that England had set the example we were following, and that protection was a temporary measure intended to put our country on equal terms with those of Europe, and thus to furnish the latter with a new competitor in the world's markets.

But we think it exceedingly unhappy that during this visit General Grant has allowed a revival of the memories of his old dispute with Senator Sumner and Minister Motley. We do not share in the *cultus* of Sumner's memory, to which a very large number of intelligent persons are devoted. Some countries enjoy an extent of sea-coast out of all proportion to their area; and some people possess an amount of surface out of all proportion to their solid contents. Mr. Sumner always seemed to us one of these. He



had surface enough for a whole army of men. His very name suggested prairies of it; his manner made him the rival of oceans and continents in this regard. It was impossible to think of him except as striking an attitude, or as preparing to put a platitude into sonorous phrases. But the net outcome of his activity in the department of politics, was much like that of his pursuit of art. All his life he posed as connoisseur, and ill-taught newspaper writers raved over the treasures of his collections. But when he left them at his death to the Boston Athenæum, the real connoisseurs of that institution pronounced the great bulk of them unworthy of preservation, and sold them under the hammer. And that auction symbolizes to us the estimate posterity will put upon Charles Sumner as a statesman and a political thinker. When the platitudes and the fallacies of his sonorous declamations have been sifted out, the remnant to be made room for among the things which the world will not let die, will be small enough.

But Charles Sumner is entitled to the merciful application of the rule, *De mortuis nil nisi bonum*. Unless where some other would suffer by silence in regard to him, no fresh charges should be brought against his memory, since he is now removed beyond the possibility of a reply. And General Grant could very well have afforded to let Sumner's record and his own go down to posterity as they lie written on the face of American history, trusting to the keen eye of future students of history to sunder the fact from the eulogy, and to distribute praise and blame where they were deserved. We say nothing as to the truth of the accusations brought. They may very well have their origin in the misunderstandings natural to two men of character so different, so repugnant. And while we do not doubt the perfect sincerity of General Grant in presenting them, we have not that confidence in his intellectual character, his gift of disentangling a tangled skein, which would lead us to put implicit trust in his accuracy, as distinguished from his truthfulness.

On the other hand, Mr. Wendell Phillips's categorical and detailed denial of those charges, has completely broken down under the counter-statement of ex-Secretary Fish, who, perhaps, carries more weight into this unpleasant discussion than any other of the parties engaged in it. Whoever it was that gave Mr. Phillips his facts, a bad blunder was made in describing the occasion on which the San Domingo treaty was brought to Mr. Sumner's notice.

And the blunder is not a formal one only, for with it is bound up the whole explanation of Mr. Sumner's assent to that treaty, which he afterwards withdrew in the Senate.

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THE result of the Ohio election is not so much a Democratic victory as a Republican collapse. The truth is that the Administration has gone too fast for the party. It is not so easy to induce a vast body of people all at once to change their minds as to the propriety or wisdom of a course of policy which has been associated with earnest thought and passionate feeling. And this is the place which the Southern policy occupies with a very large and intelligent body of Republicans. They have been for twenty years rowing in convictions, which they cannot all at once discard; and one of those convictions is that the white population of the South will tolerate the forms, but will never act in the spirit of popular government and equal rights. They have no confidence in the permanence of the present quiet; they think, as one of them puts it, if the bad boy has been made to mind, it has taken nearly all the sugar in the house. And therefore they did not come out to vote for the moral support of an Administration, which they regard as having gone over to the enemy on the issue for which they cared the most. We can understand and even sympathize with these recalcitrants, but we do not agree with them in practice. If their view of the South was right, then Thad. Stevens' plan of military government for the South was the right one. Between that and "white rule" there is no middle term; and having lost the chance of that, we must make the best of the other. Of course it is taking risks, but risks must be taken. There is more chance of influencing the South in the right direction by treating it generously, and appealing to its sense of justice, than by combining constant irritation and illegal restraint, in the style of the last Administration.

On the other hand, the failure of the Republican party in Ohio to demand the repeal of the Resumption Act helped to reduce its vote, and to increase that of the Democrats, as well as to roll up the large vote of the Greenback party. Those who regard that as the greatest of present issues, and who look upon all other questions with regard to it, could not but desire the defeat of the Republican candidates. The feeling was not confined to Ohio; it was frequently and freely expressed in other parts of the Union, and a very large portion even of those Republicans who are not

dissatisfied with the Southern policy, received the news of Mr. Bishop's election with very mixed feelings. Some ingenious attempts are making to make the facts look exactly the other way; and the Republicans are rebuked for not planting themselves on a Gold currency and the Resumption Act, and their defeat in this instance is contrasted with their success last year, when they were supposed to occupy a "sunder" position. But there was nothing in the Republican platform of last year which was inconsistent with their present position, and their defeat was really owing to their being too "sound," as these critics use the word. The set of public opinion in the West is more and more steadily in the anti-Resumption direction, and justly so.

To the Administration this defeat in the President's own State is a very severe blow, much more severe than it would have been if so much pains had not been taken by President Hayes and his Cabinet to prevent it. Anything but the wisdom of the serpent was displayed in the official campaigning of Secretary Sherman and others. A President of the United States should be above the hunting after "such outward shows of gain to bolster" him, as are furnished by election returns. If assured that his policy is in accordance with the Constitution and the laws, and therefore with his duty as the Executive of the nation, he should never seem to stoop to soliciting the suffrages of any man or body of men, to sustain him in doing his duty. The best elements in the nation expected this of our President, but Mr. Hayes continually disappoints such expectations. He is full of good and honest intentions, but he lacks something—whether it be tact, or imagination, or initiative—for want of which he never seems able to fulfil these expectations.

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ONE of the arguments very freely used in the Ohio campaign was the steady approximation of the gold and paper dollars towards each other, and the consequent naturalness of resumption. That approximation is very valuable as a refutation of the notion that the difference between the two standards was the result of the excess of our paper money. For it showed that without any contraction of that money, and without any great growth of industrial enterprise to utilize its excess, the two dollars could be brought into harmony of value. And this fully confirms the views of those who said that gold was scarce and dear in the time of paper depre-

ciation, and who predicted that it would become cheaper whenever the supply was increased. The change in the quantity of gold at our disposal is the only reason why the two dollars stand so near to each other at the present time. The balance of trade is in our favor, and we are importing it from abroad, as well as retaining our native supply from the mines of the far West.

But it now appears that this comparative plentifulness of gold is not natural, but artificial. It is the result of a combination of dealers in stocks, who are manipulating the money market by looking up large quantities of foreign exchange, with a view to forcing the London market to take, in discharge of outstanding obligations, a large mass of the stocks held in New York. And by the time that we are supposed to be ready for resumption, the state of affairs may have changed utterly. The Londoners may have come to terms, and gold become as scarce as ever.

Among the impossible plans of resumption was the one reported by a committee to the recent Bankers' Convention, to call in the greenbacks and replace them by four per cent. bonds. The Convention very wisely took no action upon it, but several of our contemporaries remark: "Just what we said: that's the straightforward, honest way out of the tangle." Did it ever occur to these people to ask themselves what the banks are to do in that case? Their notes are redeemable in demand in greenbacks, or failing that, in gold. Are they to retrench their circulation within the limit of a possible redemption in gold, or are they to be authorized to redeem them in bonds? The plan we speak of is but one step toward resumption. Unless supplemented by some wise method for the regulation of our banking currency, it would simply have the effect of annihilating commerce of every sort throughout the country.

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How thoroughly bad the management of party politics can be even without the intervention of United States officials, was shown by the Republican Convention of New York. Senator Conkling was the Convention, and as it was the first public opportunity he has had of punishing the wing of the party which defeated his Presidential aspirations in 1876, he made a very characteristic use of his pre-eminence. It is pretty well known that Mr. Conkling, was General Grant's *second* choice for the Presidency, and it was also commonly suspected that the sudden appearance of Mr. Cameron in the Cabinet was the result of a family compact, by which

the vote of our own State was to be delivered over, after Governor Hartranft's nomination was seen to be impossible. It will be remembered that the delivery was found impossible, and that the Cameron influence was chiefly used to prevent a vote for Blaine, so that the votes of New York and Pennsylvania were at no point cast together for Mr. Conkling, according to the programme agreed upon. And there was even in the New York delegation, George William Curtis, who declined to vote for any candidate whom he did not regard as the right man for the place.

The recent convention, therefore, was the favored opportunity for threshing George William Curtis, and all the Reform (*i. e.* anti-Conkling) Republicans over his shoulders. The occasion was an amendment to the platform, endorsing President Hayes and the Southern policy, which this Republican Convention rejected, after a speech by Mr. Conkling almost unique for ill-temper, bad manners, and laborious sarcasm. It was no hasty and extemporaneous effusion: it bore traces in every line of careful and prolonged preparation. It was a study in the art of being offensive, which recalls Grattan's reply to Foote, but without a spark of Grattan's genius. It was a speech which would have been tolerable in a country or at a time when its author knew that it would be followed by a challenge, but utterly out of place in this country, and this quarter of the nineteenth century. And yet it has had one very good result, for it has buried Mr. Conkling's political pretensions deeper than any resurrection will ever reach. We do not speak in any sense as Mr. Curtis's champion. We do not admire that gentleman, even as a Civil Service Reformer. We think it is because he and his friends have shown themselves unpractical, and have weakly followed foreign examples, that the whole matter has become a laughing stock with many people who might have been made its friends. And we never have been able to reconcile Mr. Curtis's sincere claim to be a gentleman, with his editorial management of a journal adorned with pictorial vulgarity. But in view of his standing in the Convention, and before the world, he may safely say that if Mr. Conkling could afford to make that speech, he could afford to hear him make it.

The other doings of the Convention were insignificant. In view of the division it achieved in the ranks of the Republican party, nobody wanted its nominations, and the nobodies got them. Its platform is one of the sublimest pieces of impudence to be found

in that class of literature. It gravely rehearses that the vote given to Mr. Hayes in New York was the largest he received in any State, not mentioning the little fact that the vote of New York for Mr. Tilden, a vote brought about by party management of the Conkling sort, was what endangered Mr. Hayes's election. And it speaks of the whole receipt of customs at New York port as the contribution of the citizens of that port to the national income. Truly, the modesty of New York Republicans is an exuberant quality.

The one use which our party organizations are capable of serving, that of mutual restraint and criticism, utterly vanishes after such a Convention as this. We are not surprised, therefore, to find the anti-Tilden and anti-Reform elements of the Democracy having everything their own way in their Convention, and a ticket patched up by the Canal Ring and Tammany Hall for the acceptance of the State. They evidently thought they had not much to beat this year.

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THE opening of the special session of Congress was chiefly notable as deciding the Speakership question in the way which coincides with our own predictions and hopes. Mr. Randall was elected on the first ballot, all attempts to rally a strong opposition to him having broken down.

In the Senate some Republican places were vacant, reducing the majority to the smallest working number; and when the Louisiana vacancies are filled, the majority will probably become a minority. Of course there is no disposition to decide hastily on the claims of the respective aspirants, and the case is sufficiently entangled to warrant reference to a committee. A decision, however, can certainly be reached before the close of the session, and it is to be hoped that no partisan interest will prevent the Senate from seating those who have the justest claim. And as a few such men as Senator Edmunds are enough to turn the scale, we have no doubt of an honest result in any case.

The Message confines itself to the deficiency matter, and the only other business before Congress is the confirmation of nominations by the Senate. Some of these, we must say, are surprisingly bad, such as that of the President's former secretary to the important Consulship of Frankfort-on-the-Main. It is said that this gentleman is absolutely ignorant of the German language, and

therefore altogether unqualified for such a position. Civil Service Reform is a beautiful theory, but the practice is disappointing.

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THERE will be a very long score to pay when Providence sends us in its bill for our treatment of the Aborigines. The whole history, not excepting Penn's smart trade for Pennsylvania, is a story of wrong, outrage, deception, and injury of every sort. And of late years the system of fraud seems to have become a thoroughly organized one. The story of government dealings with the Nez Percés of the far West, is an exact repetition of that told by Black Hawk in his autobiography, as having led to the war by which the Indians of Illinois were cajoled, cheated, and forced from their own territories. Perhaps there is a form of instruction issued to the agents of the Interior Department to cover such cases. If so, it must read something in this fashion: "Open negotiations with the chiefs of the tribes for any land which white settlers may seem to want. Make any number of promises, and to any extent. If the regular chiefs refuse to accede to your proposals, pick out some worthless, drunken scamp, and announce that you have recognized him as head of the tribe. Get your nominee to sign the papers, when he is sober if possible, but at any rate to sign them. Make no record of any protest against their validity. Always regard the United States troops as at your disposal to defend white interlopers on Indian reservations, but never to defend Indians from interloping."

By these simple rules for systematic lying and cheating, any Naboth's vineyard can be seized and its owners disposed of, as promptly as if Jezebel had the job in hand. The business of stoning the recalcitrant owner is equally simple, and with Springfield rifles, even more summary than in Ahab's days. Any little scruples about loyalty on the one side and gratitude on the other are not to stand in the way. The Nez Percés never before raised a hand against our authority. They resisted the solicitations of the Mormons, of the Southern Confederacy, of the hostile tribes. And at last we forced them to fight for their very homes, which were invaded by white miners in defiance of the most solemn promises and pledges of perpetual possession. The previous story of our dealings with them is a long and monotonous narrative of bad faith and deception. And now for a week we are entertained with

the story of hostile onslaughts upon their encampments, and of the despair of a brave but doomed race.

“In the place where the dogs licked the blood of Naboth, shall the dogs lick thy blood, even thine.”

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MR. JOHN WELSH'S nomination to the English mission is a great relief to the people of our city, and to the best elements in the population of our state. The President and Mr. Evarts, probably from anxiety to prevent a Republican defeat in our state, took the very unwise step of asking the Congressmen of the state to suggest a person for that post. Any child could have foretold the result. Mr. Simon Cameron was at once put forward as the idol of Pennsylvania. To do justice to all, he was not the first choice of a minority among them. Notably Judge Kelley suggested Dr. Morton McMichael; but it was of no use to speak of any other, when a candidate was to be put forward by our representatives in Congress.

To have nominated Mr. Cameron would have been for the Administration to give up all the distinctive principles it has avowed, and to break with all its truest friends. We trust that at no time was such a nomination thought even possible. We do not know who suggested Mr. Welsh's name to the President, nor what sort of influence was brought to bear on his behalf. But of this we are sure, that if a voice could have been given to the wishes of the second city of the Union, it would have asked that Mr. Welsh and not Mr. Cameron be the representative of our State selected, when the Administration seeks to do us honor. If there are any exceptions to this, it is among those who hoped for the nomination of an excellent member of the Philadelphia bar, who would certainly do honor to that or any high position. And as the Republican majority in the State is Philadelphian, while our country neighbors monopolize the United States appointments, for once Philadelphia has a right to be heard.

Of course we hear at once of Mr. Welsh's lack of acquaintance with public life, and ignorance of the diplomatic interests he is intended to protect. He would not be more ignorant of them than were at the start the Congressmen, the local lawyers, the literary men, who have filled the post within the memory of this generation. Such talk proceeds upon the supposition that pleading cases in



criminal courts, or filling a seat in Congress, is in some mysterious way a preparation for such a position. The truth is that we have no diplomatic service in the European sense, and a merchant like Abbot Lawrence is just as well trained for the duties of such a post as is anybody else whom we can select. And in the present case we cannot but regard Mr. Welsh's experience at the head of the Centennial Board, as better than forty years of the courts or of Congress as a school for diplomacy.

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### COMMERCE AND THE NAVY.

WHEN the mice met in council to devise means to circumvent the stealthy cat, they all agreed that the little bell was just the thing needed. But "the best laid schemes of mice and men gang aft agley," and in this case no one could tell how to bell the cat. So on the great question of the day, how to bring back good times, there is as much unanimity respecting the desired object as there was in the council of mice, and yet there is as much perplexity as to how the thing is to be done. While some advocate one scheme, and some another, whereby the prevailing business depression may be relieved, all admit that what we most need is an increased foreign demand for our surplus productions. But how are we to induce those countries which are in want of our goods to purchase them in preference to those of other countries that can produce the same goods as cheaply as we can, and which, if not nearer to them geographically, have greater commercial facilities? Of these our principal competitor is England. Until within a few years the English manufacturers could undersell us in most foreign markets, and even now we are unable to compete with her in supplying goods the value of which consists mainly in the labor and skill employed in their production. We can, however, furnish the coarser fabrics, of which the raw material constitutes the chief factor in their cost, cheaper than any one else; and were our government as liberal in its commercial policy as the English, we should be able to export at a profit nearly all the cotton goods, the railroad iron, the cars and locomotives, the castings, the agricultural implements, the cloths, the boots and shoes, the preserved meats and fruits, which are im-

ported into all South America. To a less extent we should also supply China, Japan, Australia and even India, and parts of Africa. We have the facilities for producing these goods at home at a cheaper rate than any other country, and the reason why we do not undersell the English in these distant regions is that their government has intervened to give them cheaper transportation than can be afforded by our merchant marine.

For a long time it has been the policy of Great Britain to seek out every spot on the globe capable of paying for foreign manufactures, and to fill it with English goods. If a trade with New Zealand, the Rio Plata, Cape Colony or Chili, could be built up that should make an annual demand for millions of dollars worth of English manufactures, her statesmen were sagacious enough to see that it was for the nation's interest to encourage commerce with those distant places, even at a direct outlay and at the cost of the national treasury. The only effective way to do this was to give encouragement to lines of steamers to those distant parts. After these lines were established so that communication was regular and frequent, then, in the competition for business, every manufacturer would look for a market for his particular wares, and English gingham and cutlery, Brummagem ware and crockery, Birmingham buttons, Paisley shawls and Manchester calicoes, are exposed for sale in every *tienda* at the head waters of the Paraguay and Oronoco, the *fondas* of Peru, and in the streets of Singapore. From each one of these flows a little rivulet, and these, scattered throughout the world, go to make up the vast wealth and power of the great English Empire. Cargo after cargo of these goods is dispatched daily from English ports, and on their returns depend the thousands upon thousands of artisans for their support. By thus encouraging commerce, England has become the commercial and manufacturing centre of the world. By giving subsidies to her merchantmen she has made the whole world tributary to her wealth. For a long time the best market for her wares was the United States, and most desperate were the efforts made to undersell our manufacturers at home. The advocacy of free trade *for us* by her publicists was most pathetic, and so long as by flooding our markets with her fabrics she could prevent us from establishing home factories, we could not expect to compete with her in other countries. But under the limited protective system of later years our people have gone so largely into manufacturing, that a large class of skilled

laborers has grown up, and such important mechanical labor-saving inventions have been made, that we can produce the most of the goods we formerly imported at a cheaper rate than any other people; from which it results that many of the laws which were passed to give protection are of no effect in repressing importations. The home production serves as a prohibitory tariff.

But though Great Britain has owed her wealth and prosperity for many generations to the fostering care which she has extended to her commerce, the prejudice against any such fostering by our government is so strong that it seems to be idle, a mere waste of time and labor, to consider any policy against which the hated word subsidy may be hurled. The people are opposed to subsidies, and it would be more damaging to a candidate for popular suffrages to have it proved he had ever advocated any such policy than that he had been guilty of speculation or treason.

This hostility to granting government aid to great national enterprises does not proceed, however, from any penny-wise, contracted notions of economy, so much as it does from opposition to special legislation. The people, rightly enough, are opposed to any measure or policy calculated to benefit one class, not at the expense of, but above another. It is not enough that an enterprise which owes its vitality to government aid benefits everybody to some extent; if it is to give fortunes to a few, the people will none of it. But if it is open to competition and has nothing special in its character, then the opposition abates as soon as it is proved to be feasible, and the benefits to be derived are shown to be of a general character and such as to justify the outlay.

Enterprises of great magnitude, however, that can only be prosecuted by the investment of millions, are in their nature subject to little competition. In most cases there is but one party that will comply with the conditions on which the government aid is to be granted; and then, though the legislation be general in its terms, it is for all practical purposes of a special character. Though this may but slightly increase the hostility of the people to the lending of government aid, yet if it can be made to appear that the promoters are to make any money, then a hue and cry is raised against them and the passions and prejudices of the people are appealed to by those patriots who have no other capital. It has just got to this, that a Member of Congress who is seeking for a re-election seldom relies on what he has done to aid in building

up the business of the country, in advocating and voting for measures that should encourage commerce, promote manufactures, or render agriculture more profitable, but on having uniformly opposed every such measure.

It is now the popular cant to decry and oppose all new railroad undertakings. It is alleged that we have had too many railroads built—some of them with government aid—within the last fifteen or twenty years. That is, perhaps, true; and yet it is to be doubted whether there is one mile out of a hundred of them all that the people would wish to see torn up and the money advanced by the government refunded, at the price of seeing the country restored to the condition it would have remained in but for those roads. The improvements are wanted, but because the flush times of their construction are not continued, they must bear the odium of the reaction. Much of this hostility, however, arose before the reaction had set in or the tide of speculation had reached its flood. Then it was believed that sundry individuals had made too much money by their operations. But as the most of those who had invested in these roads and were supposed to have become suddenly rich were as suddenly ruined by the collapse, we hear less about the bloated monopolists; yet the clang and clamor of the partisan and self-styled reformer is kept up against them, as the wrecked vessel having struck on a lee shore keeps up the dolorous tolling of the bell long after passengers and crew have been swept to destruction.

This envy or jealousy lest individuals should profit largely by operations of unquestionable public benefit is a weakness of human nature to which the partisan and the demagogue seldom appeal in vain. It is the terror, the death's head that crouches over Congress and forbids needed legislation. It is the same spirit which we see manifested in towns and cities whenever a venturesome citizen proposes any public improvement, like the reclamation of a neighboring swamp or pool that sends forth a noisome and destructive miasma. Does he propose to dike or drain the pestilent spot on condition that for a certain number of years he shall be permitted to cultivate it and remove the crops?—he is sure to be looked upon as an enemy of the people, and one who is seeking to rob them of their privileges, their miasmas and their stenches, and all for the ignoble purpose of making money.

This base, unpatriotic spirit, of which many of our great public

men boast themselves in appealing to their constituents, has been most forcibly manifested in Congress when, even of late years, any enterprising parties have endeavored to establish lines of steamers between American and foreign ports. A notable instance of it was exhibited a few years ago, when a New York shipbuilder undertook to open regular steam communication between San Francisco and Australia. Having the steamers suitable for the business on hand, he of course either wanted to sell them or employ them in some way that would yield a profit. Now it is a well-experienced fact that such enterprises are always carried on at first, and for a considerable time, at a loss to their projectors. The steamers must run regularly for several trips before the people learn much about them, or have faith enough in them to take passage or send their freight in them. A loss for the first year or two may be counted on as almost certain. Nevertheless Mr. Webb ventured on the undertaking, as he saw that a vast commerce must inevitably follow the establishment of the line; that it would be the great highway for travel between Australia and Europe; that the vast productions of that country, New Zealand, and the thousands of large and fruitful islands along the route, would all contribute their mails and freight and passengers to the business of the line, and in time make it the great thoroughfare for passengers who would spend hundreds of thousands annually in this country in personal expenses, and many times as much in the purchase of such products as they had been accustomed to procure from England. The line once established, it was believed it would so commend itself to the popular support that if a small subsidy were required to continue it, Congress would not refuse it.

The business of the line exceeded the expectations of the proprietor. But it did not pay at first, nor was it expected to. Each steamer that arrived at San Francisco brought a large number of passengers and a heavy freight, besides picking up an astonishing amount of mail matter, and much of it came from places almost unknown and unheard of before. With this proof of the great advantages that commerce would derive from the line, application for aid was made to Congress. It is needless to say it was not granted. Not because Senators and Representatives who examined the matter did not admit that such a line of steamers was desirable, but because subsidies were unpopular. Though it could be proved that for every thousand dollars thus spent the country

would be fifty thousand dollars richer, Congressmen dared not vote for it, lest rivals and competitors should charge them with voting away the people's money to enrich a bloated monopoly. This, in the nature of the case, was the only argument that could be alleged against it. But it was enough: the measure was defeated, and after a few months more of running at a loss, the line was withdrawn and has not been renewed.

Since this attempt was abandoned, six years have elapsed; and had the appropriation been made, the government must have paid out the sum of \$3,000,000. In the same six years it has paid for the Navy Yard at Mare Island at least \$15,000,000. And for this larger sum, what has the government or country received in return? Certain vessels left on hand at the close of the rebellion have rendezvoused there, and a large force has been engaged in repairing them, or rather in looking after them, though they have done no service whatever except to serve as a pretext for spending money. Had they all been sunk in mid-ocean on the day of the capitulation at Appomattox, and had Mare Island been rented out for sheep-grazing, the government would have saved all these millions and no interest would have suffered. These vestiges of the war have done nothing all this while in the way of giving protection to commerce, or in causing our flag to be respected in foreign ports. They have furnished ostensible employment for a large number of officers, and to keep these ornaments of the service in countenance, superfluous men must be enrolled to keep up the aspect of activity, as it could not escape observation if the officers exceeded the men in number. It also afforded a fine range for grazing the useless dependents of politicians, and with the contracts given to favorites it has been made a telling factor in the politics of the district and State.

In all this time, what was there for this naval force to do besides to fully spend the appropriations? One or two little gunboats have been kept at Alaska for the purpose of protecting the few settlers there; but beyond that the actual service rendered on the western coast, from Behring's Straits to Cape Horn, has been absolutely nothing. There have been times when a war vessel has been of use at Panama, Acapulco, and one or two other points on the coast of Mexico; yet for all the service that has been actually performed it might have been rendered for one-fifth part of what it has cost to keep up the navy yard at Mare Island. Yet all this money which

has thus been wasted has been unhesitatingly voted by a Congress which would not appropriate half a million a year to sustain a line of steamers to Australia ; a line that would do more credit to the country, and more increase our commerce, and add more to our national resources, than has the whole navy of the United States during the twelve years since the war, though it has cost the country in that time more than \$400,000,000.

The attempt of certain parties to maintain a line of steamers between this country and Brazil furnishes a more striking instance of our national statesmanship. The empire of Brazil and the countries of the Rio Plata are so situated and furnish such raw products, that in spite of the hostile legislation of our government we are compelled to have large commercial relations with them. The amount of Brazilian coffee imported into this country annually is said to amount to \$35,000,000; while the importations of hides, wool, and other raw products from the Plata, are enormously large. Those countries require an immense amount of railroad iron, locomotives, passenger cars, and other rolling stock, cotton fabrics of all kinds, castings, stoves, agricultural implements, all of which can be made here as cheaply as in any part of the world. With these goods we could pay directly for what we import, had we the same facilities of transportation as have the English manufacturers. But we have not. In fact, we are so far behind in that respect that we are at the disadvantage of doing our business with South America through London. We buy the products of that region, and contrive to pay for them with what we can sell to England.

Eighteen years ago there was a single monthly line of steamers between England and the eastern coast of South America. At present there are three or more lines, and the average departure of steamers is about three per week. These steamers go loaded with freight and passengers, and it needs no detail of figures to show that the commerce between the countries is immense. A large part of this commerce ought to be with the United States. But all that we have of it is carried on in sailing vessels. The English government has been wise enough to subsidize their lines of steamers, adding thereby many millions to her wealth, and furnishing occupation and support to thousands of her people. By having this advantage, her manufacturers can undersell us in those countries, even though our wares are produced cheaper at home than

theirs are. Now why are we so stolid as to yield this rich field to England? The only answer that an average American statesman would give is, *I am opposed to subsidies, and so are my constituents.*

In view of the great natural advantages for securing this trade to the United States, a most determined effort was made some ten years ago to establish an American line of steamers from New York to Rio Janeiro, and a very small subsidy was granted to it. To render the line successful the service should have been more frequent, and an increase was asked for. It was not only not granted, but the smaller subsidy was not continued—and the steamers, after a few years' unprofitable struggle, were withdrawn. Our government could not afford a million dollars a year to bring us in close business relations with those vast regions which naturally would look to us for most of their foreign importations, but we can and do spend ten times that sum to keep a naval squadron on the coast, which, since the war, has done little to honor and much to disgrace us.

That people, intelligent and sensible, should be so jealous lest the public moneys be used for the increase of commerce or the encouragement of domestic enterprise, while they see millions on millions thrown away, not only with indifference, but approval, because it has got to be a habit of the government, is indeed passing strange; but it is a habit. The achievements of our navy during the revolution, and in the war of 1812-15, are a part of the cherished glory of our history, and people have grown up in the belief that a large navy is as indispensable for national safety as are revenue laws for the national credit. An abuse fortified by age and tradition grows into the popular regard, and it is looked upon as sacrilege to question its usefulness. Our fathers and grandfathers not only tolerated, but petted it; the great statesmen, whose memory we all revere, approved it; and he who would destroy it is little better than an innovator and iconoclast. Thus entrenched in the traditional policy of the government, it is entirely safe for the most severe economist to vote the regular appropriations. The people do not doubt but that the money which it has always been the custom to grant without question or scruple, has been wisely expended. They know little of what it is spent for. Occasionally they hear of a gunboat being sent to some point to make inquiry into an alleged grievance. But even that happens very rarely, and for such occasional service it is not necessary to spend one-fifth of what our navy now costs the



country. That a small naval force should be maintained—one sufficient for revenue service, and with gunboats of light armament to serve as dispatch boats—is not disputed. But for many years no naval commander has ever ventured to fire a shot without orders from the Secretary of the Navy, and therefore the sending of large squadrons into the ports of other nations, with which we are at peace, is a mere pompous, useless and expensive display.

It is held, however, that our navy, though expensive, and of little use in times of peace, must be kept up for the contingency of war. But it never has been and never will be. Other nations, whose people must starve by millions if the channels of commerce are not kept open, may find it necessary to keep up vast fleets to convoy and protect their merchantmen. Not so with the United States. Our true policy is not to depend on the ships built and afloat to protect us, so much as it is to have the means of quickly constructing them whenever they may be required. If we have neither ship-yards nor ship-builders, we shall be helpless and exposed in the event of war, no matter how many iron-clads or monitors we have laid up at our naval stations. It is our interest to give such encouragement to private ship-yards that they can turn out at short notice any vessel or weapon required in modern warfare. With yards and shops and the skilled naval constructors and engineers adequate to build, in a few months, such vessels offensive and defensive as the government might consider most effective, we should also have a sufficient number of men, trained and educated in the art of naval construction. The Naval Academy should be kept up, for it takes longer to educate a soldier or a sailor than it does to build a man-of-war. But having educated a class of young men especially for the naval service, we must find something for them to do; and if our navy is to be razed down from its present proportions, many of these men who have been educated at the public expense must be retired from the service.

Now, as the prejudice against subsidies is so strong and so general, it is at this time a waste of time and labor to attempt to show that this prejudice is unreasonable and unwise. Though you may prove that by the expenditure of \$1,000,000 annually to encourage lines of steamers, we may secure a commerce worth twenty times that sum, and which England would spend ten millions rather than lose, yet it will avail nothing against the popular cry that we are taxing the people for the benefit of monopolists. The same

economists, however, willingly approve of appropriations of many times the amount on a useless navy, to be spent they seem neither to know nor care how. Recognizing these facts as they exist, let us now consider whether it is not possible, while respecting the popular feeling in regard to subsidies, to take advantage of its liberality to the navy, and by rendering the naval service more useful and efficient for war purposes, make it at the same time auxiliary to commerce and of great public benefit. To do this we may be compelled to resort to the cunning of those moralists who, under the guise of fable and romance, insinuate wisdom and virtue, so that at the time their readers imagine they are regaling themselves with light and pleasant fiction, they are made to swallow novel ideas on ethics and worldly policy, that once taken into the system effect marvellous changes, and convert the most narrow skeptics into true believers.

The average appropriation for the Department of the Navy since the war has been about \$22,000,000 annually. Let these appropriations be continued as heretofore, but in commencing a new policy let the Secretary be restricted in the act of appropriation as to the manner of expending at first \$5,000,000, or less than 25 per cent. of the whole amount. The balance could be left to him to throw away or spend on foreign squadrons, or in keeping old vessels in a healthful condition of rottenness, so as to require more money the next year, as has been the custom in times past. This remaining \$5,000,000 he should be authorized, under a general law, to spend in a way calculated to build up a merchant marine of a character to be easily converted into fast and destructive war steamers. No special line of steamers, nor company, should be mentioned or preferred, but the law should declare that whatever individual or association would build a sufficient number of steamers to perform the service between specified American and foreign ports, should be entitled to receive a certain stipulated sum per trip, or per annum. These steamers should be under the control of the Secretary of the Navy and be regarded as a part of the naval force. It should be a condition that these vessels should be powerfully built and of great speed, and so constructed as to be readily converted into war steamers, and in case of war be liable to be taken for military purposes at their actual value. For destructive purposes these vessels would be the most effective we could possibly have, and in case of war with any great maritime power, they would be the most terrible weapons to attack the enemy in his most vulnerable part.

So far as the contingencies of war are to influence our policy, there are only two or three nations to be considered. True, we may have occasion to again send squadrons to China, to Japan, and to Paraguay; but we have never had a war with either of those nations, and never shall have, and no Secretary in making his estimates ever asks for increased amounts by reason of threatened dangers in those countries. No chairman of a naval committee would ever ask for a single dollar extra, because of the belligerent attitude of Russia, Germany, Austria, Italy, Sweden or Brazil. Our naval expenditures are nearly, if not quite, all made with reference to England, France and Spain, all of which have many merchant vessels always on the ocean. To drive their commerce from the seas would be the readiest and most feasible, if not the only way, to compel them to treat for peace; and they would be in more dread of a fleet of such fast passenger and freight steamers, capable of being readily converted into war vessels, than of all our squadrons cruising in distant waters or dilapidated men-of-war rotting at the navy yards.

For coast defence they would be of little value. They would be designed to hurt the enemy, and not to contend with his floating batteries, such as the *Thunderer*, the *Monarch*, and the *Temeraire*. To defend our sea-board towns from such sea-monsters, we must in the present stage of the art of war depend in part on coast fortifications, but mainly on the terrible torpedo. Monitors and iron-clads alike, go down at the first impact of this unseen foe. The late experience of the Turks and Russians serves to show the almost utter impotency of huge iron vessels in attacking towns and cities. They may serve for gladiatorial battles in the open sea, provided the powers they represent are vain enough to waste their strength in such encounters. But for practical war, carried on for any purpose but to deplete each other's treasury, they have had their day, and a very brief one it has been.

But it is not ships nor guns that constitute a navy. It is the trained and hardened officers and men that give life and force to the engines of war. Without intelligence, valor and discipline to direct them, they are unwieldy and useless. But experience has shown that there is another discipline and another service, equally important with that learned on the quarter-deck. Too much of the latter has a tendency to make men like mere machines. The dash and courage of youth, if too long subjected to severe re-

straint and routine, become subdued and are lost. Experience during the civil war showed that those graduates of West Point who had remained continuously in the army were not the most successful commanders in the field. The graduates who most distinguished themselves were those who, having been thoroughly schooled in youth in the art of war, had, after some rough experience in Mexico and on the frontiers, left the military service and learned how practically to deal with men in the various pursuits and contentions of business and labor. This contact with men gave them a great advantage over those martinets of routine who had spent their days in the contracted and contracting monotony of camp life.

And with few exceptions the experience of the navy was very similar. The naval feats showing dash, courage, and genius, were generally the work of men who, having first been taught naval discipline, had learned from rude contact with violent crowds how to enforce their orders and take advantage of circumstances. The resources and genius displayed by Porter and Boggs in the crises of battle, surprised no one who had witnessed the order and discipline they maintained on the merchant steamers they commanded for years, overloaded, as they often were, with California gold-seekers. The feats of the brilliant and lamented Cushing were not those of one whose spirit had been cramped by over-training, but of a genius that could not bear the restraints of a life of naval routine. To all of these, when the realities of a great war came, the rough, hard side of life was already familiar. The strict technical discipline of the navy had qualified them to make the most of their after experience, and they had not become enervated by years of tame, insipid life on board a man-of-war in times of peace.

The duties of a naval officer, from the time he leaves the Naval Academy till he has passed through the various grades that entitle him to the command of a 4th rate, are as monotonous as the piping of grasshoppers in a summer drouth. His first service abroad is with a squadron that is ordered on a long voyage, in which he has absolutely nothing to do except to learn etiquette, attend to the routine calls, and watch the evolutions. All the labor is done by the sailors and marines. The petty officers stand round like hotel servants where there are two waiters to one guest, and though ever so willing, they can, while at sea, find nothing to do. While the squadron is in port they are liable to be sent on shore to

do errands, and may occasionally be left with some authority, while their superiors are on shore. The usual lack of employment, and the absence of all incentive to exertion, lead them to give undue attention to minor and insignificant details; and they become such adepts in forms and ceremonies, that they imagine they are the pinks, the very aristocracy of the earth, and that the chief duty of the government is to make the necessary appropriations, so as to enable them to show themselves in bright buttons and spotless kids in the principal ports of the world, and thus inspire an awe of their country commensurate with the character of such elegant representatives. This conceit has taken such possession of our navy that it has come to be a disease, and is so regarded by all who have much to do with naval officers. A self-consciousness of superiority to any other class, unless it be the army, has grown up among them so complete that they imagine they are the flower of the nation, too choice and delicate for rude contact with ordinary men, and to be maintained as national ornaments, and exhibited like exotics, and coddled like sick children.

For this state of affairs it is the system on which our navy is conducted that is responsible, and not the young men who have the misfortune to get into the Naval Academy. On entering they are presumed to be more promising than the average youths who enter our colleges. But the system and life to which they are subjected take away their individuality. Their only chance of distinction is in strict attention to routine, and too often to the caprice of the commander of the squadron, and their prospects of promotion depend too much on a subserviency not creditable to their manhood. So hampered are they in their range of speculation and effort, that seldom, if ever, does one of them venture to disport himself in the fields of science, of art, or literature. If a young officer have a taste and genius for such diversions, he must not indulge them; for so sublime and exalted is naval routine, it must not be debased or assoiled by such vulgar studies as engage the attention of an Agassiz or a Huxley, a Bierstadt or a Howells. Of the various colleges and seminaries in the land, there is not one which cannot point with pride to what has been achieved in these fields by its alumni. But what have our naval officers done further than is shown by the official records of the Navy Department? Having so much leisure for investigation and such superior opportunities for observation and cultivation of the graces of romance and

poetry, why is it they are never heard of but as Lieutenants, Commanders, Captains, and at last, perhaps, Admirals? What naval officer for the last thirty years has made a scientific discovery? What one has ever written a book that one intellectual man of a thousand has ever heard of?

So little fruit of this character have these favorites produced, the inference is that the intellect of the young men who are taken into the Navy never grows nor expands. Had they engaged in other pursuits we might have expected they would have developed an amount of force, talent and originality, proportional at least to that of college graduates. But it is not so. Their minds have been dwarfed to an ignoble ambition, and their natural powers being put in the straight-jacket of naval conventionalities, they are become mere lay figures, whose usefulness has been sacrificed to a miserable, mistaken system.

Now if instead of this the Navy Department were authorized by Congress to use a part of its appropriations for making a really efficient navy that should offer the younger officers a chance to show the stuff that is in them, to have the opportunity of doing real service and to advance according to their capacity and energy, such a change must certainly be for the better. To accomplish this let us suppose the Secretary of the Navy to be authorized to contract with any company that could give the adequate security to pay it one or two millions per annum, on consideration that it should provide the requisite number of steamers, to be built in the United States, of the kind above described, to run monthly to Buenos Ayres, and semi-monthly to Rio de Janeiro. Let him contract for a similar line from San Francisco to Australia, another from some Atlantic port to the Adriatic, and another to such other foreign port as in the judgment of the Secretary might promise the largest returns for the outlay attending it.

The mere building of these steamers in the United States, would be of more advantage in putting the country in a state of defense than would the money required to establish the various lines, if spent on naval vessels in the ordinary way. To build the vessels we must have ship-yards with competent engineers and skilled labor, and these we can never have till the building of iron ships becomes an extensive industry of the country. With the yards and the workmen prepared and ready to turn out any and every class of steamers, the government could, at the first mutterings of war,

hurry forward such vessels as might be most formidable both for defence and destructiveness. At such a time, it is more important to have the means of building vessels and armaments than to have them already built. The latter may be destroyed, and it is certain that anything we have now or are likely to have till forced into it by actual war, would be ridiculously weak if opposed to the fleets of the great maritime powers. Our main reliance would then be on the energy and ingenuity of our people, who would be at a most woful disadvantage if there were neither ship-yards nor ship-builders in the country. But no sooner would one of these steamers begin her career as a carrying vessel, than she would be a powerful arm of the government and a source of terror to foes. They would all be of such capacity and speed that they could never be forced to battle against odds. They would sweep the enemy's ships from the ocean, and themselves be as good as invulnerable. They would, to all intents and purposes, be a part of our naval force, as only on the conditions imposed, under the law, by the Secretary of the Navy, should they be entitled to receive any aid from the government. The amount contributed from the treasury to the support of these lines of steamers would be but a small part of the cost of building and running them. But this small sum must, in order to be accepted, be sufficient to make the difference between a profit and a loss. With an assured subsidy of a million a year, a company might invest ten millions in a line of steamers that would pay a small profit, while without this aid the company would run in debt. Yet though the advantage to the country might be several millions annually, there would be no inducement for the owners to continue it, as men do not build and run steamers at their own loss for the public benefit. The experience of Mr. Webb with his Australian steamers showed a small loss, but too large for an individual to bear, with only the remote hope of improved business. The Brazilian line of Mr. Garrison, though it had a small subsidy both from the United States and Brazil, did not pay, and when Congress refused to increase it it was withdrawn. But half a million annually for the one and an additional half million for the other would have continued them on the ocean to this day. Had this been done, there is no reason why we should not now have a very large trade with both these countries, all of which now goes to England because of her more liberal commercial policy. This would have given us a market for many of our manufactures, and

would doubtless have averted much of the business disaster and general distress that have come upon us during the last four years.

The lines of steamers thus aided by government would not only necessitate the establishment of shipyards and docks, and the employment of experienced builders, but they would render a further and more direct service in giving useful occupation to naval officers. In consideration of the assistance rendered by the government, the Secretary of the Navy should officer the vessels, and, while at sea, the navigation and handling of each ship should be under the command of an officer of high rank in the Navy, the control to pass into the hands of an agent or supercargo of the company the moment the pilot should come aboard. In that way there would be no conflict of authority, and the young officers, who under the present system are supernumeraries on shipboard, would learn the science and practice of navigation, the handling of men, the duties of the sailor, and the habit of command. A few years of this kind of work would qualify any man, having an aptitude for the service, to command a ship, or even a squadron, in time of battle; and a year of such duties would give him more self-confidence and self-resource in the crisis of action than would a service five times as long of the namby-pamby ceremonies of a man-of-war cruising about in time of peace. Thus, with no additional cost to the government, but by the diversion of a small part of the annual appropriation to a different channel, we should have shipyards and docks for building such vessels as might be required by the exigencies of war and, which is more important than it is to have fleets and armaments, we should have an infinitely better class of officers to command them in time of need.

And for all this no subsidy is asked. Not a dollar of extra appropriation is required. It is only asked that the old routine of useless expenditures should be broken up, and that a small part of the money annually appropriated for the Navy should be devoted to making it more effective, more competent in men, better prepared for the contingencies both of peace and war.

As results so important and beneficial must inevitably follow from such change of system, no opposition to it is to be looked for except from the Navy itself. The younger officers whose duties have been confined to the routine of parade and etiquette might take it as a hardship that they should be called to do duty like the officers of a merchant vessel, to superintend the loading and discharge of



cargoes, and do the other work such as falls to the lot of a first or second mate. Such of them as have relations in Congress will very likely call on them to oppose any legislation that shall expose them to such desecration of their persons and their clothes. Yet even to them the rougher life will be of the greatest advantage, and whether it is or not is a matter of small importance when considering the magnitude of the results that must follow from so marked a change in the conduct of the Navy.

CHARLES A. WASHBURN.

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## THE OCEAN: ITS ORIGIN AND DESTINY. II.

### THE DESTINY OF THE OCEAN.

THE empire of the past and the realm of the future, alike, belong to the dominion of man. An intimate acquaintance with all that has happened in the one, as well as a proximate knowledge of that which will transpire in the other, belong to the province of the attainable. Since our substantial intellectual progress consists mainly, if not entirely, in extending our acquaintance with the past and cultivating a familiarity with the future, we may venture a few thoughts respecting the ultimate destiny of the ocean without incurring the imputation of unwarrantable assumption.

Instinct and passion may possibly be innate in animals, but knowledge and conscience are not intuitive in man. They are creatures of nurture. Man knows naught save that which he has acquired through experience or induction. The validity of all knowledge acquired by reasoning from a particular result in a given case to that which will possibly or inevitably follow in another similar case, depends, first, upon the correctness of the reasoning and the corresponding legitimacy of the conclusion attained, and second, upon the uniformity of the operation of the laws of nature. The accumulated experiences of mankind in all ages and all nations of the world, attest the uniformity of the operations of the laws of nature; and it is the universally received opinion of all those who are competent to the formation of an enlightened opinion upon the subject—the *belief* and *dogmatic assertion* of all others is not worthy to be noticed, much less to be honored with

a refutation—that law—inexorable, universal, undeviating law—reigns supreme throughout the universe of matter and of mind.

It was not always thus. During those days of darkness and ignorance and superstition, when all meteoric changes were attributed to the special intervention of spirits; when the appearance of a comet was thought to betoken imminent peril; the fall of bolides or ærolites that an enraged God had opened the vengeful artillery of heaven upon sin-sunk mortals,—mankind had not the remotest conception of a law of nature as those laws are known to us. Our remote mythology-fabricating ancestors stoutly maintained that each of the celestial orbs was a worthy who had once dwelt upon the earth; who had been assigned a seat in the galaxy of the firmament as a reward for superior bravery, patriotism or wisdom, that they might still continue to exercise a paternal watchfulness over the nation; and to whom they persisted in paying divine honors. This superstition was gradually replaced by the belief that each planet is guided in its habitual perturbations by a presiding spirit (also a relic of earth), who has taken up his abode upon it. So great is the influence of prepossessions, religious superstitions and early impressions, that so eminent a scholar as Kepler clung with rigid tenacity through life to this doctrine of “guiding spirits.” When the establishment of the law of gravitation divested the heavenly orbs of their veil of mystery, this doctrine was exchanged for the dogmatic myth of miraculous creation,—which still curses the world.

The absolute reign of law throughout the realm of matter and mind is habitually attested and further demonstrated by every experience of man and every revelation of science, to the demolition of theologic myths and theosophic moonshine.

The constant evolution of the heterogeneous from the homogeneous, has led to the at-present firmly-established belief that the prevailing complex order of the universe was developed from the absolute homogeneity of primitive chaos, by successive integrations and persistent individuation.

Years ere the development hypothesis sprang from the fecundated minds of “advanced thinkers,” like the fabulous Minerva from the cleft head of Jupiter, “the weeping philosopher” of Ephesus, Heracleitus the “self-taught,” amid the solitude of his silent study in his hermit home on the mountain, vaguely conceived that ceaseless change is the universal law of matter and mind. In modern

times, Herbert Spencer, coadjuted by other able evolutionists, has demonstrated beyond the possibility of a doubt to all rational minds, that evolution and dissolution—progression and retrogression—segregation and diffusion—life and death—growth and decay, are the inexorable laws to whose iron will the whole universe yields willing obedience.

Whether we accept the speculations of the evolutionists, according to whom the present complex order of nature is the legitimate and inevitable outgrowth of persistent individuation—of gradual development from a less complicated order; or receive as correct the teachings of the assimilation theorists that the present order, and each past order, of the universe resulted from counter-movement, and nothing else,—whichever theory we accept, yet this vaguely-apprehended principle of the hermit of the mountain, and these antithetic laws of the bachelor philosopher and his followers, are equally true in principle and universal in application.

Read in the light of this principle and these laws, what is the ultimate destiny of the ocean?

In endeavoring to prognosticate the destiny of the ocean, we cannot act more judiciously than to draw our predictions from the portent of nature. No celestial body, of telluric contemplation, is more adapted to our purpose than the moon.

When Lydia Van de Bosch witnessed the shaky hands and hobbling gait of Madame Bernstein, she exclaimed: "Well! I hope we sha'n't be like her when we're old, anyhow." It seems to be the universal desire of man to escape the miseries of a decrepit and helpless old age. Many do, by dying young. But it is not the same with worlds as it is with men. The laws which pervade inter-stellar space, and which guide the planets in their progress to the rapidly-approaching catastrophe of a clash of worlds and the wreck of the universe, are universal and inevitable. The probabilities are that there is a clear-cut and well-defined path of progress which each planet must pursue in its journey from youth and vigor to old age and decrepitude. The planet we have selected as a representative planet, has already run the greater part of its destined career, and it is now in an advanced stage of senility and decrepitude, with the vigor of youth abated; the fire of activity extinguished; the period of demolition rapidly approaching. If reported miracles—which are looked upon by the astute and philosophical minds of the time, which are free alike from bias or fear

or superstition, as childish and irrational, unfounded in nature or reason or fact—be excepted, there is nowhere throughout the whole realm of nature a single instance of a willful and wanton interruption in the unity and harmony and universality of the operation of the laws of nature; hence we will be abundantly justified in judging of the probable future career and ultimate destiny of planets which are yet youthful and sprightly, vigorous and healthy, from the footprints left in the sands of the universe by that planet which has almost completed its labors in the race of the planets to the goal of the universe.

The moon is a companion planet, accompanying the earth in its journeyings round the sun. It had an origin in common with the earth, and possessed during some stage of its progress to complete refrigeration—for it is now merely the *cadaver* of a planet, the wreck of a worn-out world, and destined, Stanislas Munier predicts, to be precipitated to the earth in showers of stones—the present prevailing characteristics of the earth. In other words, its surface was once swept by a humid atmosphere, and bathed with a tepid ocean. Each of these was subject to the mundane-inter-stellar laws of thermal equilibrium. Both have been engulfed in the progress to the present state of complete refrigeration. But let us not anticipate: this will be fully developed in the sequel.

It is now universally conceded by all those who have taken the trouble to familiarize themselves with the subject, that the moon once possessed both an ocean and an atmosphere. The density of this atmosphere must have been less than that of the terrestrial atmosphere; and the lunar oceans doubtless were far inferior in proportion to the amount of matter in the moon's bulk to those upon which we gaze,—yet they had a veritable existence nevertheless. To account for the disappearance of these oceans and this atmosphere, several ingenious theories have been brought forward at various times. Since, as our own inimitable Emerson puts it, "every earnest glance we give to the realities around us, with intent to learn, proceeds from a holy impulse, and is really a song of praise," all efforts to explain the mysteries of the past in nature, account for her condition in the present, and predict the events or catastrophes of the future, instead of being useless and sacrilegious, are laudable and worthy, even though they should ultimately prove futile and nugatory. Of these various theories the following claim our attention:

I. It has been suggested by William Whiston, the persecuted theologico-philosopher, that the lunar oceans and atmosphere have been swept away by a comet which, in its wanderings through the void of interstellar space, approached to within dangerous proximity the orbit of that luminary.

This eminent divine seems to have been infatuated with an idea of preternatural powers possessed by comets, and to have put as great faith in them as the ignorant and deluded do in miracles and prayers. In his "New Theory of the Earth," an ingenious and clever work, which won for him an enviable reputation, Whiston, in an attempt to reconcile Mosaic cosmology with fact, and bring the Noachean Deluge within the scope of credibility, contended that a comet crossed the path of the earth a short distance in front of the planet, the first day of the Deluge, and by the force of its attraction and the external tidal flows which it excited, caused the water beneath the earth's crust to break forth and spread over the surface, thus breaking up "the foundations of the great deep"; and also that the vapors left upon the face of the earth by the tail of said passing comet, became rarefied by solar heat, ascended into the atmosphere, and returned to the earth in the violent "forty days' rain."

With the recent progress in scientific knowledge, these cometary hypotheses have become antiquated and untenable. From our present knowledge of the nature and constitution, power and potentiality of comets, we know that these theories run counter to every ascertained law of nature, and must perforce be abandoned.

II. It has been suggested, by whom we do not know, that the moon has grown so intensely cold that all life—animal, vegetable, and that life our imagination pictures where great natural changes are in progress—has become extinct; the atmosphere condensed and precipitated; the ocean and smaller bodies of water congealed to their utmost depths.

This theory, though more plausible at first sight than the preceding, yet, in reality, is scarcely more tenable. The numerous facts evolved by the laborious but patiently-performed experiments of Lord Rosse, completely confute this theory.

It is quite possible, and, indeed, very probable, that the superlative gelidity of the long lunar night would, if continued without intermission for a space of time equal in length of duration to said night, be amply sufficient to solidify the once-existing oceans, and

congeal the various gases of the once-existing atmosphere. But it is also at least equally probable, if not absolutely certain, that the intense heat of the long lunar day, precipitated without interruption for a space of time equal to fourteen of our terrestrial days, would liquefy the frozen ocean and vaporize the congealed atmosphere. Telescopic observations reveal the fact of the stability of the moon's phenomena. If there were actually a vaporization of a congealed atmosphere and a liquefaction of frozen oceans, there would be a perceptible change in the observable phenomena of the moon, if not a palpable manifestation of the actual mutation. Since there is no observable disturbance occurs in the lunar contour which would indicate the presence of either an atmosphere or of oceans, we may very rationally conclude that there is neither lunar atmosphere nor oceans,—at least none on that portion of the surface of the sphere which is visible to us.

III. As an explanation for the disappearance of the lunar atmosphere and oceans, Hansen has suggested that they have withdrawn to the opposite and unseen portion of the moon's surface.

This theory, though no less startling and incredible than those already enumerated, yet has obtained signal credence with astronomers and scientists of repute, and for this reason, if for none other, is deserving of our careful and attentive consideration.

Now this theory is not merely a fanciful conjecture fomented in a heated imagination and based upon our utter destitution either of direct knowledge or of symbolical conception—upon our profound ignorance—of the opposite and unseen portion of the moon's surface, or the tacitly-reiterated principle *omne ignotum pro magifico*, and adduced to evade some inexplicable mystery, but founded upon facts derived from various observations made by astronomers of experience and scientists of repute, and supported by phenomenal facts. We do not contend that the theory is positively and indubitably *true*, but that it is not without *probable*—slight though it be—foundation.

This theory was first suggested by a profound investigation of Hansen, an ingenious German mathematician. His investigations led him to conclude that if the moon's centre of gravity is not at the middle point of the earth-directed diameter, that fact would be evinced by her movements. After extensive investigations and long and patient observations, Hansen finally obtained what he considered to be sufficient evidence to warrant the conclusion that

the moon's centre of gravity is more than thirty miles farther away than the middle point of the earth-directed disc.

Now if the shape of the moon is that of a globe or sphere, the side towards which the centre of gravity is moved must be considerably heavier than the opposite one. May not this inequality of weight have been produced by the withdrawal of the lunar atmosphere and oceans to the weighty side? In the event of such a passage there would be a coercion of said oceans and atmosphere to twenty-one fiftieths of the entire surface of the sphere, or else some of the attendant phenomena of air and water would be manifested to our telescopic vision; for in her librations the moon tilts first one disc and then another towards our earth with such regular and successive alternation that in reality there remains but twenty-one fiftieths of the sphere which is altogether and at all times unseen.

Sir Isaac Newton long since demonstrated that, theoretically, at least, the moon is ellipsoidal in shape. Recently Gussev, by examining stereoscopic views of the moon—produced by combining photographs of this satellite which were taken by De la Rue, with his powerful reflector, when she was in opposite stages of her librations—and carefully noting the displacement of craters and other discernible characteristic features, has succeeded in obtaining a method for determining the lunar contour. According to Gussev's method of ascertainment, the greater portion of the earth-directed disc must be regarded as a mountain excrescence which attains, at its greatest altitude, an elevation of nearly seventy miles above the mean level.

When the moon acquired a distinct individuality, and was sent on its short planetary career, amid a wilderness of other worlds, its shape was necessarily spherical. It is presumable that while this orb was yet young and susceptible—ere yet its mobile surface had hardened to rigidity—the moving force of the earth's attraction, acting upon its surface with eighty-one times greater power than the corresponding force exerted by the moon on the earth, gradually elongated the moon towards herself, and thus produced its present figure.

This theory of withdrawal, however, is no longer entertained by astronomers or accredited by scientists, because it has been shown that this supposed peculiarity in the moon's shape, which suggested the theory, first, has no existence in fact, and second, if it

did exist, it would be impotent to produce the supposed effect; for if this were the true contour of the moon, if there existed ocean or atmosphere anywhere on the planet it would be, as Forbes suggests, around the base of this prodigious protuberance. Under this circumstance the moon's visible disc would be a girdle of water. Since there are no manifest signs of air or water on this portion of the moon's surface, we are warranted in concluding that she is destitute of both; hence we are justified in rejecting as untenable that theory which contends for their withdrawal to its opposite and unseen side.

IV. Dr. Frankland has suggested that the lunar atmosphere and oceans have withdrawn—not to the opposite and unseen side of the moon, but—to the interior.

Although Dr. Frankland is the putative father of this theory, its true originator was Seemann, a German geologist of considerable native talent and local notoriety. It was espoused and advocated independently and simultaneously by Dr. Frankland in England, Stanislas Munier in France, and Sterry Hunt in our own country.

This theory of Seemann's, variously modified, is obtaining signal credence in the scientific world, and is evidently destined to supersede, for a season at least, all others.

If we repose with implicit confidence in the nebular hypothesis, and accept as legitimate the evidence and the reasons and conclusions of Meyer, whatever other opinions we may entertain respecting the past condition of the moon and the other members of the solar system, we can not reasonably withhold our assent from that theory which represents that all the members of the material universe were at one time diffused throughout the extent of space in a gasiform condition. At this period the vaporous nuclei which developed respectively into the earth and the moon, were confined within the same gaseous envelope. This pellicle envelope gradually contracted, the chains of immurement fell from the earth and the moon, and thenceforward they exist as distinct spheres, subject to the same laws of thermal equilibrium. In compliance with the requirements of these laws the moon, being much smaller in bulk than the earth, consequently cooled much more rapidly. It is presumable that while the earth's surface was still aglow with primal heat, the moon frowned upon her with a corrugated and gelid brow.

From analogy we know that this cooling of the moon must have



been attended by contractions, which, it is said, can scarcely be conceived as occurring without the development of a cavernous structure on the interior. A cavernous structure thus produced would necessarily communicate, by means of fissures, with the surface. In this manner there might be produced a receptacle for the lunar atmosphere and oceans, from the depths of which even the long lunar day of the warm full moon would be unable to dislodge more than mere traces of their vapors.

Assuming that the solid mass of the moon would contract, on cooling, at the same rate as mundane granite, its refrigeration through one hundred and eighty degrees of Fahrenheit's thermometer—the difference between the boiling point and the freezing point—would create cavernous space equal to nearly fourteen and one-half millions of cubic miles; which would be amply sufficient to engulf the whole of the lunar atmosphere and oceans, even though they bore a far greater proportion to the mass of the moon than our atmosphere and oceans to the bulk of the earth.

It has been abundantly shown by speculative demonstration, that the atmosphere and oceans of the moon never did, and, in fact, from the very constitution of nature never could, bear the same relation to the bulk of matter in that planet that the oceans and the atmosphere of our world bear to its bulk. The mass of the moon is but about one eighty-first part as large as that of the earth, and the extent of lunar surface, although considerably larger proportionately, yet is but about one-thirteenth as great as that of the earth; so that the extent of the moon's atmosphere, in proportion to the mass of that planet, could not possibly have been more than about one-sixth of that of our atmosphere to the earth's mass. Hence it necessarily follows that, assuming the material of the moon's composition to be originally proportioned as to quantity very similar to those of the earth, when the moon was passing through the stage of planetary development to which the earth has at present attained, the quantity of air above each square mile of lunar surface could not have been more than one-sixth part of the quantity above each square mile of the earth's surface; and when we take into consideration the fact that lunar gravity at that time possessed not more than one-sixth part of the present energy of terrestrial gravity, we know that the quantity of air above a square mile of the moon's surface would be drawn downwards with but one-sixth part of the force

exercised over the atmosphere of terrestrial surface of the same extent, and consequently would possess but one-sixth the density; thus giving the true mass-proportion of the moon's atmosphere to be but one thirty-sixth that of the earth.

The same reasoning applies with equal force to the lunar oceans, except as to the compressibility; and it may thus be shown that while the proportion of our oceans to the whole extent of the earth's surface is about seventy-two one-hundredths, that of the lunar oceans ranges somewhere between twenty-four and thirty-six one-hundredths.

This theory of the development of cavernous structure on the moon's interior by means of complete refrigeration, like all other immature speculative hypotheses, has its difficulties and inconsistencies. This theory is a legitimate offspring of the Brewsterian theory that all the outer planets owed their inferior mean density to internal cavities or hollows. The absolute impossibility of the existence of such a state of affairs as that surmised by Brewster and his disciples, has been demonstrated mathematically. We know that in all planets the downward pressure of the super-incumbent layers increases as we approach the centre of the sphere. The rudest calculation will show that in the smallest spheres, even in the satellites, there cannot exist a cavernous structure; for since the experiments of Tresca we know that the most solid materials with which we are acquainted—such as steel, adamant, platinum—become plastic and behave like liquids under far less pressure than that brought to bear by a planet upon all its interior materials, except those which lie near the surface. We have every reason to believe that at a distance of ten or twelve miles beneath the lunar surface no walls of steel or adamant, however massive, would be able to withstand the pressure of the surrounding matter; and there is not a doubt but that we would be perfectly safe in affirming that at the depth of but one hundred miles—this is but about one-twentieth of the moon's diameter—the existence of a cavernous structure such as the theory under review supposes, is a thing impossible.

Though cavernous structures, such as the modified theory of Seemann contemplates, could not be formed throughout the mass of the moon, yet it is evident that in the progress of complete refrigeration, ample room would be found for the reception of the lunar atmosphere and oceans. The greatest possible pressure to which

the most compact rocks could be subjected, as has been clearly demonstrated by the experiments of the Florentine academicians, would not close up the capillary tubes which interpenetrate said rock; but on the other hand, the enormous pressure exerted upon the water at great depths would force it into spaces even minuter than capillary cavities.

From this it follows that as the moon cooled down, necessarily more and more internal space was developed for the reception of the seas and atmosphere; and the probability is that long ere the planet, in its age and senility, had become chilled to the very core, a receptacle as ample as that conceived by Dr. Frankland and his adherents, would be formed.

Without laying any claim to prescience, special delegation, or superhuman wisdom and foresight, but by simply accepting and interpreting the previsioned history—evolved by lunar facts—of the earth and the whole material universe, we are able to record, with some degree of certainty, the ultimate destiny of the ocean. In the progress of complete refrigeration, the waters which now percolate towards the earth's centre, and which now exist, in consequence of the intensity of the earth's internal heat, alternately in the form of water and vapor—a circulation being kept up in this alternation of form occasioned by the heat constantly repelling the approaching water—will follow the receding of the intensity of the earth's internal heat, and, as Winchell remarks, will circulate deeper and deeper. "When the thickness of the terrestrial shell which must be saturated with water has doubled, the increased demand must lower the waters of the ocean; and long before refrigeration has reached the centre, the thirsty rocks will have swallowed the seas and all our surface waters. The drained, and shrunken, and shivered zone lying near the surface will suck in the atmosphere, and this will disappear in the pores and caverns of a worn-out world;" and the earth, swung in the midst of space, the *cadaver* of a planet—its lights extinguished—its energy wasted—its glory departed—will continue its rapidly-circling and precipitous descent to the sun—the center from which it sprang, and to which it is destined ultimately to return.

J. MANFORD KERR.

MODERN SPIRITISM.<sup>1</sup>

THE word spiritism has been used by the Westminster Review for a kind of belief commonly called Spiritualism—a term which should be restricted to its accepted sense. It is claimed for this delusion, as well as for many curative processes, that they are founded on observation; but the great mass of these observations are due to untrained interpreters of phenomena, or to the credulous and lovers of the marvelous. John Wesley was an eminent philanthropist. He had a university education, and wishing to improve the human race in science as well as in morals, he published his *Survey of the Wisdom of God in the Creation* (or *Natural Philosophy*, 1st Ed., 1763; 3d Ed., 5 vols., 12mo, 1777), and his *Primitive Physic* (25th Ed., 1801). He took care to get medical results, and when the curative modes were found efficient, he mentions the fact. Of his fourteen remedies for ague, the sixth is frankincense and nutmeg, to be placed on the stomach in a little bag—"I have never known it to fail." The ninth remedy is pills of cobwebs, and "seldom fails." Of fifteen remedies for consumption, three are inhalatives. In the *Natural Philosophy*, we are told that barnacles may be seen opening their lids, and "peeping about them. They then thrust out their long neck, look around them for some time," etc. In certain barnacles there is "a perfect fowl: the little bill is like that of a goose; the eyes marked; the head, neck, breast, wings, tail and feet formed. The feathers are perfectly shaped. .... Now as Bats are a kind of medium between beasts and birds, are not Barnacles a kind of medium between birds and fishes?"

In the last century, swallows were said to hibernate under water, emerging in the spring, and many examples are cited from Olaus Magnus (1504) down, to cases in England, where, in cleaning ponds, they were found in the mud, and had revived.

Swallows have been found in vast quantities, clung together in a lump, like swarms of bees, but utterly cold and senseless, even in ponds that have been cleaned out, hanging under the water. *Wesley*, 1, 281, ed. of 1777.

Swallows certainly sleep all the winter. A number of them conglobate together, by flying round and round, and then all in a heap throw themselves under the water, and lye in the bed of a river. *Dr. Johnson*, in *Boswell*.

<sup>1</sup> Startling Facts in Modern Spiritualism. By N. B. Wolfe, M. D., Cincinnati, 1874.

The third opinion we shall state and support in the words of [the naturalist] Mr. Kalm. Natural history (says he), as all other histories, depends not always upon the intrinsic degree of probability, but upon facts founded on the testimony of people of noted veracity. ... Dr. Wallerius, the celebrated Swedish chemist, informs us, That he has seen, more than once, swallows assembling on a reed, till they were all immersed ... this being preceded by a dirge of a quarter of an hour's length ... he has seen a swallow caught during winter out of a lake with a net ... this bird was brought into a warm room, revived, fluttered about, and soon after died.

Mr. Klein [the naturalist] applied to many farmers-general of the king of Prussia's domains, who had great lakes in their districts, the fishery in them being part of the revenue. ... All the people that were questioned, made affidavits upon oath before the magistrates. First, the mother of the countess Lehendorf said that she had seen a bundle of swallows brought from the Frische Haff ... which ... revived and fluttered about. Secondly, Count Schileben ... saw several swallows caught in the net, one of which he took up in his hand, brought it into a warm room, where it lay about an hour, when it began to stir, and half an hour after, it flew about in the room. Thirdly, Farmer-general (Amtman) Witkouski made affidavit, that ... in the year 1741 he got two swallows from another part of the pond (they being all caught in his presence) ... after an hour's space they ... fluttered about, and died in three hours after. Fourthly, Amtman Bonke ... had seen nine swallows brought up in the net from under the ice, ... they gradually revived; but a few hours after they all died. ... Seventhly, [in 1735] I saw several swallows brought in winter by the fishermen from the river Vistula ... two of them ... revived and flew about. ... In January [1754], the lake of Lybshaw ... being covered with ice, I ordered the fishermen to fish therein, and in my presence several swallows were taken, ... one I took up to myself, brought it home, which was five miles from thence, and it revived, but died about an hour after its reviving.

These are facts attested by the people of the highest quality, by some in public offices, and by others who, though of a low rank, however, made these affidavits upon oath. It is impossible to suppose. ... It is therefore ... incontestably true that swallows retire ... into the water, ... till the return of warmth revives them again in the spring. *Encyc. Brit.*, 1797, Art. SWALLOW.

... We had, at a Meeting of the Royal-Society, Feb. 12, 1713, a farther Confirmation of *Swallows* retiring under Water in Winter, from Dr. Colas, ... who speaking of their Way of Fishing in the Northern Parts, by breaking Holes, and drawing their Nets under the Ice, saith, That he saw sixteen Swallows so drawn out of the Lake of *Samrodt*, and about Thirty out of the King's great Pond in *Rosneilen*; and that at *Schlebitten*, near an House of the Earl of *Dohna*, he saw two Swallows just come out of the Waters, that could scarce

stand, being very wet and weak,... *W. Derham*, F. R. S., Canon of Windsor, *Physico-Theology*, 10th ed., 1730, p. 356.

Equally credulous observers have seen salamanders running about in the fire,<sup>2</sup> and living toads in solid rocks have been often announced. When the 17-year cicâda last appeared, a child is said to have seized one, which stung it and caused its death; and a boy is asserted to have succumbed who put several in his hat—the insect being harmless, although believed to be poisonous. The year previous to their appearance, people digging wells are said to have met them twenty or thirty feet from the surface on their way up, although they do not penetrate farther than the roots from which they draw their nourishment. Formerly mermaids were common enough, and one caught on the coast of Holland was taught to spin—as the books tell us; and in the year 1205 a fish like a man was taken off the coast of Suffolk, and kept alive for six months.

Capt. *Whitbourn*...affirms that at *St. John's Harbour A. D. 1610*, as he was standing by the Water-side...he spied a Creature making very swiftly towards him, which by the Eyes, Nose, Chin, Ears, Neck, Forehead; and, in a word, by all those upper Parts which were very well proportion'd, appear'd to be a woman. The Hair indeed was to be excepted;...[it turned away] which gave him the opportunity of viewing the shoulders and back Parts of it, down to the Waste, which he declares were as square, smooth and white, as the like Parts in Mankind...[She came afterwards] to some Boats, in the Harbour...near the shore, the Men got all out and run for their lives...Upon the whole, we can't see why this Relation shou'd not as effectually perswade all People that there are such Creatures, as the Voyage it self shou'd that there is such a place as *Newfoundland*; And a Man can have no Interest in forming a Story of a Mermaid, which is not at all adapted to serve any Design in Church or State. *Harris's Collection of Voyages*, 1705, 1, 862.

Seals, porpoises, and various fishes are mentioned also.

The efficacy of the divining rod in the discovery of water and ores, was considered to have been fully proved in the last century;<sup>3</sup> and when lightning was supposed to arise from sulphurous exhalations, a sulphury scent was said to be present when a near object was struck. Showers of sulphur in Pennsylvania have been announced, a person collected the material from the surface of rain puddles, dried and tested it by burning and the resulting smell; but the prejudgement of the experimenter probably turned the

<sup>2</sup> *Memoirs of Benvenuto Cellini*, ch. 1, p. 7, Bohn's edition. Penny Cyc. 20, 337.

<sup>3</sup> See *Pryce, Mineralogia Cornubiensis*, 1778, pp. 116-121; and the *Encyc. Brit.*,

pollen of pine trees into sulphur; as other experimenters pretend to have turned horse-hairs into worms, a transformation believed in by men educated in the universities of the old style.<sup>4</sup> The exaggerated poison of the upas tree maintains its place in oratory, and many drugs are said to produce curative effects in doses of the billionth of a grain. This, however, is doubted by some who use larger doses, oblivious of the fact that the system acquired its reputation under the infinitesimal practice.

Certain localities have springs to which health-giving qualities are assigned, and a warm spring in the island of Mevis is thus mentioned in Harris's *Voyages* (1, 716):

Mr. *Harcourt*...brought a very bad and dangerous Cough along with him out of *Guiana*, of which he was very speedily cur'd by bathing and drinking the Water; farther, one of his Servants had his Hand so burnt with Gunpowder that he was like to lose the use of his Fingers, the Sinews were shrunk and the Hand contracted after a very odd manner, but by bathing two or three times all was much alter'd for the better, his Hand was perfectly heal'd, and tho' not reduc'd so entirely as was desir'd, yet 'twas in a fair way so to be. Several others of his Company were also cured of ugly swellings in their Legs, and that within the compass of a day.—1613-26.

It is asserted that at Glastonbury, in England, a sufferer from an asthma of thirty years duration, was told in a dream to drink of certain waters which would cure him. This was done, his cure was attested upon oath, and the waters were soon visited by ten thousand people.

Formerly scrofulous children were taken to be cured by the touch of the King of England, as in the case of Dr. Samuel Johnson, who was not relieved. At an earlier date, however, (August 28, 1687,) the bishop of Chester (Dr. Cartright) testifies that he was present when James II. "healed" 350 persons.<sup>5</sup> To aid the historian Carte, the city of London paid him an annual sum, which was discontinued in 1748 for assigning this healing power to the Stuart family, probably because such a concession might favor their claim to the throne.<sup>6</sup>

Laurence Echard, another clerical historian, mentions a confer-

<sup>4</sup>I think a case is given in Coleridge's *Table Talk*.

<sup>5</sup>*Pettigrew*, *Superstitions connected with Medicine and Surgery*, 1844, p. 151. "Along the Maine coast thousands of persons bathed on the 28th of June, because they believed an old delusion that ocean water will cure chronic diseases on that day." *Newspapers*, 1874.

<sup>6</sup>*Pettigrew*, p. 153; *Allibone's Dict.* 1, 346.

ence between Oliver Cromwell and the devil on the morning of the battle of Worcester—the credibility of the story being left to the “faith and judgment” of the reader. (Allibone, 1, 540.)

As Mr. Wesley shows that he was incompetent to judge of natural phenomena, he may be considered equally untrustworthy when stories of the supernatural are to be investigated, especially when they are regarded from the point of view that “if but one account of the intercourse of men with separate spirits be admitted,” materialism falls to the ground. This is said in his *Journal* for May 25, 1768, where he remarks as follows:

“ I took down from one who had feared God from her infancy, one of the strangest accounts I ever read. And yet I can find no pretence to disbelieve it. The well-known character of the person excludes all suspicion of fraud: and the nature of the circumstances themselves, excludes the possibility of a delusion. It is true, there are several of them, which I do not comprehend. ... The substance of what she said was as follows: “From my childhood, when any of our neighbors died, whether men, women, or children, I used to see them, either just when they died, or a little before ... many times I did not know they were dead. I saw many of them by day, many by night, ... all little children, and many grown persons, had a bright, glorious light, round them. But many had a gloomy, dismal light, and a dusky cloud over them.”

Several pages of strange details are given. Another woman (*Journal*, Oct. 1, 1763,) is visited apparently by her uncle, but not liking his discourse, she looked more carefully and saw that “one of his feet was just like that of an ox.”

Dr. Hare, a distinguished chemist, when his mind was failing toward the end of his life, was duped by certain spiritists who never convinced the scientific friends he sometimes took with him, and when he produced one of his tried mediums at a meeting of the American Scientific Association at Montreal in 1857, an evening *séance* was given to some of the members, who thought the experiments worthless. Professor Gillespie was present, and the medium heard his name, but when the spirits spelled it with the aid of Dr. Hare's ingenious machine, they mistook the initial letter for a K, as at a later period Dr. Wolfe's spirits wrote “Plymton” for “Plimpton,” and “Michael” for “Michel.” On another occasion I was present at a *séance* of Professor Walter R. Johnson, chemist and geologist, when he held the hand of a seemingly stupefied servant girl, who seemed to taste substances in *his* mouth, and for



which he asked in a whisper loud enough for the bystanders to hear. Unlike Dr. Hare, Prof. Johnson was in good health.

The chief fallacy of the spiritists (or at least of their dupes) is that which asserts that phenomena are supernatural when they cannot be accounted for by natural laws—a dictum which has assigned life to the magnetic needle, referred the electric flash to the hand of Jupiter, and classed atrophy among diseases due to witchcraft. It is probable that the number of ghosts, fairies, witches, powwows, and quack doctors, in a country, is in proportion to the number of believers in them; for like spirits at a western *séance*, they seem averse to appearing where they are not appreciated. Thus Dr. Wolfe (p. 323-4) quotes Mrs. Hollis as saying: "If you could get your representative men to come together in one circle, there would be so much personal antagonism, I fear, the spirits could not manifest. Harmony is an essential condition."

In Lippincott's Magazine (April, 1874, p. 468.) there is an account of a visit to Mrs. Hollis, a seeress of Louisville, who showed people the spirits of their departed friends at a hole in the door of a wardrobe or cabinet in which she was enclosed, the room having but little light. On the occasion described, these supposed spirits were observed to be engravings or pictures, one of which was recognized as a print named the Maid of Saragossa. When she exhibited at Dr. Wolfe's, President Buchanan appeared "like the common lithograph head" (p. 361), and, according to Col. Piatt's report, his bow, as well as that of Stephen A. Douglas, "was precisely that which would come from a crayon sketch on a pasteboard if the upper end were dipped forward suddenly." (p. 362) When Dr. N. B. Wolfe undertook to look into spiritism, he had Mrs. Hollis as an inmate of his house in Cincinnati for an aggregate of thirty weeks, during two years (p. 193), and his facts are nearly all hers, given before a few people, not one of whom, as far as we are told, having a reputation as an engineer, physicist, microscopist, surgeon, or other person accustomed to investigate phenomena. "If the manifestations are tricks, why not step forward and expose them." (p. 538.) "Science, true science, is invited to explain the phenomena we have recorded." (p. 540.) But if five strangers (p. 498) ask to be admitted, Mrs. Hollis consents, but the spirit of the wine-making Nolan demands their exclusion because he detects alcohol about them. If Tyndall had applied as a stranger, we may guess the result; if he had applied without withholding

his name, his "repulsive magnetism" (p. 351), his want of "homogeneousness" (p. 321), or his "undeveloped condition" (p. 426), would probably have prevented the manifestations; and should he desire light, he might be told that "Darkness affords no facilities for concealment." (p. 282.)

"Men like Faraday, and Agassiz, and Carpenter, may sneer at it; but what of that? Spiritualists sneer at them.... The incivility of these learned boobies, and the ignorance they display on this subject, make a humiliating exhibit of the poverty of the stuff of which conventional great men are made up. These fellows may sneer ... but what then? ... We honor ourselves when we enlist in the service of Truth (p. 540), ... as lovely as Truth (p. 542), ... for truth seeks neither place or applause,... but only asks a hearing. (p. 321.)"

This love of truth appears in his Common-sense Book on consumption, 1869, where he styles himself "medical specialist," and claims a circulation of 500,000:

"Truth wears no mask, bows at no human shrine, seeks neither place nor applause—she only asks a hearing." (p. 5.)

When Mrs. Hollis holds a slate under a table (p. 140), and brings it forth with writing on it, there is no evidence that there were not several slates, or that the writing was not already upon the unexposed side of the slate—or that the telegraphic and other writings (253, 270) were written under the table whence they were thrown; and when the slate is put on a shelf under the aperture of the cabinet to be written upon by a visible spirit hand, it is the doctor himself who places and withdraws it. When Marshal Ney makes a drawing in the dark (301), none but the doctor and the medium are present; it is he who places the dish of flour (348, 531) to receive the impression of Ney's hand, or perhaps of a plaster cast; and when a music-box weighing 23 lbs., 8 oz., came to rest, after playing and floating through the air in a "pitch-dark" room, "it was found half under my chair and between my feet." (p. 290.)

The "most marvelous manifestation in the dark circle... was attended only by the several members of my family." Spirit voices sung, the seeress became alarmed, but the doctor quieted her fears, with assurances that..."no harm would inure to her"—showing his superior knowledge or mediumship (pp. 292-3). She was then floated along the ceiling, which, at the doctor's request, she marked with a pencil, and the marks, perhaps, remain to confound the skeptical. There was no danger in thus "levitating" Mrs. Hollis, for the spirit of "Jim Nolan" assured the doctor that

"If she were lost to us, we could not replace her among a million of women."<sup>7</sup>

The cabinet was held shut by a button on the inside (pp. 305, 319), controlled by Mrs. Hollis, who was thus removed from sudden observation; there was even a curtain over the aperture in the door, and the floor was not spread with flour to mark any movement of her feet. The three reporters made no thorough examination of the premises and apparatus (pp. 385, 456, 525); they reported what was prepared for them, without asking, for example, to be allowed to stretch threads across the cabinet so as to insulate the medium from the aperture; nor did they ask for music-paper to be placed under the shawl-covered table, that a specimen of the "love-feast of celestial melody" (p. 292) might be secured, the telegraphic communications being worthless.

Dr. Wolfe's credulity would be likely to interfere with his power of investigation, as he seems to believe (p. 25) in the supernatural nature of certain table-turnings and rappings, and (pp. 107-8) in the ability of A. J. Davis to perceive the condition of the interior parts of the human frame. He read "with amazement and most absorbing interest, the great work of Mr. Davis," and he probably takes an equally absorbing interest in certificates like the following—the first one being taken from his own Common-Sense Book (p. 69), the second from a medical almanac, and the third from a newspaper.

DR. N. B. WOLFE...For about fifteen years I have had, more or less, a most distressing cough, and became so enfeebled that I could scarcely walk to my barn-lot and return...I cough but little now;... I have gained from ten to twelve pounds in weight during your one month's treatment...

Messrs. ... CLARK: My wife was troubled with a *bad cough* for two years. The cough was so bad that she had fears of consump-

<sup>7</sup>A million is a large number, nevertheless—"A million of undeveloped people can neither," &c. (p. 115.) "Millions of people have heard the spirit-raps;" (287) "A million of spirits" (201); "Millions are embraced in this mystic multitude who have accepted common sense and the spirits as their guides." (539.) "Truth expresses itself in a million of forms," (543); and the doctor's consumption book, "circulation 500,000," may have millions of readers. So Josephine mentions millions of worshippers (278) and millions of spirits (279). "Millions of intelligent men and women *know*...millions more are being resistlessly drawn to the same unassailable array of testimony...there are millions of men and women who proclaim a knowledge of the truth of spirit intercourse... The Czar Alexander, by command of the spirit Czar Nicholas,...transformed millions of slaves into millions of freemen." (pp. 538-9.)

tion...Her strength failed so that she could hardly do any kind of work...She now weighs fifteen pounds more than when she began to take the compound, and is in the best of health.

*Dr. Pierce...*My wife has certainly received a great benefit from the use of your Discovery...She has been doing most of her work for over six months...Her recovery is considered as almost a miracle, and we attribute it all to the use of your valuable medicine.

And yet, while he would have people believe in the private performances of Mrs. Hollis, he is himself skeptical in regard to the public exhibitions of the Davenports—regarding their floating guitar with the look of suspicion which his portrait exhibits, but expecting us to believe in the aerial voyage of Mrs. Hollis and of his own heavy music-box—

The guitar was carried through the air, thrumming as it floated all about the room. My knee had been touched by a spirit-hand, and my handkerchief had been tied high up on the chandelier, still...I doubted. (p. 122.)

He is indifferent to public opinion—

I respect my judgment on all occasions, caring little for the applause of men, less for their criticism, and least for their censure. (p. 313.)...but it is not pleasant to have one's integrity impeached by the world (p. 371). There is something more than political wit in Ben Butler's grim declaration, that "he never enjoyed life until he lost his character." (p. 231.)

Editors and others who doubt *his* accounts, are "addle-pated fellows," (195); "idiot editors," (277); "scribblers," (196); "sniveling correspondents," (318); generally the escapes from lunatic asylums, or the inmates of Pagan churches (318); "pulpit-preachers, pot-house politicians, and boss printers...a pretty set of mountebanks," (Mrs. Hollis, p. 168); "a newspaper scavenger and *geldmacher*"<sup>8</sup> (424)—that is, a *coiner*, but money-maker is probably meant. Yet the fee of his friend Mansfield is "three dollars and four postage stamps," (p. 39,) and he calls people *cattle* (p. 169) who

<sup>8</sup> This style was cultivated at an earlier date as appears from his lecture (mostly chimerical, like Josephine's letter on pp. 484-5), delivered over the corpse of his mother, in which he asked—"Who will question eternal principles but the knave or fool?" (p. 113.) Compare—swash, 39; he deserved to be blowed, 74; horse-stable slang, 76; sty of filth, 78; Limburg cheese, 79; pulpit falsehood, 99; pulpit Maw-worms, 178; base-born rascals, 183; St. Hog, 189; pig-head, 196, 220; dullard, 196; mental dribblers; drivel, 101, 196; well-dressed idiots, 237; pious pulpit platitudes, 249; blather-skite; 80, 219, 260; and Common-Sense Book, p. 8; daft, 305, 497; "as if she held my nose," 89; "lead them by the nose," 166; "nose singers," 284; "pulled him by the nose," 369; "*N. B. Wolfe*, Physician for the Nose, Throat and Lungs." See the portrait in his consumption book.

consult Mrs. Hollis without paying her. In his practice as a "medical specialist," people who cannot afford the expense of coming to his office can be treated by mail, but "in no case do I make any reduction in my charges [of twenty dollars for the first month and eighteen dollars a month afterwards]; neither do I send treatment for a less period than one month."

Although the doctor gives no formulas, and supplies his own drugs (Com.-Sense Book, pp. 91, 95), he seems to have imitators—

It has come to my knowledge that many of this class of people [itinerant specialists] represent themselves as practicing my system of treatment, and thereby obtain employment. (Com.-Sense Book, p. 63.)

But he is not the only sufferer from rival specialists, for we read in a medical almanac, that

"These swindlers claimed to carry certain extracts with which they would prepare any amount their customers wished. Beware of such impostors. Our...can not be made by mixing any extracts in existence."

Rival mediums are condemned for their "silly and ungrammatical drivel" (p. 38), for "language low, coarse, and ungrammatical" (p. 100); and one is without "scholastic attainments" (p. 238). "Spirits talk best in the presence of intelligent people" (p. 283). "Those who make no claims to scholarship, think more clearly on this subject, in many instances, than the *savants*" (p. 238). Dr. Wolfe uses—"a more utter stranger" (117); "more primary elements than is found" (111); "a regalia" (290); "was daft of reason" (497); "*intre nos*" (368); "neither...or" (447); "forms of diseases which never waits" (p. 94 of Common-Sense Book); and he spoils his English with Scotticisms.

In his Common-Sense Book, Dr. Wolfe indicates his medical standing by giving a copy of his Latin diploma, which is that of an eclectic concern in Philadelphia, where Jacobus M'Clintock as the first professor is "*Chirurg and Prof.*," and as the sixth is "*Anatomy and Physy. Prof.*" W. Paine evades the Latin cases by "*Theo. Prac. Med. Prof.*"—others are "*Obst. Prof.*," "*Materia Medica Prof.*," and "*Chemiae Prof.*"—the last being correct. At a later period, one of these eclectics went into the secret medicine business and another sold diplomas in connection with a quack medical school.

A nostrum-vender (Philadelphia *Bulletin*, June 10, 1874,) is of the opinion that:

There is no good reason why an English-speaking people should

be doctored in Latin, ... in the jargon of the profession, ... in garbled Latin, but in the good old mother tongue, ...

wherein he agrees with Dr. Wolfe, who thinks that physicians should be censured for not teaching the people—

in languages they understand instead of the compound jargon which only serves to obscure the sense and mystify the trade of the selfish trickster. (Common-Sense Book, p. 4.)

However common such opinions may be among quacks, they continue to dose their patients with secret remedies; and when Dr. Wolfe comes before the spiritists, he is free enough with the languages. His motto is "SUPPRESSIO VERI, SUGGESTIO FALSI"—of which there is an example on p. 18, where he mentions a daughter of "Governor Wolfe" returning home to Columbia, Pa. Here the reader is left to infer a relationship with Governor George Wolf, of Pennsylvania, who resided at Easton, and the fact is suppressed that Mr. George Wolf (not "Wolfe"), of Columbia, was familiarly addressed as "Governor" by his friends, on account of the identity of name.

Language tests should be sufficient to convince the sceptical, for in these the spirits write and speak in any language known to them. Dr. Wolfe gives examples in several of the better known languages, but the Cherokee spirit who occupies so prominent a place in the book, both in writing and speaking, gives not even an exclamation in his own vernacular. The more unusual tongues do not appear, although we are told (p. 220) that "spirits would communicate in Greek, Hebrew, Italian, Swede, Celt, and Arabic," but this was discouraged as "tomfoolery" and "useless scribble." Had it been encouraged, it might have "exhausted" Mrs. Hollis (p. 245), and elicited "personal antagonism" (p. 324) in case a traveler like Captain Burton had addressed Mohammed in Arabic with the expectation of getting a reply on the slate.

Dr. Wolfe calls attention to "four capital J's that look as if they might have all been written by the same penman; but who is he?" (p. 270)—a question which should have been asked in regard to the resemblance of the seven fac similes of B (p. 220, 222, 271,) to that in his own autograph, as given under his portrait. On the other hand, the two N's given as copies of Ney's autograph (p. 217, 301,) are quite unlike.

The name of "Napoleon Bonaparte Wolfe" would be likely to call the attention of its possessor to the great Frenchman, and

might cause him to be selected as the leader of the army of spirit-ists, for Ney tells him to "Work on! Be firm! You are the front of that army and I the rear. It cannot fail." (p. 310.) And Josephine directs him to "Work on with a cheerful heart and a wise head. All will be well." (p. 241.) "Be firm." (p. 511.) At an earlier day (p. 86-7) she advised him thus: "Do not let your heart fail you, for you must surely succeed. Persevere to the end. . . Stand firm, and be steady to your purpose! Do not doubt success!" Mrs. Hollis was also "a selected instrument for doing a great work" (p. 180), as she was told by a spirit.

The doctor claims to be "a very cool, quiet man in emergencies" (p. 313), and, with his long experience in spirit matters, he ought not to have shown "some excitement" (p. 203), when, on withdrawing a slate from beneath a table where he was holding it with his right hand (his left covering both the hands of Mrs. Hollis on the table), he found two lines signed "NEY," commencing with—"Je veux trouver homme que est honnête"—which should not have "amazed" him, as he disclaims a knowledge of French. Josephine's short note (p. 222) has such French as "person" for *personne*, and "nome" for *nom*, and while it was being written on a slate held under the table by Mrs. Hollis, the doctor was again struck "with amazement" by a bonfire or "*feu de joie* of spirit-raps" (p. 223), and when the medium left the room (none but she and the doctor being recorded as present) a chair followed her.

Josephine's English style resembles the doctor's, as when she mentions the "fires of ambition that fills my dear Napoleon's soul, sweeps over mine." (p. 224.) "Swine need feeding, even though we must work in the mire to do it." (p. 460.) "But these will serve as propaganda"—a noun in the singular number, as she must have known from the French form "propagande." Mrs. Hollis (p. 167), Dr. W. (p. 219), and Josephine (p. 500), use the word "poltroon." Wolfe has "square earnest" (p. 74), and Josephine (p. 513) has "an issue squarely made." He talks of a "rotten" peace (p. 539), and she of the "rotteness of creeds." (p. 511.)

It is a matter of wonder how a French lady and an empress could have picked up such word as "unrest" (p. 229, 506); "ye" (p. 234, 239); "dieth," "stench" (p. 499); the Germanism "stand-point" (p. 512-13), used by Wolfe on p. 430, and by a spirit on p. 342); insurance "policies" (p. 514); getting "shaky" (p. 521); "agitate the muddy waters, to liberate the offensive odors from the

mire of society" (p. 230); oppose "to the bitter end" (p. 516), a nautical term of which she could hardly know the meaning. "Lacerate my back," says Wolfe (p. v); "cowardly slaves" (p. 219); "a limber raw-hide" (p. 289, quoted with approval); and Josephine speaks of "the slavish fetters of creed" (p. 240); "the slave's back, ... lacerations of the master's whip;" (p. 461). The following expressions occur in a single letter (p. 233-4), but the Italics are not in the original. It will be observed that the doctor's book is esteemed by the spirits:

What you have written, the poodles may bark at, but it will *strike home* to the consciences of thinking men ... people who think to put our work down, *reckon without their host* ... craven souls, ... it *means work*. ... We watch the progress of the book with great interest. It has an aggressive and *fearless ring* of truth about it, that will command the attention and respect of its readers. It will be bitterly assailed, but fear not.

In another place she has "the true ring of pure metal" (p. 467), and speaking of her singing voice, the doctor says: "Its ring was like the tintillations of fine metal." (p. 474.) Contrary to French and English usage, she writes "embassadors" (p. 228), "fiber" (p. 240), "savior" (p. 246, Ney's spelling, p. 433), "center," "honor," "error," "realize," "civilize," etc., as if she had learned English lately, and in America.

When Dr. W. gives scraps of German spoken at a *séance*, it would seem that his writing was controlled by another mind, for each noun appears with a capital initial (p. 183), but his mentor could not have been present when he recorded the saying of a Teuton as "Gott in himmel." (p. 511, for "im Himmel.") The speaking and writing spirit of the Cherokee "Skiwaukee" is a failure, the name is probably based on "Milwaukie, and *s&k* do not occur together in Cherokee. Broken English by a German is not that of a Welshman, and a Cherokee's would differ from both. For "old," Skiwaukee should have said *ole*; the language wants English *j* and *p*, yet he turns *medium* into "mejum" and says "papoose," which does not belong to his language; but being without *r*, he is right in reducing *Rosanna* (p. 157) to "Sanna."

On p. 278 we find a fac simile of Mohammed's writing, in strange characters which are not Arabic, but which betray a hand accustomed to write the English letters, and in the ordinary direction. The numerals, 2, 3, 4, 8, 9 are present, of which only the "9" is made in the Arabic manner. A tea-chest would have given better characters for a note from Confucius.



It appears from a public notice of which a copy is given (319-20,) that on August 30, 1872, Dr. Wolfe proclaimed his readiness to admit a limited number of representative and intelligent people to his circles, in a lighted room, where the departed would write, speak, and show their faces so as to be recognized. As might have been anticipated, nothing was done, for it is in the nature of quacks to promise more than they can perform. In such cases they gain in notoriety, having no proper reputation to lose, and their dupes are ready to accept their excuses for failure. Two hundred people responded to the deceptive notice, but it was decided that they were not "representative" men, and that there was little "homogeneousness" of character among them.

People who accept such accounts, belong to the class which believes that toads can live in solid rock—that comets forbode evil, and that mathematicians are necromancers—which puts faith in the supernatural powers of the Fox girls—in the ability of clairvoyants to tell where the lost Charley Ross is to be found—in the satanic nature of a pack of cards, or the toy called planchette—in the quadrature of the circle—in the pretensions of Hahnemanism, or in the last hair expectorant and pectoral cathartic. Probably not a single example cited by the spiritists has as much evidence in its favor as the hibernation of swallows under water—but as the belief in such things disappears, the supposed cases of their occurrence become more and more rare.

Among perhaps hundreds of witnesses to the Katie King frauds in Philadelphia in December 1874, one man of sense was present who was competent to investigate and expose them.<sup>9</sup> The Hon. R. D. Owen was among the dupes, and while endeavoring to suppress his marvelous narration in the *Atlantic Monthly* (Jan. 1875,) after his discovery of the deception, he nevertheless continues to believe that other cases are supernatural because *he* (!) cannot otherwise account for them; and in a book on the subject by the naturalist Wallace, he desires the reader to form his opinion, not

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<sup>9</sup> Similarly, when a community was "wild with terror" at the doings of a vampire (a corpse possessed by a demon), the French botanist Tournefort (1686-1708) happened to be present at the exhumation, and "his account is a curious evidence of the way an excited mob could persuade themselves, without the least foundation of fact, that the body was warm and its blood red."—Edw. B. Tylor's *Primitive Culture*, 1874, 2, 193. See also a Servian case (Penny Cyc. 26, 105,) from the records of a public office, in which, when a stake was driven thro' the disinterred corpse, "according to the relation of eye-witnesses" it uttered a cry.

from individual cases, but from the general impression made by his narrative—certainly a cool request, when we consider that science is the generalization of individual facts. Among those who are ignorant of science there are some who are jealous of its triumphs, but they should bear in mind that, without its results, it is probable that its depreciators would still be consulting fortune-tellers, tying agues to trees, stopping blood with words, curing cuts by anointing the knife, or checking pestilence by means of human sacrifices.

S. S. HALDEMAN.

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### LOSS OF VOICE AND ITS CAUSES.

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THE voice in man is the principal means by which he expresses his thoughts, emotions, and impressions, and by means of which he is enabled to communicate them to his fellow men. It is true, a language consisting merely of signs and gestures would and actually does suffice, to establish an intimate relation between man and man, as is the case with the deaf mute, and yet the very fact that language has developed from its rudimentary, inarticulate sounds, to its present perfection, is a proof that this phonetic language is a necessity, and that without it the intercourse of men among themselves would be very restricted and civilization would never have reached its present advanced position.

This highly developed language is made up of certain sounds and noises, emitted by a special organ—the larynx—aided by the tongue, lips and teeth, while the sounds heard in singing without words are due alone to the action of the larynx. This organ of the voice, as every one knows, is situated in the throat, and is ordinarily designated by that collective term.

To enter minutely into a description of the various parts connected with this organ and aiding in the exercise of its function would be here out of place, and it is necessary to enumerate only the most important parts which are more commonly the seat of disease.

The first to be considered are the vocal cords, two pearl white bands, which are stretched across the opening of the windpipe, and which, by being set in vibration, produce the vocal sounds. These

bands are attached at one end to two movable cartilages, called *the arythenoid cartilages*, which are capable of being turned toward and away from each other, thus bringing the vocal cords together and separating them again. The other or anterior ends of the vocal ligaments are close together and immovably attached to the large cartilage which encases the larynx proper, and which with its sharp angle forms the prominence of the throat called colloquially the Adam's apple.

With every attempt at vocalization the vocal cords are brought close together, forming with their edges a narrow slit which becomes narrower with the rise in pitch in the tone to be produced, while in quiet breathing the bands and cartilages remain separated. The space between is designated the *glottis*.

The edges of the vocal cords being brought into close proximity by the movements of the cartilages to which they are attached, present an obstacle to the current of air passing from the lungs. Being at the same time stretched between their points of attachment like the strings of a violin, they yield for a moment to the pressure of the air and then recoil to regain their former position. This action is repeated many times in the space of a second, producing a vibration of the air itself, which constitutes the perceived sound. If, however, this motion of the vocal cords, or of any other sound-producing body, becomes irregular and non-periodic, such a motion is then perceived by the ear as *noise*.

Above the parts described already is situated a leaf or spoon-shaped cartilage, the *epiglottis*, which is jointed to the large cartilage of the larynx just above the insertion of the anterior ends of the vocal cords. It serves as a protection to the air passages, folding over and covering the opening of the larynx completely during the act of swallowing, so as to prevent any particle of food from entering. If, however, by accident, some food gets into the windpipe, a violent cough follows, which is excited by the irritation of the delicate mucous membrane lining the whole windpipe and larynx.

From the above description it will be seen that if by any cause the vocal ligaments are prevented from vibrating, or if their vibratory movement is only partially prevented, a loss of voice, or at least a hoarseness, must necessarily result. But the position of the vocal organ, way down in the throat, makes it difficult to form a correct opinion as to the cause of the trouble, and to adopt the proper means for its removal.

It is not many years since a singing teacher in London—Manuel Garcia—invented an instrument by which the whole interior of the larynx can be brought to view. The inventor's idea was to study, by means of this instrument, the action of the vocal cords during phonation, which action had before been only surmised from the distribution of the muscles as they were seen in dissection and from experiments made with the isolated larynx. Señor Garcia succeeded admirably in his studies, and was enabled to observe and describe all the changes which take place in the living larynx during phonation.

A short time after, in 1858, Dr. Czermak, of Pesth, used the instrument called the Laryngoscope for the diagnosis and treatment of diseases of the larynx, and thus opened the way for the medical profession to alleviate and cure a number of painful affections which before had baffled their skill.

As to the causes which produce a complete or partial loss of voice, they are very numerous and varied. A simple exposure to cold draught may cause an acute inflammation of the whole mucous membrane of the larynx, with a swelling of the vocal ligaments, which are thus unable to vibrate, and the result is that the patient cannot speak above a whisper. This state, as a general rule, disappears again in a day or two, even without any treatment, and the voice regains its natural tone and strength. In many instances, however, only the total loss of voice, if such existed, is relieved, while a hoarseness, or huskiness of the voice, remains, in spite of all ordinary remedies and even general medical treatment. If this is the case, the inflammation of the mucous membrane has become chronic, and the vocal cords indurated, or thickened, so that it requires an undue amount of breath to set them in vibration and a sense of bodily fatigue is experienced after a continued use of the voice, as in reading aloud or even in ordinary conversation. If this chronic inflammation is allowed to remain, small ulcers or sores will make their appearance in various parts of the larynx and vocalization and even swallowing may become painful. Also the small muscles which produce by their contractions the movements of the vocal cords become affected and refuse to do their work properly.

If, however, public speakers or singers are thus affected, the exposure to a draught is generally only the observed starting point of the disease, while the true cause of the trouble must be looked

for in a faulty use and overstrain of the voice in speaking as well as in singing, which, by constantly irritating the delicate organs of the throat, predisposes them to be thus affected. It is usually asserted that the use of the voice, coming to us naturally and without any effort, just like breathing, cannot be harmful. Yet we forget that we may form bad habits of speaking as well as of any other natural act—walking, for instance—and that it is these bad habits that are harmful and not the *natural* use of our organs. The drawing of the voice over a considerable part of the scale, while pronouncing one syllable, as we hear it almost universally in conversation and public speaking, is not only disagreeable to the ear and impairs the effect of expression, but is also harmful in obliging the delicate muscles of the larynx to an undue amount of work. This is only one of the many instances of bad habits of speaking, to enumerate which would be to tax the patience of the reader too much.

Another, but by no means as common a cause, of loss of voice, is a more or less sudden paralysis of the vocal cords. If their muscles remain relaxed, the vocal bands are seen in the laryngoscopic mirror to be closely applied to the sides of the larynx, thus leaving a large triangular opening between them through which the exhaled air passes without obstruction and consequently without being set in vibration. This condition is designated as a complete paralysis of both vocal cords.

In many cases, however, only one side is affected, and then we see in the mirror an attempted vocalization, and that the cord on the sound side moves toward the median line, while the one on the affected side remains quiescent. Also under these circumstances a sound cannot be produced, owing to the still too large opening between the two cords.

If on the other hand, one of the vocal ligaments is sound and the other only partially paralyzed, so that it makes an attempt at meeting in the median line, a sound may be produced, but it will be hoarse on account of the irregularity with which the air is set in vibration. This irregularity is owing to the fact that the paralyzed cord is not as tightly stretched, and consequently does not vibrate with the same rapidity as the other one.

The causes of paralysis of the vocal muscle are, as has been said before, chronic inflammation, and pressure upon the nerve trunk which supplies the larynx with its branches. Such pressure is

most frequently exerted by goitre, and persons thus afflicted are always more or less hoarse if the swelling of the neck has attained a considerable size. Then we find paralysis very frequently in Hysteria, Consumption, and overstrain of the voice. The suddenness with which the attack from the latter cause comes on and is sometimes relieved, may be illustrated by the following incident :

A news-boy screaming out the titles and interesting items of his papers, overstrained his voice, and was suddenly attacked by a paralysis of his vocal cords, so that he could not utter another sound. Observing this, I called him into my office, and applied a current of electricity, at first externally, but without effect. I then introduced one of the poles of the battery into the larynx, applying it directly to the vocal cords, when on passing the current the boy screamed out with the full power of his regained voice.

Still another, and by no means unfrequent cause of loss of voice, are small tumors which grow either on the vocal cords themselves or on the mucous membrane in their immediate neighborhood. Such growths interfere mechanically with the free movements of the vocal cords, by projecting into the glottis and thus preventing the necessary approach of the edges of the vocal cords. If they are comparatively large, they may, and frequently do, interfere with respiration to such an extent that it becomes necessary, if they can not be removed early, to make an opening into the windpipe below the larynx in order to supply sufficient air to the lungs, for the aeration of the blood.

The causes of the growth of these tumors are difficult to explain, and are very varied. They generally depend upon certain conditions of the system, differing with the nature of the tumors themselves.

It is in these cases that the great value of an instrument like the Laryngoscope becomes apparent to every one ; not only does it enable the physician to determine the size, shape and precise location of the tumor, and thus come at once to a conclusion as to the best method of relieving the harassing symptoms ; but he can also by the aid of this instrument remove, in many cases through the natural passages, the obstruction, and thus effect a cure and restore the voice.

Foreign bodies, such as pins, fish-bones, etc., not unfrequently find their way into the larynx, and although, in many cases, they do not immediately cause a loss of voice, yet they may do so by

irritation and consequent inflammation if allowed to remain in the throat. On the other hand the foreign body, if at all large, may cause an obstruction of the air passages, and if not removed speedily, either by violent coughing on the part of the patient, or by the laryngeal forceps in the hands of a physician, death will ensue by suffocation.

In the foregoing lines we have endeavored to give an idea of the causes of loss of voice and their nature, and have enumerated some of the conditions found to accompany a failing of the vocal organs. We could do so, however, only very superficially, as the subject is a very extended one, and as space would not allow us to give a detailed description of the acoustic laws involved and the anatomical changes observed in cases of throat disease. All these may be found in text-books on the different subjects involved, where they are fully described.

CARL SEILER, M. D.

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### A FRENCH SAVANT.

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ONLY forty years have passed since the death of André Marie Ampère, yet the general reader, even though quite industrious, has perhaps never heard his name. Much less would he suppose that mathematics owes him a debt of gratitude for most profound pioneer work; that while a mere child he labored long and with remarkable method to construct the primitive universal language which might lessen the labors of the learned and greatly accelerate the progress of the race. Physics too received from his ready brain and skillful hand some of her profound generalizations on the connection of electricity and magnetism. Botany ranks him among her most successful votaries. Yet he was a laborious teacher, struggling with difficulties; and his favorite study was quite distinct from all those just mentioned, his greatest powers and most enthusiastic efforts being always given to psychology.

Jean Jacques Ampère was a well educated merchant of Lyons, To him and Jeanne Antoinette, his wife, was born a son, André Marie by name, January 22d, 1775. Soon after the family removed to a small farm in the hamlet of Poleymieux-lez-Mont-d'Or, still near Lyons.

Little André showed a remarkable genius for mathematics, performing long calculations with a few pebbles, and that before he knew how to form figures or anything of their use. During a serious illness his anxious mother took away his counters, but as soon as he was allowed some pieces of biscuit they were substituted, thus ministering to the needs of the mind rather than the body. Learning to read, instead of being a process painful alike to teacher and pupil, never finished and almost or quite barren of results, was the easy grasping of a talisman more potent than lamp or ring of Eastern fable. He devoured books of every kind, and a marvelous memory, vivid imagination, and strong, early-developed reason, enabled him to retain and assimilate to a wonderful degree. Perhaps the most important of his studies in its effect on the whole tone and power of his mind was the reading of the Encyclopedia in alphabetical order. Twenty volumes of the carefully-condensed wisdom of the world, read and pondered by a child of thirteen, surely show an eagerness for knowledge and a persistence in labor which might well put riper years to shame.

To form a universal language was one of his early attempts; and he was to substitute for existing tongues, not an arbitrary creation, but the primitive dialect rediscovered and reinstated by a profound use of reason. A grammar and dictionary almost complete, and a poem, all still existing in manuscript, testify to his early powers of execution. It was a source of great pleasure in later years to find several of his combinations in Sanscrit and in one of the languages of Africa.

At eighteen the French Revolution deprived Ampère of his tender father, and the same stroke seemed to have quenched the light of his intellect. For more than a year he spent his days in utter listlessness, sometimes heaping up little piles of sand as the greatest stretch of his powers. J. J. Rousseau's botanical letters threw the first rays of light into his darkened mind, and he pursued the science with avidity, reading at the same time the Latin poets, to such purpose that forty years after he composed one hundred and fifty-eight lines without consulting any authority for the quantity. The following incident illustrates the thoroughness of his botanical studies, and the ease with which he recurred to them after long service in widely different departments. De Jussieu had left the genus *Begonia* unassigned to any of the natural orders, from the difficulty he found in determining its proper place. Auguste de Saint Hilaire



had examined with great care a large number of species growing in Brazil, and had satisfied himself of their affinities. Ampère, meeting M. de Saint Hilaire, said: "I found yesterday while walking the garden, a Begonia, and amused myself examining it. With what family do you classify it?" "Since you have examined it, permit me to ask you how you would classify it?" I would place it in the adjoining group of the Onagraceæ," replied Ampère. This was just the conclusion reached by the botanist after exhaustive study in the native locality of the plants.

Curiously enough, the extraordinary activity of mind shown by our student was associated throughout his early years with great imperfection in the two chief avenues of knowledge, sight and hearing. He was very near-sighted, and it was when eighteen years old that by accident he tried a pair of glasses just suited to his eyes. It was a revelation. All nature appeared in a new and wonderful form. He wept for joy, and ever after took great delight in the exercise of this late-found sense. His vivid imagination and well-stored memory gave him, in a remarkable degree, what might almost be called a "second sight," the power of seeing in the most unattractive place the possible beauties and improvements, almost as if they were before his eyes. It was not till thirty that music had charms for our friend. He visited a concert where the programme was made up of Glück's music. Ampère not only failed to be delighted, he was distressed. He twisted in his seat, walked about, placed himself in a corner of the room with his back to the audience. At last, when it seemed no longer endurable, some simple melodies succeeded. A flood of tears showed the delight and relief experienced, and ever after his ear was attuned to sweet sounds. But we have passed in silence over a development more important than either of these already mentioned. One page among his papers begins as follows: "One day while strolling, after sunset, along the banks of a solitary stream,"—Why was the sentence unfinished? We can only conjecture that he found words powerless to express his feelings, or even to chronicle their occasion. Had his pen not failed him he would have told of seeing two young girls gathering flowers, and that one of these, Miss Julie Carron, inspired him on the spot with so ardent an affection that he wished to marry that very day, and would have consented to forego science and embrace a shopman's life. Wiser counsels prevailed in both particulars; and after three years spent in giving private lessons in mathematics at

Lyons, he greeted his Julie as his new-made bride. A son was born to him in the following year, and he was compelled to seek a more certain and ample support. He was fortunate in obtaining the chair of physics in the central school at Bourg, and leaving his wife seriously ill, went thither in 1801. He had formed very intimate attachments with a number of talented young men at Lyons; from Bourg and from Paris, his heart ever turned to his beloved birth-place.

M. Ampère's stay at Bourg was distinguished by the publication of "Considerations on the Mathematical Theory of Play," in which he demonstrated the certain ruin of the professional gambler who plays fairly. This work showed such mathematical powers that the author was called to Paris and made tutor in the Polytechnic School. His studious life had left him very slightly cultivated as to matters of dress. The school was military in its character, yet the new tutor shocked his pupils by coming before them in a fashionable coat, and that badly cut and made. For weeks the unlucky garment neutralized much of the profound mathematical truth set forth in the lectures. The mischievous young men, by complaints of the difficulty they had in seeing the characters on the blackboard, led him to increase their size to a most ridiculous extent. Spite of all these interruptions and drawbacks, his lectures sustained and even increased his reputation.

A favorite pursuit of Ampère's at this period was metaphysics. He designed to publish a book, to be styled: "Introduction to Philosophy." Even at Paris he found few to join him in the profound discussions by which he wished to search out absolute truth. He wished to visit Lyons, hoping to find more enthusiasm among the young men with whom he had been used to meet before sunrise in the fifth story of a tenement to read Lavoisier's Chemistry, Even these friends sought to confine Ampère to more familiar fields. He writes: "How can I abandon a country full of flowers and fresh running waters, how give up streams and groves, for the deserts scorched by the rays of a mathematical sun, which, diffusing over all surrounding objects the most brilliant light, withers and dries them to the very roots?" Strong and well-disciplined powers have searched the savant's manuscripts for these psychological beauties, but their unaccustomed vision found only darkness "which may be felt." With all his fondness for discussion, Ampère was not in the least like that devoted grammarian who called down

heaven's direst vengeance on the holders of opinions contrary to his own. Some notes of Prof. Bredin contain the following: "Very animated discussions daily arose between us, and in them originated that holy and indissoluble friendship which has so firmly united us."

As tutor and afterwards professor of mathematics, Ampère directed his genius to the increase of mathematical knowledge, as well as to its diffusion. Whether it was the lucid demonstration of a geometrical truth whose very simplicity had defied proof, or the most abstruse researches in analysis, he never failed to astonish all with the completeness and importance of his work. In 1813 he succeeded Lagrange as member of the French Academy. The relation between magnetism and electricity had long been a vexed question which baffled the ingenuity of the scientific world. In 1819 Ørsted, a Danish physicist, announced the remarkable discovery that a galvanic current passing along a wire parallel to the magnetic needle would turn the north pole of the needle to the west if above the needle, to the east if below. At the regular weekly meeting of the Academy, held Monday, Sept. 11, 1820, a member from Geneva repeated Ørsted's experiment. A week later Ampère presented the more general and startling fact that two parallel connecting wires attract each other when the electric current passes through them in the same direction, and repel each other when it passes in opposite directions. He also devised the astatic compass, in which the magnetic action of the earth ceases to oppose the effect of the electrical current, and the feeblest current produces the same result as the most powerful, that is, brings the needle to a position exactly at right angles with the electrical force. These discoveries laid a sure foundation for the imposing structure of electro-dynamics, and led directly to the secret of the earth's magnetic polarity.

Brilliant and practical as were these experiments and the conclusions they reached, there were not wanting those who denied any credit to their author. It was claimed that the attractions and repulsions of the electrical current were hardly different at all from those which had been familiar ever since electricity had been an object of research. This objection was soon disposed of. Bodies similarly electrified repel each other; similar currents attract each other. Bodies in an opposite condition of electricity attract each other; unlike currents repel each other. Two bodies similarly

electrified repel each other from the moment of contact; two wires traversed by similar currents remain together like two magnets, if brought into contact.

There were others, who professed themselves most reluctant to rob Ampère of the glory due to an original and profound discovery, but brought forward this difficulty. Two bodies which separately have the property of acting on a third cannot fail to act on each other. The connecting wires, as shown by Ørsted, act upon the magnetic needle, hence their mutual attraction and repulsion is a simple deduction.

A friend said to this objector: "Here are two keys of soft iron; if you cannot show that, placed near each other, these keys attract and repel each other, the point of departure of all your objections is false."

Ampère had great facility in devising apparatus, and found abundant scope for it in the extended investigation to which he was now introduced. From his earliest childhood difficult problems had been his great delight, and nothing would content him but the whole truth. He set himself to determine by the aid of mathematical analysis and physical experiments the secret of the earth's action upon the magnetic needle. His labors were crowned with success, and he had the signal triumph of showing to crowds of wondering *savans* an electrified wire taking the place of the magnetic needle and performing its important offices.

From these researches in physical science to the most comprehensive study of animal structure seems a great step, but it was the one actually taken by our professor. Cuvier, in a course of lectures on the history of modern science, assailed the views of the German philosophers of nature who maintained the essential unity in structure of the whole animal kingdom. Ampère took occasion to defend the theory in his own course then in progress, and for some time the contest was kept up with great spirit. On one occasion a witty adversary of M. Ampère's views said to him: "Your theory has one rare and incontestable merit; it is clear and positive. I expect to see you as a modified snail." Ampère entered heartily into the laughter which followed; then taking up the subject seriously, he showed such a vast knowledge of anatomy, and brought up such ingenious and unexpected analogies, that the sharp thrust was most effectually parried.

We have seen that the astonishing knowledge of Ampère in the

most diverse departments rests on a foundation laid in his early years by the diligent perusal of the French Encyclopedia. Feeling as he must have done his great obligation to this vast repository of knowledge, and seeing the great advances made in his day, what more natural than his desire to leave a similar record of his own time? He projected an Encyclopedia, and gave much time to a classification of the sciences. He formed first two kingdoms: *cosmology*, the study of the world; and *ontology*, the study of the mind. By constantly dividing into twos, he arrived at one hundred and twenty-eight sciences of the third order, and these he considered necessary for the proper classification of human knowledge. Some of his names for these ultimate divisions prove but slightly suggestive of their province, for example, *canolbology*, *terpognosy*. Some of these minute branchings might well be dispensed with as cumbersome and confusing, but on the whole his system was more satisfactory than preceding ones. The structure to which this was to be the framework was never erected, and that such is the fact must always be regarded as a great loss to the world's learning.

When we consider the close attention necessary for some of his studies, it is not surprising that Ampère often showed himself too oblivious to common affairs around him. He has been charged with an affectation of absent-mindedness, but surely there was no need of affecting what was so natural. It is perhaps an extreme case that took place when he was dining with some persons whom it was his interest to treat with the greatest courtesy. Thinking himself at home he cried out fretfully: "What a vile dinner! Will my sister ever understand, that before engaging cooks, it is necessary to inquire into their skill?"

Religious difficulties played an important part in the internal history of our *savant*. His mother had given him a pious training, and he ever cherished those teachings in his inmost heart. Scientific research, carried to the lengths it was with him, could scarcely fail to produce conflicts in the mind of one trained in the authoritative system of Rome. Yet with all his devotion to science, he never did as so many in the fullness of their wisdom exult in doing; throw away the written word of God that they may be free to put their own construction on His works. Ampère actually committed to the flames a work he had prepared on the future of chemistry, merely because he feared it was too presuming to unveil such secrets of nature.

It might be supposed that with the extensive and varied studies he was constantly making, Ampère would have been jealous of interruptions, and little disposed to society. Such was not the case. His study was always open, and he was ever ready to engage in a game of chess, that being his favorite amusement.

The reflection is a distressing one, that powers so wonderfully adapted to widen the boundaries of human knowledge indefinitely, should have been confined during much of his life to tasks that were distasteful, and which, however important and indispensable, might have been performed more agreeably and profitably by some less gifted mind. His lifelong labors as a professor subjected him to constant and annoying friction with the heedless and mischievous tempers of young men, to whom his peculiarities of dress and manner sometimes afforded more sport than his demonstrations imparted intellectual enjoyment. His household necessities and his love of new apparatus forced him to hold for years the post of inspector general of the University. This involved a tour of inspection every year, and each tour was not only perplexing and harassing to the utmost, but took up whole months, in what was to him and to the world sheer waste of time. Ampère himself was by no means blind to the disadvantages under which he labored. He constantly compared what he did with what he might have done under more favorable circumstances, and the result was an increasing but fruitless torture—fruitless, for it was not in his power to make any improvement in these relations.

With all his wisdom, this wise man knew not how to take the simplest precautions for his own safety. He did not know how to rest. He fancied, when required to do this, that he was fulfilling the requirement by spending several hours of the day in darkness, or without book or pen in hand. The toils and anxieties of sixty years at length forced him to take steps for the recovery of his health, his lungs being chronically affected. He left Paris for the south of France, amid the confident expectations of his friends that he might be restored to activity. His feebleness and his cough made conversation painful to him, but he could not be kept quiet. His old friend Bredin refused to discuss the changes he proposed in his essay *On the Philosophy and Classification of the Sciences*, on the plea of solicitude for his health. "My health, my health!" he exclaimed. "To talk of my health! There should be no questions between us but those of eternal truth." Then for

more than an hour he discoursed most eloquently and minutely of the subtle links which unite the different sciences, and of the influence exerted by the great of ancient and modern times. On reaching Marseilles his case seemed hopeless, but tender care produced some improvement and raised the hopes of his friends. Ampère, however, was fully resigned to death, and cherished no such delusions. The end soon came, and all that was mortal of a great scientist was consigned to the dust, amid the profound regrets of France and the world.

HENRY M. DOUGLASS.

*Judson University, May 6, 1876.*

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#### DR. KRAUTH'S VOCABULARY OF THE PHILOSOPHICAL SCIENCES.<sup>1</sup>

THERE are signs of a very real and general re-awakening of the interest in Philosophy. Partly this is due to the direction which modern science has taken since the publication of the *Origin of Species* called scientific thinkers away from the mere observation of and gradual generalization from single facts, to the study of nature as a whole, and the formation of a connected and consistent theory of the universe, *i. e.*, a scientific philosophy. The new drift of scientific thought has thus carried many into a sphere of investigation and speculation, from which they previously shrank, and while some have done mischief by insisting that only the methods employed in the physical sciences were applicable in this other province of thought, they have rendered a vast service in showing how useful those methods might be when rightly directed and duly subordinated. Others again have betaken themselves to philosophy in reaction against the materialistic tendencies of modern science itself. Especially is this true of those who

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<sup>1</sup>A VOCABULARY OF THE PHILOSOPHICAL SCIENCES. (Including the *Vocabulary of Philosophy, Mental, Moral and Metaphysical*, by William Fleming, D. D., Professor of Moral Philosophy in the University of Glasgow, from the Second Edition, 1860; and the Third, 1876, edited by Henry Calderwood, LL.D.) By Charles P. Krauth S. T. D., LL.D., Vice-Provost of the University of Pennsylvania. Pp. xxiv., 1044, 8vo. New York: Sheldon and Company.

hold to the theological theory of the universe, and have found that objurgatory rhetoric and the like, are not sufficient defences of that position. They now begin to seek the only true safeguard against a false philosophy, that is, in a true philosophy. In this way it happens that the domain of the metaphysician is approached by vast numbers from the most opposite directions, and it seems probable that it is upon that domain that the great struggle between the materialists and the spiritualists is to be fought out. Indeed, philosophy itself is coming into recognition upon both sides, as the umpire of the dispute, whose final decision must be accepted by both parties. Hence, the great and rapid increase of philosophical literature during the last few years in Germany, in France, in England, and even in our own practical and busy country; and the equally noticeable introduction of the philosophical tone into both theological and scientific works. Hence, the rapt attention with which philosophical discussions of "the burning questions" are heard from such men as John Fiske on the one side, and Joseph Cook on the other. And, may we not add, hence, the urgent need of thoroughly good and scholarly works introductory to the whole subject, and fitted to guide the intelligent, but not deeply read student, through the labyrinths of the science.

Such a work is the one now before us. Prof. Fleming's *Vocabulary*, which fills the first five hundred and sixty pages, has itself become a standard work in this province—a book indeed without rival or competitor among English works of reference. Its very first edition (1858), in spite of the awkwardness in some respects of Fleming's method, and the defects occasioned by his limited acquaintance with the German literature of the subject, was a godsend to the English student. It was the first safe-guard furnished him against that most common source of misunderstanding, the failure to appreciate the special and technical senses which philosophical writers affix to their terms of art. It thus prevented much waste of time, and loss of pains. The second edition (1858) saw the chief defects of the book in some measure supplied by the suggestions of Messrs. Haywood, Morell and McCosh. The third, by Dr. Krauth (1860), brought it still nearer to what such a work ought to be, and introduced it to American students. Although at that time more specially occupied with the theological than with the philosophical literature of Germany, the American editor added to the works completeness by appending an Index of Terms



used by German authors, and also a Chronological Table of the History of Philosophy, and a Bibliographical Table, which is also a personal index to the *Vocabulary*. In the fourth (the third London edition), Dr. H. Calderwood has made some additions from Professor Fleming's posthumous MSS., and others from his own extensive and exact knowledge of the subject, the latter being for the most part definitions. On the other hand, Dr. Calderwood has thought fit to abridge the work in some respects, by omitting matter enough to make room for his own additions without enlarging it.

Dr. Krauth in reëditing the *Vocabulary*, does so after occupying for ten years the chair of Moral and Metaphysical Philosophy in the University of Pennsylvania, with such devotion to the subject as has already been evidenced by his edition of Berkeley's *Principles of Human Knowledge*, and his translation and introduction to Ulrici's *Strauss as a Philosophical Thinker*. His first aim as an editor of Fleming has been to give the *Vocabulary* in its proper completeness, with all the matter contained in the author's last edition (1858), together with Dr. Calderwood's additions, but not with his omissions. The present, therefore, is the only complete edition of Fleming's work, and gives what must elsewhere be sought in two separate books. But instead of the brief "List of Terms" of his edition of 1860, Dr. Krauth has appended the "Vocabulary of the Philosophical Sciences," which gives the book its chief title, and constitutes him no longer merely the editor but in great part the author of the work before us; and in this it is that he has inserted Calderwood's additions, distinguishing those which are the proper work of that editor, from those which he obtained from Fleming's posthumous manuscripts. At first it might be thought that the book is thus unfitted for being a work of easy reference, as the student is obliged to look for the word he wants in two alphabetical lists instead of one. But Dr. Krauth has constructed his *Vocabulary of the Philosophical Sciences* so as to facilitate consultation. Every word defined by Fleming will be found in its place in the second part, and whether anything more is said of it or not, it is marked by an asterisk to designate the fact that its occurrence is repetitional.

The method adopted by Prof. Fleming, and in the main followed by Dr. Krauth, is to provide the student with neither an encyclopedia of philosophy nor a dry list of brief definitions, but with

something between the two, which shall combine the brevity of the latter with the interest of the former. And for this reason he culled from the whole range of philosophic literature accessible to him, a large anthology of passages which set philosophical terms in their true light. Some of these quotations are like those given in Richardson's excellent *Dictionary of the English Language*; that is, they illustrate the actual force of words by well chosen passages from good writers who have used them. Others are passages whose very purpose is to define terms and to discriminate between those whose meaning is akin. The great importance of definitions to the metaphysical sciences, and especially in view of the method pursued in those sciences, has led philosophers to pay special attention to this subject, and this branch of literature is probably richer in definitional matter than any other. Prof. Fleming, therefore, found a very large amount of material ready to his hand. But he very properly did not restrict himself to this. Even when terms had been made the subject of definition by great authorities, a better, more comprehensive and juster definition would often be suggested by the very collation of several such authorities, and in other cases the very want of such materials required that the empty place be filled. Like any other habit, that of discrimination between words, and accurate appreciation of their values grows with practice, and Prof. Fleming made some admirable additions to our stock of definitions. But his weakness, as Dr. Calderwood says, was his preference for disquisition rather than definition, and the additions made by his Scotch editor, as we said, are chiefly in this department.

Dr. Krauth in the *Vocabulary of the Philosophical Sciences* has confined himself more to definitions than his predecessor. Of the vast number of articles which compose it, the majority do not occupy more than a few lines, and it is exceptional to find an article which extends beyond a page. This is chiefly because Fleming has forestalled more extensive articles on the larger topics, and has left room for such additions only in places where certain topics have become important since 1858, or have been partly or wholly neglected by Fleming. Exceptions to the rule of brevity are the articles on *Conscience, Dynamical, Ego, Force, God, Instinct, Judgment, Knowledge, Law, Liberty, Logic, Matter, Metaphysics, Motive, Nature, Necessity, Perception, Psychology, Reason, Relativity, Religion, Somnambulism, Soul, Time and Space, Vital Force, Will*

*and World*, while about fifty others average something less than a page in length. This of itself is sufficient to show how very large is the number of terms defined in the second or newer part of the work. If Fleming sometimes has the appearance of giving a system of philosophy thrown into the lexical form, his new editor has fully restored the truly lexical element to its proper eminence in the work, but without reducing it to a mere dictionary of hard words.

On comparing the character of the longer articles with those of the same extent in Fleming, we think that every one will be impressed with the greater thoroughness, compactness and general value of Dr. Krauth's work. The range of reading exhibited by the latter is so great, that he has to use compression to find room for all his kernel passages. Take for instance the article on *Reason and Understanding*, for whose preparation Fleming had more than ordinary advantages. He had access to Kant's *Critique* and to Tennemann's shorter *History* in translations; Coleridge, followed by De Quincey and Morell, had emphasized and urged the validity of Kant's discrimination between these faculties, and with such success as to bring the matter to common speech, even in the unphilosophical England of his day; Whewell, himself a Kantian, had contrasted the views of Coleridge on some points with those of Plato, with a view to getting rid of some confusions, but managing, as Calderwood points out, to give his own sanction to a very vulgar and shallow one, the confusion of *reason* with *reasoning*. So much Fleming lets us know, except that he omits De Quincey and gives us Rev. R. Ancher Thompson's views, and those of Harrington. But Dr. Krauth gives us the views of the two Fichtes, Fries, Frohschammer, Gleisberg, F. Harms, Hegel, Herbart, Jacobi, Kirchmann, Lotze, K. L. Michelet, Ritter, Schelling, Schopenhauer, H. Schwartz, Ulrici, Vischer and Wirth, without taking much more space than Fleming takes in stating the views of Kant and Coleridge. And the passages selected for translation are taken with great care; they are illuminative on the great question at issue. No man can read any of them without learning more of the grounds upon which either side of the controversy is taken. So again, in the article on *Soul*, Dr. Fleming shows us what Aristotle, Plato and Dr. Reid thought of it, with glances at G. H. Schubert as representing the German trichotomists, and at Jouffroy. All of this is very well, but there is far more discussion

than definition in it. Dr. Krauth gives us the attempts to define the soul made by Baggesen, Carus, Chalybaeus, Cornelius, Drossbach, Erdmann, the two Fichtes, Fr. Fischer, Fortlage, Frohschammer, Göschel, Griesinger, Hegel, Herbart, Kant, Kirchmann, Kym, Leibnitz, Lichtenberg, Lotze, Maimon, Mehring, Planck, Reiff, Rosenkranz, Schaller, Schelling, Schellwien, Schopenhauer, Schwarz, Strümpell, Tittmann, Ulrici, C. H. Weisse, and Wirth. Nor do these represent only the side of the case to which our author himself adheres. The views of those from whom he dissents are given as fully and as fairly as are those views which command his assent. Thus in the article on *Religion*, the statements of Frauenstädt, Von Hartmann, Riehl, Strauss, Waitz, and Zeller, are given as fully as those of the Fichtes, Kant, Schelling, Chalybaeus, Ulrici and Wirth. And we think that the result fully justifies the confidence which accompanies this candor. It shows how immense the preponderance of great names, as well as of right reason, on the spiritual and even the theological side as regards all the fundamental questions. And we are sure that if some of the theological alarmists who have made philosophy a *nehushtan* could be brought to read intelligently these and other *catenæ* of philosophical judgments, they would be brought to see the difference between false philosophy and true.

Some of Dr. Krauth's longer articles bear very directly upon the controversies now in progress, and in which our scientific naturalists are arrayed against the philosophers proper. Such are the articles on *Cause, Cosmology, Force, God, Instinct, Liberty, Materialism, Matter, Miracle, Motive, Nature, Necessity, Personality, Psychology, Vital Force, Will and World*. On any one of these points, the definitions and quotations are calculated to give a student the bearings of the great questions now at stake, and to prevent hasty concessions to our new theorists. We regret the absence of a still larger amount of this material. Equally full articles on *Agnosticism, Atomism* and *Automatism* are much needed, to say nothing of any other letters of the alphabet. But we can very well see that it was not possible to do more without enlarging the book to an unmanageable size.

Our whole impression of Dr. Krauth's work is that it adds far more to the value than to the bulk of the book, and that the *Vocabulary* would have been both more useful and more compact if the editor had rewritten it from the foundation. And should the de-

mand for the work justify a complete recast of the whole material for a third American edition, we hope that he will then use Fleming as he has used Krug, Furtmaier, etc., that is, as material for work of his own.

And now for our critical privilege of finding sun-spots,—the only thing which reconciles your true critic to the duty of praising books for what is good in them. Our fingers have been itching ever since we took up the pen, and our chief regret is that we have no solid ground for a good sweeping denunciation of the whole volume. We must leave it to our wise contemporaries to deal with it in that way, and keep our fault-finding for details.

We notice a few omissions, such as *Agnosticism*, *Autotheism*, *Unconscious Cerebration*, *Metempirics*, *Fre-existence*.

The theological sense of *Arche* in the Trinitarian discussion might have been added.

The distinction between *Atom* and *Molecule* in some writers is ignored, and the usage of those who treat them as equivalent is sanctioned.

The senses put upon *Chemism* and *Specialize* in the present Naturalistic controversy, are hardly brought into clear view.

As regards *Conscience*, the profound view taken by Baader and his school is not noticed. Baader lays great stress on the etymological force of the word, and interprets it as a sharing in the Divine knowledge of ourselves. "Man has this knowledge only because he is known; as Plato says, the eye of his spirit finds itself only in the eye of another Spirit, and his knowledge comes to him, not as the Rationalists say, *per generationem aequivocam* or of himself, but by participation, by his being brought into a knowledge which as related to him is an *à priori* and lasting." And for the *cogito, ergo sum* of Des Cartes, Baader would put *Cogitor, ergo cogito, ergo sum*. Anton Günther takes much the same view.<sup>2</sup>

Under *Creationism*, Frohschammer's theory of "mediate creation" might have been mentioned.

The definition of *Death* assumes that the spiritual body has not a physical nature, or else that the spirit is disembodied at death, and we doubt the truth of either position.

<sup>2</sup> See C. B. Schlüter: *De Conscientiæ Moralis Natura atque Indole*. Münster, 1851. Prof. F. D. Maurice in *What is Revelation*, p. 289-90, seems to accept this view.

Under *Deist* and *Theist*, Kant's very peculiar discrimination between the two words is not noticed.

The definition of *Kabala* by Fleming is one of his worst. It is that of a man who stands completely outside of and away from his subject, but has gathered up some details about it. But neither Dr. Calderwood nor Dr. Krauth has supplemented it. For "Hosenroth" read "Christian Knorr von Rosenoth." The chief authorities after Franck, are Tholuck, Freystadt, Ginsburg, and Molitor's *Philosophie der Geschichte oder über die Tradition im Alten Bunde*, 5 vols., 1834-53, which last Fleming quotes in a partial French translation under the word *Tradition*, with which it has little to do. Fleming's dates for the *Sohar* or *Zohar*, and the *Scpher Fesira* or *Jiecirah* (not *Tetsira*) are now rejected by everybody but A. Franck, and those works are assigned to the Middle Ages.

The definition of *Miracle*, by Calderwood, does not represent any view but one. That of those who, with J. P. Lange, regard a miracle as the restoration of the divine order where disorder has occurred, or as the breaking through of a higher order into the sphere of the lower, is not referred to; and Strachey and Mozeley might have been mentioned among the authorities.

On *Method*, Coleridge we think at least as high authority as Des Cartes.

Calderwood's definition of *Mysticism* is far inferior to Dr. Krauth's own in *Johnson's Encyclopedia*, to which reference is made.

The definitions of *Nation*, from Temple and Krug, are worth quoting, but they both miss the mark. They define by what is accidental to some nations, not essential to all. Rev. E. Mulford's book on *The Nation*, would have furnished far better definitions, both his own and those of other political speculators.

The theological sense of *Economy* might have been given, with a reference to Newman's *Arians*, pp. 66-79 (third edition).

Under *Pantheism* both Master Eckart and Jacob Böhme are referred to, but neither was a Pantheist. Eckart indeed said things which led his enemies to offer that charge, but he distinctly declares that "God and I are one, not in being, but in beholding." Böhme is the greatest enemy of Pantheism, as Baader, Hoffman, Hamberger and others have shown. He has been charged with being such because of the gross misunderstanding into which even Schelling has fallen, of confounding "temporal nature" and "eternal nature," and thus, as he himself says, "putting cows and calves

into heaven." Hegel (who had read only Böhme's first work), Feuerbach and H. A. Fechner claim him as a Pantheist, and Staudenmaier, Neander and Hunt treat him as such. C. H. Weisse and F. D. Maurice are in doubt. F. C. Oetinger, J. U. Wirth, W. L. Wullen, F. Schlegel, Moritz Carriere, J. Sengler, I. H. Fichte, F. C. Baur, the later Schelling, F. von Osten Sacken, Lutterbeck, Fr. Bleek, J. Huber, K. P. Fischer, and indeed everybody (except Fechner, Feuerbach and Weisse) who has made his writings a special subject of study, describe him as a Theist. It may be said that he ought to be mentioned in this connection because he is so often spoken of in it; but those who feel an obligation to his writings will not be pleased that Dr. Krauth has even *seemed* to give his sanction to this slander.

The definition of *Revolution* does not bring into view its nature as an intended break with the past. Baader contrasts it with Evolution.

Under *Rosicrucians*, Fleming treats us to the mythological story of Christian Rosenkreutz's life. There never was any such person, except in Valentine Andrea's head, and in the noddles of those whom he duped. J. S. Semler (1786) is the authority on the subject.

Calderwood's definition of *Socialism* would suit Communism better. The former does not "advocate community of property," but the control and direction of industry by government. That of *Saint-Simonism* ascribes to the founder of the school plans of social reform which originated with his more practical disciples after his death.

As an economist, we are unable to accept the definition of *Value*. It is chiefly an emphasizing of the two words "intrinsic" and "extrinsic," and both in a non-natural sense. Gold money has intrinsic value; paper money has none, we all say. Mr. Carey's definition, "the measure of nature's resistance," seems to us at once more real, more practical and clearer.

Authorities which might be added: *Alchemy*, Schmieder's *Geschichte*; *Automaton*, Jonathan Edwards, Huxley, Clifford; *Being*, Jonathan Edwards; *Casuistry*, Pascal, De Quincey, F. D. Maurice *On the Conscience*; *Culture*, Matthew Arnold, Shairp; *Negation*, (Hegelian,) K. P. Fischer; *Ontology*, Ubaghs and Dr. Ward in *Dublin Review*; *Psychopannychia*, John Calvin; *Trichotomy*, Franz Delitzsch, K. F. Göschel, and J. Beard.

ROBT. ELLIS THOMPSON.

## NEW BOOKS.

THE CARLYLE ANTHOLOGY. Selected and arranged, with the author's sanction, by Edw. Barrett. Pp. x. 386, 8vo. New York: Henry Holt & Co.

The same firm have recently published a Milton Anthology, and the two works suggest the question whether the greatest master of impassioned prose of the Victorian era is to be known to posterity, like the great master of that style in Commonwealth times, through anthologies and selections. It is true that Milton wasted much of his power upon the details of controversies which have lost interest for us. But the *Areopagitica* and several of his lesser treatises are of interest as broad and universal as *Past and Present*, while even his controversial treatises contain passages which in vigor of stately eloquence have never been surpassed; never equaled, indeed. And yet who reads Milton's prose? Will Carlyle's be read? To those of us who are old enough to have received the vigorous moral shock administered by Carlyle to the generation now passing the acme of life, the question seems almost blasphemous in its insinuation. We feel that if any books of our times deserve to live, then *Heroes and Hero-Worship*, *Past and Present*, *Sartor Resartus*, *The French Revolution*, and the *Essays* of the second period are they. We did not read them with critical coolness in those old days. We could not take them to pieces; they took us to pieces. For once we found that books are not the mere idle amusement of a literary life. This man's word pierced to the dividing of joint and marrow, and brought us into the presence of the reality which must judge us, not be judged by us. But a new generation is growing up, who read about Carlyle, before they read Carlyle. They come to his works with a certain preparation for what is unusual in them, and therefore incapacitated from being filled with the admiration which we felt in those days and weeks of surprise and enthusiasm. They have learnt to analyze his style, to investigate the secrets of his power, to discount his peculiarities. It is a pity of them, for they will never find either the use or the delight in his works, which they conveyed to those to whom the Titan was revealed in his greatness.

The selections presented in the present volume are made with great judgment. They are arrayed under six rubrics, suggested by the leading themes of Carlyle's works: (1) Life and the Conduct of Life; (2) Portraits and Characters; (3) Literature and the literary Life; (4) Religion; (5) Politics; (6) Historical and miscellaneous. Mr. Carlyle's writings lend themselves to such a selecting process very readily. Quotable passages abound in them, and his literary method, his effort at vividness of presentation, his illumination as by a lightning flash, makes every picture in a certain sense complete. And therefore the book is intelligible in itself, and is suit-



able alike for those who are not familiar with Maister Tummas, and wish to know him better, and for those whose memories of past reading will be exercised at every step. One selection we would gladly see omitted. The painful description of Coleridge's last years, taken from the *Life of John Sterling*, is probably the worst-natured thing Carlyle ever wrote. It has a value, as showing the limits of his own greatness, and his utter incapacity, in spite of some earlier vague eulogies of Kant, to understand the philosophers. But we think it a pity that his great literary power should have been used to stamp on the retina of our generation this photograph of a man as great and as lasting in his influence as any whom Carlyle ever knew, and whose weaknesses the world of thinkers would gladly cover with the mantle of filial charity.

Carlyle's style was a scandal to a generation which thought it admired Addison, but in reality idolized Johnson and Burke. It is thoroughly Anglo-Saxon in its construction, but not in its vocabulary, being in this respect the reverse of Cobbett and Tennyson.

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RECOLLECTIONS OF SAMUEL BRECK. With Passages from his Note Books (1771-1862). Edited by H. E. Scudder. Pp. 316, 8vo. Philadelphia: Porter & Coates.

"Read biographies, but especially autobiographies," Carlyle advises us. American literature is not specially rich in either department. We have few biographies that deserve to stand on the same shelf with Mrs. Childs's "Isaac T. Hopper: A True Life;" and few autobiographies to put alongside that of Benjamin Franklin. Mr. Breck's *Recollections* are therefore the more welcome, as belonging to a department of literature which is anything but overdone, and as forming at the same time a really interesting and readable book. And to Philadelphians it comes with the special recommendation of being a Philadelphia book.

Mr. Breck's life was not in any sense heroic or marked by striking adventure. But he was unusually furnished with opportunities of seeing and hearing things worth the telling. He was born in 1771, and in Boston, where his father resided until 1792, when he removed to Philadelphia because of his disgust at the high taxes imposed by his native city. Our author was sent to France in 1782 to receive his education at the Benedictine school of Soreze, returning in 1787, and again visited Europe in 1790-1, and heard Mirabeau address the National Assembly. With the rest of his family, he came to Philadelphia, and in 1797 built the Sweetbrier mansion on the Schuylkill, near Belmont, where he lived till 1838, and after that in the city. It is the period till 1797 that the narrative of his life, begun in 1830, really covers, but this has been supplemented from his diaries down to our own times.

Mr. Breck is an amusing and cheery narrator of what he had seen and heard, and if not always accurate in his recollections of

what had happened half a century previous, he is always candid, and valuable as a witness as to the broad characteristic of the period he describes. For a man of over sixty, he writes with remarkable freedom from the weakness of making unfavorable contrasts between later and earlier periods. He is no *laudator acti temporis*. He describes American society of the period which followed the Revolution, in such a way as might cure some good people of the historical and political blues, which at times affect their righteous souls. Some of our national heroes, notably his Excellency John Hancock, rather suffer by his candor; but if the whole truth were told, John Hancock would fill a very humble niche in the esteem of the American people. In 1787 or 1788, and until 1790, our author was apprenticed to commerce in a Boston counting-house. "The lessons taught in this counting-house were of the most immoral character, chiefly owing to the disturbed and feeble state of the old Confederation Government, and inexecution of the revenue laws of the Commonwealth of Massachusetts. So soon as a vessel arrived, one-half the cargo was hoisted into the upper part of the store, and the other half only entered at the custom-house, and thus we were initiated into the secret of smuggling. . . . The only apology was the universality of the custom. The laws were a dead letter; the States, collectively and individually, were bankrupt; the public debt at ten or twelve dollars for a hundred. Each State was pulling against the other, and the fruit of our seven years' war did not then appear worth gathering. Disunited from Maine (*sic*) to Georgia, the elements of self-government seemed to be lost, and we were fast sinking into anarchy and confusion." And not only in great matters but in small things he notices equal improvement. Housekeepers who groan over the servants of our day, may thank their stars that they did not live when drunkenness, incontinence, and wholesale cheating was the rule among that class of persons, and had to be tolerated because good servants were too rare to be looked for. Mr. Breck, after recording his father's experience and his own, adds: "It is sufficient to say that the demeanor of servants at this day (June, 1830) is improved, and I hope I may with justice add, improving, for there is still ample room for amendment."

While the whole book is readable, some parts of it are very amusing. Such are the account of Tracy's dinner to d'Estaing with the frog soup made of whole frogs in their green hides, expressly to suit French taste; and the account of President Washington's visit to Boston, and his diplomatic tussel with Gov. Hancock.

We are obliged to complain that the editor has allowed one passage (p. 291) to appear just as the author wrote it, as it must give great offense to the friends of a gentleman still living, and of much greater eminence than Mr. Breck.

FIRST LOVE IS BEST. A Sentimental Sketch by Gail Hamilton.  
Boston: Estes & Lauriat.

WHAT THINK YE OF CHRIST? The Testimony of the English Bible. Same author and publishers.

The one woman among our American humorists, has found leisure among her hours of castigation devoted to Secretary Schurz and the reform editors, to try her hand at fiction and theology. In neither department is she altogether a novice, for many of her sketches trench upon both, but this is her first formal venture in either. Her novel is not remarkable for any brilliancy in the construction of the plot or the delineation of character. A little lady finds one lover altogether worthless of her, after being taken in by his idealism and his surface. She loses her father, who dies a bankrupt, and then she marries her common-place banker neighbor, whose first proposal she had rejected. She does not love him, or thinks she does not, but he brings her round, and the book ends very happily and pleasantly. The chief demand for psychological skill is, of course, in the last chapters. The earlier scenes are pretty plain sailing, and the contrasts between the simple-hearted and earnest girl and her polished and worldly lover are finely depicted. And in the more difficult part, there is at least a fair approach to success. A situation which would have taxed Charlotte Brontë's powers, is handled so as to give the reader no jar by sudden transitions or inconsistencies. We feel that Miss Howe might have looked in and seen all this, and no more than this, and yet we feel there would have been more for a greater analyst of character to tell us.

The best things in the book are the bright keen sayings, when Miss Howe speaks through her characters. Mr. Glynn, the hero, is loose in his theology; he has too good an opinion of mankind to believe in the orthodox doctrine of the Fall. He thinks his townsmen "a pretty clever set of fellows. They generally are honest and civil, and they bear each other's burdens most of the time, though they may occasionally set them down and swear at them." He does not call himself a Unitarian, though he thinks he might, because the name means so little. "Any one who has no creed at all, but merely believes he ought to be decent, is allowed to call himself a Unitarian."

In her little theological venture Miss Howe approaches this question of the great divide in New England, between Unitarian and Orthodox, especially as it is intensified by the science-ward or naturalistic drift of liberal thinking. She takes it up in an irenic spirit, but she gets into dangerous ground. She speaks of Christ as an "emanation" from God, and asserts his divinity in much the same Sabellian sense as Dr. Bushnell and Rev. John Miller do. She rejects the orthodox view of many points—inspiration for instance—and labors to show, as Locke did, the reasonableness of Christianity from a common-sense standpoint—that of the common

sense of the second half of the nineteenth century. We hardly think the work worth doing. All such apologies, as Lessing long ago pointed out, must present far more weak points for attack, than does thorough-going and hard-headed orthodoxy.

IDOLS AND IDEALS, with an Essay on Christianity. By Moncure D. Conway, M. A. Pp. 137. New York: Henry Holt & Co.

THE CRADLE OF THE CHRIST. A Study on Primitive Christianity. By Octavius B. Frothingham. Pp. x. 233. New York: G. P. Putnam's Sons.

PERSONAL IMMORTALITY and Other Papers. By Josie Oppenheim. Pp. 98. New York: Charles P. Somerby.

THE ANONYMOUS HYPOTHESIS OF CREATION. A Brief Review of the so-called Mosaic Account. By James J. Furniss. Pp. 55. Same publisher.

QUESTIONS AWAKENED BY THE BIBLE. By the Rev. John Miller, [of Princeton, N. J.] Pp. 152. Philadelphia: J. B. Lippincott & Co.

Not a very orthodox batch of theology this. Every one of these writers is, from his own point of view, attacking the convictions upon which Christian society rests, with the assurance that when the foundations have been eliminated, the edifice will be only the more stable.

Mr. Conway is the ablest of the five. If he would only take to heart John Stuart Mill's maxim, "You have not refuted a man until you have refuted the best statement of his case," he would write somewhat differently. He broadly says, for instance, of Christianity, that its fruits "though not altogether evil, were preponderantly evil." "The chief root of its evil was that it taught mankind that their supreme duty is to believe certain propositions; and the very worst sin man or woman can commit is to disbelieve those propositions." Now if Christianity means anything, it means the sum of truths and of influences connected with the teaching of the life of Christ, and historically (but *ex confesso* imperfectly) transmitted through the channel of the Christian church. Now, the fact is, that Christ taught the very contrary of this, and that the greatest and most Christ-like doctors of the church taught its direct contrary. Mr. Conway prefers to learn what Christianity is from Mr. Moody. It certainly simplifies his work.

Mr. Frothingham's object is to give American readers, who care to have it, a notion of the results reached by the negative school of New Testament criticism, and to show what *caput mortuum* of fact survives their destructive analysis, and then to show the religious uses to which this slight remnant can be put. We think his book deficient in exactness of thought, and also at times in exactness of learning. For instance, he makes Paul borrow from the Cabalah the notion of Adam Kadmon, of which we have no trace in Jewish literature earlier than the Middle Ages.

Mrs. Oppenheim is a professed materialist, but a believer in virtue and goodness. She wants no theological basis for ethics, and thinks the world would be all the more virtuous for giving it up. How the conception of right and wrong can be valid for a world in which there is no such thing as freedom, she does not say. Who would call an action "right" or "wrong," or feel for it any approval or disapprobation if he knew that it was determined by laws and forces as irresistible as those which move and direct the planets? Mrs. Oppenheim's own womanly virtues are, on her hypothesis, no more meritorious than is the color of her eyes, and have no stronger claim on our respectful regard.

Mr. Furniss labors to show that the results of modern science cannot be harmonized with the two first chapters of Genesis. He is a literalist of the first water. No modern historian, no Darwin even, could stand the tests of a critical method, which finds a contradiction whenever things are mentioned in a different order, or a falsity where the order of mention is not that of occurrence.

Mr. Miller reminds us of Macaulay's character of "poor Whiston, who could believe anything except the Trinity." He holds to nearly all the orthodox creed, including the absolute deity of Christ, but rejects the Trinity, declaring that Father, Son and Spirit are but three modes of the divine manifestation, and that there might be a thousand such. He also rejects the natural immortality of the soul, and the impeccability of Christ's human nature. For these opinions he has been deposed.

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MESMERISM, SPIRITUALISM, ETC. Historically and Scientifically Considered, being two Lectures delivered at the London Institution (with Preface and Appendix), by William B. Carpenter, C. B., etc. Pp. xiv. 158. New York: D. Appleton & Co.

Unquestionably the most important book against Spiritualism that has appeared since those of Braid and De Gasparin. Dr. Carpenter's very high reputation as a physiologist, a keen scientific observer, and the fact that he is not prejudiced by any disbeliefs in the reality of spirit, must all command attention to his emphatic assertion, that after paying a very large amount of attention to the subject of spiritual manifestations, he is convinced that they have no causes except those with which we live in daily familiarity, and that a very large amount of them are pure imposture. He regards spiritualism as one of the Epidemic Delusions, which have occurred in all recorded ages, and first discusses its modern congeners Mesmerism, Odylism, Electro-biology and the Divining Rod, giving the evidence against the supernatural claims made for each and all of these. In the second lecture he pushes the matter closer home, giving his reasons for rejecting pretensions of modern Clairvoyance, Table Turning and all the superstitions of Spiritualism, dwelling especially on the methods of deception, and the processes of self-deception, involved in these.

In the main we fully agree with Dr. Carpenter's view, but we think he very needlessly minimizes the unusual, the extraordinary element in the phenomena. He is so determined to exclude the supernatural, that he reduces everything to the common-place. And just here, we are convinced, is the weakness of his work, as intended to bring conviction home to believers or half-believers in the spiritualistic theory of these phenomena. They see things which they cannot explain on these every-day principles of Dr. Carpenter. And they very easily but quite wrongly infer that the attempt to account for these on purely natural ground has broken down.

The point of our dissent is best expressed by the question: Are our every-day notions as to the limits of the human mind's activity in knowing what goes on in other minds, and of the human will's activity in moving substances which are neither parts of the body nor in contact with it, ascertained to be scientifically correct by our observation of the cases which seem exceptional? Dr. Carpenter does not absolutely answer this question in the affirmative, but he comes as near to that answer as he can get, and thus, we think, deprives himself of the best weapon against the superstitions which he is combating.

One point of interest presented by Dr. Carpenter's work is the very large collection of facts, many of which are not accessible elsewhere. Especially is this true of Dr. Braid's investigations published in 1852, but by no means accessible to readers of our days. One very curious fact which he recalls, is the failure of all the mediums and clairvoyants to claim the bank-note, which Sir James Y. Simpson had deposited in an Edinburgh bank, to be given to the man or woman who would tell its number. We confess we should have thought them able to do this, at least after meeting Dr. Simpson, and recalling the matter to his attention. And we are curious to know whether he evaded all intercourse with these people after making his offer. In that case, they certainly could not tell the number.

We think that Dr. Carpenter's book is likely to do a deal of good, and we hope that its American publishers will succeed in securing it a very wide circulation.

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### BOOKS RECEIVED.

Boston: Monday Lectures. *Biology*, with preludes on current events. By Joseph Cook. With three colored plates after Beale and Frey. 12mo. Pp. viii., 325. Cloth, \$1.50. Boston: Jas. R. Osgood & Co. [Porter & Coates.

*Economics, or the Science of Wealth.* By Julian M. Sturtevant, D. D., LL.D., Professor of Political Economy in Illinois College and Ex-President of the same. 12mo. Pp. xvii., 343. Cloth, \$1.75. New York: G. P. Putnam's Sons. [Claxton Remsen & Haffelfinger.

History of French Literature. By Henri Van Laun. Vol. III. From the end of the reign of Louis XIV. till the end of the reign of Louis Philippe. 8vo. Pp. xvi., 467. Cloth, \$2.50. G. P. Putnam's Sons. [Claxton, Remsen & Haffelfinger.

Annual Report of the Board of Regents of the Smithsonian Institution, showing the operations, expenditures, and condition of the Institution for the year 1876. 8vo. Pp. 488. Cloth. Washington: Government Printing Office.

Bulletin de L'Academie Royale des Sciences des Lettres et des Beaux-Arts de Belgique, 1877, No. 8. Brussels: F. Hayez, Printer of the Royal Academy.

The Tower of Percemont. By George Sand. *Collection of Foreign Authors, No. IV.* 16mo. Pp. 227. Paper, 50 cts. New York: D. Appleton & Co. [Porter & Coates.

Physiology of Mind. Being the First Part of a third edition, revised, enlarged and in great part re-written, of "The Physiology and Pathology of Mind." By Henry Maudsley, M. D. 12mo. Pp. xix., 547. Cloth, \$2.00. New York: D. Appleton & Co. [Porter & Coates.

Diana. By Susan Warner. 12mo. Pp. vi., 460. Cloth, \$1.75. New York: G. P. Putnam's Sons. [J. B. Lippincott & Co.

History of the Ottoman Turks, from the beginning of their Empire to the present time. By Sir Edward S. Creasy, M. A. (Late Chief Justice of Ceylon.) 12mo. Pp. xxi., 558. Cloth, \$2.00. New York: Henry Holt & Co. [Porter & Coates.

Pauline. By L. B. Walford. *Leisure Hour Series.* 16mo. Pp. iv., 331. Cloth, \$1.00. New York: Henry Holt & Co. [Porter & Coates.

Through Rome On. A memoir of a Christian and Extra-Christian Experience. By Nathaniel Ramsay Waters. 12mo. Pp. 352. Cloth, \$1.75. New York: Chas. P. Somerby. [J. B. Lippincott & Co.

The Principles of Science. A treatise on logic and scientific method. By W. Stanley Jevons, LL.D. (Edinb.), M. A. (Lond.), F. R. S., Fellow of and Professor of Political Economy in University College, London. Second edition, revised. London and New York: Macmillan & Co. [Claxton, Remsen & Haffelfinger.

The Story of Avis. By Elizabeth Stuart Phelps. 12mo. Pp. 457. Cloth, \$1.50. Boston: Jas. R. Osgood & Co. [Porter & Coates.

Dolly, a Love Story. By Mrs. Frances Hodgson Burnett, author of "That Lass o' Lowries." *International Series No. 21.* 12mo. Pp. 319. Muslin, \$1.25. Philadelphia: Porter & Coates.

Forbidden Fruit. From the German of T. W. Hacklander. By Rosalie Kaufman. *The Cobweb Series.* 16mo. Pp. 262. Cloth, \$1.50. Boston: Estes & Lauriat. [J. B. Lippincott & Co.

Eleventh Biennial Report of the Superintendent of Public Instruction of the State of Illinois, for the two years ending Sept. 30th, 1876. 8vo. Pp. 512. Cloth. Springfield: D. W. Lusk, State Printer and Binder.

The International Conference on Education held at Philadelphia, July 17 and 18, in connection with the International Exhibition of 1876. Department of the Interior, Bureau of Education. 8vo. Pp. 92. Washington: Government Printing Office.

Report of the Commissioner of Agriculture of the Operations of the Department for the year 1876. 8vo. Pp. 447. Cloth. Illustrated. Washington: Government Printing Office.

The United States as a Nation. Lectures on the Centennial of American Independence, given at Berlin, Dresden, Florence, Paris, and London. By Joseph P. Thompson, D. D., LL.D. Large 12mo. Pp. xxvii., 323. Cloth, \$2.50. Boston: Jas. R. Osgood & Co. [Porter & Coates.

THE  
PENN MONTHLY.

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DECEMBER.

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THE MONTH.

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THE news from the East continues favorable to the Russians in a very high degree, and even Constantinople begins to take its cue from the English, and to talk of the war having gone far enough to permit of peace with no loss of glory to either side. The fall of Kars under the Russian assault, and the complete investment of Erzeroum and Plevna, are events which promise such an end to the struggle as we had hoped. In the taking of Kars it was seen that the Russian soldier was capable of at least as good fighting as his opponents, when led by generals in whom he has some confidence. The Turks were nearly if not quite as strong as the attacking force; they had all the advantages of a splendid position; they fought with the desperate valor which makes an assault upon their posts so dangerous. But Ivan seems to have forced his way up the hills, across the intrenchments, and into the fortifications, with all the *elan* of a French zouave, and sent us news at once of the attack and of the capture. This victory is of farther importance, as it relieves the Russians before Erzeroum of the disadvantage of fighting with posts in their rear still untaken, and enables the commander in Armenia to employ all his forces to hold his position before Erzeroum, and to force its surrender.

The investment of Plevna will have ended one way or another, before this can reach our readers. The garrison can hold out till about December 1st, but no longer, and the closing days of No-



ember will therefore be the time for great and final efforts to come to their relief with men, ammunition and provisions. The vigor and skill with which the preliminary measures of the blockade have been carried out, and the uniform success of the Russians in dislodging the Turks from all the posts necessary for the purpose, seems to indicate that there are brains enough in control of affairs to prevent any second rush of supplies into the fated city. The wearisome and wasteful process of sifting a large quantity of princely and official chaff to find a man, seems to have reached a satisfactory conclusion in Bulgaria as well as Armenia. And if Plevna falls, and the forces which now surround it are set free to operate throughout the Province, there will probably be no Turkish army north of the Balkans when the Czar goes back to St. Petersburg for the Christmas festivities.

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THE Sultan is evidently convinced that he must fall back upon his dear friends in England, if he is to secure even a disgraceful peace with permission to stay on the European side of the Bosphorus. But he is making that application too late. England never takes up the spoiled jobs, whose managers have given them up in despair. She is commonly of Mr. Bigelow's opinion, that it's a waste of yeast to put it into a batch of dough which failed to rise the first time. Cynics would say that this is because John worships success, and might point to his rapid discovery of the rightfulness of the Northern cause after Chattanooga. It may be partly so; but it is also in great part due to the methods of English policy. England does not, and for a long time has not, fought with her muscle in any European struggle so much as with her purse. She wages wars by subsidies, and where she sends her relatively small army into a fight, it is as the spear-head for which her money has bought a shaft of foreign wood. For this reason she cannot take up Turkey's quarrel at this point, as Disraeli hoped to make her at the beginning. And for the same reason she cannot either dictate or domineer, when it becomes a question of the continuation of the war or the conclusion of a peace. On the other hand, the peace party in the English Cabinet has been growing in strength, so that the Premier's policy is now definitely recognized as simply impossible.

At the same time we hear of proposals in circulation through the diplomatic world of Europe, looking toward a termination of

the war on the basis of a partial autonomy for the Christian provinces of Europe. Such proposals are worthy of Dame Partington. No one who understands the nature of the collision between two civilizations, which is going on in Turkey, can for an instant accede to a plan of compromise, which, like all other compromises, has no real meaning except postponement. Russia might very fitly answer:

It's war we're in, not politics;  
It's systems wrestlin' now, not parties;  
An' victory in the end will fix  
Where longest will an' truest heart is.

These proposals belonged to the time of negotiation before the war. Russia once offered to take less than this—so much less that the friends of the Christian cause thought her leaders but half-hearted. But now that the sacrifices of war have been made, Russia should not cease till the Pashas and their master are driven from European soil.

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FRANCE divides with the war the attention of the world. The dilemma created by the dead lock between the Executive and the Legislative authority is due simply to the pigheadedness of the one man, at whose word every regiment in France will march. It is not any fault of the Constitution, which accepts the English principle of ministerial responsibility, and thus binds the Executive to govern in accordance with the views of the majority in the Legislature. It is the resolve of MacMahon that he will not so govern, that instead of that he will have recourse to all those weak but irritating measures, which may postpone the inevitable for a month, but not till New Year's Day. The ministry have resigned, the Duc Decazes having broken ranks by his downright refusal to resist the national will. The Orleanists in the Senate, knowing that only the Bonapartists have anything to gain by a collision, have declared that they will not support a proposal for the redissolution of the Senate, if the Marshal should make one.

But a new ministry, a bundle of men of straw, has been got together, with the certainty of being sent after their predecessors by the first vote on a decisive question. The Marshal may, indeed, go on forming ministries *ad infinitum*; he may muster all his *maires* and *prefets* into the service before he has done. But at every step he will be met by the same lawful and constitutional resistance, and, like the magician's familiar, he will see his ropes

of sand unmade as fast as made. If there were anything to wait for, any possible Ulysses in the distance, this Penelopean task might have some meaning. But as matters stand, it is simply putting in the time for the delay's sake, not for what will come after the delay.

The one gleam of chance for MacMahon comes from a blunder of his Republican unfriends in the *Corps Legislatif*. In view of the existing complication, it was clearly their wisdom to raise no new issues, but to confine themselves to the one on which a majority of the Senate could not be rallied against them. Until the question of the ministry was decided, they should have brought up no other, but have stood calm and impassive, waiting for an answer. In this attitude, they would have had the practical control of both houses. But they came together overflowing with just indignation at the barefaced lying and terrorism which had been employed to carry the election, and which had reduced their majority by forty. They had boasted that they were certain of the whole three hundred and sixty-three, and even hoped to raise to four hundred. Under the taunts of the monarchical organs and the governmental officials, they voted an investigation of the methods employed during the election, thus raising the issue as to the constitutional right of the government to use its influence with the electors. They have thus given the Marshal the rag of a pretence that he is the champion of the constitution and they its assailants, and to present himself before the Senate as unable to comply with the demands of the Assembly for a ministry which shall represent their views, since those views are inconsistent with constitutional government. He has thus virtually secured the pledge of the Orleanists in the Senate to vote for the redissolution in case of a collision between the Marshal and the Assembly on this question.

To do the Monarchists justice, they have shown themselves better masters of the game than their opponents in this instance. They have taken the very finest advantage of a bad Republican move, and if Grevy and Gambetta are not more careful the fruits of their popular victory will be lost.

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THE elections transcend in point of importance all the other events of the month, although they occur in an "off year." For the elections of a year which has seen a President inaugurated, and a change of executive policy begun, cannot but be of consid-

erable significance. The defeat of the Republican candidates in our own State, as well as in New York, was not unexpected, and while we hear from all quarters that the political leaders are not disheartened, we cannot but recognize that the fact is one of very serious omen for the Republican party. It was owing, we think, to the continuance of the hard times. Nothing makes people so dissatisfied with the party in power as the pressure of low wages, scant employment and general distress. At all times such circumstances tend to drive men into opposition, but when, as in the present case, people are everywhere told that the hard times continue because of what the government has done or left undone, or has been prevented from doing as yet, men have additional reasons for voting with the opposition, or abstaining from exercising the elective franchise. For nearly twenty years the Democracy has been the party of discontent. It has grown almost pessimistic in its long tenure of "the outside of the house." And the wide spread of a corresponding discontent among the middle and the poorer classes of voters, cannot but prove its harvest time. It makes its hay when the sun refuses to shine.

A second reason of dissatisfaction and alienation from the Republican party is undoubtedly the money question. Far more than those who are ready to vote for a "Greenback ticket," there are who simply abstain from voting at all. Many who ten years ago were regarded as committed for ever and without reserve to the party, rejoice over its defeat in Ohio, and were not sorry to see that defeat repeated in Pennsylvania, though they would not vote for the Democratic nominees.

On the other hand, the President's order forbidding office-holders to belong to political organizations, has had the effect, not only of depriving the party in power of the services of a considerable amount of political energy, but even of placing it at a decided disadvantage as compared with the party in opposition. So long as the present wretched system of temporary appointment and frequent removal continues in force—and we have no promise of any better—every political contest must be more or less of a conflict between those who have the offices and those who want them. That conflict can only be got rid of by restoring the old principle of tenure for life or good behavior, which was universally maintained until the time of Jefferson, and generally so until that of Jackson. As long as such places are in reality and truth the prize

of party victory, so long will men fight for them at the ballot-box. But the President's order deprives the contestants on his own side of all the ordinary weapons of resistance, without, in the least, disarming those on the side of his political enemies. It sends the Republican party into the struggle stripped of all the most effective and serviceable auxiliaries which were formerly at its disposal. The prominent politicians, who best know how to do what is best for their party as well as for themselves, to secure majorities as well as nominations, are virtually excluded from partisan activity on the Republican side, but are as active as ever on that of the Democrats. The recent defeats of the party, in those States where the Republican preponderance is not enormous, is undoubtedly to be traced partly to the operation of that Civil Service order.

Our readers know that we are not pleading for a mere return to the old order of things. On the contrary, we desire to see a most radical reform of an evil, which Messrs. Hayes, Evarts, Schurz and Curtis are treating most superficially and inadequately. No real reform of our civil service is possible, until the principle of removal from office for anything but malfeasance in office, is given up, and that of tenure for life or good behavior is established. And these superficial reforms of the present administration betray their lack of true principle by the practical absurdity of their results.

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THE question of party government, its wisdom or its unwisdom, which has so often been discussed by advanced thinkers in England, is brought to attention at present by the relation of President Hayes to the party which elected him. The matter is all the more complicated with us, from the fact that our Constitution recognizes no such distinctions, while the more elastic and traditional Constitution of England\* does distinctly recognize it in the theory of ministerial responsibility. The Constitution of the United States might be read and studied most thoroughly by a stranger, without his obtaining anything like a real insight into the actual, working forces of our government. On many points he would very likely carry away a most inaccurate impression. He would possibly imagine that the President of the United States was selected by the presidential electors, purely on the ground of his services, his great eminence, and his high character; while he would conceive of Congress as a body chosen on the grounds of large experience and lofty wisdom, all equally associated with the Exec-

utive, and altogether free to act upon any convictions which they might arrive at in the course of their debates. The fact that the President is a party nominee, elected by a party majority, and associated with a part of Congress by ties which do not connect him with the rest, he would nowhere find officially recorded.

This failure to honestly and explicitly accept the theory of party government, and to provide expressly against its abuses, is therefore one of the points on which the Constitution falls short of its English prototype. And the collision of theory and practice is one of the anomalies out of which our political confusion partly springs. The Executive continually finds himself involved in a conflict of duties; the one set defined by the Constitution and provided for in the laws, the other growing out of contracts, promises and understandings to which the law has given no sanction. His natural impulse, if he be a right-minded man, is to insist upon the former class of duties to the neglect or the great subordination of the other—to say, “Gentlemen, I am the President not of the party, but of the nation.” But he will be continually met by protests, whose force he cannot help feeling. He will be reminded that he only holds his place by the choice, the efforts, the sacrifices of the party, and that after all our government is and always has been conducted by party methods, and that therefore the party have claims upon him. And in acceding to these claims, he is obliged to feel that he is giving up something of the high ideal of his office, and coming down to a lower level of political morality.

In part this collision of duties is the bad effect of party government itself. That method is certainly not an ideal one. But we believe it is very greatly aggravated by the failure of the Constitution and the laws to take cognizance of party obligations, and set some limit to them. Not that the laws do altogether ignore them; it has been found absolutely necessary to recognize them in our election-laws, and we believe it will yet be found necessary to extend that recognition still farther. And just at present, the mischief is made still worse by the disorganized condition of the parties themselves. In every progressive community the natural and rightful line of party division is that between Liberal and Conservative; and when a great country like our own is in the formative stage, that line will separate those who believe in keeping power in the old local authorities, and those who believe in moving forward in the direction of strengthening the central government. Something like

this division has always hitherto existed in American politics, although the party of conservatism managed to give to its policy a certain appearance of liberality, while the real party of natural progress, the Federalists and the Whigs, managed to let themselves be put in the wrong before the people on various questions of detail. But at present the ideal element has pretty much vanished out of our politics. There is nothing distinctive of the Republicans, except a tenacious adherence to departed issues, and a decided admiration for themselves: nothing characteristic of the Democrats, except a deep-seated discontent with the Republicans.

The protest recently made to the President by the Republican caucus of the Senate, was nothing but a *testimonium paupertatis* in this regard. No reference was made to any important political principles; the party and its interests were the ultimate facts upon which they based their appeal, and their claim to control appointments and to reject Democrats. And if the most respected of its leaders have nothing better than this to say, if all that they can add to it be mere matter of detail and petty complaint, the sooner they make arrangements to bury their dead out of their sight the better. Parties exist for the sake of ideas and principles, and must at every step justify their existence by an appeal to these. And when a party leaves off speaking of its principles and begins to eulogize itself, it is little better than a corpse walking about to save its funeral expenses. Not that we think the Republican party is dead yet. But it is in a state of torpor. It has sound instincts, but few consciously formulated principles. And when it awakens to a sense of its vocation, its leaders will have something better to talk about than its services in the past, or its claims in the present.

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THIS decade is enjoying the sight of a very honest and incorruptible series of Congresses, but we fear that the general impression of their proceedings will not be such as to raise honesty and incorruptibility in the popular esteem. For the sake of those virtues themselves, it would be well if they were always more closely united to capacity and energy than they are in the present instance.

The special session is sure to last until the time comes for the regular one to begin. The appropriation bills drag their weary way through the House, the majority being in no haste to pass them. That for the Army has been the occasion of a debate which we must pronounce disgusting. Instead of voting to raise

the force to the number needed for actual service, a disposition was manifested to reduce it; and instead of giving the soldiers the praise they deserved for their services in the recent riots, some were demagogues enough to hint their sympathy with the rioters rather than with the authorities. And in spite of recent experiences, and the piteous appeal of even the Governor of Indiana for the aid of United States troops, it was maintained that dependence should be placed solely upon the State militia for the suppression of such disturbances. In three several instances, the local militia grossly misbehaved during the labor riots; and in Pittsburg the militia from our own city were deserted by their allies, narrowly escaped massacre at the hands of the mob, and are now held up to public condemnation by the Pittsburg Grand Jury as the true authors of the riot and of the consequent destruction of property! Happily the United States Senate is still sane enough to put its veto upon these vagaries, and the bill as finally passed will not do the mischief which was sought, though it will not put the army upon a proper footing.

A very large part of the time of the session has been taken up with the silver and the resumption questions. The silver bill passed by the House would have taken the control of the amount of this sort of currency out of the hands of the government, by requiring the mint to coin silver dollars for any one who brought it the bullion. This provision we regard as wrong in principle. But we do see reasons to believe that in case the United States would resume its old silver currency, which it sacrificed to the commercial necessities of the Southern slaveholders, and in case we were to open direct trade with all parts of the East, silver might again attain permanence in value, and the country be furnished with a sound and standard metallic currency. It is possible that some of the advocacy of the measure is based upon the hope that the value of the dollar would be lowered by it, and the terms of outstanding contracts be made easier to the debtor class. And while we sympathize with men who mortgaged their property for dollars worth fifty-seven cents in gold, and have to pay the mortgage in dollars worth ninety-seven cents, we do not agree with them that the government should artificially depress, or artificially appreciate its currency for the benefit of any class. On the other hand, much of the opposition to the silver legislation is exactly like that of forty years ago. Certain sections of the country want



a gold currency for the sake of their foreign trade, and they raise the cry: "Let us have the national dollar in such a shape as will pass current all over the world!" What the substance is to be, they do not tell us. Our best customers for the future, the people most likely to purchase our surplus of manufactures, and with whom an extension of our trade is possible, are the silver-using communities. Gold will not pass current all over the world. It is but slightly used as money by the Latin, the Scandinavian, and the Slavonic nations of Europe. It is not used at all by the majority of the human race, the peoples of Asia and Africa. The Moslem and the English attempts to force it into circulation in India have utterly failed, and the banks of Calcutta have before now refused it even as the security for a loan in paper money. As to our trade with the gold-using nations of Europe, if the re-adoption of the old standard will tend to keep our purchase of luxuries within the limits of equality to our sales of necessaries—which is the worst that it can do—it will hardly be a national calamity. And we may note the fact that English economists as a rule favor the adoption of silver by the United States, as likely to restore that metal to steadiness of value.

As to the repeal of the resumption law, the very small majority it has secured in the House gives but little prospect of its success in the Senate, or with the President, if it should ever reach him.

As a matter of course, all the depression of business, and other monetary and commercial difficulties, are ascribed to the suspense created by these discussions. We are even told that Secretary Sherman cannot continue his funding operations because of the silver bill. How that bill can affect the new four per cent. bonds, which were always payable in silver, is hard to see. At any rate the Treasury has given us the figures of its recent funding transactions, which show that they stand just where they did months ago. Beyond a small popular subscription received at the outset, there have been no *bona fide* sales to investors, and the quantity taken by speculators, small as it was, has been enough to glut the bond market.

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THE Committee of Ways and Means, under the chairmanship of Mr. Wood, of New York, seem to have made up its mind to the preparation of a new tariff rather than the revision of that now in force. New rates of duties and new methods of assessment are

both promised us. As to the former, of course a reduction of duties is intended, and is anxiously desired by the importing interest in Mr. Wood's constituency, with a view to the revival of its business. We are convinced that some very mistaken expectations are based by our importers upon such a reduction. In certain branches of manufacture, the reduction of duties will have little or no effect; the price and the excellence of our native manufactures in those branches are such that their producers have nothing to fear from a fair competition with Europe. But on the other hand, a sweeping and severe reduction of duties at the present time would find other branches quite unable to continue their operations, and would compel the withdrawal of employment from large bodies of working men. That such a result would be regarded with complacency by men of any opinions, we cannot believe; and yet if the proposed changes are to have any effect, will it not be exactly this effect? Some theorists, it is true, talk as if there were a vast number of neglected employments among us, from which a protective tariff had diverted the labor of the country; and as if the adoption of the other policy would simply turn labor into these natural channels. But what those employments are, they do not take the trouble to specify. Agriculture is overdone; the ruder trades and handicrafts are fully supplied; "the manufactures for which we possess especial advantages" are precisely those which are now protected. Begging, highway robbery, and the combination of the two in the tramp's life, are the alternative occupations presented to those whom a cessation of protection would deprive of employment.

As to the method of imposing duties, Mr. Wood will render a great service to the country if he will secure legislation to convert our *ad valorem* into specific duties. In so doing he will follow one of those excellent British precedents, which our Protectionists would gladly see adopted. An *ad valorem* duty is a premium upon perjury, a provocation to smuggling, and an inducement to excessive importations in times of depression, when prices, and consequently duties, are low. A specific duty keeps the whole matter of its assessment in government hands, requires no custom-house oaths, makes smuggling unprofitable, and prevents our market from being flooded at the times when our own producers can least bear excessive competition, and when the public have least reason to complain of high prices.

THE death of Senator Morton, of Indiana, leaves another gap in the ranks of the men who carried the country through the war. Oliver P. Morton was not a statesman of the loftiest type. There are few points in his recent political career upon which his eulogists would wisely care to dwell, one of the few being his brilliant and successful advocacy of the bill for the Electoral Tribunal in the Senate. But his management of his own state during the war entitles him to our grateful remembrance, and takes rank alongside the exploits of Gen. Butler in New Orleans, and those of Gen. Dick in St. Louis. To his lot fell the maintenance of one of those posts of critical importance which, like Derby and Nottingham in the English civil war, make or mar a reputation. And Morton held Indiana as staunchly and as successfully as Col. Hutchinson held Nottingham, and kept open to Parliament one of the great roads from London to the North. Would that we could put him alongside Hutchinson in other respects, and speak of him as a man whose patriotism was always superior to party considerations, his views of duty clear, and to himself imperative, and his public as well as his private life without reproach. But we can say that he was the right man in the right place, when none but a man of the first order of ability would have been the right one. And perhaps this is the eulogy he would have cared for most.

His death has, of course, brought about the impending conflict for the control of the United States Senate. And once more the Republican party is punished for its sin in reconstructing the South for party purposes. It is the carpet-bag Senators, over one of whom an indictment for theft is impending, that have imperiled the supremacy of the party, and have voted with the Democrats to seat a Democratic Senator from South Carolina, whose election is disputed. As to the claims of the Senators whose cases are in dispute, we are not able to decide. Anybody who can disentangle the rights and wrongs of Southern politics, for the last nine years, should be taken up by some great Academy and set to solve the proverbial puzzles of history. They would be mere filberts in his giant grasp. We incline to think that those who deserve seats have been in each case excluded, and the men who least deserve them are admitted.

## THE LEX TALIONIS AS A THEORY OF PUNISHMENT.

THAT legal punishments are historically associated with and grow out of the primitive and savage practice of personal revenge, is beyond question. But in this as in other matters, we must not confound *fact* with *truth*, or what is the same thing, *occasion* with *cause*. There was a truth and a right in the practice of private revenge, as well as a falsehood and a wrong. The falsehood was in the assumption that personal vindictiveness was the right motive to punishment, and that the injured party was the proper and sufficient judge as to the fact and the degree of the injury, and the consequent wrong was the inflicting a penalty far beyond the demerit of the offence. But the truth which needed to be extricated from the falsehood, was the ill-desert of the criminal and the duty of visiting upon his head some recompense for his ill-doing. And the notion of a just punishment upon which society proceeded in taking this matter out of the hands of the individual into its own, is that of unimpassioned equality in recompense—"an eye for an eye and a tooth for a tooth," instead of a whole head for either.

In the earliest stages of society, when the group and not the individual was recognized in the codes, the wrong done and to be recompensed was that suffered by such a group. Hence in case of a murder, the old Teutonic and the Brehon (Irish) laws took into consideration only the wrong done in depriving the dead man's kindred of the services of a valuable relative, and they imposed, therefore, not the death penalty but a blood fine, which was proportional to the dignity of the person slain. And some of those old Teutons, who established kingdoms within the territory which had belonged to the Roman Empire, have left on record their opinion that the Civil Law, which they still enforced upon their Latin subjects, was a very good sort of a law in its way, but suffered from one lamentable defect, in that it had no scale of payments for the assessment of the blood fine! But the Civil Law, like the codes of modern nations, had got beyond the point of regarding the group in kinship as that whose rights are to be especially protected, and regarded murder in the light of an offence against the individual who had been killed, rather than against the kindred who had been deprived of his services. Hence the substitution of the death penalty for the blood fine.

The theory that punishments are based upon the *lex talionis* gave way for a time before that which regarded them as a deterrent for the prevention of crime. This is the older of the two utilitarian theories of punishment, and the one which commends itself to men of a rude and barbarous age. It is the theory which found expression in the barbarous tortures of ruder times, but it has not died out with those times. It is still current in some parts even in our country; as in the infliction of public flogging for petty larceny and similar offences, in a neighboring state. Now flogging is not an unjust or barbarous punishment, when inflicted with a just reference to the nature of the offence. The English laws, which require that garroters, and burglars who use personal violence, shall be flogged, are capable of a reasonable justification; not so the flogging a colored man for stealing a chicken or making free with his neighbor's watermelons, for such punishments are precisely parallel to the hanging of thirty or forty persons a week at Newgate, as was done last century, for stealing a pocket handkerchief, a loaf of bread, or some more valuable article. The only principle which will justify flogging for petty larceny, will also justify hanging; and the state of Delaware, as her laws are at present administered, grossly violates the provision of the United States Constitution that "*cruel* and unusual punishments shall not be inflicted."

No theory is so fruitful of atrocity as this principle of determent. It was this that sanctioned the robbing a convicted traitor's family of his estate by the punishment of confiscation. It was this that invented the rack, the crucifix, the virgin, the boot, the thumbscrew. It was this that sent men to the gallows, "not for stealing a sheep, but that sheep might not be stolen." It was this that was responsible for half the anomalies and the nearly inexplicable enormities which deface the codes of the world. And the cowardly or vengeful instincts which lead men to take up this theory, are at all times ready to awake into life in the popular mind. A great crime is committed, which excites the popular horror, not by its own proper enormity, but by reason of some special atrocities which attend it. At once the crime and that atrocity become associated in the popular mind, and some acerb piece of legislation records upon the Statute Book, not the people's deliberate conviction as to what is just, but its passionate excitement of the hour. A Charlie Ross is stolen from his father's home; the sympathies of the community are aroused and very justly aroused in behalf of the sufferers

and their indignation against the offenders. Forthwith there is a popular demand that abduction of children be treated as a crime of the deepest dye and visited with the heaviest punishment. If such a demand is acceded to, then future generations may see a terribly severe sentence pronounced upon an offender, who perhaps was but technically in the wrong, and will then demand the law's abolition. But in the mean time, a considerable number of cases may have occurred, in which the punishment was out of all proportion to the offence, though not so grossly so as to attract attention; and a large number of persons will have suffered long terms of imprisonment, simply because in certain years of our own time the popular sympathy was very strongly excited by a case of child-stealing. In this case society becomes vindictive by sympathy, and returns to the old principle of passionate revenge, which it sought to get rid of in taking punishment out of the hands of the individual.

Or again, an offence which is not grave in itself is hard to put down, and is regarded as giving special opportunities for the commission of other offences graver than itself. Pennsylvania finds its roads disturbed by tramps; some instances of crime occur, implicating not one in a thousand of these people. But a law appears on the Statute Book, which subjects to arrest and imprisonment any person who cannot satisfy a country constable or patrolman that he has a right to be found in any township in which he happens to be. If the founder of Quakerism had lived in our own times, and blundered into Pennsylvania on any of his missionary tours, our "priestlings" would very soon have silenced him by sending him to the common jail. In this case, society becomes vindictive not by sympathy but through terror; not on others' account but on its own. And this is a still more direct return to the old principle of wrath which worketh not righteousness.

These are instances the more curious, because they occur in a community which beyond any other stands pledged to exactly the opposite theory of punishment. If there is any commonwealth in the world, which is popularly regarded as committed to the philanthropic theory of rewards and punishments, it is our own. That specious hypothesis did a great deal of good. It was a natural reaction against the atrocious and vengeful severity of the older legislation. Coming into notice about the middle of last century, at a time when all proper conception of state authority

and personal rights had been obliterated by the sophisms of Locke and Rousseau, it found an acceptance which would have been impossible either earlier or later. It especially commended itself to the new humanitarian school, founded by John Howard and fostered by the Society of Friends. The political side of Quakerism was always its weakest side. It never could distinguish between the duty of the individual as laid down in the New Testament, and that of society as such, as laid down in the Old. And therefore its adherents were quite ready to pick up the reformatory theory of punishment, and to distinguish themselves beyond all others in self-sacrificing labors to make our places of punishment the homes of moral and reformatory influence. All honor to the men; but the theory was a false one. It took for granted, first of all, that the State was a sort of reformatory institution, not altogether unlike the Christian Church in its aims. In fact, it made the State a sort of dependency of the Church, and would only be logical in demanding that offenders be given over to the Church's moral influence. In the next place, the advocates of this theory of reform by punishment must recognize the fact that in a great majority of cases no reform is effected. The criminal class is not materially diminished, much less abolished, by punishment. If therefore reform be the end of all punishment, then punishment itself is a failure and must be given up. No other class of institutions could claim a right to continuance, in the face of the continual and even general failure of their measures to effect their end.

Furthermore, on the Christian theory of "overcoming evil with good,"—which our philanthropists would fain carry out in the sphere of the State, where it has no pertinence—the convicted criminal should be treated in a manner very different from that adopted even in our most philanthropically managed prisons; should be given a larger liberty instead of confinement, and the most generous share of all life's good things, in place of prison fare, corn mush and molasses. Society having made up its mind to sweetly assuage the tempest of evil passion in his breast, should not stop short of letting him have "all the sugar in the house," if it will but "make him mind." For can anything be more absurd than to think of thus developing the inward freedom from evil passions and dispositions by an external constraint, and of cherishing the moral will by the physical evils of hard fare and cold walls. Rather, we

must exchange these means for those of the moral pedagogue of the school of Rousseau. The judge must fix his attention on the purely subjective side of every offence, think only of the prisoner's moral future in weighing his words of censure and condemnation,—and make himself the laughing stock of every hardened sinner who comes to his bar.

But no; the State cannot abdicate its judicial dignity in the name of humanity. It can neither demolish its prisons as failures, nor make them pleasure-houses for experiments in moral assuasion. And just as little can it make its punitive methods and institutions the instrument of vengeful passions and unwarranted precautions on the part of its members. Either of the two utilitarian theories of punishment lead to practical absurdities.

The true view of the matter is the *lex talionis*, not in the sense of rendering by punishment a satisfaction to vindictive passions, but in the sense of a satisfaction to the idea or principle of justice. The scales with which classic art invested the hand of justice, are the exact symbol of righteous award. The offence in the one scale and the punishment in the other should exactly balance each other; and the upright tongue should incline to neither side. This the measure and norm of punishment, and the motive is the preservation of the sanctity of law—not merely of the concrete statute, but of the underlying law of righteousness, which gives its sanction to all specific law. If we knew that the world is to come to an end before to-morrow, and were equally assured that the criminal before the bench could in no way be benefited or reformed by his sentence, it would none the less be the duty of the judge to pronounce and the executive to carry out that sentence, so far as the brevity of the time permitted. For that duty is absolute, and not relative. The judge's duty to proceed is precisely on a level with his duty as an individual to speak the truth to his neighbor. It has nothing to do with circumstances: it does not bend before the most extraordinary.

To deny this is to deny that there are any grounds for divine judgment and punishment, and thus to subvert the grounds of all righteousness. God's punishments, and those of them which most commend themselves to our consciences as just, cannot be traced to any merely utilitarian purpose. The secret blasting of his inward life which comes upon a wicked man through his wickedness, the punishment not in what happens to him but in what he is;



the awakening of remorse in his heart, the moral degradation which sinks him lower in the true scale of being, are not these the very highest manifestations of justice known to us? And yet neither of these utilitarian theories of punishment can in any way account for them. They are not meant to deter the sinner, nor yet to amend him. The torments of conscience are rather calculated to make a man worse than better. They sour his nature; they poison his relations to his fellows; they embitter his passions. Mere conscience of sin never yet led a man to amend his life. "The law," as Paul called this inward and divine retribution, is not able to put men right; it can at most awaken men to their need of what will do that. But the "law" of Paul is the very *lex talionis* itself. It is the most exact and even recompense to the man for his offence,—so exact and even that while men have cried out against the injustice of all other dispensations, no man has ever yet disputed the justice of this one.

And in all the popular and sober estimates of the injustice or justice of a statute enactment, there is an instinctive appeal to the principle of retribution. This principle is not indeed the theory which is popular; public opinion as a rule vibrates between the theory of determent and that of reform, as it vibrates between severity and mildness of mood. One day it flashes into a volcano of wrath, and would fain sweep some class of offenders off the face of the earth; nothing can be bad enough for them. As the Universalist said of the rebels in one of the heats of the war, it would say, "if there is no hell, God ought to make one for such people." But *presto!* the mood changes, and our mild-mannered public is all for gentleness. It pats itself on the back in the proud consciousness that the rack and the thumbscrew are things of the past. These are the popular *notions*; but the popular *instincts* are higher and deeper. The very notion of equity in the people's mind is the etymological one; it is the equality of the punishment to the crime. And when the justice or severity of a sentence is discussed, the first thought where popular passion has not been roused, is not of the deterrent effect, but of its equality to or excess of the guilt of the actor and the enormity of the act. And underneath all this is that deeper sense of an outrage done to justice by the act, and which must be atoned for by the criminal's punishment.

There are several obstacles to the popular reception of this principle. The first is the disposition to confound the *lex talionis* with

the principle of passionate revenge, which it superseded. But the two things are very widely different. Revenge seeks the suffering of its object or victim as its end, and sets no bounds or limits to the desire for that suffering. The law of retribution seeks the suffering not as an end, but as a means to the emphatic reassertion of the moral order, which the criminal has violated, and both the nature and the norm of its infliction of punishment is expressed in the maxim, "an eye for an eye, a tooth for a tooth." One step beyond what is demanded by the principle of equity (balance, equality,) it cannot go without surrendering its own norm of action. So far from being the same principle, no two can be in practice farther apart from each other. The one is the most lawless, the most incalculable, the most disorderly of all principles except crime itself; the other the most orderly, as it is of the very essence of law. The one has regard only to what is private, personal, particular; the other aims at the general and the universal. The one is associated with the worst passions of our nature; the other holds those passions in check and abeyance.

"But," it is sometimes objected, "your maxim 'an eye for an eye, a tooth for a tooth' is rejected by the Founder of Christianity as something inconsistent with the spirit of the Christian dispensation, as indeed the very embodiment of the principle of wrath, revenge and hate, to which He opposed Himself." I dispute the truth of both points of this statement. Jesus of Nazareth neither rejected that maxim, nor took it as the embodiment of the principle of wrath. He maintained it as the principle of social existence laid down by the Old Testament—and of that very Old Testament whose commandments, down to the very least of them, He takes pains to tell us, was to be taught and honored in the new dispensation. He does not say, "This has been said by them of old time, but they were altogether wrong," as He is very commonly supposed to say. He lays down first the social principle in each case, as taken from the Old Testament, and then proceeds to state the Christian law for the individual conscience as supplementary of it. And to keep men aware that this Christian law is not a *rule*, but a *principle*, he enunciates it in every instance in a paradoxical form, so that the letter being forever an impossible law, men may be obliged to look away from the letter to the spirit. No human being would obey the Sermon on the Mount taken as a series of rules; parts of it can be so obeyed, but those who insist

on treating it in the same literal and Pharisaic way as the Jews treated the Old Testament, are very careful to keep the other parts out of sight. The man who will not make oath before a magistrate, nor go to war, because the letter of the Sermon forbids him, will not hesitate to enforce the law of assault and battery against the man who strikes him in the face, or to punish for highway robbery or larceny the man who makes off with his cloak; and no man ever yet bought corn of these interpreters and found the bushel both "pressed down and running over;" while as to giving to any one who asks, and turning not away from him that wanteth a loan—we need say nothing. We have the practical interpretation of one of these commands from its Author. On his trial before Caiaphas the high priest, one of the attendants of the court smote him with the hand, but he did not turn the other cheek. He simply said "If I have spoken evil, bear witness of the evil; but if well, why smitest thou Me?" *Unde constat*, says Augustine, *illam preparationem maxillae alterius in corde faciendum esse*. The turning of the other cheek is a matter not of the face, but of the heart. And so of all these commands; they can be kept only by the heart. Christ commands us to right dispositions, and to nothing else. He says that the man who uses the law of society to give vent to his own revengeful feelings, is as gross a sinner as if he did it without law—just as the soldier in battle, who saw a personal enemy in the hostile ranks and fired at him with hate in his heart, would be a murderer as clearly as if there were no battle waging around them both. He sets aside no law; He only commands men to use laws lawfully, and according to their proper intention—that is, not for the gratification of private hate, but for the vindication of social order. And the man who accepts this principle, who lives peaceably with all men as much as lies *in him*, will not always have outward peace with them. He may have to shoulder his musket, but he will not hate the enemy his bullet goes in search of. He may have to go to law in defence of his rights, but he will harbor no wrong and revengeful feeling towards those with whom he cannot avoid this collision. He will not give way to the selfishness and lawlessness of other men, because in so doing he will not be sacrificing himself alone. He knows that any relation in which he is placed to them, is a thing which concerns not himself only, but is a trust which he holds for society at large. And just as sometimes the best service that one nation can render to another is to give it

a sound thrashing, so it may happen that the greatest kindness which one man may be able to show to another is in thrashing him, either with his fists, or with less tangible weapons of the law.

For these reasons I hold that the old maxim "an eye for an eye a tooth for a tooth," comes into no sort of collision with the Christian principle of returning good for evil.<sup>1</sup>

A farther objection to our principle is that "It makes the end aimed at by punishment too abstract. What is this principle of justice? It is a mere idea, a notion of the head, an abstraction which is all in the air. The interests of society as presented in one theory, and those of the individual criminal in the other, are at least something definite and concrete. We know what they mean, and how to go about reaching them." It is one of the curious weaknesses of this century that it has a horror of the general truths of the reason, and continually confounds them with those intuitionless notions of the understanding, which so often manage to be mistaken for them. But those truths are far more real and practical; they come closer home to our bosoms, and even to our business, than do the interests of any institution or any individual. And this idea or principle of justice is one of those truths. It never ceases to be present in the minds and hearts of men. It is not a head-made notion: it is part of the light by which we see, rather than an object discovered in our seeing. Were it not so, those precious interests of society, which are so tangible, so practical, so definite, would soon vanish from our sight. The collision of individual selfishness, out of which some wise people have thought it possible to construct society, would prove itself a mighty social solvent in the absence of this vivifying principle, the idea of justice; just as the juices of an animal body turn to destroying acids when the vital principle has ceased to control and modify their natural action. Justice, says Plato, is of the very essence of the state; the state is such only so long and in so far as it makes justice its end. For high above all national and social order, there is an order of absolute justice, and nations and societies live by compli-

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<sup>1</sup>This interpretation is opposed not only to that current among the Friends, but also to a similar view presented by Mr. Herbert Spencer in an article on "Our Two Religions"—if I remember the title rightly—which appeared some years ago in the *Scientific Monthly*; and also to the work of an anonymous author, entitled *Stones Thrown at Glass Houses, or Modern Christianity a Civilized Heathenism*. Anyone who interprets Christ's words in the way which He censured in the Pharisees, can get at very startling results.

ance with its conditions, or die by their violation of them. And the local, temporal and national interests, which we call social, are properly included in this larger order, and to care for it is to care equally for them. A nation, therefore, is strong and vigorous through its devotion to that principle which is higher and broader than itself; and what we need for our national vitality is the conviction of an absolute standard, to which our national life is to be conformed. The old Hebrew prophet saw that, when he had the vision of God standing in the midst of the nations, with a plumb-line in his hand. You cannot cheat a plumb-line, nor distort it from the perpendicular; it is one of those facts which are almost truths, which are the perfect symbols of truths. And it is an evil sign for us if this conception of absolute justice becomes too abstract, too airy for us. Those lower social interests will be none the better off, if we loose our hold upon the universal and the eternal order of righteousness.

It may be objected that any theory of punishment which trenches on theological grounds may easily be made a theory of persecution. I answer that persecutors always proceeded upon the utilitarian theory of punishments. They regarded the penalties they inflicted as needful either for the protection of society against heretics, or for the reformation of the heretic himself. And on their own presumptions as to the infinite and eternal importance of a right theological belief, and the danger to which society was exposed by the activity of those whom they honestly regarded as heretics, they had no choice but to persecute. Rack and stake were bad enough; but what shall we think of the more refined cruelty which left men exposed to influences whose result would be that both teacher and taught would be condemned to everlasting fire? And the deepest principle of persecution was the denial of the principle of equal retribution. The Inquisitor consigned men to rack and stake because he sincerely believed that God was Himself the greatest of all Inquisitors, and would consign by far the larger part of the human race to an endless series of tortures, compared with which rack and stake were but a trifle, and the trifle of an instant. And a great many people hold up the Inquisition to horror and scorn who hold substantially the same belief. They denounce in men what they believe of their Maker. But an intelligent conviction of the universal validity of the principle of equity, of even-handed justice, forbids the ascription of such acts to God.

And when this principle for which we are arguing is accepted by society as the basis and norm of punishment, it becomes impossible to formulate a reason for the persecution of opinion by society. On the basis of the adjustment of the punishment to the offence, it is impossible to devise a punishment for heretics.

On the other hand, let us suppose a community to be as heartily concerned about any great truth as the Middle Ages were, and as much determined on its maintenance as a pillar of social unity; what is there in any of our utilitarian theories of punishment to prevent their persecuting those who deny that truth, and disseminate their views by an open or secret propaganda? Perhaps it will be said, "The sound and utilitarian conviction that persecution is of no use. It always has failed, and it always will fail." Well did Curran say that there are more false facts in circulation than false theories; and this "failure of persecution" is one of them. As a rule, persecuted sects and parties have been destroyed by persecution. Look at the Donatists, the Arians of the East, the Manicheans, the Priscillianists, the Albigenses and other branches of the Kathari, the Brethren of the Free Spirit, the fanatical Anabaptists of Switzerland, of southern Germany and the Austrian possessions, the Crypto-Calvinists of Saxony, and above all the Protestants of Poland, of Italy and of Spain, together with the Catholics of Sweden. Persecution *has* succeeded in a thousand cases; and even if it had not succeeded in a single case, still each new persecutor would set about it with the assurance that he at any rate was not destined to fail. And the currency which this false fact has attained has not prevented the rationalists of Germany and Switzerland from engaging in a great series of persecuting measures directed against Ultramontane Catholics and old-fashioned Lutherans. This *Kulturkampf* is significant for another reason; it shows that the absence of strong religious convictions is no guarantee against persecution. Men must believe in something; if not in a God, then in culture: and whatever they really believe in furnishes motive enough for putting down those who dissent from them. Even though it be only a belief that there is nothing about which a man can be absolutely certain, yet the *Pall Mall Gazette* gives us to understand that this is ground enough to go upon. Society, we are told, cannot tolerate those who are convinced of the absolute truth of their own tenets, and who teach them as something else than mere opinions! Persecution, so long monopolized by belief and

directed against unbelief, is once more, as in the days of the Cæsars and of the Reign of Terror, to be directed by unbelief against belief. So mote it be. It is in more appropriate hands now, yet it is enough to make poor old Voltaire turn over in his grave to see the new divorce between liberalism and toleration, which he had thought forever wedded by his manly devotion to the cause of intellectual liberty. Shall we live to see the *Proces Calas* republished by the Tract Societies, and suppressed by order of the Academies of Science as a work of unsound and dangerous tendencies?

It is not, therefore, in this direction that the danger of a renewal of the old persecuting policy is greatest. It is exactly in the opposite.

I am convinced that the old thinkers were right when they declared this principle of recompense, this *lex talionis*, was the right foundation of legal penalties. The blind instinct of the vengeful savage was bound up with a truth which was sound and necessary to him—a truth analogous to all that we know of the operation of natural law. That instinct found vent in wild theories about sacrifice, satisfaction, atonement. It mingled with the atrocities of pagan beliefs; it blends with highest and the most mysterious facts of the faith which superseded them. It is the righteous principle in society; it is the very foundation on which the State rests; and more than any other it explains to us what the State is, and what its majesty as the representative of the Divine Justice.

There is a mystery—with whom relation  
Durst never meddle—in the soul of State;  
Which hath an open action more divine  
Than breath or pen can give expression to.

A. I.

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### A PLEA FOR THE GIRLS.

ONE of the most popular, and it may be said, most exaggerated, complaints of the day is that our girls are "fast and extravagant" in their dress, ideas and manners. It is said that they are yearly becoming more extreme in their disregard of all those social and womanly qualities which were the honor and ornament of the girls of the past, and, after summing up a long train of consequent

evils to humanity in general and to the young ladies concerned in particular, the climax is capped by the declaration that this extravagance, etc., are the chief causes why so many young men remain single rather than marry girls whom they could not afford to support as wives in the extravagant style in which those girls live, and which they would naturally desire to continue even after marriage.

The popular complaint thus uttered seems plausible enough on the face of it, but as "popular opinion" seldom penetrates the depths of any subject before expressing itself very decidedly upon the surface view, and as that view is invariably as false as it is superficial, we must not be surprised if popular opinion has followed its usual course, and met with its usual gratifying success in deceiving itself, upon this subject as upon almost all others. If we would study the subject more deeply and impartially, we would learn that this outcry about the extreme "fastness and extravagance" of our girls is pure nonsense—a Minervian bug-a-boo, that leaps forth polemically armed and equipped from the fertile brains of quite a numerous class of writers and speakers, who, when all other topics fail, hurl their dreaded philippics against the "female folly and extravagance" of the age as against a social Chinese wall, behind which the girls are invulnerably entrenched, laughing defiance at the stormers without. A reiteration of the charges is but "the old, old story told again," (as it has been sung since the days when girls first began to dress and men and old women began to scold,) but as it amuses the scolds and doesn't hurt the girls, we should not, perhaps, condemn the former too harshly for indulging in their favorite and harmless recreation.

But to turn from the consideration of these social censors to the subject itself, the first point to consider is the charge that girls are relatively more extravagant in their dress to-day than they were in the past. From the earliest historical times down to the present the same general complaint has been made in every age and in every civilized community. Ignorant or forgetful of the conditions of the past, and mindful only of what we see in the present, we are too prone to exaggerate the virtues of the one and the vices of the other. "Distance lends enchantment to the view" in time as well as in space, and thus it is that those who cherish fanciful memories or false impressions of years or ages gone by are always bewailing the sin and extravagance of the present, and



sighing for the purity and simplicity of the past. So far, therefore, from being new or more called for to-day, this complaint was quite as loud and as much justified a thousand years ago. Epictetus, writing just *eighteen hundred years ago*, said :

“When girls grow up they begin to be courted and caressed ; then they think that the recommending themselves to the affections of the men is the only business they have to attend to, and so presently fall to tricking and dressing and practising all the little engaging arts peculiar to their sex.”

This will serve as a specimen of many similar extracts that might be taken from earlier and later writers. The existence and practice of “all the little engaging arts peculiar to their sex” at the period when the above was written is conclusive evidence that the “tricking and dressing” we see and hear so much of in the fashions of the day are but inheritance from the old, not acquirements of the new. “There is nothing new but the forgotten,” is particularly true of female fashions. It is a fact too well known to need reassertion here that most of the fashions we have seen for many years past have been resurrections or modifications of the fashions of other days, and if the adoption of them prove that our girls are extravagant, it must be admitted that that extravagance is inherited, not acquired. And so, when our good old grandmothers, male or female, declare with feelings of pious dismay that they never had such extravagant ideas and fashions in their days, we may safely say that if they did not have the particular ones they now so virtuously condemn, they had others quite as extravagant, relatively, as any we have now.

That the girls of the present dress better, and even more richly, than did the girls of the past, is true ; but this is due to the same cause that enables us all to dress better and live better in every way, enjoying as common necessities many things which in the past were considered luxuries, or which did not exist at all. That cause is that modern science and art have given us those new and better articles, and at less cost than the poorer articles could be procured for in the past. No reasoning person will deny that, so far as worldly goods and comforts are concerned, we live better in the present than our ancestors lived in the past, but this difference in our condition cannot be called the result of extravagance ; it is improvement, social and material. As we advance in all the arts of civilization, so should we also advance in all the conditions of

our life; and as dress is one of the most important questions of life, especially to women, why should we not advance in matters of dress as well as in everything else? There is no more reason why we should retain calico and homespun, than the old stage coach and hand-power machinery; no more reason why we should be severely plain in dress than severely plain in all the productions of art. Insensibly as it may affect us, dress does, nevertheless, exert a most decided influence upon our lives, elevating our thoughts, stimulating our desires to improve our condition, by obtaining all the essentials within our reach that tend to that object, and directly encouraging those sentiments upon which the social as well as the material welfare of a community is founded. Whatever may be said in praise of the personal virtues and domestic lives of the Puritans and Quakers, it is an undeniable fact that, as a class, they have contributed very little to the material and intellectual advancement of the world; the spirit of their lives, as displayed in their dress, is opposed to radical change or worldly advancement. Satisfied with the old and the plain in all things, they neither ask nor desire better; they do not *live* in this world—they merely *exist*—looking for *life* only after their translation to the Hereafter. As Froude, the historian, has truly said, "If you see a man who is happy as the world goes—contented with himself and contented with what is around him—that man may be, and probably is, decent and respectable, *but the highest is not in him, and the highest will not come out of him.*" And so, those who are contented with the old and the simple may be very good in themselves, but the elements of a progressive civilization are not in them and will not come out of them; and when we cease to progress, it is but a question of time when we will begin to retrograde. So far, therefore, from it being desirable for us to continue the much-misrepresented "simplicity" of the past, we should, on the contrary, as the condition of our further advancement in civilization, adopt every improvement in the new over the old, knowing that much as many may doubt it, advancing civilization means also advancing morality.

But, it may be said, woman's dress has outstripped the bounds of steady advancement, and entered the realm of extravagance; even allowing for the changes of steady advancement, woman's dress costs more now than it did years ago. Granting this, it may be said that the chief cause of it is either misconceived or misrep-

resented. Woman's dress does cost more now than it did some years ago, *and so does everything else*, but this increase in the cost of every necessity and luxury of life is due, not to woman's extravagance, but to the inevitable consequences of a long, costly war, and to the changed conditions and sentiments of all classes of our people. But it must be remembered that if our expenditures increased, our receipts increased proportionately, and despite the cry of "hard times," the great majority of our people were never better provided for than they were during, and immediately after, the war, when high prices and "extravagance" reigned supreme. It costs a man more to dress, and a family more to live, now, than it did before the war. These two cases are considered matters of course, but woman's dress, affected by the same laws, for which she is not more responsible than the man or the family, is considered a matter of extravagance, and she is condemned accordingly. The justice of this discrimination is not apparent. It is not the extravagance of personal desire, so much as it is the extravagance of the times, that is responsible for the present state of woman's dress, and we need look for no reform in dress while the sentiment of the times remains unchanged. If there be extremes in the present—as there undoubtedly are—we must remember that there have been extremes in every age, and among old women as well as young ones, and among men as well as women. We must remember that paints, powders, false hair, etc., etc., etc., have been in constant use for twenty-five centuries or more, while the vagaries of fashion have at intervals, during that period, attained degrees of extravagance unknown in modern times. In positive absurdity, modern fashions cannot be compared to those that prevailed in England during the reign of Elizabeth and some of her successors, notably the Georges, while they in turn were simple compared to the extravagance that prevailed in France during the reign of Louis XV. and other monarchs. Great evils and popular extremes will always work their own cure; a popular reaction will set in sooner or later; but to be permanent it must be the effect of natural causes, not of ridicule or misrepresentation. This reaction in the extravagance of the past few years has already begun in our midst, and when all things else shall have returned to their old standard of "economy," woman's dress will follow the decline just as it before *followed* the rise. But to single out and condemn our girls as being exceptionally

extravagant, when every one and everything else has been equally so, is as unjust as it is unreasonable.

But, to digress a little, it may be very seriously questioned whether, for social, personal and certain politic reasons, it is desirable that women should dress as plainly as some of their censors would have them do. On the contrary, it may be asserted that it is not less a woman's pleasure than a duty for her to dress as handsomely as her means will properly allow. It is a duty she owes herself and those around her to make herself as pleasing and attractive as possible, and next to personal attractions those of dress are her greatest aids.

Loveliness

Needs not the foreign aid of ornament,  
But is when unadorn'd, adorn'd the most,

is a very pretty sentiment in poetry but as a simple matter of fact it is false. Those who are not lovely can in many cases be made so, and those who are already lovely can be made very much more so, by the judicious aid of ornament in dress. This is a truth so palpable that it needs no enlargement upon here. As a corollary to this point it may be said that a woman who exhibits taste and refinement in her dress will exhibit them in all the qualities of her life, while one who is indifferent about her dress will invariably be indifferent in all the qualities that combine to make a true and attractive woman.

The second point to be considered relates to the training and manners of the girls. Does any one complain that men are, as a rule, better educated and more intelligent than their ancestors were? Then why complain of the girls for being so? Yet thousands of persons do, unconsciously, utter such complaint. If girls are educated, they will be intelligent; if they are intelligent, they will be "smart;" and if they are smart, their lives will show it. And it is of this liveliness, or "smartness" as it is called, complaint is made. The wailers would have our girls grow up excessively stupid Goody-goodies, dressed in inherited calico gowns, sitting in a corner, like immortal Jack Horner, sucking their thumbs, and able to lisp only "Yeth-um" and "Yeth-ur." Such was ye model maydene in ye oldyne tyme.

But, happily for us, the age is past when it was considered almost a disgrace for a woman to be educated—when, according to Lady Mary Wortley Montague's letters, written a hundred and

fifty years ago, and other writings of that and even a later period, an educated woman was looked upon as the majority of mankind now look upon a "strong-minded" woman. This change in sentiment was accompanied by as great a change in woman's social and mental condition, and it is this social revolution, which is still active, that brought about those new ideas and manners which are the subject of so much discussion now.

That the girls of to-day are better educated and more intelligent—consequently more worldly in their ideas and accomplishments—than were their sisters of the past, must be conceded; but admitting the necessity or desirability of the education, the rest must be accepted as a logical consequence. Those who do not favor this, and who would have their daughters grow up in the "sweet simplicity" of their grandmothers' days, can very easily accomplish that object, even in this "fast" age, by restricting them to the house, by forbidding them indulgence in all outside pleasures, and by keeping them in blissful ignorance of the world and all that is in it, save such knowledge as is to be derived from the common rudiments of an education. They can thus attain their object—and they and their daughters will have abundant reason to regret it ever afterwards. The ignorance and training of the past cannot successfully supply the more advanced demands of the present, even in woman. If she is to retain her proper position in the civilized world—if she is to be a meet companion for progressive man in the battle of life—if she is to be more than a mere animated automaton, created only to bear and to suffer—she must advance with the world and with man. This advancement is to be kept up only through the medium of ever-increasing education, and it is the result of this education which gives that freedom (not looseness) of expression and manner so characteristic of the girls of to-day. Yet there are individuals who would say that this freedom is "fastness" or positive immorality! A passage from Colton, bearing upon this subject, deserves to be quoted:

"Women that are the least bashful are not unfrequently the most modest; and we are never more deceived than when we would infer any laxity of principle from that freedom of demeanor which often arises from a total ignorance of vice."

This opinion is as noble as it is deserved, and personal observation will convince every one of the truth of it. Misconceiving or misrepresenting the cause of this freedom, certain creatures in the

community endeavor to attract a little attention to their little selves by saying that our girls are "fast" or are rapidly becoming so—a "fast" girl being understood to mean an immoral one. This charge is as unjust as they are contemptible who make it. They who can see only an evidence of immorality in the simplest words and acts of girls cannot certainly belong to that Scriptural class unto whom "all things are pure"—cannot be possessed of that chivalric sentiment of pity and tenderness that would throw the mantle of charity over a doubtful word or act, and say of the questioned one, as Moore wrote of his peerless *Hinda*:

Yes, for a spirit pure as hers  
Is always pure, e'en when it errs ;  
As sunshine, broken by the rill,  
Though turned astray, is sunshine still.

To illustrate this, let us select a number of girls at random, one-half of whom, educated and traveled, will represent the present, and the other half, with little education and no travel, will represent the past. Listen to their conversations, observe their manners and mark their tastes, and then say to which class you would have your sister, wife or sweetheart belong—which class most truly represents the needs and interests of the present—and in which class would you place the greatest confidence in the personal virtues of its members? It will be found that the educated and the refined; the "worldly-wise," and the "independent" will have a most decided personal, social, and *moral* superiority over the less gifted and less experienced ones. Whatever may be said to the contrary by those who have never given the subject the study and consideration it deserves, it is, nevertheless, a profound truth that the more educated and refined individuals are, the more delicate will be their sense of right and wrong, vice and virtue, and the more strict will be the conduct of their lives in accordance with the sentiments thus entertained; and nothing is more true, however much doubted it may be by many, than that the individual, consequently the popular, sentiment of to-day is much higher and purer (as a natural sequence of its greater intellectuality and refinement), than it was in the past.

It is not true, therefore, as is so frequently and so ignorantly charged, that this generation is more immoral than the generations gone by; on the contrary it is true, and can be proven so by facts and statistics, that Americans and the more highly civilized Europeans of

this day are much more moral than were their ancestors in the past, while the barbarous and semi-civilized nations of to-day are living evidences of the falsity of the charge that our advancing civilization brings with it increasing immorality. The writer hereof has been among those people who still retain the morals and manners of the "good old days," and can speak of them from personal observation.

We cannot advance materially without first advancing intellectually, and as we are slowly emerging from the ignorance and rudeness of the past into the intelligence and refinement of the present, we are as surely approaching a higher morality as we are approaching a higher civilization. This ceaseless change in our moral, material and intellectual conditions involves a corresponding change in our ideas, and when our ideas change our manners will insensibly change with them. This is quite as true and inevitable in girls as in all others. In their ideas and manners they are but keeping pace with the changed conditions and advanced requirements of the age. If they are "fast," they are fast only in the sense in which everything modern is so, and as that fastness tends toward a higher moral, as well as material, excellence, the girls, imbued with the spirit, must follow the tendency of the age.

The third, and final, charge in connection with this subject is that the extravagance of the girls is the chief reason why so many young men remain single, rather than marry girls whom they could not afford to support as wives in the style in which they would expect to live after marriage.

It is safe to premise by saying that young men who could give utterance to such a sentiment do not possess the principles necessary to make worthy, faithful husbands, and it were better for the girls if they never should marry such "men." No one entertaining the feelings of true manhood would entertain so unworthy an opinion of one whom he truly loved and desired to make his wife as to think that she would wish to continue her girlish "folly and extravagance" after marriage; because he knows that if she loved him in return she would be only too happy to prove that love by giving up past pleasures for his sake, and joyfully accepting any position in life his means could afford her, though that position be much humbler than her former one. This is a truth too frequently illustrated in real life to need illustration here. Woman will sacrifice more for man through love, than man will sacrifice for woman.

The true reason why a great many young men remain single is, not because the girls are extravagant, but *because they are so themselves*. Admitting that many girls do expect or desire to keep up the same style after as before marriage, are they singular in this respect? Do our young men never entertain such expectations or desires? Young men accustomed to the enjoyment of every pleasure, living in comfortable homes or aristocratic boarding houses, dressing fashionably and indulging in all the luxuries of "high life," do not like to give up these enjoyments for the "hum-drum" course of married life in contracted quarters; and so, without asking the girls whether they would be willing to do it or not, (knowing full well that, as before said, if the girls loved them they would be only too happy to do so,) with a spirit as unmanly as it is contemptible, they cast the whole blame upon the innocent ones. Girls' expenses are confined almost wholly to their dress; young men's expenses are confined—no, they are not confined to anything; they run wild. A young man of the class alluded to will frequently spend as much in one day or night among his companions as would support a wife for a week. Franklin said that "one vice will bring up two children." Then, two vices should certainly support one wife, and most of the young men of the day could easily give up two and still have a large variety on hand. But the question with these gentlemen is: "What shall I do—give up my vices for a wife and settle down like a Christian, or give up the wife for the vices and continue to live like a good fellow?" The girls can thus learn the relative estimation in which they are held by these nice young men, by the answer they make to the above question. And it may be safely asserted that this question has much more influence in deciding for or against marriage than the question of girls' extravagance has.

But so far from it being true that a wife is an additional or insupportable expense to a man, she is, on the contrary, in the majority of cases, the cause of an actual saving to him. The proof of this is to be found in the lives of the married and the single around us. Take, for example, a number of merchants and mechanics, clerks and laborers, and it will be found that while the married man, with a large family perhaps, will own his own house or have something saved, the single man of the same class, and with the same income, will probably be penniless or perhaps in debt. The exceptions do not, of course, weaken the force of the



rule. It is not necessary to explain this rather paradoxical condition of affairs,\* as it is sufficiently well understood by every thoughtful person. Therefore, when a man, young or old, says he does not get married because he cannot support a wife, we have every right to assume that he cannot support himself, (which is the real trouble with a great many just now,) and the only object he would have in getting married would be to get a wife to support him, which some of these heroes very wisely do in order to keep out of debt and jail.

To say, therefore, that the extravagance of the girls is the obstacle to many possible marriages, is sheer nonsense, because every one knows that no reasonable girl would expect to indulge as a wife in the same little follies and pleasures which she indulged in as a single girl. Whatever their extravagance as girls, their expense comes down to a mere question of support as wives. The same objections to marriage that are raised to-day have been raised with equal force in every age by those who thought they could not afford, or were not inclined, to marry. *True* love is not more mercenary now than it ever was, and it is not reasonable to suppose that true lovers are more mercenary in their consideration of the marriage question to-day than they were a hundred or a thousand years ago. It is for this reason that, notwithstanding the cry of alarm raised about the decreasing number of marriages, as many take place now, relatively, as ever did, and for the very simple reason that when a man and woman, young or old, are so desperately in love with each other that they think their only earthly salvation is to get married, the vulgar question of bread and butter is not going to seriously overcloud the blissful dream of their lives. Their future is not of this world; then why trouble themselves with questions of the world! *They* are going to live on nectar and ambrosia in the elysium of their love dreams!

Of the other classes little need be said. Men and women who make marriage a mere question of money and position never should marry, because they do not possess the one essential principle of good, faithful wives and husbands. They have no love for each other—that is, none deserving the name—and marriage without love is merely a contract between two persons to live together till they find it desirable or convenient to break the contract, (and how frequently that occurs our divorce courts bear the most damning testimony,) and if the “extravagance” of this age tends in any

way to lessen the number of such marriages, so much the better for this age.

But, even admitting all that is said of the extravagance of the girls, let us see who are responsible for it. It has been said that women dress, not so much to please men as to spite or excite the envy of one another. It may be said, however, that the desire to please or gain the attentions of the men has much more influence upon woman's dress than she herself would like to admit. Say what he will to the contrary, a man will be gratified, especially in public, by the attentions or companionship of a well-dressed woman. If he request the pleasure of a lady's company to a party, theatre or elsewhere, he expects her to dress finely, if not fashionably—and he would be greatly mortified if she were to dress in the "sweet simplicity" of the past. That young lady would not be invited out a second time. The girls know this well, and knowing it, they act accordingly.

Observe the company in any social gathering. Is it the pensive maidens sitting in the corners, dressed in the simple fashions of their grandmothers' days, who monopolize the attention of the company, or even of those economical young men who can't afford to marry the extravagant girls? The answer is a most decided No! The liveliest and the best dressed girls will at all times and in all places monopolize the attentions and the flattery of those around them, particularly of those exquisite owls that are always flying around half dazed in the glare of the ball-room and theater, resplendent in all the glory of positive diamonds, comparative moustaches and superlative nonsense. Slow simplicity is neglected while fast extravagance is patronized! What is the natural result? Those girls who are already courted and flattered will naturally desire to become more so, (it is a weakness to which even man is subject,) and as a means to that end will go to greater extremes in all those arts which they find so efficient in securing them favor. When other girls learn the arts or means by which attention and flattery are gained, they will not be slow in profiting by their discovery, and so those really good, sensible girls who would willingly remain "slow" in their dress and manners must copy after their "fast" sisters in order to gain any share of attention and emerge from the obscurity and neglect against which their refined, sensitive natures revolt. When men will practically carry out the principles they now *profess* to entertain—when they will choose

“wall-flowers” for their companions and wives and allow the extravagant butterflies to flirt around unnoticed—we may look for a sudden, a complete change in woman’s dress and manners. Woman’s natural desire to gain the favor and affections of men is a much more active principle in her nature than her artificial desire to spite her sisters, and when girls learn by experience that men prefer old-time simplicity of dress and manners, the struggle with them will be to see who will make the favored change first. The writer, for one, neither asks nor desires any such change.

So much for the assertion that our girls are fast and extravagant. As this article feebly attempts to prove, they are not more so than are all progressive persons living in this age—not more so than the age itself. If some of them do go into extremes at times (just as a great many young and old men and old women go into extremes also, but the class should not be condemned for the excesses of the individual), it is only because they have been taught to believe that it is the surest mode of gaining favor, and if any censure is called for let it be bestowed upon those who are responsible for the existence of such extremes by courting and flattering those who indulge in them.

To conclude. Admitting for a moment that our American girls are exceptionally fast and extravagant in every particular charged, the only way we can judge of the consequences to themselves or others, is by noting the effect upon their later lives. However wild and foolish they may be when girls, it must be conceded that marriage or advancing age changes the current of their lives into a quieter, steadier stream. Having enjoyed their share of the pleasures, they are the more willing to accept their portion of the sorrows, of life. Over the greater part of Europe the contrary is the case. There, where “the simplicity of the good old days” yet prevails, girls are still kept under the old-time restraint until marriage *frees* them, and when marriage does free them, *they make up for lost pleasures with accrued interest*. Whatever American girls may be, American wives and mothers are the best, the truest, on the face of the earth, and these American wives and mothers were, in their time, “fast and extravagant” American girls—God bless them! It is only by such a comparison as this that we can ever judge the results of any system, and when we find that the American social system produces such results—sending forth into the world the loveliest, most intelligent, most refined creatures, en-

dowed with the highest womanly virtues and accomplishments, that the world has ever seen, even in European courts—we must admit that, though the system may possess some vices, it does possess many virtues, and as it is a vast improvement on the past we can only hope for still greater improvement in the future.

The effects of that system are self-evident in the social and material conditions of our country to-day. Woman's supreme influence—ever exerted for the noblest and the best—is everywhere felt, everywhere seen. We can never fully estimate the power that influence has exerted in maintaining the liberties, in framing the laws, in forming the manners, in shaping the sentiments and in aiding the material progress of our people, the result being that the Americans are to-day, the most *moral*, most liberal, most progressive, and, despite the present temporary depression in business, the most prosperous nation in the world. Such is the result of a system that places woman on a social and mental equality with man—that teaches man to look upon woman as an equal and a counselor, not as among barbarians, and even yet over the greater part of Europe, merely a servant and a thing without mental capacity. And yet they say, "The age of chivalry is past—'tis gone!" The age of chivalry is *not* past nor gone! The spirit of chivalry still exists in all the vigor of its action and all the splendor of its effects—aye, with more true consideration for its object and more noble deeds in that object's behalf, than e'er it knew in the days of knight-errantry. As American women are the noblest the world has ever seen, so American men are the most truly chivalrous in their thoughts of, and attentions to, women. Never were women treated with such gallantry and tenderness—never were they so honored and privileged—never were their personal qualities recognized their rights acknowledged and their wrongs redressed, as they are by American men to-day. The age of chivalry is not past nor gone! It has but just dawned upon the world, coming as the glorious champion of woman's liberty and equality, and making the present an age compared to which the little known and much-exaggerated days of knight-errantry were an era of degradation and injustice to woman—and this happy consummation is due indirectly to the influence exerted upon us by the so-called "fastness and extravagance" of our women—who are but girls "of a larger growth."

Instead, therefore, of ridiculing or censuring every change they

make in their social condition—instead of throwing obstacles in the way of their individual advancement or general improvement—let us encourage the girls, and when necessary lend them a helping hand, in their efforts to keep pace with the progressive spirit of the age in all things. The higher woman rises, socially, spiritually and intellectually, the nobler, the greater and the more perfect will man become.

JAMES JOSEPH TALBOT.

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### THE INTERPRETATION OF NATURE.

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PRINCIPAL SHAIRP, in his recent work on the *Poetical Interpretation of Nature*, after discussing and comparing the various methods of that interpretation, pronounces that to be the highest which finds in nature a parable under whose visible forms some spiritual truth is shadowed forth. Borrowing a phrase from Dr. J. H. Newman, he says that the "sacramental" interpretation of nature, that which discovers a correspondence between the truths of the natural and those of the spiritual world, is a mode of imagination which is higher than any other—higher even than that imaginative sympathy—or, as Ruskin calls it, that "penetrative imagination"—by which the poet seems to reach the very heart of nature "flashing upon our hearts by one touch, one inspired line, a sense of the inner life of things, and a conviction that he has been allowed for a moment to penetrate into their secret," as when Wordsworth speaks of

"The silence that is in the starry sky,  
The sleep that is among the lonely hills."

We think, with Professor Edward Dowden, that this is a mistaken judgment. The sympathetic and penetrative exercise of the imagination is probably the very highest function of the poet as nature's interpreter. After reading such a line as the two quoted, "we feel," Prof. Dowden says, "that a secret has been uttered; nothing more can be said, nothing better; here is for once and forever a revelation of the imaginative truth of things." "Let that which touches, which thrills, which arouses, which inspires in the external world, be accepted absolutely for what it is;

if at any time a dawn should widen upon the heart or conscience of the individual man or of humanity, then all the glory and freshness of the visible dawns will suggest themselves to interpret the new experience;" but it is not the business of the poet to go hunting after such analogies. Poetry, according to John Milton,—whom Principal Shairp agrees with John Keble in depreciating—is "simple, sensuous and passionate." Its proper relation to nature is that of intuitive immediateness. It does not look at her through the medium of the reflective understanding or its theories. It exults in the simple and sensuous enjoyment of all her manifold forms of grace, beauty and grandeur, and in imparting that enjoyment to others. It has properly no more to do with ethics and theology than with political economy. It may leave its true sphere to contradict the truths of either science; it is equally abandoning that sphere, when it undertakes to teach them. When it begins to theorize, to preach, to interpret, it has abdicated its highest function, and has taken upon it another. It may not cease to be true poetry in so doing; but it ceases to be poetry of the highest order of imagination. And the reason is that the highest function of poetry is not to see nature in the antithesis to the spiritual, which is implied even in a comparison or a correspondence of the two, but to see it as informed by the spiritual and transfused by it. Poetry is not called upon to give us the deistic side of spiritual truth, so to speak,—the theory of creation, providence, and judgment—but the pantheistic side of it, which is equally necessary to a true and complete view of it. Hence, the seeming, and in some instances, the real pantheism of some of our greatest naturalistic poets. This element Principal Shairp, like Robertson of Brighton, is obliged to recognize in Wordsworth's poetry, and he very justly asserts that it is not out of accord with the truest and highest theism. But, after accepting it as true, he unduly subordinates it, in asserting that the highest poetry looks on nature not for what nature is in herself, but for meanings which bear relation to something above nature. As Prof. Dowden well says: "When the wanderer of the *Excursion* as a youth climbed the headland, and beheld the sun bathe the world in light; when in the silent faces of the clouds he read 'unutterable love;' when thought expired in ecstasy; when his mind was

'Rapt into still communion that transcends  
The imperfect offices of prayer and praise,'

was he in reality declining to approach nature in the more excellent way? Would he have been employed in a more spiritual manner, if he had set himself to investigate what in the kingdom of heaven may be symbolized by a sunrise upon our earth?" Surely not.

But again we repeat that while this reading of nature's parables is not the highest function of the poet, it may none the less be a true function and very valuable. The highest use of a sunset is not to translate it into analogies which can be expressed in terms intelligible to the understanding. The highest things discerned by the true poet can never be so translated. It can only be appreciated by the æsthetic faculty. And yet we have, in our own times, a great number of poets of the second order who have taken up this function, apparently with the feeling that the garb of the hierophant is something higher and more sacred than the singing robes of the poet. Miss Rossetti, Mr. Patmore, Mr. Macdonald, Dora Greenwell, and Mrs. A. L. Waring, are the best known of this school in England. They are, each in their way, poetical Swedenborgs, and all of them genuine poets, but the less genuine for being "poets with a purpose." Mr. Macdonald expresses their creed when he says in his *England's Antiphon* (p. 232):

The very essence of these mystical writers [Henry More, etc.] seems to me to be poetry. They make use of the largest figures for the largest spiritual ideas—*light for good, darkness for evil*—such symbols are the true bodies of true ideas. For this service mainly, what we term nature was called into being, namely, to furnish forms for truths, for without form truth cannot be uttered. Having found their symbols, these writers proceed to use them logically; and here begins the peculiar danger: when the logic leaves the poetry behind, it grows first presumptuous, then hard, then narrow and untrue to the original breadth of the symbol; the glory of the symbol vanishes; and the final result is the worship of the symbol which has withered into an apple of Sodom.

Reading between the lines of this passage, we can see in it a suppressed conviction of the truth that the poetry of sacramental interpretation is dealing with an element in itself alien to poetry, and which must therefore be subordinated and restrained by an effort if the latter is not to be corrupted and destroyed by it. For if it were a genuinely poetical element, there could not be too much of it; you could not carry it to excess. The boldest flights may be allowed to the imagination, when she is going on her own winged and royal way. She is self-regulated; a law of self-

restraint preserves her poise and directs her course. It is only when she is sent on the errands of others that she needs to be curbed, bridled and checked. It is poetry with a purpose which always runs the risk of becoming bad poetry by going too far. And this cardinal fault of *tendency* is involved in all poetry of this sort. It aims not at poetical, imaginative truth, but at edification. Genuine poetry is Protestant; it believes in "art for art's sake," knowing that in the long run, all truth, the truth of the imagination equally with that of conscience, is edifying. It is in its method, therefore, as spontaneous as the roses and the violets. As a great mystical poet, Angelus Silesus (John Scheffler) says :

*Die Ros ist ohn 'warum ;' sie blühet, weil sie blühet ;  
Sie acht nicht ihrer selbst, fragt nicht ob man sie sehet.*

For the mystics themselves sanction the view we have expressed, and are against Mr. Macdonald. They hold that the highest truth which any human faculty can take cognizance of, is not capable of translation into the forms of the understanding, or of communication to any one except by bringing his faculty into the same exercise, and they aspire towards an intuition of things spiritual in which images, words and forms are left far below and behind them, as the stepping stones of a less perfect and less immediate knowledge.

In America this school has many representatives, but the best to our thinking are Rev. S. Duffield, of Chicago, "H. H." (Mrs. Helen Wilson, *née* Hunt), and Carl Spencer, of Poughkeepsie. This latter name is said to be the *nom de plume* of a lady. Each of the three has exhibited genuine poetical power in the higher sort of imaginative production, but all are searchers for symbols and readers of riddles. Mrs. Wilson indeed rather devises riddles than reads them, but even her riddles are solutions when read aright. Mr. Emerson very truly says that her "poems have rare merit of thought and expression, and will reward the reader for the careful attention they require." This one for instance, entitled "Refrains," she has published in *The Independent* during the present year :

Of all the songs which poets sing,  
The ones which are most sweet  
Are those which at close intervals  
A low refrain repeat :  
Some tender word, some syllable  
Over and over, ever and ever,  
While the song lasts  
Altering never.



Music, if sung, music if said,  
 Subtle like some fine golden thread  
 A shuttle casts  
 In and out on a fabric red,  
 Till it glows all through  
 With the golden hue—  
 Oh ! of all the songs,  
 No songs are so sweet,  
 As the songs with refrains,  
 Which repeat and repeat.

Of all the lives lived,  
 No life is so sweet,  
 As the life which one thought  
 In refrain doth repeat,  
 Over and over, ever and ever,  
 Till the life ends,  
 Altering never.  
 Joy which is felt, but is not said,  
 Subtler than any golden thread  
 Which the shuttle sends  
 In and out in a fabric red,  
 Till it glows all through  
 With a golden hue.  
 Oh ! of all the lives lived  
 Can no life be so sweet,  
 As the life which one thought  
 In refrain doth repeat ?

“ Now name me a thought  
 To make life so sweet,  
 A thought of such joy  
 Its refrain to repeat.”  
 Oh ! foolish to ask me. Ever, ever,  
 Who loves believes  
 But telleth never.  
 It might be a name—just a name—not said :  
 But in every thought a golden thread,  
 Which the shuttle weaves  
 In and out on a fabric red,  
 Till it glows all through  
 With a golden hue.  
 Oh ! of all the sweet lives,  
 Who can tell how sweet  
 Is the life which one name  
 In refrain doth repeat.

Now this, we think, is a fine instance of the use of poetry for purposes not in the highest sense poetical, and therefore the need of the fine judgment, the exquisite taste, which prevent such a poem from lapsing into the prosaic. One false step, and the whole would

be a mere rhymed preachment on the text Colossians iii: 17, with "conclusions for use" and "conclusions for doctrine."<sup>1</sup>

"Carl Spencer" often displays a fine gift of sympathetic and penetrative imagination, and it is to be regretted that she lacks finish and sometimes form. Her poems are as yet accessible only in the pages of our newspapers and magazines. If we are not mistaken, she will yet take rank not far below Mrs. Wilson, who holds the place at the head of our female poets. Her parabolic poetry is quite different from that of H. H., being more quaint, George Herbertish, and full of odd turns. Take this, for instance :

"My days are as the grass,"  
Swiftly my seasons pass,  
And "like a flower of the field I fade,"  
O soul, dost thou not see  
The wise have likened thee  
To the most living creature that is made !

"My days are as the grass ;"  
The sliding waters pass  
Under my roots ; upon me drops the cloud ;  
And not the stately trees  
Have kinder ministries—  
The heavens are too lofty to be proud.

"My days are as the grass ;"  
The feet of trouble pass,  
And leave me trampled that I cannot rise ;  
But wait a little while  
And I shall lift and smile  
Before the sweet, congratulating skies.

"My days are as the grass ;"  
Soon out of sight I pass,  
And in the bleak earth I must hide my head ;

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<sup>1</sup> This is one reason for the nearly universal badness of the poetical productions, which pass for hymns with the churches of England and America. Their motive is not imaginative truth, but edification, and the very nicest touch of the firmest hand is needed to prevent their sinking to the prosaic level. But as a rule, their authors have been unequal to the task. A very few of them by John Mason, Charles Wesley, Sarah Flower Adams, T. H. Gill, and some others, are real poetry, in spite of their secondary and unpoetical motive, and deserve exemption from Matthew Arnold's sweeping condemnation that none of our hymns have any right to be called poems. But most of them are wretchedly unfit for the use to which they are put. It is, however, hardly right to complain of their wretched prosaic slips in expression, when, as a rule, they have no thought to express; and when there is, the highest point ordinarily reached is the enforcement, as in Toplady's "Rock of Ages," of some doctrinal theory, with the emphasis of rhyme, smooth metre, and "good set terms."

The wind that passes o'er,  
 Will find my place no more—  
 The wind of death will tell that I am dead.

But how shall I rejoice  
 When I shall hear the voice  
 Of Him who keeping Spring with Him alway,  
 Lest hope from man should pass,  
 Hath made us "as the grass,"—  
 The grass that always has another day.

This writer reminds us of Henry Vaughan; there is the same element of cheerful vitality in her poetry, the same continual turns of surprise; the same lack of justice to the thought by careful polish. Not every line is equally strong; some halt and are commonplace. More free, yet not altogether free, from these faults is a poem called "Humanity," which is too long to quote entire:

For here is clay that holdeth fire,  
 Are slaves that yet are lords of will—  
 Wanderers, that lift from miry ill,  
 Prevailing hands of pure desire.  
 Whoso the downward path hath trod,  
 The wrecks of human life to scan,  
 Must write, "This creature, being man,  
 Was ruined, having less than God."

Lo! there are they whose lot is cast  
 With His—howe'er they toil and strive,  
 To keep this mortal self alive,  
 Which death will break from them at last.  
 Of natures nobler than they own—  
 Held to their kindred in the skies  
 By some godlike necessities—  
 They cannot live by bread alone.

Not painless works the fiery leaven:  
 They have one glory—to abide  
 In the full world unsatisfied.  
 By the one we hope that, broad as heaven,  
 O'erlooks the straitened walls of creed,  
 The sons of God proclaimed with power:  
 Each in his grandly bitter hour,  
 Sure to find love his sorest need.

Their world is low, their days are small,  
 Yet to each falleth once in time  
 That day which makes all days sublime,  
 And mystery consecrates them all.  
 To earth a glory entereth,  
 When wide alike to low and high,  
 Into the same eternity,  
 God opens His great gates of death.

But while the parabolic interpretation of nature is not the proper function of the poetical imagination, it is a very natural and not unprofitable exercise of the human intellect. The parable and the myth, while not the highest form of poetry, and not properly a form of poetry at all, constitute a form of literature which has at all times commanded the attention and employed the best power of the intellect of our race. Ever, at least, since the Aryan race rose above that low form of nature-worship which invests the physical forces with a divine personality, and became conscious first of human personality and freedom, and then of the necessity of freedom and personality to all spiritual existence, they have shared more or less clearly in the conviction that the natural has its correspondence in the spiritual, and even within the limits of its bondage to law reflects something of the greatness of that whose existence is law-free but not law-less. In this faith it is that that part of language has originated, which describes mental and spiritual actions, relations and existences. The vast host of words which were primarily purely material in their meaning, but have now lost that sense either wholly or in part, are but the crystallizations of the conviction that the inner and the outer worlds of human experience have such a likeness, that the terms derived from the latter are not unfit for application to the objects of the former. Every such term is a crystallized parable—a trope which assumes a whole theory of the harmony and the correspondence of the two essential sides of the universe. The outer world, as Bushnell says, is thus presupposed to be a vast dictionary and grammar of thought, and therefore an organon throughout of the divine intelligence. And human speech, like every other spiritual force, of whose nature we are completely cognizant, is thus seen to have its own physical organon of life.

The truth thus disclosed to us in language was enunciated by Plato in his theory of *ideas*. This term has been so much abused by its use in the sense of a mere *notion*, that it conveys very little of its true sense. The Platonic *idea* is not an abstraction or generalization from human experience. It is not in any sense a subjective result reached by the human mind. On the contrary it is the most real and objective of all existences,—the truth which lies behind the appearances which make up the world. For the things which seem realities to our sense are but the shadows of those realities,—shadows cast upon the wall of our cave of earthly

existence, while we sit with our back to the cave's mouth and to the light which casts the shadows. And this is true not only of material things, but of the highest truths and intuitions of the human mind. All are but shadows, and when we are ravished either by landscapes, sunsets, the ocean's glories, or by the excellency of justice, the glory of courage, the purity of truth, as we know these in actual experience, we are still gazing upon the shadows. We were made to know the substance and to live by that knowledge; but we have lapsed from that knowledge into this earthly life, and can only win our way back thither by long and painful experience.

Similar in some points, and yet very different in others, is the view of nature presented to us in the parables of the Gospels. Christ has none of the Athenian's contempt for this earth and the life of men. He has indeed a far truer and quicker ear for the world's discords, but also a larger and firmer hope for the growth of its harmonies. He does not remand the golden era of peace and justice, of true knowledge and right perception, to a world beyond our earth. He proclaims the advent of a kingdom of God, a kingdom of heaven, into the earth itself, declaring that the hour was at hand when the old world would be judged, its cruelties, abominations and injustices brought to an end, its good elements saved and honored; and when the new would take the place of the old—a new heaven above men's heads, a new earth beneath men's feet, and in both righteousness. The surroundings of mankind upon this earth, therefore, were of the largest possible value and significance to Him. He would have men dwell upon them as displays of the nature and good-will of their Creator, who is "our Father which art in heaven." "Consider the lilies," "the ravens," "the birds of the air." But in His parables He gives us His especial view of nature and of all human life, as the image and the reflex of divine things. In all human relations and all human affections, the purest, the tenderest, the most passionate, men are to see a reflex and shadow of the love which is God's very essence. The very occupations and employments of men are full of significance as disclosing the methods of God. And the works of nature are each a great page in the divine revelation which God continually makes of Himself. His own parables are but a few catch-words, key-notes, suggestions to lead men on in the study. To read the book through is their business. His is to teach them its alphabet,

to give them a few lessons as beginners. Hence His reply to His disciples when they asked Him what he meant by the parable of the sower: "Know ye not this parable? and how then will ye know all parables?"

Fragmentary, however, as they are in intention, it is impossible to avoid claiming for them the very highest place in human literature. Were there such a thing as a perfect standard of æsthetic judgment to which they might be submitted, they would be found, we think, in spite of their brevity and the disadvantages of their mode of transmission to us, so complete as works of literary art as to fully justify, on this side, the claim of those who assert that in their Author was to be seen the one supreme and unsurpassable intellect among all the sons of men—the man so fully possessed and enlightened by the eternal spirit, that He stands above and ahead of every "spirit of the age"—every limited historical grade of intelligence. Could anything in all the great masters of prose or poetry, for instance, be put along side the closing parable in the fifteenth chapter of Luke's gospel, which we very absurdly call the Parable of the Prodigal Son?

The parables of Christ, we have said, are meant<sup>o</sup> as but the first of a vast series of readings in the book of nature and in the book of human life. Their object is to teach men a method of reading, not to interpret the whole book. He would put men into such an attitude towards nature and towards life, as would give them at once a livelier interest in these and a keener zest in their study, and would enable them to see larger meanings than they had dreamed of. As we have said, the standpoint to which He leads men, is not that of the naturalistic poet, while by no means opposed to it. The poet cannot assume this distinctively Christian standpoint, without giving up his own proper business. His own work does not lead to higher, but different views of the universe; and the truth of the pure imagination which it is his function to explore, are needful for men, and are not to be sacrificed to any others.

Equally true is this of the purely scientific investigation of nature. Edification is not the function of science. Its aim is scientific truth, and it must make that its exclusive aim. If the scientific man care at all about edification, he must go upon the Protestant principle that in the long run truth is always edifying. His discovery may seem to lead to results which imperil theories held sacred by multitudes of pious hearts. He may even seem to shake

those primary convictions of right and responsibility, which are the strength of the strongest. None the less his duty is the plain one of proclaiming all the truth he knows, in the faith that the Power, who has taken care of the world thus far, and has quickened in men's hearts the love of and the search after truth, is not to be served by politic falsehoods or reservations, and is quite well enough acquainted with His universe, not to be nonplused by any unexpected discoveries or half-discoveries of its methods, which His children may make. If He do exist, and has any plans for the race He has created, He will neither allow Himself to be hid from men, nor suffer those plans defeated by their finding out things which the weak in faith think He wants to have concealed. Even unverified hypotheses of a materialized science, and their hasty acceptance by the half taught, cannot be much in His way.

It is not, therefore, the business of science to be either edifying or the reverse. It would abdicate its true function in trying to be either. Its results would be the less scientific, and therefore in the long run the less edifying, if it were thus to turn aside from its true purpose, just as poetry becomes less imaginative for making the same mistake.

But the Christian attitude towards nature and life, sanctioned as it is by the deepest spiritual insight of the loftiest minds, and by the spontaneous instincts of the race, has its rights and its functions. It presents its results neither to the imaginative faculty of the poet nor to the logical faculty of the savan. It purposes neither to deepen the rapture with which the penetrative imagination contemplates nature in its integrity, nor to add by the analysis of nature to the sum of knowledge anything capable of scientific verification. It speaks to the religious sense of mankind, and it must submit its results to the standards of value which that sense assumes as established. In view of the great multitude of proofs of the existence of such a sense, which are presented to us in literature, in history, and in daily experience, it is as preposterous to question its existence, as it would be for a Faraday to question the existence of an imaginative faculty in a Wordsworth, or to deny the objective value of its results. It may be that a man has little or no share of this religious sense, just as some men are devoid of poetic imagination, but that proves nothing more in this case than in the other. At present the disposition is not to deny the existence of a religious faculty, but to cast doubt upon its capacity to ascertain anything

worthy of our trust. Men speak of it as of a blind aspiration, an eye without sight or light, which forever paints the supposed objects of its vision upon the darkness into which it gazes. The words of the child's first faith, "Our Father which art in heaven," are held to be incapable of verification—a bold guess of their author, and all too bold for repetition on the part of men who dare only speak of "the Unknown and the Unknowable." There are many grounds for the rejection of this "voluntary humility" and false modesty. One is that men have faith in experts, in those whose faculty of special vision has been most highly exercised. And they cannot forget that the Man who *ex confesso* saw the farthest into these matters, and who lived in an age which talked as weariedly and as learnedly of "the Unknown and the Unknowable" as ours does, uttered His own insight not in that formula but in the other. And He told those who lived about Him that they, by the inductive method of doing God's will as far as they knew it, could come to the same conviction as Himself—could "know of the doctrine whether it be of God or of men." And He has managed to convince and continues to convince great multitudes of those who give large attention to this matter, and adopt His method, that He was and is altogether right. About the rightness of the method there can be no question. And it will certainly not be claimed that those who have rejected His formula are great religious geniuses of even the same order as the higher class of His followers, to say nothing of His own incomparable preëminence.

And again, in every other field of inquiry, the new phase of science requires to assume that where a faculty exists it has been developed by continual exercise upon its proper object. It asserts that that is the very method of development; that the eye is not here before the light, but rather that the prior existence of the light creates the demand, as it were, for the eye, and leads to its formation. But this theory of the Unknowable gives us, contrary to all scientific experience, an eye which has no light to illuminate it—a hand which has never yet found anything to grasp. On purely Darwinian grounds, we must reject such an hyper-teleological hypothesis.

A further consideration, but one of less special argumentative force *in this connection*, is the certain result of the general acceptance of such a theory of the divine element in the universe. Turn the religious faculty away from the light, and set it to gaze into the dark, and you set it to people the dark with terrors. On no other



background are images of horror so readily constructed. Your Unknowable is not knowable as regards those convenient negative opinions, which his or its votaries have inherited from the old deists, but which, *ex hypothesi*, they can never verify. He *may* expect worship; he *may* prefer all the atrocities by which the remorseful conscience has in other ages sought to propitiate Molochs and Shivas. Experience of life will not deter men from recourse to such things; life has a Moloch, a Shiva side to it, as well as a Vishnu side. Even Emerson can speak of "a substratum of ferocity in the universe," as a matter of human experience. And the vast competition—for all the world like a Dutch auction—which has gone on in India between Shiva and Vishnu ever since the expulsion of the Buddhists,<sup>2</sup> is but a rehearsal of the vibration between the two extremes of carnal security and slavish terror, which would be the religious history of a nation or group of nations, which should accept Herbert Spencer as their religious guide and prophet. This new religion of the Unknowable would have all the superstitions, and more than all the superstitions, which have characterized all the others. It would be grounded upon mere feeling, and therefore liable to all the varieties and excesses of that feeling. The others, even in their most corrupt forms, have had the instinct to set limits to their own excesses, by at least the pretence of a science of divine things, whose principles are fixed. But this would set out with repudiating the very possibility of such a science, and therefore of any limit to its own extravagances. Comfortable, busy, self-satisfied people may not realize the danger of such an outcome; but at all times the comfortable and well-to-do have been the worst possible judges of the needs of the great masses of mankind.

These considerations, of course, do not prove that Mr. Spencer is wrong; but they are very good reasons for demanding the clearest evidence that he is right, and that God has not saved us from such terrors and abominations by revealing Himself to us

But we have been digressing into an argument, where it was rather our business to proceed upon assumptions. We proceed, therefore, to say that while it is impossible to accept science as a competent judge either as to the existence of a religious sense or of the reality of its objects, it cannot refuse the aid of science as a helper in the higher appreciation of nature. It is from scientific

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<sup>2</sup> Mr. W. W. Hunter's *Orissa*, Vol. II.

observation that it chiefly derives the raw material of its studies, just as it is from poetry that it most commonly derives the form in which to clothe their results. And the objective reality of its conclusions is evidenced by the fact that it is helped and not hindered in this study by the advance of scientific research. It can keep pace with the progress of scientific investigation; it finds the better understood universe of to-day more full of the parables of God than that which, a thousand years ago, was largely shrouded in the darkness of ignorance, error and superstition.

Take for instance the great change of view brought about by the better appreciation of the relation of the parts of our solar system to each other—a discovery given to the world by a Catholic priest (Nicolas Copernicus), whose work was edited in the first edition by a Protestant pastor (Andreas Osiander, of Nuremberg), and rejected with contempt by all the physicists of that century, including Lord Bacon. Our earth in that new illumination discovered that her seeming importance and centrality was a delusion of the senses, and that the right relation of the members of the system could only be perceived by the observer transporting himself in thought to the sun, the true centre of the system. And Christian theology has at all times been proclaiming analogous truth to the human planets of our human system. Finding men everywhere and at all time falling into the fancy that they are central points around which all other interests revolve, she has never ceased to warn them that they are living under the delusion of sense in this regard, and that only by discovering their true centre in God, can they rightly appreciate their relations to the whole and to each of its parts. She has been the Copernicus of souls, stripping them of the delusion of their own centrality, and humbling them by opening their eyes to the sight of their own insignificance in comparison of the greater glories which she discloses to men. When George Eliot in *Romola* describes this change, as wrought in Giovanni Pico della Mirandola, she well describes him as “once a Quixotic young genius, astonished at his own powers and astonishing Rome with heterodox theses; afterwards, a more humble student with a consuming passion for inward perfection, *having come to find the universe more astonishing than his own cleverness.*” But she omits to say that this change was due to personal contact with Savonarola, a man who verily and for himself believed in God, and who awakened that belief in

the minds of a great multitude, and created in Florence a party who had no selfish ends, and who, in spite of many mistakes due to want of political experience, did the will of God, and sought the good of the city according to their light.

We have already spoken of the larger hopefulness of Christ, in contrast to Plato. The former hoped for the world and its regeneration; the latter chiefly hoped to earn his way out of it into some better and more illuminated form of society. Not that Christ had not a far clearer perception of the moral darkness in the world than ever Plato had; but He seemed also to have the conviction that light was a much greater thing than darkness, and would ultimately prevail over it. What form the victory is to take, may be open to question; but a real and satisfactory victory of the light is one point in the Christian faith. It believes that the day of decision will come, when half lights and shadows shall merge into the fuller light, and the darkness shall be vanquished forever. No other religious faith presents any such object of hope to men's belief. The most popular religions of the world are pessimistic. They commonly declare existence *per se*, or else conscious and personal existence, to be the very root of all evil, and the escape from it the only real good.

Such is Buddhism, whose adherents outnumber those of any other creed; and Brahminism, which follows it closely. Islam declares that all but a very small fraction of humanity are condemned to everlasting torture in hell fire. The old Persians held that evil was as eternal as was good. The old Greeks and Romans feared Hades with a very real and terrified fear, and shrunk from the very name and mention of death with horror. Their literature is burdened with wailing and lamentation over the brevity and the bitterness of life. Our old Norse and Teutonic forefathers believed that this world was a scene of conflict between the powers of goodness and of evil, but believed that the latter were to prevail, while holding that the only part for a brave man to take was that which was to be defeated; and when we come to those classes inside Christendom, who have cast off the name, the profession, and as far as possible the influence of Christianity, the same tendency to pessimism is everywhere visible. Mill inclined to think that there is a God of some sort, but was forced by his Hedonistic belief that pleasure is the chief end of existence, to say that if He does exist, He is either not omnipotent or not simply benevolent, and quite

possibly neither. Byron and Poe, Heine and Baudelaire, are the poets whom the unchristian Christendom acknowledges as its most honest and sincere singers. In Schopenhauer, Frauenstadt, and even Hartmann, the *Weltschmerz* of an unbelieving age finds its philosophical expression. The shallowness of optimism is the common-place of our thinking, and the effusive hopefulness of twenty-five years back has given place to a tone of thought exactly the opposite.

And over against all this stands Christianity, ranking *hope* with faith and charity as a primary virtue, and commanding men "Rejoice always: and again I say, rejoice." You will search the religious books of all other faiths in vain for a passage parallel to that. Well, which way do the great analogies of nature point? It might seem, at first view, as if their weight were rather against than in favor of the conditional optimism of Christianity. Light and darkness seem about equally distributed throughout the universe; day and night follow each other in equal and balanced succession; and neither gains upon the other or promises to gain upon it. And these facts have been alleged as giving the force of analogy to the arguments for the more despondent view of the universe.

But in physics as in morals, we are once more deluded by our senses. The vision of the unseen truth once more liberates us from the falsehood. Astronomy shows us that this huge night which seems to balance the light of day is but the tiny shadow of a tiny planet, which itself dwindles to a point and vanishes, while the light sweeps on its ethereal way from sun to sun, from star to star, blending the effluence of systems to fill the universe with its rays. And Christianity carries men to the open grave of the risen Christ, and proclaims in the Easter victory of absolute goodness over the blended power of every form of human evil, as the earnest or pledge of the great world-wide victory of the light. It says that, however vast and heavy may seem the weight of moral evil which presses upon the spiritual energies and retards the spiritual growth of the race, we are not to believe in the evil but in the good, not to despond because of the evil, but to hope for the victory of the good.<sup>3</sup> The seeming victory of evil, the

<sup>3</sup>"Is Christianity then but another name for Universalism?" No; it is not Universalism in our understanding of it. It is impossible to deny that many great and good Christians have been universalists. Such were Origen, Gregory of Nyssa and Erigena in the ancient church, and William Law, Albert Bengel, Fred. Schelliermacher, Augus-

Passion and the Calvary of goodness, are in some sort to be the last word of all the rest of the world's faiths. Only the Gospel does not stop there, but presses on to Easter and the Resurrection.

The disclosures made by modern science as to the dependence of our earth upon the solar forces, is another of the great parables of nature. We are carried back to the distant eras when her solid surface presented nothing but a wearisome mass of rocks and sands, such as now cover some of the utterly desolate and uninhabitable portions of the world. And we are told to watch the vast process of development, by which one form of organic life leads on to another—the lower vegetation to the higher, the vegetable to the animal, the lower animal to the more elevated in scale, and last “the diapason closing full in man.” And all this we are told to associate with the influx and accumulation of solar force upon our earth's surface. Whatever “intelligence at the heart of things,” designed and executed the vast drama of development, he wrought by means, and his instruments were the caloric, luminous and actinic forces which emanate from the centre of the system itself. These forces it is which circulate in the sap and blossom in the flower of every plant; which tingle in the nerves and energize in the muscles of every animal. The human energy which is put forth in obedience to man's free will, is not of earthly

tus Tholuck, and J. P. Lange in the modern. But Universalism is essentially a theory which makes no just estimate of the freedom of the human will, and its power of resistance to the divine. It is the theory of a piety forced upon men by Omnipotence, whereas Christianity bases its hopes for the victory of the good upon the conviction that all the resources of God will be employed to effect it, and yet without infringing on that human liberty which is essential to the dignity of man. It does not assert the final return of every soul to the fellowship of light; it says that God will leave nothing undone to effect their recall, and that the result will be such as to satisfy all who shall behold it. The severest measures of the divine government have doubtless as their aim the restriction of the unredeemed sinner from sinking to yet lower depths of degradation; and could we trace in all its details God's dealings with such a sinner, we would probably find there more reason for thankful and adoring love, than we have ever found in the best known passages of His dealings with the best of men. And Christianity neither limits the divine activity to any given period of time, nor teaches, as did Mohammed, that some part of the universe has been prepared as a place of torment, and filled with engines and agencies of torture. Its imagery of the worm undying, the fire unquenchable, the bottomless pit, are symbols of what man experiences in this earthly life, and must forever continue to experience unless he escape from these to God. And the common conscience of Christian communities corresponds to this; we apply the word hell, not to places of torture and punishment, but to places of human wickedness, such as gambling houses. We all feel it blasphemous to speak as if there were anything in the universe worse than sin itself.

but of solar origin. For ages upon ages those forces have been transmitted earthward. Every fragment of fertile soil, every coal deposit, every organic tissue, is but their latent deposit. Every form and species of vegetable or animal life is but the same in activity. And were the world to cease to draw upon that central source of energy, death would reign once more throughout our planet. The agent which had called its dead and isolated particles into the unity, the beauty, the harmony of organic form, would no longer continue his mighty work, and all things would return to that lifeless state from which he had evoked them.

And in all this Christianity cannot but find a rehearsal of the spiritual activity of humanity's spiritual sun. The source of all spiritual life is the uplifting and uniting will outside our world, which has drawn men out of the spiritual death of selfish isolation. When the theologians speak of an absolutely godless state of mankind, or of an individual man, they speak of what has no historic existence upon this earth. The lowest and most degraded races display, when closely studied, the organizing influence of the spiritual light. They live, even on the lowest round of the ladder, in no merely animal isolation and selfishness. It is their temptation, as it is ours, to sink back into that. Every fall from rectitude, every surrender to selfishness, tends to that. But God has never consented that the fall shall become the law of any human life, and the light which enlightens His heaven itself, is also "the light which enlightens every man that cometh into the world." The religions of the world, with all their admixture of superstition, reflect in their higher and truer elements the elevating influences of the divine Word in the minds of their votaries. They foreshadow and anticipate the fuller and clearer day of the perfect disclosure of God to mankind, somewhat as the lower forms of life are the prophecies of man. Their vitality is in the fragments of truth which redeem them from falsity and imposture; their weakness in the admixture of slavish terror and priestly pretences, with which they have been mingled. Christianity does not put itself forward as the flat contradiction of the world's beliefs; it declares that Christ is "the desire of the Gentiles," the clear light toward which they are feeling their way out of the half lights and the shadows of their Pagan condition; and it presents to us the missionary sermon of the greatest apostle, addressed to an assembly of philosophical Pagans, in which he declares that God had

made their fathers "to feel after Him if haply they might find Him, though He be not far from every one of us; for in Him we live and move and have our being; as certain also of your own poets have said, 'For we are also His offspring.'" It was not an apostle who drove the Teutonic chief back from the baptismal font by the declaration that all his Pagan ancestors were burning and would forever burn in hell fire. Christ clearly laid down the principle that in the retributions which fall to men's lot, they are held responsible for the light they have, and not for the light they have not.

Everything, therefore, that has been done to raise men into a truly human life, to civilize them in themselves and not merely in their surroundings, to gather them into the fellowship of the household, the neighborhood, the state—to lift them out of the savage's sordid and selfish condition into that of the citizen—has been the working of the spiritual light as an organizing force upon the human raw material of the race. And wherever the unselfish human affections manifest themselves—wherever men have given themselves or their life for their country, for justice, for humanity, for the truth—there the operations of the spiritual sun of the universe has been made manifest.

Some may say: "What advantage then hath the Christian?" and with the apostle we answer: Much every way, but chiefly in this, that he knows where others only guess. To use the great analogy employed by the founder of Christianity, his spiritual life is not embryotic, a thing of dark aspirations and impulse, whose laws he cannot cognize; it is a born life, a "life brought to light," become cognizant of itself, capable of assimilation, and of all the other great vital functions. As well ask: "What is the use of being born?" as ask "What advantage then hath the Christian?"

Or, to put the case in a way more apposite to our general analogy, the Christian lives in the very sunlight, and not in its reflection, still less in the darkened cellar from which its direct influences are excluded. His windows face the South, are open to the sun. A man can live and see to work in a room which opens only toward the North, but in the long run—*experto crede*—his health will be the worse for it. And something similar to this is the condition of those who live in a Christian country, but receive the influences of Christianity only indirectly and at second hand as it were. There is a sense in which men so situated cannot avoid

being Christian; the moral standard, the views of duty and responsibility, promulgated by Christ and lived by his neighbors, cannot but mould his life and character in ways of which he is hardly or not at all conscious. The late John Stuart Mill was an eminent example of the gradual but thorough penetration of a life by the refracted light of Christianity, and his *Autobiography*, together with his posthumous *Essays*, give us such a picture of the process as had never before been drawn by a human pen. But after all, the true nature and the full power of any truth must be sought at its focus, and not at its circumference, and it would be a mistake to insist on such instances as the highest manifestations of what the sum of truths, influences and institutions which constitute Christianity can do for mankind.

Less advantaged in this respect are the souls which experience the inward leadings of the divine Word, but are shut off from the historical disclosure of that Word, in either its direct or its indirect influences. It is they who resemble a plant shut up in the darkness of a cellar, thrusting out its bleached and colorless tendrils in search of the light, directing all its energies to reach some distant chink, through which there is a faint glimmer that penetrates the darkness. There is nothing in the whole range of vegetable life so utterly pathetic. And it has its correspondent pathos in Sakya-Muni, in Socrates, and many another seeker after God. To return to the analogy, that plant lives by solar force; it could have no life but for the accumulation of that force upon our earth. And yet its lack of the highest and most direct form of that force prevents its living the true life of a plant. All the forces of this world are not sufficient, not even those which have in past ages accumulated here from the solar fountain of energy. It must have the direct influence of the uplifting force which is not of earth, and without that it cannot live. And the parable is true of every human life. Men truly live, not only by the aid of what they can see and grasp, not by the individual things of time and sense, but by their living and present relation to what is universal and external. They "endure as seeing Him who is invisible." "For God is light, and in Him is no darkness at all."

JOHN DYER.



## AMERICAN ARCHITECTURE.

AMERICA ought to have an architecture of her own. Never has there been a grander opportunity for the development of a new style of building than has been furnished to our people during the last hundred years. Our whole country has had to be built up, including millions of structures—residences, churches, court houses, city halls, capitols, theatres, hotels, depots, bridges, docks, commercial buildings, monuments, and every other variety of structure. In fact, there has not been such a great demand for building since the revival of civilization after the dark ages. Whole cities have sometimes had to be built in a year, and appropriations by the million have been lavished by Congress and by State and municipal corporations for structures for their several purposes, including the most liberal offers for plans and models for them.

Now in all previous cases where there has been such a great amount of building, there has been a peculiar style developed to meet the peculiar wants of the builders; a style which has risen in beauty to equal, if not surpass, any previous style. Thus there was developed in Greece, when that country was built up, a new style altogether different from the parent Egyptian and Phoenician styles, and in each of the great Greek States, as they severally came to the supremacy, a peculiar modification of that style, known as the Doric, Ionic and Corinthian, respectively. So when the Roman civilization was developed, and there were erected the necessary structures therefor, there was developed with it the Roman style. When the government was transferred to Byzantium, and the east had to be rebuilt, there was elaborated the majestic Byzantine style. When central Europe began to be settled by the Romans, the Romanesque style was developed, or rather the Roman style modified to meet the new demands of the Rhine country and the west. When the north of Europe was built up, the magnificent Gothic style was developed to meet still another want and satisfy a new taste. And when finally the Renaissance period set in, and new empires and new capitals had to be decorated, a still different style sprang up, composed of the Greek, Roman and Byzantine elements, which took different forms in Italy, Germany, France and the Netherlands, according to the several wants of those countries. In England, too, after the Reformation, when a new kind of churches was required for the new worship, there sprang up a new, though

inferior, style of church building, of which Sir Christopher Wren was master; and in Spain, when the Mohammedans went thither, they developed the Moresque style suited at once to their eastern religion and western country, specimens of which still remain in the ruins of the mosques and cathedrals of that land. Everywhere, in fact, where there has been much building done, there has been produced a new style to suit the new purposes and new facilities of building.

In our country, however, there has not been a corresponding architectural advance. Instead of a manifestation of that inventive genius which characterizes our other departments of activity, there has in all our building not only not been developed any distinctively American style, but our structures are generally of only indifferent architectural merit. The best of them are copies of the French and English Renaissance buildings, though most of them are plain and tasteless brick and mortar piles without any regard to style whatever. We have, it is true, some inferior specimens of Greek and Gothic churches, as also a few unworthy examples of almost every other style; but in no respect have we anything either altogether new, or greatly improved in architecture.

Now it strikes us that this is an anomaly, and that it should not be so; and, in view of all our circumstances, we think it may and ought yet to be made different. We are in a new country, far off from any other, with new resources and new wants, composed of the people of all other countries, so that there is no reason why we should follow any other country or style, but every reason why there should be, from this fusion of national elements, a new product in style superior to any of the others. It is true that most of our building has hitherto been to supply us with the necessaries of shelter and storage, and that it has had to be done with speed and economy, so that architectural considerations could not largely enter into the builder's mind. But since a cheap and plain building may be characterized by great elegance, as the old Norman chapels sufficiently prove, because the beauty of a building consists more in the form and proportions than in any complexity of parts or richness of ornaments, there is in this circumstance no excuse for lack of architectural skill and grace. There has of late, moreover, been an immense number of costly structures erected in our country, which have allowed ample time and means for a display of elaborate architectural skill. The fact, too, that we are a practi-

cal people, seeking our ends by direct means, and in all things providing primarily for our convenience, should, instead of interfering with artistic building, enter as an element into considerations for a new style. A tasteful, noble structure may be just as convenient, and in every way just as well suited to its practical purposes, as the horrid piles which we now see on all sides.

In our natural resources, too, there is everything to aid us in building and in developing the best style. The inexhaustible supply of the best building materials ought certainly to tempt the architect to noble designs. No country in Europe can compete with us in this respect. Stones, which are rarities in the old world, are obtrusively abundant here. Marble and freestone of every variety and purity, brown, and white, and limestone, granite and volcanic rock, all are in exhaustless abundance with us. New York and Boston are surrounded by a country of brown stone and granite; Philadelphia, Baltimore and Washington by a land underlaid with marble; Chicago and Cincinnati by freestone quarries without number; and throughout the Middle States the best pressed brick in the world are made. When we compare these resources with the lamentable deficiency of Paris, Berlin, and Vienna in these respects, we ought to shame ourselves that we have made no better use of them. For whereas the European builders are glad if they can get a few stones for columns and trimmings, we lavishly pile up the products of our mines in barbarous blocks that look scarcely any better than the unquarried mine itself.

The introduction of iron and composition stone, which facilitates building, ought also to suggest something new in architecture; not only new uses of the old architectural elements, which can now be constructed with less trouble and cost than hitherto, but also new designs which could not be worked so well in the old materials of wood and stone. These new materials, since they can be wrought into any shape, size and degree of minuteness, and since they can be reproduced in any quantity without much additional cost, ought to give rise to a higher degree and greater variety of ornamentation than we have hitherto had. Statues, busts, heads, griffins, gargoyles, ornamental cornice and reliefs, could be lavished on our buildings, and produce the same architectural effect as if they were all chiseled in stone, or hammered out of bronze. It is not necessary that statues be of the finest quality of sculpture to serve their purpose as architectural elements, else the

three thousand six hundred statues on the cathedral of Milan would not serve their purpose. Elevated almost out of sight, and in bewildering numbers, they are not generally subjected to close inspection. Nor is it necessary that such statues and the like be original, for the same reason; so that copies of the masters would be equally suitable for the purpose. Such copies may be reproduced from the originals by molding, at an expense of fifty dollars apiece; so that for a few thousand dollars we could put all the gods of the Pantheon on a building. We see no reason, indeed, why our people should not be familiarized with the masterpieces of sculpture in this way; and certainly, until they are so familiarized, there can be no objection to putting them on our buildings, on the ground that they are too common, or not new. The Mosaics in St. Peter's at Rome, are only copies of well-known paintings; and if originality is not necessary in painting, as an architectural adorning, it ought not to be in sculpture.

The use of iron ought to give rise especially to *renaissance* structures, with all their ornaments, and to improvements in this style. The rich tracery, small columns and arches, ornamental capitals and finials, all may be more easily wrought in iron than the ponderous pillars and arches of the Greek or Gothic style. Any new possible style, therefore, which should be an improvement on the old styles, would perhaps have to be made on the basis of the renaissance. In it all the old elements could be used, in small proportions indeed, but in great numbers and variety, which would, with the same amount of material, give more parts and appearance of richness. For, by the use of iron instead of stone and brick, the columns, etc., to have the same strength, need not be one-fourth as large. By multiplying the same parts, moreover, which can be done with little expense by molding, we do away with the necessity for great parts altogether and so get a light, airy structure, which is the special beauty of the renaissance style, and which is aimed at in the Gothic and other styles also. It strikes us that the Italian renaissance in particular might be elaborated more fully by the use of iron. A structure like the Cathedral of Pisa, with its elegant front, containing so many small columns and rich work, where one part is like every other part, and the whole has its effect by the frequent repetition of its parts, might be constructed with but little expense, even if it were much richer: as also the front of the Cathedral of Rheims or of St. Mark's of Venice.

Iron domes being easily constructed, both as to their substantial parts and as to their ornamentation, we see no reason why they should not enter largely into our architecture, and why they should not be richer in ornament than even the domes of Europe. The dome of the capitol at Washington is a good specimen of what has been done in this direction, and suggests much more that might be done. These domes may be covered from lantern to base with the most delicate work, including reliefs and statues, without any considerable cost. The dome, too, goes well with almost any structure, mounting majestically, as in the Pantheon of Paris, above a Greek substructure; or as in St. Peter's and St. Paul's above the Italian renaissance; or as in the cathedral of Mayence above the Romanesque; or as in St. Mark's of Venice above a composition of all the oriental styles. These domes are already numerous in our country; but they are lamentably plain and out of taste, as for example that of the City Hall, in Baltimore, which, if it but had a row of columns around its base to relieve its great height, would make the whole structure equal in effect to St. Paul's church in London, or the faultless Marie della Grazie in Milan.

Iron and work in iron being so very cheap, we have sometimes desired to see a great iron cathedral erected on our continent. The time is past when great stone cathedrals, like those of Cologne and Milan, with their fabulous expense, will be constructed; and yet, though the triumphs of American architecture are in general to be in civil and commercial structures, nevertheless, as the Catholic church has the same demand for cathedrals that it has ever had, though not the money, it ought to have them on this continent as well as in Europe, and might easily have at least one as a specimen to give our people, who cannot cross the ocean, an idea of what they are. A cathedral in all respects equal to that of Cologne might be erected in iron at the same expense as the third-class cathedral now erecting in New York. If necessary a part of such structure could be built in stone, as the walls, buttresses and main shafts of the spires and columns; but the statuary, busts, heads, fret-work, tracery, minarets, molding, cornice, baldachins, foliations, etc., which in the European cathedrals have cost the principal amount of time and money, might be cast in iron. Such a cathedral might perhaps be called "shoddy" by the copyists of the old styles and old materials, but it would have all the architectural effect of the finest cathedrals in Europe, and be equally durable

and indestructible. We have achieved similar triumphs in iron bridge building, as for example in St. Louis and New York, and we were about to attempt the same in iron tower building, the Centennial committee at Philadelphia having proposed to erect a tower twice as high as the Strasbourg steeple, the highest in the world. We see no reason why we might not betake our industrial energy to churches as well. And whether we erect the proposed cathedral or not, there is every reason why we should make iron and composition ornaments more common in all our churches, instead of the plain, heavy structures that are now erected with equal cost.

The custom, common in our country, of giving out the contract to the lowest bidder, instead of the greatest architect and best builder, has greatly impeded the development of architectural style, and given an inferior class of buildings to our people. In most European countries, where the supervision of public works belongs to the monarchs, they employ, when an important structure is to be built, the best men in the kingdom to do it, irrespective of cost. For a quarter of a century Schinkel planned nearly all the public buildings constructed in Prussia, and Berlin to-day shows the impress of his genius on every hand. Sir Christopher Wren did the same for London during the later years of his life, and Michael Angelo for Italy for full half a century. When the King of Bavaria, at the beginning of the present century, undertook to embellish Munich and make it one of the most attractive capitals of Europe, he assembled there the best architects of the world. In our country alone do we let out the work to speculators or political favorites, with the single view to getting it done as cheaply as possible, and with as much profit to the committee, the contractor and the builders as possible. The result is that while in Europe there are rarely any great architectural failures, in America there are few great architectural successes. Had we the space we should like to enter into a criticism of our public buildings to illustrate this remark; a task which we hope, however, to perform on another occasion. We do not generally in our country lay enough stress on the designs. A bad design is too often adopted, when no amount of money will make a good structure of it. If more money were spent in getting a better design, some might be saved in executing it, so as to give us a good building for the same amount of money. The offers held out for draughts should be such as to tempt our best architects to compete for the prize.

Another matter which greatly interferes with the success of our building is that a tasteless set of men generally decide on the plan. The City Council, a committee of Congress, a building committee composed of men, it may be, altogether outside of the architectural profession, and without taste withal, generally determine the matter. After first issuing proposals in ignorance of what they want, they next choose from the plans submitted without taste as to what is best. If we are not to have good judges of plans, we will be no better off than if we are not to have good architects; and it is no aid to the development or encouragement of real merit in our architects, that their plans can not be appreciated by the only persons who can have them put in execution. Our artists, knowing the proverbial lack of taste in building committees, often dare not even embody ordinary good taste in their models, much less venture anything very new, lest it fail to meet the official approbation and they fail to receive the coveted award. To get their draughts approved they often cater to the bad taste of the public, and produce plans of shoddy and flashy worthlessness, leaving their genius for architecture altogether undeveloped and unemployed. It strikes us that if a committee of architects were appointed to decide on the plan or model for our buildings, or at least were counseled with as an advisory committee, the evil might be remedied. Our city councilmen and building committees need to learn that they are not capable of judging in such matters merely because of their accidental position and influence on such committees. When artists, or at least men of taste, both plan our buildings and decide on the plans, we may expect to have worthy buildings, but not before.

Another matter that interferes deleteriously with our building is, that we generally appropriate less money for the structure than it is ultimately to cost, and so fix on an inferior plan for a superior building. We first get a small appropriation for a public building, and lay the plan on the supposition that it is to cost such amount; and subsequently, after the building is commenced, we get a larger appropriation and yet do not alter the original design of the building but build it up on the cheap plan which was first proposed. The result of this custom is that we do not generally in our building get a plan worthy of the money spent or of the materials and work heaped on the structure. By appropriating one million dollars when the structure is to cost three millions, as in the case of

the State House at Springfield, we lay the plan for an inferior building and build a better building on it; so that the plan is not proportionally as good as the building—a building whose architectural pretensions and worth may be measured by one million dollars, being made to cost three times as much, so that the architectural worth of the building is only one-third of what it ought to be. If we are to expend as much as three million dollars, let us lay a foundation worthy of three millions; for the extensions and additions of ornament which are subsequently determined on to swell the cost to three times the proposed amount, cannot generally make any great improvement in the general grandeur and architectural effect of the structure. We want a structure, too, to grow up as a whole and in organic unity, so that all parts shall appear as belonging to the original design or draught, and not a medley or incongruous mass, as most buildings are when the plans have been added to or changed. Had the architect who planned the Capitol at Washington, or the Court House in New York city, any idea of the amount it was to cost—leaving out the stealage—he would have planned a building more worthy of the expense. We are generally planning inferior to our structures, making little plans and erecting great buildings on them; and so never get our money's worth of architectural merit, whatever else we may get. For when architects are pinched to keep within economical limits, they commonly sacrifice architectural beauty first, including such ornaments as towers and delicate work, being required to make the structure, like Paddy wanted his boots, as large as they can for the money. If objects of beauty are subsequently added they are adventitious, and without that effect which they would have if wrought into the nature of the structure.

Another evil in our building, of an opposite kind to that last mentioned, is that when we begin to build we generally finish at once, and if we are not able to finish as we began, we end up cheaply. Now if we were to wait, when our money gives out, until we can build on the original plan, it might delay the completion of many of our structures, but it would not spoil them. A building unfinished never looks as badly as one ill finished. In Europe it is common to work for hundreds of years on great structures; and any man of taste would rather see the parts, if all in harmony and elegance, than the whole if out of proportion. The cathedral of Strasbourg with its one tower, or of Beauvais or Utrecht with its



choir only, is a thing of beauty, and will be so whether it is ever finished or not. Many of our religious congregations in the United States can build a church, but cannot, for example, build a worthy steeple. Now if, instead of building after a draught which has no steeple, or building a cheap and tasteless steeple, they would lay the foundation of a suitable steeple and leave it unfinished until they are able to build it worthily, they would get a better structure in the end, and not be inconvenienced in the meantime by the delay. The fact that we want to use our structures as soon as possible need not lead us to spoil their ornamentation. But after we have supplied the practical demand, which is for an audience room, we should wait for the further artistic embellishments until we can meet the demands of taste. This custom of finishing at once everything that we begin has also the further evil tendency to prevent us from attempting anything very great or grand, like the noblest structures of Europe, because such structures require ages for their completion.

AUSTIN BIERBOWER,

*49 St. Paul St., Baltimore.*

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#### HARVARD EXAMINATIONS FOR WOMEN.

THE general and importunate demand for a more thorough and liberal education for women has met with an encouraging response in England, which is being repeated in this country. In 1865 the Cambridge and Oxford examinations, established for those unable to follow the University course, were opened to girls. By the rules controlling these examinations, candidates were required to be under eighteen years of age. Strenuous endeavors were made to remove the restriction, which in course of time was done away with for both sexes by the institution of higher local examinations by the universities of Cambridge, Oxford, Durham and Edinburgh. The number of applicants increased rapidly, and the inconvenience, in many cases the impossibility, of their coming to headquarters to attend the examinations, led to the creation of centres in various parts of the country where the examinations could be held simultaneously by authorized committees. As it has been easier to obtain information regarding the results at Cambridge than at the other universities, the following facts and figures

are taken from her, although the success of the experiments has been almost, if not quite, as great at all of them. In 1865 the entire number of candidates was 126; ten years later the examinations for women were held at fifty-six centres, and there were 1,552 candidates. The numbers for 1877 could not be procured in time for this article, but the writer knows of one school in London, the Camden school, under the direction of Miss Buss, which alone sent up 100 girls.

In 1874 Harvard and Yale colleges consented to follow the generous example of the English universities, with what result as regards the latter we do not know; the first Harvard examinations for women were held in Cambridge in June of that year. In 1877, in consequence of numerous applications, examinations were held simultaneously in Cambridge and New York during the first and second weeks in June. In 1878 it is proposed to hold them at the same season in Cambridge, New York, Philadelphia and Cincinnati. In 1874 there were seven candidates, of whom four passed, and one was conditioned and passed the following year; in 1877 there were altogether twenty-four candidates, of whom but six took the whole course of studies; of those only three passed without conditions; of the rest four failed entirely. These figures are of little importance beyond showing the increase in the number of applicants, as, owing to chance or nervousness, female; like male students, often fail in a branch in which they are well prepared. But the numerical disparity between this country and England—for it must be borne in mind that their Cambridge is only one of four headquarters—is overwhelming. It is due in some measure to the much greater proportion of gentlewomen in Great Britain who are compelled to earn their livelihood, which most of them do by teaching; but as many of the candidates are under no such necessity, that explanation but partly accounts for a difference so discreditable to the intelligence and aims of our countrywomen. Yet the standard of acquirements, although good, is within the reach of the average intellect.

To give an idea of the scholarship necessary for the preliminary examination, an abstract of the next course is subjoined.

#### REQUIREMENTS FOR 1878.

The preliminary examination will embrace the following subjects: English, French, Physical Geography, either Elementary

Botany or Elementary Physics, Arithmetic, Algebra through quadratic equations, Plane Geometry, History, and any one of the three languages, German, Latin, or Greek.

## ENGLISH.

Candidates will be required to write a short composition, upon a subject to be given out at the time of the examination. They will be examined upon some pieces of standard literature, to be specified each year,—and upon the history of English literature. In 1878, candidates will be examined in Shakspeare's *King Lear* and *As You Like It*, as edited for the Clarendon Press series by William Aldis Wright.

## FRENCH.

The candidate must be able to read French fluently and with a fair pronunciation.

An elementary knowledge of French history will be required, such as may be obtained from Duruy's smaller History (*Petite Histoire de France*).

Candidates will be examined upon either of the two following courses of reading at their option:—

I. 1. Voltaire, "Charles XII." 2. George Sand, "La famille de Germandre." 3. Alfred de Vigny, "Cinq Mars." 4. Sandeau, "Mlle. de la Seiglière" (comedy). 5. Molière, "Le Misanthrope." 6. Racine, "Athalie."

II. 1. Souvestre, "Un philosophe sous les toits." 2. Tôpffer, "La bibliothèque de mon oncle." 3. Mme. de Sévigné, "Lettres" (Didot's or Garnier's edition, Paris, or Masson's, London). 4. Feuillet, "Le Roman d'un jeune homme pauvre" (comedy). 5. Molière, "L'Avare." 6. Corneille, "Le Cid."

Questions will be put to test the knowledge of the candidates in regard to allusions to history, geography and manners contained in the texts.

## ELEMENTARY PHYSICS.

The examination will be based upon Balfour Stewart's "Elementary Physics." Ganot's "Elements of Physics" may be used for reference and further illustration.

## BOTANY.

The examination will be based upon the following text books, but any equivalents will be accepted: Gray's "School and Field

Botany" (*i. e.* Gray's "First Lessons in Botany and Vegetable Physiology," combined with Gray's "Field, Forest, and Garden Botany"), and Grey's "How Plants Behave."

#### HISTORY.

The examination will cover the outlines of general History, the history of England and the history of the United States.

#### GERMAN.

Candidates will be expected to pronounce the language with reasonable correctness. The candidate must possess sufficient acquaintance with the syntax of the language to be able to turn simple sentences from English into German. The prescribed course of reading is as follows:—

1. Adler's "Progressive Reader."
2. Zschokke's "Novellen" (Der todte Gast; Der zerbrochene Krug; Das Wirthshaus zu Cransac).
3. Schiller's "Don Carlos."
4. Tieck's "Blaubart."

#### LATIN.

Candidates will be examined upon—

1. Latin Grammar and Writing Latin.
2. Phædrus, Justin, Nepos, contained in the Selection in the "Latin School Series."
3. The first three Books of Virgil's *Æneid*.

Besides an acquaintance with the outlines of Roman History, some knowledge of Roman Antiquities and of manners and customs is necessary, as well as an acquaintance with the leading events of the period in which the writer who is studied belongs.

#### GREEK.

Candidates will be examined in the first 111 pages of Goodwin and Allen's Reader (or four books of the *Anabasis*) and on Book I. of the *Iliad*.

"The preliminary examination is intended as a careful test of proficiency in a course of elementary study of a liberal order, arranged for persons who may or may not afterwards pursue their education. It differs, therefore, both in its purpose and in its selection of subjects, from any college examination,

whether for admission or for subsequent standing. It applies, however, the same standard of judgment in determining the excellence of the work offered, as would be used in judging of similar work done in Harvard College." (*Extract from Circular of New York Local Committee for 1878.*) Comparing it with the entrance examination of Harvard for 1877, in plane geometry the latter is more advanced; in arithmetic and algebra they are equal. In physics, the women's course is much more advanced, but the college requires chemistry of the young men in addition. In geography they are equal. In English composition, the subjects given to the young women require far more thought and previous general reading than the young men's. In French, the papers for the former are much more advanced and comprehensive. In Latin grammar they are equal; the composition is simpler for the women and their exercises in translation both shorter and simpler. In history, the examination for the latter is more advanced and extended. They have no Greek paper, and the young men none on English literature. Therefore, on the whole, the women's examination goes further than that of the candidates for Harvard College to prove actual *having* in most of the subjects. This examination can be taken, as a whole, only by candidates upwards of seventeen; but it may be divided between two years by girls not under sixteen. More will be expected in each branch from those who divide the course than from those who take the whole. No account will be made of a partial examination unless the candidate has passed in three subjects, when the result will be recorded by the University. No one will be admitted to examination on part of a subject. The certificates will be given only when the whole examination has been passed, in the following form:

[*Form of Certificate.*]

HARVARD UNIVERSITY.

PRELIMINARY EXAMINATION FOR WOMEN.

A—— B—— has passed (passed with distinction) (passed with the highest distinction) the Preliminary Examination held at ——, on the —— day of ——, 187—, under the direction of the Faculty of Harvard College, and is entitled to proceed to the Advanced Examination.

\_\_\_\_\_,  
*President.*

CAMBRIDGE, June, 187—.

The Advanced Examination is for young women not less than

eighteen years old, who have passed this Preliminary Examination.

Examination is divided into five sections, in one or more of which the candidate may present herself. These sections are as follows:—

1. *Languages.* Candidates may offer any two of the following languages: English, French, German, Italian, Latin, Greek.

2. *Natural Science.* Candidates may offer any two of the following subjects: Chemistry, Physics, Botany, Mineralogy, Geology.

3. *Mathematics.* Candidates must present Solid Geometry, Algebra, Logarithms, and Plane Trigonometry, and any one of the three following subjects: Analytical Geometry, Mechanics, Spherical Trigonometry, and Astronomy.

4. *History.* In 1878 candidates may offer either of the two following subjects: The History of Continental Europe during the Period of the Reformation, 1517-1648; English and American History, from 1688 to the End of the Eighteenth Century.

5. *Philosophy.* Candidates may offer any three of the following subjects: Mental Philosophy, Moral Philosophy, Logic, Rhetoric, Political Economy.

It is to be observed that no person is admitted to the Advanced till she has passed the Preliminary Examination.

[*Form of Certificate.*]

HARVARD UNIVERSITY.

ADVANCED EXAMINATION FOR WOMEN.

A—— B——, having duly passed the Preliminary Examination on the —— of ——, 187—, has been admitted to the Advanced Examination in the section (sections) of —— and has passed (passed with distinction) (passed with the highest distinction) the prescribed examinations in ——, held at ——, under the direction of the Faculty of Harvard College, on the —— of ——, 187—.

—— ———,  
*President.*

CAMBRIDGE, June, 187—.

In Boston, New York, Philadelphia and Cincinnati, there are Local Committees of ladies whose duty it is to make the necessary arrangements, be present at the examinations, provide board and lodging at a moderate rate for those who desire it, and assist young women who have not the means to become candidates in meeting the expenses of the examinations. These committees have set forth these responsibilities more fully in circulars which can be obtained from their secretaries.

These are the practical details connected with the Harvard examinations for women. The general considerations in their favor are many and important. For woman intending to earn their live-

lihood by teaching, a certificate of competency in essential branches of knowledge from the highest educational tribunal in the country is obviously of great value. It is not the happy gift of everybody who possesses information to be able to impart it, but the first requisite for teaching anything is to know it, and thus far the Harvard certificate vouches for its recipient. It has been said that nervousness sometimes interferes with candidates' doing themselves justice, but if this infirmity should reach the point of total failure it might be fairly inferred that a person of such temperament is unfit for the task of instruction. It is beyond the scope and purpose of the present article to examine the deplorable inefficiency of the machinery for female education hitherto provided in this country, the principal effect of which has been merely to enlarge the sphere of our ignorance. One element of an efficient system is a proper course of study; another, qualified teachers; with us the latter has been most lacking, but the call for something better is becoming imperative. At the same time we need information and direction as to the means of securing what we seek, and as gauges of thoroughness and accuracy in what we obtain. Our starting point is one of doubt and difficulty. The deepest concern for women's welfare can be expected only from their own sex; however sincere the interest and ready the assistance of men, we must rely mainly upon ourselves for our advancement, especially for setting a movement on foot. Therefore the present provision for the better education of girls must be left somewhat to those who have been imperfectly educated themselves. A woman may by subsequent study supply the deficiencies of her school education, but that will hardly fit her to judge of the merits of a system of teaching,—not an easy matter for well educated men or women who have given no particular attention to the subject, nor had much experience in it. The Harvard examinations afford a test from recognized authority. Diplomas from Vassar college or the more recent similar foundations cannot be of the same worth, those institutions themselves not having been tested by time; the results, no matter how brilliant, of a ten years' experiment, cannot be set against the record of two centuries and a half. The same remark applies, with still greater force, to boarding-schools and day-schools, even the longest established and most ably conducted; it should be their ambition, as it is manifestly for their interest, to furnish candidates for the examinations, whose success will be at once an evidence of the

pupils' individual acquirements and the indisputable proof of the excellence of the training which she has received. It is equally true of private tuition, since the ability to prepare pupils for even the preliminary course must be a strong recommendation for any teacher, male or female. But although, at the outset, preparation must unavoidably be obtained chiefly through private lessons or classes, or special study, it is to be hoped that in a few years candidates, as a general rule, will be girls on the point of leaving school, who will go forward to receive the Harvard certificate, as the mere seal and voucher of their whole previous instruction. Cramming and coaching are dishonest and dangerous expedients; special courses of study are deceptive in their immediate fruits, and even if they could be carried on without risk of injury to the student, and with the certainty of genuine attainment, they would produce only a few scores, possibly hundreds, of well educated young women yearly; a gain and advantage to the country no doubt, but who would be as a handful of seed grain scattered over its vast surface. This system, moreover, if unsupported by the schools, leaves the candidate or graduate in an undesirable position of singularity. It should be the object of the girls' schools to bring their instruction to a level which will enable their scholars to pass the Harvard examinations, as the best schools do for boys. This would remove the strain of special preparation, and go far to do away with the nervousness and excitement which will at first in many cases accompany the ordeal, an excitement which few temperaments in either sex will wholly escape. There is no objection to the Harvard examinations to which any examination is not open, (and every recitation in class is an examination,) while the drawback of publicity is absent, since they are conducted in private and by writing, a method less trying to most young people than oral questions and answers, and which relieves the candidate from personal conspicuousness.

It is hard to remember that some people still find objections to a liberal education for women, while a larger number consider it unnecessary, and it would be impossible here to go over the oft-repeated, unanswered arguments in its behalf. There is one, however, of peculiar force in this country which nobody should forget, viz.: that if everywhere mothers are the earliest teachers, they are so to a pre-eminent degree in America. As an almost universal rule, we are dependent upon ignorant, untrustworthy foreigners of a low class for our servants; and American mothers,



whatever their means may be, are compelled to fill the post of head nurse, nursery governess, governess, tutor, and of all the functionaries who so lighten parental duties in England. That nature alone does not make mothers good nurses may be learned from any family physician, and it is not to be supposed that she makes them good governesses. One must know more than how to read and write to be able to teach even reading and writing well ; and it is not only with a view to actual instruction, but to giving intelligent and intelligible answers to the questions of children, that the best possible education is desirable for our women. Neither the guardianship nor companionship of their children ceases when the latter go to school ; on the contrary, in the absence from our homes of those benevolent institutions, the nursery and school-room, it is when the little folks are no longer babies, when the mid-day nap and early bed-time are given up, that they are most incessantly on the mother's hands. In the great majority of cases the father has nothing to do with the children beyond petting and spoiling them in the very few hours when they can be together, therefore the share of their training which by right belongs to him, comes upon the mother also ; how often between them it falls to the ground, it is needless to ask. The present state of home education, by which I mean only the moral training and discipline, is one of the most disheartening features of our social system. Every day parents are to be heard saying that their child's mind or character is too strong for any attempt at control on their part, and this is constantly said of children under four years of age. The consequences are worse for girls than for boys, the external conditions of existence, which except in the new States bear harder on men than on women, generally pressing them into bonds at an age when a girl is her own mistress, and too often the mistress of her parents' house. This is not the place for examples ; inquire of the head of any girls' school and find with how many of her pupils the choice of studies, even attendance at school, is determined entirely by the young person. Parents more often hinder than help their daughters, fretting about over-work and organizing no rules of home life to facilitate study, regular meals, exercise, and early hours. In fact the parents of America have abdicated, and left to their children the heavy burden of governing themselves. The wickedness and cruelty of their conduct, the way in which they double the responsibility in seeking to avoid it, are themes for many

sermons. They have two excuses: First, that the mother's health and nerves are very often worn out by household care and worry, by the constant charge of her children from infancy, which makes her impatient to resign it into their own hands, while the father's outside occupations take so much of his time and strength that he turns to his children only for solace or amusement. The second and best excuse is one of which they are probably unconscious—that this neglect is a reaction from the rigid manners of a hundred years ago. There are few people now alive who were brought up under that severe regimen; the middle-aged people of the present day knew an easier rule, yet one which preserved the forms of obedience and respect; but the pendulum had not yet swung to its limit and parental supervision was continually relaxing for their children and children's children, until our young people have been left to look after themselves. That they do not manage worse is a subject of wonder and thankfulness, and a strong proof of their good natural stuff. But the best of them grow up with the sense of time and opportunities miserably wasted for want of a guiding hand. The best human aid they can receive in their task is a good education; for although intellectual training cannot take the place of moral discipline, it is the best substitute; it strengthens the judgment, forms habits of thought and reflection, of method and system, and in course of time will help those who have profited by it to do their duty better by future generations than has been done by themselves; to reconstitute the lost statutes of respect, and to tighten the slackened cords of authority and order, from the looseness whereof the whole nation is slipping downwards.

The preceding remarks are based upon the supposition that women are to be mothers, and are intended to point out how important the best education is to them from that point of view. But how few remember the period, often an early one for the American woman, and in most cases leaving a long stretch of life before her, when maternal cares have decreased or ceased, and with them the household duties have grown fewer; when the time and taste for society have passed (a taste always so feeble in our people, compared to European nations); when the decades of marriage have severed the ties of girlhood and scattered the members of the former home, while the husband is more and more taken up by his profession or business, and she finds herself at her noontide practically alone, and with her occupation gone: who thinks of the provision to be made for the long hours of those long years?

To single women, desirous for their own improvement, it seems superfluous to urge the advantages of thorough and systematic study, and of giving themselves the assurance that their study is of this character, which the Harvard examinations enable them to do. In this connection I am reminded of a passage from an article in a contemporary newspaper which although favorable to the enterprise, says that, "the plan is open to the objection of encouraging the present slightly ludicrous mania for 'culture' at the expense of the old-fashioned, homely, household virtues." Where there is a marked talent for art, music, poetry, etc., there may be great accomplishments in certain directions, but *culture* cannot exist without education; the latter is the root and stem, the former only the flower. The best cure for the mania is a sound education; it will be found much more difficult to acquire than a smattering of æsthetics, while attempts at real achievement in that without first laying the solid corner-stone of the other will result in the house founded on the sand. As to the "old-fashioned, homely virtues" of which we stand daily more in need, as the old-fashioned servants and routine of service are disappearing, it is very important to ascertain whether intellectual pursuits interfere with a woman's fulfillment of her duties as wife, mother and housekeeper, or promote them. The theories on both sides of the question are well known, but careful inquiry into the lives of the best educated women and those whose mental habits are most active, go to prove that they also carry off the palm in the domestic departments. Only statistical evidence of the reverse is worth anything in the argument.

Another objection which has been brought forward against these examinations is that they will give an impetus to the rush of women for admission to the learned professions. They are certain to work in the opposite direction by showing the difficulties which lie in acquiring accurate and absolute knowledge on any subject, "the difference between knowing a thing and knowing about it." The complete courses of the advanced examinations are not sufficient to make a blue stocking, a character besides which depends upon the nature of the woman and not of her acquirements; but they are more than enough to deter an unsuccessful student from attempting the study of medicine, for instance. On the other hand, to a woman who has seriously resolved upon such a career they will be an admirable preparation for her professional studies; and since the fact that some women will be doctors

in spite of men is fully established by the number who have already become so, it is evidently desirable that they shall be as good doctors as possible, the first step toward which is their being well educated women.

The only other objection of any weight which has been made is drawn from the vexed question of sex in education. Not to enter at large upon that extensive field, it is only needful to recall to those who are anxious upon this score that Dr. Clark, the representative of the party opposed to co-education on sanitary grounds, has stated explicitly that he does not deny the ability of girls to do the same brain work as boys, but to do it in the same time and way. Now in the first place, the Harvard examinations for women do not, as has been shown, require the same work as a degree from the university; in the next place, they leave entire freedom as to the time and manner of doing it; each candidate may pursue the course as best suits her opportunities, peculiarities and circumstances, at school, in private classes, with a tutor, or by herself, and at any age above sixteen which may seem most fitting and convenient. At New York last June the ages ranged from seventeen to forty-two.

To say all the subject suggests in regard to the different branches which compose the two courses, or to enumerate the various cases of common occurrence, yet belonging to no particular class, in which such lines of study would be of the utmost practical use and benefit, would require a volume. We must be content to confine ourselves to the foregoing general illustrations; the experiences and reflections of every thoughtful reader will supply new applications and instances, but can, we think, furnish few, if any, valid objections. The urgent need of something to give purpose and elevation to the lives of our young girls and women must be apparent to everybody who has observed the direction they have been taking for ten or fifteen years past in all grades of society. They show a marked, though desultory tendency towards intellectual pursuits; let help be given them by providing it with a certain and wholesome channel.

S. B. WISTER.

## RECENT ECONOMIC LITERATURE.

PROBABLY at no period in the history of our country has so much ink and paper, as well as so much human energy and vocal power, been devoted to the subject of political economy. In articles, speeches, pamphlets and books, we have discussions of the Resumption question, of the Hard and Soft Money question, of the Silver and Gold question, of the Free Trade and Protection question, and of the Labor question, which are almost innumerable; and were they all to be collected, they would form a library nearly as large as that which Mr. Colwell spent his life in collecting out of the book stores and collections of three European countries. But when we come to speak of quality as well as quantity, we are obliged to say that very little of what has been produced in the last four or five years deserves to outlast the occasion of its birth. We have had no great systematic treatises, no profound original investigations, and few vigorous statements of any side taken in the current controversies. And the reason is that very few of the writers engaged in them have had that preliminary training in the study of the subject, which would at once bring them into possession of the best that has ever been thought and said on every question, and enable them to think and speak to some purpose for themselves. For the most part they seem to be blindly feeling their way into a subject with which they might have made a first acquaintance on much easier and more advantageous terms. There is indeed in many instances a profession and a show of learning; in some instances, where there is but little reality of it; and the great English masters would at times be very much astonished at the character of the propositions for which they are made to stand sponsor by some of their admirers on our side of the ocean.

But it is not a review of the huge mass of this literature that we propose at present, but a notice of a few of the more solid and deserving of the recent works.

Mr. Erastus B. Bigelow's *Tariff Policy* is the most recent work of the number, and one of the most valuable contributions to its

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<sup>1</sup> THE TARIFF POLICY of England and of the United States contrasted. By Erastus B. Bigelow. Pp. 61, gr. 8vo. Boston: Little, Brown & Co.

his larger work, *The Tariff Question*, is rather a statistician than an economist. He himself tells us has no preference for "theoretical special topic of recent years. Mr. Bigelow, as was evidenced by discussion;" he does not approach the question analytically or investigate the conditions of successful and profitable production and exchange; he seems to think that the positive element, that which is peculiar to the industrial condition of each nation, is of much greater weight than that which can be made the basis of economic theories, because common to all. He prefers the logic of facts, and he has taken some pains to make such a display of them as shall suffice to convince his readers, without any theoretical discussion. He traces the history of English policy; he shows that for nearly five hundred years Protection was adopted, maintained, and steadily extended by English legislation with just the results which Protectionists have always claimed for it. He shows that the surrender of that policy by Peel and the Parliament, in 1845, was based upon motives as purely and as exclusively national and local, as those which had led to its adoption. England, by 1846, had become dependent upon other countries for food; the majority of her people must eat foreign bread, and a tax on bread was a tax on the manufacturing interest itself. And, the new direction taken by her fiscal legislation was directed to the maintenance of her supremacy as a manufacturing nation. For years before committing herself to Free Trade, she spared no pains to effect commercial treaties, by which she might trade off the duties she saw she must abolish, in exchange for equal abatements of duties upon her own manufactures; but in vain. The other great reduction in her import duties has been in duties upon the raw material of manufactures. And Mr. Bigelow very justly points out the falsity of the assumption that it is to Free Trade that her subsequent extension of commerce has been due. Right on the heels of this legislation came the new influx of gold into the channels of the world's commerce; California and Australia began to replace the deficit which had been growing ever since the revolt of the Spanish Colonies in America, and since 1848, the annual supply has been three times as great as in the years preceding. And as a consequence, commerce has grown in Protectionist countries as well, and even faster than in England and France.

Mr. Bigelow draws a careful parallel of the English and the American fiscal policies. He shows that England, for the sake of

manufacturing and commercial supremacy, has sacrificed agricultural and national independence; that she raises her revenue chiefly by internal taxes, and that the bulk of her import duties is "paid by that class of the population which is dependent upon weekly wages," as her own Commissioners say; that where she puts an article on the free list it is either because she cannot produce it herself, or because she has no fear of foreign competition with her own producers; and that the example of her own silk industry, ruined by the French competition since 1860 and now clamorous for protection, is the index of what her competition would do for some of our industries if they were given up to the chances of Free Trade. As to the present American tariff, he shows that it is preposterous to speak of it as prohibitory; that its most frequently challenged enactments, such as that on foreign wools and other raw materials, amount to but a trifle of the whole value of the manufacture concerned, the duties on all such substances being less than seven millions a year. He is convinced that the necessity for protection arises from the very different conditions of production in America, the higher rate of wages—which Free Trade would not bring down—the greater cost of capital, the heavier local taxation, and the greater expense of manufacture in other directions. We are not quite of his mind that the disadvantages of our manufacturers are of that permanent sort which will compel the permanency of a Protective policy. In many departments the manufacturers themselves say they have brought their industries up to the point of independence. Mr. Bigelow retorts, "Why does not the rapid growth of exports show us this?" And just here, we think, is a point of fact which he has overlooked in his discussion, and which Mr. Washburn handled very effectively in our last issue. England's Free Trade Policy has been the active interference of her government, purse in hand, to secure to her manufacturers the control of the world's markets. And unless we are ready to do the same, we may accept Mr. Bigelow's alternative that our manufacturers are to depend on the home market and that alone.

Mr. Bigelow concludes with an exhibit of the efforts made by Englishmen to commend Free Trade to the world at large, and justly contrasts the facts with the professions based upon them. He gives in an appendix a *catena* of suffrages of American statesmen in behalf of Protection.

M. Benj. Rampal is a Frenchman without the taint of Chauvinism

which is at present so markedly prominent and offensive in most of his countrymen. He continues to recommend to the workmen of his country the example set them by a large and estimable body of those of Germany, who under the lead of Herr Schulze-Delitzsch are helping themselves instead of looking to society or to the State for their help. He had previously procured a translation of Schulze-Delitzsch's theoretical works, which, with its elaborate introduction by the French editor, we reviewed in September, 1875. This is now followed by a French version of the practical *Manual for Co-operative Societies of Production*,<sup>2</sup> which embodies the executive wisdom of the great industrial leader. The methods of industry in Germany are so different from those of our country that it would be impossible to carry out such plans here. In Germany a great many branches of production are still in the hands of the small producer, and with the rate of wages current in that country, it is possible that they will long remain there. The problem, therefore, before German co-operation is not the organization of large establishments on the capital accumulated by the thrift of workingmen. It is to enable the workingman (1) to purchase his materials without becoming the debtor and virtual bondsman, of the trading class in order to procure these. This is effected by the credit-banks, which borrow money in the money market upon the joint credit of a large body of workingmen. (2) To enable the workingman to buy materials in the small quantity he needs on as easy terms as can the great producer. This is effected by the *Roh-stoff-vereine*, or associations of workingmen, which buy in large quantities at wholesale rates, and then distribute both purchase and cost among their members. (3) To enable the workingman who has produced an article to sell it directly to the final purchaser, and then to secure the full market price for it. This is effected by co-operative magazines in which the article may be deposited, and an advance received on it, to be completed to almost its full market price as soon as it is sold. The *Manual* before us gives the most careful and detailed directions as to the

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<sup>2</sup>MANUEL PRATIQUE POUR L'ORGANISATION ET LE FONCTIONNEMENT DES SOCIÉTÉS CO-OPÉRATIVES DE PRODUCTION DANS LEURS DIVERSES FORMES. Par Schulze-Delitzsch, avec la collaboration de Dr. F. Schneider. Traduit par M. E. Simonin, Première Partie: Industrie. Précédée d'une Lettre aux Œuvriers et aux Artisans Français par Benjamin Rampal. Pp. xxvi. 488; crown 8vo. Paris, Guillaumet et Cie., Editeurs. Prix deux Francs.



formation and management of such societies, and even the blank forms for their accounts and reports. It shows that much thought and a great deal of practical experience have been utilized in planning them. The plans for co-operative stores and similar institutions will probably form a part of the next volume.

We wish M. Rampal every success in introducing and promoting co-operation among his countrymen. While not fully assured that it furnishes the final solution of the labor question, we do feel that it leads toward that solution, and even as an interimistic arrangement cannot but do good.

The work of Mr. Alfred Bolles of the *Norwich Bulletin* on *The Conflict between Labor and Capital*,<sup>3</sup> is remarkable for its thorough intellectual honesty and straightforwardness. Mr. Bolles does not see that there is any real or practical harmony of interests between the employer and his laborers on the present footing of bare competition and mere wages. He believes that in the selfish rush for wealth, every man seeks to take advantage of every other, and that the capitalist has the best position for doing this, and will make use of it. And he thinks that on the whole, the laborers of the old world at least are having the worst of the conflict; the world is gaining in wealth, but they are not growing wealthier in equal ratio. He examines the workingman's budget in each of the European countries, and comes to the conclusion that, outside of the United States, the labor market is overstocked. As to the remedies adopted or proposed, he takes them up in succession, beginning with Trades Unions. He writes of the nature and the actual history of these organizations, with a calmness and a candor which were unknown until Mr. Thornton set the good example of stating the case from the Unions' point of view, instead of that of their employers only. He shows that they have done great good as beneficial societies; that the oldest and best established are rarely involved in strikes; that their organization under a national board of direction has had the effect of reducing the number of strikes. But he believes that they have done mischief in widening the gulf between labor and capital, and in making their harmonious action more difficult for the future. And he thinks that even where they have secured a higher rate of wages, that rise has secured them

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<sup>3</sup>THE CONFLICT BETWEEN LABOR AND CAPITAL. By Albert S. Bolles, author of *Chapters in Political Economy*, and Editor of the *Norwich Morning Bulletin*. Pp. 211, 8vo. Philadelphia: J. B. Lippincott & Co.

no permanent advantage. As to Co-operation, Mr. Bolles speaks well of it, but he sees in Industrial Partnership a nearer approach to a solution of the difficulty. And he believes that employers must go farther than any mere business arrangement in cultivating the confidence of their men. They must keep them aware of the actual state of their business, the amount of its profits, and the prospects of its markets, and thus get rid of that poison of distrust and suspicion, which destroys all right and natural relations between master and men.

Mr. Bolles, being a staunch Free Trader, is of course unable to write on any economic subject without letting us know it. Thus on pages 77-8 we read, "If a restrictive tariff law is enacted by which a railroad company pays twenty-five per cent. more for its rails, it makes up the advantage thus accruing to the home manufacturer by raising the price of freights." And in a note he refers us to "Col. Grosvenor's admirable article on 'The Railroads and the Farms.'" A more unfortunate illustration could not have been employed. The whole facts as to the price of steel rails are on record; they have been again and again appealed to. Before we began to make any, our railroads made inquiries abroad, and got the lowest figures at which the English holders of Bessemer's patents would furnish them. The railroads themselves put up the first American works rather than pay that price, and at once English steel rails were offered them at a figure very far below the first offer, the difference being a good deal larger than the tariff duty. And since that time the production of Bessemer steel has been brought to a perfection in the United States which has left Europe out of sight. England is copying our "plant," and the abolition of the import duty would do little injury to the manufacturer, just as the reduction of the duty in the flush times of 1870 did not lower the price. If we were of Mr. Bolles' school, we would not talk too much about the price of rails in relation to the tariff.

The English school of Economists are fond of keeping M. Bastiat before the public. They seem to rely on the witty Frenchman to take away their reproach as the propagators of "the Dismal Science." And in Political Economy as in Theology, a very small amount of fun will go a great way, and orthodox economists are as susceptible as orthodox deacons to the shadow of the ghost of a joke. M. Bastiat's *Sophisms of Protection* in its original shape, and also an adaptation of it, are already before the public; and now

we have a selection from his *Essays*,<sup>4</sup> edited by Mr. Wells. We should rather have suggested a translation of the *Harmonies Economiques*, or a reprint and revision of its English translation. That work touches far more broadly upon the great economic questions, and as it was written under the influence of Mr. Carey's works—to put the case mildly—it is partly free from M. Bastiat's unfortunate tendency to construct economic situations and facts out of his inner consciousness. The present work is clever, brilliant and readable, but it labors under the unfortunate disadvantage of being about as wide of the historical truth of things as Mr. Wells's own *Robinson Crusoe's Money*. Indeed the paucity of allusions to historical situations in M. Bastiat's writings, and of his use of them in argument or illustration, has often been noticed. His political economy, with the exception of the work we have specified, is "all in the air." We are continually reminded of the naïve confession of the *Spectator*, that Political Economy is as inapplicable to actual life directly, as is the science of pure mechanics, which begins by assuming that bodies are absolutely rigid or absolutely fluid, to the actual substances of our daily experience.

Prof. Sumner of Yale belongs to a class which has had many illustrious names in the records of Political Economy. Berkeley, Malthus, Jones, Whateley, Wayland and Chalmers, were there not another to name, would be sufficient to show that the clergy are not disqualified by anything in their own course of training from successfully undertaking the study of economical questions. And in the sphere of practice the achievements of Duncan the inventor of savings banks, and of Kingsley and Maurice in the promotion of co-operation and the higher education of workingmen, as well as of Chalmers, Guthrie, Fliedner and others in battling with pauperism, would seem to indicate a natural relation of the science to their profession. A theologian comes to the discussion of these topics with a great advantage, and a related temptation. He, of all men, can have no excuse for not looking upon all social questions in the light of the highest, deepest, broadest principles of which the human mind is cognizant. His professional training and experience will have done but little for him, if it has not taught him to awaken men to the sense of their errors by leading them

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<sup>4</sup>ESSAYS ON POLITICAL ECONOMY. By Frederick Bastiat. English Translation Revised, with Notes by David A. Wells. Pp. xiv. 291. 8vo. New York: G. P. Putnam's Sons.

to a profounder view of all questions, and to meet them, not with negations, but with broader affirmations. On the other hand, his habit of looking upon all questions of principle with a keen sense of their practical importance, is apt to generate an intensity of feeling and of temper which is not favorable to scientific calmness, nor even at times to fairness and impartiality. Hence it is that no literature is so full of controversial heat as that which is devoted to the loftiest of all themes.

In Prof. Sumner's two economical works, *The History of Currency* and *Protection in the United States*,<sup>5</sup> we are more impressed by the warmth of feeling than by the breadth of view they exhibit. When, for instance, we take up the discussion of the national idea in his opening chapter, we find that what he has to say is chiefly of a negative kind, and that he exhibits no concern to do justice to those deeply rooted convictions and instincts of patriotic duty, which any writer on this topic must meet at its very threshold. Indeed, he excites doubts as to whether he has cared to understand what is meant by the principle of nationality. He alleges in illustration of its weakness and insufficiency as a ground of action the absurd Napoleonic map of Europe published in 1863. But so far from that being any illustration of the principle, nothing could be more contradictory of it than the schemes of the French imperialists, whose plans involved the obliteration of actual nations, and the prevention of the realization of the principle in the case of others. It is not from Napoleonic pamphlets, but from Mazzini, from Bluntschli, from Maurice, from Mulford, that we can learn what nationality means, in so far as a truth which transcends all statements can be brought within the bounds of speech.

As we may be thought unjust as to the temper of the book, we shall quote the first paragraph in full:—

“It is a sign of a dogma in dissolution to change its form while striving to guard its vested interests and traditional advantages. Just now the dogma of protection is striving to find standing ground, after a partial retreat, for a new defence, in the principles of nationality. We are told that there is now only a ‘national’ and not a ‘political’ economy; that there are no universal laws of exchange,

<sup>5</sup> LECTURES ON THE HISTORY OF PROTECTION IN THE UNITED STATES, delivered before the International Free Trade Alliance, by Wm. G. Sumner, Professor in Yale College. Pp. 64; gr. 8vo. Published for the International Free Trade Alliance by G. P. Putnam's Sons.

consequently no science of political economy; that it is only an art, and has only an empirical foundation, and that it varies with national circumstances to such a degree as to be controlled by nothing higher than traditional policy or dogmatic assertion. Great comfort is found for this position in the assertion that German economists have discovered or adopted its truth. How utterly unjust and untrue this is as a matter of fact, those who have read the works of the German economists must know. It is untrue, in the first place, that they are unanimously of the school of *socialistes en chaire*, and, in the second place, it is untrue that the *socialistes en chaire* are clear and unanimous in their position. They occupy every variety of position, from extreme willingness to entrust the state with judgment in the application of economical prescriptions, to the greatest conservatism in that regard. Finally, it is not true that any of them are protectionists."

Now let us look at a few of these statements. Who is it that have retreated from the position that there are universal laws of wealth, which it is the business of the economist to investigate? Is it Mr. H. C. Carey, or E. Peshine Smith, or Francis Bowen, or any recognized leader of the Protectionists, either in this or any other country? If they have, we have never heard of it. They have repeatedly pointed out the unscientific method of the English school, and their words have found ample confirmation in the revolt of a large body of that very school, and their adoption of the position farthest removed from its own. But Mr. Sumner gives us an intimation as to who is meant. It is those who have been talking about "National Economy" and "the national principle." The present writer is one of those who have done so. But he never knew of anybody who was absurd enough to assert that there is a nationalist principle in economic science, and then to deny that there is any principle at all.

But this talk about "National Economy" means an attempt to maintain the cause on new ground, after the old has been abandoned. Who has retreated? Who has abandoned the old ground? Neither Mr. Carey nor any of his older scholars have even adopted this term Nationalist. A very few of the younger ones—perhaps it would not take two hats to cover them all—have preferred to revive that term, as it seemed to them the best possible expression for what the school had at all times been fighting for. But that is merely their private opinion, and in no way

implicates any one except themselves. The older men stand just where they always did; and when Mr. Sumner has taken the scalps of those who prefer the term he dislikes, he has to settle with Mr. Carey's doctrines of local centres, societary circulation, etc., just as if the others had never written. But as to the history of the word, it is a revival, not an invention. It was used by List and other Germans before even Mr. Carey began to write. It was virtually, though not formally, contained in the title of Adam Smith's classic work. And it has not been revived to affirm that economics rest on a purely empirical basis, but to assert the deepest and broadest possible basis in principle for the science.

In the next place, who is it that does the injustice of supposing that the *Kathedersocialisten* adopt the Nationalist principle? Nobody that we ever heard of. The present writer has been at some pains to repudiate, as a protectionist, all notion of agreement or sympathy with them, and to show that their position, that economics are a mere matter of convention, leaves no room for a nationalist principle or any other. He has even defended those fundamental principles of the orthodox school which they have assailed, and emphasized the fact that not they, but the orthodox economists of Germany, adopted a protectionist resolution at their annual assemblage in 1875. Equally absurd, therefore, is the implication that the protectionists in general regard all German economists as belonging to the *Kathedersocialisten*. We presume of course that somebody has been talking the nonsense which calls for these contradictions; but is it fair to speak as if such absurdities were talked by protectionists in general, and especially by those of them who adopt the name of nationalists? And in view of the broad and unqualified character of Mr. Sumner's statements, might we not suggest that the words "unjust and untrue" have a much more accurate, nearer and more personal application than he has given them?

And we are obliged to say that this first paragraph is not exceptional. We do not mean that the author is consciously and intentionally unfair. We mean that he pursues the old controversial method of the theologians, which because it was utterly unsympathetic, and because those who followed it were fully satisfied that there was nothing worth understanding in those who differed from them, could not but lead to endless misunderstandings. That temper of mind is not consistent, even, with a thorough and per-

sistent attention to accuracy of statement ; it is too great a strain for human nature, to be always taking care to be just to people for whom you do not care. It would be altogether unfair to speak as if this book were an exception in this defect. There has been too much of this on all hands, and on both sides. But nowhere have we seen the method and the spirit so abundantly and profusely illustrated as in the present instance.

It may seem hypercritical to take exception to the title of the book as a *History*, as the word is very loosely used among us. History is the narrative of what has been, with the reason for its having been thus, and not otherwise. Mr. Sumner writes rather objections or exceptions to history, than history itself. He gives us an argument why these things ought not to have been, *a propos* of a collection of historical notices and illustrations. But his work lacks that fundamental bond which makes such notices and solitary facts one in historical unity. Mr. Young's work on the same theme cannot be compared with Mr. Sumner's as a piece of literature ; but in reading it we seem to come far closer to historical reality. The latter reminds us greatly of some of those recent histories of the Reformation, in which we are overwhelmed with reasons why Erasmus, More, Pirstinger, Contarini, Vicelius and the other moderates, *ought* to have had the control and direction of affairs, instead of this rough-tongued, loud-voiced Luther, whose manners are so offensive to our theorists. But we feel that the business of the historian is to tell us why it was that Luther and not Erasmus led Europe, and to show us that neither violence, nor ignorance, nor greed, nor folly, nor stupidity, are moving forces in history. If Mr. Sumner is right, the latter have been moving forces throughout a large part of the history of the United States.

One of the most complicated problems in the financial world, is the one presented by the fluctuations of the London money and merchandise markets. England's extensive commerce has made her everybody's next-door neighbor, and not an event of importance occurs in any quarter of the globe, without its being registered on the commercial barometer in Threadneedle Street. It has been carefully studied by many in the new school of financiers, who, under Mr. Bagehot's lead, have definitely given up Political Economy as an abstract science. Mr. Arthur Ellis<sup>6</sup> seems to be

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<sup>6</sup> THE RATIONALE OF MARKET FLUCTUATIONS. By Arthur Ellis. Pp. ix., 186. 12mo. London, Effingham Wilson.

one of these writers; his study of the market history of recent years is based upon very wide and careful observations, and in places he has a slap at the theorists, whose "must be," and it "will naturally follow," very often come into sharp collision with the corners of hard fact. He gives a sort of chronological view of the recent events in the business world, and of their influence. We do not always agree with him, as in his assumption of a uniform value of gold throughout the world and throughout different decades in the same century. We do not think the recent approximation of our currency and our gold standard are due simply to the appreciation of our paper money; and that to the increased demand for it by the expansion of our trade. But we think that both economists and practical men will find, in his little book, much that is suggestive and useful.

The two text books of Prof. Perry<sup>7</sup> and President Sturtevant<sup>8</sup> remind us of what the *Academy* reviewer said of the former of the two: "Political economy is still in its youth in America, and English economists, who are chiefly engaged in limiting and qualifying its early generalizations and assumptions, must envy the freshness and confidence with which transatlantic professors of the science sometimes propound them. Mr. Perry states in his preface that he has endeavored so to lay the foundations of political economy in their whole circuit that they will never need to be disturbed afterward by persons resorting to it, however long and however far these persons may pursue their studies in this science. There was a time when the trumpet of an Oxford or Cambridge professor of political economy might give forth no less certain a sound, but few such notes are now heard from English chairs. Nor since the publication of Mr. Mill's treatise would many English readers be satisfied with the conception of 'the whole circuit' of political economy involved in Mr. Perry's definition of it as the science of exchange or of value; which omits the department of production," etc.

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<sup>7</sup>AN INTRODUCTION TO POLITICAL ECONOMY. By Arthur Latham Perry, LL.D., Orrin Sage Professor of History and Political Economy in Williams College, author of "Elements of Political Economy." Pp. 348, 12mo. New York: Scribner, Armstrong & Co.

<sup>8</sup>ECONOMICS, OR THE SCIENCE OF WEALTH. By Julian M. Sturtevant, Professor of Political Economy in Illinois College, and ex-President of the same. Pp. xvii. 343. New York: G. P. Putnam's Sons.



But what would the reviewer say of Prof. Sturtevant's book, which assumes all the old principles, especially the omnipotence of competition, with all the equanimity of a McCulloch. The passion for theoretic simplicity was never more honestly and thoroughly indulged. We seem to be reading a mathematical treatise, and to be living in the mathematician's world of ascertained premises. In some points our author is superior to Prof. Perry: he defines his "Economics" as the science of wealth, not of exchange; and he decides that "Wealth is anything that can be owned and exchanged for an equivalent," while Prof. Perry thinks that Political Economy "has to do with processes simply as they are related to sales." But it follows that national skill and intelligence are no part of a nation's wealth; that communities are to be thought wealthy only because of what they have done, and not because of what they are capable of doing. But the French economists—especially Say and.....—have shown that Adam Smith was altogether wrong in his limitation of wealth to material possessions.

We must give Prof. Sturtevant the palm for thorough-going consistency. This indeed gives his book its chief value, that it says in black and white what other people half think and less than half say. Take for instance his denial of the national character of wealth in § 23.

Professor Perry's book is not an abridgment of his *Elements*, but an independent work designed for a less advanced class of readers—the pupils in higher schools, and even in those colleges where there is no place in the curriculum for a longer course of study. It represents no change of views since the preparation of his larger work. Its chief interest, therefore, lies in the attempt to bring the study within the comprehension of another class of students. In our opinion it is better suited to that end than any other work of Professor Perry's school. He writes with a love of the subject and of his own conclusions which make his writing vigorous. He does not always divest himself of a controversial attitude, but we have noticed no instance of unfairness. But we are convinced that if the same literary power had been combined with a better method and a broader conception, Mr. Perry's book would have been both more interesting and more useful.

ROBT. ELLIS THOMPSON.

## BOOKS RECEIVED.

- Music in the House. By John Hullah, LL.D. Illustrated. 16mo. Pp. vii.; 79. Cloth, 75 cents. Philadelphia: Porter & Coates.
- Monday Chats. By C. A. Saint-Beuve of the French Academy. Selected and translated from the *Causeries du Lundi*, with an introductory essay on the life and writings of Saint-Beuve, by William Matthews, LL.D. 12mo. Pp. lxxxvi.; 298. Cloth, \$2.00. Chicago: S. C. Griggs & Co. [Claxton, Remsen & Haffelfinger.
- Money and Legal Tender in the United States. By H. R. Linderman, Director of the Mint. 12mo. Pp. x.; 173. Cloth, \$1.25. New York: G. P. Putnam's Sons. [Porter & Coates.
- Meta Holdenis. By Victor Cherbuliez. Collection of Foreign Authors, No. V. 16mo. Pp. 212. Paper, 50 cents. New York: D. Appleton & Co. [Porter & Coates.
- The Different Forms of Flowers on Plants of the Same Species. By Charles Darwin, M. A., F. R. S. With Illustrations. 12mo. Pp. viii.; 352. Cloth, \$1.50. New York: D. Appleton & Co. [Porter & Coates.
- Appletons' Hand-Book of American Winter Resorts, with principal routes of travel. For tourists and invalids. Illustrated. With maps. 12mo. Pp. viii.; 138. Paper, 50 cts. New York: D. Appleton & Co. [Porter & Coates.
- The Bar-Rooms at Brantley; or, The Great Hotel Speculation. By T. S. Arthur. Large 12mo. Pp. 437. Philadelphia: Porter & Coates.
- Echoes from Mist Land; or, The Nibelungen Lay. Revealed to Lovers of Romance and Chivalry. By Auber Forestier. 12mo. Pp. liv.; 218. Cloth, \$1.50. Chicago: S. C. Griggs & Co. [J. B. Lippincott & Co.
- Being a Boy. By Charles Dudley Warner. Illustrated by "Champ." 16mo. Pp. vi.; 244. Cloth, \$1.50. Boston: James R. Osgood & Co. [Porter & Coates.
- The Queen of Sheba. By Thomas Bailey Aldrich. 16mo. Pp. 270. Cloth, \$1.50. Boston: James R. Osgood & Co. [Porter & Coates.
- Outlines of Etymology. By S. S. Haldeman, LL.D., M. N. A. S., Professor of Comparative Philology in the University of Pennsylvania, President of the American Philological Association 1876-77. 12mo. Pp. 113. Philadelphia: J. B. Lippincott & Co.
- The Flood of Years. By William Cullen Bryant. Illustrated. 12mo. Pp. 32. Cloth, \$2.25. New York: G. P. Putnam's Sons. [J. B. Lippincott & Co.
- Dita. By Lady Margaret Majendie, author of "Giannetto." Leisure Hour Series. 16mo. Pp. 260. Cloth, \$1.00. New York: Henry Holt & Co. [Porter & Coates.
- Trancendentalism, with Preludes on Current Events. By Joseph Cook. Boston Monday Lectures. 12mo. Pp. 305. Boston: James R. Osgood & Co. [Porter & Coates.
- Single Famous Poems. Edited by Rossiter Johnson. 12mo. Pp. xii.; 285. Cloth, \$2.00. New York: Henry Holt & Co. [Porter & Coates.
- The Prince of Argolis. A Story of the Old Greek Fairy Time. Illustrated by J. Moyr Smith. 12mo. Pp. 126. Cloth, \$2.00. New York: Henry Holt & Co. [Porter & Coates.