

DISCUSSIONS

BY

ROBERT L. DABNEY, D.D., LL.D.,

PROFESSOR OF MORAL PHILOSOPHY IN THE UNIVERSITY OF TEXAS,
AND FOR MANY YEARS PROFESSOR OF THEOLOGY IN UNION
THEOLOGICAL SEMINARY IN VIRGINIA.

EDITED BY

C. R. VAUGHAN, D. D.,

PASTOR OF THE PRESBYTERIAN CHURCH OF NEW PROVIDENCE, VA.

VOL III.
PHILOSOPHICAL.

RICHMOND VA.:
PRESBYTERIAN COMMITTEE OF PUBLICATION.
1892.

COPYRIGHT BY
JAMES K. HAZEN, *Secretary of Publication.*
1892.

PRINTED BY
WHITTET & SHEPPERSON.
RICHMOND, VA.

CONTENTS.

	PAGE.
MORALITY OF THE LEGAL PROFESSION,	1
POSITIVISM IN ENGLAND,	22
LIBERTY AND SLAVERY,	61
POPISH LITERATURE AND EDUCATION,	70
SIMPLICITY OF PULPIT STYLE,	80
GEOLOGY AND THE BIBLE,	91
A CAUTION AGAINST ANTI-CHRISTIAN SCIENCE,	116
THE PHILOSOPHY OF DR. BLEDSE,	182
THE PHILOSOPHY OF VOLITION,	211
THE EMOTIONS,	271
CIVIL ETHICS,	302
THE PHILOSOPHY REGULATING PRIVATE CORPORATIONS,	329
INDUCTIVE LOGIC DISCUSSED,	349
NATURE OF PHYSICAL CAUSES,	376
APPLICATIONS OF INDUCTION AND ANALOGY,	412
SPURIOUS RELIGIOUS EXCITEMENTS,	456
FINAL CAUSE,	476
ANTI-BIBLICAL THEORIES OF RIGHTS,	497
MONISM,	523
THE FACULTY DISCOURSE,	536
THE STANDARD OF ORDINATION,	551
THE IMMORTALITY OF THE SOUL,	569

MORALITY OF THE LEGAL PROFESSION.

THE prominent influence which lawyers exert in the community makes it a question of vital interest what are the ethical principles upon which the profession habitually regulate the performance of their professional duties. Their social standing is usually that of leaders in every society. As a class, they are almost uniformly men of education, and their studies of the science of the law, which is a great moral science, with their converse with all conditions of men, and all sorts of secular transactions, give them an intelligence and knowledge of the human heart which cannot but make them leaders of opinion. It is from this class that the most of our legislators and rulers, and all our judicial officers, must be taken. They are the agents by whose hands are managed nearly all the complicated transactions which involve secular rights, and interest the thoughts and moral judgments of men most warmly. But more; they are the stated and official expounders of those rights, and not the mere protectors of the possessions or material values about which our rights are concerned. In every district, town or county of our land, we may say with virtual accuracy, monthly, or yet more frequent, schools are held in which the ethical doctrines governing man's conduct to his fellow man are publicly and orally taught to the whole body of the citizens, with accessory circumstances, giving the liveliest possible interest, vividness and pungency to the exposition. Of these schools the lawyers are the teachers. Their lessons are presented, not in the abstract, like so many heard from the pulpit, but in the concrete, exemplified in cases which arouse the whole community to a living interest. Their lessons are endlessly varied, touching every human right and duty summed up in the second table of the law. They are usually intensely practical, and thus admit of an immediate and easy application. They are always delivered with animation, and often with an impressive eloquence. It is, therefore, obvious

that this profession must have fearful influence in forming the moral opinions of the community. The concern which the country has in their professional integrity, and in their righteous and truthful exercise of these vast powers, is analogous to that which the church has in the orthodoxy of her ministers. Nor are these influences of the legal profession limited to things secular; for the domains of morals and religion so intermingle that the moral condition of a people, as to the duties of righteousness between man and man, greatly influences their state towards God. It may well be doubted whether an acute and unprincipled bar does not do more to corrupt and ruin many communities than the pulpit does to sanctify and save them. These things at once justify the introduction of the topic into these discussions, and challenge the attention of Christian lawyers and readers to its great importance.

In describing what is believed to be the prevalent, though not universal, theory and usage of the bar, we would by no means compose our description out of those base arts which are despised and repudiated as much by honorable lawyers as by all other honest men. There is no need to debate the morality or immorality of the various tricks; the subornation of witnesses; the bribing of jurymen; the falsification of evidence in its recital; the misquotation or garbling of authorities; the bullying of truthful and modest persons placed in the witness' stand by no choice of their own; the shaving of the claims of clients in advance of a verdict by their own counsel, by which some lawyers disgrace their fraternity. This class are beyond the reach of moral considerations; and, concerning their vile iniquity, all honest men are already agreed. Nor, on the other hand, can we take the principles of that honorable but small minority as a fair example of the theory of the profession, who defend in the bar no act or doctrine which their consciences would not justify in the sight of God, and who say and do nothing officially which they would not maintain as private gentlemen. This class, we fear, are regarded by their own fraternity rather as the puritans of the profession. It is believed that the theory of the great mass of reputable lawyers is about this: "that the advocate, in representing his client's interest, acts officially, and not personally, and, therefore, has no business to entertain, even as an advocate,

any opinion of the true merits of the case, for this is the function of the judge and jury; that the advocate's office, to perform which faithfully he is even sworn, is to present his client's cause in the most favorable light which his skill and knowledge of law will enable him to throw around it; and that if this should be more favorable than truth and justice approve, this is no concern of his, but of the advocate of the opposite party, who has equal obligation and opportunity to correct the picture; that not the advocate himself, but the judge and jury who sit as umpires, are responsible for the righteousness of the final verdict; that, according to the conception of the English law, a court is but a debating society, in which the advocates of plaintiffs and defendants are but the counterpoises, whose only function is the almost mechanical, or, at least, the merely intellectual one of pressing down each one his own scale, while an impartial judge holds the balance; that this artificial scheme is found by a sound experience to be—not, indeed, perfect—but, on the whole, the most accurate way to secure just verdicts in the main, and that this fact is the sufficient moral defence of the system."

Now, it is not our intention, in impugning the morality of this theory, to charge the profession with immorality and dishonor, as compared with other professions. While the bar exhibits, like all other classes, evidences of man's sinful nature, it deserves, and should receive, the credit of ranking among the foremost of secular classes in honorable and generous traits. Lawyers may urge with much justice, that other professions habitually practice means of emolument strictly analogous to their official advocacy of a bad cause. The merchant, for instance, says all that he can say, truthfully, in commendation of his wares, and is silent concerning the *per-contras* of their defects. "To find out these," he says, "is the buyer's business." The farmer praises all the good points of the horse or the bullock he sells, and leaves the purchaser to detect the defects, if he can. It is not intended, then, to assert, that the practice of this theory of the advocate's duty is more immoral than other things commonly supposed reputable in other callings. The question to be gravely considered is: whether the greater importance of the advocate's profession, as affecting not only pecuniary and personal rights, but the moral sentiments and virtues of the

commonwealth, does not give a graver aspect to the errors of their theory of action. It is not that the bar is more immoral than commerce or agriculture; but that, if the bar acts on an immoral theory, it is so much more mischievous. Nor, again, is it asserted that the individual advocate is necessarily a vicious man, because the professional idea into which he is betrayed is a vicious one. It is not doubted that many men of social honor act out the idea of their office above described, who, if they were convinced of its error, would repudiate it conscientiously. It is not questioned that the professional intercourse of lawyers with each other is usually courteous, generous and fraternal, above most of the secular professions; that many magnanimous cases exist where peaceful counsels are given by them to angry litigants, so as to prevent controversies which would be extremely profitable to the advocates, if prosecuted; that there is no class of worldly men who usually respond more nobly to the claims of beneficence than lawyers; and that they deserve usually their social position in the front rank of the respectable classes. But, to recur to the truth already suggested, it should be remembered that their profession is not merely commercial or pecuniary in its concerns; it is intellectual and moral; it affects not only the interests but the virtues of the people: lawyers are their leaders and moral teachers. Therefore, they act under higher responsibilities than the mere man of dollars, and should be satisfied only by a higher and better standard. The merchant may, perhaps, lawfully determine his place of residence by regard to his profits: the preacher of the gospel may not; and should he do so, he would be held as recreant to his obligations. Why this difference? In like manner we may argue that should the lawyer act on a moral standard no higher than that of the mere reputable man of traffic, he would violate the obligations of his more responsible profession. But if this were not so, the obvious remark remains, that, if all other secular professions act unscrupulously, this is no standard, and no justification for the bar: to "measure ourselves by ourselves, and compare ourselves among ourselves is not wise." The only question with the answer to which true integrity will satisfy itself, is this: *whether the above theory of an advocate's functions is morally right.*

We shall begin a diffident and respectful attempt to prove that it is not, by questioning the accuracy of the plea of beneficial policy, in which it is asserted, that the administration of justice is, on the whole, better secured by this artificial structure of courts, than by any other means. We point to the present state of the administration of justice in our country; to the "glorious uncertainties of the law;" to the endless diversities and contradictions, not only of hired advocates of parties, but of dignified judges; to the impotence of penal law, and especially to the shameful and fearful license allowed among us to crimes of bloodshed; and ask, can this be a wholesome, a politic system, which bears such fruits? Is this the best judicial administration for which civilized, Christian, free nations may hope? Then, alas, for our future prospects! But it is notorious among enlightened men, that there are States, as for instance Denmark, Wurtemberg, Belgium, and even France, where the general purposes of order, security and equal rights—not, indeed, as towards the sovereign, but between citizen and citizen—are far better obtained in practice than they are among us, and that, in some cases, without our boasted trial by jury. Our system, judged by its fruits, is not even politic: it is a practical nuisance to the State. It may be well doubted whether, in spite of all our boasted equal rights, the practical protection this day given to life, limb and estate, by the unmitigated military despotism of the Governor-General of Cuba, not to say by the tyrannical government of Louis Napoleon, is not, on the whole, more secure and prompt and equitable, than that now enjoyed in many of the United States. And the worst feature is, that as the legal profession has increased with the growth of the country, and gotten more and more control over legal transactions, these defects of judicial administration have increased. It is urged in favor of this system of professional advocacy, that great practical injustice would frequently result from the inequality of knowledge, tact, fluency and talent in parties, if they did not enjoy the opportunity of employing counsel trained to the law and exercising their office in the spirit we have described. It would often happen, it is said, that a rich, educated, skilful man, might contend with a poor, ignorant and foolish one; but, by resorting to counsel, all these differences are equalized. It may

be justly asked, whether there are not inequalities in the skill and diligence of advocates, and whether the wealth which would give to the rich suitor so unjust an advantage over his poor adversary, if they pleaded their causes in person, does not, in fact, give an equally unjust advantage, in the numbers and ability of the counsel it enables him to secure, when those counsel are permitted to urge his cause beyond their own private convictions of its merits. We do not, of course, dream of any state of things in which professional advocates can be dispensed with wholly; minors, females, persons of feeble intellects, must have them in some form. But it is very doubtful whether as equitable results would not be reached in the main, were all other suitors, except the classes we have mentioned, obliged to appear *per se*, extreme as such a usage would be, as those reached under our present system. Cases are continually occurring, in which verdicts are obtained contrary to right, in virtue of inequalities in the members, reputation, talents, or zeal of opposing counsel, or of the untoward prejudices under which one party has to struggle. Especially is this assertion true of a multitude of cases in which the commonwealth is a party; for when this unscrupulous theory of an advocate's functions is adopted, it is universally found that the personal client on the one side is served with a different kind of zeal and perseverance from that exerted on the other side in behalf of that distant, imaginary, and vague personality, the State. This theory, therefore, probably does as much to create unfair inequalities as to correct them. And it usually happens that the advocate derives his warmth, his strongest arguments, and most telling points, from his conversations with the eager client, whom self-interest has impelled to view the controversy with all the force of a thoroughly aroused mind; that, in a word, the client does more to make the speech effective than his counsel.

But we are disposed to attach comparatively little importance to these considerations. Policy is not the test of right, on which side soever the advantage may lie; and we have too much faith in the immutable laws of rectitude, and in the providence of a holy God over human affairs, to believe that a true expediency is ever to be found in that which is immoral. In the final issue, that which is right will always be found most expedient. If,

therefore, the theory we oppose can be shown to be immoral, there will be no need to reply to the assertion of its expediency.

We remark, then, in the second place, that it is a presumptive reason against this theory of the lawyer's functions, that so constant a tendency is exhibited by individuals of the profession to descend to a still lower grade of expedients and usages in the pursuit of success. While the honorable men of the profession stop at the species of advocacy we have defined, there is another part, a minority we would fain hope, who show a constant pressure towards practices less defensible. To that pressure some are ever yielding, by gradations almost insensible, until the worst men of the body reach those vile and shameless arts which are the *opprobrium* of the bar. It is greatly to be feared that this tendency downwards is manifesting itself more and more forcibly in our country as the numbers of the profession increase, and competition for subsistence becomes keener. Now, our argument is not so much in the fact that the profession is found to have dishonest members; for then the existence of quacks and patent medicines might prove the art of the physicians to be immoral; but in the fact that the honorable part of the bar are utterly unable to draw any distinct and decisive line, compatibly with their principles, to separate themselves from the dishonorable. The fact to which we point is, then, that men who practice in their clients' behalf almost every conceivable grade of art and argument unsustained by their own secret conscience, short of actual lying and bribery, consider themselves as acting legitimately under the theory of the profession; and their more scrupulous brethren, who hold the same theory, cannot consistently deny their claim. If the advocate may go farther in the support of his client's case than his own honest judgment of its merits would bear him out; we ask, at what grade of sophistry must he stop? Where shall the line be drawn? If he may with propriety blink one principle of equity or law, in his behalf, may he not for a similar reason blink two? If he may adroitly and tacitly, but most effectively, insinuate a sophistry in his favor, might he not just as well speak it boldly out? The *suppressio veri* not seldom amounts to a *suggestio falsi*. And if the duty to the client, with the constitution of the court, justify the insinuation or assertion of a sophistry, by what reason can it be

shown that they will not justify the insinuation of a falsehood? A sophistry is a logical falsehood; and if he who offers it comprehends its unsoundness, we cannot see how he is less truly guilty of falsehood than he who tells a lie. To speak falsehood is knowingly to frame and utter a proposition which is not true. He who knowingly urges a sophistical argument does in substance the same thing; he propagates, if he does not utter, a false proposition, namely, the conclusion of his false argument. But we may fairly press this reasoning yet further. No one will deny that when the advocate, as an advocate, suppresses truth, or insinuates a claim more than just to his client, or less than just to his adversary, any such act would be insincere, and therefore immoral, if it were done as an individual and private act. The circumstances which are supposed to justify it are, that he is not acting for himself, but for another, not individually, but officially; that there is an antagonist whose professional business it is to see that he gets no undue advantage for his client, and that the lawyer is not bound to form any private opinion whatever about the question, whether the advantages he is procuring for his client are righteous or not, that being the business of the judge and jury. These circumstances, it is claimed, make that professionally innocent which would otherwise be a positive sin. Why, then, may they not justify the commission of any other sin which would be profitable to the client; and what limit would there be to the iniquities which professional fidelity might demand, provided only the client's case were bad enough to need them? If it is right, for his sake, "to make the worst appear the better cause," why not also falsify testimony, or garble authorities, or bribe jurors, or suborn perjurers, if necessary to victory? It would be hard to affix a consistent limit, for the greater urgency of the client's case would justify the greater sin. It is no answer to this to say that the latter expedients would be wrong, because the opposite party is entitled to expect that the controversy will be conducted with professional fairness, and that no advantage will be sought, which professional skill and knowledge may not be supposed able to detect and rebut if the party seeking it is not fairly entitled to it. For, according to the theory under discussion, this professional fairness is itself a conventional thing, and not the same with absolute righteousness; and

any conduct which was conventionally recognized for the time being would come up to the definition. So that the party secretly contemplating the employment of some of these vile expedients, would only have to notify his antagonist in general terms, to be on the lookout for any imaginable trick, in order to render his particular trick professionally justifiable. And it is wholly delusive to urge that the advantage sought by one party is legitimate, because it is only such a one as the opposing party may be expected to detect and counteract by his skill, if competent for his professional duties as he professes ; for the reason why the given artifice called legitimate is used in any case is just this, that it is supposed the opposing party will not have skill enough to detect and counteract it. Its concealment from him is the sole ground for the hope of success in using it ; and it is a mere evasion to say that it is such a legal artifice as the opponent's legal skill may reasonably be supposed competent to meet ; when, in that particular case, it is used for the very reason that it is believed his skill will not be competent to meet it. It is used because it is hoped that it will remain as much undetected and unanswered as would the illegitimate tricks of falsification and bribery. We believe, therefore, that if the advocate may transgress the line of absolute truth and righteousness at all in his client's behalf, there is no consistent stopping place. No limit can be consistently drawn, and the constant tendencies of a part of the profession with the various grades of license which different advocates, called reputable, allow themselves, indicate the justice of this objection.

We may properly add just here that, even if the theory we oppose were in itself moral, it might yet be a grave question whether it is moral to subject one's self to a temptation so subtle and urgent as that which allures the advocate to transgress the legitimate limit. The limit is confessedly a conventional one at any rate, and not absolutely coincident with what would be strict righteousness, if the person were acting individually and privately ; it is separated from immoral artifices by no broad, permanent, consistent line ; the gradation which leads down from the practices called reputable, to those allowedly base, is one composed of steps so slight as to be almost invisible ; and the desire to conquer, so vehemently

stimulated by the forensic competition, will almost surely seduce even the scrupulous conscience to transgress. No sinner has a right to subject his infirm and imperfect virtue to so deadly a trial.

In the third place, we respectfully object to the lawfulness of the attitudes in which this theory of the profession places the advocate. It claims that the court is but the debating society, in which the function of the two parties of lawyers is, not to decide the justice of the cause, that being the function of judge and jury, but to urge, each side, all that can be professionally urged in favor of its own client; and that out of this *ex parte* struggle, impartially presided over by the listening umpire, there will usually proceed the most intelligent and equitable decision. But the fatal objection is: that even if the latter claim were true, we might "not do evil that good might come." And truth and right are sacred things, which carry an immediate, universal, inexorable obligation to every soul in every circumstance, if he deals with them at all, to deal with them according to their reality. Man is morally responsible for every act he performs which has moral character or consequences; and no circumstance or subterfuge authorizes him to evade this bond. His maker will allow him to interpose no conventionality, no artificial plea of official position between him and his duty. Every act which has moral character man performs personally, and under an immediate personal responsibility. The mere statement of this moral truth is sufficient to evince its justness; the conscience sees it by its own light; and it is obvious that unless God maintained his moral government over individuals in this immediate, personal way, he could not maintain it practically at all. Some form of organization might be devised to place men in a conventional, official position, in which everything might be done which a sinful desire might crave, and thus every law of God might be evaded. In a word, whatever else a man may delegate by an artificial convention of law, he cannot delegate his responsibility; that is as inalienable as his identity. And it is equally impossible for man voluntarily and intelligently to assume the doing of a vicarious act, and leave the whole guilt of that act cleaving to his principal. His deed, in consenting to act vicariously, is his personal, indi-

vidual deed, lying immediately between him and his God; and if the deed has moral quality at all, it is his own personal morality or immorality.

Now, truth and right are concerned in every legal controversy. But these are things to which moral character essentially belongs. If a man speaks, he ought to speak truth; if he handles a right, he ought to handle it righteously. Lawyers seem to feel as though this conventional theory of the courts of law had no more moral quality attaching to it than the apparatus by which the centre of gravity of a ship is restored to the middle, as she leans to one side or the other. The honest sailor seizes the lever by which he moves his ponderous chest of cannon balls or chain cable, and when the sliding of some heavy part of the cargo in the hold, or the impulse of wind or wave causes the ship to lurch to the larboard, he shoves his counterpoise to the starboard side. He tells you that his object is, not to throw the ship on her beam ends, but to maintain a fair equilibrium, by going as much too far on the one side as the disturbing force had gone on the other. And this is all right enough. The forces which he moves or counterbalances are dead, senseless, soulless, without responsibility. But it is altogether otherwise when we come to handle truth and right. For they are sacred things. They can in no sense be touched without immediate moral obligation; and to pervert a truth or right on the one hand, in order that a similar perversion on the other hand may be counterbalanced, is sin, always and necessarily sin; it is the sin of meeting one wicked act by another wicked act, or, at best, of "doing evil that good may come." An attempt may be made at this point to evade this clear principle of morals by means of the confusion of thought produced by an appeal to a false analogy. Perhaps some such illustration as this may be presented: the soldier obeys his officer; he honestly, fairly and mercifully performs the tasks assigned him in his lawful profession, and yet sometimes takes life in battle. Now, suppose the war to which his commander leads him is an unrighteous war? All must admit that every death perpetrated by the unrighteous aggressor, in that war, is a murder in God's sight. But we justly conclude that this dreadful guilt all belongs to the wicked sovereign and legislature who declare the war, and not to the pas-

sive soldier who merely does his duty in obeying his commander. Hence, it is asserted, "the principle appears false; and there may be cases in which it is lawful for a man to do vicariously, or officially, what it would be wrong to do individually."

We reply that the general proposition thus deduced is one essentially different from the one which our principle denies. To say that a man may lawfully do some things vicariously or officially, which he may not do privately and individually, is a totally different thing from saying that if an act would be immediately and necessarily wrong in itself, whenever and however done, the agent who does that act for another may still be innocent in doing it, because he acts for another. But the latter is the proposition which must be proved, in order to rebut our principles. We remark further upon the illustration above stated, that there are several fundamental differences between the case of the soldier and that of the advocate who professionally defends his client's wrong-doing. One is, that the soldier, in the case supposed, has not volunteered of his own free choice to fight in this particular war which is unrighteous. If he has, then we can by no means exculpate him from a share in the guilt of all the murders which the wicked sovereign perpetrates in battle by his hand. It is only when the soldier is draughted into this service without his option, and compelled by the laws of his country, that we can exculpate him. But the advocate has chosen his own profession freely in the first instance, and he chooses each particular case which he advocates, with whatever justice it may involve. For, whatever fidelity he may suppose his professional oath, perhaps thoughtlessly taken, compels him to exercise in behalf of his unrighteous client, after he has made him his client, certainly he is not compelled to undertake his case at all unless he chooses.

Another minor difference of the two cases is, that the soldier, not being a civilian by profession and habit, is competent to have very few thoughts or judgments about the abstract righteousness of the war to which his sovereign has sent him; whereas, it is the very trade and profession of the lawyer to investigate the righteousness or wrongfulness of transactions; so that if, indeed, he is aiding his client to perpetrate an injustice, he is the very man of all others who should be most distinctly aware

of the wrong about to be done. But the chief and all-sufficient difference of the two cases is, that all killing is not murder; but all utterance of that which is known to be not true is lying. The work of slaying may or may not be rightful; the case where the lawful soldier, obeying his commander in slaying in battle, commits murder, is the exceptional case, not indeed in frequency of occurrence perhaps, but in reference to the professed theory of legitimate government. But to the rule of truth and right there is no exception; all known assertion of untruth is sin. How comes it that the profession of slaying as an agent for the temporal sovereign, as a soldier or sheriff, for instance, is in any case a righteous one? Only because there are cases in which the sovereign may himself righteously slay. And in those cases, it may be that this right to slay, which the sovereign himself possesses, may be held properly by another person by delegation. But no man can delegate what he does not possess. The client cannot therefore delegate, in any case, to his lawyer, the function of making his wrong-doing appear right, because it would be in every case wrong for him to do it himself. And here we are brought to a point where we may see the utter absurdity of all the class of illustrations we are combating. For lawyers will themselves admit that if they acted individually and privately when they present pleas which they are aware are unjust, it would be sin. Their defence is that they do it officially. Well, then, if the client did it for himself, it would be sin; how can the lawyer, his agent, derive from him the right to do what he has himself no right to do? Or, will it be said that the official right of the advocate to act for a given client is not delegated to him from that client, but from the State which licensed him as an advocate? We think this is a doctrine which clients would be rather slow to admit. And again, the State is as utterly devoid as the client of all right to misrepresent truth and right. God has given to the civil magistrate the right to slay murderers and invaders, but he has given to no person nor commonwealth under heaven the right to depart from the inexorable lines of truth and right.

This great truth brings us back to the doctrine of each man's direct and unavoidable responsibility to God, for all his acts possessing moral character or moral consequences. Now, in per-

forming our duty, God requires us always to employ the best lights of reason and conscience he has given us, to find out for ourselves what is right. It is man's bounden duty to have an opinion of his own concerning the lawfulness of every act he performs, which possesses any moral quality. God does not permit us to employ any man or body of men on earth as our conscience-keepers. How futile, then, is the evasion presented at this point by the advocates of the erroneous theory, "that the lawyer is not to be supposed to know the unrighteousness of his client's cause; that it is not his business to have any opinion about it, but, on the contrary, the peculiar business of the judge and jury; nay, that he is not entitled to have any opinion about it, and would be wrong if he had, for the law presumes every man innocent till after he is proved wicked; and when the advocate performs his functions, no verdict has yet been pronounced by the only party authorized to pronounce one." The fatal weakness of this feeble sophistry is in this, that these assertions concerning the exclusive right of the judge and jury to decide the merits of the case are only true as to one particular relation of the client. The judge and jury are the only party authorized to pronounce the client wrong or guilty, as concerns the privations of his life, liberty or property. It would, indeed, be most illegal and unjust for lawyer or private citizen to conclude his guilt in advance of judicial investigation, in the sense of proceeding thereupon to inflict that punishment which the magistrate alone is authorized to inflict. But this is all. If any private, personal right or duty of the private citizen, or of any one, is found to be dependent on the innocence or wickedness of that party before the court, it is a right and duty to proceed to form an opinion of his character, as correct as may be, by the light of our own consciences, in advance of judicial opinion, or even in opposition to it. Yea, we cannot help doing so, if we try.

Now, the question which the advocate has to ask himself as to an unrighteous client is: "shall I professionally defend his unrighteousness, or shall I not?" And that question involves an unavoidable duty, and constitutes a matter personal, private and immediate, between him and his God. In deciding that he will not lend his professional assistance to that man's unrighteous-

ness, he decides a personal duty; he does not touch the bad man's franchises, nor anticipate his judicial sentence. Let us illustrate. Many years ago, an advocate, distinguished for his eloquence and high social character, successfully defended a vile assassin, and, by his tact, boldness and pathos, secured a verdict of acquittal. When the accused was released, he descended into the crowd of the court house, to receive the congratulations of his degraded companions, and, almost wild with elation, advanced to his advocate, offering his hand, with profuse expressions of admiration and gratitude. The dignified lawyer sternly joined his own hands behind his back and turned away, saying: "I touch no man's hand that is foul with murder." But in what light did this advocate learn that this criminal was too base to be recognized as a fellow man? The court had pronounced him innocent! It was only by the light of his private judgment—a private judgment formed not only in advance of, but in the teeth of, the authorized verdict. Where, now, were all the quibbles by which this honorable gentleman had persuaded himself to lend his professional skill to protect from a righteous doom a wretch too vile to touch his hand? as that "the lawyer is not the judge; that he is not authorized to decide the merits of the case?" Doubtless, this lawyer's understanding spoke now, clear enough, in some such terms as these: "my hand is my own; it is purely a personal question to myself whether I shall give it to this murderer; and, in deciding that personal question, I have a right to be guided by my own personal opinion of him. In claiming this, I infringe no legal right to life, liberty or possessions, which the constituted authorities have restored to him." But *was not his tongue his own*, in the same sense with his hand? Was not the question, whether he could answer it to his God for having used his tongue to prevent the punishment of crime, as much a private, personal, individual matter, to be decided by his own private judgment, as the question whether he should shake hands with a felon? Let us suppose another case: a prominent advocate defends a man of doubtful character from the charge of fraud, and rescues him, by his skill, from his well-deserved punishment. But now this scurvy fellow comes forward and claims familiar access to the society of the honorable lawyer's house, and aspires to the hand of his daughter in marriage. He imme-

diately receives a significant hint that he is not considered worthy of either honor. But he replies: "You, Mr. Counsellor, told your conscience that it was altogether legitimate to defend my questionable transactions professionally, because the law did not constitute you the judge of the merits of the case, because the law says every man is to be presumed to be innocent till convicted of guilt by the constituted tribunal, and because you were not to be supposed to have any opinion about my guilt or innocence. Now the constituted authorities have honorably acquitted me—at your advice! I claim, therefore, that you shall act out your own theory, and practically treat me as an honorable man." We opine the honorable counsellor would soon see through his own sophistry, and reply that those principles only applied to his civic treatment of him as a citizen; that his house and his daughter were his own; and that he was entitled, yea, solemnly bound, in disposing of them, to exercise the best lights of his private judgment. So say we, and nothing can be so intimately personal and private, so exclusively between a man and his God, as his concern in the morality of his own acts. Since God holds every man immediately responsible for the way in which he deals with truth and right, whenever and in whatever capacity he deals with them, there can be no concern in which he is so much entitled and bound to decide for himself in the light of his own honest conscience. The advocate is bound, therefore, to form his own independent opinion, in God's fear, whether in assisting each applicant he will be assisting wrong, or asserting falsehood. This preliminary question he ought to consider, not professionally, but personally and ethically. Let every man rest assured that God's claims over his moral creatures are absolutely inevitable. He will not be cheated of satisfaction to his outraged law by the plea that the wrong was done professionally; and when the *lawyer* is suffering the righteous doom of his professional misdeeds, how will it fare with the *man*?

Our fourth consideration is but an extension and application of the great principle of personal responsibility which we have attempted to illustrate above. We would group together the practical wrongs which evolve in the operation of this artificial and immoral theory; we would invite our readers to look at their enormity, and to ask themselves whether it can be that

these things are innocently done. Let the conscience speak; for its warm and immediate intuitions have a logic of their own, less likely to be misled by glaring sophistry than the speculations of the head. And here we would paint not so much the judicial wrongs directly inflicted by suitors unrighteously successful; for here the lawyer might seem not so directly responsible. We might, indeed, point to the case in which plausible fraud succeeds in stripping the deserving, the widow, the orphan, of their substance, inflicting thus the ills of penury; or to that in which slander or violence is enabled to stab the peace of innocent hearts, undeterred by fear of righteous retribution; and ask the honest, unsophisticated mind, can he be innocent who, though not advising, nor perpetrating such wrongs in his individual capacity, has yet prostituted skill, experience, and perhaps eloquence, to aid the perpetrator? Can it be right? But we would speak rather of those evils which proceed directly from the advocate himself in his own professional doings. Here is a client who has insidiously won subtle advantages over his neighbor in business, until he has gorged himself with ill-gotten gain. He applies to the reputable lawyer to protect him against the righteous demand of restitution. The lawyer undertakes his case, and thenceforth he thinks it his duty, not indeed to falsify evidence, or misquote law, or positively to assert the innocence of injustice, but to put the best face on questionable transactions which they will wear—to become the apologist of that which every honorable man repudiates. Now, we speak not of the wrongs of the despoiled neighbor; of these it may be said the client is the immediate agent. But there stands a crowd of eager, avaricious, grasping listeners, each one hungry for gain, and each one learning from this professional expounder of law how to look a little more leniently on indirection and fraud; how to listen a little more complacently to the temptations before which his own feeble rectitude was tottering already; how to practice on his own conscience the deceit which “divides a hair between north and northwest side;” until the business morality of the country is widely corrupted. Can this be right? Can he be innocent who produces such results, for the selfish motive of a fee? But worse still; a multitude of crimes of violence are committed, and when their bloody perpetrators are

brought before their country's bar, professional counsel fly to the rescue, and try their most potent arts. See them rise up before ignorant and bewildered juries, making appeals to weak compassion, till the high sentiment of retributive justice is almost ignored by one-half of the community. Hear them advocate before eager crowds of heady young men, already far too prone to rash revenge, the attractive but devilish theory of "the code of honor;" or assert, in the teeth of God's law and man's, that the bitterness of the provocation may almost justify deliberate assassination; or paint, in graphic touches, which make the cheek of the young man tingle with the hot blood, the foul scorn and despite of an unavenged insult, until the mind of the youth in this land has forgotten that voice pronounced by law both human and divine, "vengeance is mine, I will repay," and is infected with a dreadful code of retaliation and murder; until the course of justice has come to be regarded as so impotently uncertain, that the instincts of natural indignation against crime disdain to wait longer on its interposition, and introduce the terrific *regime* of private vengeance, or mob-law; and until the land is polluted with blood which cries to heaven from the earth. Can it be right that any set of men, in any function or attitude, should knowingly contribute to produce such a fatal disorganization of public sentiment; and that, too, for the sake of a fee, or of rescuing a guilty wretch from a righteous doom which he had plucked down on his own head? Can it be right? And now, will any man argue that God hath no principle of responsibility by which he can bring all the agents of such mischiefs as these into judgment? That such things as these can be wrought in the land, and yet the class of men who have in part produced them can, by a set of professional conventionalities, juggle themselves out of their responsibility for the dire result? Nay, verily, there is yet a God that judgeth in the earth. But if such a theory as the one we have discussed were right, while bearing such fruits, his government would be practically abdicated.

The fifth and last consideration is drawn from man's duty to himself. The highest duty which man owes to himself is to preserve and improve his own virtue. Our race is fallen, and the reason and conscience which are appointed for our inward

guides are weakened and dimmed. But yet God places in our power a process of moral education by which they may be improved. The habit of acting rightly confirms their uncertain decisions, and a thorough rectitude of intention and candor act as the "euphrasy and rue" which clarify our mental vision. How clear, then, the obligation to employ those high faculties in such a way that they shall not be perverted and sophisticated? There is no lesson of experience clearer than this, that the habit of advocating what is not thoroughly believed to be right, perverts the judgment and obfuscates the conscience, until they become unreliable. No prudent instructor would approve of the advocacy of what was supposed to be error by the pupils in a debating society. Such an association was formed by a circle of pious young men in the country; and once upon a time it was determined to debate the morality of the manufacture of ardent spirits. But it was found that all were of one mind in condemning it. So, to create some show of interest, one respectable young man consented to assume the defence of the calling, "for argument's sake." The result was, that he unsettled his own convictions, and ultimately spent his life as a distiller, in spite of the grief and urgent exhortations of his friends, the censures of his church, and the uneasiness of a restless conscience. Nothing is better known by sensible men than the fact that experienced lawyers, while they may be acute and plausible arguers, are unsafe judges concerning the practical affairs of life. They are listened to with interest, but without confidence. Their ingenious orations pass for almost nothing, while the stammering and brief remarks of some unsophisticated farmer carry all the votes. The very plea by which advocates usually justify their zeal in behalf of clients seemingly unworthy of it, confesses the justice of these remarks. They say that they are not insincere in their advocacy, that they speak as they believe; because it almost always occurs that after becoming interested in a case, they become thoroughly convinced of the righteousness of their own client's cause. Indeed, not a few have said that no man is a good advocate who does not acquire the power of thus convincing himself. But there are two parties to each case. Are the counsel on both sides thus convinced of the justice of their own causes, when of course, at least, one

must be wrong? Fatal power : to bring the imperial principles of reason and conscience so under the dominion of self-interest and a fictitious zeal, that in one-half the instances they go astray, and are unconscious of their error! It has been remarked of some men famous as politicians, who had spent their earlier years as advocates, that they were as capable of speaking well on the wrong side as on the right of public questions, and as likely to be found on the wrong side as on the right.

Now, it is a fearful thing to tamper thus with the faculties which are to regulate our moral existence, and decide our immortal state. It may not be done with impunity. Truth has her sanctities; and if she sees them dishonored, she will hide her vital beams from the eyes which delighted to see error dressed in her holy attributes, until the reprobate mind is given over to delusions, to believe lies. Were there no force in any thing which has preceded, duty to one's self would constitute a sufficient reason against the common theory of the advocate's office.

We conclude, therefore, that the only moral theory of the legal profession is that which makes conscience preside over every official word and act in precisely the same mode as over the private, individual life. It does not appear how the virtuous man can consistently go one inch farther, in the advocacy of a client's cause, than his own honest private judgment decides the judge and jury ought to go; or justify in the bar anything which he would not candidly justify in his own private circle; or seek for any client anything more than he in his soul believes righteousness demands. "Whatsoever is more than these, cometh of evil." It may be very true, that if all lawyers practiced this higher theory, the numbers and business of the profession would be vastly abridged. If the fraudulent exactor could find no one to become the professional tool of unjust designs; if the guilty man, seeking to evade justice, were told by his advocate that his defence of him should consist of nothing but a watchful care that he had *no more than justice* meted out to him; it is possible clients would be few, and litigation rare. But is it certain that any good man would regret such a result? It might follow, also, that he who undertook to practice the law on this Christian

theory would find that he had a narrow and arduous road along which to walk. We, at least, should not lament, should Christian young men conclude so. Then, perhaps, the holy claims of the gospel ministry might command the hearts of some who are now seduced by the attractions of this attractive but dangerous profession.

POSITIVISM IN ENGLAND.

“POSITIVISM,” says M. Guizot, in his *Meditations*, “is a word, in language, a barbarism; in philosophy, a presumption.” Its genius is sufficiently indicated by its chosen name, in which it qualifies itself, not like other sciences, by its object, but by a boast. The votaries of physics have often disclosed a tendency to a materialism which depreciates moral and spiritual truths. The one-sidedness and egotism of the human understanding ever incline it to an exaggerated and exclusive range. Man’s sensuous nature concurs with the fascination of the empirical method applied to sensible objects, to make him overlook the spiritual. Physicists become so inflated with their brilliant success in detecting and explaining the laws of second causes that they forget the implication of a first cause, which constantly presents itself to the reason in all the former; and they thus lapse into the hallucination that they can construct a system of nature from second causes alone. This tendency to naturalism, which is but an infirmity and vice of the fallen mind of man, no one has avowed so defiantly in our age as M. Auguste Comte, the pretended founder of the *Positive Philosophy*, and his followers. His attempt is nothing less than to establish naturalism in its most absolute sense, to accept all its tremendous results, and to repudiate as a nonentity all human belief which he cannot bring within the rigor of exact physical science.

Although it is not just to confound the man and the opinions, we always feel a natural curiosity touching the character of one

This article appeared in the *Southern Presbyterian Review*, for April, 1869, reviewing: I. *Cours de Philosophie Positive*. Par M. Auguste Comte. 6 vols. 8vo. Paris. 1830-42. II. *History of Civilization in England*. By Henry Thomas Buckle. London: John W. Parker & Sons. 1858. III. *A System of Logic, Ratiocinative and Inductive*. By John Stuart Mill. New York. 1846. IV. *An Historical and Critical View of the Speculative Philosophy of Europe in the Nineteenth Century*. By J. D. Morell, A. M. New York. 1848.

who claims our confidence. Guizot says of him, when he appeared before that statesman with the modest demand that he should found for him a professorship of the *History of Physical and Mathematical Science*, in the College of France: "He explained to me drearily and confusedly his views upon man, society, civilization, religion, philosophy, history. He was a man single-minded, honest, of profound convictions, devoted to his own ideas, in appearance modest, although at heart prodigiously vain; he sincerely believed that it was his calling to open a new era for the mind of man and for human society. Whilst listening to him, I could hardly refrain from expressing my astonishment, that a mind so vigorous should, at the same time, be so narrow as not even to perceive the nature and bearing of the facts with which he was dealing, and the questions which he was authoritatively deciding; that a character so disinterested should not be warned by his own proper sentiments—which were moral in spite of his system—of its falsity and its negation of morality. I did not even make any attempt at discussion with M. Comte; his sincerity, his enthusiasm, and the delusion that blinded him, inspired me with that sad esteem that takes refuge in silence. Had I even judged it fitting to create the chair which he demanded, I should not for a moment have dreamed of assigning it to him.

"I should have been as silent, and still more sad, if I had then known the trials through which M. Auguste Comte had already passed. He had been, in 1823, a prey to a violent attack of mental alienation, and in 1828, during a paroxysm of gloomy melancholy, he had thrown himself from the Pont des Arts into the Seine, but had been rescued by one of the king's guard. More than once, in the course of his subsequent life, this mental trouble seemed on the point of recurring."

The reader, allowing for the courteous euphemism of Guizot, will have no difficulty in realizing from the above what manner of man Comte was. His admiring votary and biographer, M. Littré, reveals in his master an arrogance and tyranny which claimed every literary man who expressed interest in his speculations as an intellectual serf, and which resented every subsequent appearance of mental independence as a species of rebellion and treachery, to be visited with the most vindictive anger.

That his mental conceit was beyond the "intoxication" which M. Guizot terms it, a positive insanity, is manifest from his own language. On hearing of the adhesion of a Parisian editor to his creed, he writes to his wife: "To speak plainly and in general terms, I believe that, at the point at which I have now arrived, I have no occasion to do more than to continue to exist; the kind of preponderance which I covet cannot henceforth fail to devolve upon me." . . . "Marrest no longer feels any repugnance in admitting the indispensable fact of my intellectual superiority." And to John Stuart Mill, at one time his supporter, he wrote of "a common movement of philosophical regeneration everywhere, when once Positivism shall have planted its standard—that is, its lighthouse I should term it—in the midst of the disorder and the confusion that reigns; and I hope that this will be the natural result of the publication of my work in its complete state." (This work is his *Course of Positive Philosophy*, finished in 1842.)

Positivism takes its pretext from the seeming certainty of the exact sciences, and the diversity of view and uncertainty which have ever appeared to attend metaphysics. It points to the brilliant results of the former, and to the asserted vagueness and barrenness of the latter. It reminds us that none of the efforts of philosophy have compelled men to agree, touching absolute truth and religion; but that the mathematical and physical sciences carry perfect assurance, and complete agreement, to all minds which inform themselves of them sufficiently to understand their proofs. In these, then, we have a satisfying and fruitful quality, Positivism; in those, only delusion and disappointment. Now, adds the Positivist, when we see the human mind thus mocked by futile efforts of the reason, we must conclude, either that it has adopted a wrong *organon* of logic for its search, or that it directs that search towards objects which are, in fact, inaccessible, and practically non-existent to it. Both these suppositions are true of the previous philosophy and theology of men. Those questions usually treated by philosophy and theology which admit any solution—which are only the questions of sociology—must receive it from Positivism. The rest are illusory. History, also, as they claim, shows that this new philosophy is the only true teacher. For when the course of human opinion is reviewed, it is always

found to move through these stages. In its first stage, the human mind tends to assign a theological solution for every natural problem which exercises it; it resolves everything into an effect of supernatural power. In its second stage, having outgrown this simple view, it becomes metaphysical, searches in philosophy for primary truths, and attempts to account for all natural effects by *à priori* ideas. But in its third, or adult stage, it learns that the only road to truth is the empirical method of exact science, and comes to rely exclusively upon that. Thus, argue they, the history of human opinion points to Positivism as the only teacher of man.

But Comte, while he denies the possibility of any science of psychology, save as a result of his Positivism, none the less begins with a psychology of his own. And this is the psychology of the sensationalist. He virtually adopts as an *à priori* truth (he who declares that science knows no *à priori* truths) the maxim of Locke, *Nihil in intellectu quod non prius in sensu*, and holds that the human mind has, and can have, no ideas save those given it by sensitive perceptions, and those formed from perceptions by reflexive processes of thought. Science accordingly knows, and can know, nothing save the *phenomena* of sensible objects, and their laws. It can recognize no cause or power whatever, but such as metaphysicians call second causes. It has no species of evidence except sensation and experimental proof. "Positive philosophy is the whole body of human knowledge. Human knowledge is the result of the study of the forces belonging to matter, and of the conditions or laws governing those forces."

"The fundamental character of the positive philosophy is that it regards all *phenomena* as subjected to invariable natural laws, and considers as absolutely inaccessible to us, and as having no sense for us, every inquiry into what are termed either primary or final causes."

"The scientific path in which I have, ever since I began to think, continued to walk, the labors that I obstinately pursue to elevate social theories to the rank of physical science, are evidently, radically and absolutely opposed to everything that has a religious or metaphysical tendency." "My positive philosophy is incompatible with every theological or metaphysical philoso-

phy." "Religiosity is not only a weakness, but an avowal of want of power." "The 'positive state' is that state of the mind in which it conceives that *phenomena* are governed by constant laws, from which prayer and adoration can demand nothing."

Such are some of the declarations of his chief principles, made by Comte himself. They are perspicuous and candid enough to remove all doubt as to his meaning.

He also distributes human science under the following classes. It begins with mathematics, the science of all that which has number for its object; for here the objects are most exact, and the laws most rigorous and general. From mathematics, the mind naturally passes to physics, which is the science of material forces, or dynamics. In this second class, the first subdivision, and nearest to mathematics in the generality and exactness of its laws, is astronomy, or the *mécanique céleste*. Next comes mechanics, then statics, and last chemistry, or the science of molecular dynamics. This brings us to the verge of the third grand division, the science of organisms; for the wonders of chemistry approach near to the results of vitality. This science of organism, then, is biology, the science of life, whether vegetable, insect, animal, or human. The fourth and last sphere of scientific knowledge is sociology, or the science of man's relations to his fellows in society, including history, politics, and whatever of ethics may exist for the Positivist. Above sociology there can be nothing, because, beyond this, sensation and experimental proof do not go, and where they are not, is no real cognition. Comte considers that the fields of mathematics and physics have been pretty thoroughly occupied by Positivism; and hence the solid and brilliant results which these departments have yielded under the hands of modern science. Biology has also been partially brought under this method, with some striking results. But sociology remains very much in chaos, and unfruitful of certain conclusions, because Positivism has not yet digested it. All the principles of society founded on psychology and theology are, according to him, worthless; and nothing can be established, to any purpose, until sociology is studied solely as a science of physical facts and regular physical laws, without concerning ourselves with the vain dreams of laws of mind, free agency, and divine providence.

Such, in outline, are the principles of Positivism. Let us consider a few of its corollaries. One of these, which they do not deign to conceal, is a stark materialism. Their philosophy knows no such substance as spirit, and no such laws as the laws of mind. For, say they, man can know nothing but perceptions of the senses, and the reflexive ideas formed from them. "Positive philosophy," which includes all human knowledge, is "the science of material forces and their regular laws." Since spirit and the actings of spirit can never be *phenomena*, properly so called, events cognizable to our senses, it is impossible that science can recognize them. This demonstration is, of course, as complete against the admission of an infinite spirit as any other; and the more so, as Positivism repudiates all absolute ideas. Nor does this system care to avail itself of the plea, that there may possibly be a God who is corporeal. Its necessarily atheistic character is disclosed in the declaration that true science cannot admit any supernatural agency or existence, or even the possibility of the mind's becoming cognizant thereof. Since our only possible knowledge is that of sensible *phenomena*, and their natural laws, material nature must, of course, bound our knowledge. Her sphere is the all. If there could be a supernatural event—to suppose an impossibility—the evidence of it would destroy our intelligence, instead of informing it. For it would subvert the uniformity of the natural, which is the only basis of our general ideas, the norm of our beliefs. Positivism is, therefore, perfectly consistent in absolutely denying every supernatural fact. Hence the criticism of its votaries, when, like Strauss and Renan, they attempt to discuss the facts of the Christian religion, and the life of Jesus Christ. Their own literary acquirements, and the force of Christian opinion, deter them from the coarse and reckless expedient of the school of Tom Paine, who rid themselves of every difficult fact in the Christian history by a flat and ignorant denial, in the face of all historical evidence. These recent unbelievers admit the established facts; but having approached them with the foregone conclusion that there can be no supernatural cause, they are reduced, for a pretended explanation, to a set of unproved hypotheses and fantastic guesses, which they offer us for verities, in most ludicrous contradiction of the very spirit of their "positive philosophy."

What can be more distinctly miraculous than a creation? That which brings nature out of *nihil* must of course be supernatural. Positivism must therefore deny creation as a fact of which the human intelligence cannot possibly have evidence. As the universe did not begin, it must, of course, be from eternity, and therefore self-existent. But, being self-existent, it will of course never end. Thus matter is clothed with the attributes of God.

The perspicacious reader has doubtless perceived that these deductions, when stripped of their high-sounding language, are identical with the stupid and vulgar logic which one hears occasionally from atheistic shoemakers and tailors: "How do you know there is a God? Did you ever see him? Did you ever handle him? Did you ever hear him directly making a noise?" Those who have heard the philosophy of tap-rooms, redolent of the fumes of bad whiskey and tobacco, recognize these as precisely the arguments, uttered in tones either maudlin or profane. Is not the logic of Positivism, when stated in the language of common sense, precisely the same?

Once more, Positivism is manifestly a system of rigid fatalism; and this also its advocates scarcely trouble themselves to veil. Human knowledge contains nothing but *phenomena* and their natural laws, according to them. "The positive state is that state of mind in which it conceives that *phenomena* are governed by constant laws, from which prayer and adoration can demand nothing." "The fundamental character of positive philosophy is, that it regards all *phenomena* as subject to invariable laws." Such are Comte's *dicta*. The only causation he knows is that of physical second causes. These, of course operate blindly and necessarily. This tremendous conclusion is confirmed by the doctrine of the eternity and self-existence of nature; for a substance which has those attributes, and is also material, must be what it is, and do what it does, by an immanent and immutable necessity. Positivism must teach us, therefore, if it is consistent, that all the events which befall us are directed by a physical fate; that there is no divine intelligence, nor goodness, nor righteousness, nor will concerned in them; that our hopes, our hearts, our beloved ones, our very existence, are all between the jaws of an irresistible and inex-

orable machine ; that our free-agency, in short, is illusory, and our free-will a cheat.

But the positive philosophy, with its sweeping conclusions, influences the science of this generation to a surprising degree. We are continually told that in France, in Germany, and especially in Great Britain, it is avowed by multitudes, and boasts of prominent names. The tendencies of physicists are, as has been noted, towards Naturalism ; the boldness with which the schools of Comte lifted up their standard, has encouraged many to gather around it. Its most deplorable result is the impulse which it has given to irreligion and open atheism. Thousands of ignorant persons, who are incapable of comprehending any connected philosophy, true or erroneous, are emboldened to babble materialism and impiety, by hearing that the "positive philosophy" knows "neither angel nor spirit," nor God. And this is one of those sinister influences which now hurries European and American society along its career of sensuous existence. We detect the symptoms of this error in the strong direction of modern physical science to utilitarian ends. Even Lord Macaulay, in his essay on Bacon, seems to vaunt the fact that the new *Organon* aimed exclusively at "fruit." He contrasts it in this respect with the ancient philosophy, which professed to seek truth primarily for its intrinsic value, and not for the sake of its material applications. He cites Seneca, as repudiating so grovelling an end, and as declaring that if the philosopher speculated for the direct purpose of subserving the improvements of the arts of life, he would thereby cease to be a philosopher, and sink himself into an artisan, the fellowcraftsman of shoemakers and such like. And the witty essayist remarks that, for his part, he thinks it more meritorious to be a shoemaker, and actually keep the feet of many people warm, than to be a Seneca, and write the treatise *De Ira*, which, he presumes, never kept anybody from getting angry. The truth, of course, lies between the unpractical spirit of the ancient, and the too practical spirit of the modern philosophy. Man has a body, and it is as well to study its welfare ; but he also has a mind, and it is better to study the well-being of that nobler part. Truth is valuable to the soul in itself, as well as in its material applications. To deny this, one must forget that man

will have an immortal, rational existence, without an animal nature, when truth will be his immediate and only *pabulum*; so that an exclusive tendency to physical applications of science savors of materialism. To represent the splendid philosophy of the ancients as nugatory is also a mischievous extravagance. It did not give them all the mental progress of the moderns! True. Perhaps no philosophy, without revelation, could do this. But it gave them the ancient civilization, such as it was. And surely, there was a grand difference in favor of Pericles, Plato, and Cicero, as compared with Hottentots and Australians! pagans who, like the Positivists, have neither a psychology nor a natural theology.

When we look into Great Britain, we see startling evidence of the power of the new philosophy. John Stuart Mill presents one of these evidences. He has long since (in his *Logic*) committed himself to some of its most fatal heresies; and these he reaffirms and fortifies in his more recent *Examination of Sir William Hamilton's Philosophy*. He holds in the main to the dogmas of the Sensualistic Philosophy. He flouts the primitive judgments of the human mind. He intimates, only too plainly, the ethics of utilitarianism. He disdains the idea of power in causation, and reduces man's intuitive judgment of adequate cause for every known effect to an empirical inference. Matter he defines, indeed, as being known to the mind as only a possibility of affecting us with sensations, thus parting company, in a very queer way, with his natural kindred, the more materialistic positivists. While upon the subject of fatalism and free-will, his "trumpet gives an uncertain sound," he deserves the credit of correcting some of the errors of both the opposing schools, and stating some just truths upon these doctrines. His association with the anti-Christian school represented by the *Westminster Review* is well known. We are now told that Mill is quite "the fashion" at one, at least, of the universities, and is the admitted philosopher of liberalism.

Another of these evil portents in the literary horizon is Henry Thomas Buckle, in his *History of Civilization in England*. His theory of man and society is essentially that of the Positivist. He regards all religion as the outgrowth of civilization, instead of its root; and is willing to compliment Christianity with the

praise of being the best religious effect of the British mind and character—provided Christianity can be suggested without its ministers, whose supposed bigotry, ecclesiastical and theological; never fails to inflame his philosophic bigotry to a red heat—although he anticipates that English civilization will, under his teachings, ultimately create for itself a religion much finer than that of Christ. He, of course, disdains psychology; he does not believe a man's own consciousness a trustworthy witness; and he regards those general facts concerning human action which are disclosed, for instance, by statistics, the only materials for a science of man and society. He commends intellectual skepticism as the most advantageous state of mind. He is an outspoken fatalist, and regards the hope of modifying immutable sequences of events by prayer as puerile. He regards "positive" science as a much more hopeful fountain of well-being and progress than virtue or holiness.

It is significant, also, to hear so distinguished a naturalist as Dr. Hooker, now filling the high position of President of the British Association, in his inaugural address, terming natural theology "that most dangerous of two-edged weapons," discarding metaphysics, as "availing him nothing," and condemning all who hold it as "beyond the pale of scientific criticism," and declaring roundly that no theological or metaphysical proposition rests on positive proof.

As Americans are always prompt to imitate Europeans, especially in their follies, it is scarcely necessary to add that the same dogmas are rife in our current literature. Even an Agassiz has been seen writing such words as these: "We trust that the time is not distant when it will be universally understood that the battle of the evidences will have to be fought on the field of physical science, and not on that of the metaphysical."

All these instances are hints of a tendency in English and American philosophy. We have referred to Positivism as giving us their intelligible *genesis*. Our purpose is, in the remainder of this article, to discuss, not so much individual Englishmen, or their particular theories, as the central principles of that school of thought from which they all receive their impulse. To debate details and corollaries is little to our taste; and such debate

never results in permanent victory. He who prunes the offshoots of error has an endless task; a task which usually results only in surrounding himself with a thicket of thorny rubbish. It is better to strike at the main root of the evil stock from which this endless outgrowth sprouts. Hence, we propose to examine a few of the general objections against the body of the system, rather than to follow, at this time, the special applications of one or another of the representative men named above.

Let us, then, look back again at Positivism fully pronounced. We have pointed to that gulf of the blackness of darkness, and of freezing despair, towards which it leads the human mind; a gulf without an immortality, without a God, without a faith, without a providence, without a hope. Were it possible or moral for a good man to consider such a thing dispassionately, it would appear to be odd and ludicrous to him to witness the surprise and anger of the Positivists at perceiving that reasonable and Christian people are not supposed to submit with entire meekness to all this havoc. There is a great affectation of philosophic calmness and impartiality. They are quite scandalized to find that the theologians cannot be as cool as themselves, while all our infinite and priceless hopes for both worlds are dissected away under their philosophic scalpel. Such bigotry is very naughty in their eyes. Such conduct sets Christianity in a very sorry light, beside the fearless and placid love of truth displayed by the apostles of science. This is the tone affected by the Positivists. But we observe that whenever these philosophic hearts are not covered with a triple shield of supercilious arrogance, they also burn with a scientific bigotry worthy of a Dominic, or a Philip II. of Spain. They also can vituperate and scold, and actually excel the bad manners of the theologians. The scientific bigots are fiercer than the theological, besides being the aggressors. We would also submit, that if we were about to enter upon an Arctic winter in Labrador, with a cherished and dependent family to protect from that savage clime, and if a philosopher should insist upon it that he should be permitted, in the pure love of science to extinguish, by his experiments, all the lamps from which we were to derive light, warmth, or food, to save us from a frightful death, and if he should call us testy

blockheads because we did not witness those experiments with equanimity, with any number of other hard names; nothing but our compassion for his manifest lunacy should prevent our breaking his head before his enormous folly was consummated. Seriously, the monstrous pretensions of this philosophy are not the proper objects of forbearance. We distinctly avow, that the only sentiment with which a good and sober man ought to resist these aggressions upon fundamental truths is that of honest indignation. We pretend to affect no other.

The first consideration which exposes the baseless character of Positivism is, that we find it arrayed against the rudimental instincts of man's reason and conscience, as manifested in all ages. That the mind has some innate norms regulative of its own thinking; that all necessary truth is not inaccessible to it; that a universe does imply a creator, and that nature suggests the supernatural; that man has consciously a personal will, and that there is a personal will above man's, governing him from the skies; these are truths which all ages have accepted everywhere. Now, we have always deemed it a safe test of pretended truths, to ask if they contravene what all men have everywhere supposed to be the necessary intuitions of the mind. If they do, whether we can analyze the sophisms or not, we set them down as false philosophy. When Bishop Berkeley proved, as he supposed, that the man who breaks his head against a post has yet no valid evidence of the objective reality of the post, when Spinoza reasoned that nothing can be evil in itself, the universal common sense of mankind gave them the lie; there was needed no analysis to satisfy us that they reasoned falsely, and that a more correct statement of the elements they discussed would show it, as it has in fact done. This consideration also relieves all our fears of the ultimate triumph of Positivism. It will require something more omnipotent than these philosophers to make the human reason deny itself permanently. Thank God, that which they attempt is an impossibility! Man is a religious being. If they had applied that "positive" method, in which they boast, to make a fair induction from the facts of human nature and history, they would have learned this, at least as certainly as they have learned that the earth and moon attract each other: that there is an ineradicable ground in man's nature,

which will, in the main, impel him to recognize the supernatural, is as fairly an established fact of natural history as that man is, corporeally, a bimanous animal. His spiritual instincts cannot but assert themselves, in races, in individuals, in theories, and even in professed materialists and atheists, whenever the hour of their extremity makes them thoroughly in earnest. No; all that Positivism, or any such scheme, can effect is, to give reprobate and sensual minds a pretext and a quibble for blinding their own understandings and consciences, and sealing their own perdition, while it affords topic of debate and conceit to serious idlers in their hours of vanity. Man will have the supernatural again; he will have a religion. If you take from him God's miracles, he will turn to man's miracles. "It is not necessary to go far in time, or wide in space, to see the supernatural of superstition raising itself in the place of the supernatural of religion, and credulity hurrying to meet falsehood half-way." The later labors of Comte himself give an example of this assertion, which is a satire upon his creed sufficiently biting to avenge the insults that Christianity has suffered from it. After beginning his system with the declaration that its principles necessarily made any religion impossible, he ended it by actually constructing a religion, with a calendar and formal ritual, of which aggregate humanity, as impersonated in his dead mistress, was the deity! "He changed the glory of an incorruptible God into an image, made like to corruptible man."

Here also it should be remarked, that it is a glaring misstatement of the history of the human mind, to say that when true scientific progress begins, it regularly causes men to relinquish the theory of the supernatural for that of metaphysics, and then this for Positivism. It was not so of old; it is not so now; it never will be so. It is not generally true, either of individuals or races. Bacon, Kepler, Sir Isaac Newton, Leibnitz, Cuvier, were not the less devout believers to the end, because each made splendid additions to the domain of science. The sixteenth century in Europe was marked by a grand intellectual activity in the right scientific direction. It did not become less Christian in its thought; on the contrary, the most perfect systems of religious belief received an equal impulse. The happy Christian awakening in France which followed the tragical atheism of the

first Revolution, and which Positivism so tends to quench in another bloody chaos, did not signalize a regression of the exact sciences. The history of human opinion and progress presents us with a chequered scene, in which many causes commingle, working across and with each other their incomplete and confused results. Sometimes there is a partial recession of truth. The tides of thought ebb and flow, swelling from secret fountains of the deep, which none but Omniscience can fully measure. But amid all the uncertainties, we clearly perceive this general result, that the most devout belief in supernatural verities is, in the main, concurrent with healthy intellectual progress.

2. We have seen that fatalism is a clear corollary of the positive philosophy. It avows its utter disbelief of a personal and intelligent will above us; yea, it is glad to assert the impossibility of reconciling so glorious a fact with its principles. It makes an impotent defence of man's own free agency. But our primitive consciousness demands the full admission of this fact. If there is anything which the mind thinks with a certainty and necessity equal to those which attend its belief in its own existence, it is the conscious fact of its own freedom. It knows that it has a spontaneity within certain limits; that it does itself originate some effects. No system, then, is correct which has not a place for the full and consistent admission of this primitive fact. But this fact alone is abundant to convince the Positivist that he is mistaken in declaring the supernatural impossible, and in omitting a divine will and first cause from his system. Nature, says he, is the all; no knowledge can be outside the knowledge of her facts and laws; no cause, save her forces. These laws, he asserts, are constant and invariable. But, remember, he also teaches, that science knows nothing as effect save sensible *phenomena*, and nothing as cause save "the forces belonging to matter." Now, the sufficient refutation is in this exceedingly familiar fact, that our own wills are continually originating effects, of which natural forces, as the Positivist defines them, are not the efficient; and that our wills frequently reverse those forces to a certain extent. Let us take a most familiar instance, of the like of which the daily experience of every workingman furnishes him with a hundred. The natural law of liquids requires water to seek its own level; requires this

only, and always. But the peasant, by the intervention of his own free will, originates absolutely an opposite effect: he causes it to ascend from its level in the tube of his pump. He adopts the just, empirical, and "positive" method of tracing this *phenomenon* to its true cause. He observes that the rise of the water is effected by the movement of a lever; that this lever, however, is not the true cause, for it is moved by his arm; that this arm also is not the true cause, being itself but a lever of flesh and bone; that this arm is moved by nerves; and finally, that these nervous chords are but conductors of an impulse which his consciousness assures him that he himself emitted by a function of his mental spontaneity. As long as the series of *phenomena* were affections of matter, they did not disclose to him the true cause of the water's rise against its own law. It was only when he traced the chain back to the mind's self-originated act that he found the true cause. Here, then, is an actual, experimental *phenomenon*, which has arisen without, yea, against, natural law. For, according to the Positivist, it discloses only the forces of matter; this cause was above and outside of matter. It was, upon his scheme—not ours—literally supernatural. Yet, that it acted was experimentally certain—certain by the testimony of consciousness. And if her testimony is not experimental and "positive," then no *phenomenon* in physics is so, even though seen by actual eyesight, because it is impossible that sensation can inform the mind, save through this same consciousness. But now, when this peasant is taught thus "positively" that his own intelligent will is an original fountain of effects outside of and above nature—the Positivist's nature—and when he lifts his eyes to the orderly contrivances and wonderful ingenuity displayed in the works of nature, and sees in these the "experimental" proofs of the presence of another intelligence there kindred to his own, but immeasurably grander, how can he doubt that this superior mind also has, in its will, another primary source of effects above nature? This is as valid an induction as the physicist ever drew from his maxim, "Like causes, like effects." We thus see that it is not true that the "positive method" presents any impossibility, or even any difficulty, in the way of admitting the supernatural. On the contrary, it requires the admission, that is to say, unless we commit the outrage of denying our own conscious spontaneity.

3. The positive philosophy scouts all metaphysical science, namely, psychology, logic, morals, and natural theology, as having no certainty, no Positivism, and as being, therefore, nothing worth. These fictitious sciences, as it deems them, have no *phenomena*, that is, no effects cognizable by the senses; and therefore it deems that they can have no experimental proofs, and can be no sciences. But we assert, that it is simply impossible that any man can construct any other branch of knowledge without having a science of psychology and logic of his own. In other words, he must have accepted some laws of thought, as sufficiently established, in order to construct his own thoughts. This he may not have done in words, but he must have done it in fact. What can be more obvious than that the successful use of any implement implies some correct knowledge of its qualities and powers? And this is as true of the mind as of any other implement. When the epicure argues, in the spirit of Positivism, "I may not eat stewed crabs to-day with impunity, because stewed crabs gave me a frightful colic last week," has he not posited a logical law of the reason? When the mechanic assumes without present experiment, that steel will cut wood, has he not assumed the validity of his own memory concerning past experiments? These familiar instances, seized at hap-hazard, might be multiplied to a hundred. Every man is a psychologist and logician—unless he is idiotic; he cannot trust his own mind, except he believes in some powers and properties of his mind. These beliefs constitute his science of practical metaphysics.

We urge further, that the uniformity of men's convictions concerning *phenomena* and experimental conclusions thereupon, obviously implies a certain uniformity in the doctrines of this common psychology. For, whenever one accepts a given process of "positive" proof as valid, this is only because he has accepted that function of the mind as valid by which he apprehends that proof. Unless he has learned to trust the mental power therein exercised, he cannot trust the conclusion. If, then, physics do possess the glory—claimed for this science by the followers of Comte—of "positivity"; if their evidences are so exact that all men accept them, when understood, with confidence, this is only because they all have accepted with yet

fuller confidence those mental laws by which the physicist thinks. So that the very Positivism of the positive philosophy implies that so much, at least, of metaphysics is equally "positive."

The Positivist, of course, has a psychology, although he repudiates it. "If he had not ploughed with our heifer, he had not found out our riddle." And this psychology, so far as it is peculiar to him, is that of the *sensualistic* school. The partial inductions, errors, and natural fruits of that school are well known to all scholars. This is not the first instance in which it has borne its apples of Sodom, materialism and atheism. Hume, starting from the fatal maxim of Locke, very easily and logically concluded that the human reason has no such intuition as that of a cause for every effect, and no such valid idea as that of power in cause; for in a causative (so-called) sequence, is anything seen by the senses other than a regular and immediate consequent after a given antecedent? Hence he deduced the pleasant consequences of metaphysical skepticism. Hence he deduced that no man could ever believe in a miracle. Hence he inferred, that since world-making is a "singular effect," of which no one has had ocular observation, all the wonders of this universe do not entitle us to suppose a First Cause. Hence Hartley and Priestly, in England, deduced the conclusion that the mind is as material as the organs of sense, and perishes with them, of course. Hence the atheism which in France prepared the way for the Reign of Terror, and voted God a non-entity, death an eternal sleep, and a strumpet the goddess of Reason. We do not wonder that the Positivist, viewing psychology through this school, should have a scurvy opinion of it; indeed, we quite applaud him for it. The fact that he still employs it, notwithstanding his ill opinion, only proves how true is the assertion that no man can think without having a psychology of his own.

The relationship of the positive philosophy to these mischievous and exploded vagaries, appears especially in its argument against the credibility of supernatural effects or powers. Thus, says the Positivist, since our only knowledge is of the *phenomena* and laws of nature, the supernatural is to us inaccessible. Let us now hear Hume: "It is experience only which gives authority to human testimony, and it is the same experi-

ence which assures us of the laws of nature. When, therefore, these two kinds of experience are contrary, we have nothing to do but subtract the one from the other, with that assurance which arises from the remainder. But according to the principles here explained, this subtraction, with regard to all popular religions, amounts to an entire annihilation; and, therefore, we may establish it as a maxim, that no human testimony can have such force as to prove a miracle, and make it a just foundation for any such system of religion."

The only true difference here is, that the recent Positivist is more candid; instead of insinuating the impossibility of the supernatural in the form of the exclusion of testimony, he flatly asserts it. "The supernatural," says he, "is the *anti-natural*." In reply, we would point to the obvious fact, that this view can have force only with an atheist. For, if there is a Creator, if he is a personal, intelligent, and voluntary Being, if he still superintends the world he has made (the denial of either of these postulates is atheism or pantheism), then, since it must always be possible that he may see a moral motive for an unusual intervention in his own possessions, our experience of our own free will makes it every way probable that he may, on occasion, intervene. No rational man who directs his own affairs, customarily on regular methods, but occasionally by unusual expedients, because of an adequate motive, can fail to concede the probability of a similar free-agency to God, if there is a God. This noted demonstration of Positivism is, therefore, a "vicious circle." It excludes a God because it cannot admit the supernatural; and lo! its only ground for not admitting the supernatural is the gratuitous assumption, that there is no God. But, in truth, man's reliance on testimony is not the result of experience; the effect of the latter is not to produce, but to limit, that reliance. The child believes the testimony of its parent before it has experimented upon it—believes it by an instinct of its reason. How poor, how shallow, then, is the beggarly arithmetic of this earlier Positivist, Hume, when he proposes to strike a balance between the weight of testimony for the supernatural and the evidence for the inflexible uniformity of nature! The great moral problems of man's thought are not to be thus dispatched, like a grocer's traffic. The nature of the competing

evidence is also profoundly misunderstood. Our belief in the necessary operation of a cause is not based on simple experience, but on the intuition of the reason. The Positivist sees in the natural flora of England and France only exogenous trees. May he, therefore, conclude that nature has no forces to produce endogenous? The testimony of those who visit the tropics would refute him. The truth is—and none should know it so well as the physicist, since it is taught expressly by the great founder of this inductive logic, Bacon—a generalization simply experimental can never demonstrate a necessary tie of causation between a sequence of *phenomena*, however often repeated before us. It can suggest only a probability. We must apply some canon of induction to distinguish between the apparently immediate antecedent and the true cause, before the reason recognizes the tie of causation as permanent. If, therefore, reason—not empiricism—suggests from any other source of her teachings that the acting cause may be superseded by another cause, then she recognizes it as entirely natural to expect a new effect, although she had before witnessed the regular recurrence of the old one a million of times. If, therefore, she learns that there may, even possibly, be a personal God, she admits just as much possibility that his free will may have intervened as a superior cause.

The truth is, nature implies the supernatural. Nature shows us herself the marks and proofs that she cannot be eternal and self-existent. She had, therefore, an origin in a creation. But what can be more supernatural than a creation? If it were, indeed, impossible that there could be a miracle, then this nature herself would be non-existent, whose uniformities give the pretext for this denial of the miraculous. Nature tells us that her causes are second causes; they suggest their origin in a first cause. Just as the river suggests its fountains, so do the laws of nature, now flowing in so regular a current, command us to ascend to the Source who instituted them.

4. We carry farther our demonstration of the necessity of practical metaphysics to physical science, by an appeal to more express details. We might point to the service done to the sciences of matter by the *Novum Organum* of Bacon. What physicist is there who does not love to applaud him, and fondly to

contrast the fruitfulness of his inductive method with the inutility of the old dialectics? But Bacon's treatise is substantially a treatise on this branch of logic. He does not undertake to establish specific laws in physical science, but to fix the principles of reasoning from facts, by which any and every physical law is to be established. In a word, it is metaphysics; the only difference being that it is true metaphysics against erroneous. So, nothing is easier to the perspicuous reader than to take any treatise of any Positivist upon physical science, and point to instances upon every page, where he virtually employs some principle of metaphysics. Says the Positivist, concerning some previous solution offered for a class of *phenomena*: "This is not valid, because it is only hypothesis." Pray, Mr. Positivist, what is the dividing line between hypothesis and inductive proof? And why is the former, without the latter, invalid? Can you answer without talking metaphysics? Says the Positivist: "The *post hoc* does not prove the *propter hoc*." Tell us why? We defy you to do it without talking metaphysics.

The Positivist fails to apply his own maxims of philosophy universally; his observations of the effects in nature are one-sided and fragmentary. He tells us that philosophy must be built on facts; that first we must have faithful and exact observation of particulars, then correct generalizations, and last, conclusive inductions. Right, say we. But the primary fact which accompanies every observation which he attempts to make he refuses to observe. When it was reported to the great Leibnitz that Locke founded his essay on the maxim, *Nihil in intellectu quod non prius in sensu*, he answered: *Nisi intellectus esse*. These three words disclose, like the spear of another Ithuriel, the sophism of the whole sensualistic system. In attempting to enumerate the affections of the mind, it overlooked the mind itself. At the first fair attempt to repair this omission, Positivism collapses. Does it attempt to resolve all mental states into sensations? Well, the soul cannot have a consciousness of a sensation without necessarily developing the idea of conscious self over against that of the sensuous object. "As soon as the human being says to itself 'I,' the human being affirms its own existence, and distinguishes itself from that external world whence it derives impressions of which it is not

the author. In this primary fact are revealed the two primary objects of human knowledge; on the one side, the human being itself, the individual person that feels and perceives himself; on the other side, the external world that is felt and perceived: the subject and the object." That science may not consistently omit or overlook the first of these objects is proved absolutely by this simple remark, that our self-consciousness presents that object to us, as distinct, in every perception of the outer world which constitutes the other object; presents it even more immediately than the external object, the perception of which it mediates to us. We must first be conscious of *self*, in order to perceive the *not self*. Whatever certainty we have that the latter is a real object of knowledge, we must, therefore, have a certainty even more intimate, that the former is also real. Why, then, shall it be the only real existence, the only substance in nature, to be ostracised from our science? This is preposterous. Is it pleaded that its affections are not *phenomena*, not cognizable to the bodily senses? How shallow and pitiful is this; when those bodily senses themselves owe all their validity to this inward consciousness!

We now advance another step. Every substance must have its attributes. The ego is a real existence. If our cognitions are regular, then it must be by virtue of some primary principles of cognition, which are subjective to the mind. While we do not employ the antiquated phrase, "innate ideas," yet it is evident that the intelligence has some innate norms, which determine the nature of its ideas and affections, whenever the objective world presents the occasion for their rise. He who denies this must not only hold the absurdity of a regular series of effects without a regulative cause in their subject, but he must also deny totally the spontaneity of the mind. For what can be plainer than this; that if the mind has no such innate norms, then it is merely passive, operated on from without, but never an agent itself. Now then, do not these innate norms of intelligence and feeling constitute primitive facts of mind? Are they not proper objects of scientific observation? Is it not manifest that their earnest comprehension will give us the laws of our thinking, and feeling, and volition? Why have we not here a field of experimental science as legitimate as that

material world which is even less certainly and intimately known?

Dr. Hooker would discard natural theology as entirely delusive. But now we surmise that this science has some general facts which are as certain as any in physics, and certain upon the same experimental grounds. He believes in the uniformity of species in zoölogy. If one told him of a tribe of one-armed men in some distant country, he would demur. He would tell the relator, that experimental observation had established the fact that members of the same species had by nature the same structure. He would insist upon solving the myth of the one-armed nation by supposing that the witness was deceived, or was endeavoring to deceive him, or had seen some individuals who were one-armed by casualty, and not by nature. But psychologists profess to have established, by an observation precisely like that of the naturalist, this general fact, that all human minds have those moral intuitions which we call "conscience." The utmost that science can require of them is, that they shall see to it that their observations are faithful to fact, and their generalization of them is correct. When they submit the result to this test, why is not the law of species as valid for them as for Dr. Hooker? Why shall he require us to be any more credulous concerning the natural lack of this moral "limb" than he was of the story of the one-armed tribe? But if conscience is an essential, primitive fact of the human soul, then it compels us to recognize a personal God, and his moral character, by as strict a scientific deduction as any which the physicist can boast. For, obligation inevitably implies an obligator; and the character of this intuitive imperative, which speaks for him in our reason, must be a disclosure of his character, since it is the constant expression of his moral volition.

5. This instance suggests another capital error of Positivism, in that it proposes to despise abstract ideas, and primitive judgments of the reason; and yet it is as much constrained as any other system of thought, to build everything upon them. Mathematics, the science of quantity, is the basis of the positive philosophy, according to M. Comte; for it is at once the simplest and most exact of the exact sciences. Now when we advert to this science, we perceive at once that it deals not with visible

and tangible magnitudes and quantities of other classes, but with abstract ones. The point, the line, the surface, the polygon, the curve of the geometrician, are not those which any human hand ever drew with pen, pencil, or chalk line, or which human eye ever saw. The mathematical point is without either length, breadth or thickness; the line absolutely without thickness or breadth; the surface absolutely without thickness! How impotent is it for M. Comte to attempt covering up this crushing fact by talking of the *phenomena* of mathematics! In his sense of the word *phenomena*, this science has none. The intelligent geometrician knows that, though he may draw the diagram of his polygon or his curve with the point of a diamond, upon the most polished plane of metal which the mechanic arts can give him, yet is it not exactly that absolute polygon or curve of which he is reasoning. How can he know that the ideas which he predicates, by the aid of his senses, of this imperfect type, are exactly true to the perfect ideal of figures? He knows that the true answer is this: abstract reasoning assures him that the difference between the imperfect visible diagram and the ideal absolute figure, is one which does not introduce any element of error, when the argument taken from the diagram is applied to the ideal. But, on the contrary, the reason sees that the more the imperfection of the diagram is abstracted, the more does the argument approximate exact truth. But we ask, how does the mind thus pass from the *phenomenal* diagram to the conceptual; from the imperfect to the absolute idea? Positivism has no answer. So, the ideas of space, time, ratio, velocity, momentum, substance, upon which the higher *calculus* reasons, are also abstract. Positivism would make all human knowledge consist of the knowledge of *phenomena* and their laws. Well, what is a law of nature? It is not itself a *phenomenon*; it is a general idea which, in order to be general, must be purely abstract. How preposterously short-sighted is that observation which leaves out the more essential elements of its own avowed process? These instances, to which others might be added, show that the admission of some *à priori* idea is necessary to the construction of even the first process of our *phenomenal* knowledge.

But the most glaring blunder of all is that which the Positivist commits in denying the prior validity of our axiomatic beliefs

or primitive judgments, and representing them as only empirical conclusions. That psychology and logic of common sense in which every man believes, and on which every one acts, without troubling himself to give it a technical statement, holds that to conclude implies a premise to conclude from; and that the validity of the conclusion cannot be above that of this premise. Every man's intuition tells him that a process of reasoning must have a starting point. The chain which is so fastened as to sustain any weight, or even sustain itself, must have its first point of support at the top. That which depends must depend on something not dependent. But why multiply words upon this truth, which every rational system of mental science adopts as a part of its alphabet? It can scarcely be more happily expressed than in the words of a countryman of Comte's, M. Royer Collard: "Did not reasoning rest upon principles anterior to the reason, analysis would be without end, and the synthesis without commencement." These primitive judgments of the reason cannot be conclusions from observation, from the simple ground that they must be in the mind beforehand, in order that it may be able to make conclusions. Here is a radical fact which explodes the whole "positive" philosophy.

Its advocates cannot but see this, and hence they labor with vast contortions, to make it appear that these primitive judgments are, nevertheless, empirical conclusions. Comte's expedient is the following: "If," says he, "on the one side, every positive theory must necessarily be founded upon observation, it is, on the other side, equally plain that to apply itself to the task of observation, our mind has need of some 'theory.' If, in contemplating the *phenomena*, we do not immediately attach them to certain principles, not only would it be impossible for us to combine these isolated observations, so as to draw any fruit therefrom, but we should be entirely incapable of retaining them, and, in most cases, the facts would remain before our eyes unnoticed. The need, at all times, of some 'theory' whereby to associate facts, combined with the evident impossibility of the human mind's forming, at its origin, theories out of observations, is a fact which it is impossible to ignore." He then proceeds to explain that the mind, perceiving the necessity of some previous "theories," in order to associate its own observations,

invents them, in the form of theoretical conceptions. Having begun, by means of these, to observe, generalize and ascertain positive truths, it ends by adopting the latter, which are solid, and repudiating the former, which its developed intelligence has now taught it to regard as unsubstantial. His idea of the progress of science, then, seems to be this: the mind employs these assumed "theories" to climb out of the mire to the top of the solid rock, as one employs a ladder, and having gained its firm footing, it kicks them away! But what if it should turn out that this means of ascent, instead of being only the ladder, is the sole pillar also, of its knowledge? When it is kicked away, down tumbles the whole superstructure, with its architect in its ruins. And the latter is the truth. For if these "theories" are prior to our observation, and are also erroneous, then all which proceeded upon their assumed validity is as baseless as they. It is amusing to note the simple effort of Comte to veil this damning chasm in his system, by calling the assumed first truths "theories." They are, according to his conception, manifestly nothing but *hypotheses*. Why did he not call them so? Because, then, the glaring solecism would have been announced, of proposing to construct our whole system of demonstrated beliefs upon a basis of mere hypothesis. Nobody could have been deceived. Nor does the subterfuge avail which his follower, Mill, in substance proposes. It is this: that as the sound physicist propounds an hypothesis, which at first is only probable, not to be now accepted as a part of science, but as a temporary help for preparing the materials of an induction; and as this induction not seldom ends by proving that the hypothesis, which was at first only a probable guess, was indeed, the happy guess, and does contain the true law; so the whole of our empirical knowledge may be constructed by the parallel process. In other words, the pretension of Mill is, in substance, that all our primitive judgments are at first only the mind's hypothetical guesses; and that it is empirical reasoning constructed upon them afterwards, which converts them into universal truths. Now, the simple and complete answer is this: that this proving or testing process, by which we ascertain whether our hypothesis is a true law, always implies some principle to be the *criterion*. How, we pray, was the test applied to the first hypothesis of the series,

when, as yet, there was no ascertained principle to apply, but only hypothesis? *Quid rides?* Mr. Mill's process must ever be precisely as preposterous as the attempt of a man to hang a chain upon nothing. No; the hypothetical ladder is not the foundation of our scientific knowledge. Grant us a foundation and a solid structure built on that foundation, the ladder of hypothesis may assist us to carry some parts of the building higher; that is all. And the parts which we add, carrying up materials by means of the ladder, rest at last, not on the ladder, but on the foundation.

The accepted tests of a primitive intuition are three: that it shall be a first truth, *i. e.*, not learned from any other accepted belief of the mind; that it shall be necessary, *i. e.*, immediately seen to be such that it not only is true, but must be true; and that it shall be universal, true of every particular case always and everywhere, and inevitably believed by all sane men, when its enunciation is once fully understood. The sensualistic school seem all to admit, by the character of their objections, that if the mind has beliefs which do fairly meet these three tests, then they will be proved really intuitive. But they object: these beliefs do not meet the first test, for they are empirically learned by every man, in the course of his own observation, like all inductive truths. And here they advance the plea of their amiable founder, Locke, who little dreamed, good man, what dragon's teeth he was sowing. It is this: that the formal announcement of sundry axioms, in words, to unthinking minds, instead of securing their immediate assent, would evoke only a vacant stare. We have to exhibit the application of the axioms in concrete cases before we gain an intelligent assent. Very true, but why? It is only because the concrete instance is the occasion for his correctly apprehending the abstract meaning of the axiomatic enunciation. Is not the argument preposterous, that because the reason did not immediately see, while as yet the verbal *medium* of intellection was darkness, therefore, the object is not an object of direct mental vision? Because a child is not willing to affirm which of "two pigs in a poke" is the bigger, it shall be declared, forsooth, that the child is blind, or that pigs are not visible animals!

Now, against all this idleness of talk, we demonstrate by proof

both as empirical and deductive as that of the Positivist for any law in physics, that observation and experience are not, and can not be, the source of intuitive beliefs. Let us grant just such a case as Locke claims against us. We meet an ignorant, sleepy, heedless servant, and we ask, "My boy, if two magnitudes be each equal to a third magnitude, must they, therefore, be necessarily equal to each other?" We suppose that he will, indeed, look at us foolishly and vacantly, and, if he says anything, profess ignorance. Our words are not in his vocabulary; the idea is out of his ordinary range of thought. We say to him, "Well, fetch me three twigs from yonder hedge, and we will explain. Name them No. 1, No. 2, No. 3. Take your pocket knife, and cut No. 1 of equal length to No. 3. Lay No. 1 yonder on that stone. Now cut No. 2 exactly equal to No. 3. Is it done?" "Yes, sir." "Now, bcy, consider; if you should fetch back No. 1 from the stone yonder, and measure it against No. 2, do you think you would find them equal in length?" If you have succeeded in getting the real attention of his mind, he will be certain to answer with confidence, "Yes, sir, they will be found equal." "Are you certain of it?" "Yes, sir, sure." "Had you not better fetch No. 1 and try them together?" "No, sir; there is no need; they are obliged to be equal in length." "Why are you sure of it, when you have not actually measured them together?" "Because, sir, did I not cut No. 1 equal to No. 3, and is not No. 2 equal to No. 3? Don't you see that No. 1 and No. 2 cannot differ?" Let the reader notice here that there has been *no experimental trial* of the equality of the first and second twigs in length; hence it is simply impossible that the servant's confidence can result from experiment. It is the immediate intuition of his reason, because there is absolutely no other source for it. Obviously, therefore, the only real use for the three twigs and the knife was to illustrate the terms of the proposition to his ignorant apprehension. Let the reader note also that now the servant has got the idea, he is just as confident of the truth of the axiom, concerning all possible quantities of which he has conception, as though he had tested it by experiment on all. This suggests the farther argument, that our intuitive beliefs can not be from experiment, because, as we shall see, we all hold them for universal truths, but each man's experience is limited.

The first time a child ever divides an apple, and sees that either part is smaller than the whole, he is as certain that the same thing will be true of all possible magnitudes as well as apples, as though he had spent ages in dividing apples, acorns, melons, and everything which came to his hand. Now, how can a universal truth flow experimentally from a single case? Were this the source of belief, the greatest multitude of experiments which could be made in a life-time could never be enough to demonstrate the rule absolutely, for the number of possible cases yet untried would still be infinitely greater. Experience of the past by itself does not determine the future.

Moreover, several intuitive beliefs are incapable of being experimentally inferred, because the case can never be brought under the purview of the senses. "Divergent straight lines," we are sure, "will never enclose any space, though infinitely produced." Now, who has ever inspected an infinite straight line with his eyes? The escape attempted by Mill, with great labor, is this: one forms a mental diagram of that part of the pair of divergent lines which lies beyond his ocular inspection (beyond the edge of his paper, or blackboard), and by a mental inspection of this part, he satisfies himself that they still do not meet. And this mental inspection of the conceptual diagram, saith he, is as properly experimental as though it were made on a material surface. On this queer subterfuge we might remark that it is more refreshing to us than consistent for them, that Positivists should admit that the abstract ideas of the mind can be subjects of experimental reasoning. We had been told all along that Positivism dealt only with *phenomena*. It is also news to us that Positivism could admit any power in the mind of conceiving infinite lines! What are these, but those naughty things, absolute ideas, which the intelligence could not possibly have any lawful business with, because they were not given to her by sensation? But chiefly Mill's evasion is worthless in presence of this question: how do we know that the straight lines on the conceptual and infinite part of this imaginary diagram will have the identical property possessed by the finite visible parts on the blackboard? What guides and compels the intelligence to this idea? Not sense, surely, for it is the part of the conceptual diagram, which no eye will ever see. It is just the reason's

own *à priori* and intuitive power. Deny this, as Mill does, and the belief—which all know is solid—becomes baseless.

In a word, this question betrays how inconsistent the sensualistic philosopher is, in attempting to derive first truths from sensational experience, and ignoring the primitive judgments of the reason. How has he learned that sensational experience is itself true? Only by a primitive judgment of the reason! Here, then, is one first belief, which sense cannot have taught us, to wit, that what sense shows us is true. So impossible is it to construct any system of cognitions while denying to the reason all primary power of judgment.

When we propose the second test, that intuitive judgments must be “necessary,” Positivism attempts to embarrass the inquiry by asking what is meant by a necessary truth. One answers—with Whewell, for instance,—it is a truth the denial of which involves a contradiction. It is, of course, easy for Mill to reply to this heedless definition, that then every truth may claim to be intuition, for is not contradiction of some truth the very character of error? If one should deny that the two angles at the base of an isosceles triangle are equal, he could soon be taught that his denial contradicted an admitted property of triangles; and this, indeed, is the usual way we establish deduced truths, which are not intuitive. We affirm the definition of common sense, that a necessary truth is one the denial of which is immediately self-contradictory. Not only does the denial clash with other axioms, or other valid deductions, but it contradicts the terms of the case itself, and this according to the immediate, intuitive view which the mind has. Does not every one know that his mind has such judgments necessary in this sense? When he says, “the whole *must be* greater than either of its parts,” his mind sees intuitively that the assertion of the contrary destroys that feature of the case itself which is expressed in the word “parts.” Who does not see that this axiom is inevitable to the reason, in a different way from the proposition, “The natives of England are white, those of Guinea black?” The latter is as true, but obviously not as necessary as the former.

Or, if Whewell answers the question, what is meant by a truth’s being “necessary,” that it is one the falsehood of which

is "inconceivable," Mill attempts to reply, that this is no test of the primariness of a truth, no test of truth at all, because our capacity of conceiving things to be possible, or otherwise, depends notoriously upon our mental habits, associations, and acquirements. He points to the fact that all Cartesians, and even Leibnitz, objected against Sir Isaac Newton's theory of gravitation and orbital motion, when first propounded, that it was "inconceivable" how a body propelled by its own *momentum* should fail to move on a tangent, unless connected with its centre of motion by some substantial bond. There is a truth in this and similar historical facts. It is that the antecedent probability of the truth of a statement depends, for our minds, very greatly upon our habits of thought. And the practical lesson it should teach us is moderation in dogmatizing, and candor in investigating. But for all this, Mill's evasion will be found a verbal quibble, consisting in a substitution of another meaning for the word "inconceivable." We do not call a truth necessary, because, negatively, we lack the capacity to conceive the actual opposite thereof; but because, positively, we are able to see that the opposite proposition involves a self-evident, immediate contradiction. It is not that we cannot conceive how the opposite comes to be true, but that we can see, that it is impossible the opposite should come to be true. And this is wholly another thing. The fact that some truths are necessary in this self-evident light, every fair mind reads in its own consciousness.

As the third test of first truths, that they are universal, the sensualists ring many changes on the assertion, that there is debate what are first truths; that some propositions long held to be such, as: "No creative act is possible without a pre-existent material;" "Nature abhors a vacuum;" "A material body cannot act immediately save where it is present;" are now found to be not axiomatic, and not even true. The answer is, that all this proves, not that the human mind is no instrument for the intuition of truth, but that it is an imperfect one. The same line of objecting would prove with equal fairness—or unfairness—that empirical truths have no inferential validity; for the disputes concerning them have been a thousand-fold wider. Man often thinks incautiously; he is partially blinded

by prejudice, habit, association, hypothesis, so that he has blundered a few times as to first truths, and is constantly blundering, myriads of times, as to derived truths. What then? Shall we conclude that he has no real intuition of first truths, and by that conclusion compel ourselves to admit, by a proof reinforced a thousand-fold, that he certainly has no means, either intuitive or deductive, for ascertaining derived truths? This is blank skepticism. It finds its practical refutation in the fact, that amidst all his blindness man does ascertain many truths, the benefits of which we actually possess. No; the conclusion of common sense is, that we should take care when we think. But the fact remains, that there are axiomatic truths, which no man disputes, or can dispute; which command universal and immediate credence when intelligently inspected; which, we see, must be true in all possible cases which come within their terms. For instance: every sane human being sees, by the first intelligent look of his mind, that any whole must be greater than one of its own parts; and this is true of all possible wholes in the universe which come within the category of quantity, in any form whatsoever. Is it not just this fact which makes the proposition a general one, that man is a reasoning creature? What, except these common and primitive facts of the intelligence, could make communion of thought, or communication of truth from mind to mind, possible? It is these original, innate, common, primary, regulative laws of belief.

The most audacious and the most mischievous assertion of Mill against absolute truths, is his denial to the mind of any intuitive perception of causation and power. The doctrine of common sense here is, that when we see an effect, we intuitively refer it to a cause, as producing its occurrence. And this cause is necessarily conceived as having power to produce it, under the circumstances. For it is impossible for the reason to think that nothing can evolve something. Nothing can result only in nothing. But the effect did not produce its own occurrence, for this would imply that it acted before it existed. Hence, the reason makes also this inevitable first inference, that the power of that cause will produce the same effect which we saw, if all the circumstances are the same. But the sensualistic school asserts that the mind is entitled to predicate no tie between

cause and effect, save immediate invariable sequence, as observed; because this is all the senses observe, and *Nihil in intellectu quod non prius in sensu*. The inference, that the like cause will, in future, be followed by the like effect, is, according to them, an empirical result only of repeated observations, to which the mind is led by habit and association.

Now our first remark is, that only a sensualistic philosopher could be guilty of arguing that there can be no real tie of causation, because the senses see only an immediate sequence. The absurdity (and the intended drift also) of such arguing appears thus: that, by the same notable sophism, there is no soul, no God, no abstract truth, no substance, even in matter, but only a bundle of properties. For did our senses ever see any of these? How often must one repeat the obvious fact, that if there is such a thing as mind, it also has its own properties; it also is capable of being a cause; it also can produce ideas according to the law of its nature, when sense furnishes the occasion? Sensation informs us of the presence of the effect; the reason, according to its own imperative law, supposes power in the cause.

It is extremely easy to demonstrate, and that by the Positivist's own method, that mental association is not the ground, but the consequence, of this idea of causation. We all see certain "immediate, invariable sequences" recurring before us with perfect uniformity; yet we never dream of supposing a causative tie. We see other sequences twice or thrice, and we are certain the tie of power is there. Light has followed darkness just as regularly as light has followed the approach of the sun. Nobody dreams that darkness causes light; everybody believes that the sun does cause it. It thus appears, experimentally, that association has not taught us the notion of cause; but that our knowledge of cause corrects our associations and controls their formation.

The experience of a certain *phenomenon* following another a number of times can never, by itself, produce a certainty that, under similar circumstances, it will always follow. The mere empirical induction gives only probability. The experience of the past, were there no intuition of this law of causation by which to interpret it, would only demonstrate the past; there would be no logical tie entitling us to project it on the future.

We ask our opponents, if it be the experience of numerous instances which gives us certainty of a future recurrence, how many instances will effect the demonstration? Is their answer, for instance, that one hundred uniform instances, and no fewer, would be sufficient? What, then, is the difference between the ninety-ninth and the hundredth? According to the very supposition, the two instances are exactly alike; if they were not, the unlike one could certainly contribute nothing to the proof, for it would be excluded as exceptional. Why is it, then, that all the ninety-nine do not prove the law, but the hundredth instance, exactly similar to all the rest, does? There is no answer. The truth is, the reason why an empirical induction suggests the probability that a certain, oft-repeated sequence contains the true law of a cause (which is all it can do), is but this: intuition has assured us in advance, that the *second phenomenon* of the pair, the effect, must have some cause; and the fact observed, that the other is its seeming next antecedent, "indicates a presumption that this *may be* the true cause. For the true cause must be the immediate next antecedent, either visible or unnoticed. But there may be another more immediate antecedent than the one first noticed, not yet detected. We, therefore, resort to some test grounded on the intuitive law of cause, to settle this doubt. Just as soon as that doubt is solved, if it be by the second observation, the mind is satisfied; it has ascertained the causative antecedent; it is now assured that this antecedent, if arising under the same conditions, will inevitably produce this consequent, always and everywhere, and ten thousands of uniform instances, if they do not afford this test, generate to such certainty. Yea, there are cases in which the conviction of causative connection is fully established by one trial, when the circumstances of that one trial are such as to assure the mind that no other undetected antecedent can have intervened, or accompanied the observed one. For instance, a traveller plucks and tastes a fruit of inviting color and odor, which was wholly unknown to him before. The result is a painful excoriation of his lips and palate. He remembers that he had not before taken into his mouth any substance whatever, save such as he knew to be innocuous. The singleness of the new antecedent enables him to decide that it must have been the true cause of his suffer-

ings. The man thenceforward knows just as certainly that this fruit is noxious, whenever he sees it, to the millionth instance, without ever tasting it a second time, as though he had tasted and suffered nine hundred thousand times.

Indeed, as Dr. Chalmers has well shown, experience is so far from begetting this belief in the law of cause, that its usual effect is to correct and limit it. A child strikes its spoon or knife upon the table for the first time; the result is sound, in which children so much delight. He next repeats his experiment confidently upon the sofa-cushion or carpet, and is vexed at his failure to produce sound. Experience does not generate, but corrects his intuitive confidence, that the same cause will produce the same effect, not by refuting the principle, but by instructing him that the causative antecedent of the sound was not, as he supposed, simple impact, but a more complex one, namely, impact of the spoon and elasticity of the thing struck.

Mill himself admits expressly, what Bacon had so clearly shown, that an induction merely empirical gives no demonstration of causative tie. To reach the latter, we must apply some canon of induction, which will discriminate between the *post hoc* and the *propter hoc*. Does not Mill himself propose such canons? It is obvious that the logic of common life, by which plain people convert the inferences of experience into available certainties, is but the application of the same canons. Let us now inspect an instance of such application, and we shall find that it proceeds at every step on the intuitive law of cause as its postulate. Each part of the reasoning which distinguishes between the seeming antecedent and the true cause is a virtual syllogism, of which the intuitive truth is the major premise. Let us select a very simple case; the reader will see, if he troubles himself to examine the other canons of induction, that they admit of precisely the same analysis. We are searching for the true cause of an effect which we name D. We cannot march directly to it, as the traveller did in the case of the poisonous strange fruit, because we cannot procure the occurrence of the *phenomenon* D with only a single antecedent. We must, therefore, reason by means of a canon of induction. First, we construct an experiment in which we contrive the certain exclusion of all antecedent *phenomena* save two, which we name A and B.

It still remains doubtful which of these produced the effect D, or whether both combined to do it. We contrive a second experiment, in which B is excluded, but another *phenomenon*, which we call C, accompanies A, and the effect D again follows. Now we can get the truth. Here are two instances. In the first, A and B occurred, and D follows immediately, all other antecedents being excluded. Therefore, the cause of D is either A or B, or the two combined (thus the inductive canon proceeds). But why? Because the effect D *must* have had its immediate cause, which is our *à priori* and intuitive postulate. In the second instance, A and C occurred together, and D followed. Here again, the true cause must be either A or C, or the combined power of the two. Why? For the same intuitive reason. But in the first instance C could not have been the cause of D, because C was absent then; and in the second instance, B could not have been the cause, for B was then absent. Therefore, A was the true cause all the time. Why? Because we know intuitively that every effect has its own cause. And now we know, without farther experiment, that, however often A may occur under proper conditions, D will assuredly follow. Why? Only because we knew, from the first, the general law that like causes produce like effects.

It thus appears that the intuitive belief in this law of cause, is essential beforehand, to enable us to convert an experimental induction into a demonstrated general truth. Can any demonstration be clearer, that the original law itself cannot have been the teaching of experience? It passes human wit to see how a logical process can prove its own premise, when the premise is what proves the process. Yet this absurdity Mill gravely attempts to explain. His solution is, that the law of cause is "an empirical law co-extensive with all human experience." In this case he thinks an empirical law may be held as perfectly demonstrated, because of its universality. May we conclude, then, that a man is entitled to hold the law of cause as perfectly valid only after he has acquired "all human experience?" This simple question dissolves the sophism into thin air. It is experimentally proved that this is not the way in which the mind comes by the belief of the law; because no man ever acquires all human experience to the day of his death; but only a part, which, rela-

tively to the whole, is exceedingly minute; and because every man believes the general law of cause as soon as he begins to acquire experience. The just doctrine, therefore, is, that experimental instances are only the occasions upon which the mind's own intuitive power pronounces the self-evident law.

John Stuart Mill is both a Positivist in his logic, and the accepted philosopher of English radicalism. The reader has in the above specimens a fair taste of his quality. With much learning and labor, he combines subtlety and dogmatism. His style, like his thoughts, is intricate, ill-defined, and ambiguous, having a great air of profundity and accuracy, without the real possession of either. When one sees the confused and mazy involutions in which he entangles the plainest propositions that are unfriendly to his sensualistic principles, he is almost ready to suppose him the honest victim of those erroneous postulates, until he observes the astute and perspicacious adroitness with which he wrests the evidence of the truth which he dislikes.

But we return, and conclude this branch of the discussion by resuming the points. Positivism denies all primary and absolute beliefs. We have now shown that in this it is inconsistent, because such beliefs are necessary premises to those experimental processes of proof which alone it affects to value. It is by these primitive truths of the reason that the soul reaches a realm of thought above the perception of the senses, and ascends to God, to immortality, to heaven.

6. Comte and his followers claim that the physical sciences have the most fruit, and the most satisfying certainty, because they have received the "positive" method. Metaphysics, including psychology, ethics and natural theology, had remained to his day worthless and barren of all but endless differences and debates, because they had attempted a different method, and refused Positivism. Introduce here Butler's idea: *Probability* the practical guide of life. But he undertook to reconstruct so much of these as he did not doom to annihilation upon the strict basis of the observation of the bodily senses and experimental reasoning, under the name of "sociology." In this instance, with the help of biology, he proposed to deduce all the laws of mind from physical experiments and observations upon its

organs, the brain and nervous apparatus; and from the visible acts of men's bodies as moved by the mind. Then, from the laws of mind, with the facts of human history, he professed to construct an experimental and positive science of ethics and government. It is instructive to notice that the Positivists, just so soon as they approach these sciences of mind, morals, human rights and government, disagree with each other as much as the rest of us unpositive mortals. The Priest of Humanity has been compelled to expel many of his earliest admirers from his church. Somehow, Positivism itself, when it approaches these topics, is no longer "positive;" it guesses, dogmatizes, dreams, disputes, errs, fully as much as its predecessors. What, now, does this show? Plainly that the experimental methods of the physical sciences are incapable of an exact and universal application in this field of inquiry. The objects are too immaterial; they are no longer defined, as in physics, by magnitude, or figure, or quantity, or duration, or ponderosity, or velocity. The combinations of causation are too complex. The effects are too rapid and fleeting. The premises are too numerous and undefined for our limited minds to grasp with uniform exactness and certainty. If Positivism, with all its acknowledged learning, and mastery of the science of matter, with its boasts and its confidence, has failed to conquer these difficulties in the little way it professes to advance in the science of the human spirit, shall we not continue to fail in part? "What can he do that cometh after the king?"

Let us couple this fact, that the sciences of psychology, morals and natural theology have ever been, and are destined to remain, the least exact and positive of all the departments of man's knowledge, with this other, that they are immeasurably the most important to his well-being and his hopes. The latter statement commends itself to our experience. It is far more essential to a man's happiness here, that he shall have his rights justly and fairly defined than his land accurately surveyed. It is far more interesting to the traveller to know whether the ship-captain to whom he entrusts his life has the moral virtue of fidelity than the learning of the astronomer and navigator. It is more important to us to have virtuous friends to cherish our hearts than adroit mechanics to make our shoes. It is more momentous to

a dying man to know whether there is an immortality, and how it may be made happy, than to have a skilful physician, now that his skill is vain. We see here, then, that human science is least able to help us where our need is most urgent. M. Comte reprehends the human mind, because "questions the most radically inaccessible to our capacities, the intimate nature of being, the origin and the end of all *phenomena*, were precisely those which the intelligence propounded to itself as of paramount importance in that primitive condition, all the other problems really admitting of solution being almost regarded as unworthy of serious meditation. The reason of this it is not difficult to discover, for experience alone could give us the measure of our strength." Alas! the reason is far more profound. Man has ever refused to content himself with examining the properties of triangles, prisms, levers and pulleys, which he could have exactly determined, and has persisted in asking whence his spiritual being came, and whither it was going; what was its proper rational end, and what its laws; not merely because he had not learned the limits of his power, but because he was, and is, irresistibly impelled to these inquiries by the instinctive wants of his soul. His intuitions tell him that these are the things, and not the others, which are of infinite moment to him. It appears, then, that it is unavoidable for man to search most anxiously where he can find least certainty. His intellectual wants are most tremendous just in those departments where his power of self-help is least. To what should this great fact point us? If we obey the spirit of true science, it will manifest to us the great truth that man was never designed by God for mental independence of him; that man needs, in these transcendent questions, the guidance of the infinite understanding; that while a "positive philosophy" may measure and compare his material possessions, the only "exact science" of the spirit is that revealed to us by the Father of Spirits. This, we assure the Positivist, is the inevitable conclusion to which the sound and healthy reason will ever revert, as the needle to its pole, despite all his dogmatism and sophistry. Introduce here the experimental argument for the certain failure of materialism from the constitutional necessities of the soul, and from history of the past, even with so poor a religion as popery. If there were nothing else to ensure

it, the intolerable miseries, crimes and despair, into which Positivism will ever plunge the societies which adopt it, will always bring back this result. He may draw an augury of the destiny of his wretched creed from the parsimony of its present followers. M. Comte drew up a scheme for the support of the ministers of his new "Worship of Humanity," under which the "High Priest of Humanity" was to receive a salary of about \$12,000 a year, and four national superintendents about \$6,000 each. It appears from the newspapers that only forty-six persons contributed in 1867, and the total was \$750. But meantime the votaries of that Lord Jesus Christ whom he despises, in the conquered South, though "scattered and peeled" by their enemies, contribute annually some millions of dollars, and are sending their best intellects and hearts to propagate their faith at the antipodes. Let the Positivist judge which system has the conquering vitality!

LIBERTY AND SLAVERY.¹

THE last and only time Mr. Bledsoe was introduced into the *Critic*, it was in connection with his *Theodicy*. This work, which was a thorough-going assertion of Pelagianism, was perhaps the most honest sophistry we have ever read. It exhibited some premises so erroneous that conclusions drawn from them could only be false, and displayed no little theological prejudice; but still the discussion was manly and vigorous, the style both nervous and rhetorical, and the love of truth apparent even in the advocacy of error. If a strong and energetic man start from the wrong point, and take the wrong direction, he will go only the farther astray, because of his vigorous exertions.

The work which we review possesses the same mental traits and characteristics of style with the former, with this advantage, that the subject is one which the writer approaches without prejudice, and which the nature of his previous studies has qualified him to discuss. Born in Kentucky, where, as is well known, the emancipation feeling was almost as strong, until the abolition excitement began, as in any of the free States, spending the earlier years of his manhood in Ohio, and then a few years in Mississippi, and at all times disconnected with those occupations which interest themselves in slave labor, the author may be regarded fairly as a man who has seen both sides, and who stands in an intermediate post of observation. But the abolitionist will probably say, if he meets the usual treatment from them, that his book now speaks the language of self-interest, because he holds office under the government of a "slave-breeding commonwealth." The common utterance of such charges is as offensive to public morality as to the individuals at whom they are hurled; for they seem to take it for granted

¹ Appeared in *The Critic* for May, 1856, reviewing *An Essay on Liberty and Slavery*, by Albert Taylor Bledsoe, LL. D., Professor of Mathematics in the University of Virginia.

that candor, public virtue and moral courage are extinct in the South; and since the accusers cannot know a community in which they have not lived, and which they so much contemn, the inference is, that they disbelieve the existence of these qualities at the South, because they are not accustomed to meet with them at home. This is as unjust to the country at large as it is in this case to Mr. Bledsoe and the community in which he resides. It should not be supposed, that because the people of Virginia would deal summarily with a hypocritical incendiary from abroad, who came with insolent malignity meddling with what does not concern him, they will, therefore, refuse the privilege of free discussion to her own honorable citizens.

Mr. Bledsoe's first chapter lays down first principles for his subsequent discussion, in a discussion of "the nature of civil liberty." It may be said in brief, that the theory of society which he advocates is the Bible theory; the one which is advocated by the *Biblical Repertory* and by Christian philosophers generally, in opposition to that infidel theory which ignores a Creator and moral Governor of mankind, the pet system of infidel French democrats and pseudo-Christian abolitionists. The author in substance describes liberty to be a *freedom to do what a man has a right to do*; and to define the extent of those rights he goes to the law of God. This chapter is marked most favorably with the best characteristics of the author, freedom from prescription, boldness in attacking errors sanctioned by great names and vigorous scientific inquiry. It rises, indeed, very near the highest regions of ethical speculation, in the directness, simplicity and breadth of the thinking. The remaining chapters on the erroneous positions of abolitionists, the Bible argument for the lawfulness of slavery, the argument from the public good, and the fugitive slave law, do not quite fulfil the promise of the first in their philosophic method. This defect, if it is one, arises obviously from the author's plan of taking up and refuting the positions of abolitionists in detail; so that the discussion, instead of being strictly methodized on a logical plan, is rather a series of refutations, each one indeed pungent and demolishing, but yet as a whole, partaking of the confusion of the errors which they explode. The author does not condescend to meaner antagonists, but grapples only with the Ajaxes

of the opposite host, Drs. Channing and Wayland, and Messrs. Barnes, Sumner, and Seward. The impression which many of these special discussions leaves upon the mind of the reader is that of a strong man tearing away the defences of his helpless adversary, rending them into almost invisible shreds, and spurning them as the driven stubble before his bow, till they can be no longer found. We were peculiarly gratified with the thorough work which he makes of the criticisms of that most glozing and treacherous of commentators, Barnes, upon the epistle to Philemon. But while we would be glad that this book should be read, yea, studied by every man in the United States who is unsatisfied on the subject of slavery, we would not be understood as commending in every case the strength of its denunciations, or as approving all its positions. Pages 151, 152, the author alludes to the familiar objection by which Dr. Wayland and others attempt to break the force of the unanswerable argument from the legalizing of slavery in the law of Moses; that in like manner the sins of polygamy and divorce are there permitted. Here Mr. Bledsoe makes the admission that the fact claimed is true; but that instead of proving slavery a sin, it only proves the two other practices innocent till they were prohibited by Christ. This would indeed be the just inference, if we were compelled to make the admission. But we would by no means make it. We are by no means willing to surrender it as a settled question, that polygamy is in any sense allowed or legalized in the Pentateuch; and the scanty *permissive* legislation about divorce, explained as it is by our Saviour, is very far from placing that sin on the same platform with the ownership of slaves, which is not only limited and restrained (the whole of what is enacted about divorce), but authorized. Polemically it is a bad policy to seem to permit the abolitionist to say: "Well, after all, your notable Old Testament argument only succeeds in placing slavery in the same category with the two Mormon abominations of polygamy and divorce." There is no logical necessity on us to allow even the pretext for such a repartee.

In commending this book, with these and a few similar exceptions, to our readers, we would avail ourselves of the occasion to make two important remarks. One is, that the political troubles in our federal relations growing out of slavery at the

South can never be permanently adjusted till the abstract question, "whether the relation of master and slave is in itself an unrighteous one or not?" is fully met, discussed, and settled in the national mind. There were two courses of conduct, either of which might have been followed by the defenders of existing laws. One plan would have been to exclude the whole question of slavery persistently from the national councils, as extra-constitutional, unprofitable and dangerous, and to assert this exclusion always, and at every risk, as the essential condition of the continuance of the South in those councils. The other plan was to meet that abstract question from the first, as underlying and determining the whole subject, to debate it everywhere, until it was decided, and the verdict of the national mind was passed upon it. Unfortunately, the Southern men did neither steadily. They permitted the debate, and then failed to argue it on fundamental principles. With the exception of Mr. Calhoun—whom events are every year proving the most far-seeing of our statesmen, notwithstanding the fashion of men to depreciate him as an "abstractionist" while he lived—Southern politicians were accustomed to say that this whole matter was one of State sovereignty, according to the constitution; that Congress had no right to legislate concerning its merits, and that, therefore, they should not seem to admit such a right, by condescending to argue the matter of its merits. The premise is true; but the inference is practically most erroneous. If Congress has no right to legislate about slavery, then Congress should not have been permitted to debate it. And Southern men, if they intended to stand on that ground, should have exacted the exclusion of all debate. But this was perhaps impossible. The debate came; and of course the inferences of the premises agitated ran at once back of the constitution. Southern men should have industriously followed them there; but they have not done it; and now political agitation has gone so far, and become so complicated, that we fear the time has gone by when the country will be willing to consider calmly the fundamental question.

A moment's consideration ought to show that that question is the abstract lawfulness or unlawfulness of the relation of master and slave. The constitution gives to the Federal government

no power over that relation in the slave States. True, but that constitution is a compact between sovereign commonwealths; it certainly gives incidental protection and recognition to the relation of master and slave, and if that relation is intrinsically unrighteous, then it protects a wrong. The sovereign States of the North are found in the attitude of protecting a wrong by their voluntary compact; and, therefore, it is the duty of all the righteous citizens of those commonwealths to seek by righteous means the amendment or repeal of that compact. They are not, indeed, justified to claim all the benefits of the compact, and still agitate *under it* a matter which the compact excludes. But they are more than justified; they are bound to clear their skirts of the wrong, by surrendering the compact, if necessary. There is no evasion from this duty, except by proving that the constitution does not do unrighteously in protecting the relation; in other words, that the relation is not intrinsically unrighteous. Again, on the subject of the "Higher Law," our conservative statesmen and divines have thrown out a vast amount of pious dust. This may serve to quiet the country for a time, but it will inevitably be blown away. There is a *higher law*, superior to constitution and legislative laws; not indeed the perjured and unprincipled cant which has no conscience about swearing allegiance to a constitution and a body of laws which it believes wrong, in order to grasp the emoluments and advantages of those laws, and then pleads "conscience" for disobeying what it had voluntarily sworn to obey; but the law of everlasting right in the word of God. Constitutions and laws which contravene this ought to be lawfully amended or repealed; and it is the duty of all citizens to seek it. Let us apply this to the Fugitive Slave Law. If the bondage is intrinsically unrighteous, then the federal law which aids in remanding the fugitive to it legalizes a wrong. It becomes, therefore, the duty of all United States officers who are required by law to execute this statute, not indeed to hold their offices and emoluments, and swear fidelity, and then plead conscientious scruples for the neglect of these sworn functions, for this is a union of theft and perjury with hypocrisy, but to resign those offices, with their emoluments. It becomes the duty of any private citizen who may be summoned by a United States officer to act as part of a *posse*, guard, or in any

other way in enforcing this statute, to decline obedience; and then, in accordance with Scripture, to submit meekly to the legal penalty of such a refusal, until the unrighteous law is repealed. But, moreover, it becomes the right and duty of these, and all other citizens, to seek the repeal of that law, or, if necessary, the abrogation of the compact which necessitates it. But when we have proved that the relation of master and slave is not intrinsically unrighteous, and have shown that the fugitive slave law does but carry out fairly the federal compact in this particular, it becomes the clear duty of every citizen to concur in obeying it.

Since the slavery discussion has now become inevitable in our federal politics, it is absolutely essential that the mind of the nation shall be enlightened and settled on the abstract question. The halls of Congress should ring with the arguments; the newspaper press should teem with them, and, above all, with the Bible arguments, for ours is a Christian nation in the main; and the teachings of the sacred Scriptures are, after all, the chief means for influencing the convictions of the people. It seems, indeed, late in the day to begin the popular discussion of first principles afresh, when the immediate questions have almost reached their crisis; but we are convinced that if it is too late now to get the public ear for this discussion, it is too late to save the country. It is gratifying to notice that the political newspapers are at length wakening to the necessity of this discussion. A leading journal of the South a few weeks ago noticed, and lamented, the policy on which we have been remarking, and said that since Mr. Calhoun died, not a single politician had been found to argue the abstract question of right on its merits, while all that had been done for the peace of the country since in this matter had been done by divines and scholars. The work of Mr. Bledsoe is important and timely, as making an able contribution to this fundamental discussion.

The second remark which we would urge is, that if this debate is to produce any good to the country at large, the propositions advanced must be marked by a wiser moderation, and the arguments by more soundness than have always been exhibited at the South. The Southern cause does not demand such assertions as that the condition of master and slave is the normal con-

dition of human society, in such a sense as to be preferable to all others, in all time, and under all circumstances. Certain it is that the burden of odium which the cause will have to carry at the North will be immeasurably increased by such positions. Why array against ourselves indomitable prejudices, by the useless assertion of a proposition which would be unnecessary to our cause, if it were true? Nor can a peaceful and salutary purpose be ever subserved by arguing the question in a series of comparisons of the relative advantages of slave and free labor, laudatory to the one party and invidious to the other. There has been, on both sides of this debate, a mischievous forgetfulness of the old adage, "Comparisons are odious." When Southern men thus argue, they assume the disadvantage of appearing as the propagandists, instead of the peaceful defenders of an institution which is, and will continue, very naturally, distasteful to their opponents; and they array the self-esteem of those opponents against them, by placing the discussion in an attitude where the acknowledgement of the Southern cause must be a confession of Northern inferiority. True, our Northern neighbors have often been only too zealous to play at this invidious game, or even to begin it in advance. They should not be imitated in their mistake. It is time that all parties should learn that the lawfulness and policy of opposite, or competing, social systems cannot be decided by painting the special features of hardship, abuse or mismanagement, which either of the advocates may imagine he sees in the system of his opponent. The course of this great discussion has too often been this: each party has set up an easel, spread a canvass upon it, and proceeded to draw *the system of its adversary* in contrast with its own, in the blackest colors which a heated and angry fancy could discover amidst the evils and abuses imputed to the rival institution. The only result possible is, that each shall blacken his adversary more and more, and, consequently, that both shall grow more and more enraged; and this, though all the black shades of sorrow and oppression be drawn from facts in the conditions of the rivals; for, unfortunately, the human race is a fallen race, depraved, unrighteous and oppressive, under all institutions. Out of the best social institutions there still proceeds a hideous amount of wrong and woe; and this, not because those institu-

tions are unrighteous, but because they are administered by depraved man. For this reason, and for another equally conclusive, we assert that the lawfulness, and even the wisdom and policy of social institutions affecting a vast population cannot be decided by this odious contrast of their special wrong results. The other reason is, that the field of view is too immense and varied to be brought fairly into comparison under the limited eye of man. First, then, if we attempt to settle the matter by trying how much wrong we can find in the working of the opposite system, there will probably be no end at all to the melancholy discoveries which we shall both make, and so, no end to the debate; for the guilty heart of man is everywhere a *perpetual* fountain of wrongs. And, second, the comparison of results must be deceptive, because no finite mind can take in both the endless wholes.

The policy of the South, then, is, to take no ultra positions, and to support herself by no unnecessarily invidious comparisons. It is enough for her to place herself on this impregnable stand, that the relation of master and slave is recognized as lawful in itself, by the infallible law of God. That truth she can triumphantly evince; and from it she can deduce all that it is right for her to claim. There is no wisdom nor use in her asserting that domestic slavery is always and everywhere the best relation between labor and capital, and should, therefore, be everywhere introduced; a proposition against which, to say the least, indomitable prejudices are arrayed. It is enough for her to say—what is true, and susceptible of overwhelming demonstration—that, for the African race, *such as it is, in fact*, such as Providence has placed it here, this is the best, yea, the only tolerable relation. If it is lawful in the sight of God; if the constitution of the Union does no moral wrong in recognizing it as lawful; if it is best for the interests of the African, of the white race of the South, and of the whole Union, that the matter should be left untouched by the meddling hand of federal legislation—a hand impotent of good to it, and only mighty for mischief—to develop itself under the leadings of Providence and the benign influences of Christianity, then the South has all her rights asserted. If thus much is true, then the federal constitution, and the laws carrying out its provisions, only say what

the Bible says, that the holder of African slaves does not necessarily live in the commission of wrong, and is not, therefore, to be disfranchised of any right which the law allows to any other citizen.

It is because Mr. Bledsoe's work is marked by this just moderation in its positions that we are willing to commend it to the public. We have here none of the absurdities, of which the facile exposure has given abolitionists the pretext to sing triumphs, such as the argument that African slavery is righteous, because Noah foretold it of the descendants of Ham. The author says, for instance (p. 140), "In opposition to the thesis of the abolitionist, we assert that it is not always and everywhere wrong." "We only contend for slavery in certain cases." And in the argument from the public good, he says (p. 228): "We are not called upon to decide whether slavery shall be established in our midst, or not. This question has been decided for us." . . . "The only inquiry which remains for us now is, whether the slavery which was thus forced upon our ancestors shall be continued, or whether it shall be abolished? The question is not what Virginia, or Kentucky, or any other slave State *might* have been, but what they would be in case it were abolished. If abolitionists would speak to the point, then let them show us some country in which slavery has been abolished, and we will abide by the experiment." True, Mr. Bledsoe does not always speak of his ultra adversaries in sugared terms. But in our disapproval of the strength of his words, let us remember the outrageous provocation which has been given.

POPIISH LITERATURE AND EDUCATION.¹

WHILE the Roman empire continued, it may be said that Latin was the common tongue of the whole Western church. But after the empire fell, the modern languages of Europe gradually formed themselves and displaced the Latin in popular use, until it remained only the language of courts and scholars. But Rome, in her fear of change and blind fondness for prescriptive things, persisted in retaining all her creeds, hymns and liturgies in the old tongue, as well as the only version of the Scriptures accessible to Europeans. From Gregory the Great, near the end of the sixth century, a continued warfare was waged, until Gregory VII., in the eleventh century, finally triumphed by driving all the vernacular languages from religious worship, and imposing the formularies, with the dead language of Rome, on the whole church. The Scriptures could only be read, even by the clergy, from the Latin Vulgate. Even to this day, the prayers in which the priest leads the aspirations, or presents the wants of his people to God are in words unknown to them. No hymn echoes through "fretted vault or long-drawn aisle," which does not hide its praise in a tongue barbarian to those who join it.

The constant policy of Rome has also been to exalt this liturgy at the expense of the preaching of the gospel in vernacular languages. The mass is long and pompous; the sermons few, brief and trivial. The very structure of her churches betrays her contempt for this potent means of enlightening and arousing the popular mind, for they are not auditories in which to hear the words of instruction, but ghostly theatres for the display of superstitious pantomime. The altar and the chancel, the stage of the sacred mummeries, are the centre of all eyes, and not the pulpit, the pillar from which shines the lamp of life. Now the formation of a cultivated vernacular tongue is absolutely necessary to national improvement. The reason is obvious: there

¹ Appeared in the *Critic* for September–November, 1856.

cannot be diffusion of thought, unless there is a language refined enough to be its medium, and the bulk of a people can never know two languages, one living and common, the other dead and learned, so well as practically to use them both. The consequence is, that when the literature of a people is in a dead tongue, knowledge is not the inheritance of the masses, but the distinction of the few; the native language of the people is left in its rudeness, and they remain as uncultivated as their speech. Hence, those who have first taught their countrymen to employ the native language of their homes and their daily life in literature, a Boccaccio and Petrarch in Italy, a Luther in Germany, a Wickliffe and Chaucer in England, have ever been regarded by thinking men as high in rank among the fathers of civilization.

But what ideas and topics so kindle the activity of the mind, and crave for its teeming productions the fitting dress of a cultivated language as the religious? Among every people, the first sentiments which attune for themselves the voice of eloquence, are the aspirations of the soul towards its God. The oldest regular compositions in the world are the inspired books of the Hebrews. The first poem in Greece was probably the *Theogony* of Hesiod. And there are no sentiments so potent to unloose the stammering tongue of an awakening people, and to form its utterance, as those proceeding from man's relations to his Maker. It is hard to conceive how Rome could have devised a more ingenious and efficient mode to prevent the cultivation of the modern languages, and thereby, of the mind of Christendom, than when she compelled all people to retain their worship and religious lore locked up in a dead language. Let us suppose that she had done for every tribe to which she gave Christianity what the primitive and Protestant missions have done, had seized their barbarous tongues and ennobled them by making them the vehicles of holy truth and sacred worship. Europe would scarcely have known the dark ages, but the glorious day of the sixteenth century might have followed the declining light of the Augustan era without an intervening night. It may be, indeed, that when the popes thus postponed the dawn of civilization, "it was not in their hearts, and they meant not so." When they commanded all people and tongues to speak to their God and to listen to his words only in a dead language, it was

in their hearts to magnify the venerable age and hoary unity of their communion. But the result is one among the numerous instances of that guilty fatality which seems to make Rome, in all her plans and policies, the instinctive and unerring enemy of all human welfare.

She has always been the enemy of a free Bible. What Chinese, Indian, Hindu version of the Scriptures have her missionaries ever given to those on whom they conferred the fatal gift of Romish dogmas? Her priests import cargoes of relics and rosaries, puppets and pictures, missals and vestures, but no Bibles. From that day when the language of her Latin Vulgate became a dead one in Europe to ours, in which we have seen her convulsions of helpless rage and storms of curses against the present glorious diffusion of God's word, Rome has never willingly given to the world a Bible in a vulgar language. She has permitted a few versions, as the French of Lefevre, of Etaples, and the English Douay. But it was only to countertermine the influence of Protestants. Her people are only permitted to possess these partial versions, because else they would persist in reading the Protestant, and even her own are circulated as reluctantly as possible. No layman may read them without a license from his pastor, and no priest except at the will of his superior; and then none must dare to think on them for himself, or have an opinion of their meaning, except as his soul's masters dictate. In all her processes of education, her forms and "*fathers*" are taught in preference to the Bible, and no religious literature is desired except the literature of superstition. The thinking man cannot but see how hostile all this is to mental improvement. The Bible is the great school-teacher of mankind; its truths are of all others the most stimulating and fructifying, and its presentation of them the most successful. They move the secret foundations of man's soul, stirring the mightiest of his hopes and fears, filling the mind with vast and ennobling conceptions of an infinite God, a perfect holiness, an immutable truth, an immortal destiny. The Scriptures present examples of the most forcible reasoning, the grandest eloquence, the most burning animation, the sweetest poetry, the most tender pathos, and instances of most admirable virtue and goodness. In one word, they bring the mind of their reader into contact with God's,

not mediately, as Rome would have it, through the dim, deformed transmission of a murky, human soul, but face to face. What education can equal it? In opposing an open Bible, Rome shows herself the great enemy of popular intelligence. The results of the Reformation illustrate this charge by contrast. Wickliffe, "the morning star of the Reformation," introduced the dawn by his English New Testament. One of Luther's first acts was to give the Scriptures in German to his countrymen; and this great work, with the attendant discussions, gave form to that language as a vehicle for literature, and generated a nation of readers.

But more, while Rome makes religious discussion the privilege of the hierarchy, Protestantism makes it the right and business of every man. Hence, its very nature is an appeal from the ghostly throne beneath which the conscience and reason lay crushed, to the great tribunal of the common understanding. The audience to which it speaks is the whole race. It restores to every man his spiritual liberty, and thereby his responsibility; it urges upon him the great issue between his soul and his God, and in urging, it elevates every man who will hearken to the level of his immortal destiny. Hence, the first work of the reformers was to throw open the Bible, create a popular religious literature, and invite all Europe to the work of examination, and thereby of self-education. To see how much the popular intelligence owes to this, imagine that our venerable English version were blotted out of existence, and along with it, all the noble thought which it has stimulated in Britain and America; and that in its place we had the corrupt, cunning Douay version of a corrupt Latin translation, only here and there in the hands of a priest or layman, whose supersition was known to be so dense as to permit no risk of its illumination.

The Popish prohibition of free enquiry and private judgment in religion is, if possible, still more fatal to the mind. The Council of Trent ordained that no one should presume to understand the Scriptures, except according to the doctrines of Rome and the unanimous consent of her Fathers. Rome enjoins on her children an implicit faith, which believes on authority without evidence. The faith of the Protestant is an intelligent conviction, the result of the free and manly exercise of the faculties

God gave him, guided by divine fear and help. The papist collects the *dicta* of Fathers and Councils, only to wear them as shackles on his understanding. The Protestant brings all *dicta* to the test of reason, and still more, of that *Word*, to which his reason has spontaneously bowed as the supreme and infallible truth. Rome bids us listen to her authority and blindly submit; Protestantism commands: "Prove all things; hold fast to that which is good." Happily, the prohibition of private judgment is as impossible to be obeyed as it is absurd. In the very act of commanding us not to think for ourselves, Rome invokes our thought to comprehend the proofs of her command. In the very breath with which she tells us not to reason, she calls upon reason to understand the justice of the prohibition. In truth, the exercise of private judgment is the exercise of thought; for if the mind is to think at all, it must be its own free thoughts which it produces. If I *see* at all, it must be with my own eyes, and in such shapes and colors as they of themselves reveal to me. To command me to see only with the eyes of another, is to make me blind. And so, the attempt to banish private judgment from religion is an attempt to make man cease to think, or, in other words, to reduce him on that subject below the level of a rational being. If it were successful, man would no longer be a religious being, but a clever brute. And this is, indeed, the very ideal of that result in which Rome would most delight; to make men a docile herd of human beasts, incapable of insubordination, yet apt and skilful above other animals to toil for the pampering of her lordly luxury and pride. Nor is this mental bondage limited to sacred learning; it is also inculcated in secular studies, lest perchance the habit and spirit of free thought formed in the domain of human science should invade that of theology. The confines of every realm of thought are overspread with darkness, lest some side-light should gleam upon the foul delusions of her spiritual tyranny, revealing them to her victims. By how many odious restrictions, censorship, inquisitions and tortures is this despotism over thought sustained! How many prisons, racks and faggots have been employed to crush the freedom of the mind!

To Rome belongs the diabolical preëminence above all pagan priesthoods and political despots, of punishing with the direst

death which the human frame can endure, the crime of being too wise and truthful to believe all her absurdities. The Index of Prohibited Books, a stout volume composed of the mere titles of the works she has proscribed, gives curious evidence of her instinctive hatred of all human intelligence; for we find there, not only all the great works of her assailants, as we would expect, but of nearly all the great masters who have extended the domains of knowledge. Whether they wrote of Philosophy, Geography, History, Poetry, Rome could not forgive them the attempt to ennoble the minds which it was her purpose to enslave. When we read in the Index such names as these, which a few minutes' search has collected: Bacon, Cudworth, Descartes, Hume, Kant, Villers, Malebranche, Leibnitz, Locke, Bentham, Grotius, Bayle, Basnage, Burnet, Hallam, Mosheim, Brucker, Robertson, Selden, Sismondi and Milton, does it not seem as though Rome had designedly proclaimed herself the patroness of ignorance, by arraying against herself all that is most glorious in human intellect? To repress the free activity of the mind in religion is the most effectual mode to curb all expansive thought in every department. The truths of religion are the most pervasive and stimulating of all others. Christianity sits as queen and directress of all man's exertions, controlling every duty, modifying every relation, influencing every interest of humanity, ennobling and fructifying every speculation. The conscience is the central power of the soul, so that he who is fettered there is a slave in his whole being. When the conscience is chained, there can be no free development of the faculties by bold and manly exercise. The Reformation, says Guizot, was, in its mental character, but the insurrection of the human mind against the mental impression of Rome, which had weighed so heavily on the irrepressible activity of thought as to provoke a resistless reaction. How beneficent the impulse which every science and every institution received from that great movement. Roman Catholicism itself was aroused by the collision into a reaction, to which is due nearly all the subsequent activity which has rescued it from stagnating into barbarism. The attempt may be made to refute these conclusions, by pointing to the many illustrious men who, living and dying in the Romish communion, have helped to adorn every department of knowledge, human and di-

vine; or, by boasting of a few great *entrepôts* of science in the old foundations of Popish Europe. "Was it not a son of the Holy Mother Church," it may be asked, "who first taught us the true theory of the stars? Was it not a Papist who gave to Europe a new world? Were they not Papists who exhumed the Greek and Latin classics out of the dust of the middle ages, and who have since produced the best editions of all the works of Christian antiquity? Did not Papists invent gunpowder, the art of printing, the mariner's compass, the galvanic machine? Yea, were not the very Reformers themselves, in whose pretended light and learning Protestants so much glory, reared in the bosom of Popery? And did they not acquire in her schools the knowledge which they ungratefully turned against her? How, then, can that system be justly charged as the mother of ignorance, from beneath whose patronage have proceeded the most glorious elements of human progress?" This is our reply: "True, the human mind, thanks to its benevolent Creator, has a native activity which despotism cannot crush, however it may curb it. It may be that Rome has been so far aware of this as not to attempt an impossibility—except once, when her judicial blindness provoked the triumphant insurrection of the Reformation. It may be that she has permitted or encouraged certain forms of mental activity, even to a high degree of cultivation, as a safe outlet for the indomitable elasticity of man's spirit, selecting those forms which were least important to his true welfare, in order that she might be able to suppress the most precious and fruitful exertions of the mind with sterner force. But these instances of mental activity in her subjects have not been because of, but in spite of her influences. But for the baleful paralysis of that system, they would have been a hundred fold more; and Papists have usually made their happy exertions just in proportion to the weakness of the hold which Romanism had upon their real spirit and modes of thought.

It is true, again, that the innate energies of some great souls among Papists have prompted them to attempt and accomplish mental exploits of high emprise, but Rome has usually resisted their exertions, and punished their success. *Roger Bacon*, the inventor of gunpowder, *was* a Papist; but the reward which his church apportioned him for his chemical knowledge and spirit

of free enquiry was a long imprisonment in a monastery on the charge of magic. *Reuchlin*, another son of Rome, introduced to Europe the long lost treasures of the Hebrew literature. This is true; and his church so appreciated his labors as to prompt the German Emperor to order the burning of all the Hebrew books in the realm, and the great scholar's pupils were nearly all found in the next generation among the Protestant Reformers. *Erasmus* also was a nominal Papist, who published the first critical edition of the Greek New Testament. But his work provoked a general howl of contumely and curses from the priests and monks of all Europe, some of whom charged him with committing thereby the sin against the Holy Ghost. Columbus did indeed "give to Castile and Leon a new world," but his theory of geography was the mock of all the popish clergy and doctors of Ferdinand's court, so that it was impossible for him to secure patronage for his enterprise, till the womanly piety of Isabella was moved in his behalf. *Galileo* also was a son of Rome, that great man, who revolutionized astronomy and mechanics, who first made the telescope reveal the secrets of the skies, and thus prepared the way for that wondrous science which, among its other beneficial results, has taught the mariner to mark his beaten track across the pathless ocean, thus making possible the gigantic commerce of our century. How did Rome reward him? She made him languish in her Inquisition, till he was bowed to the shame of denying the truth, of which the demonstration was his glory.

And this Index of Prohibited Books is found crowded with the names, not only of heretics, but with a part of the works of nearly all Rome's own sons, whose genius or learning has illuminated her history; a proof that their improvements were the offspring of fruitful nature, borne in despite of the novercal envy of Holy Mother Church. Upon the fact that so many of the benefactors of human knowledge, including even the Reformers, were reared under Rome, it may be said, so have the greatest liberators been ever reared under despots. Harmodius and Aristogeiton under Pisistratus, Brutus under Tarquin, the Maccabees under Antiochus, Tell under Rudolph of Hapsburg, Hampden, Pym and Cromwell under the Stuarts, and our own Washington under George III. With as much reason might we

argue hence, that despotism is the proper soil to nourish liberty, as infer from the instances of freedom of thought under Rome that they were her proper gift to the human mind. And finally, it is not a handful of particular cases which proves a general law: "One swallow does not make a summer." When we inquire for the general influence of a system, we consider not the few exceptions which exist under it, but the condition of the masses.

We trust this discussion has educed principles which, among other valuable applications, will enable us to value at their proper worth the merits of Roman Catholic education and scholarship. Ever since the Reformation urged the human mind forward on its great career of improvement, Rome has perceived that Christendom will no longer endure the shackles of ignorance, in which that tyrant church would be best pleased to bind the mind, and that men will no longer permit the boon of knowledge to be plucked openly away. Hence she has adopted the policy of *countermining* the intelligence which she fears, by becoming the patroness of a pseudo-education. And she has committed the management of this policy especially to the order of Jesus, the most slavish and most thoroughly popish of all papal societies. Hence the eager activity of this order in the establishment of colleges, especially to catch the children of Protestants; hence the boasts of superior scholarship, which have deceived many unthinking and ill-informed men. The treachery of all their pretended zeal for letters is betrayed by this question even; why does it exhaust its efforts on providing for the education of *our* sons, and the sons of other similar Protestant states, who least need their help, while the benighted masses of Ireland, Spain, Italy, the Danube are left unenlightened? Why expend their exclusive exertions to educate heretics, while so many of the sons of their own church sit in Bœotian night? We *suspect* this over-generous zeal; we fear lest this education which they offer be the gift of another Trojan horse.

Our good, unsuspecting Protestants have especially been gulled by pretensions of peculiar classical and linguistic accomplishments. It is claimed that their Latinity, for instance, is to the best attainments of Protestant schools as Hyperion to a

Satyr. "Their pupils do not merely stumble through a slow translation of a Latin sentence: they can talk Latin. So thorough is their learning that the higher classes actually receive lectures in philosophy in that learned tongue." But look beneath the surface. That fluency is but the recitation of a parrot, accompanied with no thorough apprehension of grammatical principles, and leading to no awakening of thought. These Latin lectures on philosophy are but the slow mechanical dictation of some miserable syllabus of the contracted antiquated bare-bones of scholastic pedantry. It does not suit the purpose of Rome or Jesuits to do that which is the true work of mental training, to teach the mind to think for itself. That habit, so deadly to the base pretensions of the hoary deceiver, once learned in the walks of secular literature, would be too probably carried into the domains of theology. Hence, the Jesuits' policy is, to form in secular learning the desired mental temper of servile docility, inordinate respect for authority and impotence of independent thought, so that even mechanics, optics, chemistry, must be taught by the memorizing of *dicta*, not by the exercising of the understanding in their investigations. Then, if to this servile temper there can be added any accomplishments, by which the bondage of the mind can be concealed and a false *éclat* thrown upon the church, they think it is very well. The policy of Rome in her education is that of the lordly Roman slave-owner towards his bondsmen. To promote the amusement, the interest, or the pomp of their lords, slaves were trained to be masterly musicians, scribes, rhetoricians, and even poets and philosophers; but still they must exert their attainments only for their masters. And so would Rome lay hold on our children, the sons of freemen, of free America, and make them only accomplished slaves. But above all, does their system sap the very foundations of virtue and nobleness. It substitutes an indolent and weak dependence on authority for honest conviction, and policy for rectitude. It poisons the health of the moral being. He who is spiritually enslaved is wholly a slave, every noble faculty is benumbed by the incubus of spiritual tyranny, and the soul lies prone in degradation.

SIMPLICITY OF PULPIT STYLE.¹

PERMIT me, dear brethren, to offer you my hearty congratulations upon this re-union of our Society, and the enjoyment of another year of mercies and of happy labors. A member of any of the successive classes which have issued hence, in an assemblage gathered from all those classes, meets some to whom he is a stranger in person, though a child of the same *Alma Mater*. But there is no distance between our aims and our hearts. While we meet our own fellow-students with peculiar delight, we meet all as fellow-laborers. I need not suggest how much the enjoyment of each of us would be enhanced, could we gather around us all who studied and prayed with us here; for, doubtless, the busy thought of each one has already surrounded him with the familiar band. Probably such a meeting would be as impossible for all of us as it would be for me. Some of those whom I here learned to love I can see at no anniversary, till we meet in the general assembly and church of the first-born in Jerusalem, the mother of us all. What stronger evidence of the noble and holy influence of these annual gatherings than that fact, of which, I doubt not, every heart has already been conscious, that they do not fail to carry our thoughts upward to that glorious re-union? Let it be our aim to make this momentary resting point in our warfare as like as possible to that eternal rest.

But we are reminded that we have not yet entered into that rest. To-morrow we return again to the struggle. And, therefore, the appropriate mode of observing this season will be to make it such as God has made those Sabbaths which are his type of the eternal rest, a season for sharpening our weapons and girding our loins afresh for the contest.

I have thought anxiously in what way I could best contribute

¹ An address to the Society of Alumni of Union Theological Seminary, Virginia. Delivered at the Annual Meeting, June, 1853.

to this purpose. And it has seemed that, perhaps, as appropriate a topic as any whose discussion the times demand, would be SIMPLICITY AND DIRECTNESS OF PULPIT STYLE.

Many share with me the conviction that the renewed discussion of this topic is needful. Unless I am greatly deceived, a comparison of much that is now heard from educated clergymen with the pure standards of classic English will prove that the vice is far gone. Our ears have become viciously accustomed to a degree of wordiness, complexity, and ornament, which would have been called bombast by Addison, Swift, or Pope. Even Dr. Samuel Johnson, the proverb of his day for his love of the *os rotundum*, seems simple and natural beside us. But let us compare ourselves with the great ancient masters of style, as to the length and structure of sentences, the employment of useless epithet, and the mode of using figurative ornament. Let us compare ourselves, for example, with Horace, as distinguished for the sparkling beauty of his language as for the hatefulness of his morals, and we shall comprehend something of the excess of our fault.

The profusion of reading matter among us, and the careless speed with which men write and read, must naturally tend to the same vice. Perhaps, after all the rules for style that may be laid down, the real source of transparency and beauty is the possession of the sterling ore of thought and feeling. He who has the most numerous, just, and weighty ideas, in most natural order, and whose own soul is most fully possessed and penetrated with them, usually has the finest style. It is only when the sentiment so fills and fires the soul of the speaker that he looks wholly at the thought, and not at all at the words in which it clothes itself, that the perfection of eloquence is approached. Hence, as the art of writing much with small materials is extended, wordiness and complexity must increase. The hurried and shallow author continually strives to outdo his rivals and his own previous exploits, by tricking out his productions more and more with these ornaments which are so much cheaper than great or sparkling thoughts.

History shows also, that an artificial and luxurious mode of living surely affects the literary taste of a nation. The simplicity of thought is banished. The manliness of soul which pro-

ceeds from labor, struggles with difficulty and intercourse with nature, becomes rare. The mawkish mind of such a people demands the same tawdry profusion and frippery in literature which it loves in its bodily enjoyments. We know how the manly eloquence of republican Rome faded away, as the people were corrupted by luxury, into the feeble bombast of the Byzantine literature. If the rapid increase of luxury can give any ground for expecting a similar result now, that ground surely exists among us.

Hence, the impression has grown strong with me, that we need to be recalled to what would seem, to our exaggerated taste, a severe simplicity. When one so young as myself, and so little entitled by his own skill to teach on this subject, offers his humble contribution towards this reform, he should do it with great modesty. And you will please receive what I shall offer, not as dogmatical, but suggestive. I do not dictate anything to you, but only offer, as subjects of your more thorough and wise reflection, those ideas by which I have attempted the repression of my own faults.

Permit me also to say, at the outset, that when I advocate a severe simplicity, I am waging no war against rhetoric. I am not presuming to impugn that argument, by which I know I should be met, that since it is our duty to do our utmost for the salvation of souls, that Christian minister is faulty who does not avail himself of every innocent aid or ornament by which the truth can be commended. I only question whether anything which violates a natural simplicity and directness of speech is ornament, and has any efficacy in commending truth. Let rhetoric be truly defined as "the art of persuasion," the art of so addressing the human understanding, conscience and affections, as best to enforce our views, and I heartily shake hands with it. I will say, let us have as much true rhetoric as possible. My objection to all meretricious aid is, that it is not ornament, but deformity.

Indeed, throughout this discussion, it is on the principles of a sound rhetoric itself that I would ground all the considerations to enforce simplicity. The truest art is that which is most natural. The finest statue is that on which the strokes of the chisel are unseen, and the marble is most like native flesh.

The finest painting is that in which the beholder is not for a moment reminded of the cunning union of lights and shades, but seems to see the living and breathing man, standing forth from the canvas. And so, considering our profession of public speaking as an art merely, he is most perfect in the art in whom the hearer perceives no art, but seems to hear nature pouring forth her voice in her own spontaneous simplicity. I have seen somewhere an incident which well illustrates this proposition. A simple countryman was taken by his friends in London to see Garrick act in Hamlet. He seemed to be intensely interested in the performance. But at his return, when his friends examined the effect of the scene upon his mind, they were astonished to find him perfectly silent concerning the great tragedian. He seemed to have made no impression on him, while he was loud in his praise of all the subordinate actors. When they asked directly, what he thought of Hamlet, they learned the explanation. "Oh!" he answered, "as to the man whose father had been so basely murdered, it was nothing strange that he should feel and act as he did. No son could help it. But as to those other people, who were only making believe, their imitations were wonderful." So true to nature, and so unaffected had been Garrick's manner, that the countryman had utterly overlooked the fact that Garrick was acting! But this was he whom the cultivated taste of Britain decided to be the prince of theatrical eloquence. One of the most just objections, therefore, which can be urged against artificial ornament is, that it is a sin against art. Much that is now heard from the pulpit with admiration would be as explicitly condemned by rhetoric, by Hamlet's instructions to the players, or by Horace's Epistle to the Pisos, as by Christian feeling and principle.

But let us introduce the more direct discussion by reminding you of the topics and aims of our public addresses. Our subject is the most august that can fill and fire the human soul—the perfect holiness of the divine law, redemption from eternal ruin, and the winning of eternal happiness. Our aim is to persuade men to embrace this redemption for the salvation of their souls. It is an established rule that the grandest subjects should be treated with most sparing ornament. The greatness of the topic commends itself sufficiently without such aids. Labored

attempts to give it adventitious force seem to be a confession that the subject does not itself possess weight enough to command the heart. Ornaments which might be graceful and appropriate when connected with a lighter topic, would seem meretricious, when applied to a grand one. We do not surround the majestic temple with the same tracery which would be in place upon the graceful pavilion.

Again, we observe that man's nature is such that all powerful operations of the soul are simple and one. Complexity of the affections enfeebles all. Multiplicity of figure distracts the attention, and by distracting, weakens. It is the single, mighty, rushing wind, which raises the billows of the great deep, while a variety of cross-breezes only roughen its surface with trifling ripples. A moment's thought will show us that a multiplication of ornaments or epithets must disappoint its own object. The minds of men cannot attend effectually to a large number of impressions in rapid succession. Although thought is rapid, yet a certain lapse of time is necessary to allow the mind to receive and become possessed with the idea presented to it. Hence, he who listens to the verbose speaker, is compelled to allow many of the words which fall upon his ear to pass through his mind without impression. The mind of the listener cannot fully weigh and feel each phrase addressed to it in so rapid and complex a stream, and, consequently, it suffers them all to pass through it lightly. It cannot do otherwise, though there was, at the outset, a sincere effort of attention. Every writer or speaker, therefore, who indulges himself in heaping up useless epithets, or in the multiplication of adjectives not distinct and strongly descriptive, or in any other luxuriance of language, should remember that he is himself compelling his reader or hearer to practice the habit of listless attention. And then there is an end of all vigorous impression. The speaker can no longer hope to infuse a strong sentiment into the soul of his audience. Hence the maxim so strongly enforced by Campbell, that "the fewer the words are, provided neither perspicuity nor propriety be violated, the expression is always the more vivid." To admit into our discourse any word, phrase, or figure, which has not its essential use as a vehicle of our idea, is a sacrifice of effect. The effort which the mind of the hearer is called to make

towards these unessential phrases, in the acts of sensation and perception, is just so much taken from the force with which it receives the main idea. The highest species of eloquence is that which is suggestive, where clear and vigorous phrases not only convey to the hearer's mind distinct ideas, but point it to tracts of light which lead it along to higher conceptions of its own. But such phrases must be brief. Our language should, therefore, be pruned, till every word is an essential part of the clearly defined idea, which the sentence holds up, like a strong picture, to the mind of the hearer. If we wish to strike a blow which shall be felt, we will not take up a bough laden with foliage. We will use a naked club.

I suspect that the correctness of these views is confessed, even by the consciousness of persons of the most perverted taste. However they may laud their literary idol, they cannot conceal it from themselves, that their listlessness grows more and more dreary under the most brilliant sparklings of his rhetorical fireworks; that the more his sparks are multiplied, the more feebly they strike. There is, indeed, a large class of listeners, whose minds are so utterly shallow, and who are so thoroughly unconscious of the real nature and aims of eloquence, that they are pleased with the mere lingual and grammatical dexterity with which surprising strings of fine words are rolled forth. Their idea of fine speaking seems to be that it is a sort of vocal legerdemain, like that of the juggler, who can twirl a plate on the end of a rattan as no one else can, an art in which the perfection of skill consists in connecting the largest quantity of a certain style of words with the greatest fluency, so that they shall have the semblance of meaning and melody. With minds so childish, of course, he who can carry this verbiage to the greatest length will be the greatest orator. But none here, surely, are capable of so base an ambition as to desire this low and ignorant applause.

There are still stronger considerations, drawn from the nature of the preacher's subject, and of his purpose, in addressing his fellow men. All must admit that appropriateness is the very first element of good taste in every art. It is needless to argue this. Now, if we consider what the preacher of the gospel professes to be, and what is the topic on which he addresses his

fellow men, we shall feel how utterly inappropriate every artificial ornament is. Every minister professes to be actuated by the love of souls, and by a strong sense of their danger without the gospel. He professes to be a man who is speaking, not to amuse, nor to gain money, nor to display his talent, but to do good. Even if he is so lost to the feelings proper to his high office as to harbor these ignoble motives, as a mere matter of taste he must conceal them; for their display in connection with a subject so awful cannot but be loathsome to all hearers. His motive, then, must be benevolent sympathy and love to the Saviour. And his subject combines all that should awe the mind into sincerity, all that should unseal the fountains of tenderness and all that should fire the soul with warm and ennobling emotions. His themes are the attributes of an infinite and jealous God and his perfect law; that fatal lapse which "brought death into the world and all our woe;" the immortal soul, with its destiny of endless bliss or pain; the tomb, the resurrection trump, the righteous Judge, the glories of heaven and the gloom of hell, the gospel's cheering sound, the tears of Gethsemane, the blood of Calvary, and the sweet and awful breathings of the Holy Ghost. His mission is to lay hold of his fellow men, as they hang over the pit, and draw them from perdition by the love of the Redeemer. How unspeakably inappropriate is every artifice here which glances at self-laudation! And how utterly unnatural is all complexity of figure! If ever man should earnestly feel, he who presents these themes, from the motives which the preacher professes, should be instinct with earnestness. But who is there that does not know that the eloquence of native emotion is always simple? When the wail of the bereaved mother rises from the bedside of her dying child, ah! there is no art there! We have heard it, my brethren, and we know that our art cannot equal the power of its simplicity. When the story of his wrongs bursts from the heart of the indignant patriot, and he consecrates himself upon the altar of his country, it is in simple words. When the almost despairing soul raises to the Saviour the cry, "God, be merciful to me, a sinner," he speaks unaffectedly. So should the preacher speak. Let me urge it, then, with all the emphasis which language can convey, that the very first dictates of good taste and propriety, for him who

speaks of the gospel, are unaffectedness and directness of style. To turn away the mind's eye for one moment from these overpowering realities, towards the mere accessories of rhetoric, is the most heinous sin against rhetoric. It is as though the man who desired to rouse his sleeping neighbor from a burning house should bethink himself of the melody of his tones, while he cries fire. It is as though the champion, fighting for his hearth-stone and his household, should waste his thoughts on the grace of his attitudes and the beauty of his limbs.

Do I advocate, then, a directness and simplicity so bald as to exclude every figure? By no means. A certain class of figures is the very language of nature. Such we should use in their proper place. They are those figures which, every one sees, are used to set forth the subject and not the speaker. They are those figures which the mind spontaneously seizes when enlarged and strengthened by the earnestness of its emotions, and welds, by the heat of its action, into the very substance of its topic. Such ornaments are distinguished at a glance from the epithets, tropes and similes which the artificial mind gathers up, with an eye turned all the time upon the meed of praise it is to receive. Within the strict bounds of this directness and simplicity there is ample scope for the exercise of genius and imagination. Indeed, it is when a vigorous logic, and a truly original imagination, are stimulated by the most intense heat of emotion, that the most absolute simplicity of language, and, at the same time, the grandest heights of eloquence, are reached.

There is no stronger conviction with me than that the preacher should never attempt to rescue his discourse from baldness or tameness by those supposed rhetorical ornaments which are collected with deliberate design. The moment an ornament is felt to be introduced "with malice prepense," it becomes a deformity. It is always a futile and degrading resort. There is a rule of architecture propounded for some styles by the greatest masters which speakers might profitably adopt. It is, that while every essential member of the structure shall be so proportioned as to be an ornament, no ornament shall be admitted which is not also an element of construction; no column which has nothing to support; no bracket which has nothing to strengthen. Next to the possession of native genius, the proper

sources of literary ornament are in the warmth of an honest, earnest emotion, coöperating with a clear and logical comprehension of the thing discussed. Unless our ornaments come spontaneously from this, their proper mint, they will inevitably be counterfeit. When, therefore, the preacher, after he has done all in the preparation of his subject which clear definition, just arrangement, and sound logic can effect, feels that his work is still too tame to take hold on the people, it is worse than useless for him to seek, in cold blood, for ornament. He should seek feeling. He needs to sacrifice, not at the shrine of Calliope, but at the altar of the Holy Ghost.

Let us remember that all men have a native perception of consistency and appropriateness. And all men instinctively judge whether the tones, countenance and language of the person speaking to them are spontaneous or artificial. The cultivated do not surpass the ignorant and the young in the strength of these perceptions, for they are the direct result of intuitive capacities, which are often perverted by the habits of a faulty cultivation. Not even does dramatic eloquence offer any exception to the statement that all artificial speaking is inevitably felt by all hearers to be artificial, and therefore naught. For I am sure that there never has been, and never will be a good actor, whether on the stage, at the bar, or in the forum, who did not become eloquent by so palpably conceiving the emotions proper to the part he was acting as to merge his personality for the time in the part, and to become sincerely inspired with its feelings. Let us, then, remember that the prompt and spontaneous perception of every hearer decides absolutely whether our manner seems to him artificial or hearty; and if it decides us to be artificial, it has forthwith, with equal certainty, the feeling of our inconsistency. But what is worse than this, the chief motive which the world will naturally impute to us for this insincerity of manner is the desire of self-display. We may plead that if there is an error of manner, it has arisen from a well-meaning mistake in our disinterested effort to impress the truth. The world will not be so charitable as to credit us. It will say that the natural language of disinterestedness is simplicity, and that the natural language of self-display is artifice; and it will persist in imputing the latter as our motive.

It is very important to observe here also, that if, from our perverted training, an artificial manner has become second nature to us, this will not prevent the mischief. To the instinctive perceptions of the hearer it still seems artificial, and he naturally concludes it is purposely such. It is not sufficient, therefore, for the speaker to say that it is "his manner,"—that to him it is not artificial; that in speaking thus he is giving free course to his dispositions. He should inquire how it became his manner, whether through the promptings of an ingenuous, humble, and self-devoting love for souls, or through the itchings of conceit, literary vanity, and servile imitation, in the days of his inexperience.

But where the native perceptions of the hearers receive from our manner this impression of artifice, what reason is so dull as not to draw the inference that the preacher, if he really believed what he proclaimed of the sinner's risk, and if he really felt that generous compassion which is his ostensible motive, could have neither time nor heart to bestow one thought on self-display? When men listen to one who preaches of their dread ruin and its sacred remedy with deliberate and intentional artifice, they are driven to one of two alternatives. They must conclude, "either this man does not believe his own words, when he tells me of my hanging over eternal fires, and of heaven stooping to my rescue; or, if he does believe them, he must have almost the heart of a fiend to be capable of vanity and selfish artifice in the presence of truths so sacred and dire." And, indeed, my brethren, what must be the callous selfishness of that man who, believing in the reality of the gospel themes, can desecrate them to the tricking forth of his own rhetorical fame!

Grecian story tells us that when the painter Parrhasius was engaged upon a great picture, representing Prometheus as he lay chained to the crags of Mount Caucasus, and eternally consumed by a ravenous vulture, he bought an old man from among the Olynthian captives, sold by Philip of Macedon, and tortured him to death beside his easel, in order that he might transfer to his canvas the traits of the last struggles in their native reality. Does not the heart grow sick at the devilish ambition of this pagan, as he steels his soul against the cry of agony, and coolly wrings out the life of a helpless and harmless fellow man to win

fame for himself, by throwing into his master-piece the lineaments of a living death?

But, is this instance strong enough to express the cruel and impious vanity of that man who can deliberately traffic in the terrors of eternity, and the glories of God, merely to deck his own oratory? He brings the everlasting woes of his brother man, and gathers the gloom and the groans of their perdition, and coolly dips his pencil in the blackness of their despair, to make of them materials for self-display! Nay, he even dares to lay his hand upon the awful glories of the cross, and those sacred pangs of Calvary, at which redeemed sinners should only shudder and weep, and weaves them into a garland for his own vanity. Now, the impenitent man can hardly believe that the minister who shows in all his social life the sympathies and virtues of an amiable character is thus savagely and profanely selfish. And, therefore, the alternative which he must embrace is, to believe, or, if he does not consciously believe, to do what is practically more ruinous, to feel half consciously, that the minister is not in earnest; that his preaching is not really prompted by a settled belief of the sinner's ruin and the Redeemer's love, but by the desire to further his own reputation and earn his own bread. For, is not this parade of self-display just in character with such a purpose? And when the lover of sin and godlessness thus feels that the appointed ambassador of eternity does not himself believe, of course he will allow himself to doubt. Let this, then, be the great and final objection to all artifice of manner in the pulpit, that it most surely sows broadcast the seeds of skepticism.

And, in truth, dear brethren, does not our proneness to such manner, does not the fact that we can be capable of it, proceed from the weakness of our faith? The true cure of the vice is to feel the powers of the world to come. The reason that Davies, Tennent and Whitefield, Paul and Peter, and above all, He that spoke as never man spake, displayed such directness and power, was that their souls saw heaven and hell with the vision of faith. The more we can feel the love of Christ, and the nearer we can draw to the cross, the judgment, and the eternal world, the more we shall feel that all else than native simplicity and directness is out of place, and that all else is unnecessary.

GEOLOGY AND THE BIBLE.¹

THE subject to which we invoke our readers' attention has been much debated. But our purpose is not to weary them with a repetition of those discussions concerning a pre-Adamite earth, the length of the creative days, or the best way to reconcile geology with Moses, which have often been conducted within a few years past, with deficient knowledge and temper in some cases, and often with slight utility. In the progress of natural science, relations between it and theology become apparent from time to time, and frequently in very unexpected ways. Both parties are usually at fault in defining those relations in the beginning; and thus there occurs a season of somewhat confused contest, arising from the oversight of the proper "metes and bounds" of the two sciences. As the discussion proceeds, the facts are at length set forth, which enable all reasonable men to adjust the relations satisfactorily, and to appropriate to each its legitimate field of authority. All will agree that it is time such an adjustment were, if possible, begun between the geologist and the divine. Our humble attempt will be to make such a beginning. We have no geologic theory to advance or to impugn, and no particular facts to advance, either new or old. But, looking back over the general course of the discussion on the structure of our globe, only as those may profess to do who keep up with general literature, without assuming to be professional geologists, we would endeavor to fix some principles of discussion by which the application of natural science and its inferences may be defined and limited to their proper territory, and the claims of theology established along the points of contact. It would, perhaps, have been better for the divines if they had confined their efforts to these defensive views, instead of entering, without being always adequately prepared, into the technical discussions of geology.

¹ Appeared in the *Southern Presbyterian Review*, for July, 1861.

1. But, while making this admission at the outset, we would firmly protest against the arrogant and offensive spirit in which geologists have often, we may almost say usually, met clerical criticisms of their reasonings. To the objections advanced by theologians, the answer has usually been a contemptuous assertion that they were incompetent to sit in judgment, or to object, when geology was in question, because they were not professional masters of the science. Their reasonings have been pronounced foolish, ignorant, mistaken, and slightly dismissed or rejected without fair examination, because they came from "parsons." Now, we freely grant that it is a very naughty thing for a parson, *or a geologist*, to profess to know what he does not know, as well as a very foolish; that some of the "*genus irritabile vatum*" have doubtless been betrayed into this folly by their zeal against infidel science, as they supposed it, and that geologists have not been at all behind them—as some instances will show before we have done—in the mortifying displays of ignorance and sophistry they have made, in their attempts to use the weapons of the theologian and expositor. But, we would remark, while the specialties on which inductions are founded, in any particular branch of natural science, are, of course, better known to the professor of the specialty, the man of general intelligence may judge the deductions made from the general facts just as well as the other. Any inductive logic is the same in principle with all other inductive logic, and all deductive logic also is similar. Yea, conclusions from facts may sometimes be drawn more correctly by the man of general science than by the plodding collector of them; because the former applies to them the appropriate logic with a more correct and expansive view, and, perhaps, with less of the prejudice of hypothesis. The man who defined the inductive logic was not a naturalist by special profession—was not practically skilled in any one department of natural history—but was a great philosopher and logician.

If, then, after geologists have described and generalized their facts, and have explained their conclusions therefrom, a class so well educated as the clergy must be pronounced unfitted to form an opinion upon them, the fault must be in the geologist or his science. If demonstration is there, it ought surely to be visible

to the intelligent eye. How absurd is it for the advocates of the science to recalcitrate against the opinions of an educated class of *men*, when they virtually offer their systems to the comprehension of *boys*, by making them a subject of collegiate instruction, and one who has, perhaps, more scornfully than any other, derided the criticisms of clerical opponents to popular assemblages of clerks and mechanics! Surely, if Mr. Hugh Miller thought that he could convince a crowd of London mechanics intelligently, in one night's lecture, of his theory of the seven geologic ages, it is absurd to claim that the science is too recondite for the unholy inspection of a parson's eyes.

There must always be a peculiar reason for the meddling of theologians in this subject. It is, that it is virtually a theory of cosmogony; and cosmogony is intimately connected with the doctrine of creation, which is one of the modes by which God reveals himself to man, and one of the prime articles of every theology. The inevitable connection of the two might be inferred from this fact, that all the cosmogonies of the ancients were natural theologies; there is no philosopher of whom we know anything, among the Greeks and Romans, who has treated the one without treating the other. It must, therefore, be always expected that theologians will claim an interest in geologic speculations, and will require them to be conformed to sound principles of logic and exposition.

2. On the other hand, the attitude and temper of many of the eager defenders of inspiration towards the new science have been most unwise. By many, a jealousy and uneasiness have been displayed which were really derogatory to the dignity of our cause. The Bible is so firmly established upon its impregnable evidences, it has passed safely through so many assaults, has witnessed the saucy advance of so many pretended demonstrations of its errors, which were afterwards covered with ridicule by the learned, that its friends can well afford to be calm, patient, and dignified. They should be neither too eager to repel and denounce, nor too ready to recede from established expositions of the text at the supposed demand of scientific discoveries. They should assume the calm assurance, which regards all true science, and every genuine discovery, as destined inevitably to become the handmaids, instead of the assailants,

of revelation. Especially to be deprecated is that shallow and fickle policy, which has been so often seen among the professed defenders of the Bible, in hastily adopting some newly-coined exposition of its word, made to suit some supposed exigency of a new scientific discovery, and as hastily abandoning it for some still newer meaning. They have not even waited to ascertain whether the supposed necessity for relinquishing the old exposition has been really created by a well-established discovery; but, as prurient and shallow in science as in theology, they have adopted on half-evidence some new-fangled hypothesis of scientific facts, and then invented, on grounds equally insecure, some new-fangled explanations to twist God's word into seeming agreement with the hypothesis. It would be well for us to ascertain whether our position is really stormed before we retreat to search for another. But, several times within a generation, the world has seen a certain class of theologians saying that the old popular understanding of the Bible upon a given subject must be relinquished; that science had proved it untenable, but that they had at last found the true and undoubted one. And this they proceeded to sustain with marvellous ingenuity and zeal. But, after a few years, the natural philosophers relinquish, of their own accord, the hypothesis which had put these expositors to so much trouble, and introduce with great confidence a different one. And now, the divines tell us, they were mistaken a second time as to what the Bible intended to teach about it; but they are certain they have it right at last. So a third exposition is advanced. It has been this shortsighted folly, more than any real collision between the Bible and science, which has caused thinking men to doubt the authority of inspiration, and to despise its professed expounders. If they are to be believed, then the word of God is but a sort of clay which may be moulded into any shape required by the purposes of priestcraft. Clergymen ought to know enough of the history of human knowledge to be aware that true science advances slowly and cautiously; that great and revolutionizing discoveries in physical laws are not established every day; that a multitude of hypotheses have been mistaken, before our times, for demonstrations, and afterwards relinquished; and that even true inductions are always, to a certain extent, tentative, and

require to be partially corrected after the science has been pushed to farther advances, from which fuller light is reflected back upon them. It will be time enough, therefore, for us, as professional expositors of the Mosaic history, to settle and proclaim a plan for expounding it in harmony with geology when geology has settled itself. Our wisdom would be to commit the credit and authority of God's Word to no theory except such as is absolutely established by the laws of sound exegesis; and when we have thus taken a well-considered position, to maintain it firmly against all mere appearances.

3. It should, in the third place, be clearly decided what is the degree of authority which we are to claim for the Bible upon those questions of physics which lie along the path of its topics. Many claim for geology a license here, which comes very near to the deceitful distinction of the schoolmen, between the philosophical and theological truth. When their daring speculations clearly contravened the teachings of Scripture, they said that these opinions were true in philosophy, though false in theology. In a somewhat similar spirit it is now pleaded for geology, that it has its domain in a different field of investigation and evidence from that of the Bible. Each kind of evidence is valid in its own sphere, it is said; and, therefore, the teachings of each science are to be held true, independently of each other. But all truths are harmonious *inter se*. If one proposition contradicts another, no matter from what field of human knowledge it may be brought, manifestly, both cannot be true. If, then, the Bible, properly understood, affirms what geology denies, the difference is irreconcilable; it cannot be evaded by any easy expedient like that described above; it can only be composed by the overthrow of the authority of one or the other of the parties.

To determine how the Bible should be understood in its allusions to physical facts, we must bear in mind the object of God in giving it. His purpose was not to teach us philosophical knowledge, but theological. Nothing seems plainer than that God acts on the scheme of leaving men to find out, by their own researches, all those facts and laws of nature, the knowledge of which may minister to curiosity or to material well-being; while

he limits himself to giving us those divine facts and laws which man's research could not discover, or could not adequately establish, necessary for our attaining our proper theological end. Philosophy is our teacher for the body and for time; revelation, for the soul and for eternity. When revelation says anything concerning material nature, it is only what is made necessary to the comprehension of some theological fact or doctrine. And in its observance of this distinction the Bible is eminently a practical book, saying nothing whatever for mere curiosity, and stopping at just what is essential to religious truth. Hence, we ought to understand that when the Scriptures use popular language to describe physical occurrences or facts, all they mean is to state the apparent phenomena as they would seem to the popular eye to occur. They never intended to give us the non-apparent, scientific mechanism of those facts or occurrences; for this is not essential to their practical object, and is left to the philosopher. Hence, when natural science comes, and teaches us that the true *rationale* of apparent phenomena is different from that which seems to be suggested by the terms of the Scripture and of popular language, there is no real contradiction between science and the Bible, or between science and the popular phraseology. For instance, the exposition of such passages, which led the doctors of Salamanca to condemn Columbus' geography as unscriptural, and the Inquisition and Turretin to argue against the astronomy of Galileo, as infidel, was mistaken. The former argued against Columbus, that the Psalms speak of the heavens as spread out like a canopy, and the earth as immovable and extended. Turretin argues most methodically that the Copernican scheme of the heavens cannot be true, because the Scriptures speak of the earth as "established that it cannot be moved;" of the sun as "going forth to his circuit in the heavens;" and of sun and moon as "setting," "rising," "standing still" at Joshua's command. We now clearly see that all this was an exegetical folly. And, now that we know it is the earth that moves, and not the sun, we no more dream of charging the Bible with error of language than we do the astronomer himself, when he says, perhaps on the very pages of his almanac, "sun rises," "sun sets," "sun enters Capricorn," etc; for such really are the apparent motions of those bodies,

and had the Bible departed from the established popular phraseology in mentioning them, to use terms of scientific accuracy, it would have been gratuitous pedantry, aggravated by the fact that it would have been unintelligible and absurd to all nations which had not yet developed the Copernican astronomy.

Now, so far as the demands of modern geology upon our understanding of the Mosaic record are analogous to the concessions made above, we cheerfully yield them. It was with a view to the illustration of this new application that the familiar principle was again stated by us. And we find this principle, which we thus concede, claimed by the Christian geologist, as Hugh Miller, to cover all possible liberties which they find it convenient to take with the sacred text. This, then, is another point which requires careful adjustment. When Moses seems to say that God brought our world out of nothing into an organized state, about six thousand years ago, and in the space of six days, are his words to be classed along with those passages which denote physical occurrences according to their popular appearance, and which are to be interpreted, as we do the popular language about them, in obedience to the discoveries of natural science? Or, does this class of passages belong to a different category? We are compelled to take the latter answer as the proper affirmative. In the first place, the reference to physical facts in the record of creation is not merely subsidiary to the narrative or statement of some theological truth, but it is introduced for its own sake. For, creation is not only a physical fact; it is a theological doctrine. The statement of it is fundamental to the unfolding of the whole doctrine of the creature's relation to his creator. It is not one of those things which revelation treats as being intrinsically outside its scope, and which it, therefore, only introduces allusively. It is the first of those "things of God," which it is the proper and direct object of revelation to teach authoritatively. Second: the fact of creation had no apparent phase different from its true scientific one, like the seeming dome of the skies, the rising sun, the stable earth; for the simple reason that it had no human spectators. Hence, there could be no popular mode of representation different from the true scientific *rationale*, as there was no people to observe the apparent phenomena and describe them. But

we have seen that the popular language of the Bible about the rising sun, and such like apparent phenomena, receives its explanation purely from the fact that it is conformed to the apparent and obvious occurrences, and to the established popular language founded thereon. Instead, therefore, of requiring these passages to stand waiting until they receive their proper construction from the hand of natural science, they are to be construed, like the remainder of the doctrinal teachings of the Scriptures, according to their own independent laws of exegesis, honestly applied.

Farther: when the proper rights of revelation, as related to natural science, are defined, it is most important that we assert their independence of it. Most geologists speak as though, on any subject which the researches of human science may happen to touch, the Bible must say only what their deductions permit it to say.¹ The position to which they consign God's word is that of a handmaid, dependent, for the validity of the construction to be put upon its words, upon their permission. Now this, we boldly assert, is intrinsic rationalism; it is the very same principle of baptized infidelity which reappears from so many different points of view, from Socinianism, Neologism, Abolitionism, exalting the conclusions of the human understanding over the sure word of prophecy. Let us fully concede that the Bible has been often misinterpreted, and that thus its infallibility has been cited to sustain what God never meant it to sustain; that its correct exposition may, especially in certain parts of it, require great patience, caution, and modesty; and that it is wrong to claim its teachings as authoritative on any point, unless we have ascertained the true meaning of the text, beyond a peradventure, by the just application of its own laws of exposition. But still, the Bible must be held to have its own ascertainable and valid laws of exposition; and its teachings, when duly ascertained, must be absolutely authoritative in all their parts, without waiting on or deferring to any conclusions of human science whatsoever; otherwise, it is practically no Bible; it is no "rule of faith" for a human soul. For, to say nothing of the uncertainties and fallibility of human reasonings, of the numerous mistakes of science once held to be demonstrated, how

¹ *Testimony of the Rocks*, page 157-8.

preposterous is the idea that our Bible held out to all the generations of men before Cuvier what professed to be an infallible cosmogony, while they had no possible means (the science which was to interpret it being undeveloped) to attain the true meaning, or to discover, by the laws of exposition of the language itself, their misunderstanding of it? Such a revelation would be a mere trap. But, worse than this; just as all our forefathers, when reading the first chapter of Genesis, supposed they were reading a plain story, which they were invited and permitted to comprehend, but were, all the while, deceived; so we may now be unconsciously accepting a number of Bible propositions as authoritative, and staking our souls upon them, which are destined to receive, several hundred years hence, a totally different interpretation—an interpretation impossible for us to attain—from the light of some science as yet undeveloped, either geological, or astronomical, or ethical, or ethnological. And who can guess in what part of the Bible these quicksands are? All seems like solid ground to us now; but so did Genesis seem to our honest forefathers. We repeat, if they sinned against the Bible's own independent laws of exegesis in venturing to put a sense on the first of Genesis, if there was anything in those laws of exegesis themselves which, properly observed, would have sufficed to warn them off from their unwarranted interpretations, they were wholly to blame for their mistake. But if not, if the Bible was dependent for a fair understanding on a science as yet wholly undeveloped, then in those places it really means nothing in itself; and in seeming to mean something it is a mere trap for honest people. And so, we repeat, until human science shall have made its last advance in every circle of knowledge which can ever inosculate with theology, we must remain in suspense, whether there are not other hollow places in this Bible which are betraying us. Obviously, such a book is not authoritative to a rational soul. And obviously, he who holds the authority of the Bible only in the sense described, is but a rationalist in spirit, whatever may be his Christian or his clerical profession. But, it may be objected, "does not every enlightened Christian hold that it is the glory of the Bible to receive illustrations from every light of human science?" We reply: it is its glory to have all human science ancillary to it, not dominant

over it; to have its meaning illustrated, *but not created*, by all the discoveries of true science.

4. An equally important adjustment is to be made as to the party which is bound to assume the burden of proof in this discussion between the Mosaic and the geologic records. We consider that the theologian, who asserts the infallibility of the Bible and the independency and sufficiency of its own laws of interpretation, is entitled to the preliminary presumption; and, therefore, the burden of proof rests upon the geologist, who asserts a hostile hypothesis. The authority of the Bible, as our rule of faith, is demonstrated by its own separate and independent evidences, literary, historical, moral, internal, prophetic. It is found by the geologist in possession of the field, and he must assume the aggressive, and positively dislodge it from its position. The defender of the Bible need only stand on the defensive. That is, the geologist may not content himself with saying that his hypothesis, which is opposed to Bible teachings, is plausible, that it cannot be scientifically refuted, that it may adequately satisfy the requirements of all the physical phenomena to be accounted for. All this is naught, as a successful assault on us. We are not bound to retreat until he has constructed an absolutely exclusive demonstration of his hypothesis; until he has shown, by strict scientific proofs, not only that his hypothesis *may be* the true one, but that *it alone can be* the true one; that it is impossible any other can exclude it. And we, in order to retain our position, are not at all bound to construct any physical argument to demonstrate geologically that Moses' statement of the case is the true one; for, if the Bible is true, what it teaches on this subject is proved true by the biblical evidences, in the absence of all geologic proof. Nor are we under any forensic obligation to refute the opposing hypothesis of the geologist by geologic arguments farther than this: that we shall show geologically that his argument is not a perfect and exclusive demonstration. If we merely show, by any flaw in his conclusion, by the citation of any phenomenon irreducible to the terms of his hypothesis, that his demonstration is incomplete, we have successfully maintained the defensive; we hold the victory.

Now, have geologists always remembered this? Nay, is it

not notoriously otherwise? It would seem as though this interesting young science had a sort of fatality for infecting its votaries with a forgetfulness of these logical responsibilities. Perhaps this would be found equally true of every other physical science of wide extent, of complex phenomena and of fascinating character, while in its forming state. But every acute reader of the deductions of geologists perceives numerous instances where they quietly substitute the "may be" for the "must be," and step unconsciously from the undisputed probability of an hypothesis to its undisputed certainty. And one's observation of nature need proceed but a small way to light upon instances in which phenomena exist which would receive a given solution just as plausibly as certain others; while the geologists imagine a reason for withholding that solution in the cases which would thus spoil their hypothesis. That they can not yet claim that exclusive and perfect demonstration of their hypothesis which is required of their position, as holding the aggressive, seems very plain from familiar facts. One is the radical differences of hypothesis to which leading geologists are committed up to this very day. Sir Charles Lyell makes it almost the key-note of his system, that all geologic changes were produced by such causes as are now at work, and operating, in the main, with no greater speed than they now exhibit. Hugh Miller, and others, are equally sure that those changes were produced by successive convulsions and earth-tempests, revolutionizing in a short time the state of ages. Some reconcile the "stony record" with that of Moses, upon the scheme advocated by Dr. Chalmers, which pushes back all the mighty changes to that interval ending, in Genesis i. 2, when "the earth was without form, and void." Others, with Miller and Professor Tayler Lewis, adopt the very different theory of the six creative days extending to vast periods of time. Mr. Miller is certain that the fossil *flora* and *fauna* indicate just the order, in the main, as to the succession which their chief developments had in the geologic ages, which is set down in Genesis as the work of the several days. Many others, equally great, declare just the opposite.

A reasonable mistrust of the perfectness of geological demonstrations is excited again by instances of obvious haste and

inconclusiveness in their inferences from supposed facts. Of this one or two illustrations must suffice. Few of their writers rank higher than Sir Charles Lyell. In the London edition of his *Principles of Geology*, 1850, page 205, we have an attempt to make an estimate of the age of the earth's present crust from the character of the deep gorge, or great rocky gully, in which the Niagara river flows from the falls towards Lake Ontario. The deep part of this channel is said to be about seven miles long. The author first satisfies himself, on grounds which might perhaps amount to probability, that this whole gorge may have been excavated by the torrent itself. This is the first element of the calculation. Through the rest of the argument this probability is tacitly turned into a certainty. The next element to be ascertained is, the rate at which the river now digs out its channel, and the edge of the cataract recedes. A previous intelligent inquirer concluded, upon the best testimony he could collect upon the spot, that the falls receded a yard each year; but Sir Charles assumes an average of a foot per year as the more correct rate, on grounds which he does not state. This second source of uncertainty is also quietly ignored. Then it is calculated that the Niagara has been flowing thirty-five thousand years. While the author does not venture to vouch for this positively, he concludes by indicating to his reader that his private opinion is, the time was more likely longer than shorter. Now, even the unscientific visitor of Niagara cannot fail to observe, what Sir Charles himself correctly states, that the perpendicular face of the gorge of the cataract and of the lower edge of Goat Island reveals this structure: on the top there is a vast layer or stratum of hard gray limestone, nearly horizontal, and, at the falls, nearly ninety feet thick, while all below it, to the bottom of the precipice, is a soft shale. The real obstruction to the very rapid cutting away of the precipice by the tremendous torrent, is the solidity of the limestone layer whose surface forms the bottom of the river above the falls. When that once gives way the rest is speedily removed. Any person can easily understand that the permanency with which this limestone layer withstands the water depends chiefly on its thickness, and also on its dip, or inclination, and on the frequent occurrence or absence of fissures or seams, destroying the cohesion of

its masses to each other. Now, will not the reader be surprised to learn that, even in the two miles which extend from the cataract down to the Suspension Bridge, this all-important stratum of limestone is diminished more than half in its thickness, the soft and yielding shale forming the remainder of the cliffs? So that, to say nothing of the high probability of the occurrence of the two other causes within the seven miles, we have here a cause for the recession of the cataract greatly more rapid than that which now obtains. Sir Charles Lyell concludes with these words: "At some points it may have receded much faster than at present, but its general progress was probably slower, because the cataract, when it began to recede, must have had nearly twice its present height." Did not the waters then have more than twice their present momentum? So that common sense would say that, if there was more earth to be worn and dug away, there was far more power to do it. Surely, such reasoning as the above does not make an exclusive and perfect demonstration!

Another instance shall be taken from the same author. On page 219 he presents us with an argument for the great age of the world, from the length of time the Mississippi has been employed in forming its alluvial delta. The elements of the calculation are, of course, the area and depth of the alluvial deposit, giving the whole number of cubic yards composing it, the quantity of water passed down the stream in one year, and the percentage of solid matter contained in the water in its average state of muddiness. The *data* upon which the depth of the alluvium is fixed are only two, the average depth of the Gulf of Mexico, and a well or shaft sunk near Lake Ponchartrain. Are either of these sufficient? Is it not customary for strata to dip towards seas and oceans? If the spot at which the well was dug happened to be one of those sunk far below the usual level by earthquake agencies—and Sir Charles himself saw that such agencies had produced just such results in the region of the same river, near New Madrid—would it not come, in the course of a few hundred years, to receive far more than the average thickness of alluvial deposit? But let us come to the other element, the percentage of sediment in the water. From the observations of Dr. Riddell he learns that it is one three-

thousandth part, in bulk, of the water. Two other observers, Messrs. Brown and Dickeson, make it one five hundred and twenty-eighth part, and they make the volume of water one-third more! Sir Charles concedes that "so great a discrepancy shows the need of a new series of experiments." Did either of the observers take pains to ascertain whether the larger part of the sediment does not gravitate towards the bottom of the water while flowing, and to go down any part of the one hundred and sixty-eight feet, which measures the depth of the river at New Orleans, to procure the water which they examined? We are not informed. The observations on the annual volume of water were made at New Orleans. Was any allowance made for the waters which flow off in such vast quantities through the delta, by the *bayous*, and during the gigantic freshets, leaving the main channel above New Orleans? We are not informed. Again, the total volume of the water passing New Orleans in a year depends on its velocity. Now, experienced pilots and boatmen of the Mississippi are generally of opinion that the lower strata of water in its channel run with far more velocity than the surface. Hence the calculators, in gauging the surface velocity, were probably entirely at fault as to the real volume of water. Last, it is universally known that the Mississippi is nearly twice as muddy, on the average, at the head of the delta as at New Orleans! How much is this notable calculation worth after all these deductions? But, for all that, he *chooses* to assume Dr. Riddell's estimate for his basis, and thus proves (!) that the Mississippi has been running one hundred thousand years.

Now, let the reader note, that we do not advance the inconclusiveness of these two calculations as sufficient proof, by itself, that the world *is not* thirty-five thousand, or one hundred thousand years old. But we advance it upon the principle expressed in the adage, "*Ex pede Herculem.*" The detection of such hasty and shallow reasoning gives sufficient ground of mistrust as to their general conclusions.

Another specimen shall be drawn from Hugh Miller, ludicrous enough to relieve the tedium of this discussion. In the *Testimony of the Rocks* (Boston: 1857, p. 259), he is arguing that the fossil animals were produced by natural law, vast ages ago, because they exhibit marks of creative design similar to

those we now find in the living works of nature. One of his evidences is a little coral, the "*Smithia Pengellyi*," which constructed its bony cells such that the fracture of them presented a surface remarkably similar to a certain calico pattern which had proved extremely popular among the ladies. The conclusion is, that as this calico must have been very pretty—as though the better part of creation had never been known to exhibit their sweet caprices by admiring things for their very ugliness—the creator undoubtedly caused these coral insects to construct their cells in this way for their prettiness! To us duller mortals it is not apparent that the "final cause" of coral insects was to be ready to have their stony buildings cracked open by geologists' hammers; we thought they had been made for an existence where, in the main, no human eye could see them, especially as the species was pre-Adamite by myriads of years. Mr. Miller's notion of the design of creation seems to be very much akin to that of the old Scotch crone, who, whenever she beheld a beautiful young girl, had no other appreciation of her graces than to conceive "what a lovely corpse she would make."

Once more: while the currently received theory of the cosmogony is ingenious, it is at least doubtful whether the adjustment of all the phenomena of so complex a case to the hypothesis, has been, or can be, accurately carried out. But, until this is done, it is not demonstrated. If that scheme is true, then all the material substances which make up the chemist's list of simple substances must have been derived from the elements of the atmosphere, of water, and of the primitive rocks. For, if we go back to the beginning, we find, according to the current hypothesis of the geologists, nothing in existence, except a heated atmosphere, watery vapor, and a fluid globe of melted granite, basalt, etc. All the rest, secondary, tertiary, alluvial, is the result of cooling, crusting, depressions and upheavals of this crust, disintegration, and sedimentary deposits. But, is it certain that air, pure water, and primitive rocks contain all the chemical substances? And a still harder question is this: has it ever been ascertained whether the chemical conditions and combinations, in which the elements exist in the primitive rocks, and then in those called secondary and tertiary,

are such as are consistent with this hypothesis? Has it been ascertained that the small percentage of silicate of lime found in some of the granites—only some—and other primitive rocks, within such a distance from their surface as could, by any possibility, be subjected to disintegration, can account for all the vast masses of *carbonate* of lime—no longer silicate—in all the limestone, marbles, chalks, coral, and calcareous clays of the newer strata? But the world is entitled to have these questions answered before the geologists claim a demonstration of their hypothesis.

Recent events furnish us with another doubt. One of the main arguments by which the fossil animals of all but the most recent species are shown to be pre-Adamite, as it is claimed, is, that no fossil human remains, or marks of human handiwork, have been found among them. And geologists have admitted—as they must—that the well-attested discovery of such remains among the earlier strata would demand a surrender and reconstruction of their theory. But lately the scientific world has been agitated by the report that, near *Amiens*, in France, arrow heads of flint, and other works of human industry, have been found unquestionably in a *stratum*, and along with fossils, uniformly assigned by geologists to a pre-Adamite period. And now, it is stated that a scholar of high qualifications, Rawlinson, has visited the spot, and is satisfied of the correctness of the assertion.

For these and many other reasons, we consider the geological hypothesis as not yet a demonstration; and, hence, we claim the right to stand upon the defensive, upon the impregnable bulwarks of Scripture evidences, until we are positively dislodged. We deny that any logical obligation rests upon us to present any scientific argument, or to establish any hypothesis, on the subject. We are not bound to show, by natural science, what is the true *rationale* of the earth's creation. Our defence is thoroughly accomplished when we show that any adverse theory is not yet exclusively demonstrated.

5. The most vital point in the relations between theology and geology we have reserved for the last. It is one which has been summarily disposed of by geologists, without condescending to weigh its vast import. How far must the logical value of

the inferences of natural science from natural appearances be modified by the admitted fact of *a creation!* The character of these inferences is the following: "We see a given natural law produce a given structure; we find the remains of a similar structure which has been somehow produced in the past; we infer that it must have been produced by a similar natural law." The just application of this kind of reasoning, within its proper limits, is fully admitted; it has been the main lever in the discoveries of natural science. But now, we ask, how far should its application be limited by the knowledge of the truth, that *somewhere* in the past some omnipotent creative act must have intervened? This is the question.

Unless geologists are willing candidly to take an atheistic view of cosmogony, the fact of an absolute act of creation must be admitted somewhere in the past. We will not insult the intelligence and piety of our readers by supposing it necessary to recite the arguments which disprove an atheistic origin of the present order of things, or the emphatic admissions of all the greatest teachers of natural science, that nature obviously discloses her own origin in the creative will of an eternal Intelligence. The short-lived theory of *development* has been already crushed beneath the combined arguments and ridicule of scientific geologists themselves. There is, however, one fact, peculiarly germane to this point, that the Christian geologists of Great Britain and America claim it as the peculiar glory of their science, that it presents an invincible and original argument for a creation. It is this: the stony records of successive *genera* of fossil plants and animals show that prior *genera* perished wholly, and *genera* entirely new appear on the stage of life. Now, as the development theory is repudiated, the entrance of each new *genus* evinces, beyond a doubt, a new and separate creative act. Let us grant this for argument's sake. It is agreed, then, that terrestrial structures began, somewhere in the past, in God's creative act.

But now, it is most obvious, that if a scientific observer had been present, just after that creative act, to observe the structures produced by it, any observations or inferences he might have drawn from the *seeming* marks of the working of natural laws upon them, would have been worthless to prove that those

specimens originated in natural laws. We repeat, once admit that a creative act has intervened *anywhere* in the past, and we should have had there, if we had been present, one case in which all deductions and inferences of the natural origin of things from their natural appearances would have been worthless. Such analogical arguments would have been cut across and superseded utterly by the creative act. This is indisputable. We may illustrate it by the instances usually presented by the sound old writers of the class of Dick—instances which have far more significance than has usually been admitted. Suppose, for illustration's sake, that the popular apprehension of the Bible account of the creation of Adam's body and of the trees of Paradise is true. But now a naturalist of our modern school investigates affairs. He finds towering oaks with acorns on them! Acorns do not form by nature in a day—some species of oaks require two summers to mature them. But worse than this. He has ascertained by natural history that one summer's growth forms only one of the concentric rings in the grain of the tree's stock. He cuts down one of the spreading monarchs of the garden, and discovers that it has a hundred rings. So he coolly rejects the story that this garden began last week, and insists on it that Adam has told a monstrous fib in saying so; that it is not less than a hundred years old. Yet Adam was right; for the creative act explained all. But let us suppose another naturalist returning after some nine or ten centuries. He visits the venerable tomb of the father of all the living, and learns from his heir, Seth, how that his father sprang, at the bidding of God, out of the dust, a full-formed, adult man. The naturalist takes up a leg-bone of Adam's skeleton; he remarks: "The person to whom this bone belonged at death was evidently an adult; for its length, size, solidity and density show this." He saws off a section, polishes it down to a translucent film of bone, and subjects it to his microscope and his chemical solvents. He remarks: "Here is the cellular structure of gelatinous matter, which once formed the incipient bone of the *fœtus*; and these cells I now find filled with the deposit of *proto-phosphate of lime*, giving it its stony strength and hardness. But I know that the introduction of this earth into the cells of the soft bone of the infant is just the process by which

nature now forms the bones of adults, by gradual growth. Whence I learn that this individual, like his children, grew, during the space of twenty-one years, from a *fetus* to an adult; and the myth of his son Seth, concerning his instantaneous creation, is an attempt to impose on my credulity. This attempt I, as a philosopher, shall repudiate with contempt." Yet Seth was right, and the philosopher wrong; for, not to rely on the inspired testimony alone, this natural argument would prove that Adam was once an infant, and, therefore, had a father. The same argument, applied to the body of Adam's father, would equally prove that he also was once an infant, and had a father. And it would prove equally well an infinite series of finite human fathers, extending back to all eternity. But such a series, philosophy herself shows, is impossible!

But, second—and the remark is of prime importance—any creative act of God, producing a structure which was intended to subsist under the working of natural laws, must produce one presenting some of the *seeming* traces of the operation of such laws. We confidently challenge geologists who admit that there has ever been any creation at all to imagine a product of it which could be different. For, note, all these theistic geologists repudiate the theory of development of *genera* from different and lower *genera*. Whence it follows, that the first specimen of God's immediate handiwork, the very first moment it left his hand, must have stood forth *as truly natural* as any of its progeny which were destined to proceed from it by natural law. And the same thing must have been true, to some extent, of all inorganic structures. If they had no traits of the natural, as they came from God's hand, then they were incapable of becoming, thenceforth, the subjects of natural law.¹

Hence, third, it follows that, if once a creative act is admitted to have occurred somewhere in the past, it may have occurred anywhere in the past, so far as the deductions of natural science from the marks of natural law upon its products go. In other words, the value of all these analogical inferences as to the date at which, and the mode by which, these objects of nature came

¹ But the fossils! especially animal? Ans. If the invalidity of the arguments for the sequence and age of unorganized strata be admitted, then the proof that fossils are pre-Adamite is gone.

into being, are worthless just so soon as they attempt to pass back of the earliest historical testimony. For the creative act, wherever it has intervened (and who can tell, when historical testimony fails, where it may not have intervened?) has utterly superseded and cut across all such inferences. Nor can these natural analogies prove that the creative act has not thus intervened at a given place in the past, because the whole validity of the analogies depends on the supposed absence of the creative act. Hence, all the reasonings of geologists seem to us utterly vitiated in their very source, when they attempt to fix, from natural analogies, the age and mode of production of the earth's structure.

This objection is usually dismissed by geologists with a sort of summary contempt, or with a grand outcry of opposition. It does, indeed, cut deep into the pride and pretence of their science; at one blow it sweeps off that whole domain of its pretended discoveries—the region of the infinite past prior to all history—in which the pride, conceit, and curiosity of man's fallen intellect most crave to expatiate. But let us see whether it is possible to impugn the simple premises on which our conclusion rests, or the inevitable result from them. Is there a single answer which can be presented that is even of any scientific weight?

It is urged, in substance, by Hitchcock, that if the validity of their analogical reasonings from natural laws is denied in this case, the very foundations of all natural science are overthrown. But what is this, more than an appeal to our fears and prejudices? It is as though one said, when we refuse to accept a given species of evidence outside its proper range, that we thereby invalidate the force of all evidence. The question is: what is the proper domain of these inferences from the analogies of natural law? Within their own domain, true science accepts them as valid; outside of it, true science herself will concur with theology in arresting them. Let these premises be granted, viz., given the sufficient evidence that supernatural causes are all absent in a certain class of effects; and given the fact that just such effects have usually resulted from a certain natural law: then the inference may be very valid that these effects did result from the operation of this law. But this infer-

ence cannot help us to determine the first premise, whether all supernatural causes were truly absent, for the very reason that it depends on that premise in part. This would be to reason in a circle, with a vengeance. The application of these inferences, upon which Hitchcock and the other geologists insist, is, in fact, precisely a case of that induction from mere uniformity of antecedent and consequent, as far as observed, which Bacon condemned under the term "*Inductio per enumerationem simplicem*," and which it was one of his chief tasks to explode as utterly worthless. He proves that it can never raise more than a meagre probability of the correctness of its conclusions where it is not supported by some better canon of induction. To explain, the shallow observer says: "I find that, so far as my observation has been enabled to test the matter, a given consequent phenomenon, named B, has always been preceded by a given antecedent, named A. Hence, I conclude that, in every other case where B appears A was its cause." The obvious vice of this is, that it is wholly unproved that some other cause capable of producing B was not present, besides A, in the last cases. The induction is worthless until that is proved beyond a peradventure. To apply this: our modern geologists argue, for instance, that wherever they have been able to examine the actual process by which the formation of *stratified rocks* takes place, the cause is *sedimentary action*. Therefore, wherever any other stratified rocks are seen, their producing cause must have been sedimentary action. Here we have precisely the worthless induction *per enumerationem simplicem*, for the possible presence of some other cause capable of producing stratified rocks has not been excluded. And every one but the atheist admits that another such cause may have been present in the shape of *creative power*. Until the presence of that cause is excluded by some other evidence, the conclusion is not proved. The vice of the argument is just like that in the famous sophism of Hume against miracles—it is not worthy of a Humeist. And we conceive that there is no uncharitableness in declaring that the covert tendencies of all such philosophizings are to *Hume's atheism*. Such reasonings cannot be complete for such a result in all cases, unless the supernatural be wholly excluded and the secret tendency to do so, which is

virtual atheism. is the true spring of all such reasonings in science. But it may be retorted: are we, then, to surrender all dependence on inferences from natural law, as certain evidence, throughout the whole extent of the natural sciences? We reply, no; wherever the inquirer into nature is certain that the facts he investigates are truly under the dominion of natural law, so far such reasonings are valid. As to the origin and history of nature in the past, they are valid no farther back than we can be assured of the absence of the supernatural; and we know not how such assurance can be gained by us, save by the testimony of human experience and history, or of inspiration. This conclusion does, indeed, curb the arrogance of human science, but it does not affect in the least any part of its legitimate dominions, or of its practical value to mankind. It does, indeed, disable us from determining the age, date, and origin of the structures nature presents us, but it does not prevent our discovering the laws of those structures; and the latter is the discovery to which the whole utility of science belongs.

Again, why should the theistic philosopher desire to push back the creative act of God to the remotest possible age, and to reduce his agency to the smallest possible *minimum*, as is continually done by these speculations? What is gained by it? Instead of granting that God created *a world*, a *κοσμος*, they continually strive to show that he only created the rude germs of a world, attributing the actual origin of the fewest possible elements to God's almighty act, and supposing the most possible to be the result of subsequent development under natural law. We repeat the question: what is truly gained by this, if once the lingerings of covert atheism be expelled? Admit in good faith the facts of an actual Creator, an almighty and omniscient agent, and of an actual creation, anywhere in the past, and it will appear just as reasonable that God should have created the whole finished result, as a part. To his infinite faculties there is nothing hard, as opposed to easy; nothing intricate, as opposed to simple; nothing great, as contrasted with the small. It was just as easy for him to speak into existence a finished universe, with all its beautiful order, "by the word of his power," as to produce the incipient elements out of which "laws of nature" were slowly and laboriously to evolve the result.

For, what are those laws of nature, and what their source? Do they not originate, after all, in the mere will and immediate power of God? None but the atheist disputes this. And, although we cordially grant that the properties of bodies, by which they are constituted *forces* in the great system of causation under natural law, are actual properties, and not mere seeming blinds or *simulacra* of properties; though we grant that they are truly intrinsic in bodies, as constituted by God's creative will; yet who, except the atheist, denies that their operation is sustained and regulated by the ever-present, special providence of God? Hence, if we say *natural law* does this or that, as opposed to supernatural creation, we have not in the least simplified, or relieved, the perpetual miracle of God's working. There is still a manifold and countless operation of infinite power and wisdom.

But, if the natural philosophers still persist in claiming the universal application of their principle, that wherever there is an analogy to the results of natural law, there we must conclude natural law alone has wrought, we can clearly evince that their position is utterly untenable and inconsistent, save for the thorough atheist. For, as already intimated, push back the supernatural creative intervention as far as we may, it is impossible for us to conceive how it could produce any structure adapted to the subsequent dominion of natural law, without giving it the properties which such law gives to its similar products. To give the most complete proof of the justice of this remark, let us take that theory of the solar system which the unbelieving La Place is said to have doubtfully suggested as a possible one, and which our nominally Christian philosophers have so incontinently adopted, without demonstration, as demonstratively the true one. Suppose that the natural historian, coming from some older system, had begun his investigation of ours on the principles of these philosophers at that stage when nothing existed but a *nebula* of incandescent compound vapor, rotating from west to east around an axis of motion. This is the stage, we understand, at which it is now most popular to suppose cooling, liquefying, and solidifying processes began, resulting in a sun and planets; when the only shadow of truly scientific evidence on which La Place grounded his doubtful

surmise, has been dissipated by Lord Rosse, resolving the *nebulae* into clusters of well-defined stars. How would this scientific observer have speculated on what was presented at that primitive stage? Had he used the confident logic of our geologists, he must have said to himself: "motion in matter is always the result of impact; therefore, this rotary motion which I now behold must be the result of some mechanical force, developed by natural action, either mechanical or chemical. And, again, *vapor* implies *evaporation*, and sensible heat suggests latent heat rendered sensible by chemical action. There must, therefore, have been a previous and different condition of this matter, now volatilized, heated, and moving. These conditions are the results of the working of natural laws; and that implies a previous material, in a different condition, to be the subject of that working." Now, this reasoning would be precisely as good as that of geologists. But what would it prove? It would make matter and the organism thereof eternal; for, after ascending by such reasonings one stage higher, we should be equally impelled to ascend still another, and another. Thus it would exclude a creator totally from creation. Hence, it appears that the principles we have criticised are unsound and inconsistent, in any hands except those of the atheist. Once admit a creator and a creation, and the validity of all inferences from the seeming analogies of nature, as to origin of things, is vitiated the moment we pass back of the authentic light of historical testimony. Once admit a creator and a creation, and nothing is gained, in logic, by attempting to push back the creative act.

In fine, if that account which theology gives of the origin of the universe is to be accepted at all, it appears to us that the most philosophical conception of a creation would be the following: that God, in producing a world which his purposes required, should pass immediately under the dominion of natural laws, would produce it with just the properties which those laws were to develop. Thus God, intending to have trees perpetuated by a law of germination and growth, would most naturally create the first tree of the *genus* just such as germination and growth would produce. And so the whole structure of his world would be made, at first, with an adaptation to the laws which were intended subsequently to regulate and modify it. And

just here theology inosculates with cosmogony, and gives us a consideration which will strike every just mind with no little force, while it is one of that kind which the man of narrow specialities is almost incompetent to estimate. What was God's true end in the creation of a material world? Reason and Scripture answer: it was to furnish a stage for the existence and action of reasonable moral beings. The world was made for MAN to inhabit. Without the presence of this its rational occupant and earthly master, all the manifestations of intelligent design and moral attributes, given in the order of nature, would be an aimless and senseless work. For, as light would be no light were there no *eye* in the universe, so God's declarative glory in the wisdom and goodness of his works is no glory till there is a *mind* to comprehend it. Now, such being God's end, it seems far more rational to suppose that God would produce at once the world which was needed for his purpose, rather than spend hundreds of thousands of years in growing it.

But, bearing in mind the object for which God created a world, we shall see that it becomes the most reasonable supposition that he should have made it, from the first, with some of those traits which geologists suppose have all resulted from the working of natural laws. For instance, God's purposes, as at present revealed, prompted him to subject the surface of our globe to that class of agencies which are continually adding to its sedimentary *strata* of rocks and earths. Well, it is the most reasonable, the most philosophic supposition, that the same purposes prompted him to create a globe which had, from the first, some *strata* of the same sort. That the surface of the globe should be from the first stratified was necessary, for instance, to produce springs and veins of water, and that whole economy of irrigation which makes it a tenable home for sentient creatures.

If, therefore, there is any authentic testimony that God did, from the first, create such an earth, no sound inference drawn from natural analogies is of any force to rebut that testimony.

A CAUTION AGAINST ANTI-CHRISTIAN SCIENCE.¹

“Beware lest any man spoil you through philosophy and vain deceit, after the tradition of men, after the rudiments of the world, and not after Christ.”—COLOSSIANS, ii. 8.

EVERY Christian should be familiar with the fact that the human mind, as well as heart, has been impaired by the fall. Men “so became dead in sin, and wholly defiled in all the faculties and parts of soul and body.” From the nature of the case, the misguided intellect is unconscious of its own vice; for consciousness of it would expel it. Its nature is to cause him who is deceived to think that error is truth, and its power is in masking itself under that honest guise. Why, then, need we wonder that every age must needs have its vain and deceitful philosophy, and “oppositions of science, falsely so called?” And how can the Christian expect that uninspired science will ever be purged of uncertainty and error, by any *organon* of investigation invented by man? Even if the *organon* were absolute, pure truth, its application by fallen minds must always ensure in the results more or less of error, except in those exact sciences of magnitudes where the definiteness of the predications and fewness of the premises leave no room for serious mistake.

Even when a body of honest and sincere men, like this Synod, attempts to apply certain common principles to questions of moral and ecclesiastical detail, their differences betray the fact that the operation of their reasons is imperfect. Yet these are the men to whom the church looks to teach the way of salvation. Now we demonstrate in our very church courts the fallibility of our minds when we are left to ourselves. How then can any man be willing to entrust to us the guidance of a soul, which is

¹ A sermon preached in the Synod of Virginia, October 20, 1871, and published by request of Lieutenant-Governor John L. Marye, Major T. J. Kirkpatrick, George D. Gray, J. N. Gordon, F. Johnston, and others, elders of the Presbyterian Church.

worth more than the whole world, and whose loss is irreparable? No thinking man will commit himself without reserve, in this thing, to any human direction. We must feel our need of an unerring guide; and hence the superiority of that religion which gives us as prophet and teacher that Christ who is "the image of the invisible God, born before all creation" (ch. i. 15), "in whom are hid all the treasures of wisdom and knowledge," (ii. 3); and "in whom dwelleth all the fulness of the Godhead bodily," (ii. 9). How blessed is the man who is "complete in him!" He has an infallible guidance, and no other is sufficient for an immortal soul.

The Colossian Christians were enticed to leave this prophet for a shadowy philosophic theory of their day. This was a mixture of Oriental, Rabbinical and Greek mysticism, which peopled heaven with a visionary hierarchy of semi-divine beings, referred the Messiah to their class, and taught men to expect their salvation from their intercession, combined with Jewish asceticisms and will-worship. Thus we are taught, both by uninspired, but authentic history, and by intimations of the holy apostle in the Epistle itself. This fanciful scheme was supported by the "traditions of men"; that is to say, by the inculcation of favorite masters of this vain philosophy; and by "the rudiments of the world," by this world's first principles, instead of Christ's declarations. But the apostle solemnly reminded them that this philosophy was vain and deceitful; and moreover, that the price of preferring it to the Christian system was the loss of the soul. Thus, the real aim of the seducer was to despoil the soul of its salvation, and to make it a captive to falsehood and corruption.

The prevalent vain, deceitful philosophy of our day is not mystical, but physical and sensuous. It affects what it calls "positivism." It even makes the impossible attempt to give the mind's philosophy a sensualistic explanation. Its chief study is to ascertain the laws of material nature and of animal life. It refers everything to their power and dominion; and from them pretends to contradict the Scriptural account of the origin of the earth and man. Does it profess not to interfere with the region of spiritual truth, because concerned about matter? We find, on the contrary, that physical science always

has some tendency to become anti-theological. This tendency is to be accounted for by two facts: one is, that man is a depraved creature, whose natural disposition is enmity against God. Hence this leaning away from Him, in many worldly minds, perhaps semi-conscious, which does "not like to retain God in its knowledge." The other explanation is, that these physical sciences continually tend to exalt naturalism; their pride of success in tracing natural causes, tempts them to refer everything to them, and thus to substitute them for a spiritual, personal God. Again, then, is it time for the watchman on the walls of Zion to utter the apostle's "beware." Again are incautious souls in danger of being despoiled of their redemption by "vain deceitful philosophy." To enforce this caution, I urge:

I. The attitude of many physicists at this time towards revelation is threatening. I perceive this in the continual encroachments which they make upon Scripture teachings. Many of you, my brethren, can remember the time when this modern impulse did not seek to push us any farther from the old and current understanding of the Bible cosmogony than to assert the existence of a pre-Adamite earth, with its own distinct *fauna* and *flora*, now all entombed in the fossiliferous *strata* of rocks. To meet this discovery no harder re-adjustment was required than that of Drs. Pye Smith and Chalmers, who proposed to amend the expositions of Moses by supposing that between "the beginning" and that epoch of void and formless chaos immediately before the six days' work, there was a lapse of myriads of years; of which Moses tells us nothing, because the creatures and revolutions which filled these ages had nothing to do with the history of man's redemption.

But now we are currently required by physicists to admit that the six days' work of God was not done in six days, but in six vast tracts of time.

That the deluge did not cover "all the high hills which were under the whole heaven," but only a portion of Central Asia.

That man has been living upon the globe, in its present dispensation, for more than twenty thousand years, to say the least, as appears by some fossil remains of him and his handiwork; and that the existence of the species is not limited to the five

thousand nine hundred years assigned it by the Mosaic chronology.

That the "nations were not divided in the earth after the flood by the families of the sons of Noah;" and that God did not "make of one blood all nations of men for to dwell on all the face of the earth;" but that anatomy and ethnology show there are several distinct species, having separate origins.

That God did not create a finished world of sea and land, but only a fire-mist, or incandescent, rotating, nebulous mass, which condensed itself into a world.

And last, that man is a development from the lowest type of animal life.

Can the Scriptures, my brethren, be shown plastic enough to be remoulded, without total fracture of their authority, into agreement with all these views?

Again, the whole posture and tone of this class of physicists towards revelation is hostile and depreciatory; their postulates, with their manner of making them, imply a claim of far more authority for human science than is allowed to inspiration. Thus, the attempt to restrain any corollaries, however sweeping, which they may draw by the teachings of Scripture is usually resented. But in any other field of reasoning, if two lines of seeming argument lead to contradictory conclusions, men always admit the rule that truths must be consistent among themselves, and, in obedience to it, they surrender the weaker line to the stronger, thus removing the collision. But these physicists never dream of surrendering a deduction simply to the Bible contradiction of it. Thus they betray very plainly whether they think human science more certain than revelation. The very attempt to bring the truth of their scientific conclusions to the test of the Bible is resisted as an "infringment of the rights of science," an unjust restraint upon the freedom of their intellects. Now these men will scarcely claim for a man a right to argue himself into the belief of demonstrated falsehoods. The implication is, that the Scriptures really settle nothing by their own testimony; that is, that they have no true authority with these scholars. The public mind has become so habituated to this imperious attitude of physical science, that it is hard for you to take in its full significance. To enable you to measure it, I will ask you to represent

to yourselves that some of us theologians should raise the corresponding outcry against the physicists: that we should be heard exclaiming, "We resent the intrusions of physical science upon our divine science, as an infringement of the rights of theology; and we resist them wherever they contradict our inferences, as an unjust restraint upon the freedom of man's intellect, when expatiating in this noblest of all its domains!" Realize to yourselves the astonishment with which scientific worldly men would listen to our outcry. They would deem it the extravagance of lunacy in us! And, indeed, we should be rather fortunate if you also did not sympathize a good deal with the charge! It is, in this matter, just as it is in all other cases where Christians and the world meet on common, social grounds. Everybody thinks it obviously reasonable that where a collision would arise, the Christian people must concede, in order to avoid giving offence to the worldly. But should the Christians in any case require the world to concede anything in order to avoid giving offence to the church, in the common social *arena*, although the Christians pay just as good money as the world does for their share, their claim would appear excessively queer, indeed foolish, and wholly out of the question! Why, what are Christians for, if not to make sacrifices and be imposed on? But, if two coördinate sciences impinge against each other, the equality of their authority gives the advocates of the one just as much right of complaint as the advocate of the other, until special inquiry has settled where the fault of the contradiction lies. The feeling which I have above described shows that, in this case, the sciences of nature and of redemption are not thought coördinate, and that the latter is regarded as of inferior authority.

We hear the physicists, again, very condescendingly, lamenting the imprudence of the theologians in thrusting the Scriptures into collision with their sciences. They regret, they tell us, the damage which is thus inevitably done to the credit of religion. They are, indeed, quite willing to patronize the Christian religion as a useful affair, provided it is sufficiently submissive in its behaviour. But their conception about the collision between it and physical science is just that of the engine-driver upon the collision between a child and his mighty locomotive: it was a catastrophe much to be lamented, but only on the child's

account! Sometimes we are told that theology has nothing to do with science; that our imprudence is like that of Hophni and Phineas, in risking the ark of God in their war with the pagans. But what if the Philistines invade the very sanctuary? Shall the ark of God, at their bidding, be expelled from its home on earth? And if the price of its quiet is to be, that it shall have no Shekinah of glory to dwell upon its mercy-seat, and no tables of testimony within it, written by the finger of God, we may as well let the enemy take the empty casket. Now, all these assumptions betray too obviously the belief of their authors that the Bible is fallible, but science infallible.

Again: While I do not charge infidelity upon all physicists, the tendency of much of so-called modern science is skeptical. The advocates of these new conclusions may plead that they only postulate a new exposition of Scripture, adjusted to the results of the "advanced modern thought." But I ask, can any exegesis make our Bible speak all the propositions which I enumerated above, and all the rest which it may please the adventurous innovators to announce, without damaging its authority as a sure rule of faith? The common sense of most men will conclude that such a book is only a lump of clay in the hand of priestcraft, to be moulded into such shape as may suit its impostures. We freely grant all that can be said in favor of caution and exhaustive study, in placing a meaning upon the words of Scripture; but a Bible which does not assert its own independent meaning, as fairly interpreted by itself; a Bible which shall wait for distinct and changing human sciences to tell us what it shall be permitted to signify, is no sufficient rule of faith for an immortal soul. Those who know the current tendencies of the physical sciences well know that we utter no slander in saying that they are towards disbelief of revelation. We have the explicit testimony of an eye-witness in the scientific association of the year, held at Indianapolis, that the great majority of the members from the Northern States openly or tacitly disclaimed inspiration; and this, while many of them are pew-holders, elders—yea, even ministers—in the Christian churches. When asked why they continued to profess a religion which they did not believe, some answered that the exposure and discussion attending a recantation would be inconvenient; some, that it would be pain-

ful to their friends; some, that Christianity was a good thing for their sons and daughters, because of its moral restraints.

Both in the British Isles and in this country, the very worst and most reckless of these physical speculations now receive the most mischievous diffusion. They are inserted in popular text-books, and taught to youth, as though they were well-established scientific truths and veritable organs of mental discipline; and that, even, in some colleges professedly Christian. They are hawked about at second-hand, by popular lecturers, as though they were the commonplaces of science. We find them strained, in feeble but malignant solution, into the magazines which intrude themselves into our families as suitable reading for the Christian household. So that college lads can cultivate, under their father's own roof, by this aid, a nascent contempt for their fathers' Bibles, along with their sprouting mustaches; and misses can be taught to pass judgment at once on the blunders of Moses and the triumphs of Parisian millinery. Worse than all, we sometimes hear of their utterance from the pulpit by ministers, who treat of "Man in Genesis and Geology," intimating, in no doubtful way, that the former record of man's origin is to be corrected by the latter.

Beware, then, my brethren, lest any man spoil you through this vain, deceitful philosophy. Bethink yourselves what is to be done. Are you ready to surrender the infallibility of your Bibles? The advocates of these new opinions may plead that we are not to assume in advance the inspiration of the whole Scriptures, when, as they say, the very question in debate is, whether their sciences do not prove them fallible in part. Even if we granted this, it is still time that we knew where we stand. It is high time that the true quality of this antagonism were unmasked. Let us no longer say, "Peace, peace, if there is no peace." Consider how disastrous it may be to have these new opinions asserted without contradiction. It may be that your son, or daughter, or young pupil, is just now experiencing the bitter struggle of the carnal mind against the calls of the sanctifying Spirit, or that inflamed appetite is panting to overleap the odious but wholesome restraints of the revealed law. How dangerous, at this critical hour, to have them taught that philosophers have found, amidst the stony *strata* and musty fossils

which they explore, undoubted evidence of mistakes in Moses, Paul, and Christ! I tell you that this has become a case under that general truth of which the apostle so faithfully warns us, that "the friendship of the world is enmity to God." You must resist, or you must practically surrender your Bibles. You will have to "take sides" for or against your God. You will find yourselves under a necessity of forbidding the inculcation of this intrusive error to your children, and its entrance into your families, as though it were established truth; no matter what *odium* you may incur, or what institutions or men, styled Christian, may follow the fashion of the times; else, if things go as they now do, the church will have a generation of infidel sons.

II. And this is the position on which the Christian pastor should stand. Unless our Bible—when cautiously and candidly interpreted by its own light—is inspired and infallible, it is no sufficient rule of faith for an immortal soul. Such the Bible is, notwithstanding all the pretended discoveries of vain philosophy. Modern events have not loosened a single foundation stone of its authority, nor can any such discoveries, from their very nature, affect it. But in asserting this confidence, it is not necessary for the theologian to leave his own department, and launch into the details of these extensive, fluctuating, and fascinating physical inquiries; nor shall I, at this time, depart from my vocation as the expounder of God's word, to introduce into this pulpit the curiosities of secular science. We have no occasion, as defenders of that word, to compare or contest any geologic or biologic theories. We may be possessed neither of the knowledge nor ability for entering that field, as I freely confess concerning myself. We have no inclination to deny that these physicists have displayed a surprising industry in their researches; that they have accumulated a multitude of observations; that they have speculated upon them with amazing ingenuity, or that they have actually deduced many useful conclusions. My business is in another field; that of moral evidence. My effort shall be to set forth the nature and conditions of that evidence, as bearing upon the question of the Bible's inspiration and authority; and I shall endeavor to show you that the kind of physical speculations under review, whether they be more or less ingenious or probable, can never reach the level of that higher question.

First, then : Modern physical science is not to be allowed to boast entire immunity from error, or certainty of results, any more than the physical science of the scholastic ages. I am well aware of the proud claim which its votaries now make. While they join in exposing and ridiculing the pretended physics of the middle ages, and even glory in the vast mutations which the natural sciences have undergone, our present physicists always assume that the Baconian *Organon* has given them an immunity from mistake. Henceforth, they boast, the progress of science is firm, yea, infallible, and destined to no reverses or contradictions, but only to continual accretions, upon the impregnable basis laid by the inductive logic. We are living, say they, not in the age of hypotheses, but of experimental demonstration. Those who come after us will never have any such rubbish to remove from our systems, as the calxes, and phlogiston, the Ptolemaic astronomy, and the baseless maxims, such as that "Nature abhors a *vacuum*," which we have cast out of the old philosophy.

Now, while rejoicing in the belief that physical science has made many solid advances, we are skeptical as to the realization of this boast. It is overweening and unreasonable. Man is a fallen and weak creature, impaired in all his faculties. As I argued at the outset, so I insist here : that this finite, fallen, imperfect reason is incompetent to invent an infallible method of investigation, or to apply it with unfailing correctness, if it were given to us. Partial error has marked all the results of our forefathers' speculations ; and if we should arrogate to ourselves an entire exemption from similar mistakes, this vain conceit of ourselves would be the strongest ground for prognosticating our failure. "That which hath been, is that which shall be." Physical science will remain, in part, uncertain and changeable, for the simple reason that it will still be the work of men—men like the predecessors whose science we have convicted of uncertainty. It is true that Lord Bacon called his method a *Novum Organum* ; but he who supposes that the publication of this new method is to make modern science infallible shows himself a sciolist indeed. Did Bacon invent a logical faculty, or only describe a use of it ? He who supposes that any more than the latter was done is as absurd as though

one should say that the drill-master invents legs. Nature makes legs, and also teaches their use by instinct; men managed to walk before ever a drill-master existed, by the impulse of nature's teaching. All that the drill-master does is to teach men to walk better, and oftentimes he cannot even do that. So, our creator gave us the faculty of reasoning, and men syllogized before ever Aristotle described the syllogistic process, and made inductions before Bacon analyzed their canons. If you suppose that the experimental method was never known or valued in physics until Bacon's day, you are much mistaken. In truth, Aristotle, who is called the "Father of Logic," analyzed its laws as really as he did those of the syllogism. But had he not, Nature, man's kindly teacher, would have taught him to appreciate the experimental method; and all men who have reasoned have appealed to it, because it is one of the methods of common sense. Again, if you suppose that all the speculations of the modern sciences are conformed to Bacon's method, you are much mistaken. Sins against its rigor and simplicity are by no means limited to the days of old. Men still forget that hypothesis is not proof; and the same motives, so natural to a fallen soul, which caused mediæval physicists to depart from the safe and rigid processes of experimental logic—haste, love of hypothesis, vain-glory, prejudice, disgust of a proud and overweening heart against the humble, modest, and cautious rules of that method, still mislead men's minds. The assumption that henceforth physical science is to be trusted, and to be free from all uncertainty and change, is therefore simply foolish.

This verdict is more solidly confirmed by facts. Indeed, how can one doubt its general justice when he beholds the sciences of the day in a state of flux before his eyes? Geologic theories change in some particulars with every decade. New facts come to light, such as the supposed discovery of human fossils near Amiens, in France; and of skulls in California, in older *strata* than had been supposed to contain any such remains; or as the deep sea soundings which have lately shown that formations determined, as was asserted, to be older and newer, lie beside each other in the ocean contemporaneously. These discoveries, inconsistent with previous hypotheses, impose to-day a labor of modification upon geologists, and we must be excused

for our lack of confidence in their new structures of theory, with so recent an example of error before us, and with so manifest a pride of opinion influencing the reception reluctantly given to the new facts. Again: we are told that the chemistry taught to-day is different from that which was taught us in the colleges and university thirty years ago—so different as to require a new nomenclature. What reflecting man would deny that unproved hypothesis enters largely into the current physical sciences? Let us mention, for instance, one of the most beautiful, and one which, in parts, has received almost a mathematical accuracy, the science of optics. Is light, itself, a distinct, imponderable substance, as was suggested by Newton to be possibly true? Or is it a molecular function only, of other transparent substances? The latter supposition, we are informed, is now the fashionable one, but has it ever received an exact and exclusive demonstration? Does any one claim for it more than this, that it is a supposition which *may satisfy* all the observed facts about light, so far as we yet know? This is all, we presume, which any careful physicist will assert. Yet how often do we find writers on optics proceeding on this supposition, as though it were demonstrated, to other conclusions and assertions? We are told that the atheistic astronomer, La Place, suggested the “nebular hypothesis” for the origin of our globe, as a possible solution; resting its plausibility on the appearance of nebulous clouds of light among the fixed stars. But since the chief ground of plausibility has been removed by Lord Rosse’s gigantic telescope, resolving some of these *nebulae* into clusters of fixed stars, do we hear our clerical cosmogonists who have adopted this supposition prate any the less glibly about it? Not a whit. And last, as though to convince every sober mind that much of the current physical speculation is but a romantic dreaming, engendered of the surfeit of an over-prurient age, comes Darwinism, and engages a considerable number of the most admired names of physicists for this monstrous idea, that the wondrous creature, man, “so noble in reason, so infinite in faculties, in form and moving so express and admirable, in action so like an angel, in apprehension so like a God,” is but the descendant, at long removes, of a mollusc or a tadpole. No prophet is needed to predict that some, at least, of the current science of our day

will be swept away by the innovations of future physical science itself, as we have discredited much that preceded us.

The supposed conclusions, which seem adverse to the Scriptures as understood by common Christians, are parts of an unstable, because an incomplete system. And I will venture the assertion, without other faculty or acquirement than the light of common sense, that these conclusions are far short of that perfect, exclusive demonstration which would be necessary to unseat the Bible from its throne of authority. A faithful scrutiny would detect sundry yawning chasms between facts and inferences; sundry places where the proposition which, when introduced first, can be called no more than a "may-be," is afterwards tacitly transmuted into a "must-be." Nor is this surprising when we remember the novel and fascinating quality of the observations, and the multiplicity of the premises given by the fruitful variety of nature. Here is a trying labyrinth indeed, to be threaded by the most patient, modest, humble, cautious, finite reason. But are humility, modesty, and caution the characteristics of modern advanced thought? When, for instance, some ethnologists argue that the roots of the different families of languages indicate separate sources for the original tribes of men; when Sir J. Lubbock argues, from presumed social laws, that our civilization has raised man out of a primeval savage state; when Bunsen reasons that man has been more than twenty thousand years upon our globe, from the supposed coincidence of some human fossils with older deposits: do you suppose that their proofs are of that character which, in a court of justice, would stand the test of adverse counsel at law in every link, and remain so conclusive beyond all doubt as to justify an honest jury in taking a fellow creature's life? The inventors themselves would doubtless recoil with a shock from such a responsibility!

But the Bible, by reason of its demonstrative evidences from the independent fields of history, criticism, miracles, fulfilled prophecy, internal moral character, and divine effects on human souls, is in prior possession of the ground of authority. We hold the defensive. The burden of proof against us rests with the physicists. Nothing is done to oust the Bible, until they construct a complete, exhaustive demonstration; not only that

created things *may have* arisen, as modern science surmises, but that they *must have* arisen thus, and not otherwise. Let us suppose that we saw a group of ingenious and well-informed mechanics around a steam engine which bore no maker's label or mark. The question is: where and by whom was it made? They are certain that it might have been made in Philadelphia; they tell us that they know the skilled labor, the appliances, the metals are there for the production of just such a machine; and adding certain marks which are like those communicated to such work by the builders of that city, they are about to conclude that this engine came thence. But now there steps forth a sturdy, respectable Englishman, whose word no man has any right to doubt, and says: "Yes, it might have been made in Philadelphia; yet it was not, for I brought it from London." Is not mighty London confessedly equal to the production of just such a work? Then here is a case in which the Englishman is undeniably competent to testify, and if he is also found credible, the hypothetical reasons of the ingenious mechanics are *wholly out of place* if advanced to rebut his testimony, because the truth of what he testifies does not in the least clash with the grounds of their surmise. He can say to them, with perfect truth: "Gentlemen, I do not impugn your knowledge or skill; I do not dispute a word which you testify of the resources of your city; your surmise, hypothetically, is perfectly reasonable; as far as at first appeared from the machine itself, it *might have been made* in Philadelphia; and yet, in point of fact, it was made in London, as I know." Thus: if there is an all-wise, Almighty God, it must be allowed that he is fully equal to the production of this earth and its organisms. However fair, hypothetically, the surmise may be, that they were produced by other agencies, if there is a credible, independent witness that, in fact, they were made by God, the testimony is relevant, and the supposititious inferences wholly irrelevant to rebut it.

Finally, no naturalistic arguments from observed effects to their natural causes, however good the induction, have any force to prove a natural origin for any structure older than authentic human history, except upon atheistic premises. The argument usually runs thus: we examine, for instance, the disposition which natural forces now make of the sediment of rivers. We

observe that when it is finally extruded by the fluvial current into the lake or sea where it is to rest, it is spread out horizontally upon the bottom by the action of gravity, tidal waves, and such like forces. The successive deposits of annual freshets we find spread in *strata*, one upon another. Time, pressure, and chemical reactions gradually harden the sediment into rock, enclosing such remains of plants, trees, and living creatures as may have fallen into it in its plastic state. The result is a bed of stratified stones. Hence, infers the geologist, *all stratified and fossil bearing beds of stone have a sedimentary origin*, or other such like natural origin. Hence winds and waters must have been moving on this earth long enough to account for all the beds of such stone on the globe. Such is the argument in all other cases.

Grant now that an infinite, all-wise, all-powerful Creator has intervened anywhere in the past eternity, and then this argument for a natural origin of any structure, as against a supernatural, creative origin, becomes utterly invalid the moment it is pressed back of authentic human history. The reason is, that the possible presence of a different cause makes it inconclusive. Now, I well know that this conclusion, simple and obvious as it is, awakens a grand outcry of resistance from physicists. "What," they exclaim, "do not like causes always produce like effects? This principle is the very *fulcrum* of the lever of induction; unsettle it, and you shake all science; remove it, and all her exploits are at an end." Very true; all these illegitimate exploits in this region of a past eternity, whose solemn romance so piques the curiosity and inflames the enthusiasm of the human mind, in which science vainly seeks to measure strength in the dark with an inscrutable omnipotence; all these delusive exploits are ended. But within the proper sphere of science, we leave her the full use of her foundation principle, and bid her good speed in its beneficial use. And that is the sphere of practical inquiry, within the historical past, the present, and the finite, terrestrial future, where we can ascertain the absence of the supernatural.

But to show how utterly out of place the principle is in the past eternity, in which it must meet an Almighty First Cause, and meet him we know not where, let me add two very simple

thoughts: "Like causes always produce like effects?" Yes, provided the conditions of action remain the same. But is it forgotten that *a proposition does not prove its converse?* The admission, that like causes always produce like effects, is not enough to demonstrate that all similar effects have come from the same causes. Suppose we are compelled to grant the presence of another, independent, unlike, yea, omnipotent cause; and suppose we are compelled to admit that it may have intervened at any time prior to actual human history, as all except atheists do admit? Now, in the presence of this vast, *unlike cause*, where is your valid inference, from like effects to the like causes? It is wholly superseded. It may be asked: "Must we then believe, of all the pre-Adamite fossils, that they are not, as they obviously appear, organized matter; that they never were alive; that they were created directly by God as they lie? The answer is, that we have no occasion to deny their organic character, but that the proof of their pre-Adamite date is wholly invalid, when once the possibility of creative intervention is properly admitted, with its consequences. For the assumed antiquity of all the rocks called sedimentary is an essential member of the argument by which geologists endeavor to prove the antiquity of these fossils. But if many of these rocks may have been created, then the pre-Adamite date of fossils falls also. Moreover, when we are confronted with an infinite Creator, honesty must constrain us to admit, that amidst the objects embraced in his vast counsels, there may have been considerations, we know not what, prompting him to create organisms, in numbers, and under conditions, very different from those which we now term natural. After the admission of that possibility, it is obviously of no force for us to argue, "These organisms must have been so many ages old, supposing they were produced, and lived, and died under the ordinary conditions known to us." This is the very thing we are no longer entitled to suppose.

But hear the other thought. Grant me any creative intervention of a God, in any form whatsoever, and at any time whatsoever, then it is inevitable that any individual thing, produced by that intervention, must have presented, from its origin, every trait of naturalness; for it was produced by a rational Creator for the purpose of being—if inorganic—a part of a natural

system, to be providentially governed through the laws of nature; or—if organic—to be, moreover, the parent of a species or race of organisms like itself. The inference is as sure as geometry; for if the first, the parent organism, had not all the properties natural to the species, how could it generate that species? What is the definition which science itself gives of identity of species? It is the aggregate of those properties, precisely, which are regularly transmitted through natural generations. Then, the first organism, made by the Almighty to be the parent of the species, must have been endued with all the properties natural to the species, or to its subsequent members. Now, then, if the argument of our physicists to a natural origin is universally valid—that the like effects must be from the like natural causes—it is valid to prove that this first supernatural organism was also natural. But, according to our case as agreed on, it was not natural. And from this reasoning there is no possible escape, save in absolute atheism.

As this is a conclusion of fundamental importance, let us make it still clearer by applying it in a fair instance. We will suppose that within the lifetime of Seth an antediluvian physicist appeared, investigating the origin of the human species precisely upon the modern principles. He exhumed the remains of Abel and of Adam, and submitted them to a critical examination. He also enquired of Seth what was his belief concerning the origin of the race. That patriarch answered, that the testimony of God, delivered by the venerable Father of Man, Adam, perfectly cleared up the matter; that he, his murdered brother Abel, the unnatural murderer Cain, were all the natural progeny of a first pair, who were themselves the supernatural, adult productions of the Creator, without human parents. But to this simple account of the matter the man of science necessarily demurred; for he had examined Adam's bones, and found them exhibiting every mark of growth from a natural infancy. He had, for instance, possessed himself of that very arm-bone with which, as the unphilosophic myth of Seth would fain teach, Adam had cultivated the primeval garden. Our naturalist had sawed out a transverse section of this bone; he had polished it down to a translucent film; he had poured a pencil of microscopic light through it; and lo, there appeared plainly, as in any other bone,

the cellular tissue filled with that earthy salt, phosphate of lime, which gives to all natural bones their rigidity. And then our naturalist exclaimed, "Why, Seth, the very microscope contradicts you. We have learned from human physiology that all bony matter is thus formed by nature: first, the cellular tissue grows, and then the infant's little frail, flexible bones acquire a gradual solidity by the deposition of phosphate of lime in the cells, until, as the child becomes a mature adult, the full charge of this earthy substance gives the density and firmness of the bone of the sturdy man. Now, you observe that this bone of Adam has that density. By the unfailing maxim, that 'like causes produce like effects,' I know that this bone must have been thus produced; that it was once the flexible, gelatinous structure of the *fetus*, then the soft bone of the babe, and at length, by gradual growth and deposition of the earthy salt, the mature adult bone which we see. Hence, science must pronounce your story untrue, when you say that this person's body had no natural parentage, but was produced in a mature state by a Creator." To this beautiful induction the common sense of Seth doubtless objected; that God told Adam, for all that, he had made him without natural parents, the first of his kind; a testimony which Adam's own recollection confirmed, in that, from his earliest consciousness he had been a grown man, and there had been no older human being with him at all. Seth doubtless protested, that this testimony he should believe in spite of seeming science. And we may imagine that our naturalist grew quite impatient with his stupid obstinacy, and, as he thrust the microscope under his nose, exclaimed, "Why, man, look here; seeing is believing; your own eyes will tell you that this is natural bone, and so must have grown naturally."

Yet, still the naturalist was wrong, and Seth was right. He could have proved it even without claiming Adam's testimony; he could have reminded this naturalist that, if his reasoning necessarily proved that Adam had a parent, then the same reasoning, applied to a bone of Adam's father, would prove with equal certainty that *he* had a father in his turn, and then that there must have been a grandfather, a great-grandfather, and so backwards forever. But now it is a conclusion of science itself, that an infinite series backward, without original cause outside of itself, is an impos-

sible self-contradiction. This conclusion is of geometrical rigidity, and is recognized by all modern philosophers, even the most anti-Christian. The denial of it is, moreover, blank atheism. Now, then, if the antediluvian naturalist cannot hold this absurd and atheistic history of an infinite series of human generations literally, without beginning from past eternity, he must admit that somewhere in the past there was the *first man*. But his arguments from the natural properties of that first man's remains must inevitably be false in that case. Well, then, he might just as well admit that the argument from Adam's bone was worthless in his case. Seth's testimony is found, after all, strictly competent to the question; and, if his character is seen to be trustworthy, perfectly decisive of it. Seth could, moreover, have supported his own credibility by most weighty experimental facts: such as the exceeding fewness, in his day, of those very bones and other remains of dead human generations; the scantiness of the members of the human family, compared with their evidently prolific powers, and the obvious marks of recency attaching to the whole condition of the race.

Now I claim that my instance is fair; the parallel defect will appear in every attempt of modern science to push the Creator's intervention back of the earliest human history by such inductive reasoning. And I ask, with emphasis, if men are not in fact reaching after *atheism*; if their real design is not to push God clean out of past eternity, why this craving to show his last intervention as Creator so remote? Why are they so eager to shove God back six millions of years from their own time rather than six thousand? Is it that "they do not like to retain God in their knowledge"? It is not for me to make that charge. But have I not demonstrated that the validity of their scientific logic, in reality, gains nothing by this *regressus*?

Once more: let men explicitly relinquish the horrible position of atheism; and they must admit, somewhere in the past, the working of a Being of "eternal power and Godhead." And that admission contains another: that this eternal, sovereign Maker was, of course, *prompted by some rational design* in making what he then chose to make. That is, in the language of natural theology, God must have some *final causes* for what he does, of some sort or other. While we may not audaciously

speculate as to what they were, yet so much is obvious, that in this vast and inscrutable counsel of the Maker's purpose, amidst all the wide designs of the Infinite Reason, the material is intended to subserve the spiritual. As the body is for the mind, and not the mind for the body, so the whole world discloses thus much of its Maker's purpose, that the irrational creation is for the sake of the rational. Shall philosophers be the men to impugn this? They cannot. All nature would cry shame on them for doing so. For what is their preferred glory over the rest of us common men? It is the superior use of their reason.

Now God is manifestly so infinite in wisdom and power, that any creative exploit to which his own final causes might prompt him is as easy to him as any smaller one. Suppose that he may have had rational ends to gain from the production of a world already organized and equipped for the home of a reasonable race of his servants. Then it was no more fatiguing or inconvenient to him to produce such a world six thousand years ago, in all its completeness, than to produce, six millions of years ago, simply a nebulous, incandescent mass of vapor, out of which to grow a world. But, it will be said, is not that statement purely hypothetical? I reply, yes; in advance of revealed testimony, it is. But its legitimate use is *to show that there is a competent and relevant case here for just such testimony*. Now, then, if such a witness appears, and his credibility has sufficient moral supports, his testimony is good. And this view of the matter is as really the most scientific as it is the most Christian.

Hence, brethren, I hold that there is, and there can be, no proper collision between the most explicit and authoritative theistic testimony and sound natural science. They cannot clash, because wherever, in travelling backwards, the domain of creative Omnipotence is met, there true natural science stops. Let us hold this ground, and we have no need to debate any particular hypothesis as to the origin of organism, or to choose this rather than that. We have no call to leave the sphere of morals and theology to plunge into the secular disputes of anatomists or mineralogists. Neither have we any need to force a strained exegesis upon God's record of his own omnipotence in order to conciliate uncertain and fluctuating human sciences.

The best antidote, my hearers, for all this naturalistic unbe-

lief is to remember your own stake in the truth of redemption ; and the best remedy for the soul infected is conviction of sin. "Beware lest any man despoil you through a vain, deceitful philosophy." Of what will they despoil you ? Of a divine redemption, and a Saviour in whom dwell the divine wisdom, power, love, and truth, in all their fulness ; of deliverance from sin and guilt ; of immortality ; of hope. Let naturalism prove all that unbelief claims, and what have you ? This blessed Bible, the only book which ever told perishing man of an adequate salvation, is discredited ; God, with his providence and grace, is banished out of your existence. But is consciousness discredited, which assures you that you are a spiritual and responsible being ? Is sin proved a fancy and death a myth ? Alas, no. These imperative needs of the soul still remain, and crush you as before ; but there is no deliverer. In place of a personal God in Christ, Father, Friend, Redeemer, to whom you can cry in prayer, on whom you may lean in your anguish, who is able and willing to heal depravity and wash you from guilt, who is suited to be your portion in a blessed immortality, you are left face to face with this eternal nature, impersonal, reasonless, heartless. Her evolutions are but the movements of an infinite machine, revolving by the law of a mechanical necessity, and between her upper and nether millstones the corn is this multitude of human hearts, instinct with life, and hope, and fear, and sensibility, palpitating, writhing, and bleeding forever under the remorseless grind. Yes, for aught you know, forever ! for this dreary philosophy cannot even give you the poor assurance of annihilation. Even though it should banish God from your creed, it cannot banish the anticipations of immortality from your spirit. Naturalism is a virtual atheism, and *atheism is despair*. Thus saith the apostle : "They who are "without God in the world" are "without hope." (Eph. ii. 12.) Young man, does it seem to you an alluring thought, when appetite entices or pride inflates, that this false science may release you from the stern restraints of God's revealed law ? Oh ! beware, lest it despoil you thus of hope and immortality. Remember those immovable realities, sin, guilt, accountability, which no vain, deceitful philosophy will be able to hide in the hour of your extremity. Look at these great facts in that light

in which, as you well know, death, "that most wise, eloquent, and mighty teacher," will place them. How poor and mean will all these pretentious sophisms appear in that hour?

Hence, I am not afraid to predict an assured final triumph for the Bible in this warfare. In the end, the spiritual forces of man's nature must always conquer, as they always have conquered. Look back, proud Naturalist, upon history; your form, and all other forms of skepticism, have been unable to hold their ground, even against the poor fragments and shreds of divine truth which met you in Polytheism, in Mohammedanism, in Popery. Man, however blinded, will believe in his spiritual destiny in spite of you. Let proud Naturalism advance, then, and seek its vain weapons groping amidst pre-Adamite *strata* and rotten fossils. The humble heralds of our Lord Christ will lay their hands upon the heartstrings of living, immortal man, and find there always the forces to overwhelm unbelief with defeat. Do men say their propositions are only of things spiritual? Aye, but spiritual truths are more stable than all their primitive granite. These imperishable truths rest on the testimony of consciousness, a faculty more valid than sense and experience: because, only by admitting its certainty can any perception or experience of the senses claim validity.

Centuries hence, if man shall continue in his present state so long, when these current theories of unbelief shall have been consigned, by a truer secular science, to that *limbus* where the Ptolemaic astronomy, alchemy and judicial astrology, lie condemned, the servants of the cross will be winning larger, and yet larger, victories for Christ, with the same old doctrines preached by Isaiah, by St. Paul, by Augustine by Knox by Davies.

THE CAUTION AGAINST ANTI-CHRISTIAN SCIENCE CRITICISED BY DR. WOODROW.¹

IN May, 1869, I addressed a memorial on theological education, not to the General Assembly, but to the Committee on Theological Seminaries. Called by the church and Assembly to this work almost from my youth, I had devoted sixteen of my best years to their service, as a teacher in one of the Assembly's schools of divinity. I was conscious that I had studied this great interest, and engaged in this labor, with all the zeal and attention of which my feeble powers were capable. It was obvious that our system of seminary instruction was still, notwithstanding its valuable fruits, in several respects experimental. It had been borrowed, by Drs. A. Alexander and J. H. Rice, mainly from Andover, then the only institution of this precise nature in America, for Princeton and Union Seminaries. But Andover was Congregational—we are Presbyterians. I saw that there was danger lest features borrowed by these beloved fathers provisionally should, by unquestioned usage, harden into fixed precedents, which they never desired, when, perhaps, time might show that these features were unsuited, or not best suited, to our policy and principles. As our church was then, in God's providence, passing anew through a formative state, it seemed the right time to discuss these points of seminary management. Who should evoke that discussion, if not the men to whom the church has entrusted the business? I, though not an old man, was very nearly the oldest teacher in divinity in the service of the church. Now, I might have sought moral support for my views by manœuvring to get some faculty, or colleague, or my Presbytery, or my Synod, or a majority thereof, to "father"

¹Appeared in the *Southern Presbyterian Review*, for October, 1873, in answer to a criticism by Rev. James Woodrow, D. D., on the preceding article.

them, in the form of an "overture" to the Assembly. But, as I desired to speak out my whole mind respectfully, yet honestly, I preferred to have my views go before the Assembly unsupported by factitious props, and let them receive only that assent to which their intrinsic merit might entitle them.

The memorial was not read in the Assembly of 1869, but was referred to the faculties and directors of Columbia and Union Seminaries, going first to the former. The authorities at Columbia disapproved all my views. The papers were then mislaid for a time among the officers and committeemen of the Assembly; I know not how. Finally, another committee of the Assembly reported, without ever having met as a committee, or having seen my memorial, advising that the subject be finally dropped, on the single ground that so decided a dissent of one seminary would make it improper to attempt any improvements, whether valuable or not. Thus the paper was consigned to "the tomb of all the Capulets;" and I was refused a hearing, when neither church nor any of the Assemblies knew anything whatever of my recommendations, save from the version of my opponents. Had I demanded the privilege of dictating my views, this reception would have been just. But the humblest servant expects a *hearing*, when he comes to the most imperious master, in the spirit of humble zeal and fidelity, to inform that master of the interests of *his* property entrusted to the servant's care. That mere hearing was what I asked for; and only for my master's good, not my own; for the only result to me, of the adoption of my views, would have been increase of toil and responsibility; but even a hearing has been refused me.

This, however, is a digression. One of the points made in this forgotten memorial was an objection to the introduction of chairs of natural science into our seminaries. These sciences, and especially geology, have been so largely perverted to the interests of unbelief, that sundry friends of the Bible, in their uneasiness, came to think that our seminaries should be provided with chairs to teach these sciences, in their relation to inspiration, to all the pastors of the church. I recognized the danger, but dissented from this mode of meeting it, on three grounds, which still seem to me perfectly conclusive. One was, that the amount of instruction which could be thus given on these intri-

cate and extensive branches of knowledge in connection with the arduous studies of a three years' course in divinity, would usually prove inadequate to the end proposed; whence I conclude that the defence of inspiration against the perversions of these sciences would be better left to learned Christian laymen, and to those pastors and teachers whose exceptional talents and opportunities fitted them for going thoroughly into such studies. My second point was, that the study of modern geology, especially, is shown by experience to be seductive, and to have a tendency towards naturalistic and anti-Christian opinions. Some, of course, must master these matters, notwithstanding any dangerous tendencies; but it would be more discreet not to place the Christian men especially devoted to these seductive pursuits in the very schools where our pastors are all taught, and not to arm them with the church's own power and authority for teaching an uninspired and fallible branch of knowledge *ex cathedra* to all our pastors; because, should that happen among us, at some distant day, which has often happened to others, it would be far more detrimental to have the defection in a citadel of the church than in an outpost. To show that I was not insinuating any doubt of any living man, I added: "*The undoubted soundness of all our present teachers and clergy, and their unfeigned reverence for inspiration, now blind us to the ulterior tendency of such attempts. It may be two or three generations before the evil comes to a climax.*" My third argument was the most conclusive of all. It was grounded in the fact that our church and all its ecclesiastical powers are founded upon a doctrinal covenant—our Confession and Catechisms. Hence, I argued, the church cannot, by ecclesiastical power, teach her presbyters *ex cathedra* in her seminaries—which, if they have any right to exist at all, are ecclesiastical institutions—a set of opinions which are clear outside of our doctrinal covenants. And this was the more conclusive because it was morally certain that any theory of adjustment between geology and Moses, which would be taught by any modern geologist, would contradict the express terms of our doctrinal covenants as they now stand. For each of these schemes of adjustment postulates the existence of a pre-Adamic earth and living creatures; but our Confession, Chap. IV. Sec. 1, expressly asserts the contrary. Now, this being the case,

and some of our ministers holding one, and others holding a contrary scheme of adjustment, and others, again, being, like myself, committed to none, it must follow that, sooner or later, the attempt to inculcate one of these schemes by ecclesiastical authority must lead to strife among ourselves. How soon has this been verified! Dr. Woodrow's groundless apprehension that I was seeking to inculcate a different scheme from his, has already verified it! Now, we do not regard our Confession as infallible; but it is our doctrinal covenant, and we are surely right, therefore, in expecting, at least, thus much, that those who believe they have detected positive error in it, ought candidly to move the church to agree together upon the correction of that error; and they are the proper persons to show how to correct it, if they can.

But meantime, Judge Perkins had endowed a chair of "Natural Science in connection with Revealed Religion" in Columbia Seminary, and Dr. Woodrow was its incumbent. Is this critique his retaliation for my presuming to exercise my right of dissent? I carefully remove all provocation, by making, as I have recited, a most express and honorable exception in favor of him and all his colleagues and pupils. It will appear in the sequel as though he were bent upon excepting himself from the benefit of my exception, and verifying in his own case the caution which I was too courteous to apply to him.

The first criticism which I notice is, the charge that I disallow and reject all physical science whatever; and that I do it upon the implied ground that revelation can only be defended by disallowing it all; thus virtually betraying the cause of the Bible with all intelligent men. This misconception of my aim will be so astonishing to all impartial readers, that perhaps they will be slow to believe Dr. Woodrow has really fallen into it. Hence I quote a few of his own words. *Review*, p. 328: "Dr. Dabney has been keeping up for a number of years an unremitting warfare against physical science." There must be a good many remissions when Dr. W.'s zeal can find but three blows in seven years. Page 333: "Dr. D. endeavors to excite hostility against physical science," etc. Page 335: "Having taught . . . that physical science is vain and deceitful philosophy," etc. Page 337: "If he had confined himself to saying that

the tendency of much of so-called modern science is skeptical, he might easily have substantiated this assertion. But . . . he maintains no such partial proposition," etc.

But this is precisely the proposition which I do maintain; having stated and defined it precisely thus in my own words. I presume that Dr. Woodrow is the only reader who has so misconceived me. My last and chief publication, the sermon in Lynchburg, is entitled, "A Caution against *Anti-Christian Science*." Why may I not be credited as understanding and meaning what I said? Dr. Woodrow exclaims, as he cites from my own words my respectful appeal to the physical science of Drs. Bachman and Cabell, or to the refutation of the evolution hypothesis of Darwin, etc., by Agassiz and Lyell, or to the proof of actual, new creations of *genera* by fossil-geology: "Is Saul among the prophets?" Why may it not be supposed that I was not an ignoramus, and so was consistent with myself, and knew what I was saying? The anti-Christian science which I disallow was here expressly separated from this sound physical science. But again: In the introduction of the sermon I hasten to separate and define the thing I attack. On the second page I tell my readers that it is the "prevalent, vain," physical philosophy. Now every one knows that it is the materialistic philosophy of Lamarck, Chambers (*Vestiges*), Darwin, Hooker, Huxley, Tyndall, Herbert Spencer, Büchner, which is now the "prevalent" one. That is, these and their followers, like the frogs in the fable, who made more fuss in the meadow than the whole herd of good bullocks, are notoriously "prevalent" upon the surface of the current literature. It is these whom people called "intelligent" now usually read in the journals of the day. They hear of Darwin and his friends a thousand times, and do not hear of Dr. Woodrow's sound and safe science at all. I presume that there was not a gentleman in my audience in Lynchburg who did not see that I opposed these materialistic physicists, and them alone. I further defined the thing I opposed as that which affects "positivism;" which attempts to construct a "sensualistic" psychology; which refers everything, as effects, to the laws of material nature and of animal life. One would think that the materialistic school of Darwin, Huxley, *et al.*, was in these words defined beyond possibility of mistake to the well-

informed hearer. All such would, moreover, clearly understand me as meaning these, because they knew that I knew it was precisely this school of physicists which was making nearly all the noise and trouble in the popular literature of the day, described by me in subsequent passages of the sermon.

But Dr. Woodrow, rather than give me the benefit of my own definition of my own object, on page 335 of his *Review*, launches out into the most amazing misunderstanding and contradictions. Indeed, the passage is to me unintelligible, except that his astounding denial of the attempt made by the followers of Hume, and of Auguste Comte, to give a "sensualistic" explanation of the "mind's philosophy," betrays the fact that he has wholly failed to apprehend what I was speaking of. Had I learned manners in the school of Dr. Woodrow, I should here be warranted in retorting some of his very polite language on pages 368 to 370, and "prove that *he* is acquainted neither with the method nor the ends of" *mental* "science;" that he "has refused to learn" about the history of psychology "what boys in college can understand," or that he "is ignorant of the difference between true science" of mind "and the errors uttered in its name," etc., etc. But instead of doing so, I shall simply beg Dr. Woodrow's attention to some very familiar facts in the history of philosophy, which I trust will enable him to see my meaning. Be it known then, that especially since the days of Hartley in England, and Condillac in France, there have been in those countries, schools of philosophers, whose main characteristic is that they ascribe to the human mind no *original* functions save those of sensibility and sense-perception. They deny all *à priori* powers to the reason, and disbelieve the existence, in our thinking, of any really primitive judgments of reason. They teach that all logical principles are empirical. They hold in its sweeping and absolute sense the old scholastic maxim, "*Nihil in intellectu quod non prius in sensu.*" The consistent result of so false an analysis was foreseen to be materialism; and so it resulted. Now, the term employed to denote this school of psychology, from the days of the great and happy reaction under Royer Collard and others in Paris, and Emmanuel Kant in Königsburg, was *sensualistic*, sometimes spelled by the English philosophers, as Morell, *sensationalistic*; and the name

is appropriate, because the school sought to find all the sources of cognition in the *senses*. This common error characterized the deadly philosophy of Hume, the scheme of Auguste Comte, termed by himself *positivism*, and the somewhat diverse systems of Buckle, John Stuart Mill, and of Darwin and Huxley; who, while disclaiming *positivism* in that they do not adopt some of Comte's crotchets, yet hold this main error, and consequently reach, more or less fully, the result, blank materialism. One of the worst characteristics of the type of physical science now so current through the writings of these men, is the union of this "sensualistic" psychology with their physical speculations, whence there results almost inevitably a practical atheism, or at least a rank infidelity. I hope that Dr. Woodrow is now relieved, and begins to see what was the "anti-Christian science" which I opposed in my sermon and other writings.

I will now add, that at the end of last April, two months before the publication of Dr. Woodrow, he did me the honor to write me very courteously, at the prompting of a good man, a friend of peace, notifying me of his intended critique. I wrote him, the first of May, a polite and candid reply, in which occurred the following sentences:

"REV. AND DEAR SIR: Your courtesy in advertising me of your article deserves a thankful acknowledgment. I beg leave to tax your kindness with a few remarks before you finally commit your MS. to the press. The few words which passed between us in Richmond showed me that I had not been so fortunate as to convey the real extent and meaning of my views to you. This misconception I will make one more effort to remove, in order to save you and the public from discussions aside from the real point. . . .

"I conceive that there is but one single point between you and me, which is either worthy or capable of being made a subject of scientific discussion. It is this: I hold that to those *who honestly admit a Creator anywhere in the past, the a posteriori argument from naturalness of properties to a natural—as opposed to a creative or supernatural—origin of the structures examined, can NO LONGER BE UNIVERSALLY VALID.* That is, really, the only point I care for. Now let me appeal to your candor to disencumber it of misapprehensions and supposed monstrous corollaries, and where is the mighty mischief?

"But, you may say, Dr. Dabney is understood as holding the above in such a sense as to involve the assumption that all save the '*pleistocene*' fossils are shams; that is, that the older fossil remains of animal life never were alive, but that God, in creating the world, created them just as they are, probably for the purpose of 'hugging' the geologists. Now I have never said nor implied any such thing, and do not believe it. *Search and see.* You may return to the charge with this inferential argument; that the doctrine means this, or else it has no point to it. *It*

does not mean it in my hands, and I will show you what point I think it has. Let that ugly bugaboo, I pray you, be laid.

“Again, you will find, if you will search my notes and sermon, that I have not committed myself for or against any hypothesis held by truly devout, Christian geologists. I have not said that I rejected, or that I adopted, the older scheme of a pre-Adamite earth, as held by Drs. Chalmers, Hodge, Hitchcock, etc. I have not committed myself for or against the hypotheses of Cardinal Wiseman, and Dr. Gerald Molloy of Maynooth. No man can quote me as for or against the ‘uniformitarian’ scheme of Sir Charles Lyell as compared with the opposite scheme of Hugh Miller. As to the other propositions advanced in my notes and sermon, I presume they can hardly be made the subjects of scientific debate between us, even if of difference. We shall hardly dispute whether sham-science, disparaging Moses, is, or is not, wholesome reading for the children of the church. We shall hardly differ about the propriety of carrying that solemn conscience into physical speculation which sinners usually feel when they come to die. It can hardly be made a point for scientific inquiry, whether your larger or my smaller admiration for the fascinating art of the mineralogist is the more just.

“The only real point which remains, then, is my humble attempt to fix the ‘metes and bounds’ of physical *a posteriori* reasonings when they inosculate with the divine science. Obviously, atheistic physicists wholly neglect these metes and bounds. Obviously again, many theistic physicists—as Hitchcock, *Religion of Geology*—dazzled by the fascination of facts and speculations, are overlooking these metes and bounds. Now, that inquiry may proceed in a healthy way, and the ground be prepared for safe hypothesis, it is all-important that a first principle be settled here. I offer my humble mite, by proving that, to the theistic reasoner—I have no debate here with atheists—the proposition cannot hold universally true that an analogous naturalness of properties in a structure proves an analogous natural origin. I do not care to put it in any stronger form than the above.

“But when cleared of misconceptions, this proposition, to the theist, becomes irresistible. ‘Geologists’—meaning of course the ones defined in the previous paragraph—refuse all limitations of analogical, *a posteriori* arguments, claiming that ‘like causes always produce like effects,’ which, say they, is the very corner-stone of all inductive science. But the real proposition they employ is the converse of this, viz.: ‘Like effects always indicate like causes.’ Now, first, must I repeat the trite rule of logic, That the converse of a true proposition is not necessarily true? Secondly, The theist has *expressly admitted another cause*, namely, an infinite, personal Creator, confessedly competent to any effect he may choose to create. Hence, the theist is compelled to allow that this converse will not hold universally here. Thirdly, A wise creator, creating a structure to be the subject of natural laws, will *of course* create it with traits of naturalness. Hence, whenever the mineralogist meets with one of these created structures, he must be prepared to find in it every trait of naturalness, like other structures of the class which are originated naturally. Fourthly, To the theist this argument is perfect, when applied to all vital organisms. The first of the species *must* have received from the supernatural, creative hand every trait of naturalness, else it could not have fulfilled the end for which it was made, viz., to be the parent of a species, to transmit to subsequent generations of organisms the specific nature. And, fifthly and lastly, To deny this would compel us still to assign a natural parent, *before the first created parent*, of each species of generated organism: which would involve us in a multitude of infinite *series*, without causes outside of themselves. But this notion science herself repudiates as a self-contradictory absurdity. . . . etc.

“*What use* is to be made of this conclusion, if admitted? First, to save us from being betrayed into some theory of cosmogony virtually atheistic. Secondly, to make you and me, those who love geology and those who are jealous of it, modest in constructing hypotheses; to remind us, when examining the things which disclose ‘eternal power and Godhead,’ how possibly we may have gotten into contact with the immediate *Hand* who ‘giveth no account to any man of his matters.’

Very faithfully yours,

R. L. DABNEY.”

As to my argument in this letter, on the main point we shall see anon. Now, of course it was impossible for me to foresee the amazing misapprehensions into which Dr. Woodrow had fallen. But had I been prophet enough to foresee them, I could hardly have chosen terms more exactly adapted to remove them, and to demonstrate that I did not attack all physical science; that I did not recommend universal skepticism of all but mathematics and the Bible; that I did not teach God had created a lie in putting fossils into the rocks, etc. But probably it did not avail to change one word; Dr. Woodrow was not to be thus balked of the pleasure of printing a slashing criticism of one who had given no provocation to him. Leaving it to the reader to characterize this proceeding, I would only ask if I was not entitled to the benefit of my own exposition with the public? May I not claim the poor right, never denied even to the indicted felon, of speaking my own speech and defining my own defence? Had Dr. Woodrow deemed my statements in my letter inconsistent with those in my sermon, he might at least have given me the benefit of a change towards what he considers the better mind.

I shall be reminded that the misconception of my scope was justified by such language from me as this: “The tendencies of geologists are atheistic.” “These sciences are arrayed in all their phases on the side of skepticism,” etc. These statements are all true, and consistent with my high respect for all true physical sciences. All of them are arrayed by some of their professed teachers, on the side of skepticism. Or, as I defined my meaning in the sermon, these sciences of geology, natural history, and ethnology, now exciting so much popular attention, “always have some tendency to become anti-theological.” I believe this to be true. They always have this tendency, but not always this effect. A tendency is a partial *drift* towards a certain result. It may exist, and yet in a multitude

of cases it may have no effect, because countervailed by opposing tendencies; or better still, opposing causes. Thus it appears clearly to be the doctrine of Scripture, that the possession of wealth always has, with frail man, a *tendency* towards carnality; yet all rich Christians are not carnal. Witness Abraham, the father of the faithful, yet a mighty man of riches; and the prince of Uz, Job. Hence a good man may, for valid reasons, own riches, and may even seek riches; yet, until he is perfectly sanctified, their pursuit is doubtless attended with a certain element of spiritual danger. If he does his duty in prayer and watchfulness, this danger will be counterpoised and he will remain safe. Now it is precisely in this sense that I hold these studies always to have some tendency to become anti-theological. Yet it may be even a duty to pursue them, prayerfully and watchfully; and many good men, like Dr. Woodrow, may thus escape their drift towards rationalism, though, like Abraham, acquiring great store of these scientific riches.

I assigned, as I thought very perspicuously, the reasons of this tendency. First: it is both the business and the boast of physical science to resolve as many effects as possible into their second causes. Repeated and fascinating successes in these solutions gradually amount to a temptation to the mind to look less to the great First Cause. The experience of thousands, who were not watchful and prayerful, has proved this. Again; geology and its kindred pursuits have this peculiarity, that they lead inquiry full towards the great question of the *Αρχη*, the fountain head of beings. Now let a mind already intoxicated by its success in finding the second causes for a multitude of phenomena which are to meaner minds inexplicable, and in addition, secretly swayed by that native hostility which the Scripture declares lurks in all unconverted men, "not liking to retain God in their knowledge," let such a mind push its inquiries up to this question of the beginning of beings, there will be very surely some anti-theological tendency developed in him. Is it asked why all other human sciences, as law, chemistry, agriculture, are not chargeable with the same tendency? The answer is: because they do not come so much into competition with the theistic solution of the question of the origin of things. Is it denied that geology does this; and are we told that Dr.

Dabney has betrayed his scientific ignorance by supposing that geology claims to be a cosmogony? Well, we know very well that Sir Charles Lyell, in the very outset of his *Principles of Geology*, (London, 1850), has denied that geology interferes with questions of cosmogony. And we know equally well, that if this be true of his geology, it is not true of geology generally, as currently obtruded on the reading public in our day. I thought that "cosmogony" meant the genesis of the cosmos; that cosmos is distinguished from chaos. So, when modern geology, in anti-theological hands—which are the hands which rather monopolize geology now in our periodicals, viz., Huxley, Hooker, Tyndall, Büchner, *et al.*—undertakes to account for the *origin of existing structures*, it is at least virtually undertaking to teach a *cosmogony*. In this judgment I presume all men of common sense concur with me. "Geology *ought* not to assume to be a cosmogony?" Very true; and I presume Dr. Woodrow's does not. But unfortunately, in this case the frogs out-sound the good, strong bullocks. It is the assuming, anti-theistic, cosmogonic geology of which the Christian world chiefly hears; and *hence my protest*.

On page 352 Dr. Woodrow says: "All speculations as to the origin of forces and agents operating in nature are incompetent to natural science. It examines how these operate, what effects they produce; but in answer to the questions, is there a personal, spiritual God, who created these forces? or did they originate in blind necessity? or are they eternal? *natural science is silent.*"

That is to say, Dr. Woodrow's natural science is silent. But is Drs. Darwin's and Huxley's natural science silent about them? Notoriously, it is not. When these men endeavor to account for existing beings by "natural selection," a physical law as the "original force" and "operating agent;" when *many* recent writers endeavor to use the modern doctrine of the "correlation of forces" for the purpose of identifying God's power with force, *their* natural science does not behave at all as Dr. Woodrow's behaves. And *this is our quarrel with them*. Nor can we assent fully to Dr. Woodrow's view, that true natural science "is silent" about all these questions. She ought not to be silent. Her duty is to evolve as the crown and glory of all her

conclusions, the natural, theological argument for the being, wisdom and goodness of a personal God. Such was the natural science of Lord Bacon, of Sir Isaac Newton, of Commodore Matthew Maury.

It is urged, I should not have said these physical sciences have an anti-theistic tendency, because, where men have perverted them to unbelief, the evil "tendency was in the student, and not in the study." This, I reply, is a half truth. The evil tendency is in the student *and* the study; I have shown that the study itself has its elements of danger. But I might grant that it is in the student, rather than in the study; and still assert the generality of this lurking tendency. For, the quality in the student, which constitutes the tendency, is, alas! inborn, and universal among the unrenewed, namely, alienation from God—a "not liking to retain him in their knowledge"—a secret desire to have him afar off.

And now, when we turn to current facts, do they not sorrowfully substantiate my charge against these perverted sciences? Every Christian journal teems with lamentations over the wide and rapid spread of unbelief flowing from this source. Such men as Dr. McCosh fly to arms against it. Such men as Dr. Woodrow have so profound an impression of the power and audacity of the enemy as to be impelled to wage the warfare continuously, even in an inappropriate *arena*. It is notorious that these physical speculations have become, in our day, the common, yea, almost the sole resources of skepticism. We have infidel lawyers and physicians; but they are infidels, not because of their studies in jurisprudence, therapeutics or anatomy; but because they have turned aside to dabble in geology and its connections.

But we see stronger, though less multiplied, instances of this tendency, in the cases where it sways devout believers to positions inconsistent with their own faith. Thus, Hugh Miller was a good Presbyterian, the representative and organ of the Scotch Free Church, yet he was misled by geology to adopt a theory of exposition for the first chapter of Genesis which Dr. Woodrow strongly disapproves. And Dr. Woodrow, though "believing firmly in every word of the Bible as inspired by the Holy Ghost," is betrayed in this critique, by the same seductive "ten-

dency," into two positions inconsistent with his sound faith. This will appear in the sequel. In this connection a remark should also be made upon the attempt to veil the prevalence of unbelief in America, by condemning my reference to the reported sentiments of many members of the Indianapolis meeting of 1870. He thinks it quite slanderous in me to allude to the published testimony of an eye-witness, without having required that person to put these slandered members through a very full and heart-searching catechism as to all their thoughts and doings, and the motives of them. Somehow, I find my conscience very obtuse upon this point. Obviously, I only gave the published testimony of this reporter for what it was worth. That I was clearly entitled to do so seems very plain from this fact: that he, and I know not how many other prints, had already *given it to the public*. He had made it the public's; he had made it mine, as an humble member of the public, to use it for what it might be worth. The currency given to the statement, by its mention in my poor little sermon, was but as a bucket to that ocean of publicity into which it had already flowed through the mighty Northern press.

The second point requiring correction in Dr. Woodrow's critique is the equally surprising statement, that I inculcate universal skepticism in every branch except the Bible and mathematics. Here, again, his mistake is so surprising that it is necessary to state it in his own words. Page 330, of *Review*: "He" (Dr. D.) "*recommends skepticism* as to the results of the application of our God-given reason to the works of God's hands." Page 331, I am represented as teaching that "we must regard ourselves as *incapable of arriving at a knowledge of truth*," and, farther on, "that we *can never become certain of anything* in geology or other branches of natural science." I am represented, on page 332, as claiming "that our reason *could not form one correct judgment* on any subject without divine guidance." On page 338, I am represented as attempting to show that "physical science *never can reach* undoubted truth." On page 337, I am made to teach "that the systematic study of God's works always tends to make us disbelieve his Word," whereas the very point of my caution is, that the sort of pretended study of God's works which makes so many people dis-

believe his Word *is not systematic*. That is, it is not conducted on a just system.

There is, then, no mistake in my charging this misrepresentation, that the reviewer really does impute to me a sweeping disbelief of *all* that physical science teaches, except in the "exact sciences." And neither is there, with the attentive reader, any mistake in the verdict that this charge is a sheer blunder. The very passage quoted to prove the charge from my sermon disproves it in express words. I state that "the human *mind*, as well as heart, is *impaired* by the fall," not destroyed. I do not go any farther, certainly, than our Confession. Why did not Dr. Woodrow assail and ridicule that? Again: "The Christian need never expect that uninspired science will be *purged of uncertainty and error*," etc. The metaphor is taken from therapeutics, in which a "purge" is given with the aim of bringing away certain morbid elements bearing a very small ratio to the body purged. And still more definitely, I say: "Even if the *organon* were absolute, pure truth, its application by fallen minds must always insure in the results *more or less of error*," etc. On page 8 of *Sermon*, I add, speaking of the industry and ingenuity of the infidel physicists themselves, that even "*they* have deduced *many* useful conclusions." Dr. Woodrow remarks, very simply, p. 331: "It is singular that Dr. Dabney should have fallen into this error," etc. Yes; so very singular as to be incredible. And I presume that he is the only attentive reader of my words in America who has "fallen into the error" of imputing this error to me. As Dr. Woodrow says, I condemn it in my Lectures. I repudiate it by honoring certain learned votaries of physical science. I repudiate it by appealing to certain well-established conclusions of physical science. I expressly limit my charge of fallibility in physical science to the presence of "*more or less of error*" mingled with its many truths.

But as Dr. Woodrow's misconception evinces that it was possible for one man to fail to understand my position, I will state it again with a plainness which shall defy a similar result.

The perverted physical science which I oppose contradicts revelation. We believe that the Bible is infallible. Now, my object is to claim the advantage for the Bible of infallibility as

against something that is not infallible, in any actual or possible collision between science—falsely so called—and the Scriptures. This is plain. Now, as Dr. Woodrow and all the good people for whom I spoke believe, with me, that the Bible is infallible, all that remains to be done, to give us this advantage, is to show that physical science, and especially anti-Christian physical science, is not infallible. Where now is the murder? Does Dr. Woodrow wish to assert that these human speculations are infallible? I presume not. Then he has no controversy with me here. That obvious and easy thesis I supported, by noting, first, that while the fall left man a reasonable creature, the intellect of his sinful soul was no longer a perfect instrument for reasoning; and we may expect it to be specially imperfect on those truths against which the prejudices of a heart naturally alienated from God are interested. Then, alluding to the fact that these infidel physicists usually assume the arrogant air of treating their science as certain, and the Bible as uncertain; and alluding to the claim that, however fallible the ancient and the mediæval physics, the adoption of the inductive method has now made the conclusions of modern physics certain, I proceeded to contest that claim in part, asserting that we must expect some error still in modern physics. This I proved (*a*), by the principle, that ancient and modern men are of the same species, and so should be expected to have the same natures and infirmities; but modern physicists convict their predecessors of a number of errors, whence it is arrogant in the former to assume that posterity will not convict them of any. I showed (*b*), that it was not true the inductive method was first invented and used in science from Lord Bacon's day, because Aristotle is said to have described the method; and whether *any* logician described and analyzed it or not, nature had taught men of common sense, in all ages, to make some use of it. I asserted (*c*), that even the inductive method had not saved modern physics from all error, perfect as that method might be, because in fact modern physicists do not always stick to it faithfully; they sometimes, at least, yield to the same temptations which seduced the mediæval physicists. I showed (*d*), that modern physics had not yet reached infallibility, because *it is still correcting itself*. And I remarked (*e*), that infallibility could be approximated in

the exact sciences only, in pursuing which, the fewness of premises and exactness of predications may, by the help of care, bring entire certainty within the reach even of fallible intellects. Now, a great many scholars have concurred with me in applying this name, "exact sciences," to the knowledge of magnitudes and number. They must have thought that the others were in some sense "inexact sciences." Yet they never dreamed they were guilty of recommending *universal skepticism of everything save the Bible and mathematics*. I presume they thought thus: that these "inexact sciences," true sciences to a certain extent, notwithstanding their inexactness, should be valued and should be used as far as was safe, but should be pressed with caution, and especially that they should be modest when they came in competition with exact science or infallible revelation.

Now, Dr. Woodrow would reply, at this showing of the matter, that I must be clear before I require the "inexact science" to succumb to the theological proposition, that the latter was indeed God's infallible meaning, and not merely my human supposition about it. I grant it fully. And I take him to witness that I did not require my hearers to commit themselves to the interpretation of the Westminster Assembly, nor to that of Dr. Pye Smith, Chalmers, *et al.*, nor to that of Mr. Tayler Lewis, *et al.*, nor to my own interpretation of what Moses really meant to teach about the date and mode of creation. I did not even intimate whether I had any interpretation of my own. Indeed, I behaved with a reserve and moderation which, for so rash a person, was extremely commendable. But I must claim another position: I must assume that Moses did mean *something*, and when we are all honestly and certainly convinced by a sufficiently careful and mature exposition what that something is, then we have the infallible testimony of the Maker himself, and fallible human science must bow to it.

But from Dr. Woodrow's next step I must solemnly dissent. It is that in which he degrades our knowledge of God and redemption through revelation to the level of our fallible, human knowledge of the inexact physical sciences. He is attempting, page 331, to refute my inference from the fall of man, which he misrepresents as a commendation of absolute skepticism, to the imperfection of his speculations. To do this he claims "that

theology is as much a human science as geology, or any other branch of natural science." "The facts which form the basis of the science of theology are found in God's Word; those which form the science of geology are found in his works; but the *science* in both cases is the work of the human mind." To ensure us that he is deliberate in propounding this startling doctrine, he repeats: "Still, the science of theology as a science is equally *human* and *uninspired* with the science of geology; the facts in both cases are divine, the sciences based upon them human." He then proceeds expressly to extend this *human* and *uninspired* quality to *our knowledge of the great central truths* of theology!

The grave error of this is unmasked by a single question: is then the work of the geologist, in constructing hypotheses, inductions, inferences, merely hermeneutical? All that the student of the divine science properly does is to interpret God's Word, and compare and arrange his teachings. Is this all that geology undertakes? The world had to wait many centuries for a Kepler and a Newton to expound the laws of the stars; God tells us himself that his Word is for his people, and so plain that all may understand, and the wayfaring man, though a fool, need not err therein. Again, this degrading view of theology misrepresents the reality. The "facts of geology" are simply phenomenal, material substances. The facts of theology, which Dr. Woodrow admits to be divine, are *didactic propositions*, introducing us into the very heart of divine verities. "God is a spirit." "The word was God." "The wages of sin is death." Here are the matured and profoundest truths of the divine science set down for us in God's own clear words. Does he teach the laws of geology thus? This difference is too clear to need elaboration. Once more: the critic's view, whether right or wrong, is unquestionably condemned by his Confession of Faith and his Bible. The former, Chap. I., § 5, says: "Our full persuasion and assurance of the infallible truth and divine authority thereof is from the inward work of the Holy Spirit, bearing witness by and with the Word in our hearts." And Chap. XIV., § 2: "By this faith a Christian believeth to be true whatsoever is revealed in the Word, *for the authority of God himself* speaking therein," etc. The Scripture says: an apostle's preaching

“was not with enticing words of man’s wisdom, but in demonstration of the Spirit and of power; that your faith should not stand in the wisdom of men, but in the power of God.” (1 Cor. ii. 4, 5.) The apostle John promises to Christians (1 John ii. 20, 27): “But ye have an unction from the holy one; and ye know all things.” “The *same anointing* teacheth you *all things*, and is truth, *and is no lie.*”

Dr. Woodrow, perceiving how obnoxious his position might be shown to be to these divine principles, seeks an evasion in the claim, that the children of God are as much entitled to ask and enjoy spiritual guidance when they study God’s works as when they study his word. He reminds us that the heavens declare the glory of God, etc., and asks whether Christians forfeit his guidance when they seek a fuller knowledge of that glory in the heavens and the firmament. Unfortunately for this evasion, we have to remind him of a subsequent page of his essay, where he heaps scorn upon the idea that physical science has any theological tendency, and declares that it is only ignorance which ascribes to it either a pro-Christian, or an anti-Christian character. The physicist, then, is not seeking God’s glory in his study of *strata* and fossils; if he does, he has become, like Dr. Dabney, unscientific; he is seeking only “the observable sequences” of second causes and effects. Farther, the physicists whom I had in view never seek God anywhere, never pray, and do not believe there is any spiritual guidance, being infidel and even atheistic men.

If, then, the “science of theology” is as human and uninspired as the science of geology; and if, as Richard Cecil has so tersely expressed it, the meaning of the Bible is practically the Bible; the ground upon which we are invited in the gospel to repose our immortal, irreparable interests, is as fallible as geology. How fallible this is, we may learn from its perpetual retractions and amendments of its own positions, and from the differences of its professors. Is the basis of a Christian’s faith no better? Is this the creed taught to the future pastors of the church by Dr. Woodrow? As was remarked at the outset, when we predicted such results in the distant future, from the attempt to teach fallible human science in a theological chair, we still courteously excepted Dr. Woodrow from all applications

of this caution. The reader can judge whether my critic has not deprived himself, in this point, of the benefit of this exception, and verified my prophecy two generations earlier than I myself claimed.

The third general topic requiring my notice in this critique is the outspoken charge of culpable ignorance. It is said, page 368, that I am "acquainted with neither the methods nor the ends of physical science, with neither its facts nor its principles," etc.; and of this assertion many supposed specimens are given, served up to the reader with the abundant sauce of disdain and sarcasm. On this I have, first, two general remarks to make. If it was only intended to prove that I am not a technical geologist, like Dr. Woodrow, which is not necessary to infidel physics, this end might have been quickly reached without fifty-two dreary pages of criticism, by quoting my own words, *Sermon*, page 8: "We may be possessed neither of the knowledge nor ability for entering that field, as I freely confess concerning myself." The other remark is, that all these specimens of imputed ignorance would have been passed over by me in absolute silence, did they not involve instances and illustrations of important principles; for I presume the Presbyterian public is very little interested in the negative of that question, "Is Dr. Dabney an ignoramus," the affirmative of which Dr. Woodrow finds so much interest in arguing.

But it is asserted that I understand "neither the methods nor the ends" of physical science, because I speak of some such professed science as "anti-Christian," and suspect it of atheistic tendencies. Page 353: "Natural science is itself incapable of inquiring into the origin of forces . . . and it is impossible for it to be either religious or anti-religious." Page 354, it is claimed as a "fact," that the "results reached are not in the slightest degree affected by the religious character of its students." Page 351, I am criticised for asking whether the theological professor of "natural science in connection with revealed religion" traces geologic forces up to a creator, and it is charged as a "grievous mistake to suppose that natural science has anything whatever to do with the doctrine of creation." Well, I reply, if even a mere physicist had not, we presume that a Christian divine, put into a theological school to teach the church's

pastors the "connection of natural science with revealed religion," ought to have something to do with that "connection." This, as the attentive reader will perceive, was the question in that passage of my writing. Hence it is a sheer error to cite this place as proof of an "utter failure to recognize the province of natural science."

But in truth, physics, simply as natural science, have a theological relation. These studies deal with the very forces, from whose ordering natural theology draws the *a posteriori* argument for the existence of a creator. It is not a "fact," that these studies are unrelated to the religious views of their students. Were this so, it would not have happened that a Newton always travelled by astronomical science to the recognition of a God; and a La Place declared, as the result of his *Mecanique Celeste*, that a theory of the heavens could be constructed without a creator. It would not have happened, that while Dr. Woodrow always traces natural laws up to the great First Cause, Dr. Thomas Huxley should see in Darwin's physical theory of evolution by natural selection a perfect annihilation of the whole teleological argument for the being of a God. Dr. Woodrow says in one place, that because the business of natural science is with second causes, it has no business with first causes. Because the fisherman is at one end of the pole, he has no business with the hook and the fish that are at the opposite end of the line! Fortunately, on pages 343 and 344, Dr. Woodrow himself contradicts this error. There he defends his view of a creation by evolution, by claiming that the structure produced by second causes is as truly God's creation as a first supernatural structure could be. If that is so, then the study of the second cause is surely a study of a creation, and so of a creator. So also Dr. Woodrow's friend, Lord Bacon, contradicts him, and justifies me in the very place quoted (*Review*, page 374): "It is an assured truth and a conclusion of experience, that a little or superficial knowledge of philosophy may incline the mind of man to atheism; but a farther *proceeding* THEREIN *doth bring the mind back again to religion*; for in the entrance of philosophy, when the second causes, which are next unto the senses, do offer themselves unto the mind of man, if it dwell and stay there it may induce some oblivion of the highest cause,"

—just the “tendency” towards unbelief described by me; “but when a man passeth on farther, and seeth the dependence of causes, and the works of providence, then, according to the allegory of the poets, he will easily believe that the highest link of nature’s chain must needs be tied to the foot of Jupiter’s chair.” Thus, according to Bacon, natural science has a religious relationship. What is it indeed but hypercriticism to object to the phrase, “anti-Christian science,” and the like, that natural science is properly neither Christian nor anti-Christian, when everybody but the critic understood that the terms were used in the sense of “natural science perverted against religion?” So fully are such phrases justified by use, and so well understood, that Dr. Duns actually entitles his gigantic volumes on physical science, “*Biblical Natural Science*.” What a target, in that title, for such objections!

On page 372, the reviewer finds an evidence of ignorance in the passing allusion which I made to the new questions touching the relative order of *strata* raised by the results of recent deep-sea soundings; “all of which,” declares Dr. Woodrow, “evinces an utter misapprehension of the real import of the discoveries in question.” That is to say, Dr. Woodrow happens not to be pleased with that view of the import of these recent discoveries which I advanced, derived from competent scientific sources. Therefore the apprehension which happens not to suit him is all “misapprehension.” We shall see, before we are done, that it is rather a permanent illusion with the reviewer to account that his opinion is true science, and true science his opinion. But we beg his pardon; we do not purpose to be dogmatized out of our common sense, nor to allow the reader to be dogmatized out of his. Let these facts be reviewed, then, in the light of common sense. It is the current theory of Dr. Woodrow’s friends, the geologists, that the stratified and fossil-bearing rocks are the result of the action of water, formed of sediment at the bottom of seas and oceans, and then lifted out of the water by upheavals. Now geologists have assigned a regular succession of lower, and upper, and uppermost, to these *strata*, determined, as Lyell remarks, by three guides: the composition of the *strata*, the species of fossil life enclosed in them, and the observation of actual position, where two or more of the *strata* co-exist.

Now then, should some new upheaval lift up the bottom of the North Atlantic, for instance, what is now the surface of the sea bottom would, immediately after the upheaval, be the top *stratum* of the land upheaved. But the deep-sea plummet and the self-registering thermometer have proved that species of animal life hitherto determined by the rules of stratigraphy to be *successive*, are in fact *cotemporaneous* now on the sea bottoms, and considerable difference of temperature—determining different species of aquatic life—are found, unaccountably, in neighboring tracts of the same ocean at depths not dissimilar. Is it not evident that, in case of such an upheaval, we might have, side by side, formations of equal recency? But geologists would have decided, by previous lights, that they were not equally recent; that one was much older than the other. The prevailing stratigraphy may, consequently, be very probably wrong. Let the reader take an instance: microscopists have been telling us, with great pride, that English chalk is composed in large part of the minute shells of an animalcule, which they name *Globogerina*. They say that the cretaceous deposits rank as *mesozoic*, below the *pleiocene*, *iocene*, and *meiocene* in order, and consequently older in origin. That is, Sir Chas. Lyell says so, in his most recent work, if he is any authority with Dr. Woodrow. But the microscopists also tell us, that the slime brought up from the depths of the North Atlantic by the plummet, of a whitey-grey color when dried, is also composed chiefly of the broken shells of the tiny *Globogerinae*, many of them so lately dead that the cells still contain the jelly-like remains of their organic parts. If this is true, then chalk formations *are now making*, and should an upheaval occur, there would be a chalk bed as really new, as post tertiary, as the bed of alluvial mud on the banks of Newfoundland. May it not be, then, that some other chalk beds on or near the top of the ground, may be less ancient than the established stratigraphy had claimed? Such was our point touching these deep-sea soundings; and we rather think that sensible men will not agree with Dr. Woodrow that it can be pooh-poohed away. But as we are nobodies in science, we will refer him to a testimony of Dr. Carpenter, of London, late president of the British Association, who is recognized as perhaps the first physicist in Great Britain. He says:

“Whilst astronomy is of all sciences that which may be considered as most nearly representing nature as she really is, geology is that which most completely represents her as she is seen through the *medium* of the interpreting mind; *the meaning of the phenomena that constitutes its data being, in almost every instance, open to question, and the judgments passed upon the same facts being often different, according to the qualifications of the several judges.* No one who has even a general acquaintance with the history of this department of science can fail to see that the geology of each epoch has been *the reflection of the minds by which its study was then directed.*” “The whole tendency of the ever-widening range of modern geological inquiry has been *to show how little reliance can be placed on the so-called ‘laws’ of stratigraphical and paleontological successions.*”

Abating the euphemism, Dr. Carpenter seems as bad as Dr. Dabney. He will soon require the chastisement due to the heresy, that the Woodrow opinion is not precisely the authoritative science of the case. His testimony is peculiarly significant as to the worthlessness of “the so-called ‘laws’ of stratigraphy,” because he had himself been especially concerned in the examination of this chalk-mud from the deep-sea soundings.

Dr. Woodrow sees proof of ignorance of even the nomenclature of natural science, in my use of the word *naturalism* to describe—what he obviously apprehends I designed to describe—that school which attempts to substitute nature for God as the ultimate goal of their research. The very passage quoted from my printed notes by him defined my meaning. “This, therefore,”—meaning obviously the unwillingness of this school to recognize any supernatural cause back of the earliest natural cause—“is the eternity of naturalism; it is atheism.” Dr. Woodrow thinks this an antiquated, and therefore an improper use of the word. On both points I beg leave to dissent. If I need an expressive term, why may I not revive an ancient one, if I define its sense? Is not this better than coining a new one, and being obliged to define that? But my term is not antiquated. *Naturalismus* holds its place to-day in German lexicons; and Webster—surely he is “new-fangled” enough—gives the word in my sense. But the concrete noun, “*naturalist*,” ought to be used in the sense of a *student of nature*; not in my meaning of an *advocate of naturalism*—in my evil sense. So it is usually employed. But in the only place where I use it in the bad sense, I distinguish it sufficiently by the epithet, “proud naturalist,” whose theory of nature is a “form of skepticism.”

Here again I am comforted by the belief that Dr. Woodrow is the only man in America embarrassed by my nomenclature.

On page 339 of the *Review*, supposed evidence is found that I believed, in my ignorance, that the idea of a pre-Adamite earth was first suggested within the memory of the older members of the Synod of Virginia; and a great deal of rather poor wit is perpetrated as to the age of these members. Having read, for instance, the introductory chapters of Lyell's *Principles of Geology*, twenty years ago, in which quite a full sketch of all the speculations about this matter is given from ancient times, I was in no danger of falling into that mistake; nor did I give expression to it. My brethren doubtless understood the words, "this modern impulse," in the sense I designed, namely, as a "popular impulse," given by the comparatively recent diffusion of geological knowledge, and felt in the minds of the people. And it is substantially true, that just one generation ago, it had not generally gone farther in the speculations then prevalent among Americans, than the claim of a pre-Adamite earth in such a sense as might be reconciled with the Mosaic cosmogony upon the well-known scheme of Dr. Pye Smith. Since that day many other and more aggressive postulates, standing in evil contrast with the first and comparatively scriptural and tolerable one, have been diffused among our people by irreligious men of science. Some of the latter I also enumerated; intimating that, while we might, if necessary, accept the first, along with such sound Christians as Dr. Pye Smith, Dr. Chalmers, and Dr. Woodrow, *all of the latter* we certainly could not accept consistently with the integrity of the Bible. So that my charge of anti-Christian character was, at least to a certain extent, just, against this set of physicists.

Another evidence of my ignorance, upon which Dr. Woodrow is exceedingly funny, upon pages 367 and 368, is my classification of the rocks, as lowest and earliest, the *primary* rocks all *azoic*; next above them, the *secondary* rocks, containing remains of life *palæozoic* and *meiocene*; third, the *tertiary* rocks and clays containing the *pleiocene* fossils; and fourth, the *alluvia*. Dr. Woodrow then presents a classification, which he says is "REAL GEOLOGY," differing from the brief outline I gave chiefly—not only—by using more subdivisions. The meaning of the as-

sertion that this is the "Real Geology," it must be presumed, is, that this is Dr. Woodrow's geology; for his classification is not identical with Dana's, or Lyell's, any more than mine is. But it is not true that Dr. Dabney "comes forward as a teacher of this science." In that very lecture I state expressly that I "do not presume to teach technical geology." My avowed, as my obvious, purpose was only to cite the theory of the geologists in its briefest outline, unencumbered with details and minor disputes of its teachers among themselves, sufficiently to make my argument intelligible to ordinary students of theology. For this object details and differences were not necessary, and I properly omitted them. Dr. Gerald Molloy, of Maynooth,—a writer of almost unequalled perspicuity and intelligence,—with precisely the same end in view, goes no farther in the way of classification than to name as his three divisions, *igneous*, *metamorphic*, and *aqueous* rocks. Here is a still greater suppression of details. Dr. Woodrow may now set this exceedingly rudimentary division over against his detailed "Real Geology," and represent Dr. Molloy also as ignorant of what he speaks of.

But, it is presumed, Dr. Woodrow would add that my rudiments of a classification were partly wrong, namely: that I call the igneous rocks (granite, trap, etc.) *primary*, and that I apply the term *azoic* to all rocks devoid of fossils; whereas it has seemed good in the eyes of the Woodrow geology—the only "real geology"—not to call the igneous rocks *primary*, and to restrict the term *azoic* technically to a very small segment of the azoic rocks, viz., to the sedimentary rocks, which have no fossils.

Well, the Woodrow geology is entitled to choose its own nomenclature, we presume; and *so are the majority of geologists who differ from it entitled to choose theirs*; and I have a right to follow that majority. Dr. Woodrow, as he intimates, chooses to follow Sir Chas. Lyell in his crotchet of refusing to call the "igneous" rocks "*primary*." The latter uses the word "primary" as synonymous with the palæozoic group. But Dr. Woodrow also knows that this freak of Lyell's is prompted by a particular feature of his "uniformitarian" scheme, and *is a departure* from the ordinary nomenclature of the earlier geologists. He knows also that many geologists apply the term *azoic* to all the crystalline rocks, and not to the non-fossiliferous *strata* of

sedimentary rocks only. Thus, Duns, "following competent men of science," divides thus, first, Azoic; second, Primary, equivalent to the palæozoic; then, secondary, equivalent to the mesozoic; and fourth, tertiary, or cainozoic. So Dana states his division thus, "I. Azoic time. II. Palæozoic time. III. Mesozoic time. IV. Cainozoic time. V. The age of mind." And what can be more true than that the igneous rocks, ordinarily styled primary, may be also termed *azoic*; when *the absence of fossil remains of life in them* is at least as uniform and prominent a trait in them as any other? But the reader will feel that this is an exceedingly small business.

The specimen of ignorance which amuses Dr. Woodrow perhaps most of all, is my notice of some geologists' "nebular hypothesis," criticised on pages 344 and 345 of the *Review*. This idea—that our solar system was first a vast mass of rotating, incandescent vapor, and then a sun and a set of planets, of which the latter, at least, had been cooled first to a molten liquid, and then to a solid substance on their surfaces—is said to have been suggested first by La Place as a mere hypothesis; and the only seeming fact giving it even a show of solid support was the existence of those faint, nebulous spots of light among the stars which no telescope had as yet made anything of. Now every one who reads infidel books of science observes how glibly they prate of this supposition, as though there were some certainty that it gave the true origin of our earth. Meantime Sir William Herschel first, and then Lord Rosse, applied more powerful magnifiers to them. The effect of Herschel's telescope was to resolve some of the *nebulae* into distinct clusters of stars. He then divided them into the three classes of the *resolved*, the *resolvable*, and the *unresolved*, suggesting that a still more powerful instrument would probably resolve the second class. Lord Rosse, in our own day, constructed a still larger reflector, and the result is, that more of the *nebulae*, when sufficiently magnified, are now seen to be clusters of stars. Now, must not every sober mind admit with me that "the chief ground of plausibility is thus removed" from the atheistic supposition? The probability is, that the other *nebulae* are what all are shown to be, which have been resolved. Then the evidence of fact is lacking that the heavens ever contained planetary matter in that form. For

the only other luminous and nebulous bodies known to astronomy are the comets, and they evidently are not cosmic or planetary matter, *i. e.*, not matter which can be cooled into a solid as large as a world, because, however vast their discs and trains, their quantity of matter is so amazingly small that they produce no appreciable perturbations in the orbits of the planets near them. But Dr. Woodrow exclaims that the newly discovered *spectroscope* has taught us the chemistry of the heavens, and has shown that some *nebulae* are incandescent gases. Well, let us see about this *spectroscope*, of which we have heard a great deal these latter years. One thing which we have heard is the following sensible caution from Dr. Carpenter. Speaking of the assumption founded on the *spectroscope*, that the sun's chromosphere is incandescent hydrogen, he says, "Yet this confidence is based entirely on the assumption that a certain line which is seen in the *spectrum* of a hydrogen flame, means hydrogen also when seen in the *spectrum* of the sun's chromosphere. . . . It is by no means inconceivable that the same line might be produced by some other substance at present unknown." Dr. Carpenter then proceeds to administer a similar caution to Dr. Huggins, one of the professed authorities with the *spectroscope*. Such is the skepticism of England's greatest physicist about its revelations. But to be more particular: its friends tell us that the *spectra* of luminous rays passing from incandescent solids through a gaseous *medium* have certain dark lines in them; whereas, when the incandescent gases are themselves the sources of the rays, the *spectra* have the cross-lines in different places. Now hear how Dr. Roscoe tells this story of Dr. Huggins, about the *nebulae* in the spectroscope, in the great work of the former on *spectrum analysis*. "He," (Dr. Huggins) "instead of having a band of light intersected by dark lines, indicating the physical constitution of the body to be that corresponding to the stars, found the light from these *nebulae* consisted simply of *three insulated bright lines*," etc. The sober reader will be apt to think with me, and with Dr. Carpenter, that so minute a result, and so unlike the other results of more distinct *spectrum analyses*, gives no basis for any conclusion whatever. And this will be confirmed when he hears Mr. Lockyer, another friend of the *spectroscope*, say, "The light of some of those *nebulae* visible in a moderately large

instrument has been estimated to vary from one 1,500th to one 20,000th of the light of a single sperm candle consuming 158 grains of material per hour, viewed at a distance of a quarter of a mile. That is, *such a candle a quarter of a mile off, is twenty thousand times more brilliant than the nebula!*" Let the reader now consider what likelihood there is, that any art can ever separate all the stray beams of other light diffused through our atmosphere, from this almost infinitely slender beam, so as to be sure that it is dealing with the rays of the *nebula* alone. But a *microscopic shadow* of this almost invisible ray is the "conical ball of the chassepot gun" on which Dr. Woodrow relies, to pierce the solid steel of common sense! This is, to our view, shooting with rays of "moonshine," in the thinnest of its metaphorical senses.

The last of these specimens is that noted on page 366 of the *Review*. I had shown that the first structures made by God, though supernaturally produced, had every trait of naturalness. This was then illustrated by me, by reference to one of the trees of paradise. To this Dr. Woodrow makes the very singular objection, that I ought not to found scientific arguments upon surmises! He overlooks the simple fact that this surmise about the tree of paradise with annual rings, *was not my argument at all*, but only my illustration of it! Had he read the previous paragraph of my "Notes," or pages 13 and 14 of my sermon, with attention, he would have found *there* my argument, founded, not on *suppositions* about a possible tree or bone, but on impregnable principles of natural science itself. Does not Dr. Woodrow know that every parable is, in its nature, a supposition? Yet parables are excellent illustrations. When Jotham, the son of Gideon, in the sixth chapter of Judges, answered the men of Shechem with his parable of the trees, Dr. Woodrow would have put this reply in the mouths of Abimelech's faction: "That Jotham was exceedingly illogical, for the reason that the actual utterance of words by olive and fig trees, vines and brambles, was a phenomenon not known to exist."

On page 335 of his *Review*, Dr. Woodrow prepares the way for his charges of ignorance and inconsistency against me, by the following illustration: "Just as leading Presbyterian theologians, *personally known to Dr. Dabney*, have taught that 'every

obstacle to salvation, arising from the character and government of God, is actually removed, and was intended to be removed, that thus every one of Adam's race might be saved,' and that 'the Father covenants to give to the Son, as a reward for the travail of his soul, *a part* of those for whom he dies.'" To many readers it has doubtless appeared unaccountable that so "far-fetched" an illustration was sought. The clerical readers of the *Southern Presbyterian Review* and the *Southern Presbyterian*, can easily recall the clue of association which suggested it. They will remember that nine and a half years ago, these two periodicals, which have now been made the vehicles of the charge of scientific heresy against me, contained articles which insinuated against me the very charge of theological heresy, viz., an indefinite design in Christ's atonement, which is here introduced by Dr. Woodrow as an illustration. The occasion of that charge was my action, in obedience to the General Assembly, as chairman of a committee for conference and union with the United Synod of the South. That committee proposed to the Presbyteries a declaration of doctrinal agreement, of which I happened to be the penman. The conductors of the two presses in Columbia, opposing the union, sought to prevent it, in part, by criticising the orthodoxy of the doctrinal propositions, and intimating the doctrinal unsoundness of them and their writer in no indistinct terms. True, this intimation remained without effect, as might have been supposed, when aimed equally against the orthodoxy of my obscure self, and of such well-known and learned Old School theologians as Dr. Wm. Brown, Col. J. T. L. Preston, Dr. J. B. Ramsey, and Dr. McGuffey—the last two conferring as informal members of the committee. We see, when reminded of this history, how natural it was that Dr. Woodrow, seeking for a biting illustration, should recall this one. And the clerical readers of the *Review* have doubtless almost as naturally understood him as insinuating that "the leading Presbyterian theologian, personally known to Dr. Dabney," was no other than Dr. Dabney himself. If the words bear that construction, all I have to say is, that I never wrote or uttered the statements enclosed in the quotation marks.

But I find these very words ascribed by Dr. B. M. Palmer, in a controversial piece against the United Synod, to Dr. H. H.

Boyd, a distinguished minister of that body. Doubtless, Dr. Palmer quoted them correctly. Grant, now, that the insinuation against me, which seemed to lie so obviously in Dr. Woodrow's reference, was not intended by him, and that he also meant to designate Dr. Boyd; the question recurs, why was so peculiar and remote an illustration selected? The only answer is this: that an intimation of Dr. Dabney's unworthiness might be given from his intimate association with a theological comrade so erroneous as Dr. Boyd was esteemed at Columbia. To this again I have to say that Dr. Boyd was not "personally known" to me; that I never spoke to him save once, on the steps of a hotel, as I was passing to the cars; and that I never heard him preach, nor read one line of his theological writings, save the few quoted by Dr. Palmer, and thus had no personal knowledge of his unsoundness or orthodoxy. My whole knowledge on this point was a statement received through acquaintances, which I believed to be authentic, coming from Dr. Boyd himself; and that statement was, that when our Lynchburg declaration appeared, Dr. Boyd, counseling with his own brethren in his Presbytery, earnestly advised them to accept the union on those terms, although, as he declared, that joint declaration was, in his view, purely an Old School document, and distinctly condemnatory of whatever was peculiar in his own theological views. For, he said, the best interests of the churches demanded union; and inasmuch as his brethren were doctrinally already upon this Old School platform, he did not desire selfishly to gratify his own peculiar doctrinal preferences, at the cost of obstructing their comfort and usefulness; his points of difference from the platform not being, in his view, vital.

The fourth, and far most important vindication which remains, is of the fundamental position of my sermon on anti-Christian science. That position has been seen by the reader in the extracts given in this reply (pages 143-'5 above) from my letter of May 1st last to Dr. Woodrow. That position may be thus restated: the structures of nature around us cannot present, by their traits of naturalness, a universally demonstrative proof of a natural, as against a supernatural origin, upon any sound, theistic theory. Because, supposing a creator, originating any struc-

tures and organisms supernaturally, he also must have conferred on his first things equal traits of naturalness. Hence, should it be found that this creator has uttered *his testimony* to the supernatural origin of any of them, that testimony fairly supersedes all natural arguments *a posteriori* from natural analogies to a natural origin. My arguments for this position are briefly stated in those extracts inserted above (pages 143-'45.) The reasoning, though brief, will be sufficient for the candid reader, and I shall not weary him by repeating it.

But Dr. Woodrow, *Review*, pages 365 and 366, impugns one of my points. He will not admit it as proven that a wise creator, producing a first organism to come under natural law, and to be the parent of a species of like organisms, must have made it natural. He says, "he does not know, and he thinks it likely that Dr. Dabney does not know either." And he proceeds very facetiously to speak of my imagination about the rings in the tree of paradise as the sole basis of my argument. The tree was only an illustration. That basis I will state again. If theism is right, as Dr. Woodrow believes, then the creator is doubtless voluntary, knowing, and wise. While it is often very unsafe philosophy to surmise that the creative mind must have been prompted by this or that *final cause*, it is always very safe to say that he was prompted by *some* final cause, and that a consistent and intelligent one. For this is but saying that he is wise, and what he has effected is a disclosure of what he designed to effect, so far as it is completed. Now, God, in producing his first organisms by creation, must have designed them to exist under the reign of natural law; because we see that he uniformly *places them under that law*. That is to say, what he does is what he intends to do. But natural law could not govern that which remained contra-natural in qualities as well as origin; therefore God must have created his first organisms, while supernatural in origin, yet natural in traits. This argument is, if possible, still more demonstrative when applied to the first living organisms, vegetable and animal, because these were made by God to be the *parents of species* propagated by the first, and thenceforward in successive generations. Now, not only does revelation say that these supernatural first organisms "yielded seed *after their kind*," but natural science also tells us

most clearly, that the true notion of propagation, perpetuating a given species, is the parents' conveying unto the progeny all their own essential, specific qualities. So true is this notion, that the most scientific definition of *species* is now stated substantially thus by the greatest living natural historians. A given species *denotes just that aggregate of properties which every individual thereof derives by its natural propagation*. Hence it is certain that the first organism, supernaturally produced, possessed every essential quality natural to its species; otherwise it could not have been a parent of species.

Suppose then, that by any possibility, a physicist should examine the very remains of one of those first organisms, he would find in it the usual traits of naturalness; yet he could not infer thence a natural origin for it, because it was a *first thing*. Hence it is concluded, with a mathematical rigidity, that, granted a creator anywhere in the past, the argument from naturalness of structure to naturalness of origin *cannot be universally conclusive*. And supposing the structure under examination to be one of which revelation asserts a divine origin, then, in that case, this testimony of the almighty maker absolutely cuts across and supersedes the opposing inference from natural analogies. Such was the doctrine of my notes and sermon. Dr. Woodrow seems to conclude that, in such a case, God's workmanship would teach a lie, by seeming to be natural in origin when it was not. The solution of his embarrassment is simple. It is not God who teaches the lie, but perverted science going out of her sphere; and that this question of *αγογγ* is out of her sphere, Dr. Woodrow has himself taught with a fortunate inconsistency, on page 352 of his *Review*.

But as I know nothing about science, I beg leave to fortify my position by three scientific testimonies. The first shall be that of Dr. Büchner, the German materialist and atheist. He declares, in a recent work, that the ideas of *God* and of *science* are incompatibles, in this sense, that just to the degree a divine action is postulated, the conclusions of science are to that extent estopped. Now, what is this but confessing that the only evasion from my argument is atheism? The second testimony shall be from a more friendly source. Dr. Carpenter, in the inaugural speech referred to above, uses the following closing

words. When we make allowance for a certain *euphemism*, prompted by his attitude as president of a body purely scientific, many of whose members are avowed infidels, and by the occasion of his speech, which was wholly non-religious, we shall see that his testimony is very decided. After showing that every physical law, correctly interpreted, tells us of one single, almighty, intelligent Cause, the supreme, spiritual God, he says: "The science of modern times, however, has taken a more special direction. Fixing its attention exclusively on the *order* of nature, it has separated itself wholly from theology, whose function it is to seek after its cause. In this science is fully justified." . . . "But when science, passing beyond its own limits, assumes to take the place of theology, and sets up its conception of the order of nature as a sufficient account of its *cause*, it is invading a province of thought to which it has no claim; and *not unreasonably provokes the hostility* of those who ought to be its best friends."

The third witness is Prof. F. H. Smith, who fills the chair of Natural Science in the University of Virginia. His long experience, vast learning, subtle and profound genius, and well known integrity and caution of mind, entitle his scientific opinions to a weight second to none on this side of the Atlantic. He makes, in two letters to me, the following statements:

"The transcendent importance of the subject of the letter with which you lately honored me forbade any response which was not deliberate.

"The 'naturalness' of the new-created world is, in my judgment, conclusively established in your recent letter to me. You wholly demolish the argument of the infidel, who deduces from such continued and uninterrupted naturalness the eternity and self-existence of nature. To me it is simply inconceivable, that the physical world should ever have borne marks of recent creation, or that it shall ever present signs of impending annihilation. Nay, granting the existence of such inconceivable signs, I do not see how we could interpret them. If they were possible, they must be unintelligible.

"The beginning of a universe regulated by mechanical laws must have been some 'configuration,' to which it *might* have been brought by the operation of the same mechanical laws from an antecedent configuration, mathematically assignable. I undertook to illustrate this truth to my class last session, by this simple example: The undisturbed orbit of a planet is an ellipse, described with a velocity periodically varying by a definite law. The planet passes any given point of its orbit with the same velocity, and in the same direction, in each recurring round. If it were arrested there, and then projected with that velocity in that direction, it would resume identically the same orbit. The actual motion at each point of the orbit is, therefore, the necessary projectile motion of the new-created planet at that point.

Hence, wherever created and projected, its initial motion *might* have been the result of centrifugal action. Thus the elliptical circulation presents no marks of a beginning or of an end. As regards the terms of its existence, the phenomenon is dumb. The lesson it teaches is not the shallow sophism that it has no beginning or end; but that whatever information we derive on these points, we must seek from a source other than nature.

“When this first great truth was first apprehended by me, it filled me with a glow of a new discovery. You may smile at the confession; for to one well acquainted with the history of philosophy, the statement may appear to be one of venerable antiquity. Indeed, I found it myself, subsequently, ably set forth in an article¹ on geology, which appeared in the *Southern Quarterly Review* (Columbia, S. C.), in 1861. I believe that Mr. P. H. Gosse, a British naturalist, advanced substantially the same idea in a book quaintly called, *Omphalos*; the name and keynote of which were suggested by the probable fact that Adam had a navel, though he was never united to a mother by an umbilical cord.

“Be the history of the doctrine what it may, none the less acceptable and timely is the irresistible logic by which you have established it. Most heartily do I agree with you in affirming that the formula, ‘Like effects imply like causes,’ fails for the initial state of the world, and cannot, therefore, logically be used to disprove a beginning,” etc. . . .

“All the astronomer’s statements” (calculating possible past or future eclipses), “as to the past or the future, are limited by the qualification, either overt or covert, *nisi Deus intersit.*”

We claim, that a case of what lawyers call “circumstantial evidence,” in a court of justice, is a fair illustration of the logical rules which ought to govern in all these hypothetic geological arguments to a natural origin for given structures. The science of law has exactly defined the proper rules for such evidence. These rules require the prosecution to show that their hypothesis, viz., the guilt of the man indicted, not only may possibly, or may very probably, satisfy all the *circumstantiæ* which have been proved to attend the crime, but that it is the *only possible hypothesis* which does satisfy them all. And the defence may test this in the following manner: if they can suggest *any other hypothesis*, invented, surmised, or imagined, even, which is naturally possible, and which also satisfies all the circumstances, then the judge will instruct the jury that the hypothesis of guilt is not proven, and the accused is acquitted. Such is the rule of evidence to which logical science has been brought by a suitable sense of the sacredness and value of a human life. Now, the conditions of scientific *hypotheses* are, logically parallel; *they are cases of “circumstantial evidence.”*

¹ An article which appeared anonymously, but was written by R. L. Dabney.

Suppose, then, for argument's sake, that some such hypothesis, in the hand of an infidel physicist, should put our Bible upon its trial for veracity. It is the time-honored belief of the Christian world that the truth of that Bible is the only hope of immortal souls. Surely the issue should be tried under at least as solemn a sense of responsibility, and as strict logical requirements, as an indictment against a single life.

But I carry this parallel further. Grant the existence of a Creator God, "of eternal power and Godhead," then we of the defence *have always the alternative hypothesis*, which is always naturally possible, viz., that any original structure, older than all human observations, which is brought by anti-Christian science into one of her "circumstantial" arguments, may possibly have been of direct divine origin. Hence it follows, that should, perchance, the Bible contradict any scientific hypothesis of the origin of things, science is incapable, from the very conditions of the case, of convicting the Bible of falsehood upon such an issue. The thoughtful reader can now comprehend the polemic prejudice which prompts Büchner to say that the very idea of God is an intrusion into the rights of science; and Huxley to argue that the evidence from design for the existence of a God is annihilated by the evolution scheme of Darwin. These infidels have perspicacity enough to see that the theistic position vacates their pretended scientific deductions as to the origin of structures and organisms. Let us explain. A murder has been committed in secret; there is no parole testimony, apparently, to unfold the mystery. The prosecutors therefore proceed, with exceeding industry, care, patience, and ingenuity, to collect the materials for a circumstantial argument, to fix the guilt upon Mr. X. Y. Z., against whom a vague suspicion has arisen. These lawyers note even the most trivial matters, the direction of the shot, the smell of gunpowder upon the garments of the corpse, the scrap of blackened paper which formed a part of the wadding of the gun, and a thousand other circumstances. They weave them into their hypothesis of X. Y. Z.'s guilt, with a skill which is apparently demonstrative. But there now steps forth a new witness, named L. M., and testifies that *he saw* the murder committed by another man, named A. B., who had not been hitherto connected with the event. Now, there is, natu-

rally, no antecedent impossibility that A. B. might commit a murder, or this murder. Let us suppose that such was the case. Every lawyer knows that the issue would now turn *solely upon the competency and credibility* of L. M. as a witness. If the prosecution desire still to sustain the proposition that X. Y. Z. is the murderer, they now have but one course open to them: they must successfully impugn the competency or credibility of L. M. If they admit these fully, their case against X. Y. Z. is naught; their circumstantial hypothesis falls to the ground, without a farther blow. That hypothesis was exceedingly plausible; the antecedent probabilities of its truth were great, or even almost conclusive? Yes. Still, if L. M. is true, they now conclude nothing. They show that X. Y. Z. *might have killed* the murdered man. L. M. shows that *actually he did not*. The conditions of the argument of infidel science against the Bible and the creative agency of God are exactly parallel. Their hypothesis may be, naturally speaking, every way probable; but the Bible comes in as a parole-witness, and testifies that God, and not nature, was the agent of this given work. Now, we believe that the Bible is a competent and credible witness. Hence its voice supersedes the "circumstantial evidence" here.

It is complained, that when we thus refuse to allow the maxim, "like effects imply like causes," to thrust itself into competition with the testimony of revelation upon these questions of the first origin of the world, we deprive mankind of its use in every scientific induction, and in all the experimental conclusions of practical life. Dr. Woodrow is not satisfied with the reply, that within the sphere of natural induction, where we are entitled to assume the absence of the supernatural, his canon is valid. He attempts to quote me against myself, as saying, on page 15 of my notes: "*It is not experience* which teaches us that every effect has its cause; but the *a priori* reason. Very true, intuition, not mere experience, teaches us that every effect has *its* cause. That intuition is: had there been *no cause*, there would have been *no effect*." Had my doctrine been attended to, as developed in my sixth lecture, these words would have been found on page 49: "The doctrine of common sense here is, that when the mind sees an effect, it intuitively refers it to *some cause*." For instance, when we come upon a stratified

rock, intuition necessarily refers its existence to *some cause*, either to God, or to watery action, or some other adequate natural agency. But the question is: *which cause?* If we are practically assured of the absence of the supernatural cause, then of course we must assign the effect to one or another natural cause. But *if we have good reason to think that the supernatural cause may possibly have been present*, then the attempt to confine that effect to a natural cause, upon the premise that "similar effects imply the same causes," obviously becomes an invalid induction. Now, should it appear that revelation testifies to the presence of the supernatural cause at a given juncture, that would be good reason to think, at least, its possible presence; and then the naturalistic induction becomes invalid. It obviously comes then into that class which Bacon stigmatizes as worthless for the purpose of complete demonstration, under the term, "*Inductio simplicis enumerationis.*" *Novum Organum, Lib. I. § 105*: "*Inductio enim, quæ procedit per enumerationem simplicem, res puerilis est, et precario, concludit, et periculo exponitur ab instantia contradictoria,*" etc. Yes; in the case in hand, the *instantia contradictoria* would be the instance of a supernatural origin, competently testified by revelation. Hear even the sensualistic philosopher, Mill, (*Logic*, p. 187): "But although we have always a propensity to generalize from unvarying experience, we are not always warranted in doing so. Before we can be at liberty to conclude that something is universally true because we have never known an instance to the contrary, it must be proved to us, that if there were in nature any instances to the contrary, we should have known of them," etc. This is, so far, sound logic. But now, should it be that the Bible testifies to structures supernaturally originated in a pre-Adamite time, it is obvious that we should *not* have known of them, for the simple reason that no human witness was extant. The universal reference of all structures to natural causes would be, according to Mill himself, in that case, the very induction we "were not warranted" in making. What can be plainer?

Dr. Woodrow cites as an instance the wine made of water by Christ, at Cana. He says, page 359, "Had one of the guests been questioned as to its origin, he would unhesitatingly have

said that it was the expressed juice of the grape. But, by unexceptionable testimony, it could have been proved that it had been water a few minutes before, and had never formed part of the grape at all. Now, in view of this fact, according to Dr. Dabney's reasoning, we are forever debarred from concluding that wine is the juice of the grape, unless we shall have first *proved the absence* of God's intervening power," etc. I reply: Not so. My position is, that we would be "debarred from concluding" that a given vessel of wine "was the juice of the grape," in the particular cases where "unexceptionable testimony" had "first proved the PRESENCE of God's intervening power." This one word removes all the confusions and misconceptions of the subsequent pages of his critique. Indeed, I desire no better instance than Dr. Woodrow's admission touching this wine of Cana to exemplify my view. Any sensible man, drinking good wine under ordinary circumstances, would of course suppose that it came from grapes. But if competent testimony showed that, in this case, a miracle-worker had been present, who had infinite power, and a benevolent motive, to make *this wine* without grapes, his good sense would not lead him, admitting the testimony, to argue that this must also have come from grapes, because all natural wine uniformly comes from that source. And my position is precisely parallel. We examine numerous structures, whose beginning we did not ourselves see, and they all wear, seemingly, the appearance of full and equal naturalness. We were about to ascribe them all, very naturally, to a natural source. But should "unexceptionable testimony" come in, asserting that some among them had a supernatural origin, we should then conclude, precisely as the man of "common sense" at Cana had to conclude, that *in this particular case, the inference from naturalness of qualities to a natural origin did not hold*. This is all I have ever asked. Dr. Woodrow concedes it.

But he argues that if I hold on this ground, that there never was any pre-Adamite earth—as he understands me to hold—then I must also hold that the fossils, in all deposits older than the Adamic, are a species of shams; that they never were alive; and that the existence of these portions of matter would be absolutely unaccountable. Indeed, he thinks I should be driven

to the belief, that the visible works of God are a lie; which is as disastrous as believing his Word a lie. But if, on the other hand, I do admit an earth existing one fortnight before Adam, the Scriptures are, upon my view of them, as fatally impugned as though an earth had existed a million of years before Adam. Hence, he thinks my main position would be useless, were it not false. Let us inspect the two horns of this cruel dilemma. As to the first: he will not allow me to say of the fossils, "We have no occasion to deny their organic character." He thinks my "whole argument rests upon the supposition that the fossils may have been created as we find them." He cannot see what else I mean by saying that if many of "these rocks" may have been created, then the pre-Adamite date of fossils falls also. He can only understand it in this way, either that the fossils never were anything but rock, or that God thrust them into the rocks after they had died, and after the rocks were made, which would be very preposterous.

Had Dr. Woodrow attended to my meaning, when I spoke of many of "these rocks" as possibly created, he would have understood me. He seems to suppose that I meant the fossiliferous rocks. In fact, I was speaking of the stratified but *non-fossiliferous* rocks—the *azoic* of his nomenclature. That geologists recognize quite a large mass of these, is plain from the fact that they have a separate division and name for them. Now they teach us that these *azoic*, but truly stratified rocks, were the work of the same sedimentary action which has through long ages produced the fossiliferous stratified rocks. I trust my meaning will now be seen. It is this: suppose it should be found that revelation testified these *azoic* sedimentary rocks, so-called, were not growing through long ages by deposition from water, but, along with some other things, were made by the almighty word of God. If that were granted, then the "laws, so-called, of stratigraphic succession," as established by geology, are without adequate proof; and it again becomes an open question—to which Scripture may possibly testify—when and how the living creatures which are now fossils did live, and when and how the deposits containing their remains were formed. I say, in that case, the geologists' present arrangement of stratigraphical succession is unproved. As I have stated, the *data*

from which they claim to have settled this order—proving, as they suppose, that some fossils are such ages upon ages older than some others—are of three kinds: the observed order of *strata* where they are actually in juxtaposition; the kinds of organic life they contain; and the material and structure of the *stratum* itself. Now, in the case supposed, this last *datum* has become inconclusive. One stone is lost from their arch of evidence, and the whole arrangement of the stratigraphic succession becomes unsettled. For the reasoning in support of it now involves a vicious circle. For instance, the geologist has concluded that the non-fossiliferous clay-slate is a very old stratified rock, because without fossils. Again, he has concluded that a certain species of fossil life is old, because formed in some *stratum* very near that very old slate. Then he concludes that some other *stratum* is also old, because that old species of fossils is found in it. But the basis of all these inferences is lacking in the case I have supposed, and the reasoning proceeds in a circle.

The other horn of the dilemma made for me is equally unstable. It was urged that, if I had to admit the existence of an earth one fortnight older than Adam, the interpretation placed on the Scriptures by the Westminster Assembly is as violently outraged as though that pre-Adamite earth were millions of years older than Adam; whence Dr. Woodrow supposes it to follow that my main position, if it were not false, would be useless. I have shown that it is not false; I will now show that, as with Prof. F. H. Smith, and so many other learned men, judges, it is of vital use, after we admit a pre-Adamite earth. Its use is, that it alone can save Dr. Woodrow and us from an endless *regressus* into a naturalistic atheism. Let us review that naturalistic argument, as the evolutionists and the atheist Büchner insist on using it, and as Dr. Woodrow claims it ought to be used, untrammelled by my position. The maxim, "Like effects imply like causes," must be pushed, say they, universally; if restricted by my rule, the very basis of experimental science is gone. But now, theism says that there were first things, somewhere in the past, created, and not evolved naturally. There was a first man, not naturally born of a mother, but created, the father of subsequent men. Yet this first man must also have been *natural* in

all his organization, in order to be the father of men. But had these physicists subjected his frame to their experimental investigation, they would have concluded that, because his organization was natural, his origin must have been natural. He, therefore, by their logic, was not the first man, but had a natural father. Who does not see that the same process of reasoning applies equally well to that supposed earlier man, and then to his father? Who does not see that the same logic, consistently followed, runs us back into an infinite natural series, without any first term, or first cause? Dr. Woodrow, then, must cease to oppose my doctrine, in order to save himself from the infidel evolution theory. And the evolutionist must accept my doctrine, in order to save himself from that absolute "eternity of naturalism, which is atheism." But if my doctrine is squarely accepted, then, on every question of the *αρχή* of things, of the *when* and the *how* of the origin of nature, the testimony of revelation properly and reasonably supersedes all natural inferences contradictory thereto, when once the testimony is clearly understood.

But *how* should that testimony of the Bible be understood? It would appear that I have been much misapprehended here, in spite of the caution with which I refrained from dogmatizing on this point. It has been supposed that my whole argument involves the assumption of that sense placed upon the Mosaic record by the Westminster Assembly, totally denying a pre-Adamite earth. I will therefore attempt to place my meaning beyond possible misconception. I say then, first, that I *have not postulated* the interpretation of the Westminster Assembly as the true one, and that I have not asked any one to commit himself to a denial of a pre-Adamite world in all forms. It may very well be that the science of Bible-exegesis is not yet dispassionate and mature enough on this point to authorize us to commit ourselves finally to *any* exposition of it, as I am very sure that such a final decision is not at all essential to our defence of the integrity and supreme authority of revelation. And it may also be true, that the inquiries and conclusions of geology are not yet mature enough for it to venture on the construction of a scientific theory on that point. I say, secondly, that if the supposition be made for argument's sake, that the interpretation of

the Westminster divines turned out some day to be the only scriptural one—the only one faithful to the inspired text—then my principles would still enable me to uphold the full authority of my Bible, reasonably, consistently, and philosophically, notwithstanding the seeming, natural analogies for an older date of the world. Note, dear reader, that I do not make that supposition, and I have no craving to do so. But let us, for argument's sake, look at it, as one may surmise it to return upon us. Suppose, I say, that after all the *pros* and *cons*, friends and enemies of Moses' inspiration should settle down to this conclusion that his language can in fairness mean only what the Westminster divines supposed, viz., that there was no pre-Adamite earth at all. Let us suppose that, while honest reverence led believers, like Dr. Woodrow and me, to this conclusion, that *all* the "scientists" had also settled down to the same, so far as to say, disdainfully, "Your Moses obviously can mean nothing but that, if he means anything; and it is, therefore, *we* reject him totally." Let us also represent to ourselves by what plausibilities a person who, like Mr. David N. Lord, holds this view, would support his assertion, that to this issue the universal opinion must come at last. He would remind us that the great body of Christians certainly understood Moses so, while unbiassed by the *stress* of this geological view; that while a few of the fathers and the Reformers understood Moses differently, yet the new interpretation, as he would call it, was, in fact, suggested and dictated by that geological stress, which was a little suspicious; that the Christian geologists, when driven by that stress, are vacillating and contradictory in their exegesis, which is again suspicious; that the Westminster divines, while probably very poor geologists, were exceedingly able and faithful expositors; and especially that *Moses' enemies are coming more and more openly to the position, that no such new interpretation can save his credit for inspiration.* Our imaginary expositor certainly has the facts with him on this last point. The tone of the scientific infidels is changing in this direction manifestly. Formerly they studied decency, and professed to be quite obliged to the Pye Smiths and Chalmers, who saved the consistency of the venerable Book with their science by means of the new interpretation. But now their *animus* is very different. They disdain to trouble them-

seives about these old literary remains of "Hobrew barbarians" and ignoramuses. No sense placed on them is of any importance to the scientific mind. Let the Westminster sense be the true one—which they think is most probably the only consistent one—for the man who is a fool enough to believe in the documents, these "scientists" easily disencumber themselves by kicking the whole aside as rubbish. Such is Huxley's mode, for instance.

Suppose now, for argument's sake, that we should at last be all compelled to settle down upon the Westminster construction. Then I, from my position, could still save my Bible, and do it consistently. Dr. Woodrow could not. I could say, this Bible is established by its own impregnable, independent evidences, moral, prophetic, historical, miraculous, to be a competent and credible witness to the supernatural agency of an Almighty Creator. I could say this omnipotent agency is competent to any result whatsoever. I could bring in my position, that in such a case the divine testimony logically supersedes the circumstantial evidence for a natural hypothesis, no matter how plausible; and my conclusion would not be superstition, but true logic and true science. If the unbelieving geologist thrust at me his difficulty about the seemingly ancient fossils, I could say, first, that the Divine Witness does not stand in need of an explanatory hypothesis from man to entitle him to be believed. I should say, secondly, that it was always credible that Infinite Wisdom might find a motive, and Infinite Power a means, to effectuate results very unaccountable to my mind. It might be, for instance, that this Omnipotent and Infinite Wisdom, working during the six days, and during the long antediluvian years, during the flood, and during the years succeeding, in times and places where there was no human witness, saw fit to construct these *strata*, and to sow them with vegetable and animal life with a prodigal profusion now unknown; and to hurry the maturing of *strata*, and the early death and entombment of these thronging creatures, with a speed very different from the speculations of geology; and all for profound motives good to his infinite wisdom, but beyond my weak surmises. I might also add that possibly this is what revelation meant, when it said (Gen. i. 20): "God said, let the waters bring forth *abundantly*," etc. I might point to the fact, that such

a divine working would not be wholly unwonted; that, for instance, he causes thousands of embryos of animal life to be produced and to perish without their proper development, for one that grows; that he sows the earth prodigally with vegetable germs which, if they ever sprout, sprout only to perish; that he sheds millions of rain-drops, such as are adapted by nature to water the herbs upon the barren wastes of ocean; that he gives to millions upon millions of flowers in the wilderness, destined only to be cropped by the irrational brute, the same æsthetic arrangement of color, shape and perfume which he has conferred on the flowers of our gardens, for the purpose of giving to rational, observing man the thrilling pleasures of taste. Why this seeming prodigal waste? It is no duty of mine to account for it. But God acts so! So, if he had told me that he had done a similar thing at the world's creation, I should be ready to believe it. But *I should believe it on the authority of God's express testimony, not on the strength of a mere hypothesis and a set of analogies which I have just described.*

I repeat again, I have no mission at this time to assert this Westminster construction of Moses as the only true one. It may be asked, why, then, do I argue its possibility? Why did I, in my former arguments, seem to imply that this might be the issue between the Bible and science? I answer: because I wished to illustrate the full value of this saving principle, by showing how, even in that aspect of the debate, it would defend us against infidelity.

And now I close. I beg the reader's pardon for detaining him so long, excusing myself by the honest plea, that my chief object is, not the vindication of any poor credit I may personally have, but the exposition of vital principles, which will, sooner or later, be found precious to all Christians. As against my rigid critic my purpose has been solely defensive; and if my haste or carelessness has let slip one word which, to the impartial reader, savors of aggression or retaliation, I desire that word to be blotted from memory. None can accord to Dr. Woodrow more fully than I do the honor of sincere devotion of purpose to the truth; or can join more cordially than I do in the wish that he may soon return home with recruited energies and prosperous health, to the work of defending truth.

THE PHILOSOPHY OF DR. BLEDSOE.¹

WE have a long score to settle with Dr. Bledsoe. Something more than twenty years have elapsed since we noticed, in two *critiques*, his great work, then newly published, *The Theodicy*. This dogmatic and spirited book, as we then showed, has for its key-note the Pelagian doctrine, that, in consequence of the self-determination of the rational will, omnipotence itself cannot efficaciously control a soul without destroying its freedom. And the great "theodicy," or vindication, of Dr. Bledsoe, for God's admission of sin into his universe is, that *he could not help it*. These strictures Dr. Bledsoe resents in his *Review* of January, 1871; and he has followed this rejoinder up, in the succeeding numbers noticed, with attacks on Calvinism and applications of his philosophy to two or three other important points in theology. To understand these, a knowledge of his personal history is needed.

Dr. Albert Taylor Bledsoe, a native of Kentucky, an *alumnus* of the Military Academy of West Point, became a minister of the Protestant Episcopal Church. But in a short time his bold and independent mind saw that the standards of that church indisputably teach Calvinism, and also baptismal regeneration, and the eternal damnation of unbaptized infants dying in infancy. Incapable of the mental chicanery which reconciles so many men to insincere or formal professions, he frankly demitted his clerical function and went into the practice of law, which he pursued with distinguished success at Springfield, Ill., for a few

¹ Appeared in the *Southern Presbyterian Review*, October, 1876, reviewing I. *The Sufferings and Salvation of Infants*, and *Reviewers Reviewed*, being Dr. Bledsoe's rejoinder to the strictures of the *Southern Presbyterian Review* on his *Theodicy*, *Southern Review*, January, 1871. II. *History of Infant Baptism*. *Southern Review*, April, 1874. III. *The Southern Review and Infant Baptism*. *Southern Review*, July, 1874. IV. *The Suffering and Salvation of Infants*. *Southern Review*, January, 1875. V. *Infant Baptism and Salvation in the Calvinistic System*. By C. P. Krauth, D. D. VI. *Our Critics*. *Southern Review*, October, 1875. VII. *The Perseverance of the Elect*. *Southern Review*, January, 1876.

years. But seeking more congenial pursuits and associates, he then became a distinguished Professor of Mathematics, first in the University of Mississippi, and then in that of Virginia. Upon the formation of the Southern Confederacy, its needs for military knowledge in its service prompted him to resign his chair and take the post of Assistant Secretary of War. Leaving this post, he went to Europe, and devoted the remaining years of the war to the literary defence of Confederate principles, and to extended studies. After the return of peace, he founded, first in connection with another gentleman, the *Southern Review*, a well known quarterly, which, like the starry sphere sustained upon the shoulders of Atlas, has been chiefly borne upon his sturdy arms. A few years ago Dr. Bledsoe, after having long held, under protest as to some of her doctrines, the attitude of a layman in the Protestant Episcopal Church, joined the Methodist Episcopal Church, and resumed his clerical function, though without assuming any pastoral relation. His *Review* was soon adopted by the General Conference of the Methodist Church South, as their literary organ, though not without dissent on the part of leading members. Since that adoption, Dr. Bledsoe has seemed to add to his former praiseworthy mission of defending sound opinions and faithful history in ethics and politics, the more special one of exposing and correcting what he deems the enormities of Calvinism. His first onset possessed all the zeal of a new recruit. Subsequent researches have shown him something to admire in some Calvinists; and he now announces it as his chosen task to discover the common ground which Wesley dimly groped after, upon which sincere Calvinist and Arminian may meet in a code of doctrines at once evangelical and soundly philosophical.

Convinced as we are that this triumph is impossible for mortal man, we yet admit that the peculiar doctrinal code of Wesley and Watson is, in some important respects, a return towards the truth from the worse extremes of early Arminianism. It is, perhaps, the very closest approximation to the truth which can be made by evangelical minds still unfortunately infected with the *πρωτον εζδδος*, of the *equilibrium* of the rational will. To us it appears clear that the Wesleyan creed contains far more of God's truth than the New Haven theology. Wesleyanism teaches, in-

deed, that the bondage to native depravity is in part relieved under Christ, and that the sinner's will is now restored to such *equilibrium* as to be able to coöperate with God's grace in the spiritual acts of repentance and faith. But the Wesleyan admits that the depravity, as inherited from Adam, is total, until retrieved by "common sufficient grace." The semi-Pelagian of New England denies total depravity, and ascribes to man, by nature, an ability of will to all spiritual good. The Wesleyan does, indeed, teach a universal atonement for the sins of all the race. But he holds to a true vicarious satisfaction for guilt; while the New Haven divine denies this vital truth, and invites us to rest our hope of pardon upon some Socinian device of an exemplary suffering by Jesus. The Wesleyan claims that, by virtue of "common sufficient grace," all sinners have ability of will to embrace Christ; but he teaches that it is a "grace," a redemptive purchase of Calvary, and not a natural endowment of fallen souls, which enables dead sinners to perform the living acts of faith and repentance. He holds against the Scriptures, that God was moved by an eternal foresight of believers' faith and holy obedience, to predestinate them to life; but he, at least, holds that God has in this way a personal, infallible and eternal predestination, which the New Haven divine refuses to accept. It is to us a pleasing thought, that multitudes of the adherents of Wesley grasp with a sanctifying faith these saving truths, while they quietly, and perhaps unconsciously, drop these unscriptural excrescences which their great teacher attached to them in the vain hope of bending God's word to his unfortunate philosophy, and thus these excellent people really build their hopes upon grace, and grace alone. These rudiments of vital truth are practical to them; the excrescences fortunately remain unpractical.

Dr. Bledsoe is perspicacious enough to see the vital connection between the theory of free agency and the doctrines of grace. Hence he tells us that he has made the great work of Edwards on the Will the study of years. One of his chief works has been an attempted refutation of Edwards' doctrine of the moral necessity, or certainty, of our volitions; and the opposite view of self-determination is continually asserted and expounded by Dr. Bledsoe as the corner-stone of all his speculations. He is too shrewd to adopt the old Arminian *formula*, that the will

determines itself to choose; or the modern form of the heresy, that volition is an uncaused event in the world of spirit. He admits the first principle, "Nothing arises without cause." But says he: the mind itself is simply the cause of its own volitions. Motives are, indeed, connected with volitions, as their necessary occasions, but not as their efficient. The action of intelligence and sensibility, the presence of motives in the mind—all these, he admits, are the conditions *sine qua non* under which acts of choice take place; but still it is the mind itself, and that alone, which is the efficient or true cause of volition. And in this assertion he places the very being of our free agency and responsibility.

Now this is more adroit than the old scheme demolished by Edwards; for it evades the most terrible points of Edwards' refutation. As Dr. A. Alexander has admitted, there is a sense in which, while the will, in its specific sense as the faculty of choice, is not self-determined, we intuitively know that *the soul is self-determined*, and that therein is our free agency. But still the scheme of Dr. Bledsoe is the opposite of Dr. Alexander's, and is but the same Arminian philosophy in a new dress. When Dr. Bledsoe says that the mind is the true cause of all its own volitions, he means that this mind causes them contingently, and may be absolutely *in equilibrio* while causing them; he means that the mind does not regularly follow its own strongest judgment of the preferable when acting deliberately and intelligently; he means to deny the efficient certainty of whatever in the mind produces volition; he means to apply his theory of the will to the very results in the theology most characteristic of the semi-Pelagianism, or, even worse, of Pelagianism. It is to this philosophy he appeals to justify an omnipotent God in permitting sin, simply because he could not help any sinner's transgressing who chose to do so; to argue the necessity of synergism in regeneration; to deny the sinfulness of original concupiscence.

This novelty of Dr. Bledsoe's statement of the old error does not require a re-statement of the impregnable argument by which the certain influence of the prevalent motive has been so often established. The well-informed Presbyterian reader will not need this repetition. For such a one, the whole plausibility of

Dr. Bledsoe's argument is destroyed by simply pointing out two of its omissions. He speaks of the presence of motives in the mind as conditions *sine qua non* of volition, and yet denies them causative efficiency. But he has failed to perceive the essential difference between sensibility and desire, between the passive and the conative powers of man's soul, and between the objective *inducement* and the subjective *motive*. For this confusion, as for the apparent weakness in our demonstration, he and we are indebted to the sensualistic philosophers. Were Dr. Bledsoe reasoning with Hobbes or Locke, his refutation would be sound. Were it true that there is nothing in the mind but sensations, and the reflex modifications or combinations thereof; that sense-impression is the $\pi\acute{\alpha}\nu$ of mental affections; that the presence of the object necessitates the nature of the impression, and the nature of this passive impression on the sensibility necessitates the nature of the reflex appetency; and this, in turn, necessitates the volition; then man would be a sentient machine, and his free agency would be gone. The sinful volition of the sheep-stealer, for instance, would be as much the physical result of the sight of the sheep, as pain over the skull is the involuntary result of a blow with a bludgeon. But must Presbyterians forever advertise the Arminians that Hobbes is not their philosopher? We now again notify Dr. Bledsoe, that we surrender that scheme of necessity to his devouring sword. Let him demolish it as fast as he pleases. Dr. Alexander has given him a proof much simpler and shorter than any of his own, that objective inducement is not the efficient of any deliberate and responsible volition. It is found in the obvious fact, that the same object, the same sheep, for instance, is the occasion of opposite volitions in the sheep-stealer and the honest man. But were the sheep *cause* of volition in each case, "like cause should have produced like effects." But let us pass now from objective inducement to subjective motive, from the passive impression on the sensibility to the conscious, active, spontaneous appetency; and it needs no argument other than our own consciousness to convince us that deliberate volition always does follow subjective motive; or that the choice will infallibly be according to the soul's own subjective, prevalent view and appetency. The stray sheep did not *cause* the thief to purloin, nor the honest neighbor to restore it

to its owner's fold. But subjective concupiscence, whose action was *occasioned* by the sight of the animal, *caused* the one man to steal it; moral love for "our neighbor as ourself" *caused* the honest man to restore it. Let Dr. Bledsoe make full allowance for this distinction, and he will attain to what he has not yet reached, amidst all his studies—a clear understanding of the Calvinistic and Bible philosophy of the will. And here we can see in what sense Dr. Alexander could justly admit, that, while the faculty of will is not, the soul is, self-determining. Motive, which is the uniform efficient of rational volition, is subjective: it is as truly a function of self-hood as volition itself. It is not an impression superimposed on the spirit from without; it is the soul's own intellection and appetency emitted from within.

The reader is now, we trust, prepared for seeing how fatal is Dr. Bledsoe's second omission in his analysis of free agency. He has left out the grand fact of *permanent, subjective disposition*—the *habitus*, not *consuetudo*—of the Reformed theology. When we appreciate the flood of light which this fundamental fact of rational nature in that theology throws upon the main questions of free agency and morals, and when we see how usually great philosophers, as Dr. Bledsoe, overlook it, we are often amazed. He may rest assured it is the "knot of the whole question." Let this simple view be taken. Grant that the soul of man is self-determining. *Where then are we to seek the regulative law of its self-action?* No agent in all God's creation works lawlessly. "Order is heaven's first law." Every power in the universe has its regulative principle; is mind, the crowning being of God's handiwork, lawless and chaotic in its working? This regulative law of man's free agency is found in his *disposition*, his moral nature. Though one being detects another's disposition *a posteriori*, by deducing it from his observed volitions, yet in each spirit, disposition is *a priori* to volition; for it is the original, regulative power which determines what subjective motives have place in the mind. These facts are so evident to the consciousness that to state them is to show their justness. How, then, are free acts of choice in the moral agent regulated? We reply, not by objective impressions; for then the man would not be free; but by the agent's own permanent disposition. There is the fullest, most efficient certainty, that the specific sub-

jective motive will arise according to the man's own disposition, and that the volition will follow the prevalent motive. Does Dr. Bledsoe complain that then it is man's disposition which governs him? I reply, Yes; and nothing can be so appropriate, because his disposition is himself; it is the ultimate, the most original, most simple function of his self-hood.

From this truth it follows, that to control the disposition of a creature is to control his motives and actions. When Omnipotence, which first created, new-creates a sinner's disposition, although we may not explore the mystery of that act, we see clearly enough that God thereby determines efficiently the new line of action. And yet free agency is not infringed; but the uniform law of connection between disposition and subjective motive, and motive and act, so far from being tampered with, is reëstablished and ennobled. But on Dr. Bledsoe's philosophy, God possesses only a contingent, possible power of occasioning, not causing, some of the volitions he desires, by the ingenious and multiform play of his skill amidst those feelings and impressions in the sinner's soul which are only the conditions of the creature's self-determination! Which of these is the Bible account of saving grace?

Amidst the many refutations which he claims to have made of Edwards' argument, we notice only one, because it will be found to bear upon our subsequent discussion. Edwards has argued the certainty of the acts of free agents, from the fact that God certainly foresees them. This unanswerable argument Dr. Bledsoe thinks he has neutralized. He admits the fact of God's foreknowledge of such acts. But he argues that, since this is the foreknowledge of an infinite mind, it is the most unwarrantable presumption in us to suppose that it implies such sort of causative connection between the volitions and their antecedents as would enable our finite minds to foreknow future events. He rebukes the Calvinist with heat, because, from the fact of God's foreknowledge, he presumes to infer the mode of it. Dr. Bledsoe here travels precisely over the ground of the famous controversy about *scientia media*, and asserts the same sophism which the Jesuit and semi-Pelagian asserters of that error attempted to sustain. Admitting, against the Socinian, that God has foreknowledge of all the volitions of rational creatures, they supposed it to be a mediate and inferential knowledge. What did

they suppose to be its *medium* or middle premise? God's knowledge of all the conditions under which any free agent will act being an infinite omniscience, his insight into the disposition of each creature enables him to infer how that creature will act under those given conditions. But Dr. Bledsoe ought to know how often the demolition of this scheme has been completed. For instance: this Jesuit theory makes this branch of God's foreknowledge derived or inferential; if we mistake not, Dr. Bledsoe, with all sound theologians, believes all God's knowledge to be immediate and intuitive. Again, every one who is able to put premises together must see that the middle term of this *scientia media* virtually assumes that efficient connection between the agent's subjective disposition and motives, and his volitions, which the Calvinist assumes and the semi-Pelagian denies. We ask: how does God's insight into that agent's disposition enable him *certainly* to infer the action, unless as God sees that this disposition certainly regulates the agent's free choice? Hence, when the Jesuit cries that we must not measure the method of God's omniscience by our knowledge, he is pretending to claim for God, as a mental perfection, a tendency to draw an inference after the sole and essential premise thereof is totally gone! Is this a compliment or an insult to the divine intelligence? To every right mind it will be clear that, whether a mind be great or little, it would be its imperfection, and not its glory, to infer without a ground of inference.

But as Dr. Bledsoe does not seem to be aware that he is treading the oft-refuted path of the Molinist, so he does not seem to understand the true nature of the argument from God's foreknowledge to the certainty of the creature's will. We will expound it to him. He will not deny that the Bible says God made man's soul after his image, in his own likeness. While God's intelligence may, consistently with this fact, surpass man's infinitely, the two intelligences cannot, while acting aright, expressly contradict each other. Second, Dr. Bledsoe doubtless believes, with us, that the necessary intuition, "no effect without its adequate cause," is valid and correct. If this is the fundamental *norm* of the human reason, and was impressed on our minds by a truthful God, it must be because it was also, from eternity, a principle of the divine reason. Now then, if the divine mind

foresees an event as certain in the future, he must foresee it as to be effectuated by *some* true cause; for *ex nihilo nihil* is also true to God's thinking. Again: if a mind infinitely correct foresees that a given event is certainly going to occur in the future, it must be certainly going to occur. Is not this so true as to be almost a truism? But unless there were *somewhere, some true cause efficient to produce* the certain occurrence of that event, its occurrence would not be certain. Here is a case, *e. g.*, where God certainly foresaw that Nebuchadnezzar would freely choose to sack Jerusalem. Then, the occurrence in the future was certain. Then, there must have been, somewhere, a cause efficient to produce that choice. Where now will Dr. Bledsoe find that cause? In fate? Oh, fie! In God's compulsion of the Assyrian's freedom? This is as bad as the other! Or in the devil's compulsion? This is worse yet! There is absolutely no place for Dr. Bledsoe to rest, save in our good, Calvinistic, Bible philosophy: that the efficient of Nebuchadnezzar's free volition was in the power of his own disposition and subjective motives over his own will. These lying open before God's omniscience, and indeed operating under his perpetual, providential guidance, he thus foresaw infallibly the free volition which he purposed to permit the wicked pagan to execute; foresaw, because he purposed to permit.

We are compelled, then, to return to the charge made in our pages in 1856, which he so much resents: that he has mistaken the nature of the creature's free agency; that he has infringed the omnipotence of God, and therefore that his "theodicy" is nothing worth. As he complains of injustice in our presentation of his views, we now give them in his own words (*Theodicy*, p. 192, etc.): "Almighty power itself, we may say with the most profound reverence, cannot create such a being ('an intelligent moral agent,') and place it beyond the possibility of sinning." "It is no limitation of the divine omnipotence to say that it cannot work contradictions. To suppose an agent to be created and placed beyond all liability of sin, is to suppose it to be what it is and not what it is at the same time . . . which is a plain contradiction." His theodicy is, that in this sense God tolerates sin in his natural kingdom, because he cannot effectually exclude it without destroying the creature's free agency.

How can any just mind fail to see that here we have a total oversight and exclusion of that vital distinction, so well known in sound philosophy, between certainty and compulsion? Compulsion would overthrow free agency; certainty as to the nature of volitions does not. Deny this, and you cannot hold that God is indefectible without uprooting his freedom. Deny this, as Dr. Bledsoe virtually does, and it becomes impossible for God to answer a prayer for grace with any certainty; or to regenerate any sinner certainly; or to promise certain glory to any elect angel or to any redeemed man in heaven. Deny this, and it becomes impossible for Jesus Christ to give us, in the infallible holiness of his Person, a safe ground for our trust in him. We forewarn our Wesleyan brethren that this is but blank Pelagianism; it uproots all foundations of faith and believing prayer; and it flings a pall of doubt and fear over the assurance of angels and saints in glory. We beseech them again to beware, and not allow Dr. Bledsoe's zeal in assailing what they deem the errors of Calvinism to seduce them to this fearful position, so destructive of redemption itself. Happily Dr. Bledsoe is too good a Christian to stand consistently to his own philosophy; he contradicts himself. On page 174 of his *Theodicy*, he states that "as every state of the human intelligence is necessitated," and "every state of the sensibility is a passive impression," a "necessitated phenomenon of the human mind," as the sensibility "may be dead," an almighty God may so act on this necessitated intelligence and sensibility as to create new light and a new heart in the sinner. On this remarkable concession we make several remarks. First, Dr. Bledsoe here, in his misconception of the real doctrine of the Calvinist concerning the will, actually goes into the extreme of the ultra-necessitarian; he talks just like a follower of Hobbes or Spinoza. Second, he confirms our charge of a failure to distinguish between sensibility and conation, as two opposite capacities of the soul, and between mere objective inducement and subjective motive. In describing God's agency in creating the new heart, he omits what is the hinge of the whole change, fundamental disposition and its renewal. Hence, third, in quoting Dr. Dick as presenting a parallel theory of regeneration, he shows that he misconceives the whole matter, mistaking the semi-Pelagian conception of "moral

suaſion" for the Bible one of a quickening of the ſoul into ſpiritual life. His theory vibrates between ſemi-Pelagianiſm and fataliſm. Nothing is eaſier than to ſhow, from his poſition, that the man thus renewed of God would act under a fatal neceſſity. If "ſtates of intelligence are neceſſitated," and "ſtates of ſenſibility are paſſive and neceſſitated," and God creates light, and a new heart, through a neceſſary operation on theſe, then there is an end of the converted man's free agency; his gracious ſtate will conſiſt in his actions being directed by the two neceſſitated powers of intellect and ſenſibility. That is too fataliſtic for us Calviniſts! Spontaneity is left out. Dr. McGuffey was evidently correct in his verdict upon this book: that its peculiarities aroſe from Dr. Bledſoe's not conceiving aright the true nature of the Reformed theology he ſuppoſed himſelf refuting.

But let us bring his concluſion to a teſt ſurer than any philoſophy: the Word of God. He, ſpeaking preciſely of this department of his providence, his rule over free agents ſays: "My counſel ſhall ſtand, and I will *do all my pleaſure.*" "He doeth his will among the armies of heaven, and the inhabitants of this earth: and *none can ſtay his hand*, or ſay unto him, what doeſt thou?" "Therefore hath he mercy on whom he will have mercy, and whom he will he hardeneth." The 110th Pſalm, glorifying the gracious influences of the Meſſiah's kingdom, ſays that "his people ſhall be willing in the day of his power." So, "his people never periſh, and none is able to pluck them out of his hand." "They are kept by the power of God, through faith, unto ſalvation." But why multiply proofs? The effectual calling of every ſoul "dead in treſpaſſes and ſin" is a proof that God's omnipotence is able to renew every ſinner. For the clear teaching of the Bible is, that, while there are differences of degree in the developments of native depravity, the deadneſs towards God is entire in every ſinner, and "the carnal mind is enmity againſt him." The whole activity of every natural man is put forth for ſelf-will and againſt godlineſs. Hence, were not an efficient and invincible power put forth in the quickening of every believer, none would be quickened. This divine power which quickens one would be enough to quicken all the reſt, had God purpoſed to attempt it. The uniform tenor of

the gospel teaches us that we are all lost sinners; and that when one is saved instead of another, it is the divine mercy which has originated the difference, not the superior docility of the favored man. "What hast thou that thou didst not receive?"

Does the caviller, then, harass Dr. Bledsoe with the question: if God was as able to keep Satan in holiness as Gabriel; if he was as able to redeem Judas as Saul of Tarsus, why did he choose the everlasting crime and misery of his creatures, Satan and Judas? It will be better for him, instead of asserting God's benevolence at the expense of his omnipotence, to answer, with us: "secret things belong unto the Lord our God." For the pretermission of Satan and Judas, our God doubtless saw, in his own omniscience, a valid reason. It was not capricious, nor cruel, nor unfair; nor did God find it in his own impotency. Had God seen fit to reveal that reason, every reverent mind would doubtless be satisfied with it. He has given us no knowledge of it. Yet one thing we know, that this unknown reason implied no stint of divine benevolence and infinite pity towards the unworthy, in God. That we know, at least, by the fact that God is so merciful as to give his only Son to die for his enemies. There we rest satisfied. "What he doeth we know not now, but we shall know hereafter." There our author, and the caviller whom he vainly seeks to satisfy, had better rest with us.

The second great task which Dr. Bledsoe proposes to himself is the application of his philosophy of the will to the "suffering and salvation of infants." In four of the articles of his *Review*, cited at the head of this paper, he zealously impugns Calvinism, and especially the Calvinism of the Protestant Episcopal Church, as involving the damnation of dying infants. While we shall resist with all our might this indictment against the Presbyterian Church, justice requires us to say that in some of the positions of these articles Dr. Bledsoe is correct, and by his candor has earned the approbation of all. Among these praiseworthy places is his clear exposure of Lecky's *Rationalism in Europe*, for assailing early Christianity on this subject, when it is transparently manifest that he knew not whereof he affirmed. He has here convicted this defender of rationalism of a pretentious sciolism. Another passage which deserves the earnest sympathy of the

friends of truth is that in which he demonstrates that the Thirty-nine Articles, especially as expounded by the Homilies of the Protestant Episcopal Church, are sternly Calvinistic, and where he exposes the miserable shufflings of her Arminian and pretended Low-church clergy around these doctrines and that of baptismal regeneration. He shows that the most offensive points in the whole discussion upon the destiny of dead infants have grown out of this wretched error of baptismal regeneration, with the kindred one of a "tactical succession;" and he convicts the original Lutheran, along with the Anglican Church, of being committed to the harsh doctrine of the eternal damnation of all unbaptized children. But when, with Dr. Krauth, he attempts to include the Presbyterian Church in the same charge, we must wholly demur. A part of their proof is, that Calvin and the supralapsarian divines use language implying that they believed there are infants in hell, whose eternal perdition began before they were old enough to commit overt sins; and they remind us that, among these extremists, was Dr. Wm. Twisse, the first Moderator of the Westminster Assembly. It is a sufficient reply that the Assembly *did not* endorse Dr. Twisse's supralapsarianism; that Presbyterians are responsible, not for the writings of any uninspired men called Presbyterians or Calvinists, nor even of Calvin himself, but only for the creed which they have expressly published as their own. If Dr. Bledsoe must judge of the complexion of that creed by the literature of that age, then, in fairness, he is bound to remember that our ablest and most esteemed divines of that age, as of this, like Turretin, do most expressly refute the ultraisms of Gomarus and Twisse. But he thinks, with Krauth, that when our Confession (Chap. X., § 3) speaks of "elect infants dying in infancy" as being redeemed in some way by the blood and righteousness of Christ, the only antithesis implied is of "non-elect infants dying in infancy." To a mere surmise, a simple denial is a sufficient answer. We assert that the fair and natural implication is, of *elect infants who do not die in infancy*, but live to be adults. For, the subject of the previous proposition is the manner in which grace is applied to rational adults. It asserts that, in their case, it is by effectual calling. How then is grace applied to elect souls, *i. e.*, to elect infants called in the providence of God to die in infancy,

who are not in a rational condition? This question the article in hand undertakes to answer. Though these little souls be not in a condition to experience the rational part of effectual calling and to exercise conscious faith, the omnipotence of the Saviour can and does apply redemption to them also; and in like manner to dying idiots and lunatics. This is the blessed truth here stated, and it is the whole of it. The natural antithesis implied is that between the elect soul that dies in infancy and the elect soul that lives to be adult, and the different modes in which the same redemption is applied to each. Does the objector cry, "why then did not the Confession speak out plainly, and say whether it supposed there was any soul, not elect, which ever died in infancy?" We answer: because on that question the Bible has not spoken clearly. Let Dr. Bledsoe show us the express place of Scripture, if he can. Herein is the admirable wisdom and modesty of the Westminster Assembly, that, however great the temptation, they would not go beyond the clear teaching of revelation. Where God is silent they lay their hands upon their mouths.

Our assailants also think they find clear traces of infant damnation in our Confession (as in the Thirty-nine Articles), where it asserts that original sin is, even in the infant, true sin carrying guilt, and making the soul obnoxious to the moral indignation of God. Here they bring us, indeed, to the hinge of the whole question. Is "concupiscence" real sin? Or is it only an infirmity? Does it involve guilt, even apart from the overt transgression to which it naturally tends? If it does, then it indisputably follows that even the young infant is worthy of condemnation before God. But *it does not follow that any dead infant is actually in hell*; nor that we, who are convinced that "concupiscence is sin," should dispute the application of Christ's blood to atone for that sin in every soul dying without actual transgression. This obvious distinction Dr. Bledsoe quietly leaves out; while he charges that as we hold concupiscence by itself is really guilty, we must believe many infants are damned for it. He stoutly holds that it is no sin at all; and therein, as we shall show, commits himself to the baldest Pelagianism. And here again, in passing, we solemnly caution our Wesleyan brethren to take care how they permit this champion of theirs, under the appearance of a zeal against

a despised Calvinism, to betray them to an error which Wesley, Watson, and all their leaders reject. We testify to them, that this doctrine of the *Southern Review* is not Wesleyan: it is Pelagian; it is Socinian. It says (Jan., 1875, p. 97): "New born infants *deserve no punishment at all*, much less 'God's wrath and damnation.'" P. 103; "The guilt of original sin" is only "supposed," "founded only on the sand of human opinion." P. 105: "Before the time of Augustine . . . natural depravity was looked upon by the fathers of the Church *not* as 'truly a sin,' but *only as misfortune*." April, 1874, p. 353: "The omnipotence of God himself cannot take away our sins, and turn us to himself, without our own voluntary consent and coöperation." Do not Wesley and Watson teach that there is an original sin derived by fallen man from Adam, which is so truly sin as to need and receive the propitiation of Christ's blood offered in a sacrifice of universal atonement "for every man?" Do they not teach that this original sin also necessitates the redemptive gift of "common, sufficient grace," purchased by Christ's blood, and inwrought by his Spirit, to relieve, in the common, unrenewed sinner, the bondage of the will, and lift him again to the power of self-determination for gospel acts? Surely this doctrine and Dr. Bledsoe's are at dagger's points! Again, according to him, a dying infant, not being a sinner, has no need of a Saviour in the gospel sense. It is not *redeemed* by Christ, but only helped in some such sense as a physician who eases its sufferings. It is not pardoned; for it has no "true sin" to be pardoned. It cannot be renewed; for, according to Dr. Bledsoe, it needs no renewal; and if it did, could in no possible way receive it, since "the omnipotence of God himself cannot turn it to itself without its own voluntary consent and coöperation." But the dying infant has not sense enough to give that *voluntary consent*. Hence, when ransomed parents reach heaven, their glorified little ones will have no part with them in "the song of Moses and the Lamb." When Christ blessed little children, claiming them as subjects of his "kingdom of heaven," he was mistaken; for that kingdom is the one which he purchased with his blood. No infant should be baptized. The water represents the blood and Spirit of Christ cleansing *sinners* from guilt and corruption. But, according to Dr. Bledsoe, they are not real sinners, have no guilt, and instead

of needing a renewal of their corruption, are only laboring under a "misfortune." Why he should hold to infant baptism it passes our wit to conceive. In one place he says he has a reason for baptizing them; but we have not been able to find the place where he has condescended to state it. Now, *for what does the Methodist church baptize infants?* Does she do it, like Pelagius and the Papal priests, to deliver them from a *limbus* of eternal natural blessedness; or to signify their deliverance from sin and wrath? Let its standards and ritual answer. Again we warn our Methodist brethren; they cannot afford to carry this doctrine: it is neither theirs nor Christ's.

We also justly complain of Dr. Bledsoe for certain passages in which he endeavors to involve Presbyterians in *odium* for this solemn and awful fact of original depravity, *which they did not invent* but sorrowfully recognize as a great reality. His language is worthy of a cavilling Lecky, or of a Universalist. He speaks ironically of "innocent little babes" condemned by a God of love to cruel and everlasting torments, only because Adam chose, some thousands of years ago, to eat an apple. He should know that this is unfair; for no Calvinist ever ascribed any imputed guilt of Adam's first sin to any posterity of his which was innocent of all subjective depravity. Our Confession says that "original sin" is, in all, true sin, and carries true guilt. But it defines original sin as including not only the guilt of Adam's first sin, but always inward corruption also. Dr. Bledsoe affects to draw a contrast between the earthly parent, though a sinner, loving and cherishing the smiling babe, and the Calvinist's God, though holy, hating and damning it. Does he not know that this is precisely the song of cavilling Universalists? He professes to believe that God will certainly punish our adult sinful children in hell, if they refuse to repent. But does not the Christian parent cherish and pity that adult impenitent child in any hour of his helplessness, as he did the infant? To any one but a Universalist the solution is plain. Our children are bone of our bone. We are not the appointed judges and punishers of ungodliness. God is that Judge. Hence, while he discloses towards our impenitent children, in ten thousand mercies, a pity far more watchful and tender than a parent's, yet when he assumes his rightful judicial function, he

condemns each man according to his deserts. He is a Ruler "both of goodness and severity."

But to return. The Bible teaches that inherited depravity of nature is, apart from actual transgressions, truly sin, as such, involving guilt, and therefore obnoxious to the righteous wrath of God, and to such penalty as his equity apportions to it. Dr. Bledsoe thinks that inherited depravity, apart from actual transgression, is not truly sin, involves no guilt, is only a "misfortune," and merits no wrath or punishment at all. This is precisely the issue between him and Calvinism. In giving it practical form and extent we have another distinction to present, which is of cardinal importance. It concerns that general proposition which Dr. Bledsoe would also contest: that every sin, being committed against an infinite God, is an infinite evil, and so carries a desert of everlasting punishment. Let us, for illustration, discuss this proposition as to a specific sin of a rational adult. Many, in this instance, would deny it, because they are so in the habit of estimating transgression as the civil magistrate does, insulated from all its attendants and sequels. Does the court, for instance, indict a man for murder? That single act is considered by itself; and the court does not concern itself with antecedent character, or with consequences, except as they throw some light on the evidence. Now men continually deceive themselves by these examples, as though a heart-searching God could or would judge sins against himself in this partial and inadequate way. They seem to have before their imaginations some such case as this: here is a man who has truly and literally committed only one insulated sin against God; and God has this one act to judge, as expressive of no antecedent moral state, as destined to have no repetitions, as unconnected with any formation of evil habitudes in the agent's soul, and as carrying no consequence or influence upon his immortal character or on that of immortal fellow-creatures. Has God said that this one act, thus insulated, is by itself worthy of eternal penalty? We reply, we are ignorant of any revelation on that question. For, in fact, such a case never existed, and God will never have such an instance to judge. It is impossible that it should arise; were it possible we do not profess to know what God would think of it. Every

case which God has to judge is that, not of sin by itself, out of a sinner; not of an act merely, but of an agent; and the infallible omniscient mind will, of course, look at each act as it truly occurs, in its whole connections with character, destiny, and example to others. Here, for instance, a profane oath has been uttered. God sees that this oath is, first, an expression of certain prevenient sentiments of wilfulness, irreverence, carelessness, and enmity in the mind of the swearer. Then, secondly, it involves certain influences for evil on spectators and imitators, the evil tendency of which is to wide-spreading and everlasting mischiefs. Then, thirdly, it strengthens the profane temper and habit of swearing, thus involving the natural promise of a series of profanities continued forever. In a word, God, as an omniscient judge, has to weigh the sinner as a concrete whole, and to estimate each transgression as part, and index, and cause, as well as fruit, *of a disease of sin*, a spiritual eating cancer, which is an immense evil, because involving, unless grace intervene—and the sinner has no *claim of justice* to that remedy—an everlasting mischief and criminality. Thus judged, sin is manifestly an infinite evil; it manifestly deserves an endless penalty. One reason why a holy God punishes forever is, that the culprit sins forever. The everlasting series of sins is the fruit of the first rebellion. This is God's point of view. When we argue thus, we do not appreciate those aggravations which attach to any one particular sin, by reason of the majesty and holiness of the party offended, and the perfectness of his claim of right to our obedience. It is well said by the Puritans, "To have a little sin, one must have a little God."

Let us now apply this view to the case of a depraved infant, standing, as yet, before the divine inspection, without actual transgression. He has one sort of sin and guilt as yet, that of his original sin. If that is real sin and real guilt, as we shall prove, then a righteous divine judge will, and ought to, disapprove it as such, and to adjudge to it *whatever penalty is its fair equivalent*. How unanswerable is this! But the objector, when we proceed to the question, how extensive that penalty may justly become, preposterously argues as though this infant's sin and guilt were to have no natural sequel or increment. They seem to imagine that somehow God continues to view him as not

growing up from a depraved infancy to a sinful manhood, and to an endless series of provocations. But in fact God views him as one who will grow into all that sin; for this career is simply the sure and natural outgrowth of his own corrupted free-agency. The objector, with a strange hallucination, seems to suppose that, if there should ever be, beyond the grave, a soul condemned for its infant depravity—just as *we see* all infants this side the grave at present under condemnation for their infant depravity—that first infant would be sinless of all save its initial depravity. But, obviously, if there were such a case, that infant would develop precisely like the unconverted infants we see around us every day, and precisely like them *would continue a condemn'd soul, because it continued a sinning and an increasingly sinful soul.* Let the man who cries out against the “monstrosity of infant damnation” drop these absurd scales from his eyes. Let him remember what it is that the Calvinist asserts. We do not assert that there is a single case of an eternally damned infant in the universe; for we know Christ redeems infants, and we hope he redeems all who die infants. But we assert that were not the infant guilt of depravity cleansed by Christ’s blood in the case of those who die infants, it would be just in God to disapprove, judge, and condemn them, *precisely as we actually SEE HIM condemning the living ones in our own households.* Does not Dr. Bledsoe believe, sorrowfully, that the condemnation of some of these living ones may become everlasting? He says he does. But on what conditions? On the conditions of growth into adult sin and perseverance in impenitency. Well, were the grace of Christ not applied to the soul of the infant that dies, its condemnation would also turn out to be everlasting on precisely the same conditions. Does Dr. Bledsoe think the eternal doom of the adult unjust, who, beginning a depraved infant, lived on in a life of voluntary depravity to a final impenitency? He does not. He regards it as solemn, fearful; yet worthy of a holy God. Why then this outcry, when the case of the non-elect dead infant, if there were such a case, would be precisely parallel? There is, then, no use in this vain attempt to cavil against God’s condemnation of the guilt of original sin. It is precisely what we see every day in the living infants of our own families. We see it in their alienation from God, in their sick-

nesses, mortality, and community with us in the curse. We hear it in the express word of God, that they "are *all by nature* heirs of wrath, even as others;" that "all the world are become guilty before God;" and that "the wrath of God abideth" on every son of Adam who has not believed.

But let us now return to the hinge of the whole debate. Is that *habitus* of soul which the depraved infant inherits really sin, in such a sense as to carry guilt and to deserve penalty? Dr. Bledsoe is constrained by his erroneous philosophy to say no; it is, so far, only an infirmity. We say his philosophy constrains this answer. For, first, if certainty in the influence of subjective disposition and motive over volition were absolutely inconsistent with free-agency and responsibility, there would be no real guilt in the actual transgressions which are the fruits of such *habitus*, and, of course, no guilt in the parent state of soul. Secondly, if self-determination and contingency are essential to free agency, in Dr. Bledsoe's sense, then no permanent and decisive state of soul can have moral quality. There remains nothing to which moral quality can be ascribed, save *acts of soul*. This conclusion, which is virtually Dr. Bledsoe's, should have opened his eyes to the error of his premises; for that "sin consists only in sinful acts of soul," has always been the key-note of the cry of ancient and modern Pelagians. Let us test the question whether a depraved disposition is truly sin, by sound reason and scripture.

The stereotyped argument in the negative is, "that nothing can be sin which is involuntary; but the disposition cannot be voluntary, being, as the Calvinists themselves teach, *a priori* to all the volitions it regulates." This plausible sophism proceeds simply upon an ambiguity in the word "involuntary." In one sense, an act or state is involuntary when the agent wills positively not to do it, but is forced against his will; as when one striving to cleave to his support is yet forced to fall. The result, which is, in that sense, "involuntary," is, of course, devoid of moral quality, and blameless. The other sense is, when an act or state of soul is called involuntary because it did not result from any express volition. In this sense, that which is not the result of an intentional volition may have moral quality, and be criminal. An envious man may so think of his innocent enemy as to have

envy excited, by reason of an involuntary train of association; yet that envy is criminal. Let the ambiguity be removed by employing the word spontaneous. Responsibility is coëxtensive with rational spontaneity. But the envy, in the case supposed, was spontaneous. The disposition to ungodliness is spontaneous. The sinner cannot say that it subsists in his breast contrary to his will. No power makes him entertain it against his wishes. It is as much a function of his selfhood, prompted from within, as any volition he ever executes. It may be, then, like the express volition, responsible and criminal.

We argue that native evil disposition is such, again, from the testimony of conscience. Every man blames himself when he thinks dispassionately, for inclinations to evil not formed into purposes. He would blush to have them disclosed to his fellow men. Why this, except that his moral intuition tells him his fellow will rightfully disapprove it? If he perceives a mere inclination in his neighbor to wrong him, he resents it, though it be formed into no purpose.

Many sins of omission prove the same thing. Here, for instance, is a well-dressed and self-indulgent man walking beside a stream. A prattling child falls into the water, and while he is hesitating to infringe his bodily comfort and tarnish his goodly raiment by leaping after it, the child is drowned. Here is guilt, but there has been no *volition*: the lazy man can say with truth, that positively he had not made up his mind to neglect the drowning child. But he is guilty of breaking the sixth commandment. Now every one sees that it is to his selfish hesitancy the guilt attaches. But hesitancy is a state, and not an act of soul. We blame it in this case because it is the index of a selfish, cowardly disposition.

This suggests a stronger plea. Every practical mind gauges the moral quality of an act according to its intention. When, for instance, a just judge would ascertain the guilt or innocence of a homicide, he inquires into the intention. He knows that "all killing is not murder." It is the malicious intent which stamps criminality upon the act. This is but stating, in another form, the admitted truth, that the subjective motive determines the moral quality of the act, as it decides its occurrence. But it is the natural disposition which regulates the subjective motive.

Hence, it is so far from being true, that morality resides only in acts of soul—if it did not reside in the dispositions which regulate these acts and give them their quality, it would not be found in the acts at all, it would be banished from the earth. In fine, we appeal to that common sense of mankind which persists in imputing moral merit or demerit to *character* as well as to actions. What is character? Wherein does the thievish character of the rogue reside, in the intervals when he is eating, or is asleep, or anyhow is not thinking of his thefts? The only answer is, it resides in his disposition and habitudes. We appeal to that common sense which always regards cause and effect, parent and child, as kindred. When we see concupiscence, in the words of the Apostle James, conceiving and bringing forth sin, we know that mother and daughter have a common nature.

This suggests to us the scriptural argument. Here we are on solid and impregnable ground. Job declares that none can bring “a clean thing out of an unclean.” Does he not use the term “clean” in the same sense in the parent and the child? David confesses in the fifty-first Psalm that he “was shapen in iniquity, and in sin did his mother conceive him;” and this in-born sinfulness he makes, along with the crimes which were its fruit, subject of profound repentance. The fifty-eighth Psalm declares that infants go astray as soon as they be born, speaking lies; their poison is as the poison of the adder, hereditary and natural. Our Saviour tells us “that which is born of the flesh is flesh,” and on this he grounds the necessity of a new birth. He tells us, “Either make the tree good and the fruit good, or else the tree evil and the fruit evil.” Does he not use the words “good” and “evil” consistently throughout, of the soul’s dispositions and its acts? The great apostle tells us that we were all naturally “dead in trespasses and sins and were *by nature* children of wrath.” Does anything that is not truly sin excite the “wrath” of a righteous God? Lastly, God prohibits concupiscence, saying, “Thou shalt not covet;” and in his own inspired definition, by the Apostle John, makes *discrepancy with his law* the characteristic of sin. *Ἡ ἀμαρτία ἐστὶν ἡ ἀνομία.* This must include not being, as well as not doing, what God’s law requires.

Now a mind tinctured with unscriptural philosophy will suppose that it sees two stubborn objections to this Bible doctrine. He will exclaim, "The infant cannot reason. Intelligence is necessary as a condition of guilt. It is as unreasonable to regard this little creature in its cradle as criminal for a natural state of soul of which it comprehends nothing, as though it were a kitten." But we reply, it is not a kitten. It has what the kitten has not—a rudimental reason and conscience. Why should not this be enough to ground a rudimental responsibility? Let it be noted here, that we did not claim the responsibility for mere disposition to evil was as developed, or as heavily criminal, as that for intentional and overt rebellion; we claimed that it is a true moral responsibility. It may be added that, as a question of fact, there is nothing in mental science about which it is more perilous to dogmatize than touching the state of intelligence, and the degree of its development, in the human infant. All we know is, that it cannot exercise the communicative faculty of speech, and that its consciousnesses are not of such a quality as to be remembered to after years. He would be a rash man who would dare to assert, on these grounds, that the infant human has no more functions of rational consciousness than a mere animal. But aside from all this, we make our appeal again to common sense. Do we not morally disapprove the evil disposition of a bad adult, at such moments as it lies quiescent, and is not provoking his own intelligent consciousness by acts of soul? Do we not despise the thief as a thief while he is asleep?

Ah! but, exclaims our opponent, this is because the thievish disposition of this man is his own voluntary acquisition; he has created it, or induced it upon himself by a series of thievish acts, intelligently and freely performed before. No being can be worthy of praise or of blame for what he has not freely chosen. Here we have, in this final objection, the last stronghold of the Pelagian philosophy. It is easily demolished by the same distinction which separates the *spontaneous* from the *positively involuntary*. No man is blameworthy for a defect which afflicts himself *against his will*. Every man may be blameworthy for a moral state which is spontaneous. That our disposition is spontaneous, we have shown by a simple appeal to consciousness. We know that

it is the most primary function of selfhood; we cherish and exercise it of our own motion, not compelled from without; it is the most subjective of all subjectivities. And now that its being coeval with our rational existence is no ground for disclaiming responsibility for it, we are able to prove by an adamant demonstration. If a being is neither praiseworthy nor blameworthy for his moral disposition, because it was native, and not taken to himself by a subsequent act of choice, then Adam could not have any holiness in Paradise, for God "created him upright." Then Gabriel can have no credit for his heavenly holiness, because it was original. Then the humanity of Jesus deserved not a particle of credit, because it was born of the virgin "a holy thing," by "the power of the Highest." And chiefly, the eternal God deserves no praise, because he has been eternally, naturally, immutably, necessarily holy. This proof we crown, by showing that the Pelagian theory of the rise of responsible character is a case of logical suicide. Say they: a man is justly responsible for his character, because he intelligently chose it for himself. Then, we argue, that act of choice must have been a responsible one. But the moral quality of every volition depends on that of its intention, *i. e.*, of its subjective motive. If the motive be non-moral, the act will be non-moral, and can conduce in no way to a moral habitude. Thus, on this absurd philosophy, the disposition must act and become a cause before it is in existence. This result teaches us that when our analysis of moral actions has led us back to the ruling disposition, we have the ultimate moral fact. Beyond this we cannot go with our analysis. The *original disposition*, which, though not arising in an act of choice, is *spontaneous*, communicates the moral quality to all the volitions it regulates, *because it has moral quality in itself.*

Now then, if Dr. Bledsoe will admit the Bible doctrine, that a fallen infant is guilty for his sinful disposition, he will also admit with us, that a righteous God will hold him guilty therefor, in precisely such a penalty as is equitable. And hence, did the purpose of grace as to dying infants dictate God's leaving such a soul beyond the grave to bear that just penalty, and work out its own ulterior character and conduct, the result would be precisely what we see in this life, where a fallen infant, beginning

its career a culprit, and adding, of its own free will, a life of sin and final impenitency, works out for itself an everlasting perdition. But *is it God's real purpose* to permit a single dying infant thus to remain without the grace of Christ? It is on this question that the fact wholly turns, whether there are any lost infants. And of this question, we presume Dr. Bledsoe knows precisely as little, and as much, as we do. Neither of us hath a precise "Thus saith the Lord." We presume that the silence of God on this point of his gracious purpose is accounted for by this trait of his revelations: that they are always intensely practical; that he never turns aside to gratify mere curiosity; and so, as there are no instrumentalities for us to use in the redemption of dying infants, he has, in his usual practical fashion, remained silent. But in one thing we agree with Dr. Bledsoe: water-baptism is not an essential instrumentality for the applying of Christ's grace to a dying infant, nor is the lack of it decisive of its fate. To teach this is an odious, unscriptural Phariseism; and, being unwarranted by God, is a brutal cruelty to bereaved parents. We know that a multitude of dying infants are redeemed. To us it appears every way agreeable to the plan of redemption through grace, that, as dying infants never sanctioned Adam's rebellion in overt act, so in the liberality of God, they all enjoy union with the second Adam, without being required, like us adults, to sanction it by overt faith in this life. No man can prove from the Scriptures that any infant, even dying a pagan, is lost.

The next movement of Dr. Bledsoe's polemic, in the *Southern Review* of October, 1875, and January, 1876, is against his own Methodist brethren. Here we have, therefore, the more pleasing task of spectators interested for fair play. One of the positions which he has found for the meeting point of Wesleyanism and Calvinism, of which he hopes to be the efficient, is his doctrine of "the perseverance of the elect." To Arminians the doctrine of "the perseverance of saints" has been very obnoxious. But Dr. Bledsoe distinguishes between "the elect" and "the saints." He avails himself of the modification of the doctrine of conditional decrees, fully sanctioned by the greatest Wesleyan divines, including the great founder himself and Watson. According to these, while all predestination in God is grounded in his fore-

sight of men's free acts, there is a three-fold division of the objects. Those whom God foresaw would stubbornly reject his gospel, he for that reason determined to leave to their doom. Those whom he foresaw would truly believe and repent, he for that reason determined to renew, justify, and adopt. The smaller number whom he saw would persevere in that faith until death, he for that reason predestinated to everlasting glory. This view Dr. Bledsoe adopts. One consequence justly inferred from it is, that he thinks a man may be a saint, a true, renewed believer, without being one of the elect. Another is that a man may be a true believer for a time, and be totally and finally apostate. A third is that the elect must certainly and infallibly persevere in a state of grace to the end, and be saved. Thus, while with other Methodists he denies the perseverance of the saints, he startles them by roundly asserting the infallible "perseverance of the elect." This conclusion is obviously implied in the Wesleyan positions, as Dr. Bledsoe argues with resistless logic. If God elect to eternal life only those whom he foresees will persevere in faith and repentance until death, then their perseverance therein must be certain; that is, *if God's foreknowledge is certain*. This Dr. Bledsoe is led, of course, and correctly, to assert in the fullest terms. When asked whether this is not virtually the Calvinist's doctrine of perseverance, he replies, No, because while he holds the fact, he utterly dissents from the grounds of the fact asserted by the Calvinist; he ascribes the perseverance of the elect to the foreseen determinations of their own free will; still holding fast to his Arminian $\pi\omicron\tilde{\nu}$ $\sigma\tau\tilde{\omega}$, that no degree of grace from without could limit this self-determination without destroying free-agency. But his speculation as to the "perseverance of the elect" leads him to other sound positions. He is led to see, as he consistently must, that we should ascribe to God a foresight of all things, including all free determinations of created wills, absolutely infinite, eternal, infallible and immutable. Hence, he repudiates with contempt the feeble notion of Adam Clarke, that God forbears from foreseeing certain acts of men. Dr. Bledsoe also recognizes the iron logic of the Calvinist, that if the believer's faith and repentance are fruits of regeneration, then these, as foreseen by God, cannot be the causal grounds of his purpose to regenerate; for this would represent

the divine mind as making an effect the cause of its own cause. Hence he concedes that in the *act of regeneration* there can be no synergism; the coöperation of the human will begins thereupon, in the consequent process of *conversion*. Is the reader ready to exclaim, then Dr. Bledsoe is a good Calvinist! So have some of his own brethren exclaimed. But stay: his escape is in claiming that God's regeneration produces no certainty of will in its subject as to gospel acts; it only lifts him, as to them, into an *equilibrium* of will! Here we are tempted to make three remarks. First: we thought Dr. Bledsoe, as an Arminian, was bound to hold that "*common sufficient grace*" had done that much for the gospel-sinner before regeneration. Secondly: how different is Dr. Bledsoe's regeneration from that of the Bible, which St. John assures us is such that "whosoever is born of God doth not commit sin; for his seed remaineth in him: and he cannot sin because he is born of God." Thirdly: it seems as though, after all, the only barrier between Dr. Bledsoe and Calvinism is the *εἰδωλον* "of self-determination."

The Doctor also asserts that he does not believe God gives preventing grace to all men under the gospel. For God's foreknowledge being infinite and infallible, he foresees some cases in which preventing grace would be stubbornly resisted, and thus become the occasion (not *cause*) of an aggravated doom. Hence it is in mercy that God sometimes withholds it, that his kindly-intended grace may not become the occasion of the poor sinner's making his case worse than before. Here again we have two words. First: how much difference remains between this doctrine and that Calvinistic doctrine of *preterition*, which, under the ugly name of "reprobation," Dr. Bledsoe so much abhors? Secondly: well does Dr. Granberry say of this, that it *seems* to teach that God withholds the grace essential to conversion from *all* whom he foresees would fall. It is hard for us to see how it teaches anything else. For has not God, according to Dr. Bledsoe, a complete foreknowledge of everything? Then he foreknows *every case* in which converting grace is destined to be slighted; and of course the same wisdom and mercy which cause him to withhold the useless gift in some cases will withhold it in all. How does the reader imagine Dr. Bledsoe escapes? It

is by saying (October, 1875, p. 479) that God may give convenient grace in cases where he foreknows it will be despised, "in order to demonstrate the malignity of sin, and cause the universe to stand in awe of its deadening, destroying, and soul-damning influences." Really, it seems to us that Dr. Bledsoe might just as well adopt, at once, the Calvinistic statement, that God gives or withholds grace "*for his own glory.*"

These teachings, and especially that of the "perseverance of the elect," awakened some of his brethren. Dr. Granberry, the excellent Professor of Practical Divinity in the new Vanderbilt University, objected strenuously, first in the *Christian Advocate*, and then in the Annual Conference of the Southern Virginia Methodists for 1875. Here the two met in oral debate, and Dr. Bledsoe has further defended his views in his *Review* for January, 1876. It is with good ground that the honest Methodist instincts of Dr. Granberry snuffed the taint of Calvinism in this doctrine. We have seen the corollaries, in part, to which it has already led Dr. Bledsoe. They do not contain the unsophisticated Arminianism; they savor of the Westminster scheme. But further, the doctrine of the "perseverance of the elect" in itself virtually asserts the *perseverance of saints*, of some saints—the hated dogma to the zealous Arminian—for Dr. Bledsoe's elect are a certain species of "saints." Worse yet; both Dr. Bledsoe and Dr. Granberry agree in holding that there is *no essential difference of grace* in the saint who is, and the saint who is not, elect. They must hold thus, or else we truculent Calvinists will compel them to acknowledge our "sovereign distinguishing grace." The difference then, between the non-elect saint who falls, and the elect saint who cannot fall, is contingent and not essential. So that Dr. Bledsoe forces us to admit the perseverance of certain saints who are virtually like other saints. This is not old Methodism. But most of all, Dr. Bledsoe presents us, in every case of the "perseverance of the elect," with an instance utterly destructive of the Arminian philosophy. *The Arminian holds that certainty in volitions is inconsistent with freedom. This is his corner stone. But every persevering elect person is a case of certainty of volitions consistent with freedom.* Dr. Bledsoe has thus placed Dr. Granberry and himself helplessly

between the jaws of the Calvinistic vise; and we design to turn the screw remorselessly. Let us see what premises he has given us. If God certainly foresees who will persevere and thereon elects them, they must be certain to persevere. Otherwise God's foreknowledge would be erroneous. But unless the volitions to cleave to the gospel were free, they would have no moral quality, and would be no steps or means towards holiness. Now any volition which is not foolish has a motive. If the gospel motives, in these cases, are certain to produce the continuance of gospel-volitions, there must be an efficient connection between motive and volition here. Yet the agent is free. This is all the certainty, or "moral necessity," any intelligent Calvinist asks in his philosophy of the will. Dr. Bledsoe's doctrine has given us our case.

And lastly, we now find the application of our discussion on a previous page, of Edwards' argument from God's foreknowledge to the "moral necessity"—or as we prefer to say, certainty—of the volitions foreknown. The key of the argument is in the great truth, that no effect is without a cause. We know that God knows this universal law, because he makes us know it intuitively. Now, then, no event could be certain to occur in the future unless there was to be also a cause efficient enough to make it certainly occur. If, then, it is certain that any elect person is going to persevere in gospel volitions, *it can only be because there is, somewhere, a suitable cause efficient to produce them.* Now Drs. Bledsoe and Granberry do not believe that this certainly efficient cause is in the Christian's will; for they think that is contingent, else, they insist, it would not be free. The cause must then be in God's grace. This then is the blessed doctrine of "efficacious grace." *This is Calvinism.*

The question then remains in this attitude: Dr. Bledsoe says, and proves, that the Wesleyan doctrines include the inference of the "perseverance of the elect." Dr. Granberry says, and proves, that this inference is Calvinistic. They both conclude correctly; and *our* conclusion from the whole is, that the Wesleyan theology, like a generous but over-fresh must, should work itself clear by ripening into "the old wine well refined upon the lees" of the Westminster Confession. Our sincere prayer is that the venerable editor of the *Southern Review*, with all his younger

brethren, may find in every hour of temptation, and in their last conflict, the priceless support and comfort of "efficacious grace." This intercession we offer with a comfortable assurance, "being (with Paul, Phil. i. 6) confident of this very thing, that he which hath begun a good work in them will perform it until the day of Jesus Christ."

THE PHILOSOPHY OF VOLITION.¹

THE nature of free agency constitutes much the most important problem in the whole range of philosophy. Indeed, it would be no exaggeration to claim for it an importance greater than all the rest of philosophy together, after man's rationality is admitted. The connections of this problem with theology are manifold and vital. As is one's philosophy of the will, such, if he is a consistent thinker, must be his theory of providence, of foreknowledge, of the decree, of original sin, of regeneration, of the perseverance of the saints, of responsibility. The most momentous things to man, in all the universe of space and time, are responsibility, sin, penalty, and redemption. But one of the clearest of our intuitions tells us that free agency is essential to a just responsibility, to guilt and merit, to reward and penalty. What, then, is free agency? What are its real conditions? This must ever be the question of questions.

Dr. Bledsoe has seen clearly this fact; and hence all the discussions of his *Examination of Edwards*, his *Theodicy*, his debate with the *Southern Presbyterian Review*, from 1871 to his last thundering broadside, January, 1877, are virtual or actual discussions of free agency. When we add the other fact, that no point in philosophy has been surrounded with more of confusion, ambiguous definition, and prejudice, the thoughtful mind will need no apology for our continuance of this vital discussion. A special and practical reason exists for carrying it, in this case, to a thorough result. This is the mischief which Dr. Bledsoe is unconsciously doing among evangelical Christians and minis-

¹ Appeared in the *Southern Presbyterian Review*, for July, 1877. Reviewing: I. *An Examination of President Edwards' Inquiry into the Freedom of the Will*. By Albert Taylor Bledsoe. Philadelphia: H. Hooker. 1845. 12mo., pp. 234. II. *A Theodicy*, etc. By A. T. Bledsoe, LL. D. New York: Carlton & Porter. 1856. 8vo., pp. 368. III. *Vindication of our Philosophy*. By the Rev. A. T. Bledsoe, LL. D. *Southern Review*, Art. V., January, 1877. Pp. 54.

ters. He has been an Episcopal, and is now a Methodist minister. He stoutly declares he is no Pelagian; he considers himself quite a Pauline divine. His theory of free agency retrenches some of the untenable logic of his school, and frankly admits some of the positions and arguments of the orthodox philosophy. Especially does he teach his errors with an equal vigor of thought and style and obvious integrity of purpose. The sad result is, that he is forming the opinions of a multitude of young Christians, and ministers even, in the Episcopal—a Calvinistic—Church, to what will turn out, in their cases, bald and poisonous Pelagianism and Socinianism. These young men, scantily furnished, perhaps, in the history of doctrine and philosophy, adopt Dr. Bledsoe's conclusions, unconscious that they contain the very rudiments of those heresies, supposing them to be new and safe, results of his original discussions. But they will, we fear, think too connectedly to adopt also the happy inconsistencies by which Dr. Bledsoe arrests himself; and they will be plunged into deadly errors, which he, with us, will lament. We are convinced thus, that there is nothing in Southern, or even in American, theological literature, more important than a thorough adjustment of this debate.

Dr. Bledsoe's reply to our very courteous and measured argument of last October is delivered with unspeakable energy and eloquence of invective. He professes to see in the provocation nothing but imbecility and ignorance. But his readers are asking, "Why, then, this effort?" Why should leviathan thus "tempest the deep" to crush a minnow? Would he fill the whole sea with bloody foam, unless the lance of his little assailant had pierced consciously to his vitals? He complains that his theory of free agency has been criticised without ever having been read; that he is represented as holding exactly what he repudiates and refutes; that page and word have not been quoted faithfully from his *Examination of Edwards and Theodicy*, to show what he really holds. Now, a sufficient reply to this loud complaint would be to say that *neither of these works was placed at the head of our critique*; that we did not undertake specially to discuss them at that time, but only to defend ourselves and the truth from the aggressions contained in the pieces which we expressly named. Is it not preposterous

that, when a voluminous writer is taken to account for his recent declarations, he should claim a right to have works of twenty years ago included? But we stoutly assert, as we shall evince, that our recent chastisement of Dr. Bledsoe's trespasses on Presbyterianism was not composed without just understanding of those books. If there remains any appearance of unfairness, it will be removed by remarking, first, that Dr. Bledsoe has, in some cases, very causelessly mistaken his critic as meaning to put propositions into his mouth as Dr. Bledsoe's own, when the thing obviously designed was to show that Dr. Bledsoe's positions were obnoxious to certain absurd corollaries; and, second, that it may be entirely feasible for him to quote from his earlier writings what is opposite to positions we do ascribe to him, *because he so contradicts himself*. But that is his misfortune, and not our fault. He complains that we did not cite his own words. We surmise that when we proceed to do this, and show that the same contradictions remain, he will be hardly so well satisfied as he now is. One bitter complaint is, that we charge the virtual tendency of his scheme of free agency to be Pelagian when it is not. We shall see. Another is, that we accuse him, in his account of the rise of volition, of not seeing the significance of subjective disposition in the matter; whereas, he claims that he does see and teach all about it. We shall see whether he does. Still another complaint is, that we charge him, in speaking of motive, with overlooking the vital distinction between subjective appetency and objective impressions on the passive sensibility, which, he claims, he has most perspicuously separated. We shall see whether he has. A fourth complaint is, that we make him hold mind itself to be the "efficient" and the "cause" of volitions; whereas, he now wishes to be understood as holding that "mind is not the efficient cause of volition." We shall see whose is the contradiction.

Chiefly Dr. Bledsoe seems to complain, because our review did not again go back and debate his theory of the will. We will endeavor to remove that ground of complaint also. Mere rejoinders, sur-rejoinders, and replications upon personal and partial issues, are little to our taste, and of little fruitfulness. We presume that neither the Presbyterian nor the Methodist public is much interested in that thesis which Dr. Bledsoe pursues with

so much zeal and pleasure, viz., that his critic is silly and ignorant. It is more important to settle the question, whether Dr. Bledsoe's way of asserting *the contingency of all responsible volitions* is any more valid than the old way, which, he admits, Edwards has demolished.

Before we proceed, however, to this main object, we wish to show the reader with how much violence our author is in the habit of contradicting himself and the truth. Our purpose is not so much to enjoy our reasonable self-defence against his accusations, as to convince of the real incoherency of Dr. Bledsoe's theory. He contradicts himself because the positions he wishes to occupy are contradictory, and the candor and vigor of his own spirit precipitate him into the pitfalls he has prepared for himself.

Thus, we are much berated for representing him as holding that the mind is the efficient or the cause of its own volitions. He tells us that he has asserted the contrary. The latter is perfectly true, both of his books and his *Review*. Thus, in the latter, p. 11: "All . . . must admit this exemption of the mind in willing from the power and action of any cause. . . . It is this exemption which constitutes the freedom of the human mind." And p. 20: "What he (Dr. Bledsoe) really denies is, that there *is anything*, either in the mind or out of the mind, *which produces volition*." This is clear enough. But in Section IV. of the *Examination of Edwards*, and in the *Review*, p. 16, he finds himself face to face with the inevitable maxim, *Ex nihilo nihil*; and he admits the absurdity of a change, either in mind or matter, "without any parentage whatever." It is easy to anticipate that the stress of his own common sense must precipitate him into the opposite declarations which we ascribed to him, and it accordingly does so more than once. Thus, on the very page cited (16th), "Volition never comes of itself at all; *it comes of mind*." "Volition always has its parentage in mind." Is not a "parent" a *cause* to its own offspring? On the same page, he angrily declares *he has not denied* that "volitions have any efficient cause or antecedent *of any kind*." On p. 21 he declares that original concupiscence, "caused" by Adam's fall, while not itself sinful, is the "source" of all men's sin, and leads uniformly to sin. On page 14 he assures us that he, along with all

the advocates of free agency he ever heard of, has maintained always "*that the mind is the cause of volition.*" So also in his *Examination of Edwards*, we find him saying, p. 47, "Under certain circumstances, the free mind will furnish a SUFFICIENT *reason and ground* of the existence of a volition." Page 48: "I do not deny that it (volition) *depends for its production* upon certain circumstances, as the conditions of action, *and* UPON THE POWERS OF THE MIND." Page 71: "It is true that President Edwards tells us of those who 'imagine that volition has no cause, or that it produces itself.' . . . But whoever held such a doctrine? . . . I have never been so unfortunate as to meet with any advocate of free agency, either in actual life or in history, who supposed that a volition arose out of nothing, without any cause of its existence, or that it produced itself. They have all maintained, with one consent, that *the mind is the cause of volition.* Is the mind nothing?"

We now ask the candid reader, does not this last passage mean that the mind is the *producing cause* of it? Again, when Dr. Bledsoe says that volition has "its parentage" of the mind, that depravity is the "source" of all sins, has he not said in substance, what in another place cited above he has said in words, that the mind is the efficient cause of volitions? Is not the cause which *produces* a thing efficient thereof? If Dr. Bledsoe desires to use words without sense, he must excuse us; we cannot follow him. If he now means to say that his own words, "the mind is 'the cause' of its volitions," are meaningless, it is his only excuse, but a very poor one. It is perfectly true that he does contradict himself by stating with the greatest perspicuity, and by arguing that volitions have no true cause, that they are not effects at all; that they are contingent as to all antecedents whatsoever. But this—the stronghold of his philosophy of the will—is yet so utterly incompatible with consciousness and common sense, and with his own admissions, that he cannot avoid declarations equally emphatic on the opposite side; he slips into them by the mere force of nature.

Dr. Bledsoe complains again, that we do him great injustice in saying that he, like many other analysts of mind, has failed to give proper weight to that decisive fact, the influence of disposition, or *habitus*, on volitions. And yet in the same breath

he glories in asserting that *he does not ascribe* any important influence to that great fact. Well, that is precisely what we charged and now charge on him as a fatal error. And when we come to test what he so modestly terms that "most careful, conscientious, painstaking, and elaborate discussion," in the 15th Section of his *Examination*, or 3d Chapter of his *Theodicy*, in which he impotently endeavors to dispute—what his own common sense makes him in many places assert—that the mind's native dispositions are, and must be, regulative of its volitions, we shall show by the confusions and futility of that argument the full justice of the charge.

He also complains grievously of our charge, that in discussing the efficiency of motive he fails to see and use the vital distinction between the objective inducement and the subjective motive. We now proceed to show that this *our charge is exactly true*. This is clearly betrayed by the manner in which Dr. Bledsoe declaims about it, at this very place. (*Review*, p. 42.) He assures us that he understands it perfectly, of course; for he proceeds to tell us, "this distinction has never been overlooked by anybody." . . . "We have certainly never known any man or read any author who was so weak or so silly as to overlook such a distinction." But it is a well known fact in the history of philosophy, that the distinction between objective inducement and subjective motive, which we have in view, and of which we were speaking, *has been overlooked*, and that *by all philosophers* of the sensationalist schools. Hobbes overlooked it; Locke overlooked it; so of course did Condillac and Helvetius; so did all the fatalistic schools. Yet, more; their very principles necessitated that they should overlook it; because, from their maxim, *Nihil in intellectu, quod non prius in sensu*; in other words, from their analysis of all subjective states of appetency into mere reflexive modifications of states of passive sensibility caused by the objective, they could not, as consistent thinkers, hold or use the distinction. This is notorious. Now, the above assertion of Dr. Bledsoe inevitably proves one of two things: either that *he does not appreciate* that important distinction as we hold it, or that *he is ignorant* of the ordinary history of philosophy. And it is very vain for him to endeavor now to prove his correct appreciation of the difference between objective induce-

ment and subjective motive, by citing to us, as he here does, sentences from his books, in which, wrapping both kinds of antecedents together, under the common promiscuous name of "motive," he asserts of them all indiscriminately, that they are all not efficient, but mere occasions of volition. *That very mode of assertion betrays the justice of our charge.* But we shall not rest it here alone. Sometimes it is hard to "prove a negative." But one evidence in this case, of at least partial weight, is, that the *Examination of Edwards* may be searched through in vain for an articulate statement or application of the distinction. But more than this: numerous passages imply its rejection. To apprehend these, a word of explanation may be needed. The sensational theory of the soul's powers, with which both English and French psychology were so deeply tinged by the ascendancy of Locke, traced all mental modifications, whether intellective or emotive, to the objective impressions. As with it all cognition was empirical, so all emotion was passion. The very language confounded the words. The outward impression on feeling was regarded as the *cause* of the emotions which followed. In somewhat the same way as the blow caused the pain in the head of the man struck, so they conceived that the pain caused the resentment, and the resentment caused the volition to double the fist and strike back. Now, if this is the whole account of the emotions of this rational agent, his free agency is illusory. Resentment efficiently determined the volition to hit back; pain from a blow caused the resentment; the blow delivered by another man caused the pain. Thus, while the man struck acts as a sentient agent, he does not act as a self-determined rational one. He is but a sentient machine, whose acts are remotely but efficiently determined from without, not from within. The theory of the causative efficiency of motive, thus expounded, was a theory of fatalism. Such was that of Hobbes; such that of all consistent sensationalists, as well as of theological fatalists.

But a more correct psychology supervened. Scholars grasped the all-important truth, all along practically assumed in the philosophy of the Bible, that the human soul has not only percipient faculties and sensibilities, but, *a priori*, constitutive powers of reason and appetency; that in the emotive sphere of the soul's action, these appetencies and repulsions were inherent,

subjective, and spontaneous; not functions of passive sensibility, but functions of subjective activity, whose spontaneous movements are merely conditioned on, not caused by, the impressions on sensibility. And they saw, what the Bible had intimated, that it is these subjective desires and repulsions which are the true motives (*motiva*) of volitions. It is this vital distinction which Sir William Hamilton makes under the terms sensibilities and conative powers; and he (erroneously) claims to have been the first to discriminate them clearly. One more important truth remains. The rational agent's "conative powers" do not move at haphazard; they have their regulative principle; and this, in every case, is the agent's subjective native disposition, or *habitus*. In the order of causation, disposition is *a priori* to the operation of inducement, and is not modified by it. It is not the pain of a blow which determines a given human soul to be resentful, but it is the preëxistent resentful disposition which determines that man to resent a blow. It is not applause which causes the spirited young man to desire fame, but it is the native, preëxistent desire of fame which determines the young man to regard applause as an objective good. When an objective inducement becomes an occasion of an act of soul, as, for instance, a forgotten purse, of a servant's theft, the causative efficiency is not projected from the gold upon the thief's soul, but from the thief's covetous desire, as regulated by his evil disposition, upon the gold. This was established in our article of October last. Now, then, from the point of view of this Bible psychology, the rise of volition becomes intelligible. Our consciousness had told us, on the one hand, as against the sensationalist scheme of motive, that we are free agents; that in all our deliberate and responsible volitions, our souls are self-determined. Our common sense and experience had told us, on the other hand, that such volitions cannot be uncaused and contingent changes in the mind; that the very notion of a rational volition is of one for which the man had a controlling reason; or in other words, of one in which the motive efficiently prompted. It is because this distinction between subjective motive and objective occasion of choice has not been clearly held to, that nearly all the confusions in the argument have arisen. The great treatise of Edwards, while on the

right side, is by no means free from this confusion. All the arguments of Reid—on the Active Powers—against the moral necessity of volitions, are occasioned by this confusion; and they have force, just so far as they are aimed against the sensationist view, which makes the passive sensibility the efficient motive. So, the whole force of Dr. Bledsoe's reasonings against Edwards—so far as they have any force—is from this mingling of the sensationist theory of necessity with the true theory of certainty, which views volition as the effect of subjective motive. It is certainly true that Dr. Bledsoe blindly opposes both systems, the correct one and its sensationist travesty. But the question is, has he intelligently discriminated therein, and has he seen the decisive consequence of that discrimination? We again affirm, *he has not*; and we proceed to affirmative proofs from his own works.

Thus, *Examination of Edwards*, p. 40, line 2, Dr. Bledsoe says: "The strength of a motive, as President Edwards properly remarks, depends upon the state of the mind *to which* it is addressed." There is another fatal admission here, which we reserve. Now, manifestly, Dr. Bledsoe, like Edwards, confounds motive with objective inducement. Their "motive" is something which "*is addressed to the mind.*" That tells the whole story; it is the objective inducement! He argues in utter obliviousness that the real "motive" is not the thing "*addressed to the mind,*" but the subjective appetency determined by the "state of the mind" to which the object is addressed.

So, p. 75, line 7: "A mind, an object, and a desire, if you please, are the indispensable prerequisites, the invariable antecedents to volition; but there is a vast chasm between this position and the doctrine that the mind cannot put forth a volition unless it is made to do so by *the action of something else upon it.*" Here, again, Dr. Bledsoe betrays the fact fatally that he does not perceive what the Calvinist means by efficient motive. He thinks that we mean the objective—the "*something else*" than the mind, that is supposed to "*act upon it.*" He is fighting blindly. This passage also presents another proof of this: that, like so many others in all his writings, it confuses together objective inducement and subjective desire, as all alike *not "causes,"* but "*condi-*

tions" of volitions. Had he seen the proper distinction, he would never have spoken thus; he would have said that the objective is the one thing, namely, the condition only, and the subjective desire is the opposite thing only, namely, the cause.

On p. 89, again, the author fails to apprehend the true doctrine in the same way: "External objects are regarded as the efficient causes of desire; desire as the efficient cause of volition; and in this way the whole question seems to be settled." That is to say, Dr. Bledsoe has still no other apprehension of our doctrine than that of the sensationalist. He thinks that we think desires are *efficiently caused* by external objects! He has not gotten out of the delusion that the desires which we hold prompt volitions, are functions of the passive sensibility; and this is the doctrine which he opposes. And how does the reader suppose Dr. Bledsoe designs to fight it? By attacking the second link of what he erroneously supposes to be the Calvinist's chain; by denying what he grants every other asserter of free will, besides himself, has held; by denying that such desires have any efficiency as causes of volition! Thus, p. 92: "Our desires or emotions might be under the influence and dominion of external causes, or of causes that are partly external and partly internal; but yet our volitions would be perfectly free from all preceding influences whatever." Thus, it appears plainly, he is still in the dark. For, we do not hold that our desires or subjective emotions are "under the influence and dominion of external causes." We hold that they arise from within, are functions of the soul's own spontaneity, and efficiently regulated by the soul's own permanent *habitus*.

On p. 97, again, the same confusion appears. Dr. Bledsoe asks, "Is it true, then, that any power or efficacy belongs to the *sensitive or emotive* part of our nature?" So, on pp. 99, 100, Dr. Bledsoe cannot accept that law so beautifully expounded by Bishop Butler, that while our passive impressions become blunter from habitual action (*consuetudo*), our active principles become stronger. What is his difficulty about it? He tells us that he cannot see how, when the passive function of sensibility is weakening, the effect thereof can be increasing. Still he is in the same fog; he supposes our active desires to be mere functions of passive sensibility. We crown our proof with Dr. Bled-

soe's concluding words, p. 102: "The truth is, that in feeling the mind is passive; and it is absurd to make a passive impression the active cause of anything. The sensibility does not *act*, it merely *suffers*. The appetite and passions, which have always been called the 'active powers,' the 'moving principles,' and so forth, should be called the passive susceptibilities. Unless this truth be clearly and fully recognized, and the commonly received notion respecting the relation which the appetites and passions sustain to the will—to the *active power*—be discarded, it seems to me that the great doctrine of the liberty of the will must continue to be involved in the saddest perplexity, the most distressing darkness."

It would not be hard to add many other proofs, as at page 182 (top), but they are superfluous. It is Dr. Bledsoe who is in "distressing darkness." He has mingled together the functions of conation and sensibility in inextricable confusion, and hence can see no light. The very passage in the *Theodicy* to which Dr. Bledsoe so confidently appeals to show that *he does appreciate* the vital relations of native, subjective disposition, and of subjective appetency to volition, betrays an ignorance and blindness about the whole truth that are simply pitiable. Does he (*Theodicy*, pp. 173-'4) distribute the powers of the mind into "intelligence, sensibility and will?" Yes. But by "will" he means exclusively here, not Hamilton's "conative powers," not what the Calvinists mean by "will" in its wider sense, the whole subjective activities, including disposition and subjective desires leading to volition; no; but simply and nakedly, the power of choosing, the volition-making power. Either he is ignorant of the *main drift* of our meaning, or he discards it. Then he tells us every act of the intelligence is merely passive. And "*every state of the sensibility is a passive impression!*" Then comes volition, efficiently produced by nothing, within or without the mind, always contingent. These are the only antecedents of free volition of which Dr. Bledsoe knows anything! The Almighty may necessitate states of intelligence—mere passivities—by his agency in providence or regeneration, if he pleases. But he has not thereby communicated either necessity or *even certainty* of a single right volition in the new-born creature; for those states are only antecedent occasions, not efficient of

volition. God may have new created the heart, but the man may still make every volition a sin, if he chooses!

One more of Dr. Bledsoe's complaints of unfairness remains to be noticed. This is, that *we assert his philosophy to be virtually Pelagian*. This charge we did undoubtedly make, and intend to repeat. Now, Pelagius and Celestius taught sundry dogmas, such as baptismal redemption, monkery, the existence of unredeemed infants dying in infancy in a happy eternal state which yet is not the Christian's heaven, which Dr. Bledsoe does not hold; nor does the veriest Socinian on whose modern shoulders Pelagius's own mantle has fallen, hold them. They are as antiquated as the Ptolemaic astronomy. These ancient heretics, again, carried out their erroneous first principles with a symmetrical consistency in some results which we never dreamed of ascribing to Dr. Bledsoe; we do him no such injustice. In these senses he is, if he will prefer it so, no Pelagian. But in church history Pelagianism is a given, definite code of doctrines in philosophy and theology, clustering around certain hinge-propositions. These hinge-propositions granted, the essential body of the system follows for all consistent minds. What we mean by calling Dr. Bledsoe a virtual Pelagian is, then, this: that he asserts these hinge-propositions, and the more obvious and important of their consequences.

The central position of Pelagius and Celestius was this: 1, That volitions are contingent, and uncontrolled by any efficient antecedent, either in or out of the mind; and that if they were not, man would neither be a free nor justly responsible agent. Accordingly, 2, They define sin and holiness as consisting only in sinful or right *acts of soul*. They hold, 3, That a natural or original sin or righteousness would be no sin or righteousness, because not chosen by the soul in an originating act of choice. They also hold, 4, That responsibility is absolutely limited by ability, taking "ability" in its scientific sense. Hence, 5, Primeval man did not have any positive moral character impressed on him at creation. If he had, not being the result of his own volition, it would have been as absolutely non-moral as the natural color of his hair. But he was *innocent*; *i. e.*, in a state of harmless neutrality at the outset, and had to acquire his own positive moral character in his after career, by right

acts of choice. Hence, 6, No power, not even the Almighty, could determine or give certainty to man's free volitions consistently with the nature of his free agency. Hence, also, 7, There can be no such native immoral disposition as that which Calvinists call moral depravity, inherited by children from Adam, for, if original, it would not have originated in the child's act of choice, and so, would have been involuntary and non-moral. Children, therefore, however they may go astray into sin from evil example, are not actually born depraved. So also, 8, "concupiscence," an appetency for wrong not matured into purpose, although the occasion of sin, is not sin. And last, 9, The re-creation of a soul into holiness, in regeneration, would be incompatible with free agency; hence, the gracious agency in regeneration is only suasive; and the change of heart can be, essentially, no more than the sinner's putting forth a hearty volition to change his conduct. Such is the well-known outline; it is not necessary to burden the page with an array of names of learned sound, to substantiate the statement. It will not be disputed by the well-informed. Our testimony is, that this is virtually Dr. Bledsoe's creed; and that it is not Wesleyan Arminianism. We shall let him speak mainly for himself.

Now, as to the first position, hear him (*Theodicy*, p. 153): "We lay it down, then, as an established and fundamental position, that the mind acts and puts forth volitions, without being caused to do so—without being impelled by its own prior action or by the prior action of anything else. . . . It is this exemption which constitutes the freedom of the human mind." *Examination of Edwards*: "I think we should contend for a perfect indifference, not in regard to feeling, but in regard to the will." (P. 110.)

As to the second, it is enough to quote from the *Review*, p. 28, these words: "*Holiness consists in those things which 'are done' by us according to the will of God, and not in those things which he has given us.*" Can anything be more explicit?

On the third point Dr. Bledsoe is equally explicit. The whole 15th section of his *Examination of Edwards* is but a distillation of this Pelagian heresy. Let this unmistakable sentence suffice, p. 198: "It strikes my mind with the force of self-evident truth, that nothing can be our virtue, unless we are, in some sense, the

author of it; and to affirm that a man may be justly praised or blamed, that he may be esteemed virtuous or vicious, on account of what he has wholly and exclusively received from another, appears to me to contradict one of the clearest dictates of reason."

That Dr. Bledsoe holds, with all his heart, the fourth Pelagian principle, is sufficiently evinced by this sentence from the *Examination of Edwards*, p. 182: "If my volitions are brought to pass by the strength and influence of motives, I am not responsible for them."

On the fifth point, our evidence is superabundant. *Review*, p. 28: Dr. Bledsoe professes to quote, and adopts expressly these words of another: "Was not primal man *holy*? . . . I answer, innocent, *but not holy*." *Examination of Edwards*, p. 199: "I deny that Adam was created or brought into existence righteous." P. 198: "He is neither virtuous nor vicious, neither righteous nor sinful. This was the condition of Adam, as it very clearly appears to me, at the instant of his creation."

On the sixth point, may be quoted, along with many passages from the *Theodicy*, the following from the *Review*, p. 34: "Behind this veil of words," (the phrase, "certainty of volitions," used by Calvinists,) "as thin as gossamer, we see the same old thing, *the scheme of necessity*, grinning upon us." This latter he declares impossible to be reconciled with free agency. And *Review* p. 6, borrowing the words of another: "Therefore—with reverence be it spoken—the Almighty himself cannot do this thing."

On the seventh point, Dr. Bledsoe professes in some places to depart from the consistent Pelagian track. He says, p. 21, that he has always held, in direct opposition to Pelagius, that Adam's sin "caused the depravity of human nature;" and that, while "Adam was created upright, in the image of God," "infants are born with a fallen and depraved nature, and can therefore never be saved, without the regenerating grace of the Holy Spirit." Let us pause here a moment, to illustrate the intensity of his self-contradiction, both in thought and word. In this point, he is not, according to his present assertion, a Pelagian; but it is absolute absurdity that he, with his positions, is not a Pelagian here, as in other things. Let the reader note, first, the flat verbal contradiction. On the last page, "Adam

was not created holy," only innocent. "I deny that Adam was brought into existence righteous." But now, lo! "Adam *was* created upright." Does not "upright" mean "righteous"? or is there some miserable jugglery in the interchange of these synonyms? But, second, Dr. Bledsoe has no business believing that infants are born with a fallen and depraved nature. For, according to his own clearest doctrine, on the last page, any quality which is original, *cannot be a moral* quality, not being the acquirement of the agent's own undetermined electing act. Any mind that can put two and two together will see that Dr. Bledsoe is bound to follow his leader here also. Again, he has "dinned into us" his heresy—thoroughly Pelagian—that if a volition is caused efficiently *by anything*, in the man or without, it is not *free*. Then, it is impossible that a free agent can have a native principle certainly causative of sinful acts; because, according to Dr. Bledsoe, such acts would not be free. Hence, this doctrine of a depravity which is the "source" of all man's errors, is, in his mouth, utter contradiction and absurdity. Again, Dr. Bledsoe cannot hold that sinners have native depravity and need salvation by grace, as he has said, p. 21, *Review*; because, in strict accordance with his philosophy, he has assured us, again and again, to the contrary. Thus, *Review*, Jan., 1875, p. 97: "New born infants *deserve no punishment at all.*" April, 1874, p. 353: "*The omnipotence of God himself cannot take away our sins and turn us to himself, without our voluntary consent and co-operation. Does the dying infant give that voluntary, rational consent and co-operation?*" Of course not; it is incapable of it. *Then either it has no original depravity, or, dying in infancy, it must, according to Dr. Bledsoe, inevitably be damned by it.* Let him be honest, then, and either go to the Pelagian ground, where he properly belongs, or else admit himself a believer in universal infant damnation. Now, let the reader pause and weigh for himself the inexorable logic of this dilemma. When he has done so, he will say it is vain for Dr. Bledsoe, according to his wont, to writhe and roar, to scold and vituperate, in the hope of hiding his agony.

On the eighth point, Dr. Bledsoe so "glories in his shame" that it is almost superfluous to quote evidence that he does not think concupiscence is sin. But, as further illustrating his con-

sistency, we quote *Review*, January, 1877, p. 24: "Dr. Dabney says that we appeal to our philosophy 'to deny the sinfulness of original concupiscence.' We do no such thing. We appeal to our consciousness, to the consciousness of all men, and not to any philosophy whatever, to show that *a new born infant is not sinful*, or deserving of punishment, on account of what it brings into the world with it." Yet, he had said, p. 21, that it is born depraved! He then goes on to assert, in manifold terms, that concupiscence is not sin. He is even rash enough to quote Augustine¹ as holding with him.

On the ninth point of the Pelagian scheme which I have mentioned, Dr. Bledsoe, according to that method of absolute self-contradiction which is the chief trait of his philosophy, is both on the Pelagian side and the opposite. Consistency would require him to be all the time on the Pelagian side. If, as he so often holds, volition *cannot be caused* by anything, either in the

¹ That Augustine did not exclude concupiscence from his definition of sin is evident from many passages of his writings against the Pelagians; one of which we shall quote from the very treatise cited by Dr. Bledsoe, *Contra duas Epistolas Pelagianorum*, Lib. I., Cap. 10: "Magis enim se dicit (Paulus, Rom. vii. 16), legi consentire quam carnis concupiscentiæ. *Hanc enim peccati nomine appellat.*" In chapter thirteen of the same book there is a passage which will, perhaps, account for the mistake into which Dr. Bledsoe has fallen. Augustine is explaining in what sense concupiscence *in the baptized* may be called sin and yet not sin: "Sed hæc (concupiscentia) etiamsi vocatur peccatum, non utique quia peccatum est, sed quia peccato facta est, sic vocatur: sicut scriptura manus ejusque dicitur, quod manus eam fecerit. Peccata autem sunt, quæ secundum carnis concupiscentiam vel ignorantiam illicite fiunt, dicuntur, cogitantur; quæ transacta etiam nos tenent, si non remittantur. Et ista ipsa carnis concupiscentia, in baptismo sic dimittitur, ut quamvis tracta sit a nascentibus, nihil noceat renascentibus."

So also in his *De Nup. et Concup.* I. 26: "In eis, qui regenerantur in Christo, cum remissionem accipiunt prorsus omnium peccatorum, utique necesse est, ut *reatus* etiam hujus licet adhuc manentis *concupiscentiæ* remittatur; manet *actu*, præterit *reatu*." This is almost identical (allowing for the clearer views of Luther and Melancthon on the subject of justification as a forensic act) with the statement of the Apology for the Augsburg Confession, Art. I. (See *Hase's Evangelisch-Protest. Dogmatik*, p. 75.) "Lutherus semper ita scripsit, quod baptismus tollat *reatum* peccati originalis, etiamsi materiale peccati maneat, videlicet *concupiscentiæ*. Addidit etiam de materiali quod Spiritus Sanctus, datus per baptismum, incipit mortificare concupiscentiam." Melancthon, more than once in the *Apology* says that Augustine is accustomed to define "peccatum originis concupiscentiam esse."

Dr. Bledsoe, it would seem, has taken a limited statement (and that not understood) in regard to concupiscence in the regenerate, as if it were designed to be universal.

mind or out of it; if all antecedent states, whether of intelligence or emotion (the only emotions he knows of being passive impressions or sensibilities), however they may be determined by omnipotence itself, still bear to volitions no other relations than that of conditions and not efficient; then Pelagius' view is the only possible one. There can be no other regeneration than a moral suasion resulting in a contingent and mutable change of choices as to sin and righteousness. And when Dr. Bledsoe is fighting a Calvinist, he is virtually in this position. He denies that there is or can be a necessitated holiness; and by this denial he makes us clearly see he means to deny the possibility of God's propagating in a free agent any such subjective state as would be followed with efficient certainty by any given kind of volitions. He also travesties the Bible doctrine of regeneration—showing again that he does not understand it—as God's directly and necessarily *producing the volitions* of the new born man. Whereas the Bible doctrine is, that God efficiently *produces the holy disposition* which regulates the man's volitions. When he would fain cleanse himself from the slough of Pelagianism, he paints to himself a regeneration which consists in God's efficiently creating in the man new views of truth in the intelligence and new acts of sensibility. But on this monstrosity we have sundry remarks to make. One is, that Dr. Bledsoe declares all the time, these new views and feelings God has produced are but mere passive functions of soul; and again, that volitions are, after all, uncaused by them. Then, of course, such impressions, however far omnipotence might carry them, *would constitute no moral change of the soul*. And we have, after all, no certainty of any new conduct from the new born man. If each volition arises uncaused, contingent, connected by no tie of efficiency with any antecedent state or act of mind, then all the volitions possibly may; so that we might have this monster: a man thoroughly regenerated by Omnipotence, and yet happening to choose to do nothing but sin! Our second remark is, that this scheme of regeneration, if it amounted to anything, would make the converted man a mere machine. It is entirely too necessitarian for us Calvinists! The states which are the necessary antecedent conditions—not causes, according to Dr. Bledsoe—of all his regenerate volitions, are mere functions of passivity. So far as those

volitions have any connection or character at all, it is with impressions, in which the soul is *merely passive!* Thus, true spontaneity is left out; it is entirely too mechanical for us Calvinists.

But Dr. Bledsoe appeals to his friend Wiggers (*Augustinianism and Pelagianism*), who is himself Pelagian in tendency, and who helped him so much in writing his *Theodicy*, to show what Pelagianism really is. Well, Wiggers' showing is pretty just, so far as it goes, but it is incomplete and superficial. It must be borne in mind that this system of error, like every other system of error or truth of human origin, was not fully developed by its inventors. Pelagius and Celestius did not establish all the regular parts and corollaries of their heresy, any more than Copernicus developed all the laws of that planetary system called Copernican. But from the premises which Pelagius gave the rest grew, in the ulterior discussion, by a logical necessity; and thus *the system* known as Pelagianism came into the history of theology. Every one who thinks connectedly, whether he be friend or enemy of that system, recognizes the vital members of the system as belonging to it. Dr. Bledsoe quotes Wiggers, as saying that *the results* of Pelagianism condemned by the General Council of Ephesus, A. D. 431—(wasn't that the "Robber Council"?)—were seven. Now, first, we have not been speaking of the results, but of the principles of the system; and second, these were very far from being all the results of Pelagianism debated in the church. But some of these propositions Dr. Bledsoe says he holds; some he both holds and rejects, as we have seen; and all of them he would hold, if he had the logic and consistency of the early Pelagians. Thus, he assures us he does not think Adam's body would have died, whether he had sinned or not. He would be much more consistent if he did think so; for he thinks that millions of infants die who have no sin, original or actual. Why not Adam too?

Nor can we see why Dr. Bledsoe should repudiate the sixth and seventh results of Pelagius: that the law, as well as the gospel, may be a means of salvation; and that men without the gospel may in some cases practice true godliness, and go to heaven. For upon his theory of free will, why should not these volitions, which are always loose from all efficient control, hap-

pen sometimes to be right? And none but a Calvinist can consistently hold it certain that no Jew nor Pagan can serve God because he knows no gospel; for this would make him responsible for volitions which arise with certainty. The only reason then, that Dr. Bledsoe disclaims these "results" is that he does not think consistently.

In dismissing this part of the discussion, we beg the reader especially to note Dr. Bledsoe's positive claim that he holds the Wesleyan theology. This we shall now effectually explode. On pp. 24-25, of his *Review* he concludes, sustained by the suffrages of a wondrous theologian, in the form of a Presbyterian young lady, that he knows intuitively no one is responsible for his native depravity; and he tells us in the same connection, that it is also an intuitive *datum* of his, that concupiscence is not sinful. "This," he exclaims, with ardor, "is our Methodism born with John Wesley in the year of our Lord 1788." Now, Dr. Bledsoe is very right in his chronology, so far as that his doctrine was "born" long since the days of inspiration. But we utterly dispute that it is Methodism, or was born with John Wesley. No. This is his Pelagianism, "born" in the fifth century. Hear David, in the 51st Psalm, *repenting because* he was shapen in iniquity and conceived in sin. Hear Christ say, John iii. 6: "That which is born of the flesh is flesh." Hear Paul, Eph. ii. 3: "We were by nature children of wrath." Is God angry with what is not sinful? Who knows best what is guilty, God, or that wonderful "Presbyterian young lady?" And when we hear Wesley, we find that he has as little to do with the paternity of Dr. Bledsoe's doctrine as the Bible has. *Doctrinal Tracts*, page 251: "It has already been proved that this original stain cleaves to every child of man, and that *hereby* they are children of wrath and liable to eternal damnation." Says Dr. Bledsoe, *Review*, p. 24: "A *new born infant is not sinful, or deserving of punishment.*" Says Wesley, it is, by reason of its original depravity, "*a child of wrath, and liable to eternal damnation.*" Wesley, *on Original Sin*, first British edition, pp. 155, 156: "Now, *this bias of the will is certainly evil and sinful, and hateful to God*; whether we have contracted it ourselves, or whether we derive it from *Adam*, makes no difference." "Therefore the inference, 'if natural, and, in some sense, neces-

sary, then no sin, *does by no means hold.*" Dr. Bledsoe asserts that if it be natural, and *in any sense necessary*, it is no sin. Wesley adds: "This doctrine has been held, . . . so far as we can learn, in every church under heaven, at least from the time that God spake by Moses." Alas for Dr. Bledsoe, Wesley discards him; says to him: "I never knew you." Let him now launch some of his scornful invective at the great founder of Methodism. We wait to hear the thunder. Many proofs, equally explicit, might be collected from Wesley *On Original Sin*.

On page 27 of his *Review*, as in the fifteenth section of his *Examination of Edwards*, Dr. Bledsoe asserts in its baldest form that most characteristic Pelagian principle, that Adam was not *made* holy, but only innocent, which he explains as meaning, neither positively righteous nor sinful; that no moral agent can have such positive initial righteousness; because such a state, if possessed, not being freely chosen by an act of will, would be no moral state at all. He proceeds, page 27: "Probation is the necessary antecedent to the only means of attaining moral freedom or holiness." On this heresy we remark, first: Scripture says, Luke i. 35: "The Holy Ghost shall come upon thee; . . . therefore, also, *that HOLY THING which shall be born of thee*, shall be called the Son of God." Here was a thing *holy before a probation, born holy*. It was not the eternal Word, for that was not born of Mary; it was the humanity of the Messiah. This simple but terrible antithesis should be enough to open our author's eyes to the depth of his Pelagianism! In fact, his own proposition, as stated by himself, does articulately dispute the possibility of our Redeemer's being by nature a holy free agent. But this is the common faith of all churches, and the cornerstone of our salvation. We now prove that Dr. Bledsoe's Wesleyan authorities are *as dead against him* as is the Bible, and the church of all ages. Thus:

When Dr. Taylor, of Norwich, a recognized modern Pelagian, said, exactly according to Dr. Bledsoe's philosophy: "Nature cannot be *morally corrupted*, but by the choice of a moral agent" — Wesley's reply is in these emphatic words: "You may play upon words as long as you please, but still I hold this fast: I, and you too, whether you will own it or no, am inclined, and ..as

ever since I can remember, *antecedently to any choice of my own*, to pride, revenge, idolatry." Isn't Dr. Bledsoe also evidently inclined to the first two? "If you will not call these *moral corruptions*, call them just what you will. But the fact I am as well assured of as that I have memory or understanding." (*Original Sin*, pp. 193, 194.)

Dr. Taylor, in accordance with Dr. Bledsoe's philosophy, had said: "It is absolutely necessary, before any creature can be a subject of this" (God's peculiar kingdom), "that *it learn* to employ and exercise its powers suitably to the nature of them." Says Wesley: "*It is not necessary.*" . . . "But it must appear extremely absurd to those who believe God can *create* spirits, both wise and holy; that he can stamp any creature with what measure of holiness he sees good, at the first moment of its existence." . . . "Just in the same manner you" (Taylor) "go on: 'Our first parents in Paradise were to form their minds to an habitual subjection to the law of God, without which they could not be received into his spiritual kingdom.' This runs upon the same mistaken supposition, that God could not *create them holy*. Certainly *he could, and did.*" (Pp. 221, 223.) Says Taylor, the Pelagian, like Dr. Bledsoe: "*Righteousness is right action.*" Says Wesley: "Indeed, *it is not.* Here, as we said before, is a fundamental mistake. *It is a right state of mind*, which differs from *right action* AS THE CAUSE DOES FROM THE EFFECT. Righteousness is properly and directly a right temper or *disposition of mind*, or a complex of all right tempers." Wesley here, at one trenchant blow, demolishes Dr. Bledsoe's whole philosophy of the will, and teaches with the Bible and all orthodox Christians of all churches, that right volitions are not uncaused; but the "*effects*" "*caused*" by holy dispositions acting *a priori* to the volitions. (P. 286.) And says Wesley in conclusion, p. 291: "From all this it may appear, that the doctrine of *original righteousness*, as well as that of *original sin*, hath a firm foundation in Scripture, as well as in the attributes of a wise, holy and gracious God."

This express contradiction of Wesley himself leaves poor Dr. Bledsoe's "Methodism" in a pitiable plight. We have one more Methodist authority, which is, if possible, still more damaging—that of Mr. Richard Watson's *Theolog. Institutes*, Pt. II., Ch. 18, *Full of Man, Doctrine of Original Sin*. Having stated pre-

cisely the doctrine of Dr. Bledsoe and the Pelagians, he proceeds to refute it thus: "If, however, it has been established that God made man 'upright;' that he was created in 'knowledge, righteousness, and true holiness,' and that at his creation he was pronounced '*very good*;' all this" [viz. Dr. Bledsoe's theory of volition] "falls to the ground, and is the vain reasoning of man against the explicit testimony of God. The fallacy is, however, easily detected. It lies in confounding '*habits* of holiness' with the principle of holiness. Now, though habit is the result of acts, and acts of voluntary choice, yet, if the choice be a right one—and right it must be in order to be an act of holiness—and if this right choice, frequently exerted, produces so many acts as shall form what is called a habit, then either the principle from which that right choice arises must be good or bad, or neither. If neither, a right choice has no cause at all; if bad, a right choice could not originate from it; if good, then there may be a holy principle in man, a right nature before choice; and so, that part of the argument falls to the ground. *Now, in Adam, that rectitude of principle from which a right choice and right acts flowed, was either created with him, or formed by his own volitions. If the latter be affirmed, then he must have willed right before he had a principle of rectitude, which is absurd; if the former, then his creation in a state of moral rectitude with an aptitude and disposition to good, is established.*" The author then sustains the truth by citing similar arguments from Wesley and President Edwards.

Now this book is one of the text books of the Wesleyan ministry. The words we have quoted from it, which are worthy of being written in gold, give, with unanswerable precision, the very argument we advanced in our *Review* of October last, pp. 651, 656. The reader is referred to the discussion there, in which we established by the same logic and by unanswerable Scriptures, this doctrine of the Christian churches. Dr. Bledsoe, in his reply, took good care not to venture near that part of our argument. Let it be also noted how scornfully and utterly Wesley and Watson here cast away his pet theory of the will. The latter states the idea, "a right choice has no cause at all," Dr. Bledsoe's very theory, as a self-evident absurdity, which he uses to reduce his opponent to a ruinous dilemma. Both of them teach expressly

and by constant implication, that holy dispositions are the efficient cause of right volitions. We have seen Wesley declare that Dr. Taylor's theory about volition, which is Dr. Bledsoe's, is his "*fundamental mistake.*" Is Dr. Bledsoe a Wesleyan? or, like Taylor, a Pelagian?

The sophism which underlies this fundamental mistake is so mischievous, and has evidently so completely deceived Dr. Bledsoe, that although we explained it briefly in our October No., p. 652 (top), it is worthy of further illustration. The old sophism is, that a man cannot be responsible for a disposition with which he is endued by nature; because we intuitively judge that *we cannot be responsible for what is involuntary.* The answer is, that in the sense of that intuition, *a man's own native disposition is involuntary with him.* Nobody constrains him to feel it, or yield to it; he feels it of himself; he yields to it of himself. The meaning of the proposition, "a man is not responsible for what is involuntary," as our common sense assents to it, is this: *A man is not responsible for what befalls him AGAINST his own sincere volition;* that is all. Now, will Dr. Bledsoe be rash enough to say that a man's natural disposition actuates him against his own sincere volition? that the naturally envious man, for instance, is actuated by *his own* envious disposition, against his own hearty volition? Hardly. Nature does not act against itself. Dr. Bledsoe seems very strangely to jump to the conclusion, that, because we do not elect beforehand our natural dispositions, therefore we do not have them voluntarily, and ought not to be held responsible about them at all. He cannot see the simple truth, that this native disposition being *the man's own*, its influence is as really *a function of his spontaneity* as any volition could be, even on Dr. Bledsoe's extreme theory. Now, one simple question will clear away his confusion. May not a man's free preference accept and adopt that which nature gave him, just as much as though he had first elected the quality and procured it for himself? For example, here is a young gentleman who has a very nice brown beard. How does he like it himself? Extremely well; indeed he altogether prefers and admires it, and quite prides himself on it. But whence did he get it? Shall we insinuate that it is the work of his own volition? (by the aid of a hair-dye?) Oh! no. Nature gave it to him;

dan that is one essential ground why he is proud of it! So we see how entirely possible it is that *a quality* which one did not *acquire by an act of choice* may yet be most entirely his *free, spontaneous preference*. Once more. We beg our young gentleman's pardon for supposing—merely for argument's sake—that he has the most frightful “carrotty red” beard, and—what is not at all impossible—that he is very foolishly and heartily proud of that same beard. Do not all the young ladies judge him to be therein guilty of “shockingly bad taste?” Of course. Dr. Bledsoe would come to his defence with his Pelagian logic and would argue that, inasmuch as his young gentleman had not voluntarily dyed his beard carrotty red—but naughty Dame Nature had done it for him—therefore his perverse liking for it must be involuntary; and so it is no violation of any principle of taste. But none of the young ladies would believe him; their common sense would show them that this perverse pride in the carrotty red was just as spontaneous and free as though the fop had dyed the fair brown beard red “on purpose.” Let the reader apply this parable to man's native moral disposition, and he will see that, although they be native, yet are we as free and responsible in them as though we had first procured them by a volition.

Once more. Dr. Bledsoe is much aggrieved by our saying that the result of his *Theodicy* is, that God admitted sin into his universe *because he could not help it*. On page 23 of his *Review*, he exclaims that to hold such an opinion of God would be virtual atheism. And he urges, page 24, that the very *gist* of his theory is, that no one ought to discuss the question “why God *permitted sin,*” because, in fact, he does not permit it at all. That this last is a play upon words only, and that he does teach substantially that *God cannot help* men's sinning if they choose, Dr. Bledsoe shall himself prove. He believes that sin is here, and that it is not God's choice that it should be here. (See *Theodicy*, pp. 197 and 199.) He sees that sin “*will raise its hideous head*; but he does not say, ‘So let it be.’ No; sin is the thing which God hates, and which *he is determined*, by all means within the reach of his omnipotence, *utterly to root out and destroy.*” It is here. God does not consent to it, but is determined, as far as he can, “*utterly to root it out.*” Yet it

will *always* be (*i. e.*, in hell). Now, we ask any plain mind, has not Dr. Bledsoe, in saying these three things, substantially said, that sin enters, because God cannot help it? Again, he says, with much iteration, "Having created a world of moral agents . . . it was impossible for him to prevent sin," etc., etc. "He could not prevent such a thing." How much difference is there between this, and our "could not help it?" The candid reader will see none. And as to the question, whether it is correct to say God has "permitted sin," this, even after Dr. Bledsoe has robbed him of his omnipotence, is a mere verbal quibble. When he says we must not speak of God as "permitting" sin, he is merely asserting that the word is always the synonym of *consent to from preference*. Of course God does not consent to sin, out of preference for sin itself; and if that is the only meaning of "permit," then God does not "permit sin." But wise men "permit" many things which they do not prefer. This use of the word is undisputed. And since we do not, like Dr. Bledsoe, rob God of his omnipotence over rational free agents, when we see him, for instance, permitting an archangel—Satan—to sin, and we know that his omnipotence would have enabled him to sustain Satan in holiness, even as it sustains Gabriel, then we are certain that we are right in saying God *permits* sin, while he does not for its own sake prefer it.

Had Dr. Bledsoe considered a little, he would not have robbed God of his almightiness in the interest of a false speculation. He would have seen these consequences. If God, "having created a world of moral agents, . . . could not prevent such a thing," then, first, there is no certain encouragement for sinners to pray to God for grace; and, second, there is no certainty that God can keep sin out of heaven. Are not angels and saints in heaven free moral agents? If God was "determined, by all the means within the reach of his omnipotence," to root sin out of this world, and *has failed*, may he not also fail to keep it out of the heavenly world? Dr. Bledsoe cannot evade this by any of his expedients. Thus, his work, instead of being "a *Theodicy*," spreads the pall of despair over the kingdoms both of grace and glory.

We now approach the second part of our undertaking—the more articulate discussion of Dr. Bledsoe's special theory of

free agency. He charges us with a delinquency in not discussing it formally in our number of October last, where we did not propose, nor undertake, to do it. We shall now repair that omission, but in a manner which, we surmise, will contribute very little to his contentment. Other inducements to this discussion exist in the fundamental importance of the doctrine of free agency, and in the relation between Dr. Bledsoe's theory of it and all his other theological lucubrations. He seems to suppose that we evaded the task of arguing for our view, under the pretext of such discussions being superfluous for Presbyterian readers, when in fact we knew that his mighty logic in the *Examination of Edwards* had already demolished all the Calvinistic arguments! The reader shall see. The method we propose is, to define carefully our theory of free agency, and then to prove it. We shall then be prepared to entertain Dr. Bledsoe's rival theory, and weigh its contents—if there be any.

First, then, the question between us is not whether man is a real free agent, or whether consciousness testifies that we are, or whether such real free agency is essential to just responsibility. We believe the affirmative of all these as fully as Dr. Bledsoe; and when he represents the debate as between those who hold to a real and conscious free agency and those who dispute it, he misrepresents us. The question is, not whether a real free agency is, but only what it is.

Second, The word "will" has been often used in a broad, and also in a narrow sense. In the broad sense, it is what the Scripture popularly calls "the heart," or what Sir W. Hamilton calls the "conative," or Dr. McCosh the "optative" powers. This is the sense in which Calvinistic writers use the word "will," when they distribute the powers of man's soul into the powers of sensibility (passive), powers of intellection (simply cognitive), and "will," or active powers. In this broad sense, the "will" includes much besides the specific power of volition; viz., all those appetitive or "orectic" powers which furnish the emotive element in subjective motives. In the narrow sense, the word "will" means the specific power of choice, or the "volitional" power. This is the sense in which Dr. Bledsoe uses it; and this is the sense in which we shall use it.

Third, The "motive" of volition is a term which is contin-

ually used by Dr. Bledsoe, and even by Edwards, with a mischievous ambiguity. It is often employed for the object, that to which the soul moves in volition. And nearly all the confusion in the arguments on the will has arisen from the mistaken notion, that we regard this object, along with its involuntary impression on the sensibility, as the efficient of a volition. Again do we forewarn Dr. Bledsoe and our readers, that these, in our view, are not motive, but only the outward occasion for the action of real motive. What then, according to us, is the efficient motive? The soul's own spontaneous, subjective desire, as guided by its own intelligence; and this desire is a function of a faculty distinct from, yea, an opposite to, the sensibility; of an active power, whereas the sensibility is a "passive power"; of a power wherein the soul is self-moved, instead of being moved from without; wherein the soul is agent, and not mere subject of an effect.

Fourth, If we should say that volitions are "morally necessary," we should mean, with Edwards, only that they arise with *full certainty*, and by the efficiency of their subjective motives. We think, with Dr. Hodge, that the misunderstanding of the word "necessity" does boundless mischief in this debate; but we do not think that this is the fault of the word. The truth is, that since this Latin word was domesticated in philosophy, it has undergone a change in its popular use; and even scholars have lost sight of the fact, that its philosophical sense, of full certainty of eventuation, and nothing more, is its proper etymologic meaning. What is its real origin? The "*necessitas*" is simply "*quod non cedit*," the *unfailing*. We can recall the reader's mind from its hallucination, by reminding him of the twin-brother of this word, which has not been abused by modern popular use, "*incessant*." Every school boy knows that "in" is "un," the negative particle. So that "incessant" is the *unceasing*; and so "necessary" (necessant) is the *non-ceasing*. But our familiar word "incessant" has not undergone the bad luck of being perverted to mean—wholly another thing—the *compulsory*. Nobody is so perverse as to think the "incessant talker" is a compulsory talker—a man who is compelled to talk. Well, let the reader only give the great Latin scholastics credit for understanding the real meaning of the word, and this mighty

bugbear of "necessity" will vanish. He will then see that it is no dishonest after-thought, no "dodge" to escape the just *odium* of a hateful theory, to say that by a "necessary volition" we mean—and philosophy always did mean—simply what the phrase "an incessant volition" would classically mean, *volitio quæ, mediante motivo, non celet*; simply this, that, supposing the subjective motive present, the volition will not fail to rise. Now, "where is the murder?" Why should our innocent Latin word be held responsible for the wholly different idea which popular use has forced upon it, that of inevitable compulsion? But Dr. Bledsoe declares roundly (as in *Review*. p. 34) that he will not be appeased by this definition; that nothing shall satisfy him except our believing that volitions are uncaused and contingent; and that they *may fail to rise*, though every condition of their rise be present. Else he thinks the mind is not free.

But, fifth, what is free agency? Let the reader note that we do not say "free will." Dr. Bledsoe himself is constrained, in a sort of grudging way, to grant the reasonableness of Locke's remark, that freedom is an attribute of an agent and not of a faculty; so that, properly speaking, it is the mind which is free, and not the will. So we will not speak of "free will"—at best an ambiguous term—but of free agency. Dr. Bledsoe is much dissatisfied with Edwards for defining freedom as a man's privilege of doing what he chooses. We will venture the assertion that Dr. Bledsoe will not find any man of common sense who desires any fuller freedom than this. But the ground of objection against this clear and practical definition is, that the way in which choice comes to pass ought to be determined also; that if a man has the privilege of doing what he chooses, yet he may have been *made to choose*, in some way infringing his freedom. And Dr. Bledsoe cites Edwards with great condemnation as saying that, no matter how a man comes to choose thus and thus, if he has unobstructed privilege of acting as he has chosen, he has all the freedom he can ask for. Now we presume that the difference between Dr. Bledsoe and Edwards here is simply this: that the latter was too clear a thinker to have his mind haunted with any phantom of a *choice* which is *compelled*. His common sense taught him that choice, on any theory whatever, must still be an *uncompelled determination* of the soul; so that his practical

definition of freedom does include a freedom of the soul, and not of the limbs only, as Dr. Bledsoe cavils. Edwards had in his view, doubtless, that declaration of the Westminster Confession, Chapter IX., which frankly says, that freedom is an attribute of the rational agent so inalienable and essential that it cannot be, and is not, infringed, whatever the moral state of the soul. So, if Dr. Bledsoe could only think that "*any* good can come out of Nazareth," he might see that when we define free agency as a man's liberty of doing as he chooses, we are not laying a wicked trap for him, to catch him in this fraud, viz., that while he has the privilege of *doing as he chooses*, we will *compel* him to *choose as he chooses*. No; we cannot conceive of that bugbear of his, a *compelled choice*; we assure him we think it, just as he does, the intensest of contradictions. And so, in our generous desire to calm his apprehensions—not because it is really necessary—we tender him this definition of free agency: it is the soul's power of *deciding itself* to action, according to its own subjective nature. But even this is not going to satisfy him!

But let it be distinctly understood that, by "ability of will," we understand a very different thing, namely, fallen man's supposed power to reverse that nature by his volition. That power we utterly deny to a born sinner; we do not believe that he can, or will, choose dispositions exactly against those which it is his nature to prefer, and thus revolutionize that very nature by a volition. Ability we deny; free agency we grant to him.

Sixth, We do not regard President Edwards as infallible, and did not before Dr. Bledsoe assailed him. The essential structure of his argument is indestructible, but it has some excrescences and blemishes. He, like nearly all the English Christian philosophers of his day, was too much under the influence of the pious Locke; and hence his usually clear vision is sometimes confused by the shallow plausibilities of the sensationalist psychology. Hence he sometimes seems to confound objective inducement with subjective motive. He also confuses his reasoning by sometimes using the word "will" in the broad and sometimes in the narrow sense.

Seventh, The question, "how volitions arise in a free agent," has received three distinct answers. One is that of the consistent sensationalist, fatalist, and pantheist. According to these, voli-

tion is efficiently caused by emotion; but emotion is only the necessary reflex of impression made on the sensibility from without. We think, with Dr. Bledsoe, that this scheme is virtually no scheme of free agency at all. Under it the soul is, after all, determined to action by an efficient external to itself; the soul is really not agent, but acted on.

The second answer is in the opposite extreme: it stakes our true free agency in this, that the volition may always be a mental modification arising immediately in the mind without any efficient at all—a self-determined change. The advocates of this scheme hold that the free volition must be disconnected even from subjective motive, and arise, in that sense, absolutely uncaused. Its advocates describe it sometimes as the theory of the self-determination of the will as opposed to the self-determination of the soul, using the “will” in its narrow sense. Sometimes, they say, the mind must be in absolute *equilibrium*, as to even subjective motive, when the free volition takes place. Sometimes, they say, volition is an *uncaused event*. But always they concur in holding that the free volition must be a *contingent event*, whatever may be the antecedent states of mental conviction and desire looking towards the object of choice.

The third answer shuns both these extremes, and defines free agency as the self-determination of the soul, not of the specific faculty of choice. But it holds that rational spirit, like every other power in nature, conforms to the maxim, “Order is heaven’s first law.” In other words, it acts, like everything else in divine providence, in accordance with a regulative law; and this law of free volitions is the soul’s own rational and appetitive nature—its *habitus*. Hence the rational free volition is not an “uncaused phenomenon” in the world of mind; it only arises by reason of its regular efficient, which is the subjective motive. By subjective motive is meant that complex of mental judgment as to the preferable, and subjective appetency for the object which arise together in the mind, on presentation of the object, according to the regulative law of the mind’s own native disposition. In a word, the free volition will rise according to, and because of, the soul’s own strongest motive; and that is the reason why it is a rational, a free, and a responsible volition. Hence, we believe that such volitions are attended with full certainty,

—which is what we mean by moral necessity—and also with full freedom. We are fully aware that every man performs acts whose causation in the soul is more secondary. Thus, the snuff-taker opens his box and “takes his pinch,” often, perhaps, without any remembered consciousness of the subjective motive. It is because both mind and limbs have come, by repetition, so under the influence of the law of habit—*consuetudo*, not *habitus*. This law is so influential in this case that we popularly term the acts “mechanical.” Are such acts still rational, free, and responsible? They are, so far as previous acts of conscious freedom formed the *consuetudo* which now influences the mind and body.

Now the third is the theory of the will, or of the way responsible volitions rise, held by Calvinists. Does not its right statement evince of itself its correctness to every candid mind?

1. Our first argument for it then shall be, that it is supported by man’s consciousness. Dr. Bledsoe thinks not. He is, indeed, too adroit to say that we are conscious of having rational responsible volition *without motives*; for he foresees the reply, that consciousness can only be of what is in the mind. He admits (*Examination of Edwards*, p. 230): “We are not conscious that there is no producing cause of volition. No man can be conscious of that which does not exist.” His position (p. 227) is that “we find our minds in a state of acting. *This is all* we discover by the light of consciousness.” But is this all? We raise the question of fact. We assert that whenever the soul chooses with sufficient deliberation, we are conscious of choosing according to a subjective motive. Dr. Bledsoe is misled in the reading of consciousness by haste, pride of hypothesis, and the evanescent nature of the impression left on remembered consciousness by the motive when the mind hurries on to the execution and fruition of its choice. This cause of an erroneous reading of consciousness may be well explained by the manner in which we instantaneously drop out of remembered consciousness the *objects*, also, of rapid volitions. The intelligible perception of the object is, as Dr. Bledsoe admits, the absolutely essential condition—not cause—of the act of will. Yet often its presence is not consciously remembered for a moment. Here is a man fencing. We see him intentionally bring up his sword

and make "the guard in tierce." He saw his adversary make, perhaps with almost lightning speed, the "thrust in tierce." That occasioned his making the guard in the same figure, the subjective motive being, of course, the desire, according to his nature, to preserve his own body. Does he remember, an instant after, in which figure his adversary made his thrust? Perhaps not. But Dr. Bledsoe admits that his perception, at the time of the "thrust in tierce," was the occasion without which he would not have made the "guard in tierce," which he did intentionally make. What is the solution? That in the speed of the mental processes the conscious perception of the thrust dropped instantaneously out of remembered consciousness. There is no other. Now, Dr. Bledsoe will ask that fencer: Do you remember being rationally conscious of the desire of self-preservation as your subjective motive for making that rapid guard? And very possibly the fencer will answer: No. The solution which Dr. Bledsoe has just used applies again. Haste and excitement caused the *motive*, as the *occasion*, to drop out of remembered consciousness. But the intelligent volition to "guard in tierce" could no more have arisen in that fencer's mind without motive than without object. Let us, then, eliminate the cause of confusion, and inspect any volition which is sufficiently deliberate; we know, we are conscious, that motive prompts it. Had the motive not been, the volition would not have been. This is but saying that a reasonable man knows that when he acts deliberately he thinks he has his own "reason for acting." When he sees one act, and asking, "Why did you do that?" receives the answer, "Oh, for nothing at all," he sets down the answer as silly. It is the very characteristic of a fool to act "without knowing what for." Is this the description Dr. Bledsoe means to give of himself when he declares (p. 227) that he "sees not the effectual power of any cause operating to produce his volitions?" Did he write all these wise books and reviews without "effectually" or decisively "knowing what for?" Courtesy requires us to leave him to make the answer. For ourselves, we can only say, that when we get to that pass—that we deliberately choose a line of action without even thinking we have in ourselves a rational motive—an *aizû*—determinative of our choice—we hope our friends will select a lunatic asylum for us.

2. If the most deliberate acts of choice may be thus loose from the efficiency of all antecedents in the mind, then we could not make a recognition of any permanent character in ourselves, or our fellow-men. What do we mean by *a character*? Clearly a something having continuity and permanency qualifying the free spirit. Any man with common sense will add, "a character is a certain set of practical principles permanently qualifying the man." But we need not claim more than the general answer. Now one man does not have the gift of "discerning another man's spirit" by immediate intuition; he learns character *a posteriori* by observing his fellow-man's volitions. But if Dr. Bledsoe's theory were true, volitions would be no *indices* of character, for they must be loose from the efficiency of "all antecedents in or out of the mind;" and, of course, loose from the regulative power of that permanent something in the mind constituting its character. But we ask, emphatically, may not character be at least sometimes known by conduct? If not, how does a jury ever find out whom to punish? How does Dr. Bledsoe find out whom to esteem?

Dr. Bledsoe (in Section XV., *Examination of Edwards*) makes a set effort to escape this fatal logic. The place abounds with the baldest assertions of the fundamental Pelagian postulate, that a concreated righteousness of principle would be no righteousness, because not the result of an act of choice; and that, hence, no moral agent can be made righteous, but he must do a righteousness. President Edwards had argued—*Treatise on Original Sin*—in exact conformity with the Wesleyan Watson, and with Wesley himself, "Not that principles derive their goodness from actions, but that actions derive their goodness from the principles whence they proceed; so that the act of choosing what is good is no further virtuous than that it proceeds from a good principle, or virtuous disposition, of the mind."

Dr. Bledsoe conceives that the fallacy of this argument proceeds from the ambiguity of the term principle. Taking, *e. g.*, the instance of Adam's first eating the forbidden fruit, he claims that the "principle" from which this evil volition resulted, was not any "implanted principle" at all, but Adam's "intention, or design, or motive." The only "implanted principle" Dr. Bledsoe sees in the case is, that native desire for material good and for

knowledge which Adam's Creator had placed in the animal and spiritual parts of the creature's person. If God put them there, he urges, they could not have been sinful; they must have been innocent. Says he, "And hence, we very clearly perceive that a sinful action may result from those principles of our constitution which are in themselves neither virtuous nor vicious." And again, "In fact, the virtuous principle from which the virtuous act is supposed to derive its character, is not an implanted principle at all, but the design, or intention, or motive, with which the act is done, and of which the created agent is himself the author."

Now, on this evasion we remark, first, he misrepresents us in saying we teach there must have been an "implanted principle" of evil from which Adam's first sin must proceed. No. We say there must have been a principle of evil prior in the order of causation to the act, or else the act would not have been qualified as evil. And this Dr. Bledsoe is compelled to own, p. 201, "As it is truly said . . . a holy action can proceed only from a holy principle or disposition," etc. Second, we ask the reader to note how unavoidably Dr. Bledsoe falls into the true doctrine: "holy action *proceeds* from," "a sinful action may *result* from," etc. Surely that which "proceeds" and "results from" antecedents, is an effect. Common sense will assert its rights. Third, Dr. Bledsoe thinks that the "agent is himself the author" of "the design, or intention, or motive," which is "the principle from which the virtuous act is supposed to derive its character." Very well. He has taught us that all functions of intelligence, and all functions of emotion or feeling, are passivities; the will is the only active power. Now, then, if the agent is author himself of the principle of his volition, he must have originated that principle by an act of choice! What principle of "design, or intention, or motive," regulated that prior act of choice? And must he not have chosen to choose? Thus Dr. Bledsoe is hopelessly entangled in the endless *regressus* and in Mr. Watson's fatal refutation at once.

But, fourth, and chiefly, let us look a little more narrowly at this self-originated "design, or intention, or motive" in Adam, from which Dr. Bledsoe admits his unholy action proceeded. What was this intention? Merely to gain knowledge, and please

his palate naturally and innocently? That was not all; for as Dr. Bledsoe justly argues, the appetency for these natural goods being implanted by his Maker, was not essentially sinful, but legitimate in its proper bounds. There was an intention to gratify this unrighteously. There was intelligent intention to prefer these natural goods to duty. Now let this "*intention*" be inspected. Who fails to see that it involves a subjective appetency, a desire; the new expression of a new and perverted disposition; the *habitus*, namely, of unrighteous self-will? While we know very well that this new disposition, qualifying Adam's soul now, was synchronous with the evil act, we also know that, in the order of production, it was precedent to it, and so qualified it as evil. Thus Dr. Bledsoe's pretended analysis is only an attempt to wrap up the great facts of the precedent disposition and appetency under the word "*intention*." But, we repeat, intention involves them. "*Intentio*" is a subjective and active directing of the soul upon (*tendere in*) an objective end. This is the analysis of common sense. Every lawyer and jurymen thinks that, in proving "*evil intention*" on the murderer, he has proved "*malice*."

Dr. Bledsoe thinks that if Edwards argues that Adam's first holy volition would never have taken place unless God implanted a principle of holiness to prompt it, he is equally bound to argue that the first sin could never have occurred unless the Maker first implanted an evil principle to prompt it. Our author forgets, in this ingenious cavil, that there is an important contrast in the essence of holiness and sin. Sin in principles and acts, is a *privative* quality. Holiness is a *positive* one. *Ἡ ἁμαρτία ἐστὶν ἢ ἀνομία*. Discrepancy from law is sin. But only positive conformity with the standard is holiness. Now surely it is one thing to say that a finite, dependent creature cannot, if created in a state of defect, out of that defect originate the positive; and a very different one to say that this finite, mutable creature, naturally endued with the positive, may admit the negative defect. Dr. Bledsoe's logic is precisely this: because a candle sixteen inches long will never shine unless it be positively lighted, *ergo*, it will never cease shining unless it be positively extinguished. That might follow as to an infinite candle; but this one, being but a few inches long, has only to be completely let alone to burn itself out.

3. If our theory were not true, no certainty would attend any form of influence which man exerts upon man. Education would yield no definite results in the formation of character. Human control over a fellow-man, beyond the material grasp of the controlling person, could never be exerted with full certainty; for the way in which human control exerts itself is by addressing some inducement to some known subjective appetency of the person governed, which is known to be adequate to occasion the designed action. For instance, may not the employer present to his servant's native desire for gain a pecuniary reward, which will certainly result in the performance of the service? Does not the teacher present to the urchin's desire of bodily welfare a positive threat of the birch, modifying that native appetency into active fear, which will result in punctual and unfailing obedience? Dr. Bledsoe knows that this is often done. He has friends, from whom, unless death or casualty intervene, he knows his requests will secure an infallible compliance, in at least some things. *How* does he know this? If volitions are efficiently caused by "no antecedent in or out of the mind," he has no right to think it—no means to know it. His doctrine is, that every antecedent condition of choice may be there, looking to the confidently expected volition, and yet there is always the possibility that the will may fly off at a tangent, as men popularly say, into the opposite determination. He has no right to be *entirely certain* that the best friend he has in the world is going to comply with his most reasonable request, though able to do so.

4. The free volition which should arise exactly according to this theory would be neither rational nor moral. The very ground of our judging these qualities to an act is, that we recognize it as proceeding out of a rational or a moral motive, which was efficient thereof. Dr. Bledsoe is so unable to blind his eyes to this fact, that he says, while the rational or moral volition has *no cause*, it has *its ground* in reason, of course. But what is *the ground* of an act? The phrase is a metaphor. The ground of a thing is that on which it stands, as a house on its foundation. The ground of a volition is the state of soul on which it stands for its being. What is this but *its cause*? The ground of an act which yet is not its cause, would be a ground that was not a ground. How can a volition derive positive or

certain moral character from its rational or moral "ground" in the mind, unless the volition is positively and certainly connected therewith? Let common sense answer. We see a man perform an act in outward form charitable. We ask, "What made you do that?" He answers, "Nothing; the volition *just came so.*" Instantly we withdraw our moral approbation. The man, instead of appearing approvable, now seems only silly.

5. Dr. Bledsoe's scheme breaks down utterly when brought to the test of man's free choice concerning his *summum bonum*. Let natural good and evil be presented in alternative before the free soul; as for instance, sickness and health. Let him be free to choose between them simply for their own sakes, without any complication of the question by connected consequences or moral restrictions. Let him be invited to exercise his freedom by electing sickness rather than health, simply for the sake of being sick. Is there a particle of uncertainty? Is there the faintest possibility that he will so elect? Yet is that man's election just as free and rational, though morally necessitated or made certain by the efficient influence of his own common sense and natural desire of welfare, as any other volition he ever performs.

6. Every rational being in the universe, except man, is an instance exactly against Dr. Bledsoe's theory of free agency. God's holy volitions are morally necessitated by his eternal and immutable perfections. Is he, therefore, not free? The Bible itself tells us that "he cannot lie," "he cannot be tempted to evil." Then, according to this philosophy of contingent volitions, none of God's moral volitions are free! Our Lord Jesus Christ, as we have seen, *was born* a "holy thing." According to Dr. Bledsoe, he was therefore not a free agent. Holy angels, as we are expressly taught by scripture, had holiness as their "first estate," and they are now made known to us as "elect angels." Now, Dr. Bledsoe himself says he believes in the infallible "perseverance of the elect." So it appears these angels must be certainly determined to holy volitions, and therefore they are not free agents; and if they are not free agents, they cannot have moral character; so the holy angels cannot be holy, because they are indefectibly holy! Again, according to Dr. Bledsoe, elect sinners will infallibly persevere in so many, at least, of the acts of holy volition as will maintain their spiritual union with their Re-

deemer; for Dr. Bledsoe believes in the "perseverance of the elect"—though not in the "perseverance of the saints." Now, there are some "mighty curious" corollaries attached to this doctrine of the "perseverance of the elect." God's decree of their election to glory is conditioned on his foresight that they will not only believe on Christ, but continue in faith to the end. But if the creature's volitions are contingent, God's prescience of them must be contingent, since he knows them just as they are to be. Here, then, we have a perseverance grounded on the fact that they will persevere, and a perseverance which is but contingent, *i. e.*, a perseverance that may not persevere! But our main point is to argue that, as to those persevering elect, at least those volitions by which they cleave to Christ must be certain. But Dr. Bledsoe's theory teaches that if they are certain, they are not free. Once more; lost souls and evil angels are infallibly certain never to will holy volitions. Then, their unholy ones are not free, and therefore not blameworthy!

We quote, under this head, from *Wesley on Original Sin*, pp. 286, 287, in order that Dr. Bledsoe may see how much title he has to call himself a Wesleyan. Dr. Taylor, of Norwich, had advanced—precisely Dr. Bledsoe's doctrine, on p. 28 of his *Review*—the proposition that a being "must exist, and must use his intellectual powers *before* he can be *righteous*." Wesley, adopting Dr. Jennings's reply, answers precisely according to our argument in this sixth head:

"But according to this reasoning, *Christ could not be righteous* at his birth. You answer, 'He existed before he was made flesh.' I reply, He did, *as God*. But the man Christ Jesus did not. . . . According to your reasoning, then, the man Christ Jesus *could not be righteous at his birth*."

"Nay, according to this reasoning, God could not be righteous from eternity, because he must exist before he was righteous. You answer, 'My reasoning would hold even with respect to God, were it true that he ever did begin to exist; but neither the existence nor the holiness of God was prior to each other.' Nay, but if his existence was not prior to his holiness—if he did not exist before he was holy—your assertion, that 'every being must exist before it is righteous,' is not true."

7. The Bible doctrines of God's certain foreknowledge of men's volitions, of his foreordination of them (see Acts ii. 23; Isaiah x. 5-7), of his prediction of their voluntary acts, and of his providence over such acts, present an unanswerable demonstration of our theory of volition. We shall not fatigue Christian readers by citing many scriptures to prove any one of these

doctrines. God's providence is "his most holy, wise and powerful sustaining and governing all his creatures and all their actions." That his efficacious providence extends, in some mysterious way, to men's volitions, is expressly asserted in the Bible. "The king's heart is in the hand of the Lord as the rivers of water: he turneth it whithersoever he will." (Prov. xxi. 1; 2 Sam. xvi. 11; xxiv. 11, etc.) Is God's providence here efficacious? If one answers, "No," he contradicts the Scripture, and robs God of his sovereignty. If he answers "Yes," as he must, the question is settled; for in causing this volition certainly to arise in the man's soul, God has procured the operation of some sort of causation. The argument is so true that it is hard to express it without uttering a truism. But, then, that volition, which still is free and responsible, was not uncaused. Now the species of causation which we assign for it, subjective motive, is beyond question more consistent with the man's free agency than any other possible species. Let Dr. Bledsoe try his hand at explaining how there can be any other possible species of efficient causation of that volition in that man's soul, more compatible with his free agency therein, than subjective motive acting spontaneously, yet according to the known law of his disposition. But we need not press him so far. The argument is in these simple and inevitable propositions: God efficiently controls the man's volition; therefore the volition had some efficient. But the essence of Dr. Bledsoe's theory is, that volition has no other *efficient* antecedent, either in or out of the mind, than the mind itself.

Again, God has predicted a multitude of volitions to be formed in subsequent times by free agents. He has foretold them positively. He has, so to speak, made the credit of his veracity responsible for their certain future occurrence. Here we have two arguments. These predictions imply a certain foreknowledge in God; and from this foreknowledge we argue the certainty of the events foreknown. Again, inasmuch as God is well acquainted with the feebleness and fickleness of man, and the uncertainty of human affairs in themselves, unless, when he predicted that a certain man should freely do a certain act, he purposed effectually to bring the doing of it to pass, he could not safely or wisely have committed himself to the prediction.

Would Dr. Bledsoe, knowing that the cashier of his publishing house was both poor, fickle, foolish, mortal, and of uncertain moral principle, like to pledge his credit that this cashier shall, on the first day of June, 1885, infallibly pay a given paper merchant five thousand dollars, unless he felt, while giving the pledge, that he himself possessed some effectual mode of causing the cashier to do it? God, in the Bible, pledged his credit to many such things.

But God's universal and infallible foreknowledge is sufficient to prove our doctrine. Dr. Bledsoe cites Edwards as presenting this argument in this comprehensive form: "When the existence of a thing is infallibly and indissolubly connected with something else which has already had existence, then its existence is necessary; but the future volitions of moral agents are infallibly and indissolubly connected with the foreknowledge of God, and therefore they are necessary." This is so conclusive that Dr. Bledsoe admits frequently that God's prescience proves *the certainty* of free volitions. Thus, p. 141: "It is freely conceded that whatever God foreknows will most certainly and infallibly come to pass." Watson, in his *Institutes* (Part II. Chap. IV.), admits that God's prescience refutes the idea of any *uncertainty* in the volitions foreseen. He says that, when he teaches the "contingency" of volitions, he does not mean their uncertainty, but their freedom. "Contingency is not opposed to *certainty*, but to *necessity*." He then proceeds to define the species of necessity, which he denies of free volitions, in the following unmistakable terms: "The very nature of this controversy fixes this as the precise meaning of the term. The question is not, in point of fact, about the *certainty* of moral actions, that is, whether they will happen or not; but about the nature of them, *whether free or constrained*," etc. It thus appears that the necessity against which Watson protests is the necessity of *constraint*. Abating the novel and unusual definition of the word contingency, Watson's statement is one which every Calvinist can accept. But Dr. Bledsoe certainly cannot adopt that view of "certainty" in volitions which the leading Wesleyan authority here gives us.

The argument from God's prescience to our theory of volition was stated by us (*Review*, October, 1870) in a form to bring out

articulately a link which Edwards leaves to be implied. That which is by an infallible mind certainly foreseen, must be certain to occur. Nothing would be certain to occur in the sphere of dependent being, unless there were some efficient of its certainty. Does anything come absolutely *ex nihilo*? Even Dr. Bledsoe concedes that it does not. Well, then, when a thing is certainly to come, it is equally clear that the something out of which it comes must be such a something as will not fail to produce it. For if it may fail to produce it, then the thing is not certain to come. This is the idea of efficient causation: a producing agency which will not fail. Now, then, unless the event be certain to arise, no correct mind will have a certain belief it will arise. If any mind correctly and certainly expects it to arise, it must be because there is seen some efficient cause to make it arise. For since nonentity cannot produce, an event that did not have *some* certainly efficient cause would not be certain to occur. Every gambler knows that the dice which always fall six up, are loaded. But where will you find that certain efficient of the free, foreseen volition? Our theory presents the answer most consistent with free agency; for if you place the causation anywhere save in the efficient influence of subjective motive, under the regulative control of the soul's own disposition, free agency is lost.

Such is the point of this unanswerable argument. Dr. Bledsoe is hugely offended because we intimated that he misunderstood or evaded its point. If the reader will examine the eleventh section of the *Examination of Edwards*, he will see the mode in which our author proposes to resolve it. He tells us in the outset that, "to many minds, even among distinguished philosophers, the prescience of Deity and the free agency of man have appeared to be irreconcilable." Among these are Dugald Stuart, Dr. Campbell, and Locke. Yet Dr. Bledsoe believes that he can easily remove the argument which convinced them! How does the reader suppose this exploit is wrought? By begging the very question in debate, whether volition is an event without efficient cause; and by deciding, in opposition to the intuitive judgment of all other philosophers and common men, that in the mental world changes may, and do, arise without efficient cause. He would have us draw a distinction between

“logical certainty” and a “causal certainty.” He admits that God’s certain foreknowledge of a volition must imply its “logical certainty;” but he denies that we are entitled to infer therefrom its “causal certainty.” Let him express his idea in another form (page 135): “But is this indissoluble connection” (of the occurrence of volition with God’s certain foresight thereof) “at all inconsistent with the contingency of the event known? *This is the question.*” . . . To settle this question, . . . “let us suppose, to adopt the language of President Edwards, ‘that nonentity is about to bring forth,’ and that an event comes into being without any cause of its existence. This event then exists; it is seen, and it is known to exist. Now, even on this wild supposition, there is an infallible and indissoluble connection between the existence of the event and the knowledge of it; and hence it is necessary, in the sense above explained. But what has this necessary connection to do with the cause of its existence?” By supposing such a case, Dr. Bledsøe endeavors to show that the “logical certainty,” which he concedes, does not imply a “causal certainty,” which he denies. But the reply is very simple: Such a case cannot be supposed. That “nonentity can bring forth,” is a proposition which the reason rejects as a self-evident impossibility. Does not he himself admit that it is a “wild supposition?” If it might be assumed, then we might admit that a “logical certainty” does not imply a “causal certainty.” But it may not be assumed. On the contrary, we assert that, because the reason tells us by its most fundamental intuition that every event must have a cause, the “causal certainty” does, and must, follow from the logical certainty. If we are certain a given event is going to happen at a given time, then we are intuitively certain that the efficient cause of that event is going to be present at that time. Our reason tells us that otherwise the event would not be. What is this but the intuitive judgment on which all valid inductive science proceeds? Unsettle this connection between the logical and the causal certainty, and a *posteriori* argument is at an end. The very *organon* for ascertaining natural laws is broken up; the foundation of the reason is uprooted. Dr. Bledsøe exclaims, that then we bring the law of causation to complete the argument from God’s prescience to the efficient influence of motive. Of course we

do. His complaint betrays the very fact whose intimation he so resented. Of course the intuition that no change comes uncaused is an implied premise of Edwards' enthymeme. He did not expand it in that place, because he did not imagine that any one would argue from the opposite and impossible supposition that nonentity can bring forth events.

It is wholly unnecessary to follow Dr. Bledsoe through all the confusions of his attempted evasion from the grasp of our argument. In one place, for instance, he endeavors to insinuate—what he dares not assert plainly—that the intuition which demands a cause for every event is not binding in this argument, by bringing in the assertion of Stewart, that the deductions of geometry are not founded on its axioms, but on its definitions. We might pause to ask whether it is creditable to one who has written on the philosophy of mathematics to be misled by this very one-sided statement. He should long ago have found its solution in the obvious view, that while the properties of figures and bodies described in the definitions of geometry are, of course, the subject matter of geometrical reasonings—the things geometers reason about—still the axioms, or primitive judgments of the reason about quantity are the logical foundations of all the reasonings about properties. But why intrude that old, quibbling debate? Could geometrical reasoning proceed without any axiomatic truths? Can philosophy proceed without the fundamental axiom of cause? After all, Dr. Bledsoe does not dare to say it can. Even in the construction of his sophism, he admits that it would be a “wild supposition.” The outrage done to reason by this attempt to sunder a “causal” from a “logical” certainty is so great that Dr. Bledsoe's own mind recalcitrates, and constrains him to a fatal concession. (*Examination of Edwards*, p. 146.) “If Edwards means that a thing cannot be foreknown unless it has a sufficient ground and reason for its existence, and does not of itself come forth out of nothing, we are not at all concerned to deny his position.” Now, why should Dr. Bledsoe deceive himself by calling the efficient cause of volition a sufficient “ground and reason”? Is volition only a logical inference? He, of all men, is compelled to deny that proposition. We properly speak of a “sufficient ground and reason” for logical conclusion. Why, then, seek to hide under this nomenclature of logic what

is nothing else but *efficient motive* of the act of soul? The only sufficient ground and reason, in whose certain action God sees the certainty of the volition, is the *subjective motive* which, he sees, *determines* that volition. It is true, Dr. Bledsoe proceeds to speak, as he so often does, of volition as "proceeding from the mind, acting in view of motives." First, we remark on this subterfuge: here is the old and obstinate confusion of objective inducement with true, subjective motive; our author still is under the hallucination that "motive" is *something objective, at which the mind is looking*. But, second, has not Dr. Bledsoe said many times that "motive," whatever it may be, is only the occasion, and not the cause, of the mental determination? The question then arises, since the objective, *at which the mind looks*, does not efficiently dispose or influence the mind to choice, *what does?* Does the mind determine itself to choice? Dr. Bledsoe gives up that solution as contradictory. (See his Sixteenth Section, *Examination of Edwards*.) Then what does? Does "nonentity bring forth"? And here we commend to Dr. Bledsoe's lips one of the few valid specimens of his own philosophizing. He teaches us, very correctly, that it is not the *agent* which is the cause of effects, but it is his action which causes it. The being or existence of a given agent is not what is fruitful of effects; it may exist for ages—as the arsenic has existed in the mineral ore ever since the creation, and caused the death of no animal—without generating a given effect. It is when it acts that it produces effects. While we loosely speak of the agent as cause, yet, in strictness of speech, it is *the agent's appropriate action* which is the real cause of the resultant change. This is excellent doctrine, and according to it, Dr. Bledsoe contradicts himself when he speaks of the mind as causing or producing volitions, and yet denies that any antecedent action in the mind produces it.

Dr. Bledsoe virtually concedes that, to the human reason, at least, a logical certainty must imply a causal certainty, by the subterfuge to which he is at last driven, on his 147th page. It is, in substance, this: that, although our minds are so constituted that it would be absurdity and contradiction in us to think a thing certain to occur, without thinking there will be any certain thing anywhere to make it occur, yet it may not be so with God's mind; and it is very presumptuous in us to assume it. That

is to say, although God assures us that our spirits are formed in his image and likeness; although we are assured that every constitutive feature of the human reason which is a mental excellence, also exists in God's mind in the higher grade of an infinite rational perfection; although God enjoins us by the very intuitions which he has implanted as our regulative laws of thought, not to think that an event will be certain to arise without any cause certainly efficient of its rise; yet it is presumptuous in Calvinists to say that God certainly will not perpetrate the mental solecism which he has made impossible for us, formed in his image! Dr. Bledsoe thinks that somehow God's infinitude may make such a difference between his thought and ours that a species of thinking which would be preposterous in us may be legitimate for him. This is substantially the solution which Archbishop King gives, to escape the stress of our argument from God's foreknowledge. If the reader would see a calm and masterly refutation of Dr. Bledsoe and Archbishop King on this point, let him consult again the Wesleyan text book, Watson's *Theological Institutes*, Part II., Chap. IV. He there shows that the position is "dangerous," "monstrous," and in premises "anti-scriptural." He asserts that the fact that God is incomprehensible does not prevent our knowing him truly and correctly, up to the limits of our finite knowledge. He teaches that his prescience differs from ours, not in kind, but in degree. He declares that if God's attributes, both rational and moral, are not really like the scriptural, human conceptions of them, but mere analogues, then the foundation of religion is gone. Is Dr. Bledsoe a Wesleyan?

Again, we beg the reader to fix the true question before his mind. The question is not, whether God has modes of cognition inconceivably above ours. Doubtless he has. The question is, whether God has modes of cognition contradictory to those which he has himself made not only valid but imperative for us, created in his image. If one of us were to convince himself that an event is certainly coming, and yet that there is nothing anywhere certainly efficient of its coming, we should outrage our reason. Does God *commit that very outrage* in the higher use of his reason? We answer, no! And we say, no, not because his doing so would be incomprehensible, but because it

would be contradictory. Dr. Bledsoe shall here define this difference. P. 221: "There is some difference, I have supposed, between disbelieving a thing because we cannot see how it is, and disbelieving it because we very clearly see that it cannot be any how at all." This is well said; because we see that, according to that law of cause which God has impressed both on nature and reason, the thing that is certain to happen must have, somewhere, an efficient which will certainly make it happen; and inasmuch as the efficiency of subjective motive over volition is the only explanation thereof, consistent with free agency, therefore we know that when God foreknows volitions certainly, our theory of motives producing volitions is true.

Dr. Bledsoe takes an attitude of humility, in order to escape this argument. He falls back on his ignorance. He chides us for assuming, as he charges, that God has no way of knowing certainly the contingent volition, because we cannot explain it. But let not the reader be deceived. Dr. Bledsoe thinks that he can explain it none the less, and this by the Molinist scheme of *scientia media*, which, he tells us, he adopted with all his heart, when he became acquainted with it. Church history tells us that Rome has never had the audacity to adopt it, in the teeth of the Scriptures, the Fathers, and philosophy. But Dr. Bledsoe is a bold man. In his *Review*, pp. 47-51, we have his attempt to escape our exposure of Molinism; an attempt made up of confusions and misstatements, in which he so loses himself as to ascribe to us precisely what we were confuting. We will not weary the reader by unwinding all these tortuous and entangled threads. It will be shorter to restate the problem.

In the latter part of the sixteenth century, the Pelagian theory of volition, which was substantially Dr. Bledsoe's, found itself crushed by this argument from God's certain prescience. To escape this refutation, Louis Molina, a Spanish Jesuit, devised his theory of mediate foreknowledge, which he introduced to the learned world, A. D. 1588, in his book entitled *Liberi Arbitrii Concordia cum Gratiae Donis*. Dr. Murdock, on Mosheim, Vol. III., p. 111, states his doctrine thus: "What depends on the voluntary action of his creatures, that is, future *contingencies*, God knows only *mediately*, by knowing all the circumstances in which these free agents will be placed, what motives will be

present to their minds, and thus foreseeing and knowing how they will act."

Those orders of the Romish clergy who followed Augustine resisted this doctrine with all their might. The controversy was ardent, because the Jesuits, according to their usual policy, defended their member with a strict partisan zeal. The question was referred to Rome, where a special commission of theologians was raised to examine it, called the *Congregatio de Auxiliis (Gratiæ)*. Mosheim, who made no secret of his leanings to Arminianism, says (Vol. III., p. 327) that after long debates, this commission actually reached a decision, which was reported to the Pope for his sanction and publication. The substance of this was, that this "opinion of Molina approximated to those of the Pelagians, which had been condemned" by the Roman Church. We have, then, the suffrages of Rome herself, in addition to early history, in support of our assertion that Dr. Bledsoe is a virtual Pelagian, for he says that he heartily adopts the doctrine. But the usual crooked and time-serving policy of the popes, and their fear of the growing ascendancy of the Jesuit order, prevented the publication of this decision.

Dr. Bledsoe and we both agree that, since God's cognitions are perfect, eternal, coëtaneous, and unchangeable, none of them can have arisen deductively, after the method of our inferential and "discursive" processes of logic. All must be primary and intuitive. The theologians mean this: that it cannot be that God, like us, first knew premises, and then *afterwards*, by a process of derivation and a *succession* of thought, learned from them conclusions not before known to the divine mind. For this is inconsistent with the eternity and completeness of the divine omniscience. But no theologian means to deny that this immediate intuition of God takes in truths according to their actual relations. Doubtless, since his knowledge is absolutely correct, it takes truths exactly as they are; but many truths are truths of relation. These, therefore, the divine mind, while it takes them up intuitively, takes as related truths. For instance, in the history of the material world, God had no occasion to learn the power of a given cause, *a posteriori*, from its effect, as we do, since he eternally and immediately knew both cause and effect. But he doubtless always foresaw that cause and its effect

as thus related, because, in fact, they were thus related; and his intuition is always true to fact, being absolutely correct. Nor will the considerate mind have a particle of difficulty in admitting that there may be immediate intuition of a truth of relation. Are not several of our own primitive judgments of this kind? What else is this: "If two magnitudes are respectively equal to a third, they must be equal to each other"?

With this obvious explanation, we make our first remark against this ascription to God of a *scientia media*. However Dr. Bledsoe may have modified the theory for himself in his last *Review*, under the stress of our criticism, it was, in the hands of its inventors, an ascription to God of an inferential knowledge. If it is not such in Dr. Bledsoe's hands now, he is evidently improving somewhat in his theology; our tuition is doing him some good! Why did its own inventors name it *scientia media*, mediate foreknowledge, except because they thought its conclusions were mediated to the divine mind by premises? And do they not state expressly what those premises, as they suppose, are?—"the circumstances in which these free agents will be placed, and what motives will be present to their minds." What else did the inventors mean, by placing this species of cognition between God's *scientia simplex*, or knowledge of the infinite possible, and his *scientia visionis*, or knowledge of all the uncontingent actual? Surely these include all possible forms of the divine intuition. The intermediate class they thought, therefore, to be a class of inferential cognitions. So, certainly, judges Dr. Hodge (*Theology*, Vol. I., p. 400): "The kind of knowledge this theory supposes cannot belong to God, because it is inferential. It is deduced from a consideration of second causes and their influence, and, therefore, is inconsistent with the perfections of God, whose knowledge is not discursive, but independent and intuitive." This makes our first objection against *scientia media* sufficiently clear.

Our second is an argument *ad hominem*; but it is a just one. It proceeds against Molina on grounds which we do *not* hold, *but which he does*; and it is, therefore, fair to hold *him* to them and their consequences. It is to be regretted that Dr. Bledsoe did not perceive this obvious character of our argument on this head, as he might have thus saved himself from sundry confu-

sions which are especially preposterous. The Molinist supposes that the divine mind *infers* what the human free will may please to do, "from all the circumstances in which these free agents will be placed, and the motives present to their mind." But on his and Dr. Bledsoe's theory of volition, these circumstances and motives furnish no ground for any inference; because they say that there is no efficient or certain tie of influence between the free volition and the circumstances or motives, or both together. Of all the men in the world, they are the last who have any business with such an inference as to what free volitions will be; because the very heart of their theory cuts all tie of efficient influence between the proposed premises and conclusion. We Calvinists are the men who are entitled consistently to draw that inference, because we believe that there is an efficient tie between subjective motive and volition. We have not, like Dr. Bledsoe and his Molinist friends, cut our premises and conclusions fatally asunder. And we, reasoning experimentally, after that inferential manner suitable to temporal and finite minds, actually do infer, in a multitude of cases, what free agents will choose, from our knowledge of "circumstances and motives." And we can see how, if God did also reason deductively—which he does not—as the Molinist supposes, he also could, in *all* cases, infer what *all* free agents will choose to do, from his prescience of their "circumstances and motives;" that is, provided our Calvinistic theory of the efficient influence of motives is the true one. And, inasmuch as God sees all truths, both truths of relation and all others, not deductively, but immediately and intuitively, we suppose that God eternally and intuitively sees what free agents are going to choose, in relation to the foreseen motives which are going to cause these free choices. That is, we suppose God's intuitive prescience is *exactly according to the actual fact*; and as these future free volitions, when they come, are to come out of the efficient influence of motives in the men's spirits, God foresees them as thus connected. And this is the way, we suppose, God has, not a *scientia media*, but a *scientia visionis*, of all that free agents are going to choose; a *scientia visionis* which, while not an inference from premises after the mode of our successive, discursive thought, is yet an intuition of truths in their destined relations. We are

certain the matter is now clear to the candid reader, and we even venture to hope, to Dr. Bledsoe. One thing is clear to all except him: whether God's foreknowledge of free volitions were an inference from premises, or an intuition of truths in relation, it must be equally impossible for a correctly thinking mind to think the two parts of the truth in relation, if Dr. Bledsoe were right in saying the relation does not exist. But this is his position: "Motives are not related to volitions by any tie of certain efficiency." And we humbly presume that God's omniscience no more enables him to think this erroneous solecism, which no rational man can think, than God's infinite holiness could enable him consistently to do an act which would be intrinsically wicked if done by his inferior, man. There is the sum of this whole matter.

8. The way is now prepared for our eighth argument in support of the efficient influence of subjective motives over volitions. As we saw it was implied in the Bible doctrine of original sin, so it is necessarily implied in the doctrine of regeneration. What is it? That God so exerts a gracious efficiency upon the depraved soul,—called in Scripture the "new creation unto good works," the "new birth," or birth from above, the "quickening," the "illumination," the "heavenly calling," etc.—that the souls hitherto certainly self-determined to ungodliness are now graciously yet freely determined to certain perseverance in godliness. They "are created unto good works, which God hath before ordained that they should walk in them." They "are kept by the power of God, through faith, unto salvation." They cannot practice habitual sin, because they "are born of a living and incorruptible seed, which liveth and abideth forever." Such is the work. Now, it is impossible that this permanent effect can be graciously propagated, consistently with free agency, except on the theory of a tie of efficiency between the renewed disposition, with its holy subjective motives, and the free volitions of the soul in this gracious state. This is the *minimum* postulate on which the doctrine of regeneration can possibly hold, and man yet remain a free agent. If grace turns man into a stock, or a machine, or an irrational sentient beast, which moves at the spur of a mere instinct provoked from without, then it is conceivable how grace may certainly and regularly

evoke the series of acts which is outwardly conformed to godliness. But then, where is free agency? If we retain free agency, we must either hold to the causative and efficient influence of motives over free volitions, or we must give up the Bible doctrine of regeneration.

Dr. Bledsoe makes an impotent attempt to reconcile the difficulty. In the chapter cited from his *Theodicy*, he teaches that motives, while not the efficient of volitions, are their invariable antecedents. The judgments of the intelligence, if correct, may be antecedents to wrong choices. The desires of the heart, if perverse, may be antecedents to wrong choices. Both these functions of spirit he supposes to be purely passive. He can concede, then, that grace may omnipotently renovate these passive antecedents of free choice, without infringing the freedom of the will; and this is regeneration. Such is his scheme. The fatal defect is, that according to that theory, which is his corner-stone, *such regeneration would not ENSURE a single holy act*, much less an infallible perseverance in holy strivings. For these "necessitated" states of passivity, correct judgments of intellect, and right desires, he tells us, are *not efficient*, but only antecedents, to volitions. These arise in the will itself, "not determined, but determinations," connected by no tie of efficiency with "any antecedents in or out of the mind." What can be plainer, then, than this: that according to Dr. Bledsoe, God might "necessitate" these antecedents, and yet procure not a single holy volition! The whole scheme is naught.

9. The last argument we adduce is the well-known *reductio ad absurdum*, which has descended from the scholastics to President Edwards. If the will is self-determined, since this faculty has but the single and sole function of volition, it must be by a prior volition that it determines itself to the given choice. But now the question recurs, What determined the will to that prior volition? The only answer is, an earlier volition, still prior to this; because the faculty of choice, which is supposed to exert the self-determination, has but the one function. Thus, it must have chosen to choose, and we have a ridiculous *regressus*, to which there is no consistent end. Dr. Bledsoe endeavors to escape this argument by two expedients. One is to say that he does not use the words "the will self-determined," "the will

determines itself," along with all prior advocates of his theory of free will. They ought not to have used such language, he holds; it is not correct. He tells us they have been all off the track in debating the question whether motives determine the will, or whether the will determines itself; for, in fact, the will is not determined at all; it determines. Its sole function, volition, *is not an act determined, but a determination*. This is as pretty a *conundrum* as was ever made up of a mere verbal quibble. "Volition is simply a determination," quoth 'a. But did ever one hear of an action without an agent? Who, or what, does the determining in this *determinatio*? Only the will, says Dr. Bledsoe. Then the will determines—what? Oh! says Dr. Bledsoe, the will determines not itself, but its volition. But what is volition save *a function of itself*? Then the stubborn fact remains, that on his theory the will does determine itself. All the rest of the semi-Pelagian and Pelagian worlds were not fools, nor was Dr. Bledsoe the only wise man among them. The phrase "the will determines itself" is, on their theory, perfectly correct and unavoidable. Dr. Bledsoe's other evasion is to blink the fact on which Edwards' argument in part hinges, that when the specific faculty of will is made self-determining, then our opponents are shut up to the concession that it must determine itself to choose by an act of choice, since this is its sole function, viz., emitting acts of choice. The other functions of spirit all belong to other faculties.

From this point of view the reader can easily see how shortsighted and impotent is the effort which our author makes, in many places, to wrest this famous argument from Edwards and turn it against him. Dr. Bledsoe pleads that the only way for us Calvinists to avoid the absurd result of a *regressus* without end is to adopt his notion of volitions arising in the will, determined by nothing; for, reasons he, if Calvinists say that volition cannot arise save from some other mental modification or function, prior to volition, and the efficient thereof, then he has equal right to say that this prior mental modification must also have had its prior efficient to produce it. And if we demur to his logic, he will prostrate us with the same formidable maxim, *ex nihilo nihil*, with which we threatened him when he advanced his volition without efficient cause. Here, again, we have a

smart quibble; that is all. He forgets that the something for which he asserts absolutely self-determined (or, if he prefers it so, undetermined) action, is a specific faculty in the soul, which his theory absolutely severs from all tie of efficient relation to any other faculty. But the thing for which our theory claims self-determination is not a severed faculty, but the soul itself, the spiritual agent, qualified consistently by all its related faculties of intellect and appetency and sensibility. *There* is the vital difference. Dr. Bledsoe's theory is guilty of asserting, in this undetermined faculty, a function which would be *ens ex nihilo*; and it is also guilty of derationalizing this function of choice by thus severing it from all efficient relation with the regulative faculties of the soul; but, according to our view, it is *the soul* which has the function of originating modifications in itself on occasion of suitable objectives. Therein is its spontaneity. The soul *does originate* new modifications of thought and appetency. We need no *regressus* without end to account for a given act of thought or appetency in the mind. But the simple question is, how are the several faculties related to each other in their efficient inter-action? Which is directive, and which executive? Are the conjoined faculties of intelligence and appetency directive of the will, the faculty of choice? That is what common sense and the Bible declare. Or is the faculty of choice, the executive faculty, unrelated by any efficient tie to any directive faculty? That is Dr. Bledsoe's theory; and we assert that it disjoins the soul, leaves man a blind agent, and confounds the whole psychology on which rational agency and responsibility rest. It is perfectly true that we must assign to the soul some function, somewhere, of self-caused action, else we should be involved, for each mental state and act, in an endless *regressus* of mental causations, and real spontaneity would be lost. But the point of the matter is this: that the naked function of volition, as among the related functions of the soul, is the very one which cannot be, in Dr. Bledsoe's sense, self-caused.

It should not be concealed here that there is a sense in which every change in the world of mind is connected with a chain of efficiencies which goes back to eternity, which is a literal *regressus in infinitum*. We speak now of that providential control over souls, and their states and acts, which the Almighty se-

cretly exerts, in the endless execution, in and through men, of his eternal decree. But both consciousness and Scripture assure us that the way in which this providence operates does not infringe our true spontaneity; and as the point now in debate is not the theology, but the psychology, of human volitions, we content ourselves with simply recording this truth.

We are now prepared to approach the remaining task which we assigned ourselves, to examine Dr. Bledsoe's peculiar phase of the theory of free will, and ascertain whether it contains anything entitled to modify our views. Many of his arguments have been already considered and refuted in connection with our affirmative establishment of the Calvinistic doctrine. Repetition will be avoided as much as possible.

We have seen how our author, conscious of the utter overthrow Edwards has given to the proposition, that "the will determines itself," endeavors to change the issue of the debate. All the great men, like Dr. Reid, who have made inconsistent attempts to sustain his view of free will, he thinks, have conceded too much. They have allowed it to be taken for granted that volitions are determined somehow; and, rejecting the doctrine that they are determined by subjective motives, have attempted to show that they are determined by the will. But on that position, Dr. Bledsoe confesses, Edwards has utterly overthrown them. So he would take a higher position: *that volitions are not determined at all*; that they are not *effects of any efficient cause*. If he is met by the maxim, *ex nihilo nihil*, his evasion is, to say that volitions arise from the mind, and the mind is something. But he would concede to Edwards, against his own friends, that it is not correct to say "the will is self-determined" to choose; or that the will "remains *in equilibrio* in the act of choice;" or that the mind is conscious at the moment of choosing of a "power of contrary choice." He admits the fatal logic of our champions against these positions. Now, upon these admissions we remark first, is it not a little presumptuous for this last champion thus to criticise the positions of all the great men upon his own side? Is he alone the consistent advocate of their common theory of free will? Common sense will rather incline to the conclusion that these great and astute advocates of the Arminian philosophy knew what they were about,

at least as well as Dr. Bledsoe. We surmise that they declined to adopt his favorite position of *an undetermined determination*, not from short-sightedness, but because, like us, they regarded it as intrinsically absurd. We hold with them, that if either their or Dr. Bledsoe's theory of free will were true, then it must result that the will is *in equilibrio* as to motives. Very true, the will cannot be *undecided when it decides*, but, on their common theory, it remains *in equilibrio quoad* the motives competing to influence the choice. Whatever inconveniences Edwards' logic has attached to this position Dr. Bledsoe will have to abide. So "the power of contrary choice" must be claimed if his theory be true; for if the will, when choosing an affirmative choice, had not the power to choose the contrary, it was efficiently determined from that contrary to the affirmative,—the very doctrine Dr. Bledsoe abhors. These attempts to modify the old doctrine of absolute free will are, therefore, but virtual confessions of its overthrow.

But the kernel of Dr. Bledsoe's doctrine of the will is in his notion of cause and effect. He asserts that the mind has no notion of "effect," save as it is physical change produced in a passive subject. He asserts that no true agent can be so the subject of causation as that thereby its active function shall be produced efficiently. He regards passivity as of the essence of all true effects. Act and effect with him belong to irreconcilable categories. He is even rash enough to say that "a change in matter is the only idea we have of an effect;" and on p. 81, *Examination of Edwards*, that "we have no experience of an act of mind produced by a preceding act of mind." He is willing to grant that the volition has conditions *sine qua non*, but denies that it has any efficient cause.

Now, the intelligent reader will have noticed, that all this is simply a *petitio principii*. Whether in the dependent being, man, the action of the soul can be efficiently produced, and yet be proper action, is the very question to be proved in this discussion, and not to be assumed, as Dr. Bledsoe does. To say that an effect proper must be a change wrought on a *passive* subject, is simply begging the very question to be settled. That the assumption is not true as to conscious volitions, we have proved—not assumed—in our affirmative discussion. That it is not true

of other activities of the mind, as a general proposition, is easily proved, both by Scripture and reason. When, for instance, the apostle tells us of God's "*working in us*, both to will *and to do*, of his good pleasure," have we not a truly *caused action*? According to Dr. Bledsoe, effect is limited to the realms of matter and instinct; there is no class of rational and spiritual effects that are truly effects. Yet every man in the world—doubtless including Dr. Bledsoe—aims to produce them! For instance, all speak of evidence as *producing* mental conviction. Oftentimes the conviction of mind is an effect of evidence as inevitable and certain as any physical effect in the world. Now, we know that Dr. Bledsoe will attempt to exclude this class of mental effects, so fatal to his position, by saying that the functions of the intelligence are passive. But no psychologist will say so. No other philosopher will rank the intellect among the "passive powers" of the soul. He is refuted again by all the numberless instances in which volition itself is directed, not upon the bodily members, but upon our own mental faculties. Dr. Bledsoe says that it is the very nature of volition, not to be a real effect, but to produce real effects. Well, let the latter part of his assertion be true, and then, in every case in which volition is directed upon the action of our own mental faculties, he has refuted himself. There is the case, for instance, of voluntary attention, in which the will directs the intellect, and energizes it to its highest and most creative acts of cognition. But why multiply words? Does Dr. Bledsoe require us to think that the familiar phrase "self-government" is a mere metaphor, save as it is applied to the direction of our limbs and sense-organs? If not, he must admit that there are multitudes of cases in which acts of mind are causes of other acts of mind.

So hard pressed does Dr. Bledsoe evidently feel himself by the difficulties of his position, that he even resorts to a wretched piece of genuine sensationalist analysis, worthy of James Mill himself, to account for our very notion of cause and effect, p. 77: "The only way in which the mind ever comes to be furnished with the ideas of cause and effect at all is this: we are conscious that we will a certain motion *in the body*, and we discover that the motion follows the volition," etc. Surely it is not necessary at this day to refute this analysis, and to prove that such

instances as these, of conscious, or observed, causations, are merely the occasions and not the sources of our rational notions of cause and effect. God and angels have no bodies, no limbs, to be moved by volitions; hence, according to this marvellous explanation, they would not have any notion of causation at all! Conscious instances of such bodily motions produced by volitions are merely the occasions, and not the only ones, upon which the mind evolves its own *a priori* notion of cause and effect—the antecedent which contains efficiency to effectuate the consequent—and forms the inevitable judgment, that without such antecedent the consequent change would not have been.

In his third section our author endeavors to raise a difficulty against the doctrine of the efficiency of motive as producing volition, by asserting that there is no way to measure “the stronger motive.” When Edwards teaches that the choice always is as the stronger motive, the question is asked, What is motive? Let the answer be, motive is the complex of all that in the mind which immediately produces the volition. How, then, asks Dr. Bledsoe, is it known which is “the stronger motive?” Edwards replies, as he supposes, by the fact that it is the one which the volition follows. And then he charges that Edwards has proceeded in a circle, first assuming that the volition must follow the stronger motive, and then, that the motive the volition actually followed was the stronger. Now, that this cavilling is fallacious may be shown by a parallel fact. By precisely the same process Dr. Bledsoe might show that the science of mechanics is all fallacious. But he doubtless believes in the laws of mechanics. The motion of a body will be in the direction of the stronger force, will it not? Undoubtedly. But how is the relative strength of forces measured? By the motion they produce. The stronger force will overcome the greater resistance, will it not? Yes. But how is the relative strength of the force estimated? By the amount of resistance it overcomes. Have we not here, then, the very same “circular” process? Undoubtedly. Yet Dr. Bledsoe believes firmly in the validity of these mechanical laws, in spite of our cavil! Then his parallel cavil is worthless as against Edwards. The truth is, that on Dr. Bledsoe’s empirical philosophy the cavil would be insoluble for him

in either case, though worthless in both cases. The solution is, that our necessary conviction of the great law of causation is not derived from experience, as he supposes, but is an *a priori* result of the law of the reason; and it is law which alone enables us to formulate our experience rationally. It is not experience which has gradually taught us that every motion in bodies is an effect of related force, and that every deliberate, responsible volition is the effect of subjective motive. It is intuition which prepares our minds thus to construe the sequences of change given us by observation. And by the same law of the intuitive judgment, which demands a cause for every change, we know that cause must be adequate to and so related in its degree of energy to its effect.

It is very true that, in the case of a given motive in our fellow-creature's mind, we can only determine its relative strength *a posteriori* by its effect in producing volition. But do we ever suppose that the motive derives its strength from this circumstance? No; our reason forbids it.

There is one general but conclusive reply to all of Dr. Bledsoe's argumentation against the efficient certainty of motive. *He has himself made admissions*—unwillingly and under the unconscious stress of common sense—*which retract and destroy his whole theory.* Thus, p. 93: "A desire or affection is the *indispensable condition, the invariable antecedent, of an act of the will.*" P. 216; "Has volition an efficient cause? I answer, No. Has it 'a sufficient ground and reason' of its existence? I answer, Yes. No one ever imagined that there are no indispensable antecedents to choice, without which it could not take place." "But a power to act, it will be said, is not a sufficient reason to account for the existence of an action." He means of this or that specific action. "This is true; the reason is to come. The sufficient reason, however, is not an efficient cause; for there is some difference between a blind impulse or force and rationality" (pp. 92, 93). "Our volitions might depend on certain desires or affections, but they would not result from the influence or action of them. . . . The reason why this principle has not been employed by the advocates of free agency is, I humbly conceive, because it has not been entertained by them." Jouffroy, as admitted on p. 92, did not "entertain" it. P. 40,

“*The strength of a motive,*” as President Edwards properly remarks, “DEPENDS UPON THE STATE OF THE MIND *to which it is addressed.*” Thus does Dr. Bledsoe stumble unintentionally, but unavoidably, into the Calvinistic doctrine of volition. By “motive” he here means objective inducement, as is perfectly obvious from his describing it as a something “*addressed* to the mind”; so that he has acceded to our position, which is the corner-stone of our whole philosophy of the will, viz., that the strength of objective inducement “depends on the state of the mind.” Now, then, first, will not that state of the mind be regulative of the volitions of which these objective inducements are the occasions, not causes? The affirmative is too plain. And second, what is included in that “STATE *of the mind,*” or, as Dr. Bledsoe expresses it elsewhere, “*nature*” of the mind, which is thus found to be efficiently regulative of volitions? This is the crucial question, from the investigation of which he always recoils, by reason of that obstinate confusion of sensibility and conation, of the objective and subjective, with which we charged him in the outset. Had he dared to look this question steadily in the face, he would have seen what all common sense recognizes—just what the Calvinistic philosophy formulates. This “state,” this determinant “nature,” is precisely the *habitus*, the *disposition*, regulative of the rise of subjective appetencies, and thus of the volitions which these cause. In this fatal admission Dr. Bledsoe has refuted his whole refutation. Again, Dr. Bledsoe finds that none of his colleagues, in the advocacy of self-determination of the will, concur with him, not even Jouffroy, in his idea that while volitions “depend on certain desires or affections,” yet they do not “result from their influence or action.” No wonder; for they have not Dr. Bledsoe’s capacity for self-contradiction. To him alone must belong the unique glory of believing that an event is “not influenced by” what it “depends on!” Again, he teaches that not only a mind, but an object and a desire, are the invariable, the indispensable antecedents of volition. Well, sound philosophy teaches that a change has no invariable and indispensable antecedent except its efficient cause. Why should a given antecedent be indispensable to a given consequent, except that it is its cause? It is by this very principle that all the methods of experimental induction into the

laws of cause in nature proceed. The philosopher knows that when he has found the invariable indispensable antecedent, *he has the cause*. Hence this is what all his canons of induction are framed to seek for.

Once more : Dr. Bledsoe admits that, while he thinks volition has no efficient cause, yet it has, of course, "its sufficient ground and reason." He exclaims, "There is some difference between blind impulse or force and rationality!" In that we all agree. But is force the only species of cause, and physical motion in the passive body the only species of effect? That is what Dr. Bledsoe assumes without proving. What we proved by Scripture, experience and reason was, that there are spiritual causations as well as physical. And we presume, again, that Dr. Bledsoe has the unique honor of being the only philosopher who is not a materialist who ever denied it. Now, then, in this sphere of spiritual causations, our plain theory is, that *as the effects are rational, the causes also are rational*. Now, what is a rational cause save "a sufficient ground and reason?" The Greek, the native language of philosophy, suggests this obvious truth by using the same word for both. *Aitia* is *cause*; and *aitia* is reason of acting; rational, subjective motive.

With this complete answer which Dr. Bledsoe has given of himself we conclude our answer. And thanking him for his efficient aid in his own demolition, we make our final bow, reciprocating his courteous wishes for our welfare.

THE EMOTIONS.¹

THE works on mental science most current treat almost exclusively of the intelligence or cognitive faculties of the soul. Locke's great treatise dispatches the subject in his chapter on *Power*, and that in the most superficial and unsatisfactory manner. Sir William Hamilton and Dr. Noah Porter close their books without teaching us anything at all about the feelings of the soul, except the mere intimation given in their preliminary divisions of the subject, that human souls have such functions. Kant, in his *Critic of the Practical Reason*, speaks of the motives of human activity, thus recognizing the emotive functions of the soul, and making some profound remarks. But the main object of the treatise being to discuss the ethical judgment and sentiment, as the peculiar characteristic of rational, responsible agents, it really presents no systematic discussion of the feelings as a whole. To us the most striking trait of this work of the great philosopher is the following: he alone, of all the psychologists, recognizes and establishes "the propensity to evil" in human nature on pure grounds of psychology as distinguished from theology, as one of the constitutive traits of human character, just as other psychologists recognize and prove the natural love of happiness, of power, or of applause. Of this, more in the end. Dr. Thomas Brown devotes an adequate portion of his eloquent lectures to the feelings, for which, as for the elevation and purity of his views, and the ingenuity of his analyses, he deserves much admiration. But his distribution of the subject is not logical, and he leaves much to be done for the perfecting of this branch of the science.

Dr. McCosh seems to have been moved by this belief to the undertaking of this, his latest work. Dr. Brown had distributed the feelings into three classes: 1, Our "immediate emotions;"

¹This article appeared in the *Southern Presbyterian Review* for July, 1884, reviewing *The Emotions*, by James McCosh, D. D., LL. D. New York: Charles Scribner's Sons, 12mo., pp. 256.

such as wonder, beauty, the ludicrous, love, hate, pride, humility, sympathy. 2, Our "retrospective emotions;" as regret, anger, gratitude, gladness, remorse. 3, Our "prospective emotions;" as desires, fear, and hope. The basis of this classification is the way in which feelings are related to their objects in time. The first class he then subdivides into feelings involving moral quality, as love, hate, sympathy; and those involving no moral quality, as wonder, beauty, the ludicrous. Dr. McCosh has evidently had this distribution in his eye, and in attempting to improve it, he only changes it into one still more inconsequential. His plan is to distribute the feelings into: I. "Affections towards animate objects," the subdivisions of which are (a) retrospective, (b) immediate, and (c) prospective affections towards animate objects. II. "Affections towards inanimate objects," the æsthetic namely. III. "Continuing and complex affections." This list suggests easily many fatal objections. The divisions do not divide. Are not all feelings, in their very nature, more or less "continuing"? The same affection is in some spirits more persistent than in some other more fickle ones. No affection is, like volitions and like many sense perceptions, momentary. Again, love is classed in the third division, for instance; but love is as simple as any of the affections, and certainly it is one which can only be directed towards an animate object. Again, have we no æsthetic feelings towards animate objects? Do we never see beauty in a squirrel, a fine horse, a graceful child? Must the object necessarily be dead, like a star or a mountain, in order to awaken the æsthetic sentiment? And if the division into prospective, immediate, and retrospective is worth anything, does it not also extend to the second and third classes? Once more, the complex affections we must unquestionably find very numerous, even as various combinations of a few letters make a multitude of different syllables. The list should be very long, whereas Dr. McCosh's is very short, and must, therefore, omit a very large number of complex feelings. And surely, in a philosophic classification, the complex emotions should be treated under the heads of the simple and elemental ones which form them by combination. What chemist would treat, in one book, sulphur as a simple substance, and then in another the sulphates and sulphides?

Or, if we return to Dr. Brown's less objectionable distribution, we may well inquire whether the relations of feelings to their objects in time gives us any accurate or useful ground of division. In one sense all our feelings have a *posterior* relation, in time, to the cognition of their objects; for such cognition is the condition precedent of the rise of the emotion. For instance, when Dr. Brown makes wonder an immediate emotion, and anger a retrospective one, we must ask: Did not the cognition which excited the wonder precede that feeling just as truly as the cognition of the injury preceded the resulting emotion of anger? We may admit that desire, hope, fear, do look forward to future good or evil in the sense in which wonder and resentment do not.

But if we grant that the relation in time of the feelings to their objects gives a thorough ground of division, the equally grave objection is, that this division would be fruitless. The discriminative trait selected is one which has little importance, and leads to no scientific results. It is as though one should classify fruits by their *color*, when one class would be of "red fruits," including strawberries, some cherries, currants, grapes, and apples (and excluding others of the same species), with pomegranates. What light would botany ever receive from such a classification and treatment?

So it was erroneous for Dr. Brown to divide feelings into those qualified by moral trait and those having no moral trait. Strictly, no feelings are ethical in quality except the emotions of conscience, approbation, and reprehension. But in the popular sense, any feeling may become moral, or immoral, according as it is conditioned and limited. The æsthetic feelings, the bodily appetites, the resentments, the desires, the loves and hatreds, may be virtuous, or vicious, or indifferent, according to their objects and limitations. If there are some objects of feeling such that the emotions cannot be directed to them without having some ethical quality, good or bad—which is admitted—this is far short of giving us a ground of general discrimination. A profitable classification must be obtained in far other ways than these.

Before dealing with this task, let us resume the question as to the importance of this discussion of the feelings in philosophy.

Our rational consciousness reveals to us a multitude of acts of intelligence, sensitive, intuitive, suggestive, or illative, which all have this in common, that their results are cognitions. The same consciousness reveals to the slightest glance that there is a class of functions in the human spirit very distinct from cognitions: *the feelings*. The best description of these, and of their wide difference from cognitions, is that which we read in consciousness itself. Our admiration, disgust, desire, necessarily wait on our ideas of their objects; and yet differ as consciously from the acts of intellection which arouse them as the warmth of the solar ray, felt in our nerves of touch, differs from its luminous power, felt by the optic nerves. *Feeling is the temperature of thought.*

Although so many of the books direct our attention exclusively to the powers of intellect, the feelings are far from being the least important or least noble functions of the soul. These writers seem to think that the whole glory of the mind is in its discriminations of thought; that here alone they can display a glittering acumen. But this quality is no less necessary to the correct analysis of the feelings than of the logical processes of mind. If any eminency is to be assumed for either department, we should incline to claim it for the feelings, as the more noble and essential functions of the soul, rather than the cognitions. For,

First, The conative feelings constitute the energetic and operative part of every motive to action. Hence these are, in scientific view, more important than the cognitions which occasion them. Essentially, feelings are man's motive power. Intellect is the cold and latent magnetism which directs the ship's compass, and furnishes the guide of its motion, should it be able to move. Feeling is that elastic energy which throbs within the machinery, and gives propulsion to its wheels. Without it, the ship, in spite of the needle pointing with its subtle intelligence to the pole, rots in the calm before it makes a voyage anywhither.

Second, The morality of our volitions depends upon that of their subjective motives; and these derive their moral complexion wholly from the feelings which combine in them; for this is the active, and therefore the ethical, element. It is chiefly the feelings which qualify the motives, as praise- or blame-worthy.

Hence, again: a great and noble emotion is a higher function of the soul than any mere vigor of cognition. "The serpent was more subtile than any beast of the field;" and none the less the reptile, the most ignoble of his class of animals. "Magnanimity" is made up chiefly of the grand affections, and not of keen thoughts. Disinterested love is nobler than talent. Generous self-sacrifice is grander than acute invention; the heroic will is more admirable than the shrewd intellect. Hence, again: our moral discrimination, our analyses of our own motives, is chiefly concerned with the ascertainment of the real elements of feeling which combine in them. We shall strikingly confirm this by the instances to be cited hereafter, in which we shall find the moral problem: Was the act right? or, in other words, Was the emotional part of the motive right? will turn solely upon the analysis of the feeling which entered into the motive. Indeed, the intelligent moral government of the heart will be found to turn on such analysis of the feelings, tracing them to their real ultimate principles. The maxim, "Know thyself," resolves chiefly into a knowledge of the feelings which mingle within us. It is, then, chiefly the psychology of the feelings which is the moral guide of life.

Third, The vigor of the functions of cognition itself depends, in every man, more on the force of the incentive energizing the faculty, than on the native strength or clearness of the intellect. Many a man whose mental vision was by nature like that of the eagle, has been practically of inert and useless mind; the luminous ray of his spirit was dimmed, and at last quenched, by the fogs of indolence or fickleness. There was not *will* enough to direct the mental attention steadily to any valuable problem. But in the man of persistent and powerful feeling, the desire has so cleared and stimulated the vision that it has grown in clearness until it has pierced the third heavens of truth. It is chiefly the feelings which make the man.

If we examine a lexicon, we find names of feelings in almost countless numbers. In a single subdivision we see "pleasure," "joy," "gladness," "content," "delight," "rapture," "cheerfulness," "a merry heart," and many others. In another we hear of "expectation," "wish," "hope," "desire," "craving," "lust," "concupiscence," "coveting," "longing." In another of "un-

easiness," "apprehension," "alarm," "fear," "panic," "terror." But the faculties of cognition seem to be few, and easily separated. Hence, perhaps, some infer that there can be no complete psychology of the feelings; that this department of the soul's functions must remain an ever-shifting cloud-world, whose laws are too numerous and too fickle to be comprehended. But it is hoped that this mutable maze will be found like the kaleidoscope, all of whose diversified wonders are accounted for by two plane mirrors and a few colored beads. True science can bring order out of this confusion. And the most valuable ethical and theological results will be, that right emotions will be distinguished from the wrong, and we shall ascertain the line which separates the normal affections from the unlawful.

One simplification of the subject is at once effected by noticing that they may be the same in nature and *differ in degree*. So that many of the names of emotions do but express the same feeling in different grades of energy. Thus: "concern," "apprehension," "fear," "terror," are but four degrees of the same feeling, as calmer or more intense. What else is expressed by the terms "content," "cheerfulness," "joy," "rapture," "transport"? The word "passion" is often used colloquially, and even defined in some books as meaning the emotion in an intense degree. They tell us, for instance, that "love" has become "a passion," when it has risen to an uncontrollable agitation, absorbing the whole soul, overpowering the self-control, making the pulse to bound and the face to glow. Thus they would call "displeasure" a feeling, but rage a "passion." And they have even separated off chapters upon the discussion of "the passions." But if the intense feelings are the same, except in degree, with their calmer movements, this is just as sensible as though the chemist who promised to treat scientifically of "water," should discuss separately water in a teacup and a tub; or, after announcing "caloric" as his subject, should devote one chapter to heat in a tea-kettle, and a different one to heat in the boiler of a steam-engine. This abuse of the word "passion" has another mischief: it utterly obscures the etymology of the word, and in doing so helps to becloud another division of the feelings, which is, as we shall see, the most fundamental of all. *Passio* is from *pator*, "I suffer," "I endure." Passions should mean those

feelings with which I am *passively impressed*. The English Liturgy uses the word classically and correctly when it teaches the worshipper to supplicate Christ "by his most holy cross and passion" (by his *sufferings*; the feelings of pain, bodily and spiritual, which he was made passively to endure); and our Confession uses it aright when it declares God "without parts and passions:" an Infinite Monad, essentially and boundlessly active, but incapable of being made to suffer or to experience any function of passivity.

This plain and obvious view of feelings, the same in element but different in degree, explains another very frequent fallacy. The feelings, in their calmer grades, are mistaken for the rational functions of judgment, which they attend. Thus, the man whose motive is caution, or apprehension, is described as acting rationally; while he who is actuated by terror is said to act with "blind passion." But what is "terror" except a higher degree of the very same element of feeling, "fear," which appears in "apprehension"? In the true sense of the word "passion," an emotional function of passivity, if terror is a "passion," so is "apprehension." Extensive delusion also exists in the idea which finds expression in the first word of the popular phrase, "*blind* passion." It is supposed that vehement emotion usually obfuscates the intellect. So it sometimes does, doubtless. And perhaps far more often *it clarifies the intellect*. Every faculty performs its functions more accurately when it is vigorously energized. Feeling is the temperature of thought. Is the solar beam in July less luminous than on some pale wintry day, because charged with so much more heat? Facts confirm this the true philosophy. Lawyers assure us that they get their most perspicacious views of the merits of their cases from the minds of their clients who are "piping hot" with indignation and zeal. The great orator, when in the very "torrent and tempest of his passion," enjoys flashes of intellectual vision so clear and penetrating, that he sees by them in a moment logical relations which a day's calm study might not have revealed to him. Stonewall Jackson modestly stated, that the moments when he had been conscious of the best use of his intellect were in the crisis of a great battle, with the shells hurtling over him. To our apprehension it appears fully as probable that the dull and dim grade

of an emotion will mislead the reason, as the vehement grade ; especially in view of the fallacy which calls the calmer grade a rational judgment. The gentle wolf in sheep's clothing will be more likely to invade the peaceful sheepfold of the intellect successfully than the raging wolf in the confessed wolf's skin.

These fallacies also greatly obscure our apprehensions of the functions and value of the feelings in the conduct of the spirit. We must learn to separate from our conception of the essence of the feelings that supposed trait of pungency or agitation. This necessarily characterizes only the more intense degrees of the feelings. The mental state may be true feeling, and yet calm and even. Again, we define feeling as "the temperature of thought." Now, the temperature of a beam of light may vary in intensity, from the faint warmth of the wintry sunlight to the burning heat of the midsummer beam condensed by a lens. Yet in both rays it is caloric, not mere light. Heat is usually thought of by the unlearned as imbuing only fiery or molten masses. Yet science teaches us that there is a smaller degree of caloric even in a block of ice, for it can so radiate from that ice as to affect a thermometer. These facts are only used to illustrate the proposition so often overlooked, that there may be an element of feeling in even the calmest processes of soul, and the analogy of the cases of itself raises a probability of the truth. But it can be demonstrated, and that by the following plain and short view. There can be no subjective motive without some feeling. But, without subjective motive, there can be no action of volition. Every rational volition is from a subjective motive to an object, which is the inducement, or objective end of the action. But in order for any object to be an inducement to rational volition, it must present itself to the mind in the double aspect of the desirable and the real. For instance, if one says : "Come with us to the hill and dig laboriously, and you shall bear home on your shoulders a heavy load of rubbish," no one responds. The object is real, but totally undesirable. Again one says : "Run, and overtake the foot of yonder moving rainbow arch, and under it you shall find a bag of gold." Not a soul moves a step. Why not? The object named, gold, is desirable, but the understanding knows it is unreal. Again, one says : "Come with us to the mountains of Georgia, and in the

known auriferous veins of that region we will dig gold." The man desirous of wealth will now move. The objective, or proposed inducement, stands to the mind in the double category of the desirable and the real. But of course if this object becomes inducement to the soul, there must be an answering correspondency between it and the soul; the subjective actions of the soul going out towards it must also be double, including both a judgment and a desire. Thus psychology confirms the verdict of common sense and consciousness. Every motive to action must involve a desire. But desire is feeling. Hence in the states of soul leading to the calmest intelligent action, there must be some feeling.

We learn thus, it is a mistake to suppose that feeling is intermittent in the soul's functions, while cognition is supposed to be constant. It is as true that the waking soul is never without feelings (in at least some calmer manifestations) as that it is never without thoughts. One phase of feeling goes, but another takes its place in perpetual succession; it is only the intensity of feeling that ebbs and flows. Indeed, were all feeling really to desert a human soul, that soul would be as truly frozen for the time into fatuity as though it were struck idiotic. Suppose a man walking along the street under the impulse of some *purpose*, wholly deserted by feeling—he would not take another step! For thought is not purpose, unless it also involves desire. With the total extinction of desire, purpose would be annihilated, and the purposeless soul would pause as certainly as though it had become fatuous. Let the eager racer, who is about to bound towards the goal, see that the gold crown upon the goal, which was his incentive, has turned to a clod. He stops. Why should he run? No feeling, no action. If a man totally lost all feeling, what would there be left to energize his attention so as to direct it voluntarily to any given subject of thought? Nothing. The processes of thought would remain as aimless and vacillating as the movements of the magnetic needle whose polarity is interrupted. Conscious thought might die away out of the soul after the death of feeling. Certainly there would be an end of all connected thought; for the act by which the soul directs its attention is a volition, and without feeling there is no volition.

The next step towards simplifying the multifarious forms of

feeling should be to search for those elements which are simple, original, and characteristic of human nature as such. This search must result in a correct classification; and only by such a result can its completeness be verified. And,

I. At the forefront of all proper classification of feelings must stand ever the distinction between those which have an external cause, and in which the soul is passive—acted on, instead of acting—and those which have a subjective source in the soul's own spontaneity and dispositions, and which act outwardly towards their objects. Had not the popular usage so totally spoiled and perverted the classical meaning of the word *passions*, this would give us exactly the term we need for the former class. The word would express states of feeling in which the soul is subject, and not agent, where the capacity for the feeling is a "passive power," or mere susceptibility lodged in the native constitution, and not a subjective activity. But as the persistency of the erroneous usage would cause us continually to be misunderstood, we surrender the word. Let us agree to call these feelings *functions of sensibility*, or *sensibilities*.

The opposite class of feelings, where the power in exercise is a subjective and active power, and the function of emotion has a subjective cause, we will call *appetencies*. But we must remind the reader that these inward activities may pronounce themselves for or against an object. They may take the form of desires or aversions; they may reach after or repel the objectives. And the one class of feelings will be converse to the other. We desire, then, when we speak of "appetencies," to be understood as meaning either desires or aversions, either of these outgoings of subjective spontaneity.

It will soon be made to appear how all-important this division is. Yet many neglect it. Dr. Porter, dividing the powers of the soul, mentions them as three powers, of "Intellect, of Sensibility, of Will." So Gregory and many other moralists. Locke, in the brief discussion of the feelings referred to, insists, indeed, upon distinguishing between the desires and the will, but declares that all desire is determined by an "uneasiness," which he evidently regards as a passive sensibility. Kant, however, with his usual accuracy, divides feeling from desire. Sir Wm. Hamilton, in his *Lectures on Metaphysics*, announces and defends the cor-

rect distinction, making four classes of powers in the soul: 1, Of intellect or cognition; 2, Of sensibility; 3, Of "conation," including (*a*) appetencies, and (*b*) volition. He claims, with a rather hasty self-importance, that he was the first to see and announce the true distinction. Had he been as familiar with the Calvinistic divinity (even of his own country) as with the heathen Peripatetics, he would have seen that many of them had virtually taught the correct division generations before him. For in their habitual distribution into "*understanding, affections, and will,*" they include, virtually, under the term will, not only the function of naked volition, but also all those of subjective conation. When, for instance, the Calvinist speaks of the "corruption of the *will,*" he means rather the conative movements preceding volition, than the mere power of volition itself. This distribution really meant to say, then, that the soul has three classes of powers: 1, The intellective; 2, The susceptibilities (passive powers); 3, The conative, or active, divided into (*a*) the appetencies, and (*b*) volitions. So that they really set forth the all-important distinction between the sensibilities and the appetencies.

It is true that the two opposite forms of feeling often, nay, usually, concur; both are usually present together. It is also true that the impressions on the sensibility are the *occasions* (not causes) of the rise of appetencies, or subjective desires and aversions. But none the less is the distinction just and fundamental. For—

First, Consciousness requires it. In the rise and continuance of a sensibility, I am conscious that, so far, I am only subject, and not agent; passive, and only impressed from without. I call into exercise no more spontaneity or selfhood as to experiencing or not experiencing the sensibility, than the man unwittingly assaulted from the rear with a bludgeon has, as to the pain resulting from its stroke. And, consequently, I feel no more responsible. But when I begin to harbor an appetency, though it be not yet matured into volition, I am conscious of self-action. I know that this action of soul is an expression of my own spontaneity. This appetency is the *Ego* tending outwardly to its objective. Its presence is as truly an expression of my free preference as is a volition. I feel thus only because *I incline*, or have the disposition, to feel thus; whereas before,

my sensibility was uttered in the passive verb, my appetency is uttered in the active transitive verb. Let the reader consider any actual instance. Suppose it to be that of the man causelessly assaulted with the bludgeon. The first consequence of the blow which is reported in the man's spirit is the grief or distress answering immediately to the physical affection of the bruised nerves. In this the soul is as involuntary and passive as a stone in falling. Next thereafter may arise in the spirit of the injured man the warm appetency or desire to retaliate the pain—active resentment. Or this may not arise. If the sufferer is choleric, it may arise; if he is meek, or if the blow came from one he loves, it may not arise, but in its place will come a tender grief and a generous desire to render good for the smiter's evil. If the desire to strike back arises, its *occasion* will be found in the passive sensibility of grief or distress inflicted on the spirit by the blow; but the *cause* of the resentful appetency, or of the tender forgiveness, must be sought in the subjective feelings of the man struck. Let another instance be found in the complex feeling called the "appetite" of hunger. This includes, first, an involuntary sensibility, the uneasiness of want; and next, a voluntary desire reaching forth to the food set before the eyes. But let us suppose that, at this moment, one informs him, "This food contains arsenic." The appetency instantly subsides, although the uneasiness of want continues. A third instance may be found in the feeling of wonder. This, in its first movement, is a passive sensibility, excited by a novel object. It is, however, the immediate occasion of the active appetency of "curiosity," or the desire to know.

Second, This distinction is essential to explaining our conscious free agency, consistently with the certainty of volitions. The true doctrine here is undoubtedly the Augustinian: that *motives* regularly *cause volitions*. But now, if we confound passive sensibilities with spontaneous appetencies, and call the former "motives," that doctrine becomes inconsistent with our conscious free agency. If my impulse to strike back at my assailant is a passive sensibility, it is caused by his blow, as truly as the bodily pain. In the producing of that pain I had no more agency than the stone has in dropping when its support is removed. If that impulse was cause of the volition to strike back,

then the whole series, feelings and act, was determined for me by a causal necessity, without my consent, by the assailant when he struck me. I was no free agent, but a sentient puppet. The last movement, the act of retaliation, was determined by the other's blow, as really as the movement of the hindmost link in a chain, whose foremost link is drawn forward by another hand. But if we make the proper distinction between sensibility and appetency, if we perceive aright the objective source of the one, and the subjective source and true spontaneity of the other, we are able to refute that fatal inference. It is this truth which dissolves the whole fallacies, both of the materialistic fatalist and the advocate of the contingency of the will. Grant, with Hobbes, Condillac, and the Mills, that appetency is but "transformed sensation," or transformed sensibility, and every act of man is physically necessitated, like the movements of the successive links of the chain. But the Pelagian, seeing whither this fatal argument leads, sought to break it by denying that motives do cause volitions. He exclaimed: The feelings do not causatively determine the will, but the will is self-determined, and essentially *in equilibrio*, and always competent to emit the volition which is contrary to the strongest motives. Only thus can you save man's true free agency. But the Pelagian is here contradicted by consciousness, by theology, by the absolute divine prescience of volitions, by experience, and by a thousand absurd consequences of his denial. *Motives do determine volitions. But what are motives?* This vital question cannot be answered without the just distinction between sensibilities and appetencies. Passive sensibilities never are motives—at least to responsible rational volitions—but only non-efficient occasions of those subjective appetencies which are the determining motives. And man is free in his volitions, because he is spontaneous in those motives which determine them; not because there is any such monstrosity in his spiritual action as this function conformed to no law, even of his own subjective reason or disposition, and regulated by no rule, even of his own subjective constitution. Thus the errors of the two extremes are resolved at once, and the consistency of the true moderate doctrine reconciled with our conscious free agency.

II. The next fundamental point is, to ascertain the con-

ditions under which feelings arise in the soul. One condition is obviously the presence, in thought at least, of some idea or judgment as object of the feeling. He who feels must have something to feel about. It is equally obvious that it is *some cognition*, some idea or conclusion, presented either by sense, memory, association, imagination, or reason, which furnishes that object before the soul. It is an injury which excites resentment; in order that it may do so, the injury must be either seen, felt, or thought. The object of parental love is the child. This affection can only imbue the mother's spirit consciously as the child is present, either before her eyes or her thought. Hence the maxim, that the soul only feels as the mind sees. Cognition is in order to feeling.

The other condition is, if possible, more important, though not so obvious. In order to feeling, there must be in the soul a given *a priori* disposition or *habitus* as to the object. And this is true both of the sensibilities and the appetencies. As the rise of bodily pain from a blow or stab is conditioned on the previous presence in the flesh of living nerve-tissue, so the previous presence in the soul of a given susceptibility is the condition prerequisite to the excitement of a given sensibility by its object. The blow did not put the nerve-fibres into the flesh; it found them there. So the presence of the object in thought does not create the susceptibility or sentiency of soul, but finds it there. The parallel fact is true of the appetencies. Unless the soul is naturally and previously qualified by a given disposition, or tendency of inclination for or against the given object, seen in cognition, this could not be the object of appetency or aversion. The racer would not, and could not, emit desire for the clod set upon the goal; he could and would for the gold crown. Now, did the clod and the metal, or either of them, propagate this difference in the man's desire? That is absurd; they are dead, inert matter; objects of desire or aversion, not agents. It was the native, subjective disposition of the racer's soul which determined the desire towards the golden crown, and away from the clod, when the two objects were presented in cognition. This is plain.

But from this it follows, that if a given disposition is native to the soul, no object naturally indifferent or alien to that disposi-

tion can have any agency whatever to reverse it. This must follow by the same kind of reasoning which proves that, if the horse pulls the cart, it cannot be the cart which pulls the horse. What is it that has decided whether a given object shall or shall not be an inducement to this soul? It is that soul's disposition which has decided it, and decided it *a priori*. Then, an object which the soul's disposition has already decided to be alien or indifferent cannot influence that disposition backwards. The effect cannot reverse its own cause. If, then, we have ascertained a native disposition of souls, we have gotten an ultimate fact, behind which analysis can go no further; a fact which is regulative (not compulsory) of human spontaneity, and through the spontaneous appetencies, of the will. Let an instance be taken from the class of feelings called appetites. We ask the child: Is this drug sweet or nauseous? If on experiment the native taste pronounce it nauseous, that is the end of the matter. Of course, the child may still be forced by manual violence to swallow it. The child may even elect freely to swallow it; may even beg eagerly to be allowed to swallow it, if it sees that the evil drug is the only choice except a more evil sickness or death. But that child will not freely eat that drug *for the sake of enjoying it*, nor will its natural repugnance be in the least changed, but rather confirmed, by having the drug forced upon it. Let an instance also be taken from the spiritual dispositions. Is the human soul so constituted as to find an intuitive pleasure in the applause of its fellows, and pain in their contempt? If experiment uniformly reveals this, what would or could be the result of this appeal: "Come, my friend, and embark yourself in this laborious train of efforts. They cannot possibly procure for you any good or advantage, except that of being despised by all your fellow-men. Come, undergo these toils, solely to win that contempt." Every one knows that the appeal must totally fail, unless the man were a lunatic; and all except lunatics would think us lunatics for attempting to make it. Now, the hearer is, in this refusal, perfectly free, and yet his free refusal is absolutely certain. Why? The *a priori* constitutive law of disposition has settled the matter: that being well abused cannot be, *per se*, an inducement to a human soul; the native disposition is to find pleasure in the opposite—in applause.

III. From this simple view it results that the feelings, both sensibilities and appetencies, will present themselves *in pairs*. We shall meet with a given feeling and its reverse. The second essential condition of feelings, as we saw, was the previous existence of a native disposition. Now, the disposition which has decided a given object to be an inducement, will of course regard the opposite object as one of repulsion. The taste which has elected the sweet will, *ipso facto*, repel the nauseous as evil. Or, the disposition which recognizes the approbation of fellows as the good, will *ipso facto* reject the obloquy of mankind as *per se* an evil, however one may endorse it for the sake of some other higher good. The pair of results in each case does not disclose two dispositions, but only one, acting according to its own nature oppositely towards the two opposite objects. In the compass it is the same molecular energy which causes the upper end of the needle to turn towards the north pole, and to turn away from the south. It is so of the soul's native condition of spiritual electricity; the one disposition discloses two opposite actions, either of sensibility or of appetency; the soul is affected, in virtue of one disposition, with two sensibilities, or two appetencies, pleasure or pain, desire or aversion, towards the pair of opposite objects. Eminently is this true of the moral emotion: approbation of the virtuous and reprehension of the wicked, are the dual expression of the one, single right disposition of conscience.

Thus all the feelings may be shown to go in pairs, as pleasure and pain, wonder and ennuï, sublimity and disgust, beauty and ugliness, love and hatred, gratitude and resentment, beneficence and malice, fear and bravery, pride and humility, approbation and reprehension, self-satisfaction and shame. And the whole list of Desires, whether for continued existence, power, money, fame, ease, has its counterpart list of Aversions, for death, weakness, poverty, reproach, sickness. Thus our analysis is at once simplified, and the number of cases to be reduced is diminished by one-half.

IV. This seems the suitable place to refute two kindred, or we may say, virtually identical, theories, which boast of a still greater simplification, and have infused boundless fallacies into the science of ethics. These writers say: Give us two feelings only, the sensibilities to *pleasure* and *pain*, and we have all the

elements necessary to account for the multiplicity of human emotions. An object happens by chance to affect us a few times with pain or pleasure. We remember the effect of its presence. This memory of the experienced pain or pleasure is supposed to be sufficient to generate subsequent aversion or desire towards that object. Desire, then, is only rational self-calculation, proposing to itself to seek the same means in order to repeat the feeling of pleasure.

Hartley had applied his favorite doctrine of *association* for virtually the same purpose. The Mills, father and son, and even the witty Sydney Smith, heartily adopted the scheme. The "associational philosophers," dazzled by the power association evidently has over our ideas, and the wonders which this faculty works in suggestion and imagination, were led to suppose that they could account for all the higher functions of the reason by association, without postulating for the mind any of those *a priori* cognitions and judgments which were so obnoxious to this empirical school. They thought they could account for memory as a mere result of associated ideas. Our most fundamental judgments of relation were to be explained as a sort of trick the mind got into by seeing two ideas associated in a certain way, of supposing them necessarily related that way. Our belief in the tie of cause and effect, they said, was nothing but a habit of expecting a consequent to follow a given antecedent, simply because they had been so often associated so. What wonder that these men thought they could also account for all the marvels of emotion with the two simple elements of experienced pain and pleasure, and their magician, association? Thus: Experienced pain has been associated with a given object a number of times. Afterward the sight of the object, by the law of association, suggests those former pains, and this is the genesis of the emotion of *fear*. Other objects caused pleasure. By the same power of association their presence suggested that former pleasure, and that gave birth to *desire*. Or if the rational faculty joined to the association a probable expectation of attainment, that was *hope*. The sight of the kind mother, by the associative tie, suggests to the boy or girl the many personal pleasures of which she had been the source, from the first remembered draught of nourishment out of her generous breasts to the last ministration of

relief or enjoyment; and that string of associations constitutes *filial love* and *gratitude*. We see a person suffering; the association which the spectacle revives of our former suffering gives us a gentle pain, and that is *sympathy!*

Now, in refuting this notable scheme, it need not be denied that our feelings do fall within the wonderful tie of association, nor that this faculty has a potent influence in combining and modifying the emotions. But elements must *exist* before they can combine; and the associative faculty, whose whole power is to procure the reproduction of ideas or feelings before connected, has no power to generate. The chief plausibility of this scheme is derived from its success in accounting for *fear*, as only remembered pain associated with its cause. But when we take another step in their process the plausibility vanishes. If their plan is correct, should we not account for all our aversions precisely as we account for our fears? But then aversion and fear should be the same, but they are often widely distinguished.

But the more thorough and obvious refutation is to remark, that the whole trick of this analysis is in assuming that there is one pain and one pleasure only. But pains and pleasures are many and diverse. Some are animal, some spiritual. Is the pain of a stripe from the rod quivering in the animal nerves of the gross and selfish child the same with the pain of conscience awakened in the spirit of the ingenuous boy by the tears of the mother, who, while she disapproves, is too loving to strike? Can the one pain be analyzed into the other by any jugglery of the associations? No. This Hartleian scheme thus begs the question at the outset, by confounding, under the names of pain and pleasure, functions of feeling widely distinct and equally original.

The fact substantiated under our second head equally refutes it. As soon as we ask the question, Can any object whatsoever occasion in man's spirit any feeling whatsoever? the negative which common sense at once pronounces to that simple inquiry gives us the material of this argument. Did the clod occasion the same joy and desire in the racer's mind as the golden crown? May a heap of rubbish be possibly the object of an æsthetic pleasure as the rainbow may be? Can a human spirit be pleased at being talked about abusively, as well as by being talked of approvingly? Of course not. But why not? The answer is as

simple as fundamental: that there must exist, in the sensitive spirit, a capacity or specific disposition establishing a relevancy of the soul to the specific class of objects. And that disposition must exist as a subjective law of the soul previous and in order to the result, the rise of the different feeling. It would be as reasonable to say that the rivulet generated the spring as to assert that the feeling implanted the disposition and capacity, whose preëxistence is in order to the rise of the feeling. Hartley has missed, then, and totally overlooked the main fact in the problem. Since pains and pleasures are many, and are naturally distinct, it is vain to talk of a plan by which one pain and one pleasure may generate many other coördinate and equally original pains and pleasures.

Association, least of all, can work this effect. For the very nature of this mental process is to connect ideas and feelings by some tie of preëxistence together in the mind—resemblance, contrast, causation, or logical relation—so that the *one idea shall reproduce the other*. That is all. But mere reproduction does not transmute. The suggested idea merely arises such as it was when cognized before, save as it is now thought in some new connection. Hence, all these theories which seek to make association the generator of different mental states from those first associated are worthless. Let us test in this way, for instance, the genesis of filial love and gratitude from the child's associations of experienced natural pleasures with the kind mother's person. Those pleasures, when experienced, were personal and selfish. But the very essence of filial love is to be disinterested. How could the mere circumstance that these pleasures are revived by suggestion in association with the mother's image work all that mighty change into an affection of the opposite class? Again, how do we get from such a source an ethical affection for the mother, including the judgment and sentiment of right, merit, desert, and obligation? Why should these remembered personal pleasures generate a love different from that felt for the kindly cow, which relieved the child's hunger more constantly than the mother's bosom; or for the jolly toy, which gave him as many gay moments as the mother's caresses? There are loves, again, which go out towards objects which are sources of our griefs and not our joys: the mother's love for her new-born

infant, which, up to that moment when she enshrines it in her heart of hearts, had made its existence as a *fetus* known to her only in the pains of gestation and the agonies of parturition; the parent's love attaching to a child whose faults and cruelties only pierce the loving heart with sorrows.

It is unnecessary to pursue the parallel process with the supposed generation of sympathy from our own remembered pains and of the other affections. The argument is so similar as not to need repetition.

The other branch of the theory which accounts for appetency as the deliberate self-calculation arguing from pleasures before experienced to the repetition of their means, receives a more easy and popular answer. How was the soul carried to the appetency of that object the first time it sought it? Not by the experience of the pleasure derived from the object, for there has been no experience as yet, this being the first experiment. Here the theory breaks down hopelessly. Now, when the soul sought the object of its appetency the first time, the impulse to do so could not have been calculated, but it must have been immediate and instinctive. But this first instance of appetency is of the same class of mental affections with all the subsequent instances of the same appetency. In the subsequent ones, then, this immediate and instinctive desire cannot be absent, which was the sole element in the first and most characteristic instance. It is not meant to deny that rational calculation, founding on remembered experiences of advantage, does afterwards mingle with and reinforce instinctive desire; all that is argued is that it cannot first generate it, any more than a child can procreate its own parent. Let us suppose that a physiologist was asked: What causes the new-born infant to imbibe its natural nourishment? and that he were to reply: "The cause is its experience of the sweetness of the mother's milk." The folly of the answer would be transparent. How did the infant know it was sweet before it had tasted it? By similar reasoning it appears that, as this infant seeks the mother's breast under the guidance of an original and inborn animal instinct, so all the soul's elemental appetencies are spiritual instincts. This truth reflects new honor upon the wisdom of him who fashioned human spirits, when we come to perceive the "final causes" of the original feel-

ings. The designs which the Maker pursues in them are so profound that we learn man "is fearfully and wonderfully made," not only as to his anatomy, but as to the frame-work of his feelings.

V. We advance now to the true classification of the elemental feelings. We have already found them fundamentally separated by a dual division into sensibilities and appetencies, the former passive and produced by an external cause, the latter active and springing from a subjective source. Then, in view of another principle of division, we found them all falling into pairs: sensibilities, pleasurable or painful; and appetencies, either of desire or aversion; and each pair the expression, not of two, but of one original disposition of soul, yielding the contrary feelings in response to opposite objects. Still another basis of a dichotomy was found by remembering that man is corporeal and spiritual, and has, accordingly, animal sensibilities and mental. The passive sensations experienced in the animal susceptibility are impressions on the bodily senses; the corresponding appetencies are known by the name "appetites." In popular language, these are usually limited to the appetitive part of thirst, hunger, and the sexual sensibility. But it would be curious and interesting to inquire whether each of the appetencies occasioned by the sensation impressed on the other animal senses is not equally entitled to be called an "appetite." Why may we not say that the peasant whose back itches has an appetite to scratch, as properly as we say that, when thirsty, he has an appetite to drink? When the eye is wearied by confinement in darkness, may we not say that it has an "appetite" for the light? When the musician's ear is wearied by silence, why should we not speak of him as having an "appetite" for harmony? But waiving this question, we only add that the pleasures and pains of the sensuous æsthetic—we shall meet the mental æsthetic feelings further on—and the desires and aversions occasioned by them, also belong to this division of feelings.

There remain, then, to discuss the mental feelings of the two classes: the sensibilities and appetencies which inhabit the rational spirit properly, as distinguished from the animal nature, to which the senses contribute nothing except the remoter ministerial service of channels for the cognitions which occasion

the spiritual feelings. Let this be more clearly viewed in an instance. The virtuous man is informed of the utterance of a base lie. The feeling which we take into account here is the ethical loathing he feels for the falsehood. Now, it may be asked, had not this virtuous man employed his acoustic sense, would his mind have known that the foul sin of lying had occurred? No; the bodily acoustic sense has been the channel of the cognition. But the evil quality which occasions his mental abhorrence does not at all reside in the *sounds* through which, by the ministry of the ear, his mind cognized the evil lie. It is not that these sounds were grating or unmelodious, or the words unrhethorical. The vice is in the *thoughts uttered* by the liar; and the moral feeling is spiritual, and not sensuous.

Looking, then, only to the feelings of the mind, and excluding bodily sensations and appetites, we venture to suggest, as an imperfect and tentative arrangement, the following classification. The first column contains the objects, on the presence of which in cognition feeling is conditioned. These objects, as explained, fall into pairs. The second column contains the corresponding sensibilities; and the third the corresponding appetencies, also appearing in pairs of opposites. But each pair of pairs reveals only one subjective disposition or capacity of feeling in the soul. So that the whole variety of feelings is reduced to *nine principles*.

These nine elements of disposition, susceptibility, and conation, of course combine in various ways, producing many forms of complex feeling. Of these a few have been indicated in the table. The moral emotion may combine in many of these, as with instinctive resentment, love, sympathy, and modify the products. So the sensuous affections may combine with others, as love, selfishness, sympathy, and ambition, or avarice, producing the most energetic results, of which some are criminal and some legitimate.

The eight traits of disposition, with their resulting capacities for sensibility and conation, are implanted by our Maker in our souls. The ninth disposition was introduced by the fall. We may safely conclude that, had a given capacity no legitimate and innocent scope for its exercise, a wise and holy God would never have implanted it in the man made in his image. Hence, while the perversions of these feelings, produced by the combination

of the ninth, native depravity, are all mischievous and criminal, there must be exercises of the other eight which are lawful. There is a legitimate wonder, curiosity, mirth, admiration, desire of power, delight in a good name. It is possible for a man to "be angry and sin not." There is a desire for one's own welfare, which is not sinful self-love, or the craving for unrighteous advantage and good. There is a generous emulation, which is sympathy with our fellow's manifested energy.

DUAL OBJECTS OF FEELING.	CORRESPONDING FEELINGS OF PASSIVE SENSIBILITY.	CORRESPONDING FEELINGS OF ACTIVE AFFECTENCY (DESIRE AND AVERSION).
1. { Existence and { Extinction.	Simple Pleasure of Existence. Contrasted Pain at Extinction. (Sense of the Ludicrous, Sense of the Beautiful, Sense of the Sublime, Sense of the Dull, Sense of the Trivial, Sense of Ugliness.)	Desire of life. } Motives of all self-protective Aversion to Death, } acts.
2. { The Novel, { The Trite.	Wonder, Ennui.) Curiosity, or Desire to know.) Disgust, or Aversion from contemplation of.
3. { Action, and { Passivity.	Instinctive Pleasure of Exertion. Pain of Inaction.) Desire of Power, or Ambition. Aversion to Restraint. Avarice, or Desire of Wealth, as combined with 7.
4. { Righteous- ness and { Sin.	Ethical Approbation. Ethical Reprehension. Remorse. (Rational Sensibilities.)	Desire of Reward to the Deserving. Desire of Penalty on Guilty.
5. Others' Feelings as Witnessed	(Sympathy with others' joy, grief, etc. Emulation, being Sympathy with the energy of fellows.	Desire to Help. Desire to Excel. But perverted by No. 7, Envy, or Desire to prevent others excelling.
6. { Applause, and { Reproach.	Pleasure in Praise. Pain in Dispraise. And combined with No. 7, Pride and Humility.	Love of Fame (or, with No. 3, Ambition). Haughtiness and Vanity. Desire of Improvement.
7. Well-Being, Ill-Being.	Gladness. Sorrow. But combining No. 4, Resentment at Injury.	Desire of our own Well-being, { Erroneously called Fear of Evil. } Self-love. Combining with No. 9, Selfishness. Desire to retri- bute, and (combining with 8, part 2d,) Revenge. Desire to make happy, or Beneficence. Malice, or Desire to cause Suffering.
8. Our Fellow- Man.	{ Love, or Delight in. { Hatred of.	{ Aversion to Duty (at least some). { Preference for Self-will.
9. { Moral { Obligation, { License.	{ Innate Depravity.	

Let us pause here to remark in this instance upon the important light thrown by a just analysis and classification of the feelings upon their moral quality. The emotion of emulation has been by some moralists applauded, and by others condemned. Some teachers and rulers appeal freely to it as a wholesome *stimulus* to effort. Others deprecate all use of the principle, as depraving to the morals. Now, if we conceive no emulation, save that which is the outcome of envy, the latter are right. For envy can only be criminal and malignant. It is a mixture of selfishness, pride, and hatred, as quickened by the contemplation of a rival's superiority. The appetency of will which attends it is not the laudable desire to advance one's self, but the mean craving to depress and degrade the rival. The envious man does not wish himself better, but his competitor worse. Were all emulation but a phase of this vile emotion, it must always be wrong. But is there not a totally different phase? Every thoughtful man knows that the great law of sympathy extends to other affections besides sorrow. We sympathize with our fellow's joy, with his hope, with his courage, with his fear, with his resentment, with his mirth, just as we do with his grief. The philosophic meaning of *πάθος* is not sorrow merely, but feeling, all feeling; and *συμπάθεια* is the social infection of the one with all the forms of his neighbor's *παθήματα*. Now, love of action, energy, *is a feeling*, and a legitimate and noble one. Why may not the ingenuous spirit, witnessing the flame of this animating emotion, instinctively sympathize with it, just as he would with his neighbor's sorrow, or terror, or gladness? Doubtless this disinterested sympathy is felt. There is, then, an emulation which is *sympathy with another's energy*. It is from wholly another element of emotion than envy. It is not malignant, but just and generous. It does not crave to drag its honorable competitor down, but rightfully to raise itself up. And thus the Scriptures are justified and reconciled with themselves, which in one place rank "emulation" among the evil fruits of the "flesh"; and in another enjoin us to "provoke one another to good works."

The consistency of the classification proposed above must be left mainly to speak for itself. The reader's own reflections will pursue the hints which it presents him. This article is already

approaching the limits of allowable length, and room can be claimed only for two other points.

One of these is the evident prevalence of "final cause" throughout the structure of the emotions. Every one has been fashioned with design. The skill with which they are all fashioned to educe their results bespeaks the Creator's wisdom and benevolence just as clearly as the structure of the human eye. What was the end designed in imbuing the mind with the sensibility of *wonder* and its corresponding appetency of curiosity? To stimulate man to learn and to make his newly acquired knowledge sweet to him. Why was the law of sympathy established? To provide a spontaneous and ready succor for the distressed; to connect men in social ties, and to enable them to double their joys and divide their sorrows by sharing them. What is the "final cause" of instinctive resentment? To energize the innocent, weak man against aggression, and thus to prevent his giving additional *impetus* to the unjust assailant through timidity and sloth. But we must forbear this attractive line of thought.

Psychologists, in explaining the dispositions and classifying the native feelings of the soul, almost uniformly overlook the one we have placed in the ninth rank, native depravity. But we hold that the same sort of inquiry and reasoning from facts, which leads them to hold that the love of applause is a native trait of man's heart, should cause them to count depravity equally among man's constitutive dispositions. Why this grave and most inconsistent omission? Has the pride of reason blinded them? Kant is the only great writer, not teaching from the theological point of view, who has stated the psychological truth as to this trait, and therein he shows his acuteness and honesty at once. This original depravity he defines as a subjective "propensity" (*propensio*) prompting the soul to adopt something else than duty, as sensual good, selfishness, advantage, for the prevalent rule of voluntary actions. But notwithstanding this deplorable election, these lower motives may prompt the man to many actions formally right, as business honesty, domestic kindness; so that the man's *conduct* may be to a large degree moral. Yet the man himself is fundamentally immoral, radically depraved, because he has deposed from his soul what is entitled to be the supreme

rule of all actions, and established the unrighteous rule of self-will, so that every one of his acts is bad in motive, at least by defect. If we ask what subjective cause determines the original propensity to determine the will to this life of disobedience, we raise an absurd question. For, if an answer could be found, this would only raise a prior question, What determined that antecedent determining cause of propensity? The *regressus* would be endless. We must stop, then, with the inscrutable but indisputable fact, original evil propensity. It is the end for us of all possible analysis. But to preclude the sinner from the cavil, "Then my propensity, being native, infringes my free agency by a physical necessity, so that I am not responsible for the volitions that result," Kant argues acutely, that this propensity to evil is none the less a function of spontaneity, because it is original. For it is as truly and as freely elected into the soul by its free agency as is any specific act of evil freely willed by the sinner. Is not this propensity to evil as truly, as freely, as thoroughly, *the soul's preference* as any single bad act it ever willed? The propensity reigns in the soul by virtue of a perpetual, *continuing act* of spontaneity, unrelated to time. Each specific sin that soul commits is a similar act of spontaneity, related to some particular point in time. Hence, the soul's determinate preference for sin is both certain and free, and therefore responsible. The evidence by which Kant proves the existence of this original depravity is very plain and short. All men sin, both in the savage and civilized states, and the morals of nations (which have no earthly restrainer over them, and consequently show out man's real *animus*) are simply those of outlaws or demons. International relations are *frequently* those of active robbery and murder, and *all the time* those of expectation and preparation for robbery and murder.

Kant's description of that mixture of good and evil conduct which natural men exhibit, which yet coexists with radical depravity of will, is luminous and correct. We do not say that because the natural man is radically depraved, he is therefore as bad as man can be, or as bad as he may become in future. We do not condemn his social virtues as all hypocrisies. Many affections in this man are still normal and legitimate, and they concur in prompting many actions. His ethical reason in those

judgments which recognize the rightness and obligation of God's holy law is not essentially corrupted, and cannot be, except by lunacy. This sacred judgment of conscience in favor of the right has not wholly lost its force in this man. But he holds God's law persistently dethroned from the place of universal supremacy in his soul, to which it is entitled. When he does the formally right thing, he does not do it supremely to please God. When the law of right comes into clear competition with the law of self-will, the man always gives the preference to his own disobedient will. His conduct may be mixed—some good, some bad—but his soul as a moral monad, incapable of an ethical neutrality, is *decisively against duty*. The man is radically depraved.

In proving psychologically that the disposition to evil is a native spring of feelings and volitions, just as truly as the love of applause, the desire of happiness, or the love of the beautiful, it is not necessary, then, to assert that every natural man desires to break every rule of right. All we have to prove is, that every natural man is fully determined to commit some sins—such as his other propensities do not restrain him from—and to neglect some known duties. When an exact naked issue is made between God's holy will and self-will, the latter has the invariable preference.

Our first evidence is an appeal to consciousness. Let the man who is in the state of nature answer honestly the question, whether it is his *present* preference and (by God's grace) *purpose* to act from this time up to every known obligation, especially those due to God, and to forsake now every known sin, and he must say no. He thinks he admires virtue as a whole and in the future. To some of the particular parts of virtue he has, at this time, an inexorable opposition. Observation shows us that while some men are far less wicked than others, every natural man transgresses in some known things deliberately and repeatedly. The only man of whom the writer ever heard who asserted his entire freedom from the dominion of sin was a Col. Higginson, a Boston Socinian, who in one of Joseph Cook's "*symposia*," declared that he had never in his life slighted a monition of conscience. But this claim to a perfect natural holiness was rather damaged with all men of common sense when it became known that in the Confederate war he had

raised and commanded a regiment of runaway-negroes to invade his fellow-citizens. Thus he ran greedily into the very wickedness which his political gospel, the Declaration of Independence, had charged against George III. One is not surprised to find in such a boaster just that blindness of heart which would prevent his seeing the cruelty and wickedness of arming against his brethren semi-savages and slaves, whose allegiance to their masters was solemnly guaranteed by the very constitution under which he pretended to act!

Again, if we trace this absolute aversion to duty back in each man's history, we find its appearance coincident in every child with the earliest development of reason and conscience. When first the child's mind comes to know duty rationally, he knows it but to hate it, at least in some of its forms. All sensible persons who rear children discover that their sin is in part always a development from within, and not a mere habit learned from imitation, or propagated by bad treatment and unwholesome outward influences. So true is this that the average child, left to its own expansion without any moral nurture or restraint, would be so much worse than the average child reared under a faulty and evil discipline, that average men would regard him as a monster. We view the evil of the nature of little children under an illusion. We call them "little innocent babes." Because their bodily and mental powers of executing their impulses are so weak, we think of them as harmless. The animal beauty of their bodies seduces our judgments. But let this picture be considered. Let us take the moral traits of an ordinary infant, his petulance, his unreasoning selfishness, his inordinate self-will, his vengefulness, his complete indifference, whenever any whim of his own is to be gratified, to the convenience or fatigue and distress of his loving mother or nurse, his entire insubordination to all force but corporeal, his bondage to bodily appetite, his uncalculating cruelty. Suppose him, instead of appealing to your pity by his helplessness, embodying precisely these qualities in the frame of a robust adult, we should have a wretch from whom his own mother would flee in terror. Does one say that these dispositions, which would be hateful sins in an adult, are no sins at all in the infant, because he has as yet no intelligence to know they are wrong? We reply with this question:

If this child were left absolutely free from all external restraints, *when his intelligence came to him, would he therefor forsake these dispositions?* Experience tells us he would not. But fortunately for society, while his native evil is at its greatest, his faculties of execution are at their weakest. Thereby Providence subjects him from the outset to an ever-present *apparatus* of restraints and discipline, which, by the time his powers of mischief are grown, have curbed his native depravity within bounds tolerable to society.

Now, how can the existence of any native principle of feeling be better proved than by the fact that some degrees of it are found in every man; that it appears from the first in each, and that it develops along with the growth of his faculties? Is there any other or stronger proof by which psychologists show that the æsthetic sensibility, sympathy, resentment, love, are native to man?

One more fact remains: that this aversion to duty and love of sinful self-will operates with determining energy, and against all possible inducements. This dominancy of the feeling exhibits itself especially, in many cases, in resisting and conquering inducements which, rationally, ought to be irresistible. For instance, the love of life is usually supreme. Here is a man who is indulging a sensual sin to the injury and destruction of life itself. He is clearly forewarned; but he does not stop. In another man avarice, in another inordinate ambition, is his dearest permanent appetency. The one has wealth, the other fame and power, within his reach. But each is falling under the power of drunkenness, which is known to be destructive to fortune and to reputation. But this fact does not arrest the course of indulgence; the able, energetic man finally sacrifices his own dearer desire to the low and sensual vice. Or if we take the general view of this matter, it can be made clear to any understanding that, on the whole, a course of temperance, prudence and virtue will be best for every man's own happiness. In the final outcome any and every sin must subtract from man's highest good. Indeed, this conclusion is the testimony of every man's conscience. Let men be urged, then, to make this true self-interest their uniform guide; to eschew all evil, and perform all duty. In each man the appetency to sin will assert itself still,

against the man's own highest interest and most reasonable self-love.

But it is when we observe man's uniform neglect of the duties of godliness that this rebellion of sinful self-will becomes most marked. Here the inducements to repentance are literally immense, including all the worth of heaven and dreadfulness of hell. When the problem is urged, "What shall it profit a man to gain the whole world, and lose his own soul?" the judgment of every man's understanding is, of course, absolutely clear against the exchange. Or, if the sinner pleads, "I do not *decide* this horrible exchange; I only *postpone* the right decision in favor of God, and my soul, and heaven;" when we show him the unutterable rashness of this delay, and show that he is staking an eternity of blessedness on a very perilous chance, against a worthless bauble of self-indulgence, his understanding is equally clear against his own proceeding. But none the less does he proceed in the paths of ungodliness.

Now, in mechanics we measure a force by the resistance it uniformly overcomes. And so it is correct to measure the energy of this appetency for transgression by the rational and moral obstacles which it overcomes

Here, then, is a fundamental dislocation in man's soul. In his appetencies, man's subjective spontaneity finds its expression. They inspire the will; they regulate from within the whole free agency. In them centres man's activity. But on the other hand, conscience claims to be the rightful and rational ruler of mankind. It utters its commands with an intuitive authority; it is as impossible for one to doubt whether conscience, duly enlightened, is *entitled* to be obeyed, as to doubt his own existence or identity. We have, then, this situation in each natural soul: *the supreme faculty of the reason at war with the fundamental appetency of the free agency.* And this fatal collision presents itself on the most important of all the soul's concerns—duty; that on which the soul's destiny consciously turns. There has been, then, a catastrophe in human nature! Just as clearly as "there was war in heaven when Satan and his angels fought with Michael and his angels," there is a strife going on in the firmament of man's spirit. We see no such dislocation in the natural laws of either man, or animal, or inorganic nature,

in any other instance. In man's other faculties there is entire consilience. Perception, memory, suggestion, imagination, reasoning, all work together in substantial harmony. The laws of material nature concur. Or else, if we perceive in sentient beings any disorder similar to the one we have displayed in man's soul, we at once say, "There is disease." Is there not, then, a moral disease infecting the soul? It cannot be disputed.

When and how was this disease contracted? How can it be effectually remedied? To these momentous questions, philosophy has no answer. If we attempt to solve the second by saying, "Self-discipline can and must subdue the propensity to sin," philosophy herself meets us with this fatal difficulty: Whence is the effectual motive to that subjugation of the ungodly self-will to arise within man himself? The dominant competency has already pronounced, always pronounces, in favor of self-will and against conscience! Kant has seen, and stated with transparent clearness, this insuperable point. The soul is a free agent wherever it is responsible. True. Its action is self-determined? True. But unless the soul is an anomaly, a monstrosity in nature, an agent acting by no law whatever, it must contain some regulative law of its own determinations. If we violate its freedom by supposing an external objective law, then, at least, we have to suppose a subjective law regulative of its actions. What can that subjective law be but disposition—*habitus*? But as to this issue of an ungodly self-will against duty, we find *there* the regulative, ultimate propension, and *it is fundamentally against this subjugation of self-will*. This decision is native. Now, how can nature reverse nature? How can the first cause reverse its own law of effects? Can the fountain naturally propel its own stream against its own level?

The remedy for this spiritual disease, then, must begin, if it ever begins at all, in a supernatural source. So saith Scripture. John i. 13; iii. 5.

CIVIC ETHICS.

PASSING now from the social morals of the family to the general ethics of social duties, we meet the fact that the civil government is the appointed regulator and guardian of all these. Hence these duties take the form of civic morals, and our rights and duties as citizens meet us at the front. The discussion naturally begins with the question, What is the moral ground of my obligation to obey the magistrate, whom yesterday, before he was inducted into office, I would have scorned to recognize as my master, to whom to-day I must bow in obedience? Three opposing theories have been advanced in our day in answer to this question. The first answer is that I am bound to obey him solely because I have consented to do so. This is the theory which founds government in a "social contract," which, first stated by Thomas Hobbes, of Malmesbury, was made popular among English Liberals by John Locke, and, introduced to the French by Rousseau's famous book, *Le Contrat Social*, became the ruling philosophy of the French Jacobins. This apprehends men as at first insulated individuals, human integers, all naturally equal and absolutely free, having a natural liberty to indulge, each one, his whole practical will as a "lord of creation." But the experience of the inconveniences of the mutual violences of so many hostile wills, with the loss of so many advantages, led them, in time, to consent voluntarily to the surrender of a part of their wills, natural rights, and independence, to gain a more secure enjoyment of the remainder. To effect this they are supposed to have conferred, and to have entered into a compact with each other, covenanting to submit to certain restraints upon their natural liberty, and to submit to certain of their equals elected to rule, in order to get their remaining rights protected. Subsequent citizens entering the society by birth or immigration are supposed to have given their sovereign assent to this compact, expressly, as in having them-

selves naturalized, or else impliedly, by remaining in the land. The terms of compact form the organic law, or constitution of the commonwealth; and the reason why men are bound to obey their equal, or possible inferior, as magistrate, is simply that they have bargained, and are getting their *quid pro quo*.

Many writers, as Bulemarquí and Blackstone, are too intelligent to suppose or claim that any human persons ever rightfully existed, in fact, in the independent state described, or that any commonwealth actually originated in such an optional bargain; but they teach that such a non-existent compact must be assumed as implied, and as virtually accounting for the origin of civic obligation. Thus Blackstone, II. Intro., § 2, p. 47. But to us it appears that this species of legal fiction is a poor basis for a moral theory, and is no source of natural right and obligations.

The second theory may be called theistic, tracing civic obligation to the will and ordinance of God our Creator. It answers that we are bound to obey the civil magistrate, because God, who has the right as creator and sovereign, commands it. This command is read by all Christian citizens in sacred Scripture, which says, "The powers that be are ordained of God," and "Whosoever resisteth, resisteth the ordinance of God." It is read again in the light of natural facts and reason. These facts are mainly two, that God created man a social being, which is so true that without social relations man would utterly fail of reaching his designed development and happiness, and indeed would perish, and that man's personal appetencies ever tend to engross to himself the rights of others. Selfishness is ever inclining to infringe the boundaries of equity and philanthropy. Hence it is the ordinance of nature that man shall live in society; and that man in society must be restrained from injuring his fellows. And there are no other hands than human ones to wield this power of restraint. We are thus taught as clearly as by Scripture itself, that the Creator ordained civil government and wills all men to submit to it. The same argument may be placed in this light: Men are rational, moral, and responsible creatures. Righteousness is their proper law. But personal selfishness tends perpetually to transgress that law, hence arises the necessity of restraint. Thus, the only alternatives are, submission to civil government, which is such restraint, or an ulti-

mate prevalence of aggression, which would destroy the very ends of social existence. Witness the wretched and savage state of all human beings who are wholly without any form of government. Here we are met by a cavil which is expressed by some, and which has evidently embarrassed many other moral writers. This is, that God ought not to be introduced into this discussion, because God and his will are theological facts; but since this inquiry is concerning natural right and secular relations, it ought to be decided exclusively upon natural data, without importing into it other premises from the alien field of theology. To this I answer, that in reality there is no fact among the data of moral science so purely natural as God. As soon as the mind begins to reason on the phenomena of nature and experience, it is led in one direction to God, at least as immediately and necessarily as it is led in other directions to gravity, causation, conscience, free agency or any other natural fact. God is not only one proper factor, but the prior one, in the philosophy of our moral nature, seeing he created it, and his nature is the concrete standard of moral perfection; and his preceptive will, the expression of that nature, is the practical source and rule of all our obligations. He is, therefore, not only the first, but the essential and most natural of all the factors in every question of natural right. To attempt to discuss those questions, omitting him and his will, is just as unreasonable as it would have been in Newton to discuss planetary astronomy, and the orbital motion of the planets, leaving out all reference to the sun. And this is justified, last, by the remark, that in constructing our theory of civic obligations, we introduce God, not in his theologic relations as Redeemer, but in his natural relation as creator and moral ruler. I am happy to find my position thus sustained by the great German statesman and philosopher, Dr. Julius Stahl, (quoted by Dr. Chas. Hodge *Theol.* Vol. III. p. 260): "Every philosophical science must begin with the first principle of all things, that is, with the Absolute. It must, therefore, decide between Theism and Pantheism, between the doctrine that the first principle is the personal, extra mundane, self-revealing God, and the doctrine that the first principle is an impersonal power immanent in the world." It is the Christian doctrine of God and of his relation to the world that he makes the founda-

tion of legal and political science. He controverts the doctrine of Grotius that there would be a *jus naturale* if there were no God, which is really equivalent to saying that there would be an obligation to goodness if there were no such thing as goodness. Moral excellence is of the very essence of God. He is concrete goodness, infinite reason, excellence, knowledge, and power, in a personal form; so that there can be no obligation to virtue which does not involve obligation to God.

The theistic scheme, then, traces civil government and the civic obligation to the will and act of God, our sovereign, moral ruler and proprietor, in that he from the first made social principles a constitutive part of our souls, and placed us under social relations that are as original and natural as our own persons. These relations were: first of the family, then of the clan, and, as men multiplied, of the commonwealth. It follows thence that social government in some form is as natural as man. If asked, whence my obligation to obey my equal, or possible inferior, as civil magistrate? it answers, because God wills me to do it. He has an infinite right. The advantages and conveniences of such an arrangement may illustrate and even reinforce the obligation; they do not originate it. Civil government is an ordinance of the Maker; magistrates receive place and power under his providence. They are his ministers to man.

This theory, pushed to a most vicious extreme by the party known as Legitimists, is the third which has had some currency. These advocates of the divine right of royalty teach, that while government is the ordinance of God, its first form was the family, in which the father was the sovereign, and this is the type of all larger commonwealths. Every chief magistrate should therefore be a king, holding the same sovereign relation to their subjects which fathers hold to their children. As in the patriarchal clans of Scripture, the birth-right descended to the eldest son and carried with it the headship of the clan, so the right to reign is hereditary in the king's eldest son. To deprive him of it is to rob him of his rightful inheritance. Subjects, if discontented with their king, have no more right to replace him by another chief magistrate elected by themselves, than minor children have to vote in a new father. If the hereditary monarch becomes oppressive, the only remedy for the subject is humble petition and

passive obedience. There is no right of revolution. Oppressed subjects must wait for a release by divine providence. And in support of this slavish theory they quote the precepts of the apostles. (Rom. xiii. ; 1 Peter ii. 13-17.)

This servile theory I thus refute. Men in society do not bear to their rulers the proportion minor children bear to their parents, in weakness, inexperience, or folly, but are generally the natural equal of their rulers. Nor are the citizens the objects of an instinctive natural love in the breasts of kings, similar to that of parents for their children, powerfully prompting a disinterested and humane government of them. The pretended analogy is utterly false. Second, whereas divine authority is claimed for royalty, God did not give a regal government to his chosen people Israel; but his preference was to make them a federal republic of eleven cantons. When he granted a king at their request, it was not an hereditary one. The monarchy was elective. David was not the son of Saul, but was elected by the elders of Israel. It is true that the prestige of his heroism enabled him to nominate his immediate successor, Solomon, who yet was not his eldest son. After Solomon, the elders of Israel were willing to elect his son Rehoboam; but upon ascertaining his tyrannical purposes they elected Jeroboam. And the reader must note that they are nowhere in Scripture blamed for this election, nor for their secession; and Rehoboam, who had been elected by two tribes, when proposing coercion is strictly forbidden by God. So Jehu, elected by divine direction, was not a successor of the house of Ahab. Third, the New Testament does not command us especially to obey kings, but "the powers that be." Scripture thus makes the *de facto* government, whatever may be its character, the object of our allegiance within the limits of conscience. And it is fatal to these advocates of the divine right of royalty, that the actual government which St. Paul and St. Peter enjoined Christians to obey was neither regal nor hereditary. It was a recent usurpation in the bosom of a vast republican commonwealth still retaining the nominal forms of republicanism. Julius Cæsar and his nephew Octavius carefully rejected the title of king. The latter selected that of imperator, the constitutional title of the commander-in-chief of the active armies of the republic. He held his executive power by

annual, nominal reelection of the offices of pontifex maximus and consul, both republican offices. He was, in a word, what the Greeks expressed by the name—*τυραννος*. Octavius Cæsar was not the son of Julius, Tiberius was not the son of Octavius, Caius Caligula was not the son of Tiberius, Nero was not the son of Caius. So that the fact is, that the very government to which the early Christians were commanded to submit was a revolutionary one, and not regal. So unfortunate have the Legitimists been in claiming the authority of Scripture against the right of revolution, and in favor of royalty. In a word, their theory has not a particle of support in reason or God's word. Yet the obtruding of it by so many divines as the theistic theory doubtless did much to prejudice the right view.

On the contrary, the power of magistrates as between them and the citizens is only a delegated power, and is from the commonwealth, which is the aggregate of citizens, to them. God has indeed, by the law of nature and revelation, imposed on all the citizens and on the magistrates the duty of obedience, and ordained that men shall live in regular civil society under laws. But he has not given to magistrates, as such, any inherent rights other than those belonging to other citizens. As persons, they are equal to the citizens and of them; as magistrates they exist for the people and not the people for them. "They are the ministers of God to thee for good." They personally have only the common and equal title which their fellow citizens have to good as being of one race, the common children of God, subject to the golden rule, the moral charter of republicanism.

Having refuted the theory of legitimacy, or divine right of kings, we now return to complete our evidence for the right theory, by refuting the claim of a social contract.

First, it is notoriously false to the facts. Civil government is a great fact. It must find its foundation in a fact, not in a legal fiction. And the fact is, men never existed rightfully for one moment in the independency this theory imagines. God, their maker and original ruler, never gave them such independence. Their civic responsibility, as ordained by him, is as native as they are. They do not elect between civic subordination and license any more than a child elects his father, but they are *born* under government. The simple practical proof is, that were any

man to claim that natural liberty, and the option of accepting or declining allegiance, every government on earth would claim the right to destroy him as an outlaw.

Second, the theory is atheistic and unchristian. Such were Hobbes and the Jacobins. It is true that Locke tried to hold it in a Christian sense, but it is none the less obstinately atheistic in that it wholly discards God, man's relation to him, his right to determine our condition of moral existence, and the great fact of moral philosophy, that God has formed and ordained us to live under civil government. So, in the insane pride of its perfectionism, it overlooks the fact that man's will is ever disordered and unrighteous, and so cannot be the just rule of his actions.

Third, it also virtually discards original moral distinctions. So did Hobbes, its author, teaching that the *enactments of government* make right and wrong. It infers this consistently, for if man's wish made his natural right, and he has only come under any constraint of civil law by his optional compact, of course whatever he wished was right by nature. Moreover, government being a restraint on natural right, is essentially of the nature of an evil, to which I only submit for expediency's sake to avoid a greater evil. Civil society is herself a grand robber of my natural rights, which I only tolerate to save myself from other more numerous robbers. How then can any of the rules of civil government be an expression of essential morality? And is this scheme likely to be very promotive of content and loyalty?

Fourth, the social contract lacks all basis of facts, and is therefore wholly illogical. It has no claim *in foro scientiæ* to be entertained even for discussion. For the science of natural rights should be inductive. But this theory has no basis of facts. Commonwealths have not historically begun in such an optional compact of lordly savages. Such absolute savages, could we find any considerable number of them, would not usually possess the good sense and the self-control which would be sufficient for any permanent good. The only real historical instances of such compacts have been the agreements of outlaws forming companies of banditti, or crews of pirate ships. These combinations realize precisely the ideals pictured by Hobbes, Locke, and Rousseau. Did ever one of them result in the creation of a permanent and well-ordered commonwealth? The

well-known answer to this question hopelessly refutes the scheme. Commonwealths have usually arisen, in fact, from the expansion of clans, which were at first but larger families. True historical research shows that the primitive government of these clans was usually presbyterial, a government by elders who had succeeded to the natural and inherent authority of the first parents.

Fifth, certain inconvenient and preposterous consequences must logically follow from the theory of the social contract. The righteous "swear to their own hurt, and change not." No matter, then, how the lapse of time may have rendered the old contract unsuitable or mischievous, no majority could righteously change it so long as any minority claimed their pledges. Again, unless the commonwealth has a formal constitution, who can decide what are the terms of the social contract? England has no written constitution. Again, if the ruler violated the essence of the contract in one act, this would release all the citizens from allegiance. The contract broken on one side is broken on both. But so sweeping a release of all the individual citizens of the commonwealth from their allegiance, whenever any essential article of the social contract had been violated, either by a ruler or a greedy majority, would lead to intolerable anarchy. There is a noted government which historically and actually originated in a social compact, that of the United States of America. It was a republic of republics, a government of special powers, created by a federal covenant between sovereign states, or little contiguous independent nations. The contracting integers were not citizens, but states. The logical result was that the infringement of any essential principle of the constitution, which was the compact, released each contracting party from the bond. This result inhered inevitably in the nature of the federal government, as was admitted by juriconsults of all parties, by Josiah Quincy, President Fillmore, and Daniel Webster as fully as by Jefferson, Madison, and Calhoun. A government formed by a social compact is, *ipso facto*, dissolved by the breach of that compact into the integers which composed it. In the case of the United States those integers were sovereign commonwealths. Hence the exercise of their constitutional right of secession could not result in anarchy, for the

original commonwealths survived, exercising all the authority necessary to that civic order enjoined by natural obligation.

Last, law properly arms the magistrate with some powers which could not have been derived from a social contract of individuals, because the individuals never possessed those powers. Life, for instance, is God's. No man can bargain away what does not belong to him. Nor can they plead that the commonwealth's existence justifies her in assuming a power of life and death. But the commonwealth, on their view, has no existence to persons as yet until the social contract is completed. Again, how does the commonwealth get power to take the life or property of aliens who never contracted with it? The theory represents independent men as surrendering certain natural rights to society in order to secure the enjoyment of the rest. But I deny that any right can be mentioned, morally belonging to any man, of which he is stripped when entering a just government. The one most frequently named is the right of self-defence. But what is meant by it? The privilege of making one's self accuser, judge, jury and executioner, at once to avenge any supposed wrong in any manner suggested by one's own resentment? I deny that this was ever a right of any creature of God's in any state of existence. It is always a natural unrighteousness. It is the right of an innocent man, when the arm of the law is not present, to protect himself by his own personal force, even to the destruction of the assailant, if necessary. Then I deny that just government strips any citizen of this right. The law fully recognizes it.

This infidel theory sets out, like an atheist as it is, without reference to the fact that man's existence, nature and rights sprang out of the personal will of a creator. It sets out without reference to original moral distinctions, or original responsibilities to God, or to his moral essence. It quietly overlooks the fact that man's will, if he is the creature of a personal and moral creator, never could be in any circumstance his rule of action. It hides away the stubborn fact that the human will is depraved, and, for that second reason, cannot righteously be his rule. It falsely assumes a state of nature in which the individual's will is independent, and makes his right. Whereas, no being except the eternal and self-existent God has a right to that state for

one instant. But all these are facts of nature, involved in this case of civic obligation, and discoverable by reason and experience. All then must be included in our construction, if we would have a correct, or even a rational view. The state of facts is simply this: Man, being a creature, enters on existence the subject of God. This he does not only by force, but by moral right. Moral distinctions are essential and eternal, having been eternally impersonated in God's subjective moral principles, and authoritatively legislated for creatures in all the precepts, to utter which God is prompted by those immanent principles. Moral obligations on the creature are therefore as native as he is. They are binding, not by the assent of the creature's will, but by God's enactment; so that man enters existence under social obligations, as is indicated by his being, in so many constitutive traits, a social creature. Civil government is nothing more than the organization of one segment of those social rights and duties. Thus civil government is God's natural ordinance. Once more, the rule of action enforced by just governments is the moral rule. This is approximately true, even of the government which we deem relatively bad. So that a thoroughly just civil government, if such could be realized, would enjoin on each order of citizens only the acts which were morally right for them to do, and forbid only those which would be wrong.

What then would be a man's civil liberty? I reply, under a perfectly equitable government, could such be realized, the same as his natural liberty. No existing government is perfectly equitable, because executed by man's imperfect hands. None are wholly unrighteous. Some withhold more, some fewer of the citizen's moral (and natural) rights. Hence, under the most despotic government, some natural rights remain. Could a government be perfectly equitable, each citizen's civic liberty would be exactly equal to his natural.

Some few citizens may shrink from the theory of government in God's absolute authority over man, and denying to man any absolute natural independence, from the apprehension that it may lead to arbitrary civil government. To such, I reply: Is it not far more likely that tyrannical consequences will be drawn from the other theory which discards God, the eternal standard and pattern of pure equity and benevolence, which postulates

the sinful creature's licentious and unjust wishes, as the ultimate measure of his rights, which represents the natural rights of the ruler and the ruled as a very different quantity from his civic rights, and which discards the essential distinction between justice and injustice *a priori* to legislation? Is not this the freer and safer theory, which founds man's inalienable rights, as his duties, on eternal and holy moral distinctions, and holds rulers and ruled responsible to the judgment of an equitable heavenly Father with whom is "no respect of persons?"

"By their fruits ye shall know them." I require the student to look at Hobbes, deducing with his iron logic from this theory of the social contract his conclusion, that government must be leviathan, the irresistible giant among all the weaker animals. He proves that on his theory government ought to be absolute. For the theory recognizes neither responsibility nor allegiance to a common heavenly Father, perfectly impartial, equitable and benevolent, the ruler of rulers, the protector of all his children, who will call all their oppressors to a strict account. To the Jacobin, the commonwealth is the only God, beyond which there is no umpire, no judge, no avenger. Again, upon this theory, the supreme rule of commonwealths' action has no standard whatever of intrinsic righteousness, equitable and immutable, embodied first in the moral perfections of the heavenly Father, and then in the universal and indestructible judgment of the right human conscience; but the ultimate standard of right is the mere will of each greedy and unrighteous creature. For this system there is no morality to enforce duties or guarantee rights except the human laws; and these are merely the expression of the cravings of this aggregate of licentious, ruthless, selfish wills.

This reasoning of course makes the will of the majority supreme, and says *vox Populi, vox Dei*. But it must be remembered that this majority is only the accidental major mob, in which the wicked will of each citizen is the supreme law; so that the god of Jacobinism, whose voice receives this sovereign expression, may at any time reveal himself as a fiend instead of a benignant heavenly Father. The practical government which results from this theory is simple absolutism, differing from the personal despotism of a Sultan or a Czar only in this one partic-

ular, that its victims have that "many headed monster," the mob, for their master, always liable to be more remorseless and greedy in its oppressions than a single tyrant.

To this deduction history gives the fullest confirmation. The democracies infected by this theory have ever turned out the worst despotisms. Such was the government of the Jacobin party in France ninety years ago, expressly deduced from the social contract, and yet, a government guilty of more oppressions, stained with more political crimes and murders of the innocent, more destructive of public and private wealth than all the despotisms of Europe together, annihilating in one decade forty-eight billions of francs of the possessions of the French people, and drenching Europe in a universal, causeless war, and rendering itself so loathesome to the nation that it was glad to escape from it into the military despotism of Napoleon. The favorite motto of this democracy is, "*Liberté, égalité, fraternité,*" of which the practical rendering by the actions of the Jacobins was this, "*Liberté,*" license to trample on other people as they chose; "*Egalité,*" similar license for the Outs when they could become the Ins; "*Fraternité,*" all brother rogues. So all the worst oppressions and outrages experienced by the people of the United States have been inflicted by the same Jacobinism, masquerading in the garb of Republicanism.

The Declaration of Independence teaches as self-evident that "all men are by nature equal." The proposition is highly ambiguous. We need not be surprised to find the Jacobin party claiming it in their sense, that every sane human being has a moral right to a mechanical equality with every other in every specific privilege and franchise, except when deprived of them by conviction of crime under the laws; so that, if any one man or class in society is endowed with any power or franchise whatsoever that is not extended to every other person in the commonwealth, this is a violation of natural justice. This famous document is no part of the constitution or laws of the United States. With all its nervous pomp of diction and political philosophy, it involves not a few ambiguities and confusions, and the enlightened friends of freedom have no concern to assert its infallibility. But this often quoted statement bears another sense. There is a natural moral equality between all men, in

that all are generically men. All have a rational, responsible and immortal destiny, and are inalienably entitled to pursue it. All are morally related alike to God, the common Father; and all have equitable title to the protection of the laws under which divine providence places them. In this sense, as the British constitution declares, all men, peer and peasant, "are equal before the law." The particular franchises of Earl Derby differ much from those of the peasant: the lord sits in the upper house, as the peasant does not; inherits an entailed estate; and if indicted for felony, is tried by peers. But the same laws protect the persons and rights of both. Both, so far as human and as subjects of human society, have the same generic, moral right to be protected in their several (different) just franchises. Here are two meanings of the proposition, which are historically perfectly distinct. If there are those who profess to see no difference, it is because they are either inconsiderate and heedless, or uncandid. The difference was perfectly palpable to the English liberals who dethroned the first Charles Stuart; for that great Parliament on the one hand waged a civil war in the support of the moral equality of all Englishmen, and at the same time rejected with abhorrence the other, the Jacobin equality, when they condemned the leveller Lilburn, and caused his books, which contained precisely that doctrine, to be burned by the common hangman. I assert that it is incredible the American Congress of 1776 could have meant their proposition to be taken in the Jacobin sense; for they were British Whigs. Their perpetual claim was to the principles and franchises of the British Constitution, and no other. Their politics were formed by the teachings of John Hampden, Lord Fairfax, Algernon Sidney, Lord Somers, and the revolutionists of 1688. I should be loath to suppose those great men so stupid and ignorant of the history of their own country as not to understand the British rights, which they expressly say they are claiming. Second, their English common sense showed them that the statement is false. In the Jacobin sense men are not by nature equal. One half of them differ by nature from the other half, in the essential qualities of sex. There are countless natural differences of bodily organs, health, and stature, of natural faculties and moral dispositions. Naturally, no two men are equal in that sense.

Third, it is impossible the Congress could have intended that sense, seeing that every one of the thirteen states then legalized African slavery, and not a single one granted universal white suffrage even. No application was made by any of those states of this supposed Jacobin principle at that time to remove these inequalities of franchise. Were these men so nearly idiotic as to propound an assertion in which they were so glaringly refuted by their own actions at home?

The extreme claim of equality is false and iniquitous. For out of the wide natural diversities of sex, of powers, and of character, must arise a wide difference of natural relations between individuals and the state. To attempt to bestow identical franchise upon all thus appears to be unjust, and indeed impossible. It is but a mockery to say that we have bestowed a given franchise upon a person whom nature has disqualified from using it. It is equally futile to boast that we lift all men to the same identical relations, when their natural differences have inexorably imposed on them other relations. Of what avail would it be to declare that all women have the same natural right with myself to wear a beard and to sing bass, when nature has decided that they shall not? What is the use of legislating that all lazy fools shall acquire and preserve the same wealth with the diligent, wise men? The law of the universe ordains that they shall not. I urge further, that the attempt to confer upon all the same franchises, to which the wise and virtuous are competent, upon the foolish and morally incompetent, is not only foolish and impossible, but is a positive and flagrant injustice to all the worthier citizens; for when these unsuitable powers are abused by the unworthy all suffer together. The little children of my family have not an equal right with their parents to handle loaded revolvers and lucifer matches. If we were so foolish as to concede it, the sure result would be, that they would kill each other, and burn down the dwelling over their own and their parents' heads. So it is not equal justice to clothe the unfitted members of society with powers which they will be sure to misuse to the ruin of themselves and their better fellows under the pretense of equal rights. Such pretended equality is in fact the most outrageous.

I argue again, that the Jacobin doctrine leads by logical con-

sequence to female suffrage and "woman's rights." The woman is an adult, not disfranchised by conviction of crime. Then by what argument can these theorists deny to her the right of suffrage, or any other civic right enjoyed by males? By what argument can they require her to submit for life to the domestic authority of a male, her absolute equal, in order to enter marriage? Especially have American Jacobins armed this logic with resistless force against themselves by bestowing universal suffrage on negroes. By what plea can the right of suffrage be withheld from the millions of white American women, intelligent, educated, virtuous and patriotic, after it has been granted as an inalienable natural right to all these illiterate semi-savage aliens? In the point of this argument there lies a fiery heat which must sooner or later burn its way through all sophistries and plausibilities, unless the American people can be made to unlearn the fatal premise. But the concession of all equal rights to women means simply the destruction of the family, which is the cornerstone of the commonwealth and civilization. Will permanent marriage continue after it becomes always possible that every man's political "enemies may be those of his own household?" Further, the moral discipline of children becomes impossible when there are two equal heads claiming all the same prerogatives, unless those heads are morally perfect and infallible. What will be the character of those children reared under a government where, when a father says I shall punish, the mother has an equal right to say, you shall not? Once more, I have shown at a previous place, that if marriage is reduced to a secular co-partnership of equals, the principles of equity will compel this result, that it shall be terminable upon the plea of either party. This theory thus destroys the family and reduces the relations of the sexes to concubinage, when carried to its logical results. Facts confirm these reasonings. Such were its fruits in Jacobin France, and in those Swiss, Italian and German cities which adopted the revolutionary philosophy.

But among the inalienable natural rights of all are these: privilege to pursue and attain one's rational and equitable end, virtue, and that grade of well-being appropriate to the social position of each for time and eternity; and for adults, liberty of thought, inquiry and belief, so far as human compulsion goes.

The former is an inalienable right, because it attaches to the boon of existence, which is God's gift. Hence all restraints or institutions of civil society which causelessly prevent this are unrighteous. But even the title to existence must give place to the commonwealth's right of self-preservation; as when she calls upon even her innocent citizens to die in her defence from invasion; or when she restrains capital crimes by inflicting the death penalty. "The greater includes the less." Hence the same principle justifies the commonwealth in restricting the lesser rights when the safety of the whole requires it. The right of free thought is inalienable, because belief is the legitimate, and ought to be the unavoidable result of sufficient evidence; whence I infer that it cannot be obstructed by violence without traversing the rights of nature. Second, responsibility to God (as we shall prove in the proper place) is unavoidable, and cannot be evaded. Hence the iniquity of intruding another authority over thought between the individual and God, when the intruder is unable to take his penalty for wrong belief off his shoulders. Third, no human government, either in church or state, is infallible. Rome professes to meet this objection by claiming that she is infallible. She is consistent; more so than a persecuting Protestant. Hence the conclusion, that civil government has no right to interfere with thought, however erroneous, until it intrudes itself in acts violative of proper statutes. For instance, the state refrains from meddling with the Mormon's polygamous opinion, not because he has a right to such opinions; he commits an error and a sin in entertaining them; but this sin is against another jurisdiction than the state's, that of God. If he puts it into practice, he is righteously prosecuted for bigamy, a felony. But suppose the statute is immoral, requiring of the citizen an act or an omission properly sin? How shall a free conscience act? I answer, it asserts its higher law by refusing to be accessory to the sin. If the conscientious citizen holds a salaried office, one of whose functions is to assist in executing such sinful laws, he must resign his office and its emoluments. To retain its powers and emoluments while still refusing to perform its tasks on plea of conscience, is hypocrisy and dishonesty. Having thus resigned his executive office and its salary, the citizen is clear of the sin involved in the evil law;

except that he, like all other private citizens, has the right to argue and vote for its amendment. But if this sinful act is exacted by the state from its citizens, not as its executive officers, but as its private subjects, he must refuse to obey, and then submit, without violent resistance, to whatever penalty the state inflicts for his disobedience, resorting only to moral remonstrance against it. The latter part of my precept may appear at first glance inconsistent with my doctrine of freedom of conscience. Ardent minds may exclaim, if it is righteous in us to refuse complicity in the acts which the state wickedly commands, then it is wicked in the state to punish us for that righteous refusal, whence we infer that the same sacred liberty which authorized us to refuse compliance should equally authorize us to resist the second wrong, the unjust penalty. I reply, that if civil government had no better basis than the pretended social contract, this heady argument would be perfectly good. It is equally obvious that it would lead directly to anarchy; for the right of resisting penalties which the private citizen judged iniquitous must, on these premises, rest exclusively upon his sovereign opinion. The state could not go behind the professed verdict of his conscience; for upon this theory the disobedient citizen's private judgment must be final, else his liberty of thought would be gone. But now, I remind these overweening reasoners that anarchy is more expressly forbidden to them by the will of God than unjust punishment of individuals is forbidden to magistrates; that anarchy is a far greater evil than the unjust punishment of individuals, because this universal disorder strips away all defence against similar unjust wrongs, both from themselves and their fellow-citizens. Or my argument may be put thus: My right to refuse obedience to a civil law only extends to the cases where compliance is positive sin *per se*. But my submission, for a conscientious reason, to a penalty which I judge undeserved, is not my sin *per se*: my sufferings under it are the sin of the erroneous rulers. Hence, while I must refuse to make myself an accomplice in a positive sin, I submit peaceably to the penalty attached to such refusal. Thus, when "the noble army of martyrs" were required by the pagan magistrates to worship idols, they utterly refused. The act was sin *per se*. But when they were required to lose goods, liberty or life, as the penalty

of their refusal, they submitted; because these losses, voluntarily incurred in a good cause, were not sin *per se* in them, however evil on the part of the exactors. Even Socrates, though a pagan, saw this argument so clearly that when means of escape to Maegara from an unjust death sentence were provided for him, he refused to avail himself of the escape, and remained to drink the hemlock. (*See Plato's Phædo*). Thus judged the holy apostles and the Christian martyrs of all ages.

It may be asked now, if the individual righteous citizen may not forcibly resist the injustice of the state, how can that aggregate of citizens, which is only made up of individuals, resist it? Does not this refute the right of revolution against even the most usurping and tyrannical government? That right is correctly argued against Legitimatists from these premises: First, that the will of God, as revealed by nature and Sacred Scripture, does not make a particular form of government obligatory, but some form; the rule for the individual being that the *de facto* government is authoritative, be it of one kind or another. Hence the sin of rebellion does not consist in changing the form, but in resisting the government as government. Second, that as between rulers and ruled, the power is delegated from the latter to the former. Rulers exist for the behoof of the ruled, not the reverse. Whence it follows that to make a crime of the ruled (the masters) changing their rulers involves the same absurdity as making the parent rebel against his own child. Third, that hence there must be in the ruled the right to revolutionize, if the government has become so perverted, on the whole, as to destroy the ends for which government is instituted. This right must exist in the ruled, if anywhere, because providence does not work relief without means, and the righteous means cannot be found in external force, according to the law of nations. The divine right of kings is no more sacred than that of constables.

But the difficulty recurs, if it is the duty of each individual citizen to submit to the government's wrongs on him, how can the injured body of citizens ever start the resistance without sin? Since the existing offices of the state are in the hands of the oppressors, of course the initial action of resistance must be private and unofficial. Even grant that when once a "commit-

tee of public safety" has been organized that may be fairly considered as clothed with delegated and official power, the getting it arranged must be unofficial, private action. All this is true, and it gives us the clue to find the dividing path between unwarrantable individual resistance and righteous revolution. If the outraged citizen is moved to resist merely by his own private wrong, he is sinful. If his resistance is disinterested, and the expression of the common breast outraged by general oppressions, it is patriotic and righteous. There is the dividing line. It is common to say with Paley, that, to justify forcible revolution, the evils the body of the citizens are suffering under the usurpations of the existing government must be manifestly greater, on the whole, than the evils which unavoidably accompany the revolution. This seems correct. And that there must be, second, a reasonably good and hopeful prospect of success. This I dissent from. Some of the most righteous and noble revolutions would never have begun on such a calculation of chance of success. They were rather the generous outburst of despair. Such was the resistance of the Maccabees against the Syrian domination. Such was the rising of the Swiss against the house of Hapsburg. But these were two of the most beneficial revolutions in history.

An all important corollary of the liberty of thought is, that neither church nor state has a right to persecute for opinion's sake. A part of the argument may be seen above. It may be supposed that this is too universally held to need any argument. I answer, it is held, but very much on unintelligent and sophistical grounds; so that its advocates, however confident and passionate, would be easily "dum-founded" by a perspicacious opponent. The history of human rights is, that their intelligent assertors usually learn the true grounds of them "in the furnace of affliction"; that the posterity who inherit these rights hold them for a while in pride and ignorant prescription; when the true logic of the rights has been forgotten, and when some plausible temptation presses so to do, the next generation discards the precious rights bodily and goes back to the practice of the old tyranny. Such has been the history, precisely, of confederated rights in the United States. The present popular theory of the United States' Constitution is exactly that theory of consolidated

imperialism which that constitution was created to oppose; and which our wise forefathers fought the Revolutionary War to throw off. You may deem it a strange prophecy, but I predict that the time will come in this once free America, when the battle for religious liberty will have to be fought over again, and will probably be lost, because the people are already ignorant of its true basis and condition. As to the latter, for instance, the whole drift of the legislation and judicial decisions touching the property of ecclesiastical corporations, is tending like a broad and mighty stream to that result which destroyed the spiritual liberty of Europe in the middle ages, and which "the men of 1776" knew perfectly well would prove destructive of it again. But the statesman who now should propose to stay this legislation would be overwhelmed by a howl from nearly all the Protestant Christians of America.

In arguing men's responsibility for their moral opinions, we saw and refuted the erroneous grounds on which many advocates of freedom claim it. I showed you that upon their ground our right of freedom was betrayed to the advocates of persecution. For these succeed in proving beyond reply that men are responsible for their beliefs, and then add the inference that, since erroneous beliefs are mischievous, the errorist should be responsible to the penalties of the civil magistrate. When we object by pointing to the horror of mediæval persecutions, they reply, that these admitted excesses no more disprove the right of magistrates to punish error wisely and moderately than the Draconian Code of Britain, which punished sheep-stealing with death, proves that theft should not be punished at all. The only way to refute these adroit statements is to resort to a truth which Radicals and Liberals are most prone to forget, that the state is not τὸ πᾶν of social organization, but is limited by God and nature to the regulation of one segment of social rights and duties; while the others are reserved to the family, the church and to God. It is well again to repeat, that while the citizen is responsible for erroneous beliefs, his penal responsibility therefor is to God alone. The wickedness of human intrusion here is further shown by the following considerations: No human organization can justly usurp the individual's responsibility to God, for his powers of thought and will, because

no human organization can substitute itself under the individual's guilt and penalty if he is made to think or feel criminally. Now, this is more especially true of the state than even of the organized church. Because the state in its nature is not even ecclesiastical, much less a spiritual institute; being ordained of nature simply to realize secular (yet moral) order. Orthodoxy or spirituality are not qualifications requisite for its magistrates, according to the law of nature, but only secular virtue and intelligence. Witness the fact, that the rule of Mohammedan magistrates is morally valid in Turkey, and of pagan in China. And the magistrates to whom Romans xiii. enjoined allegiance were pagan and anti-christian. Now, how absurd that I should be required to devolve my spiritual personal functions and responsibility on an institute utterly non-spiritual in its nature and functions, or even anti-spiritual! And how practically absurd, that institutes which are disagreeing (as to religion) and contrary to each other and the truth, throughout most of the world, should be selected as defenders of that truth which not one of them may hold.

Again, if the fallibility and incompetency of the state for this task be waived, persecution for misbelief, by either church or state, is wicked, because it is not only a means utterly irrelevant to produce the professed good in view, right belief, but has a violent and mischievous tendency to defeat it, and hence is criminally impolitic. Thus, first, a right belief must be spontaneous; force is a compulsory measure. It is as though one should whip a sad child to make him glad. His sadness may be sinful, but a punishment which he feels unjust will certainly not help matters. Second, it is so natural as to be unavoidable, that a creed must be more or less associated in men's minds with apprehension of its supporters. True, a cruel man may by chance be the professed advocate of a right creed. None the less do I associate creed and its advocate and infer that if the advocates are wicked, the creed is wicked. What, then, is the insanity of trying to make me love the creed from which I had dissented, by giving me most pungent motives to hate its advocates? So history teaches that persecution for mere opinion's sake, unless annihilating, as of the Lutherans in Spain, only makes the persecuting creed odious, and the persecuted one popular. Thus the perse-

cuting of the Scotch Covenanters by the prelatist made prelacy odious to the Scotch nations for two centuries. The brief persecution practiced against the Immersionists by the colonial government of Virginia, has made that creed popular ever since in the old counties of the state. Third, persecuting helps the error persecuted by arraying on its side the noblest sympathies of human nature, sympathy with weakness and suffering, and moral indignation at injustice. Fourth, persecution, if practiced at all extensively, is frightfully demoralizing; first, by confounding faults, which, if faults at all, are lesser ones, with the most enormous in the criminal code. A sincere mistake about a mysterious doctrine is punished more severely than rape and murder. Secondly, by always using and rewarding, as it must, the vilest and foulest of the community as its delators and tools, thus putting the rascality of the community in place of honor. It breeds hypocrisy wholesale; professing to punish a mistake in theologizing severely in the person, perhaps, of a very pure and benevolent woman or old man, while the current sins of cursing, drinking, lust and others, go rampant. Eras of persecution have always been eras of foul and flagrant moral laxity. Last, persecuting, if not annihilating, always inflames religious dissensions and multiplies sects. If annihilating, it produces, as in Italy, France, and Spain of the eighteenth century, a dead stagnation of infidelity under the mask of orthodox uniformity.

The American constitutions now all deny to the states the right to establish or endow any form of religion, true or false. That right, almost universally believed in out of America, until our generation, by all statesmen of all creeds, was argued from two different points of view. One, which I may call the high prelatie (as in Gladstone's *Church and State*), makes the state the $\tau\acute{o}\ \pi\acute{\alpha}\nu$ of human aggregation, charged with all associated functions whereby man is advantaged for time and eternity; teaches that this omnibus organ, state, is moral and spiritual; has a conscience; is, as an organism, responsible to God for propagating his true religion, as well as Christian morals, just as much as the two other institutes of God and nature, the family and the church. Hence it is obligatory that the state shall herself profess a religion, and that a true one, through her chief magistrates; shall apply a religious test-oath to all her officers, judges and legis-

lators; and shall actively support and propagate the true religion through the ministry, through the orthodox church. This extreme theory is refuted thus: If it is to do all this, why not persecute also? Let the student consider the question. The state is not by its nature either a spiritual or ecclesiastical institution, but a secular one. The same argument would prove that every gas company or telephone company was bound to profess a company religion, have a test-oath, evangelize its employees and patrons. The second, more modern, theory, advocated by Bishop Warburton, Dr. Chalmers, Macaulay, Patrick Henry and such men, argues thus: They repudiate the (absurd) prelatie theory of the state, and hold that it is only a secular organization, appointed by God and nature to realize secular order. 1. But, by the reason that it is entitled to exist, it is entitled to use all means essential to its existence and fulfilment of its natural ends. This is granted. 2. They proceed to say that popular morality is essential to its existence and fulfilment of its natural ends. 3. There is no adequate basis for popular morality, except the prevalence of some form or forms of reasonably orthodox, evangelical Christianity. 4. But experience shows that no voluntary denomination of Christians can succeed in sufficiently evangelizing the masses without state aid. Hence the conclusion that it is the state's right and duty to select some one or more denominations of Christians reasonably orthodox, evangelical, and pure, and endow and aid them to evangelize every district and the whole population.

This theory is much more plausible and decent. No experienced man contests either of the first three propositions. We contest the fourth, and also argue crushing difficulties in the way of the state's reaching the desired end in the way of church establishment. Experience shows that free and voluntary effort of the denominations, all wisely and equitably protected by the government, but left independent, will come nearer evangelizing the whole society than any other plan. The United States is the best example. For when we consider the rapid growth of its population, we see that the voluntary efforts of the denominations have done relatively more than any churches enjoying state aid in other lands.

The following arguments are to be added against the more

moderate theory we are discussing; they apply *a fortiori* against the higher prelatial theory. That the state's patronage will be benumbing. For, since the state is and must be a secular institute, its individual magistrates are likely to be anti-evangelical. "The natural man receiveth not the things of God, for they are spiritually discerned." "The carnal mind is enmity against God." These earthly rulers must therefore be expected to patronize the least evangelical ministers and denominations; and the office-seeking temper will debauch the ministry, just as it does the other office-seekers. Again, since the state pays the salaries of the preachers, the duty to the tax-payers will not only justify, but demand its supervision of the functions paid for, either by claiming the appointing power over pastors, or in some other appropriate way that shall be efficient. Then how shall the endowed church maintain its spiritual independence or its allegiance to King Christ? This was strikingly illustrated in Scotland in the collisions of the Free Church with the government in 1843. The British government claimed for secular patrons the "right of advowson," (or right to nominate a minister to a parish). Dr. Chalmers claimed that the ordination, installation, and discipline of ministers were spiritual functions of the church, over which she could recognize no control whatever except that of her divine Head. But the government rejoined that this secular control over the religious teachers was the just corollary from the support which the secular government furnished to them. Dr. Chalmers' party attempted to evade this argument by a distinction. They admitted that secular aid must justify a certain secular control over religious functionaries, *quoad temporalia*, but not *quoad sacra*; as to these the authority of the church under Christ must be exclusive and supreme. The government replied in substance that the distinction was impracticable; when the *temporale*, for instance, was a manse, endowment or a monied salary furnished by the commonwealth as her compensation for a certain religious teaching, it was impossible for her to exercise the control over her money, without also exercising a virtual control over the function for which the money was paid. Dr. Chalmers' distinction appeared as vain as though a plaintiff in a civil court, who had sold a horse, the health of which he warranted, and who was now sued for the

purchase-money, should raise this plea: that while he admitted the jurisdiction of the court over the money, he should deny its competency to decide upon the health of the horse, on the ground that it was a court of law, and not a veterinary surgeon. The court would answer that its jurisdiction over the purchase-money must inevitably involve its right to judge the horse's health; jurisdiction over the *quid* must carry jurisdiction over the *pro quo*. I conceive that, against Dr. Chalmers, who still asserted the duty of the state to endow the church, this reply was conclusive. The wildest form of state establishment must logically result in some partition between the state and church of that spiritual government which Dr. Chalmers rightly taught belongs exclusively to the church under the laws of the Lord Jesus Christ. And this suggests, finally, that any state establishment of religion must tend to evolve Erastian influences as to church discipline of private members also; see this powerfully confirmed by the difficulties of Calvin in Geneva. For, will not the unchristian citizen say that this pastor is a public servant? How, then, can he convict his own master for acts not prohibited by the state, his employer? The consequence is logical, that since the religious functionaries are but a part of the state's administration, magistrates alone should have the censorship of manners and morals, unless they are to surrender that whole function to the clergy. But the latter would be absurd and impossible. If the magistrates are not entitled to correct the crimes and misdemeanors of the people, there is nothing to which they are reasonably entitled. If, now, another censorship of manners and morals is allowed the clergy, the citizens are subjected to an *imperium in imperio*, to double and competing authorities. Where, then, will be their rights or liberty?

The Protestant Reformers did not at first evolve the doctrine of religious liberty or separation of church and state. The former was taught by Milton and John Owen, and the latter by Jefferson and Madison. Virginia was the first commonwealth in the world which, having sovereign power to do otherwise, established full religious liberty instead of toleration, with independence of church and state, and which placed the stamp of crime upon the African slave trade. The latter law she enacted

in October, 1778, in the midst of the throes of a defensive war, thirty years before it was done by the Government of the United States, and forty years before the overpraised and tardy action of Great Britain.

From the view we have given of the basis of the commonwealth and of rights under it, it is obvious, that the right of suffrage and eligibility to office is not an inalienable natural franchise, but a function of responsibility entrusted to suitable classes of citizens as a trust. The opposite theory, which claims suffrage as an inalienable right, is inconsistent, in that it does not extend the claim to women, and either extend it to aliens also, or else refrain from all jurisdiction over them and their property. That claim is founded on the social contract theory, by implication, and so falls when it is refuted. That theory represents man as absolutely free from all obligation to government, save as he comes under it by his optional assent to the social contract. It is supposed that this assent is only given by suffrage. Hence, it is argued, no man owes any allegiance except he be clothed with the right of suffrage. But we have seen that God and nature bring men under the moral obligation of allegiance, and not their own optional assent. Hence the duty of allegiance does not imply the right of suffrage. The extremest Jacobins do not deem it right to extend suffrage to minors. Why not? The answer must be, because they lack the knowledge and experience to exercise it safely. They are human beings; it would be absurd to disfranchise them merely because they are of a certain age. The argument must be, that this immature age is the sign of their disqualification for the function. Now, if a class of persons, over twenty-one years of age, are marked by a similar incompetency, why should not the same exclusion be applied to them? To give the incompetent a power which they will abuse to their own injury, and the injury of their fellow-citizens, is not an act of right, but of injustice. That claim leads to unreasonable and self-destructive results; for should it be that a class of citizens in the commonwealth are of such a low grade of intelligence and virtue (yet not in the class of condemned felons) as to use their suffrage to destroy their fellow-citizens' right and their own, reason, says the commonwealth, is entitled to self-preservation by disfran-

chising them of that power. One of the maxims of the Whigs of 1776 was: "That all just taxation should be accompanied with representation." They meant that a commonwealth or *populus* must be somehow fairly represented in the parliament which taxes them, or else there is injustice. Modern democracy claims that it is true of individuals. Certainly those great men did not mean it thus. The historical proofs are, that in that sense the maxim is preposterous. For, first, then no females, however rich, could pay a cent of taxes unless they voted; nor wealthy minors; nor, second, aliens holding much property protected by the commonwealth. And, last, since even Jacobinism does not propose to have babies, idiots and lunatics vote, all their property must remain untaxed. As the moral duty of allegiance does not spring out of the individual consent, but is original and natural, so the duty of paying taxes, which is one branch of allegiance, does not arise thence. This, of course, does not imply that a government has a moral right to tax an unprotected class of citizens unequitably. And for equitable protection of the taxed against their own rulers clothed with the taxing power, it is enough that the taxed be represented in the law-making department by enough of the classes who pay taxes, to make their just will potentially heard. And experience proves that to clothe all, including those who have no property, with suffrage, leaves property practically unprotected.

THE PHILOSOPHY REGULATING PRIVATE CORPORATIONS.

THERE is a discriminating conservatism, which values and seeks to preserve the principle of old institutions, and which understands the conditions of their value. It seeks to save the kernel even at the expense of the shell. There is also an unthinking conservatism, which, by a blind association of ideas, cleaves to the form of institutions once valuable, overlooking the conditions of their utility, and the principles which remain stable under changing forms, or even demands mutations of form in order to remain stable. This conservatism seeks to keep the shell at the expense of the kernel. Such is often the temper which moves the American people to regard industrial combinations with excessive legislative favor. There was once a historical reason, which made the right of incorporating precious to the free people of Europe. We still feel the former fondness for it, after the state of affairs in which that reason was grounded has been totally reversed.

After the fall of the Roman Empire before the Teutonic invasions, Western Europe was for a time a chaos, "without form and void," presenting no distinctive social order or settled rights. At length, out of the disastrous confusion, the feudal system was seen to emerge. Its main feature was the holding of lands for stipulated military services to the landlord or suzerain, by tenants for life, without a fee-simple title. The tie which thus connected the lord and the vassal was almost the only remaining bond of rights or social obligations. The other essential feature of feudalism was, that the ownership of the lands also carried to the suzerain the right of government over its inhabitants, and made him not only a landlord, but a ruler. Each barony was a military commonwealth, exercising the rights of administering justice within itself, and of waging war on its neighbors, and irresponsible, even to the king, except for its

stipulated military obligations and aids. For the vassal, there might be rights and franchises, guaranteed to him by the charter of his fief, and protected by the mailed hand of his lord. But for persons not belonging to the military caste, for artisans and traders, there was no right, and no protection. The tillers of the soil were either slaves or serfs *adscripti glebæ*. The inhabitants of the towns were liable to be plundered at will by the neighboring feudal chieftains.

In the eleventh and twelfth centuries, the industrial classes in towns began to find this expedient: Sometimes by payment of money, sometimes by some timely service, sometimes by their own sturdy right arms, they extracted from their lords *charters* of incorporation, virtually giving them an organic existence, and guaranteeing some of their rights. Kings perceiving in these corporations probable counterpoises to the power of the great feudatories, found their interest in proposing themselves as their patrons and umpires. Chief magistrates of nations thus found in these industrial communities agents by whose help they were able to create out of the endless strifes of feudalism a national order. The burghs, enfranchised by these charters, became the strongholds of the commonalty, and the fountains of popular opinions. Industry, protected in them by a republican municipal government, created wealth, comfort, and civilization. Thinking men recognized in them the saviours of popular rights, as well as the fountains of manufacturing and commercial wealth. They became essential factors in the creation of modern constitutional freedom. It is, then, not strange that these corporations were cherished as precious and admirable, and that their protection was sought for every species of interest against feudal violence. Each trade in the towns was organized into a guild, governed within itself by strict by-laws, and guarding its common privileges by the stipulations of a charter. Just as in the military caste, every tenure of land had before assumed the form of a fief; so, among the industrial classes, every franchise endeavored to gain the sanction of corporate rights. It is not surprising that generations of the commonalty grew up accustomed to think the usage of incorporation the very bulwark of freedom and source of prosperity.

But this favor for incorporating business enterprises has sur-

vived among us, in full force, after every condition of society which justified the practice has passed away. The feudal institutions were aristocratic; they divided society by rigid and arbitrary castes. The power of the feudal lord was a one-man-power, and it recognized no restrictions save those of existing charters. The commoner, if he met the baron single-handed, and outside of chartered protection, was absolutely at his mercy. The only hope of the commonalty was in combination, in the union of many weak hands into one corporation. But now, all this is totally changed. Feudalism has been dead in America for more than a century. All men are now legal equals, and each is a sovereign. The chief magistrate, in enforcing the law, acts directly upon individuals, and no longer upon fiefs. The law is in theory supreme, and every man is equal before it. The commonwealth itself is the all-comprehending guild, whose charter, the constitution of the state, should abundantly protect every citizen, whatever his interest or pursuit. Incorporation, once the only expedient of the weak as against the strong, is now too often the partial and usurping artifice of equals against their fellows—of the strong against the weak. Yet, after the whole ground for the prejudice and the usage has been reversed, they still continue in full force. Thus, out of this mediæval expedient of the commonalty is now rapidly growing a new aristocracy, armed by law with class-privileges and powers more odious than the feudal. Such is the blind conservatism which saves the shell while it loses the kernel.

A corporation is an artificial person, created by the law, usually of many individuals, and clothed by its charter with certain rights of personality, and with a continuity of existence outlasting the natural life of each of its members. Judge Marshall defined it as “an artificial being, invisible, intangible, and existing only in contemplation of law.” “A public corporation” is one which, like the municipal government of a town, is created for political functions. A “private corporation” is organized by the law, perhaps of many individuals, and yet mainly to pursue some end of personal gain belonging immediately to the members alone. Public corporations are essential to the execution in detail of the functions of justice and government; and although they may operate each one directly on but a part of

the citizens, yet they exist for the common purposes of all the people. Against them I have no word of caution or objection to utter. The thoughts which I propose to unfold are aimed only at private corporations, and only at the unnecessary creation of these.

There are only two cases under a republican constitution which offer any fair pretext for erecting private corporations with special privileges not common to all the citizens. One is that in which the work proposed requires more wealth than any one citizen or copartnership possesses. One man may not be found rich enough to build a long railroad. Yet such a road may be productive of wealth. The other case is that in which the enterprise, in order to be useful, must be continued under the same management longer than the lifetime of any citizen. Hence, it is argued, the law must create the artificial person, which collects into one treasury the wealth of many members, and which does not die when its projectors die, to carry through and perpetuate this costly and enduring work. The only other alternative, it is said, would be for the state to conduct all such enterprises herself, by the agency of multitudes of her officials, and thus to make herself at once the civil government and the universal business corporation. But the commonwealth which should undertake this, in a high material civilization, would become so all-engrossing as to be a gigantic tyranny to the citizens. It would, indeed, be clear of the error of conferring on associations of a part of the citizens' class-privileges; but this would be at the cost of engrossing to itself dangerous powers from all the citizens. The aggregate of functions thus thrown upon the government would be too heavy and multifarious for anything short of omniscience; and the aggregate of power and money would be too formidable to be entrusted to any hand but that of immutable rectitude. The huge machine would present opportunities for boundless mismanagement and speculation. The plan would convert a free government into a Chinese "paternal" despotism.

But if we concede these arguments, there is no reason why private corporations should be causelessly multiplied. At least, their privileges should be jealously limited to suitable cases; they should be made to resemble, as nearly as may be, business

copartnerships; and they should have no privileges different from those belonging to every citizen, save such as conduce to the public and general advantage.

We have now touched the prime motive for seeking corporate powers. Business men contemplating any industrial enterprise do not desire to bear the responsibilities of business copartnerships. According to the good old law of copartnerships, the partners were not only jointly, but severally, bound for all the debts of the firm. The creditors of the firm could not only exhaust the definite sums contributed to the firm by the partners, but could pursue the separate private estate of each partner until their debts were satisfied. Either partner, in signing the firm-name to an obligation, bound the firm and its other members. It is precisely these responsibilities which the petitioners for private corporations seek to evade. And the sophistical plea they advance for asking this immunity is, that the foresight of such a sweeping risk deters business men from useful adventures; that the commonwealth, as a whole, is interested in encouraging an active spirit of adventure, because the successful opening out of new industries will add to the common riches; that hence the laws should encourage adventure by giving private incorporation, which will enable business men to make the experiment by risking only their specified capital stock.

My position is, that this specious plea is *wholly unsound*, at least for existing American society. The spirit of industrial adventure *does not need stimulus* among us, but it needs prudent repression. The temper of our people is already over-adventurous. We are perfectly sure that every possible new adventure, promising increase of private or common wealth, will find men to pursue it vigorously; the private motives of ambition, love of excitement and desire of gain, ensure this. Does not experience testify that too many adventures are made, in experiments too uncertain and of too little reasonable promise, either of private or public reward? I repeat, no stimulus is called for in our day.

But all these industrial adventurers pursue these experiments, reasonably hopeful or foolishly rash, for their own private behoof. This is all they think of. The other vital fact in the question is, that the experiment *inevitably costs money*, some-

body's money, and usually a great deal of it. The money it has cost is actually consumed, and *somebody* is inexorably compelled to "pay the piper." Is there a mine to be developed, supposed to promise much wealth? Is a private corporation created to do it, consisting of ten members, each of whom only puts in as capital stock one thousand dollars? But by the adroit use of their credit they get the control of labor and other values to the amount of one hundred and fifty thousand dollars, which are all sunk in useless shafts and tunnels, and then the honorable corporators, after paying all *the corporation*, has ten thousand dollars of debt, wipe their mouths and announce the mine a total failure, and dissolve their corporate body into thin air. But now, values to the amount of one hundred and forty thousand dollars have been irrevocably consumed. Whose? The labor of honest working men; the timber, forage, and provisions of the neighboring farmers; the little patrimonies of orphans and widows, lent to the corporation as a safe investment on rash representations. *These* are the people who are made to pay the cost of the rash experiment, while the responsible experimenters go nearly free and retain all their private wealth, and while the honest losers would not have been allowed a mite of the direct profits of the minerals had the barren veins proved rich in them. This is a flagrant natural injustice. The men who devised the experiment for their own private advantage, who were guilty of the mismanagement, and who made the mistakes, these are the men who are justly bound to bear the whole risks and losses of these mistakes. The only showing of a pretext which saves the transaction from the just charge of robbery, is that such experiments on the whole redound to the common advantage and wealth, and that therefore the adventurers should be relieved of a part of their risk. But I have shown this assumption erroneous. The community is not interested to have such spirit of enterprise stimulated in this form. The measure does not result in the increase, but in the destruction of private and public wealth. It is these wasteful and costly experiments, unwisely and rashly made, because consciously made at other people's expense, which are devouring a large part of the honest and solid increase of wealth made by regular industries, and thus are retarding the progress of society.

Again: this sophistical pretext has only a showing of a fair application to business enterprises which are novel and untried. As to all the known and approved lines of industry, men ought to be able to know the reasonable expectations of risk and gain; and, if they attempt them, to do so with as good knowledge of the prospect of gain, as their other fellow-citizens have in their industries. If a man is personally ignorant of such established and known industry, what right has he to migrate into it? What right to demand that he shall be empowered to indulge his impertinence in assuming a business he does not understand, and has not fitted himself for, at his neighbor's expense? Here is a man who knows how to make shoes, and understands the risks, and the ways by which honest, moderate profits are made from leather. But his ambition, avarice, or laziness moves him to attempt woolen manufacture, of which he knows nothing, and which he has not taken the pains to learn. As a corporator, he can "play gentleman," instead of sticking to an honest last. So the law equips him with a private corporation, to enable him to make this experiment of playing gentleman at others' expense! I repeat: it is only when the industrial experiment which promises general advantage is untried and novel, that any color of pretext appears for relieving the adventurers themselves of any part of the risk. And then, the wise and equitable way would be for the state to pay the first adventurers a small *bounty*, taken out of the common treasury, to aid in the cost of the first trials. But we now see the invidious privileges of the private corporation granted for pursuing every familiar and ordinary line of business as old as society itself.

If this ill-advised species of legislation were reformed, and all men who wished to adventure their riches in the hope of acquiring other riches, were made to do so under the responsibilities of the old copartnership, we should see this change: men would much more regularly stick to the callings in which they had been reared, and in which they were qualified and entitled to succeed. There would be few adventures of the absurd and dishonest character now so common, made by men ignorant of the business into which they intrude, at the expense of men more honest, industrious and modest than themselves. There would be far less over-trading. There would be far less waste

of the earnings of remunerative industry in unwise experiments. The steady and wholesome increase of solid wealth would be much greater.

Corporate privileges can never be common *franchises*, belonging of right, and equally, to all citizens. They must ever remain of the nature of special grants; and hence, they can be equitably bestowed on favored persons only on special grounds, which constitute the petitioners for them in some sense exceptions from their fellow-citizens. The fair inference from these truths would seem to be, that the granting of such privileges should be the sovereign and the very careful act of the legislature alone. It should be regarded as a power too delicate and important to be delegated. The American States, in delegating this prerogative by some general law of incorporation, to an inferior agency—as nearly all the states have done—may plead that, in such action, they have merely devolved upon the lower department the ministerial function of arranging the *forms* of the corporation; while the principles of the general corporation law sovereignly determine the nature and conditions of the privileges allowed. So much may, however, be safely affirmed: that these sweeping expedients for facilitating incorporation are symptoms of an abuse of the usage by its undue and rash extension. Legislatures have seemed to think, that because their general laws of incorporation contained no express limitations; because they offered equal privileges, in seeming and in word, to any and every citizen desiring to incorporate, therefore they were not making class-legislation; therefore they were not chargeable with conferring special privileges on some citizens at the expense of their fellow-citizens. This view is entirely deceptive. No matter what equal right the law may seem to offer to all, all men cannot actually pursue all avocations. There must always be some branches of industry naturally unfitted to come under corporate management; while some are naturally adapted to gain advantage from this form of control. A private corporation may be extremely well suited to the management of a mammoth distillery, or woolen-factory, and utterly unfitted to the successful rearing of poultry and pigs. It is, therefore, a mockery to the farmer for the legislature to say to him: “The general law of incorporation is, in its letter, as

open to you as to the distiller. If you wish to enjoy its privileges, incorporate yourselves to rear pigs." Imperious circumstances have made it impossible for them to incorporate themselves successfully. Hence the incorporated distillers are, by this law, empowered to pursue their industry with special privileged advantages against their fellow-citizens, the farmers. This is essential injustice, under the guise of a nominal equality. Again, if the shrewd men who avail themselves of these corporate powers do not regard them as specially advantageous, why do they seek them, in preference to the old, fair copartnership? Evidently, then, they know that the condition of their making advantage of their corporate powers is this: that many of their fellow-citizens shall still pursue their industries unprotected by similar corporate powers. If the system of incorporated and privileged industries could be equitably universal, it would cease to be unfairly advantageous to anybody. If everybody could practically enjoy the system, then these shrewd men would cease to desire it for themselves. They would say: "Now it can do us no good, because all are again on one level." Thus, the obstinate truth still appears, that the customary legislation for private corporations is invidious class-legislation, anti-republican in tendency, however republican in seeming, and favorable to oligarchy in business, and ultimately in the state.

But these wholesome views have not prevented the states from vying with each other in general corporation laws, which throw wide open the gates, and make the acquisition of these privileges as easy as possible to the classes favored by circumstances. In Texas, any persons combining to pursue any legitimate industry may obtain corporate powers by certifying their pretensions, their capital stock, their names and by-laws, to the secretary of the commonwealth, and complying with certain rules of mere form. Thereupon it is the latter's duty, as a matter of course, to confer on these the full powers. In Virginia, the same law is in force, except that the official who incorporates is the judge of the circuit (district) court. In New York, two laws authorize the secretary of state to grant incorporation to any and every imaginable enterprise, except banking, whenever the petitioners certify him of the objects, duration, capital, and trustees of the proposed combination.

Thus, instead of maintaining any wise restrictions on private incorporations, we have them for everything, not only to build railroads, navigate ships, operate factories, educate the young, bury the dead; but corporations to carry parcels on the vehicles of these other corporations; corporations to spin, to make our clocks and watches, to peg shoes and to make a nail; corporations to fatten cattle on the "free grass" of other corporations; corporations to play Shylock; corporations to print bank notes for those other corporations; corporations to lock up the papers safely, which represent the fictitious wealth of sister-corporations.

Note the following among the actually existing corporations of the great State of New York:

"The American Bag-Loaning Company;" "The American Hotel-Directory Company" (to print directories for hotels); "The Ball Players' Publishing Company;" "The John Bauer Company," for dealing in *junk*! "The Empire Brewing Company;" "Electric Manufacturing and Miscellaneous Stock-Exchange Company;" "The Farmers' Milk Company;" "The Metropolitan Milking-Machine Company;" "Metropolitan Café Company" for carrying on an eating-house); "The Ready-Cooked-Food Company" (to provide hot dishes); "The Salamanca Embroidery Company," to embroider cloth; "The Horse Stealing Preventing Society;" "The Chautauqua Lake Camp-Meeting Company;" "The Gramercy Boat Club;" "The Citizens' Plate Glass Insurance Company;" "The Company to Prevent Extortion by Gas Companies."

Does not this list more than justify the exaggerated sarcasm of Dickens' description of the "Hot Muffin and Crumpet Baking and Ready Delivery Association," which Mr. Ralph Nickleby inaugurated so successfully with the help of the eloquent member of parliament, and which he manipulated so much to his own profit? This picture of our American extremes would be ludicrous, were it not alarming.

In arguing against the abuse, further, I note first a point which is least important—the costly and wasteful methods of production caused by private corporations, as compared with individual, responsible effort. I know that the boast of their advocates is just the opposite: That the association of the means of many

men enables a corporation to produce a given value more largely and methodically, and thus more economically; that "union is strength." The following plain question explodes this plausible claim: Why do these shrewd corporators, claiming to have capital and skill for a given production, so jealously shun the strength of that union which the old right of forming copartnerships would give them, and so eagerly prefer the private corporation? Obviously, because they know that they shall thus get more gain for their capital and skill, and throw on other people more of the risks and responsibilities of unlucky ventures. But somebody must "pay the piper." Of course, the people who deal with the private corporation must, on the whole, pay more than they would to a responsible copartnership. The public, after giving the corporate privileges, pay more for the service than it had paid before. Let us exemplify in some detail. Why does the money-lender so often prefer to lend as a member in an incorporated bank, rather than as a private citizen? Because he wishes to enjoy the experience and prudence of the bank to get him safe loans? But suppose this money-lender has gotten himself made director or cashier in this lending corporation, so that the prudence of the bank is no other than his own individual prudence? Now, why? Because the banking corporation can get more interest than private money-lenders. Why does the capitalist who actually puts in more than enough money to build and operate *one* of the largest factories, prefer to be a shareholder in a company which builds a whole town of factories? Because he aims not only to manufacture that class of fabrics, but to operate a monopoly in their sale. Here is a ship-owner, who has himself plenty of money to build and man the finest steamer, but he prefers to be *one* member of a "navigation company" which has a fleet of steamers plying between New York and Richmond. He designs to monopolize the coasting trade between the two ports, so as to charge exactly double freight for the same barrel of potatoes the day after a competing ship, belonging to an individual owner, ceased to run. (I speak that I do know.) But perhaps the most glaring plunder is that of the "express forwarding companies," private corporations chartered to do the duties of "common carriers" on the vehicles of other corporations, which have no other

title to existence than to be themselves "common carriers;" so that to say they are not competent to these duties is to confess themselves dishonest delinquents. A snug plan this, truly, to make the public pay twice over for one service. No wonder the express company divides fabulous dividends, rears palaces in our trading towns, parades its cohorts of fat horses and officials! What is the exalted function which is so magnificently rewarded? Only that which was performed for our forefathers, by simple wagoners and sturdy shipmasters.

That the means employed by private corporations are promotive of wasteful, and not of economical production, is proved by their employing in a thousand ways more lavish methods than individual producers ever do. The administration is on a scale of gigantic waste. Does the rich private capitalist, carrying his own risks and responsibilities, ever pay his steward or head clerk \$25,000 salary? the rate of a modern railroad president! Why is it that all the salaries paid by the corporations are higher than those paid for similar services by wise individuals, from the highest to the lowest? The steward of the company gets his \$25,000, while the steward of the most gigantic private business gets perhaps his \$3,500. The mere laborer gets his \$1.50 *per diem* for the same species of manual labor for which the most thrifty farmer can give only fifty cents. The answer is clear: the monopolist power which the incorporation confers enables them to rake together masses of money, at the expense of other industries, which beget prodigality and waste in administration.

I shall be reminded that this age, so marked by the multitude of private corporations, is also the age of cheapened productions. The reconciliation of this with my conclusion is in this truth. The marvellous applications of beneficent science to the work of production have indeed cheapened many values to a great degree. But the contrary influence of the corporations has, in most cases, *intercepted the benefit* of this cheapened production, in whole or in part, and prevented the people from enjoying the advantage to the degree to which they are entitled. It is applied science which has provided economical production for us; it is the private corporations which have prevented a part of the results. Besides, the cheapening of production

turns out to be after all partial and deceptive. The corporations do give us some things astonishingly cheap, partly by making them in what Carlyle called the "cheap and nasty way." And yet, they do not give us, on the whole, cheaper living. They give us a yard of flimsy calico for five cents, but it costs more to dress a girl a year, than when French chintz sold for seventy-five cents. The mortising machine gives us a cheaper panel door, or slat blind, yet it costs much more to build a given house than before there were mortising machines.

Second: I advance to a more weighty argument, "*Money is power.*" It used to be a maxim of political science, that "*where power is, thither power tends.*" As long as the love of power is native to man's heart, this centripetal tendency must exist. Jefferson taught that, in order that republican equality of political rights may continue, no excessive differences of wealth must arise. Hence, he felt it necessary to abolish in Virginia all rights of primogeniture; so that when special energy and skill should have gathered a large mass of wealth into one hand, parental love should usually ensure its division at the holder's death, and thus its redistribution. But we undo his work by creating corporations which never die, but which continue from generation to generation to grasp wealth with all the greed of the "robber-baron," and to hold it perpetually in *mortua manu*, with all the tenacity of that baron's descendants with their law of entails. We create an aristocracy of active capital, furnished with trains of drilled retainers, far more dangerous to the common liberties than a landed aristocracy. Must not the natural arrogance of wealth suggest the lust for more power? It is for the gratification of this desire for more gainful organization and more monopolies, that they first enter the arena of political manœuvre. Success in this will in due time suggest the desire for more direct political power. The experience of the American States with these creatures of their legislation has just passed through the first stage and is approaching the next. The seniors among us can remember how a moneyed corporation in Philadelphia, the creature of the United States, once challenged the whole force of the United States government, and almost came off conqueror. It is now the stale jest of some capitals, that their legislatures meet mainly to register the edicts of railroad

presidents. In Maryland, there is a corporation whose revenues far exceed those of the sovereign commonwealth, and which commands an army of trained officials so much more numerous, that the state's servants are but a squad before them. And, for a reason to be explained anon, corporations will always incline to employ means much more corrupt than private men would venture, to seduce legislators to bestow further favors. The eager craving of the age is for equality before the law. The people are taking the surest plan for disappointing their own desires, through the growth, out of these corporations, of oligarchies more oppressive than the feudal aristocracies they have overthrown. We have made our forms of government extremely democratic; and this epoch of democracy witnesses the creation of the new oligarchies. So "extremes meet." The peril is illustrated by this fact, that monopolists and victims are alike so devoted to material good, that they join in flouting the counsel which would have us forego any of these supposed means of enrichment, for the sake of sound morality and political safety, as a silly crotchet. The sufficient answer is, Who expects the American people to forego the readier means of *making money*, for your "political abstraction"?

I urge, third, that the forms of industry promoted by the powerful corporations tend to undermine the domestic and personal independence of the yeomanry. The associated means of production supplant the individual, the products of the older and more independent forms of industry retreat before those of the corporations. The time was when manufactures were literally "domestic," the occupations of the people in their homes. The producing yeoman was a "free-holder," a person whose vital significance to British liberty our times have almost forgotten. He dwelt and labored under his own roof-tree. He was his own man, the free-holder of the homestead where his productions were created by the skill and toil of himself and his family and servants. Now all this is changed. The wheel and the loom are no longer heard in the home. Vast factories, owned by corporations, for whose governors the cant of the age has already found their appropriate name as "kings of industry," now undersell the home products everywhere. The axe and the hoe which the husbandman wields, once made at the country forge,

the shoe upon his mule's feet, the plough with which he turns the soil, the very helve of his implement, all come from the factory. The housewife's industry in brewing her own yeast can hardly survive, but is supplanted by some "incorporated" "baking powder," in which chemical adulteration may have full play. Thus the centralization of capital leads at once to the centralization and degradation of population. The free-holding yeoman citizen is sunk into the multitudinous mass of the proletariat, dependent on the corporation for his work, his wages, his cottage, his kitchen garden, and privilege of buying the provisions for his family. In place of the freeman's domestic independence, he now has the corrupting and doubtful resource of the "labor union" and the "strike." His wife and children are dragged from the retirement of a true home into the foul and degrading publicity of the festering manufacturing village, the "negro-quarter" of white wage-slaves, stripped of the overseer's wholesome police and the master's and mistress' benevolent oversight. Thus conditions of social organization are again produced more incompatible than feudalism with republican institutions.

The fourth, and chief argument against our system is found in its influence on the virtue of the people. Every one remarks on the alarming relaxation of business and political morals. But unless we can refute the testimony of not only Washington, but of Moses, David and Solomon, correct morals are the very foundation of public safety, and this unfashionable, homely, and simple old truth must stubbornly hold its place, notwithstanding nineteenth century smartness. I shall show that the species of legislation I criticise furnishes the occasion for much of the corruption which all sensible men dread.

1. One evil begins at the very inception of the legislation. It puts it into the power of legislators to pass, and of suitors to urge, enactments directly affecting individual, pecuniary interests. By this system the legislator, whose only rightful business is the equitable protection of the *moral rights of all citizens*, is invited and enabled to use the sacred power of the commonwealth to vote money indirectly out of the pockets of one citizen into those of another. Disastrous invention! Every prudent statesman has recognized the peril and the evil of such political

action as suggests, even to the citizens, the habit of looking to the action of the government for any pecuniary personal advantage, instead of looking to it for the just and equal defence and regulation of the independent, manly exertions of each citizen for himself. Whatever may be the direct object of the legislation, which contains, like the tariff laws, this ill-starred suggestion, it forms a weighty objection to it. It is an unwholesome day for the virtue of a people, when they learn to look to that government for partial pecuniary advantage, whose only legitimate action is the equitable guardianship of all. And this is especially the tendency of our unrestricted legislation for private corporation. The petitioner goes to the legislature of his country with an unfair motive. Hence immediately the temptation to apply to the legislator some improper motive. Let me repeat the short demonstration: Here is a group of men who desire to combine their means for the pursuit of some known and customary business. There is the old, fair and honest way of *copartnership*, with the effective strength arising out of close union, and its just responsibilities. Why do these men put the legislature to the trouble of making them a corporation? Of course it is because they expect thereby to acquire some additional and partial advantage over their fellow-citizens with whom they propose to deal. These advantages having a money value, of course it becomes natural to think of paying money for them. Here the poisoned fountain is opened for the corruption of the law-makers themselves.

2. It is an urgent point of moral interest to the commonwealth, that as few business functions as possible be entrusted to corporations, especially of those functions which enter into the ordinary traffic and production of the people, because "corporations have no soul." Sir Edward Coke uttered this in one sense; sensible men have now universally learned to take it in another. Corporations are too often deficient in that prime attribute of rational souls, *conscience*. And the formidable feature of this fact is, that it is the result of regular and efficient moral causes. The legal personality of the corporation is artificial; what more natural than that its attributes should be artificial? Moral responsibility can only exist as an *individual* thing, binding the separate, single soul, by its own

immediate obligation, to its Divine Ruler. When the agent is an association, the sense of responsibility is so diminished by being divided out among numbers, that it comes to be lightly felt by each member. In point of fact, we see all men yield, in some degree, to this illusion, except the few who have kept a thoroughly enlightened and unbending conscience. Average men will not usually feel as immediate responsibility for their associated acts, as for their individual acts. The world is full of instances; no further illustration is needed.

Again, few appreciate the plausibility of the influence against just action, arising out of this feature of business associations, that they usually deposit the ruling responsibility in one place, and the executive agency in another place. The orders emanate from the directory, in the great city. The execution is by the hands of hired officials, away in the country. These officials are *inclined, by their very honesty*, to execute the orders of the heads of the corporation with unquestioning punctuality. The ordinary logic of the faithful official is: "I have nothing to do with directing the action of the corporation; I am not the least responsible for the moral character of it. I have covenanted, in consideration of my salary, to execute orders. I have no business with criticising their moral propriety as long as I hold my office." Thus, this official has become as mere a tool as the common soldier in a standing army. But the directory also persuade themselves that their fidelity should be in studying exclusively the interests of their association. The individual injustices they order are executed far away, and by other and inferior hands; they do not pique the consciences of the directors, not being seen.

Let us view a plain instance. Here is an honest and faithful station agent. A valuable package has been lost by his railroad, or a neighboring widow's only cow has been injured by a train. The claim for damages is presented to him as the only accessible representative of the corporation on the spot. The good man reaches down from a pigeon-hole a list of the corporation's rules, and reads to the aggrieved claimant this: "The company, considering that it has been imposed on in the levying of claims for damages, instructs all agents to resist such claims in future, until enforced by process of law." And then, his comment is

this: "No doubt, respected madam, your case is just, but you see, *I have my orders.*" Now if this were an individual transaction, would this decent man resist a claim after he had conceded its justice, and wantonly put the injured claimant to the additional costs of a suit? He would be ashamed to do it. But now, he is the tool of a corporation. "He has his orders." And if the lordly directory are asked why they enforce a rule which works this individual injustice, they answer: "It is our duty to study the general interest of the stockholders." Thus conscience is bandied backwards and forwards between employers and employed, until it is tossed clean out of the business, and the traffic of the great corporation becomes as heartless as that of a dead machine.

Hence, I repeat, it is important for the maintenance of the public conscience, that as little as possible of the ordinary traffic of society be conducted by corporate agencies, and as much as possible by individuals or copartnerships, under their wholesome, personal responsibilities. But private corporations have been so heedlessly multiplied, that now, many things have ceased to be done by men in their individual capacities. Do you wish a parcel carried by land or sea? It is not done for you by any individual ship-master or carrier, acting under the restraints of a personal conscience, but by an "Express Company" or "Navigation Company." Do you need shoes? You do not get them from the shop of a cordwainer, but from some "Shoe Company." Or a handful of nails? An "Iron Company" is invoked to produce them. Do you wish your person transported? You commit it to a "Railroad Company." Are you fearful that they may break your neck? You secure an insurance from an "Accident Insurance Company." Lo we go to the end, when our heirs secure a grave for us from an incorporated "Cemetery Company."

3. The creating of private corporations for transacting the current business of society is exceedingly unfavorable to morality, because these associations so multiply the chances for secret fraud. In illustrating this point, I have but to refer the intelligent reader to the unfathomable tricks of the stock-boards and of Wall street. "The mystery of iniquity doth already work." Is not this, in plain English, the recognized prudence of the

speculator in these markets: that he shall believe nothing which is told him by other dealers; that he shall take it for granted they always have a concealed design in making whatever representations they profess to give the public; that he shall construct his argument as to what is the prudent thing for him to do by inferring what is his adversary's secret trick? Does not every lawyer know that it is vain to endeavor to ascertain the actual solvency of a corporation even by inspecting its records? They let him see just so much as tends to mislead him. Who has not heard of the illustrious invention of "watering stocks"; or of the ways that are dark of sending out the human jackals to "bear" the stocks the capitalist wishes to buy, or to "bull" the sinking bonds he is anxious to sell; of managing the works of the corporation so as to announce lean dividends when the "operators in the ring" wish to buy the stock, and of flaunting before the public fat dividends when they wish to sell; of buying largely on credit from honest merchants, and selling largely for cash, dividing out the proceeds of the sales as dividends; so that when pay-day comes, the creditors find only a dead corporation with no assets, while the members of yesterday walk abroad to-day rich private citizens, secure from the righteous claims of the men they have plundered? By all these arts the large stockholders in the directory victimize the small holders and the creditors of corporations almost at their will. "The big fish continually eat up the little ones." The whole system tends "to make the rich richer, and the poor poorer," thus producing a condition among the people most incompatible with permanent republicanism.

I have been speaking of the *tendencies* of this legislation. I make no sweeping attack upon the personal character of the members, directors, and officers of these corporations. Many of these have been men of the noblest public spirit, of blameless integrity. Their action has been a help and support to their constituents. Their faithful exercise of the trusts with which the law has charged them has been the chief influence commending a vicious system, for whose errors they themselves were not responsible to the confidence of their fellow-citizens. In criticizing the dangerous *tendencies* of the system, and the sins of its unworthy members, I would not detract anything from the fair credit of such men.

Yet the crowning objection to the prevalent system is that its tendencies are unfavorable to the virtue of society. This is not the only occasion of that tide of dishonesty which threatens to undermine our civilization; but it is one occasion which the people can ill afford to tolerate when the other conspiring causes are so influential.

The history of Federal institutions presents us with one more commentary on the tendencies of private corporations, which should be peculiarly instructive to Southern statesmen. We have been taught by the fathers of the constitution that the centralization of political power is adverse to the liberty of the people, of which the due independence of the several states in the exercise of their reserved rights is the only earthly bulwark. But manifestly these incorporations have been promotive of political centralization. The first wrench which perverted the constitution and the action of the Federal Government from that equitable model designed by the fathers, was the assumption by Congress of power to create a banking corporation within the domain of a sovereign State, as the debate on this measure was the beginning of that undying contest between the party of reserved rights and liberty, and the party of centralization and despotism, which was never appeased until it ended in the wreck of the constitution itself. The next great constitutional struggle was against the protective system, but this is grounded in the same principles of class legislation and partial advantage, and it has always been closely wedded to corporations. They are twin sisters. But for the influence of private corporations on the affairs of the United States the revolution of 1861-'5 would never have been attempted, and without the congenial aid of these associations the aggressive party would have found the South unconquerable in its defence of the constitution and the freedom of the people.

INDUCTIVE LOGIC DISCUSSED.¹

I.

WHAT IS INDUCTIVE DEMONSTRATION?

THE terms deduction, induction, are very currently used, and they seem to be regarded as signifying two contrasted methods of ascertaining truths. The description usually given in popular statements is, that while deduction is the drawing down of an inference from a more general truth, induction is the leading in of a general truth from individual facts. There has doubtless been much bandying of the terms, which was not more intelligent than the word-play with that other pair of ambiguous terms, "analysis and synthesis." It is customary to say that Aristotle first examined and formulated the deductive logic or syllogism, and Bacon the inductive method. While almost entire barrenness is imputed to the syllogism, the glory of great fruit and utility is claimed for the induction. Some, indeed, are perspicacious enough to see that neither Aristotle nor Bacon was the inventor of the one or the other method of reasoning, any more than the first anatomists of human limbs were the inventors of walking. Nature has enabled men to walk, and ensured their doing so, with at least imperfect accuracy, by fashioning the parts of their limbs, nerves, bones, tendons, and muscles. The anatomist has only described what he found in the limbs by his dissecting knife. Men virtually syllogized before Aristotle, and found inductive truths before Bacon. Yet even these more accurate historians seem to think that the two are opposite methods of logical progression.

These vague opinions of what induction is, are obviously unsafe. They lead to much invalid and even perilous reasoning. No stronger testimony against the unauthorized character of much that now calls itself physical science, under the cover of sophistical inductions, need be cited than that of J. Stuart Mill.²

¹ A series of articles which appeared in *The Southern Presbyterian Review*, for January, July, and October, 1883.

² *Logic*, Vol. I., pp. 480, 481, 7th Edit., London, 1868.

“So real and practical is the need of a test for induction, similar to the syllogistic test of ratiocination, that inferences which bid defiance to the most elementary notions of inductive logic are put forth without misgiving by persons eminent in physical science, as soon as they are off the ground on which they are familiar with the facts, and not reduced to judge only by the arguments; and as for educated persons in general, it may be doubted if they are better judges of a good or bad induction than they were before Bacon wrote. . . . While the thoughts of mankind have on many subjects worked themselves practically right, the thinking power remains as weak as ever; and on all subjects on which the facts which would check the result are not accessible, as in what relates to the invisible world, and even, as has been seen lately, to the visible world of the planetary regions, men of the greatest scientific acquirements argue as pitifully as the merest ignoramus.” In these days, when the followers of physical research so often imagine the theologians to be in an active state of hostility against them and their sciences, it is well that we have this accusation from one as remote as possible from alliance with theology. This able witness proves at least so much: that every beam of light which can be thrown on the true nature of the inductive logic, though slender, is desirable; and will be useful both to purify the sciences of matter and to reconcile the conflict, if any such exists, between them and philosophy and theology.

We propose first to account for the vagueness which Mr. Mill has noted in the applications of this species of reasoning, by briefly displaying the uncertainties and discrepancies existing among the logicians who have professed to treat of it. The modern admirers and expounders of Aristotle are found to deny that he did overlook the inductive method, and confine himself to the syllogistic; they claim that he formulated the one as really, if not as fully, as the other. But when they proceed to exhibit what they suppose to be the Aristotelian form of induction, they are not agreed. Thus, Grote's *Aristotle* (Vol. I., p. 268, etc., Murray, London) interprets him thus: “In syllogism as hitherto described, we concluded that A the major was predicable of C the minor, through B the middle. In the syllogism from induc-

tion we begin by affirming that A the major is predicable of C the minor; next we affirm that B the middle is also predicable of C the minor. The two premises, standing thus, correspond to the third figure of the syllogism (as explained in the preceding pages), and would not, therefore, justify anything more by themselves than a *particular* affirmative conclusion. But we reinforce them by introducing an extraneous assumption that the minor C is coëxtensive with the middle B, and comprises the entire aggregate of individuals of which B is the universal, or class term." The instance Mr. Grote gives from Aristotle to explain the above is:

(1), Horse, mule, etc., etc., are long-lived.

(2), Horse, mule, etc., etc., are bileless.

(3), (Extraneous assumption.) The horse, mule, etc., etc., comprehend all the bileless animals—

(4), (Conclusion.) Hence, all bileless animals are long-lived.

Now, it is obvious to remark on this: that without the extraneous assumption the fourth proposition would not hold good as a universal truth. The third proposition, or extraneous assumption, then, is not an accessory, but an essential part of the logical process. But if Aristotle correctly defined syllogism as a process including the proof and conclusion in three terms and three propositions, this inductive process here supposed, whether valid or invalid, is not syllogism. A still more formidable question remains: How do we see that the extraneous assumption is warrantable? Are we entitled to assume that horse, mule, etc., etc. (an incomplete enumeration), do contain all the bileless animals? Evidently, nothing contained in this formula authorizes us. The process, then, as a proof of a general proposition, is inconclusive. It does not give us the form of a valid inductive proof, and is not the correct analysis of that mental process.

But Mr. Grote himself states that the prior commentators on Aristotle understand him differently. Thus—

(1), All horse, mule, etc., etc., is long-lived.

(2), All bileless is horse, mule, etc., etc.

(3), *Ergo*, all bileless is long-lived.

But Mr. Grote correctly remarks that, while, in form, this comes correctly under the first figure, it manifestly leaves the second proposition unwarranted, and authorizes no universal

conclusion. He also quotes M. Barthélemy St. Hilaire as explaining Aristotle thus: "Induction is, at bottom, but a syllogism, whose minor and middle are of equal extension. For the rest, there is but one sole way in which the minor and middle can be of equal extension: this is, that the minor shall be composed of *all* the individuals whose sum the middle represents. On the one part, *all* the individuals; on the other, the whole species which they form. The mind very readily makes the equation between these two equal terms." M. St. Hilaire is right, so far that, if this is the Aristotelian induction, it is perfectly valid. But it is equally clear that it is perfectly worthless, as we shall prove by the authority of Galileo. If we must ascertain the predicate to be true of each separate individual of the class, by a separate proof, before we can affirm that predicate of the class as a whole, then our general affirmation is certainly a safe one. But it can certainly teach us nothing, and authorize no progress in knowledge, because we have already learned in detail all it states, in our examination of the individuals. So Galileo. "Vincentio di Grazia objected to a proof from induction which Galileo adduced, because *all* the particulars were not enumerated. To which the latter justly replied that if induction were required to pass through all the cases, it would be either useless or impossible: impossible when the cases are innumerable; useless when they have each already been verified; since, then, the general proposition adds nothing to our knowledge." (Quoted in Whewell's *Inductive Sciences*, Vol. II., p. 219.)

Whewell himself explains Aristotle after that general method of the commentators which Grote reprehends. Thus the former: "Induction is when, by means of one extreme term, we infer the other extreme term to be true of the middle term." This Whewell explains thus:

- (1), Mercury, Venus, Mars describe ellipses about the sun.
- (2), All planets do what Mercury, Venus, Mars do.
- (3), *Ergo*, all planets describe ellipses about the sun. (*Inductive Sciences*, Vol. II., p. 50.)

Again, we repeat, in our anxiety to have the reader see the real weak point in all these theories of induction, the fatal defect is in the second proposition. What authorizes us to say

that all planets do as Mercury, Venus, Mars do? The theory of these authors gives us no answer; the assertion is not authorized; and the process, as a proof, is worthless.

Ueberweg (*Hist. of Phil.*, Vol. I., p. 156) represents Aristotle thus: "In induction (*ἐπαγωγή, ὃ ἐξ ἐπαγωγῆς συλλογισμός*) we conclude from the observation that a more general concept includes (several or) all of the individuals included under another concept of inferior extension, that the former concept is a predicate of the latter. (*Analyt. Prior*, II., 23.) Induction leads from the particular to the universal. (*ἀπὸ τῶν καθέλαστα ἐπὶ τὰ καθόλου ἔφοδος. Topics*, I., 10.) The term *ἐπαγωγή*, for induction, suggests the ranging of particular cases together in files, like troops. The complete induction, according to Aristotle, is the only strictly scientific induction. The incomplete induction which, with a syllogism subjoined, constitutes the analogical inference (*παράδειγμα*), is principally of use to the orator."

We pass now from the Stagyrite logic to the method of Lord Bacon, which it is customary to represent as its antithesis. Bacon's claim to be the founder of modern physical science has been both asserted and contested. The verdict of Mill seems to be just: that he does deserve great credit, not so much for giving the real analysis of the inductive method as for pointing us to the quarter where it lies. The very title of his *Novum Organum*, "Concerning the Interpretation of Nature," struck the correct key-note. The problem of all science, mental as well as physical (and it is to be noted that Bacon claims, Book I., Aphorism 127, that his method is as applicable to mental and moral sciences as to material), is to interpret the facts given us by nature. The right method was doubtless pointed out when Bacon told the world, in the beginning of his *Novum Organum*, that instead of assuming general propositions, and then audaciously deducing from them, by syllogism, what causes and facts shall be, we are to begin in the opposite way, by the humble, patient, and accurate observation of facts, and then proceed, by legitimate inductions, to general and more general propositions concerning nature's laws.

Bacon says, Book II., Aphorism 1, that as the work and design of human power is to induce upon a given body a new property or properties, so the work and design of human science is to dis-

cover the "form" of a given property. The whole tenor of his discussion shows that by "*natura*" he means any permanent property of a concrete individual thing. He himself has defined the sense in which he uses the word "form," with a clearness which admits of no debate. Thus, Book II., Aphorism 17: "For when we speak of *forms*, we mean nothing else than those laws and determinations of pure activity which regulate and constitute some simple property (*naturam simplicem*), as caloric, light, weight, in every material thing and subject susceptible thereof." He admits that the old philosophy rightly declared, "*to know a thing truly is to know it through its causes.*" These causes Aristotle had distinguished into four—the material cause, the formal cause, the efficient cause, and the final cause. In the investigation of nature, the inquiry after the final cause is out of place. He teaches elsewhere that it belongs to philosophy and natural theology. He also turns aside from inquiry into the material and the efficient causes in their abstract senses. The problem of induction is to ascertain the regular law of the formal cause.

The directions for the interpretation of nature fall, then, under two general classes. The first show us how to derive general truths from experience; the second direct us how to apply these general truths to new experiments, which may further reveal nature. To deduce a general truth from experience, individual observations, there is, first, a task for the senses, that of accurate, distinct observation of the individual facts of natural history; there is then a task for the memory, the tabulating of coördinate instances; and there is then the task of the intellect or reason, the real induction, which is the detection, among all the resembling and differing instances, of the universal law of cause. It is the last task in which the mind must have the aid of the proper canons of induction, by all attainable comparisons. Thus: let a muster, or array, be made of all the known individual instances in which the property which is the subject of inquiry is present. Then let another array be made of the known instances in which that property is absent. Then let another array be made of the known instances in which the property is present, increased or diminished. When these sets of cases or arrays are carefully pondered and compared, the law (*forma*) of the property will begin to reveal itself by this principle: that

whatever is always present with that property, or always absent when it is absent, or is found increased or diminished with it—that is the cause of the property. This inductive process is then illustrated at tedious length by an application to the inquiry, What is heat? First, a list is made of all known individual things in nature which exhibit heat, as solar rays, combusive masses, fermenting masses, quick-lime moistened, animal bodies, etc., etc. Then a list is made of bodies which exhibit no caloric, as the fixed stars, the moon, etc. Then lists are formed of objects more or less warm; and the *vindemiatio*, or induction to the true *forma*, or law of caloric, may be cautiously made. This is, that “*Caloric is an expansive motion*, repressed and striving in the lesser parts of the warm body.” (Book II., Aph. 18.) This first *vindemiatio* is then to be tested and confirmed by considering a number of *prerogativai instances*, which are particular instances presenting the property under such circumstances as give them the prerogative of determining the law of the property. Of such instances, twenty-five are enumerated! and with a refinement and intricacy of distinction which must be utterly confusing to a practical investigator.

The disparaging verdict which Mill pronounces upon this technical part of the Baconian *Organum*, must be admitted to be just. Yet it should be mitigated by the fact that, cumbersome as the proposed canon is, it seems to have led Bacon, centuries in advance of his age, in the direction of the latest theory as to what caloric is. That theory now is, that caloric is a mode of molecular motion. Bacon’s conclusion was that it is “the striving of an expansive but restrained motion in the lesser parts of a body!” His method was not mere groping: it foreshadowed an imperfect truth. In the light of fuller inquiries, Bacon’s errors seem to have been these: that his contempt for the abstract in metaphysics led him to neglect the fundamental notion of *power in the efficient cause*, discriminating it so vitally from the material, formal, and final causes, and thus to depreciate the inquiry into efficient cause; that he had not pondered and settled this other truth of metaphysics, the relation between power and properties in individual things; and that he applied his induction, in his favorite examples, to detect the *forma*, or law of a property, instead of the *laws of effects*. It is the latter inquiry

in which inductive science is really concerned, and the solution of which extends man's powers over nature. The thing we wish inductive philosophy to teach us is, how may we be sure to produce, in the future, a given desired *effect*, which has been known in the past?

The illustrious Newton, who did more than any other to throw lustre on the new method by its successful application, presents us, in his four rules (*Principia*, 3d Book), a substantive advance upon the rude beginnings of Bacon. These rules are far from being exhaustive; nor are they stated in an analytic order, but they are the sound dictates of the author's experience and profound sagacity.

"1. We are not to admit other causes of natural things than such as both are true (not merely imaginary) and suffice for explaining their phenomena.

"2. Natural effects of the same kind are to be referred to the same causes, as far as can be done.

"3. The qualities of bodies which cannot be increased or diminished in intensity, and which belong to all bodies in which we can institute experiments, are to be held for qualities of all bodies whatever.

"4. In experimental philosophy, propositions collected from *phenomena* by induction are to be held as true, either accurately or approximately, notwithstanding contrary hypotheses, till other phenomena occur, by which they may be rendered either more accurate or liable to exception."

Sir William Hamilton, in his *Logic*, Lecture 17th, describes his "inductive categorical syllogism" as "a reasoning in which we argue from the notion of all the constituent parts discretively, to the notion of the constituted whole collectively. Its general laws are identical with those of the deductive categorical syllogism; and it may be expressed, in like manner, either in the form of an intensive or of an extensive syllogism." This he calls "logical or formal induction." The process is precisely that which we have seen described by St. Hilaire: When a given predication has been found true of every individual of a class, it is also true of the class as a whole. This is unquestionably true; but as unquestionably useless, as we have seen from the statement of Galileo. It gives us only a truism, and no new truth.

But Hamilton proceeds to distinguish from this what he calls the "philosophical or real induction," in which the argument is not from all of the individuals in a class to the class as a whole; but from a part of the individuals to the whole. He says that the validity which this induction may have, is not from the logical law of identity, but from a certain presumption of the objective philosopher, founded on the constancy of nature. This species of induction proceeds thus:

(1), This, that, and the other magnet, attract iron.

(2), But this, that, and the other magnet, represent all magnets.

(3), *Ergo*, all magnets attract iron.

This doctrine he again enlarges in his 32nd Lecture, where he treats of modified logic, and deals with the "real or philosophical induction" expressly. He again makes it an inference from the many to the all. To the soundness of such an induction two things are requisite: that the cases colligated shall be of the same quality, and that they shall be of a number competent to ground the inference. But to the question, How many like cases are competent? he has no answer. This species of induction, he admits, cannot give a categorical conclusion. It only raises a probability of truth, and leaves the conclusion a mere hypothesis, sustained by more or less of likelihood. That likelihood is, indeed, increased as a larger number of cases is compared, as the observation and comparison are made more accurate, as the agreement of cases is clear and precise, and as the existence of possible exceptions becomes less probable after thorough exploration. Hamilton concludes by quoting with approbation these words from Esser's *Logic*: "Induction and analogy guarantee no perfect certainty, but only a high degree of probability."

The objection against the Aristotelian syllogism of induction, which we urged on pages 351 and 352, had been stated by Archbishop Whately. Let it be put thus:

(1), This, that, and the other magnet, attract iron.

(2), But this, that, and the other magnet, etc., are conceived to constitute the genus magnet.

(3), *Ergo*, the genus magnet attracts iron.

Whately's objection is, that *the second proposition is mani-*

festly false. Hamilton pronounces this, which appears to us a fatal, "a very superficial objection." His reason is, that it is extra-logical; that logic is a formal science only; and that hence the correctness of its forms is not vitiated by the circumstance that some proposition expressed in them and correctly connected, so far as these forms go, with other propositions, is in fact untrue, and that the imaginary propositions with which the text-books of logic illustrate the logical forms answer just as well, whether they be really true or not. Hamilton is here clearly misled by a confusion of thought. Because an imaginary, or even a silly, proposition may serve to illustrate a rule of logic, when that rule is the subject of inquiry, it does not follow that, when the ascertainment of other truth by the use of the rules of logic is our object, that can be a good logic whose framework always and necessarily involves a false proposition. Blank cartridges may serve very well for the purposes of an artillery drill; it by no means follows that blank cartridges are adequate for actual artillery practice in war. Such artillery would be practically no artillery; for it would repulse absolutely no enemy. And such logic would be practically no logic. Logic is a formal science. True. But it professes to give the general forms of elenctic thought, by which the truth of the propositions of all other sciences, besides logic, may be ascertained. Hence, if it proposes to us a given form of thought which is always and necessarily invalid in every real science to which logic offers its method, that form is incorrect as a logical form. We affirm Whately's objection, then, in order to call the reader's attention again to the fatal weak spot in these theories of induction.

What, then, is Whately's own explanation of the inductive syllogism? See his *Logic*, Book IV., Chap. I. He begins by justly distinguishing two uses of the word induction, which are entirely different. The one process is not a process of argument to the conclusion, but is wholly preliminary thereto, the *ἐπαγωγή*, or bringing in of like instances; the collecting process; and this is, in fact, nearer to the literal meaning of the word. The other process called induction, is the argumentative one, leading in the conclusion, as to the whole class, from the instances. Now, of this logical induction, Whately remarks that, instead of being different from the syllogistic, it is the same with

it. And, indeed, unless we assert its sameness, we must give up the theory of the syllogism; for that theory is, that syllogism expresses the one form in which the mind performs every valid reasoning step. The logical induction is, then, says Whately, a syllogism in the first mode and figure, with its major premise suppressed. That suppressed major is always substantially the same in all logical inductions: *that what belongs to the individual cases observed, belongs to their whole class*. The induction by which we predict, in advance of individual examination, that all magnets will attract iron, would then stand thus, according to Whately:

(1), What belongs to the observed magnets, belongs to all magnets.

(2), But these observed magnets attract iron.

(3), *Ergo*, all magnets attract iron.

Now the reader will observe that Whately's process only inverts the order of the first two propositions in Hamilton's. For Whately's first is only a different way of expressing Hamilton's second: that

(2), "This, that, and the other magnet, represent all magnets."

The order of propositions given by Whately seems obviously the simple and correct one. But the difficulty he had propounded as to the Aristotelian form of the induction, recurs as to his: How have we ascertained our major premise, that what belongs to the observed magnets belongs to the whole class? Are we entitled to hold it as a universal truth? The same difficulty virtually meets Whately. It is amusing to find him attempting to parry this fatal difficulty in a way similar to that which Hamilton uses to parry him: "Induction, therefore, so far forth as it is an *argument*, may, of course, be stated syllogistically; but so far forth as it is a *process of inquiry*, with a view to obtain the premises of that argument, it is, of course, out of the province of logic." The evasion is as vain for Whately as it was for Hamilton. For that universal major premise, namely, that what belongs to the observed individual cases belongs to the whole class, can no more be the immediate non-logical result of a mere colligation of cases, than the conclusion itself of the inductive syllogism can be. Whately has himself admitted that if a premise used in a syllogism

now in hand was a conclusion of any previous reasoning process, then our logic must concern itself about that premise also, and the mode by which we get it, as well as about the form of its relations to the other propositions in our present syllogism. Now, the universal major he claims, is not the mere expression of an extra-logical colligation—that is self-evident. Unless it is an original intuition, it must be the conclusion of a prior logical process. What is that process? Is this universal major valid? Whately gives us no sufficient answer; and thus his theory of inductive argument fails like the others. Yet, it presents us, as we shall see, one step in advance of the others, towards the right direction.

Dr. Whewell deserves mention also, by reason of his wide learning, extending into the domains of physics and metaphysics, and his authorship of a work, once a standard, devoted to this very subject. This is his *Philosophy of the Inductive Sciences*. His view of induction may be seen in these citations (Vol. I., p. 22): Where “truths are obtained by beginning from observation of external things, and by finding some notion in which the things, as observed, agree, the truths are said to be obtained by induction.” Contrasting deduction with induction, he says, “Deductive truths are the results of relations among *our thoughts*. Inductive truths are relations which we perceive among existing *things*.” And of the deductive process he thinks the geometrical demonstrations the best examples.

Now, the insufficiency of these descriptions is obvious from these remarks. Lines, angles, surfaces, solids, in geometry, are as truly *things* as any observed phenomena or effects in physics. Thus the distinction wholly fails. Again, Whewell has combined, in his description of induction, two processes of mind which are wholly distinct, and only one of which is a logical process. Both have, indeed, been called induction (in different senses), but the first is only a *colligation* of observed things or facts. This process only completes a general statement which gives correct expression to a series of individual observed facts, when taken as a whole. The instance given by another presents this process very simply: A navigator in unknown seas beholds land; he knows not whether it is continent or island. But he sails along its shores, noting its bays and headlands, and taking

ocular evidence of the continuity of the whole coast, until he beholds again the same spot he first saw. He calls the land now an island. But he has made no *logical inference*; he has but colligated all his separate notes of the coasts, with their connecting continuity, into that general concept of which "island" is the correct name. Now, this is really what Kepler did when he performed what has so often been cited as a splendid instance of induction: from a number of observed angular motions of the sun in the ecliptic, he declared that the earth moved in an ellipse, with the sun at one of the *foci*. The real process was but to plot and colligate upon a plane surface, all the successive positions of the earth; whereupon inspection showed that the line she had pursued was elliptical. A still simpler and equally illustrious instance of this process was given when Maury enounced the general facts of his wind-and-current charts. His results were obtained by faithfully plotting, upon blank charts of the oceans, the directions of the winds and currents, with the successive dates, from a multitude of actual observations in sailors' log-books. When this humble but noble work was patiently done, the general facts as to the directions of the winds and currents, at given seasons, revealed themselves to inspection. Here was a grand colligation, but, as yet, no inference. But we have a true instance of inductive inference when Newton derived the great law of the attraction of gravitation, as expressing the true cause of that elliptical circulation. Kepler had colligated only a general fact; Newton inducted a law of cause. Whewell seems, p. 23, to confound them.

But on p. 48 he speaks, if still too indefinitely, yet more nearly to the truth. "Induction is familiarly spoken of as the process by which we collect a *general proposition* from a number of particular cases; and it appears to be frequently imagined that the general proposition results from a mere juxtaposition of the cases, or, at most, from merely conjoining and extending them." . . . "This is an inadequate account of the matter." . . . "There is a *conception of the mind* introduced into the general proposition, which did not exist in any of the observed facts." The phrase "conception of the mind" is indeed an inaccurate expression for the missing but all-important element of the logical induction. But Whewell had perceived so much: that this

element of proof was not in the mere colligation of agreeing instances alone, but was to be furnished from another source. And he points our inquiries in the right direction, in seeking this vital premise among the intuitive judgments of the reason. It is to be found in that judgment which so many of these writers speak of as our *conviction of the uniformity of nature!* Thus, in substance, answer the most of them, as Hamilton and his great German authorities, Krug and Esser. But this is the question.

The comments of Lord Macaulay on the inductive method, in his famous Essay on Lord Bacon, justify the angry estimate of his comrade, Brougham, by their superficial character. But they may also serve to show how just the complaint of Mill is as to the confusion of the opinions of even educated men on this subject. Macaulay, with his usual plausible brilliancy, assures us that the method of the *Norum Organum* was nothing more than the familiar experimental argument of the English squire as to the cause of his bodily ailments. The result of the squire's induction is to trace his sufferings to his indulgence in his favorite dainties. On the nights after free indulgence he suffered much. On nights when he had wholly abstained, he was free from pain. On nights when he had indulged sparingly, he suffered slightly. Here, intimates Macaulay, we have the whole Baconian process, the *comparentia instantiarum similium*, the *exclusiones instantiarum negativarum*; the *comparationes pluris aut minoris*. He seems to think that this embraces the inductive logic!

Fleming, in his *Vocabulary of Philosophy*, after citing numerous definitions of induction, which exhibit the uncertainties and confusions criticized in these pages, gives his own statement thus: "By the principle of induction is meant the ground or warrant on which we conclude that what has happened in certain cases, which have been observed, will also happen in other cases which have not been observed. This principle is involved in the words of the wise man, Eccles. i. 9: 'The thing that hath been, it is that which shall be; and that which is done is that which shall be done.' In nature there is nothing insulated. All things exist in consequence of a sufficient reason; all events occur according to the efficacy of proper causes. In the lan-

guage of Newton, *Effectuum naturalium ejusdem generis eadem sunt causæ*. The same causes produce the same effects. The principle of induction is an application of the principle of causality," etc. Of this description we may say what was said of Whewell's, but with more emphatic approval: that it points us in the right direction.

We now introduce the definitions of three contemporary American logicians. The Rev. Dr. McCosh says (*Div. Gov.*, p. 289): "Induction is an orderly observation of facts, accompanied by analysis; or, as Bacon expresses it, the 'necessary exclusions' of things indifferent, and this followed by a process of generalization, in which we seize on the points of agreement."

Professor Bowen, *Logic*, p. 380, teaches that induction is from some observed cases to the many not observed; and he passes this verdict on the process: "But just so far as they" (inductions) "are means to these ends, they lose the character of pure or demonstrative reasonings, the syllogisms to which they are reducible are faulty, either in matter, as having a major premise, the universality of which is merely *probable*, or in form, as containing an undistributed middle."

"Induction, properly so called, concerns the matter of thought, and concludes from *some* to *all*."

Dr. Porter, *Elements of Intellectual Science*, Abr. Ed., p. 393, says: "Judgments of induction differ from simple judgments in several important particulars. (In the simple judgments we bring the individuals under the appropriate common concept.) In induction we proceed farther: we add to those simple judgments yet another, namely, that what we have found to be true of these, may be received as true of all others like them. The ground of the first judgment is facts observed and compared. The ground of the second is what is called the *analogy of nature*. A judgment of induction is, then, a judgment of comparing observation, enlarged by a judgment of analogy. The judgment of observation is founded on an *observed similarity*; the judgment of induction on an *interpreted indication*."

We have postponed to the last the notice of two celebrated philosophers, Dugald Stewart and John Stuart Mill, because they both exhibit, as a common trait, the influence of their

countryman, Hume, in wresting their views from the truth. Stewart (Vol. III., Chap. IV., of the *Method of Inquiry* pointed out in the *Experimental, or Inductive, Logic*), amidst many elegant, but confused, digressions, reaches substantially the same view of inductive reasoning with his predecessors. (P. 246.) "When, by thus comparing a number of cases agreeing in some circumstances, but differing in others, and all attended with the same result, a philosopher connects, as a general law of nature, the event with its *physical cause*, he is said to proceed according to the method of *induction*." "In drawing a general physical conclusion from particular facts, we are guided merely by our instinctive expectation of the continuance of the laws of nature; an expectation which, implying little, if any, exercise of the reasoning powers, operates alike on the philosopher and on the savage." . . . "To this belief in the permanent uniformity of physical laws, Dr. Reid long ago gave the name of the *inductive principle*."

Stewart seems to admit by implication what we have seen Hamilton and Bowen assert so plainly, that the physical induction can give only a probable evidence, and can never demonstrate absolutely a universal truth. For Stewart, in commenting on the interesting fact that the inductive method is applicable in mathematics, reminds us that it was only by this method Newton proved the binomial theorem; and then proceeds to argue, pp. 318, 319, that, had this theorem not really been sustained by some principle more valid than is found in any physical induction, mathematicians would not have accepted it as universally true for all exponents of the $(a+x)$. All the proof, says he, which Newton seemed to have of the binomial theorem, was to expand the products, by actual multiplication, of the $(a+x)$ to the second, the third, the fourth, and to such a number of powers as satisfied him that the laws he found prevailing for the number of terms, and the exponents and coefficients in all the products actually inspected, might be trusted to prevail in all other powers, however high. Now, had this been really all, Stewart thinks we should have had, in this mathematical formula, a specimen of induction exactly like physical induction. And he evidently thinks it could not have been demonstrative of the universal truth, but only evidential of the probable truth

of the *formula* for untried cases. He thinks there is really, latent in the process of Newton, a further evidence, which is demonstrative: that when the actual multiplications are pursued to several powers, the mind sees a reason why the coefficients and exponents not only do, but must, follow the law observed by inspection in the products expanded. Does not this imply that in the case of physical inductions, a similar *desideratum* is lacking? Surely. But Stewart does not supply it. Surely, he cannot think that he finds it in "permanent uniformity of physical laws," which he regards as the inductive principle; for he thinks it is instinctive, rather than rational. Thus he leaves his system of inductive logic as baseless of solid foundation as the others.

But the worst legacy of the philosophy of Hume he leaves us, is his distinction between the physical cause and the efficient cause. The physical cause is the invariable actual antecedent of the *phenomenon* regarded as effect. The efficient cause is the secret unseen power the mind imputes; and he declares the word *power* expresses an attribute of mind, not of matter. He expressly declares that the object of induction is to seek, not the efficient, but the physical cause. (Pp. 230, 231.) And his reasons are but the deceptive ones of the sensationalistic philosophy which misled, in part, even Brown and Stewart, and so much more sadly, Mill: that observation of physical sequences gives us nothing but a regular antecedent and consequent; so that physical science should have to do with nothing more. That this often repeated conclusion is utterly sophistical appears from these two tests: observation of physical phenomena gives us no general concepts; for all philosophers agree that nature presents *to the eye* nothing but *individual* things and *phenomena*. Shall physical science, therefore, have no business with general concepts and universal propositions? Again, nature presents to the eye no inference of any kind. Shall physical science then discard inference? Carry out this argument, and man's relation to nature must sink to that of the cunning brute, the ant or the beaver. Hence it appears that, if there is to be any science or any theory, elements must be contributed to it from the subjective powers of the mind, as well as from the outward observed facts and things. Stewart was the more unpardonable for mak-

ing this concession against the inquiry for the efficient cause, for that he is not really a sensationalist, but admits the mind has intuitive notions and judgments. He should have remembered that, granting what the eyes observe in the rise of a *phenomenon* is only its regular antecedent, we rationally supply to the real causal antecedent, as its own property, the notion of *power*. Just as when by the senses we perceive a cluster of properties of a concrete thing, the law of the reason necessitates our supplying the notion of *substance*. It is impossible for us to think the antecedent which seems next the effect the real next antecedent, unless we judge it to emit the *power* efficient of the effect. In a word, the physical cause, can, in truth, be none other than the efficient cause. If we do not know, by sense-perception, what the power is, we rationally know that it is; if we do not know its $\tau\acute{o}$ $\pi\acute{\omega}\zeta$, we do know its $\tau\acute{o}$ $\beta\acute{\iota}\tau\iota$. Hence, its reality is as proper a ground for argument and inference as the reality of any concrete body. Do we know what the energy we call electricity is? Yet we construct a thousand experiments to seek it, and inferences from its power. Stewart ought to have affirmed, then, precisely what he denied, what Newton affirmed: that the real object of the inductive inference is to *find the efficient cause*.

We shall see that the chief, the only useful, problem of induction is, to ascertain the certain laws of given effects. *How can an antecedent bring the effect certainly after it, unless it be efficient thereof?* To limit induction, as Stewart and Mill do, to the ascertainment only of the physical antecedent, is to forbid induction from ever rising above the probabilities of mere enumerated sequences, whose worthlessness to science Bacon has so well exposed. Have we not the clue, in this refusal of the search after the efficient cause, to the imperfections and confusions of their treatment? We repeat, the reversal of this *dictum* of theirs is vital.

Mill is at once the best and the worst of all the English-speaking logicians, in his treatment of the inductive logic. His insight into its true nature is far the most profound and correct; and his technical canons of induction the most simple and accurate at once. But his error as to the rudimental doctrine, which underlies all his admirable discriminations, is the most obstinate. To him eminently belongs the credit of vindicating for

the inductive logic the character of a true demonstration, and of showing where that demonstration is founded. Having set aside the inaccurate uses of the word induction, he defines as follows (Bk. III., Ch. II., § 1):

“*Induction*, then, is that operation of the mind by which we infer that what we know to be true in a particular case or cases, will be true in all cases which resemble the former in certain assignable respects.” (Chap. III., Sec. 1.) “It consists in inferring from some individual instances in which a *phenomenon* is observed to occur, that it occurs in all instances of a certain class; namely, in all which resemble the former in what are regarded as the material circumstances.” But since the mere observation of a similarity of sequence in a number of instances does by no means authorize this expectation as to instances not observed—a truth which Mill here implicitly recognizes, and elsewhere expressly acknowledges—the all-important question remains, what is it that authorizes the mind to infer positively, in the case of the valid induction, that the unobserved instances will be like the observed? He answers (§ 1): “The proposition that the course of nature is uniform, is the fundamental principle or general axiom of induction.” “If we throw the whole course of any inductive argument into a series of syllogisms, we shall arrive by more or fewer steps at an ultimate syllogism, which will have for its major premise the principle or axiom of the uniformity of the course of nature.” Again (Chap. V., § 1), recognizing the general law of logic, that only universal premises can yield universal conclusions in the mathematical reasonings, he admits that it must be so likewise in inductive reasonings. “This fundamental law must resemble the truths of geometry in their most remarkable peculiarity, that of never being, in any instance whatever, defeated or suspended by any change of circumstances.” But where do we find such a universal principle? He answers: “*This law is the law of causation.*” (§ 2.) “On the universality of this truth depends the possibility of reducing the inductive process to rules.” “The notion of *cause* is the root of the whole theory of induction.” And most emphatically (in Chap. XXI., § 1) having expounded his canons of induction, for discriminating between the sequences which authorize, and those which do not authorize, expectation of the same *phe-*

nomena recurring, he says: "The basis of all these logical operations is the law of causation. The validity of all the inductive methods depends on the assumption that every event, or the beginning of every *phenomenon*, must have some cause."

But this excellent doctrine he then fatally neutralizes by the doctrine of the sensationalists concerning the notion of causation. This he declares to be of empirical origin (Chap. V., § 2): "The only notion of a cause which the theory of induction requires, is such a notion as can be gained from experience." He deems that the tie of power, which we think the reason, but not the senses, sees between cause and effect, is "such as cannot, or at least does not, exist between any physical fact and that other physical fact on which it is invariably consequent, and which is popularly termed its *cause*." He distinguishes, with Reid and Stewart, between the physical and the efficient cause, and declares that induction concerns itself only about the physical cause. With him, causation is "*invariable, unconditional antecedence*"; nothing more.

Again (Chapter V., § 3), after referring to the truth that a sequent effect is not usually found to be the regular result of a sole antecedent, but of a cluster of several antecedent *phenomena* and states, he claims that all these regular antecedents are equally cause, and that the mind has no ground for assigning efficiency to one more than another. He seeks to abolish the distinction between the efficient causes and the conditions of an effect. If one eats of poisonous food and dies, we have no reason to call the poison the *cause* of the death, rather than the idiosyncrasy of the man's constitution, the accidental state of his health at the time, and the state of the atmosphere, for all had some concurrent influence to occasion the result. "The real cause is the whole of these antecedents; and we have, philosophically speaking, no right to give the name of cause to one of them, exclusively of the others."

These *dicta*, as we shall show, are subversive of the author's own better doctrine, cited in the previous paragraph. For it is easy to see that, if they were true, they would be fatal to that certainty and universality which he has himself correctly demanded for the major premise of all inductions. Waiving, for the present, the discussion of the question whether our notion

of causation is empirical, we would point out that there is, obviously, no invariable, no certain connection between the mere condition of an effect and its actual rise. This condition must be present, if it is a *conditio sine qua non*, in order to the rise of the effect; but it may be duly present, and yet the effect may not come. This simple remark shows that, were efficient cause no more invariably connected with effect than is a condition, then cause and effect would not have any of that uniformity and universal certainty of effect which, Mill admits, is essential to ground the inductive argument. But he asserts that the condition is part cause, and as much entitled to be viewed as real cause as any other part of the antecedents supposed to be more efficient. Thus he contradicts himself. This suggests the further argument, that our common sense is not mistaken in ascribing an efficiency or power to the cause such as it does not ascribe to the occasion; because we know, experimentally, that the true cause has a connection with the effect more necessary than the occasion has. Oftentimes conditions may be changed, and yet the regular effect continue to occur; but if the truly causal antecedent be lacking, all the appointed conditions remain dumb and barren of effect, though duly present. For instance, in order that germination may result, there must be moisture, warmth, and vegetable vitality in the seed. Can any reasoning man believe that moisture or warmth is as essentially efficient of the growth as the vital energy is? No. For he sees that all the water in the sea and all the caloric in the sunbeams, conjoined, would never produce growth until the vital germ is added. But as soon as this is present, in addition to the other two, the growth regularly takes place. They are conditions, this alone efficient cause of living, vegetable growth. Mill has evidently been unconsciously deceived by the fact that there are effects in which more than one *vera causa* concur as efficient, in addition to certain conditions. Thus, in the case of a moving body driven by two forces in different lines, each force is *true cause* of the resulting diagonal motion, in addition to the other *conditions* of mobility.

But to us this appears to be the crowning proof of error in this doctrine of Mill, that often we find conditions of effects which are merely negative. Yet they may be conditions *sine*

qua non. The burglar was enabled to effectuate his felonious purpose of burning the dwelling by reason of the absence of the fire-engine. How could an engine *which was absent* exert efficiency in the destruction of the house? The very amount of this condition was, that this engine exerted absolutely no efficiency, did nothing in the case.

The error of Mill's doctrine appears also when it is carried into psychology. Our author is, in a sense, a Necessitarian, or, at least, a Determinist, in his theory of volition. Now, when a given volition rose, the whole set of conditions attending its rise included a certain subjective motive, which was a complex of a certain judgment and appetency; and a certain objective inducement, not to say other circumstances, conditioning the feasibility of the volition. According to Mill, this whole cluster of conditions, taken together, should be regarded as the cause of that volition; and one element has as much right to be regarded as efficient thereof as another. Then, the objective inducement and the subjective motive were as really efficient, the one as the other? Where, then, was the agent's rationality and free agency? In the objective presentation of the inducement, the man's spontaneity had no concern, in any shape. To him, that presentation was as absolutely necessitated as the fall of a mass unsupported. Hence, if that objective inducement was as truly *cause* of his volition as his inward appetency was, his free-agency was a delusion, and his act of soul was absolutely necessitated. But of his exercise of these attributes in that volition, his consciousness assured him. We thus vindicate that philosophy of common sense which distinguishes the real efficient from the mere conditions of an effect. It is the presence of the former which determines and produces the effect; the others are merely conditions *recipient* of that effect.

This review of the history of the inductive logic the reader will find to be not a useless expenditure of his time. It has not only traced the growth of the doctrine in its progress towards correctness, but it has familiarized his mind to the terms and ideas with which he has to deal in the further study. It has given us opportunity to criticize and establish the proper views on some points, like the one last discussed, which will be found vital to the development. And above all, it has disclosed

to us the true problem which yet remains to be solved, to complete that development. The most important points of this review to be resumed are these: that "induction" has been used to describe three distinct processes of the mind—of which the first is the colligating of many resembling percepts into one general concept of the mind; the second is the inference to the truth of the predication concerning the whole from its ascertained truth concerning each and all of the individuals of that whole; and the third is the inference from some observed instances to all the other unobserved instances of the class. That the first of these processes the writers we have consulted declare to be no logical process at all, but only a preliminary thereto; that the second was found by us perfectly valid, but also perfectly useless, except as a compendious form for recording knowledge already ascertained; that the third is the useful process of the inductive inquiry, and the only one which really extends our knowledge or our power over the previously unknown. But the vital problem about this process is, *how* the ascertainment of only some of the resembling instances entitles us to infer a universal rule, which shall be held true of cases absent in space, or future in time, from the sphere of the actual observation. That the answer given is, our expectation of the "uniformity of nature" is what entitles us; and that the best of our teachers, as Newton, Fleming, and Mill, ground that expectation in the law of causation.

But that we may comprehend the difficulty and gravity of the main problem, we must inquire whether this expectation of the uniformity of nature is valid, and whence it is derived. Does nature, in fact, present an aspect of uniformity? Far from it. A very great part of her *phenomena* are unexpected and unintelligible to men. The unlikely and the unexpected is often that which occurs. Whole departments of nature refuse to disclose any orderly law to man's investigations, as the department of meteorology refused to our fathers; so that the results which arise are well described to our apprehension by the phrase, "as fickle as the winds." That the aspect of nature is to the popular and unscientific observer almost boundlessly variable and seemingly capricious, is shown by the sacrifices of the Romans to the goddess *Fortuna*, whom they supposed to rule a large part

of the affairs of men, and whose throne they painted as a globe revolving with a perpetual but irregular lubricity. What else do we mean by our emphatic confessions of our blindness to the future, than that the evolutions of nature are endlessly variable to our apprehension; and for that reason baffle our foresight? See Mill, Chap. XXI: "It is not true, as a matter of fact, that mankind have always believed that all the successions of events were uniform and according to fixed laws. The Greek philosophers, not even excepting Aristotle, recognized Chance and Spontaneity as among the agents of nature," etc., etc. So, Baden Powell, *Essay on the Inductive Philosophy*, pp. 98-100. No writer has made more impressive statements of this uncertainty of the aspects of nature than that idolater of the inductive sciences, Auguste Comte. His *Philosophie Positive* says of her energies: "Their multiplicity renders the effects as irregularly variable as if every cause had failed to be subjected to any precise condition. It is only where natural causes work in their greatest simplicity and smallest number, that any appearance of invariable order is obvious to the common observer. As soon as the number of concurring or competing causes becomes larger, and the combinations more intricate, the resultant *phenomena* begin to wear to us the aspect of a disorder which obeys no regular law whatever." Such is Comte's confession. This suggests the question, What, then, authorized the observer to postulate this proposition, that "nature is uniform"? Shall it be said that he is authorized to do so because his inductions have led him to detect latent laws of order amidst nature's seeming confusions? But the postulate of nature's uniformity was, as it appears, necessary to his first inductions. Whence did he derive it at the beginning? Is his induction all reasoning in a circle? The same philosopher has also pointed out this general fact, that the departments of nature, in which her causes are few and simple, and her movements therefore uniform, are the very ones which are farthest from man and from his control; while in those departments which are nearest to him, which most concern him, and which it is most desirable for him to control, causations are most innumerable and complicated, and all principle of uniform order most latent. The heavenly bodies move in orbits, under the operation of two forces only; and

hence their movements are manifestly regular, intelligible, and capable of exact prediction. Astronomy is the most exact of the physical sciences. But these stars are the farthest bodies from us, and the ones over which we can have absolutely no control. As we approach nearer to our human interests and persons, natural causations become more numerous and intricate. The chemistry which governs in the composition of our food and medicines, presents us with physical energies much more numerous and subtle than the two forces, centrifugal and centripetal; and in that science results are far less regular and capable of prediction by us, just as they are nearer and more important to us. But when we come still nearer to the vital energies which govern our health, disease, pain, or ease and death, there the appearance of uniformity is least, and the fortuity seemingly greatest. No man "knoweth what a day may bring forth." How, then, are we warranted to set out with this assumption of the "uniformity of nature"? How is it that we claim to account for her actual complications and apparent fortuities, thus embarrassing us at every turn, by our hypothesis of the inter-actings of *latent laws*; when the very question is, whether these irregularities do not refute the very idea of permanent law in her realm?

If it be urged that there are regularities amidst the seeming fortuities of nature, and that induction may proceed from these regularly recurrent instances, we shall be met with another difficulty. It is demonstrable that no amount of mere regularity in a recurring sequence can amount to demonstration that the same sequence will recur in the future. The customary apprehension of the inductive argument seems to be thus: that if a given *phenomenon* be actually observed to go immediately before another a *sufficient number of times*, this justifies the postulating of a regular law. And such, in fact, is the amount of most of the so-called scientific observation and argument. If one asks, *How many* observations of the same recurring sequence are sufficient to reveal, and thus to prove, a law; no consistent answer is given to us. And let it be supposed that any answer whatsoever were given us—as that fifty or five hundred entirely agreeing instances would be sufficient to establish a law—then we must ask, *What is there different* in the last crowning instance, say the

five-hundredth, which makes it conclusive of a law, when the four hundred and ninety-nine were not? The argument was begun on the assumption that they were to be all agreeing instances; for the disagreeing instances would rather cross and contradict the induction than strengthen it. And yet this five-hundredth must have something in it different from the four hundred and ninety-ninth, for that is conclusive where this was not. To this difficulty also we get no consistent answer.

In truth, the inquiry has proceeded far enough among the inductive logicians to prove thus much, absolutely, that this species of induction, which does no more than count up agreeing instances of sequence, can never be a demonstration. Bacon calls it the "*Inductio per enumerationem simplicem.*" His verdict against its validity may be found in the *Novum Organum*, L. I., Apothegm 105: "Some other form of induction than has been hitherto in use, must be excogitated in establishing an axiom" (general principle). "And this is necessary, not only for discovering and proving what they call *first truths*, but also the lesser and the mediate axioms; in fine, all axioms. For an induction which proceedeth by simple enumeration, is a puerile affair, and gives a precarious conclusion, and is liable to peril from a contradictory instance; and oftentimes it pronounces from fewer instances than is meet, and only from such as lie readiest at hand." So Mill (Book III., Chap. III., § 2): "To an inhabitant of Central Africa, fifty years ago, no fact probably appeared to rest on more uniform experience than this, that all human beings are black. To Europeans, not many years ago, the proposition, all swans are white, appeared an equally unequivocal instance of uniformity in the course of nature. Further experience has proved to both that they were mistaken." (See also Chap. XXI., Vol. II., p. 101.) So speak all the thoughtful writers. The invalidity of such induction is also proved by familiar examples. Experience observes the invariable death of our fellow-men. We confidently expect all living men, including ourselves, will die. Experience has, with equal certainty, shown us night always preceding day within the limits of twenty-four hours; for we live between the arctic circles. But no man dreams that night or darkness *causes the day*; and if he concluded that the sequence must hold as he has seen it, he would

be refuted by the first winter within the arctic circle. Every man who rises early enough, hears the cock crow invariably before the dawn; no man infers that the cock's crowing causes dawn, or must necessarily precede it. Babbage's calculating machine presented a curious refutation of this species of induction. Its machinery could be so adjusted by the maker as to present to the eye a certain series of numbers, increasing by a given law, and this was continued through instances so numerous as to weary the spectator. Did he now conclude that these numerous agreeing instances revealed to him the necessary law of the machine? He was speedily refuted by seeing it change the law of the series by its own automatic action.

But does not such an enumeration of agreeing instances teach anything? We reply that it does raise a probability of a law which may be found to regulate the future rise of similar instances. The more numerous the agreeing instances summed up, the more this probability will usually grow; and when, by our own observation and the testimony of our fellow-men, the agreeing instances become exceedingly numerous, and none of a contradictory character appear, the probability may mount towards a virtual certainty. The ground of this will appear when we have advanced further into the discussion. It must also be conceded that inferences which have only probability, may be of much practical value in common life, and serve a certain purpose even in the proceedings of science. Bishop Butler has taught us that, to a great extent, probability is the guide of life. Junctures often arise when it is not only man's wisdom, but his clear duty, to act upon only probable anticipations of results. In science, also, these imperfect inductions have their use, which is this, to guide to some probable but only provisional hypothesis, which is taken only as a guide to experiments that are made for the conclusive investigation of nature. What we observe, then, of this induction by mere enumeration of agreeing instances is, that it is not useless, but it can never give demonstrated truths. But science requires, in its final results, complete demonstration.

Not a few logicians, among whom Hamilton is to be numbered, in view of this imperfection in the mere induction from the many to the all, have roundly declared that induction can never

give more than probable evidence of its laws. (*Logic*, Lecture 32nd, end.) He asserts that it is impossible for it to teach, like the deductive syllogism, any necessary laws of thought or of nature! Must we concede this? Is the problem, the gravity of which was indicated, indeed hopeless? Must we admit that all the sciences of induction, and all the practical rules of life, which are virtually also inductive, are forever uncertain, presenting us only probabilities, and remaining but plausible hypotheses which await the probable or possible refutation from wider investigations? This we cannot believe. We claim a demonstrative force for this species of evidence, when it is properly constructed. We must substantiate such a view, or else candidly surrender the proud claim and name of *science* for our opinions upon all the natural *phenomena*. Real demonstration cannot be grounded in uncertainties, however much they be multiplied. They can only be grounded, as Mill has most truly declared,—however inconsistently for his own logic—in necessary truths. Moreover, the common sense of mankind rejects the conclusion that all its inductions are only probable. Some of them we know to be certain, and experience never fails to confirm their certainty. The question, then, recurs, which is the great problem of this species of logic: How does the inference seemingly made from the some or the many to the all, become valid for the all?

II.

THE NATURE OF PHYSICAL CAUSES AND THEIR INDUCTION.

In our previous sketch of the history of Inductive Reasonings, we found that the chief (and the difficult) question, the great problem of this species of logic, which continually emerged, was this: How does the inference seemingly made from the some, or the many, to the all, become valid for the all?

The settlement of this, as of the other fundamental doctrines of logic, must proceed upon right postulates as to psychology, and especially as to its highest branch, the original powers of the reason. In our criticism of the *Sensualistic Philosophy of*

the Nineteenth Century, a parallel question as to the Deductive Logic is considered (see pp. 265-272). That question was the old one between the assailants and defenders of the utility and fruitfulness of the syllogism, with which the students of philosophy are acquainted. The followers of Locke, from his day to ours, have argued that, since a syllogism which concludes more in its third proposition than is predicated in its major premise, is confessedly faulty, all such reasonings must inevitably be either sophisms, or worthless, only teaching us what we must have known before in order to state our premise. Yet we saw Mill, after echoing this objection, confessing, what all men's common sense must concede, that the syllogism is the full expression to which all deductive reasoning is reduced. How was this paradox to be solved? It was shown that the solution is in recognizing the *a priori* necessary and universal judgments of the reason. Admit that the mind is entitled to other judgments than the empirical, the intuitive namely, and that they are universal, then the synthesis of truths becomes a valid and fruitful source of new knowledge.

A similar resort to the doctrines of a true psychology must be made, again, to explain the Inductive Logic. This necessity has been disclaimed, on the ground that logic is a critical art, whose whole and only business is to test the validity, not of the contents, but of the forms of our elenctic thought. This might be admitted; and yet it would remain true that these processes, which it is the business of logic to criticize, are psychological processes, and that the critical acts are also psychological processes. Moreover, as in the world of matter, the substance determines the form, so in the realm of thought, it is the quality of the contents of thought which determines the logical framework. The science of logic, therefore, must be grounded in a correct psychology.

That psychology must not be the sensationalist. We must hold that the mind has original powers of judging *a priori* necessary truths; powers which, although they may be awakened to exercise on occasion of some empirical perception, yet owe the validity of the judgments formed, not to sense-perception, but to the mind's own constitutive laws. This, then, is the metaphysical doctrine assumed as the basis of this discussion: that while

the senses alone give us our individual idea of objective things, it is the original power of the reason which gives us our universal necessary judgments about objective things and their relations; and these same powers furnish the forms according to which we connect them into general knowledge. Those necessary and universal truths are primitive judgments, intuitively seen to be true; and not dependent for their authority upon the confirmation of observed instances, be they many or few. For these first truths and laws of the reason must be, in their order of production (though not in their date), prior to the observations of the senses and to all deductions therefrom, because they are necessary to construe the individual perceptions intelligibly, and to connect them for any purposes of reasoning. But it is our purpose here to postulate, and not to argue, this view of the mind's powers. For the latter, the reader must be referred to the work mentioned above (*Sensualistic Philosophy of the Nineteenth Century Considered*, Chaps. X. and XI.).

We have seen J. S. Mill's correct position, that the *law of causation* is the foundation of every inductive demonstration. We have also seen his inconsistent assertion, that our belief in this law is the result of an induction from experience. We have proved, on the contrary, that it is a necessary intuition of the reason. Whenever we observe a *phenomenon* or a new existence, the law of the reason ensures our assigning for it an adequate cause. It is impossible for us to think a thing or event as arising out of nothing. To think it as producing itself, would be the contradiction of thinking it acted before it existed. Nor can we avoid ascribing to the cause *power* efficient of the effect. The old objection, that we have no right to assume anything else than what the senses observe, a regular or uniform sequence between a certain antecedent and a certain consequent, is worthless to any one who has learned the true doctrine: that the reason is itself a source, and not a mere passive recipient, of cognitions. As, when sense-perception gives us only a cluster of properties belonging to body, the reason must supply the supersensuous notion of substance underlying and sustaining them, so when the senses perceive a cause preceding its effect, the reason compels us to supply the rational notion of efficient power in the cause. It is this, and this alone, which enables and qualifies the ante-

cedent to be cause. And this power must be thought as efficient of the effect. This judgment involves the further belief that, wherever the cause is present, under the same conditions, the efficiency of its power ensures the same effect. Such is obviously the nature of the necessary judgment: "Same causes, same effects." A simple examination of our consciousness convinces us that our rational notion of substance involves the assurance of its continuity of being and permanency. As the rise of that substance *ex nihilo*, without any cause, is a proposition which cannot be rationally thought, so the cessation of that substance's continuity of being, or its return into *nihil* without a cause efficient of its destruction, is equally incredible. This intuitive confidence in the permanency of true substance, as thus defined, is not an inference from any observations, but a phase of the intuition, a source and premise of all our reasonings about substances; and a regulative law for construing every observation experiences give us about them. So we have a similar intuitive confidence in the persistency and uniformity of power, wherever it inheres. So long as power qualifies any being, it is, in its own nature, efficient of the same effect which it is once seen to produce. If we see the agent and the recipient of the effect again present, and do not witness the rise of the same effect, we intuitively and necessarily believe that some other power, whether visible or invisible, is intervening to modify or counteract the known power. This is the explanation of our belief in the "uniformity of nature" when the belief is legitimate. Nature is uniform just so far as the same powers are present, and her uniformities are nothing but the necessary results of the permanency of substances and powers. What we call laws of nature are only the regular methods of the actions of natural powers. We believe in those laws, only because we intuitively judge that each power or energy is, under the same circumstances, efficient of the same effects.

But this conception of regular laws in nature implies an assurance not only of the permanency of substances, but of their essential properties. That substances have two classes of properties, distinguished as *attributa* and *accidentia*, is obvious; and it is according to their permanency or mutability that we ascribe a quality to the one class or the other. How is it that we are

authorized to entertain this assurance of the permanency of essential properties? The answer is, *because these properties make themselves known to our reason as powers*. If we reflect, we see that what we call a property of a body is only revealed to us by its emission of a power, producing an effect either on some other body, or on our own percipient senses, and through them on our own spirits. This truth has been seen by Dr. McCosh, for instance (in his *Divine Government, Physical and Moral*, p. 78). The evidence assigned for the proposition seems inadequate: that we observe no body acts on itself, but only on another body in a certain relation to itself. The same writer, very singularly, excepts from his assertion those properties which affect our senses. Of all the properties of external things, he should have said that those which affect our senses directly, are most certainly powers. For it is only by some effect on our senses, propagating a perception, that we learn an effect has been produced on another body. What is perception? How do we convince ourselves of the reality of the external world? Consciousness, a subjective faculty, can of course only testify to the subjective part of the perceptive function. What, then, is the rational ground of that judgment of relation which, as we know, we all make between the perceptive cognition and the external source? Reflection convinces us that this ground is in the necessary and *intuitive judgment of cause*. We are conscious of a perception; we are also conscious we did not affect ourselves with it. But there can be no effect without a cause; therefore the object perceived must be a reality. It is frequently said that we derive, or at least we first see, the rational notion of power and efficiency in our own conscious volition; that we are conscious of the will to emit efficiency; that we see the effect, and that we thus form the notion of efficient power in cause. We have no disposition to dispute the fact that this may be one of the occasions upon which the reason presents her intuitive notion of power. But, whatever the change which she may observe, constituting a new *phenomenon* or state, whether in the subjective or objective sphere, she must supply the notion of cause and of efficient power. For the necessary law of her thinking is, *ex nihilo nihil*. The new effect could not have been, except there had preceded a sufficient

cause. But when is cause sufficient? Only when it possesses power efficient of the new change.

Now, then, the first cognition which the mind can have of any objective thing, is *through experiencing an effect therefrom*. Is it not obvious, thence, that what we call properties of things are *only known to us as powers*? They are, simply, what are *able to affect us* with the perceptions. And since every perception is an effect, we only learn that any body has the property (or power) of affecting another body by experiencing its power of affecting us. Hence, we should say that we know the properties of bodies which affect our senses as powers primarily; and those which we see affecting other bodies we know as also powers secondarily. Instead of saying that properties are powers, it would be more correct to say that powers are the only true properties. The notion of power is in order to the idea of property. Here, then, is the ground on which we expect a permanency in any essential property, as immutable as that which we intuitively ascribe to substance; it is because "the same causes produce the same effects."

But there are properties which are not permanent, and yet they can produce effects on us and on other bodies. The distinction of "attributes" and "accidents" made by the scholastics is just. The solidity of congealed water, for instance, is certainly not an essential property of that substance; yet it has power to affect our tactual sense, and it also has a power of impact on other bodies which the liquid has not. Here is an apparent inconsistency—that we should infer the permanency of essential properties from the fact that they are causes; that the same causes produce the same effects—and yet concede power to properties which are not permanent. But the inconsistency is only seeming. The explanation is, that the change or state which was just now an effect may in turn become a cause, and may not only depend on its cause, but have another effect depending on it. While its own prior cause propagates it, it may also propagate its effect; with the suspension of the action of its cause, it and its effect cease. The original cause has thus its progeny, not only of the first, but of the second and subsequent generations. Now, what is an "*accidens*," a property not permanent, except a mutable effect of some other property which

is a permanent cause?—mutable, because, while the power of essential property has no change, the conditions for its action may change. While the more original power or powers of the essential property is acting, its effect, the accidental property, is propagated; and this in turn may become cause, so long as it subsists. Thus, solidity is not an essential property of water, for this substance often exists uncongealed; the solidity is the result of a molecular energy which is an essential property in the substance, and which is allowed to come into action by the departure of the caloric out of it. To understand this truth, we must avail ourselves of the old distinction between *active* and *passive powers*. Essential properties are active powers. Accidental properties are the results of passive powers in the bodies which exhibit them; of susceptibilities or powers of reciprocity, by means of which the more original powers of the essential properties, either simple or combined, show through and give themselves these new and mutable expressions.

We remark, again, that it is obvious the permanency of the properties which we predicate of a class, or of a general term by which we name it, is essential to the validity of all general and scientific propositions. This, to the logician, needs no arguing. Hence it follows that it is all-important we shall be able to distinguish, in classifying, between permanent or essential properties and "*accidentia*." How do we effect this? Here the rule quoted from Sir Isaac Newton comes to our aid. If we find that a given property is always present whenever the body is present, and that it is not affected with increment or diminution, whatever other effects are wrought on the body, we may safely conclude that it is an essential property. This rule should be qualified by the following admission: It may be that the energy which we invariably see expressing itself through this property is not the original energy, but is itself the next effect of a latent and undetected energy. If this were surely discovered, we should feel constrained to carry back the name and title of essential property to that original energy. For instance, we have been accustomed to regard caloric as an original energy in matter. Should it be discovered that caloric is itself a result of a peculiar molecular motion in matter, or in some latent *medium*, we must give the name of original energy to that hitherto

undetected cause. This, we suppose, Newton would have freely conceded. But this concession does not practically derange our inductive conclusions. For if there is the latent energy, and yet it always expresses itself through the known property, and if it is its necessary law to do so, any practical conclusion from it is as solid as though the latent cause had been seen. We are, in fact, reasoning from it, while we only leave it anonymous. But, it may be asked, does the fact that a body always exhibits a certain property, *as often as we have observed it*, prove that property to be essential, and therefore permanent? Is not this the defective induction *per enumerationem simplicem*? We concede that it is nothing more. Hence it is all-important that we employ the other part of Newton's rule also, that upon frequent observations we see the property takes no increment or decrease, whatever changes are made upon the body. If the property stands that test, it is essential. But the application of this test is, as we shall see in the subsequent discussion, but an employment of the canon of "corresponding variations," one of the methods of induction by which a valid is distinguished from an invalid inference. It may be asked, Does the process of inductive reasoning begin so far back in our thinking, in the very formation of our concepts, as well as in deducing from them? We answer, Yes; the rational function must come into play, not only at an early stage of our processes of logical thought, but along with their very beginning. This is the very principle of true metaphysics.

We shall see that this is not the only case of inductive inference, which takes place in the very processes of generalization. It has been too long and too heedlessly repeated, that the generalizations which give us our general concepts are *preliminary* to our processes of inference, and therefore cannot be inferential. Dugald Stewart, in repeating this statement, seems to have a view of its inaccuracy, for he immediately qualifies it by remarking that, while a given inferential process has no concern with the question whence or how the premises employed came, but only with the question whether they are correctly related; yet one or more of these premises may be itself an inference from a previous illation. This is the vital concession. A general proposition cannot be correctly affirmed, save of general

terms. Hence it is also essential that the concepts named in those general terms be correctly framed. The question of their correctness may require to be settled by a logical process. Let it be considered now, that when we frame a general term, it must be understood to connote all the properties essential to the species. For instance, the general term horse must be held to signify each and every property essential to that species of quadrupeds. Let us suppose that, in a place new and strange to us, as the Shetland Isles, we meet with an individual quadruped, which we wish to classify. We see that, along with some quite striking differences, as of size and such like, it has several of the more obvious qualities of the horse species. May we refer it to that species? On the one hand, unless this individual quadruped has all and each of the properties essential to the species horse, we are not authorized to class it there. On the other hand, we have not seen all the possible properties of the Shetland individual: for instance, we have not dissected it; we have not yet satisfied ourselves, ocularly, that it may not be a *ruminant*, or that it may not present specific differences in its osteology. Yet we refer it to the species horse. It is obvious that in doing this, we make an induction, and it is an induction from a part to the whole. We know by observation that the individual has some of the equine properties; we infer that it has the rest of the essential properties. But all logicians agree that the induction from some to all is not necessarily valid. Are our general concepts themselves, then, only partially correct? How much uncertainty must not this throw over all our general reasonings? If we are not certain that a given thing really belongs to its class, we cannot predicate certainly about it what we have proved concerning the class.

Now, on this question, it may be remarked, first, that our references of individual things to their classes are often supported by only probable evidence, or incomplete inductions. And, therefore, our propositions, when applied to those individuals, have only probable truth. But in practical life, probabilities are far from valueless; if they are not universally accurate as guides of our action, they are generally so. But for the construction of a *science*, they do not suffice, for science claims *truth*, and not mere probability. Second, we all practice, in our

customary generalizations, certain mental expedients to guard ourselves against erroneous classifications; expedients which we learn by experience, and which are, in fact, approximate uses of logical canons of induction, although we have not distinctly analyzed and explained to ourselves the rules which we virtually employ and trust. This is that practical sagacity which the mind acquires in the process of its own self-education. By its help we greatly diminish the probabilities of error in our generalizations. This may be explained by the instance already mentioned. An inexperienced child and a shrewd, observing adult, neither of whom is a trained logician or natural historian, see for the first time the Shetland pony. The child, impressed by the puny size, shaggy coat, and bushy fetlocks of the quadruped, may exclaim that it cannot be a horse. The experience of the man tells him that these peculiar appearances may be but *accidentia* of the Shetland variety, striking as they are, and he at once directs his observation to other characteristics in the little animal, which convince him that it is, nevertheless, a true horse. The more discriminative marks, the uncloven hoof, the character and number of the teeth, the relations of the limbs to each other, furnish him with the inference that the rest of the equine properties would all be found in it, if it were thoroughly dissected. Third, this observer, although not a naturalist, makes a practical application of a general principle to guide his induction. His reason has told him that *the ends* of nature cannot but dictate morphologic laws, which ensure the associating of certain characters together, so that where some of them are seen, the rest may be safely inferred. He does not call himself a philosopher; he does not name those ends "final causes." But, none the less, his reason has the partial guidance of the universal principle. He does, semi-consciously, a similar thing to that which Cuvier did, when he argued that no quadruped having graminivorous teeth would ever be found with claws on its feet, because the final cause of the Creator would never lead him to provide an animal with the instruments for seizing prey, which was ordained, in other parts of its structure, to live without prey. And when the philosophic naturalist's classifications are made with scientific certainty, by inferring the whole number of essential properties from the knowledge of a part of

them, it is because he has converted the invalid induction into a valid one by the help of a necessary principle which he makes his major premise.

POWERS AND PROPERTIES PERMANENT.

But it is time we had returned to another point in our explanation. If essential properties are powers, and if, as such, they must be permanent, why are not their effects continuous? Whereas, it is notorious that properties are not always active in the production of effects. A property, like the attractive energy of a loadstone, may remain for ages without effecting the actual motion towards itself of the bit of iron which lies in an adjacent drawer of the cabinet. This demands explanation at our hands. The explanation is, that properties of created things are causes only potentially; in themselves only powers *in posse*. In order for the effluence of the actual power, a certain relation or relations must be established between the thing possessing the property and another thing. Thus, the loadstone is always potentially an attractor of iron; but a certain proximity must be established, in order for the effect, motion, to take place. Such instances may be multiplied until we convince ourselves that the essential condition for all physical effects is the instituting of some particular relation between two bodies. Not until the appropriate relation is instituted is the potentiality of the causal property released so as to become an actual power. Until then the property remains quiescent. If this doctrine is correct, the action of an elastic spring held in a state of compression is the parallel to the powers of natural things. The elasticity is doubtless in the compressed spring all the time, and expresses itself in a steady pressure upon the bolt or key which holds it. Let that bolt be withdrawn, and the elasticity is released, and produces the visible motion of the body propelled by the spring, hitherto quiescent. The condition of the action of every natural property is, then, its release from some restraining energy; the condition of the cessation of action is the restoration of that restraint. Is not this strictly conformed with the recognized relation in science between statics and dynamics, action and reaction?

The instances of the beginning and cessation of effects which

we are best able to read seem to be conformed to this view. The rise of the mercury in the tube of the barometer is ascribed to the counterpoising pressure of the atmosphere. This is a force which really exists perpetually, but it cannot produce this particular effect until a counteracting force is taken away from the top of the column of mercury. As soon as this is removed, the mercury rises in its tube; when it is replaced, the atmosphere is no longer able to support the column; but the atmosphere has not lost a particle of its weight. Again, chemical affinities are deprived of many of their customary effects when organized bodies are presented to them. This is because there is another energy in the organism, the vital energy. Just so soon as this departs, the carbon, water, and nitrogen of the organism yield to the chemical energies, like other carbon, water, and nitrogen. Those energies are there, but cannot work "until that which letteth is taken out of the way."

This theory may be no more, as yet, than a probable hypothesis. But it substitutes another theory which has recently grown into much favor, and which is also only a plausible hypothesis. That is the theory of "the equivalency and transformation of energy." The conclusion from this doctrine, which is aimed at, is, that there is really but one kind of energy in the material universe; that as the caloric, for instance, which disappears from the sensible to the latent state in the volatilization of water into steam, is transformed into an equivalent amount of elasticity in that steam, so caloric and elasticity are but two forms of the same energy. Now, much is yet lacking before this supposition is proved. The instances in which a body may be infused with a high degree of one form of energy, and then again deprived of it, while another energy in the same body remains constant, seem fatal to the inference that those energies are equivalent and transformable. Thus, a mass of metal may be greatly heated, and then refrigerated, while its gravity remains unchanged. Gravity, at least, then, cannot be thus correlated to caloric. The same argument seems to hold of all parallel cases.

Another seemingly fatal objection to the theory of the "equivalency and transformation of energy" has been urged by Clausius. What transformation and reflection of a force can take place, which is emitted on the exterior limit of the universe, and on a

line of action away from existing bodies? Let the energy be, for instance, that of heat or light. Its reflection back into the universe in the form of the same, or of a transformed energy, would appear equally impossible, since nothing exists, outside the universe, to be the medium of its reception or reflection. Hence, it would seem that, as a wedge of heated iron placed in a winter atmosphere must continuously lose its caloric until as cold as the surrounding medium, so a universe, a system of bodies energized under natural laws, must continually diffuse its energies until its motions declined into universal quiescence. The favorite corollary of the theory under debate is: the permanency and equality of the aggregates of cosmic forces through all time. But this corollary, we here see, cannot be true on that hypothesis. Yet, if it be not true, how shall the physicist maintain his fundamental position, the uniformity of nature? The alternative hypothesis we suggest solves the difficulty. The powers of nature are not all equivalent and transformable the one into the other. But the powers of nature are permanent; because true powers are essential properties, and essential properties are permanent. The *forms* of matter change; but the matter, whose are the essential properties, is indestructible.

But the only *a priori* argument advanced for the new theory, so far as we are informed, is this: That reason forbids us to suppose that a power which we see now existing and active, can anon, upon the completion of its effect, be annihilated and pass into nonentity. It has disappeared in that form; but they argue, it cannot be extinct. Hence, they conclude that it has reappeared in the form of its effect. There has been, not an annihilation, but a transformation of the energy. Now, this argument seems wholly neutralized by the view which we have suggested.

Grant that reason requires our believing in the permanency of powers, as much as of substances; this energy which we see acting temporarily, has not gone into its effect, but has retired into potentiality in the matter which it inhabits. The conditions of its release have terminated; it is again remanded from its active to its potential state. The same energy is in matter still, in the form of essential, permanent property; and is again able to emit the same power and propagate a similar effect,

whenever the conditions of release take place again. This theory of power, then, instead of reducing all the energies of nature to a single one, recognizes as many distinct kinds of energy in material things, as there are certainly distinct and essential properties in matter. We may not have concluded accurately as to which properties are really distinct and essential. We may be mistaking two properties for essential ones, which will turn out to be two effects of some more latent essential property of matter. We may find that what we call heat, light, and electricity are but three phases of some one molecular energy, transformable into these equivalent effects. But we return to the more natural and obvious theory of Newton and his great contemporaries, that matter has more than one real, essential property, and more than one power. This theory of power is encumbered with none of the difficulties besetting the newer one. It coheres with the rational view which, as we have seen, compels us to regard essential properties of substances as nothing else than powers *in posse*, because we have cognition of them only as we see them producing effects.

THE AIM OF REAL INDUCTION.

But the main use of the inductive logic is to enable us to anticipate nature. Our beneficial power over her can only be gained by learning her ways. To be able to produce the given effect we desire, we must know the natural law under which that effect arises. Bacon has tersely expressed this truth at the beginning of his *Novum Organum*. "Human knowledge and power coincide, because ignorance of the cause maketh the effect to fail. For Nature is only conquered by obeying her; and that which in our contemplation hath the aspect of Cause, in our working hath the aspect of Rule." The thing we need to do is to predict what sequent will certainly follow such or such an antecedent. For only thus can we know these two things, the knowing of which constitutes all practical wisdom: how to produce the effect we desire, and how to foresee what shall befall us. Our first impulse is to attempt to learn nature's secret, by the mere observation and summing up of what we see occurring, with the circumstances of the occurrences. But when we have done this, and recorded our enumerations, experience speedily

teaches us that we cannot yet certainly interpret and predict nature, since the same antecedents may not be relied on always to bring in the same sequents. Sometimes they may, and oftentimes they may not. The problem, then, is to distinguish between those observed sequences which certainly will hold in the future, and those which will not. And *between the antecedent and consequent of the former sort, there must be known to be a necessary tie; for it is self-evident that only a necessary tie can ensure the certain recurrence of the second after the first.* But it is equally evident, both to the human reason and experience, that nature has no necessary tie between her events, except that of *efficient cause.* Hence it appears that the sole remaining *problem of induction is to distinguish the causal sequences we observe, from the accidental.* Whenever we see what we term an effect, a change, a newly beginning action or state, this necessary law of the reason assures us that it had its cause. Had not that cause been efficient of that effect, it would not have been true cause. It must, then, have communicated power. That power will always be efficient of the same effect, when it acts under the same conditions. Hence, when we have truly discriminated the cause from the mere antecedent, the *propter hoc* from the *post hoc*, we have found therein a certain and invariable law of nature. We have read nature's secret. We are now enabled to predict her future actions; and so far as we can procure the presence of the discovered cause and conditions, we can command nature, and produce the effects we desire. This, and this alone, is *inductive demonstration.* This position is substantiated also by the authority of the three most intelligent expounders of the inductive logic, whom we have quoted: by that of Lord Bacon, cited on p. 354; by that of Sir Isaac Newton, cited in his second Rule, on p. 356; and by that of Mr. Mill, p. 366. (See *Southern Presbyterian Review* for January.)

He who ponders the last argument thoroughly, will see that there is no consistent explanation of the inductive demonstration possible, upon the plan of Mr. Hume's metaphysics. Let the *a priori* rational notion of efficient cause and power be discarded; let our judgment of cause be reduced to the mere observation of invariable sequence, without any supersensuous tie between antecedent and consequent supplied by the law of reason; let the

vain distinction between efficient cause and physical cause be established, and the aim of science restricted to the inquiry for the physical cause, while the search after the efficient cause is discarded; and let the rational distinction between true cause and *conditio sine qua non* be obliterated; then, obviously, no necessary truth remains, from which any argumentative process can be constructed, to lift any series of observations above the uncertain level of an *inductio enumerationis simplicis*. Mr. Mill himself, while making the fatal denials enumerated above, is driven by the force of truth to say that such necessary, universal truth must be introduced from some whither, in order to give to *induction* the solid character of science. Whence can it be obtained, if not from the intuitive judgment of efficient cause? Experience, without this, only tells us that this has come after that a great many times. But the number of instances in which experience has not been, and will not be, able to observe whether the same consequent comes after that antecedent, is infinitely greater than the number of instances which have been experimentally observed. Hence we can never conclude by that method, whether the sequence we observe is the certain one in the future. The introductory citations showed the reader how the writers on this branch of logic waver and confuse and contradict each other. Is not the reason now disclosed,—that so many of them have disdained the guidance of correct metaphysics?

The reader is now brought to the proper point of view to understand why the induction from a mere enumeration of agreeing instances can never rise above probability; and why it does, as we admit, raise a probable expectation of recurrence in the future. *So far as the observed presence of a given antecedent seemingly next before the consequent raises the probability that we see in that antecedent the true efficient cause*, just so far have we probable evidence that the consequent will follow it in future. Now, inasmuch as our rational intuition tells us that cause always immediately precedes effect, the *phenomenon* which is seemingly next before another may be in many cases taken for the nearest antecedent, and, therefore, the cause. But even this rule of probability is liable to many exceptions, which we are taught to make by our practical sagacity. We have invariably seen darkness preceding dawn; and that immediately. But we have never

felt the least inclined to see the faintest probability therein, that the darkness was the cause of the dawn. Why not? Because our observation showed us a species of heterogeneity between the two events, which made us disinclined to look for the probable, or even the possible, cause of light in darkness. But in many other cases, as, when the tides were seen always to follow the rise of the moon to the meridian, the probability that the moon's coming was the true cause appeared; and as soon as Newton's theory of mutual attraction was stated, that probability appeared very strong.

But ordinarily the observed sequences can only raise a probability that we have found in the antecedent the true cause; for this reason: *that we know there are often such things as unobserved or latent or invisible causes.* For instance, the old empirical chemists knew that something turned the metal, when sufficiently heated, into the calx. They talked of an imponderable agent which they named *phlogiston*. They had not suspected that oxygen gas was the cause; for this gas is transparent, invisible, and its presence in the atmosphere had not been clearly ascertained. Had the frequently observed sequence, then, led them to the conclusion that *heat* was the efficient and sufficient cause of calcination, they would have concluded wrong. Further experiment has taught us this error: some metals, as potassium, calcine rapidly in the midst of intense cold, if atmosphere and water be present. None of the metals calcine under heat, if atmosphere and water are both excluded, as well as all other oxygen-yielding compounds. Here, then, is the weakness of the induction by the mere enumeration of agreeing instances: *We have not yet found out but that an unobserved cause comes between the seeming antecedent and the effect, the law of whose rise we wish to ascertain.*

And here is the practical object of all the canons of inductive logic, and of all the observations and experiments by which we make application of them, to settle that question, *whether between this seeming antecedent and that effect, another hitherto undetected antecedent does not intervene.* Just so soon as we are sure there is no other, whether it be by many observations or few, we know that the observed antecedent is the true efficient cause; and that we have a law of nature which will hold true

always, unless new conditions arise overpowering the causation. Not only is it possible that we may be assured of the absence of any undetected cause between the parts of the observed sequence by a few observations; we may sometimes reach the certainty, and thus the permanent natural law, by a single one. To do so, what we need is, to be in circumstances which authorize us to know certainly that no other antecedent than the observed one can have intruded unobserved. Such authority may sometimes be given by the testimony of consciousness. For instance, a party of explorers are traveling through a Brazilian forest, where every tree and fruit is new and strange to them. One of the travellers sees a fruit of brilliant color, fragrant odor, and pleasing flavor, which he plucks and eats. Soon after, his lips and mouth are inflamed and swollen in a most painful manner. The effect and the anguish are peculiar. His companions, who have eaten the same food, except this fruit, and breathed the same air, do not suffer. This traveller is certain, after one trial, that the fruit is poisonous, and unhesitatingly warns his companions with the prophecy: "If you eat this fruit, you will be poisoned." What constitutes his demonstration? His consciousness tells him that he has taken into his lips absolutely nothing, since the previous evening, that could cause the poisoning, except this unknown fruit. He remembers perfectly. He has tasted nothing except the coffee, the biscuits, and the dried beef, which had been their daily and wholesome fare. But, *no effect—no cause*. This fruit, the sole antecedent of the painful effect, *must therefore be the true cause*; and must affect other human lips, other things being the same, in the same way. His utter ignorance of the fruit does not in the least shake his conclusion. The traveller has really made a valid application of the "method of residues." He has argued validly from a *post hoc* up to a *propter hoc*.

This is so important that it will not be amiss to illustrate it in another instance of inductive argument—that of the metals and calxes. The first observations seemed to show that heat was the cause of calcination. But when heat was applied to a metal excluded from atmosphere, it did not calcine. And when the metallic bases of the stronger alkalies, as potassium, were identified as metals, it was observed that this one of them calcined

violently on a lump of ice. Hence the belief that heat was the efficient of calcination had to be given up—chemists had to confess that the apparent antecedent, heat, in their first experiments could not be the nearest antecedent, but that this, the true cause, was still latent. They had really corrected their erroneous induction by the joint method of “agreement and difference.” It was reserved for Sir Humphrey Davy to show them the true efficient of calcination, in the invisible, undiscovered, but all important agent, oxygen-gas.

Once more; when the observed antecedent is of a character which our previous conclusions have not condemned as heterogeneous from the supposed effect, and therefore not very unlikely to be its cause; as we increase the number of the agreeing instances observed, we feel that our probable evidence that we have found the true cause, grows also. Why is this? It is because reason has assured us that this effect has its efficient cause next before it; and as this antecedent seems to appear again and again before it, and no other has yet been detected between them, it becomes more probable that there is no other intervening antecedent. If such is the case, then this antecedent is the cause.

THE METHODS OF INDUCTION.

We are now prepared to advance to the correct definition of the inductive demonstration. It may be, in form, an enthymeme, but always, in reality, is a syllogism, whose major premise is the universal necessary judgment of cause, or some proposition implied therein. This view of the inductive proceeding corresponds with that conclusion to which the reflection of twenty centuries has constantly brought back the philosophic mind: that all illative processes of thought are really syllogistic, and may be most completely stated in that form; and that, in fact, there is no other process of thought that is demonstrative. The history of philosophy has shown frequent instances of recalcitration against this result, as those of Locke, of Dr. Thomas Brown, and of their followers; but their attempts to discard syllogism, and to give some other description of the argumentative process of the understanding, have always proved futile. The old analysis of Aristotle still asserts its substantial sway;

and successive logicians are constrained, perhaps reluctantly, the more maturely they examine, to return to his conclusion—that the syllogism gives the norm of all reasonings. If our definition of the inductive demonstration, then, can be substantiated, it will give to logic this inestimable advantage: of reconciling and simplifying its departments. The review of opinions given by us at the outset revealed this state of facts: that logicians felt, on the one hand, that no reasoning process could be conclusive, unless it could be shown to conform, somehow, to syllogism; and on the other, that the custom and fashion of distinguishing induction from deduction as different, or even opposite, kinds of argument, had become prevalent, if not irresistible. Consequently, the most of them, following the obscure hints of their leader, Aristotle, endeavored to account for induction as a different species of syllogism, in which we conclude from the some to the all, instead of concluding from the universal to the particular or the individual. And then immediately they were compelled, by the earliest and simplest maxims of their logic, to admit that such syllogisms are inconclusive! And they have to confess this in the face of this fact: that this induction is the *organon* of nearly all the sciences of physics and natural history; sciences whose results are so splendid, and so important to human progress! Such a result is not a little mortifying and discreditable to philosophy. But we hope to show that it is a needless result. It will appear that induction is not only syllogistic, and therefore within the pale of demonstrative argumentation, but regularly and lawfully syllogistic. Mill has had a sufficiently clear conviction of the necessity of accomplishing this, to teach (Vol. I., pp. 362–365) that the conclusions of this species of reasoning can only become solid when grounded in a universal truth. This, he thinks, is our belief in the invariability of the law of causation. But he then (p. 345) very inconsistently adds, that this universal truth itself is but a wider induction, which approaches universal certainty sufficiently near, by reason of its breadth. This universal and necessary truth, we hope to show, is the intuition of cause for every effect, along with the truths involved therein.

To effect this, the methods of induction must be explained. When we speak of observed sequences, we mean a set of ob-

served resembling cases where one state or change seems immediately to precede another change, or "effect," which we are studying. These cases may be observed by ourselves, or witnessed to us by others. The *fact* of the sequence is the only material thing. But, first, one's own observation must be honest and clear, and his record of the case exact. He must not see his hypothesis in the facts, but only what occurs there. And, second, a case taken on testimony should be fully ascertained by a judicial examination of the evidence. Having now this set of agreeing instances, more or less numerous, which gives us, as it stands, only an induction *per enumerationem simplicem*, our task is, so to reason from it as to discriminate the *propter hoc* from the *post hoc*. The result of this task, when successfully performed, is to give us a "law of nature," which is such because it is a law of true efficient causation. It is to effect this, we need the methods of logical induction. In stating them, the chief guide will be Mr. Mill, whose discussion in this point seems the most complete and just.

1. The "Method of Agreement" is the following. Observation usually gives us sequences of this kind, namely, not one antecedent, but a cluster of them appear to stand next before an effect or (more commonly) a cluster of effects. Such observation, no matter how often the like case recurs, fails to tell us which antecedent, or which combination of them, contains the efficient cause of either effect. We must observe further, and compare cases. Like the algebraist, we will use letters as symbols, for the sake of clearness, calling the antecedents by the first letters of the alphabet, and the consequents by the latter. Let us suppose that the cases agree in this: one antecedent remains the same in each, and the same effect appears after each cluster of antecedents, however the other antecedents may change. Thus in case 1st, $A+B+C$ are followed by X . In case 2d, $A+D+E$ are followed by X . In case 3d, $A+F+G$ are followed by X . Let it be postulated that these are all the antecedents: then the true cause of X must be among them. But in case 1st, neither D , nor E , nor F , nor G , could have caused X , for they were absent. In cases 2d and 3d, neither B nor C could have caused X , for they were absent. Therefore A was the true cause of X each time. The canon, or rule of elimina-

tion, or exclusion of seeming but false causes, then, is this: Whichever antecedent remains alone unchanged next before the same effect in all the known cases of sequence, is the true cause. The law of nature gotten in this case is, that A will always, *cæteris paribus*, produce X. The necessary universal truths on which we have proceeded are, that every effect must have some cause, and that, to be efficient cause, it must be present.

The converse process is also practicable. Let the cases observed be in the *a posteriori* order: several clusters of effects $X+Y+Z$, $X+W+V$, etc., are found to agree only in that among the antecedents A is constant. The counterpart canon will teach that X is the effect of A.

As an example of this method may be taken the earlier and simpler reasoning by which the tides were connected with the presence of the moon on the meridian. In one case the flood-tide was observed, we will suppose, at the bottom of a bay penetrating the land towards the west. The observed antecedents were the passage of the moon over the meridian, and also a strong east wind. It did not appear whether the moon's attraction or the wind's force was the main cause. At the second observation, the flood-tide was preceded by the moon's coming to the meridian, and by a calm; at the third, by the moon and a south wind. The argument concludes that the moon is, all the time, the main cause.

But, simple as this process of exclusion seems, it is not yet a perfect demonstration in every case. This arises from three truths, which must be candidly admitted. First. Usually, we cannot know that the observed antecedents, $A+B+C$, are all the antecedents really present, because often true causes remain long latent. Second. The same effect, X, may be caused at different times by different true causes. For instance, fulminate of mercury explodes under heat; it also explodes under percussion. Sensible caloric is emitted by the solar rays; by compression of a gas; by friction; by chemical actions. If, then, we were safe from the presence of a latent cause among the antecedents, all that we should prove by the method of agreement would be: A is one cause of X (while there may be others). But this would be no mean result, for it would give us thus much of power over nature, that we should know (whether or not X could be pro-

duced by other means) we could always produce it when we could, *cæteris paribus*, produce A. Third. One effect may be the result of the combination of two or more causes. And this single effect may be the total of what would have been the two separate effects of the two causes, acting severally; as when two mechanical forces moving in different lines, propel a mass along the diagonal of the "parallelogram of forces." Or, the mixed effect may present itself in a new form, concealing, by its apparent heterogeneity, both the causations, as when the affinities of an acid and an alkali form a neutral salt, which exhibits neither acid nor alkaline reaction. In view of this third truth, it is evident the "method of agreement" may not tell us absolutely whether A is the cause of X, or A with which other antecedent combined. Again, since A may itself be, along with X, one of a pair of effects of a latent cause, all we can conclude is, either A is cause of X, or is an invariable function of an unknown cause of X. The method of agreement, then, does not give us an absolute demonstration, unless we have means of knowing that the observed antecedents, $A+B+C$, $A+D+E$, etc., are the only antecedents present in each sequence—that no causal antecedent is left undetected.

2. The "Method of Difference" is applicable to the following case. A set of sequences is ascertained, in which, when a given antecedent is present, a given consequent is also present; but when that antecedent is absent, that consequent is also absent. Thus, $A+B+C$ are followed by $X+Y+Z$. But $B+C$ are only followed by $Y+Z$. Here the reasoning proceeds on this premise: because this antecedent A cannot be excluded without excluding the effect X, it must be the efficient cause of X. The canon derived may be thus stated: Whenever the absence of a given antecedent is followed by the absence of the effect, all the other circumstances remaining the same, that is the true cause. The law may consequently be inferred, that A will always produce X, *cæteris paribus*. For instance, let the problem be to ascertain the true cause of the corrosion or calcination of a metal, as iron. It is found that sometimes heat and atmosphere are present; at other times heat without atmosphere. In the former cases corrosion always followed; but when the atmosphere was excluded, there was no corrosion. The cause of corrosion must,

then, be in the air ; further experiment confirms this, by showing it is in the oxygen of the air.

So far, then, as we can *know* that the second set of sequences, in which the effect failed, *differed* from the former set in which it had place, *only in one circumstance*, we know that the true cause is in that circumstance. This is the canon on which most of our experimental inductions in practical life proceed. It is the one of which *experiment* usually seeks to make use. For it is this feature which experiment is most often able to realize, the reproduction, namely, of the identical sequence, abating one single known circumstance, which has been observed before. Hence the method of difference is both more feasible and more definite in its conclusions than the method of agreement. Indeed, the chief value of the latter is to suggest a probability which points to the hypothesis indicating the experiment which will test it. By the experiment thus suggested, an appeal is made to the method of difference, and the probability of the law of cause is either established or exploded.

But the method of difference, when most rigidly applied, only proves that A is one cause of X. It does not prove that X may not be also produced, in other times and places, by other causes. It may, however, be again remarked, that this gives us so much, at least: that A, given similar conditions, will always produce X. Reflection will show, also, that this method may be used in the counterpart, or a *posteriori* way. Whatever antecedent is always absent when the effect X fails, all other circumstances remaining the same, is a cause of X. But, because this canon proves that A always produces X, it does not follow by the converse that every X was produced by A. To the heedless mind, the two propositions may seem almost identical, but they are really different, and the second may be false. Its falsehood appears from the admission that similar effects are often produced at other times by wholly distinct and independent causes. Observation may have proved that all solar rays directly produce calefaction ; but it is entirely erroneous to say all calefaction is from solar rays directly. Few cautions are more important than this, which reminds the inductive reasoner, that while like causes give like effects, like effects do not prove like causes.

In this reasoning, we, of course, use the word cause in the sense

of concrete causal antecedent. If it is taken in the more abstract sense of the efficient energy present in the concrete causal antecedent, it may be a probable hypothesis, that the energy is the same in these several concrete causes. Thus, let the effect be calefaction. It may be caused by the sun's rays, or by combustion, or by some other form of chemical action, or by friction, or by percussion, or by a modified current of galvanism. This proves beyond a doubt that the same effect does not always come from the same (concrete) cause. But the physicist may claim that the molecular energy, causing the sensible effect of calefaction, may be the same energy in all these different antecedents. If so, there is an abstract sense in which the effect, calefaction, proceeds from the same cause all the time. To affirm or deny this is equally unnecessary to our purpose.

3. The third method may be regarded, from one point of view, as a double application of the first, or as a combination of the first and second. The method of difference, as we saw, is the one to which our intentional experiments usually appeal. Having observed a number of cases in which a cluster of antecedents, $A+B+C$, is followed by several consequents, X, Y, Z , and having surmised that A causes X , we construct a designed sequence, in which the cluster of antecedents is in all respects the same, except the exclusion of A . If X disappears out of the consequents, we reason that A is a true cause of X . But in the study of nature, instances may well arise in which we cannot control the antecedents $A+B+C$, so as to procure the rise of $B+C$ without A . What can we do? The third method answers: observe and record all the instances in nature where $B+C$ occur without A , and probably with some other phenomenon, as $B+C+D$, or $B+D+E$, etc. If we find that all the seclusters of antecedents, however else they may differ, agree in the omission of A and also in the failure of X , the probability is increased that A is an efficient cause of X . We have made two different applications of the method of agreement, one affirmative, the other privative, and they concur in pointing to A as a real cause of X . As an example: the question was, Which is the real efficient of the anodyne effect in crude opium? This is known to be a complex gum. It is also known to contain, as one of its "proximate principles," the alkaloid known as morphia. Every time

the crude gum is given, including the morphia, an anodyne effect follows. This is no demonstration. Let us now suppose that organic chemistry has not yet given us the ability to extract the morphia alone from the crude gum, with an exact certainty that we took out nothing else and left the opium, in all other respects, what it was before. This inability prevents our resorting at once to the definite method of difference. But we may collect all known gums any ways akin to opium, containing other proximate principles which it contains, and administer them. If we find that among the various effects of the various drugs, the anodyne effect fails in all which lack morphia, we adopt the probable opinion that this is the real anodyne agent. But the wise physician will remember that this is short of demonstration. The uncertainty always attaching to the method of difference may be diminished, but cannot be annihilated by doubling the testimony. Thus, in the instance taken, the first set of cases would still leave some doubt whether some undiscovered element in the crude opium, or some combination thereof with known elements, might not be the efficient; and in the second set of cases, where morphia was absent, and the anodyne effect also failed, it would not be demonstrated but that the new drugs given contained some element counteracting an anodyne effect, which, but for this, might still have been emitted in the absence of morphia.

4. The fourth method has been termed that of residues. Cases which present a plurality of antecedents, followed by a plurality of consequents, are analyzed by it until one pair is left unaccounted for. This may then be concluded to be cause and effect. The result observed is, that $A+B+C$ are frequently followed by $X+Y+Z$. Now, if, in any valid way, it has been proved that A is the cause of X , and, if single, produces only X , and that B produces only Y , then, although we may not experimentally insulate Z in any separate case, it may be concluded that C is the true cause of Z . For, the causal efficiency of A having been traced into X , and of B into Y , there is no source to which to ascribe Z , except to C . Every effect must have a present cause. Obviously, to render this method a complete demonstration, we should be able to know that A , B and C are the only possible causes present. For if a fourth antecedent,

D, remains in addition to C, it may be proved that A has expended its efficiency in producing X, and B in producing Y, and it will still be an unsettled problem whether C or D, or a combination of the two, produces Z. The elimination is incomplete.

5. Another method remains, which may be applicable where, in consequence of the inability to experiment, the exact application of previous methods may be impracticable. This may be called the inference from *corresponding variations*. A given state or change, which we call A, is often seen to be followed by a change called X. This suggests, as has been so often said, only a probability that A is the efficient cause of X. But if a variation in the action of A is seen to be followed by a corresponding variation in the occurrence of X, the probability strengthens. If a second and a third variation in A is followed by still other corresponding changes in X, the evidence grows rapidly towards certainty. This variation in the antecedent may be not only in quantity, but also in direction of its action, or in some other circumstance; and still it gives us this inference. The nature of the proof is this: If a given antecedent had no power over a consequent, a modification of that antecedent would have no influence on that consequent. Hence, when the modification of the one is invariably accompanied with a corresponding modification of the other, it seems plain that there must be some causal tie. But it is not, therefore, certain that the tie is direct; the two circumstances which change together may be connected as two functions of some more recondite cause. Until we are able, by some experiment or reasoning, to exclude this hypothesis, our induction by observing corresponding variations is not complete.

Examples of this method may be found in the conclusion that increments of heat are the causes of the successive expansions of the mercury in the thermometer. We observe that, the more heat, the more expansion; the less heat, the less expansion. Another application of this induction led to the discovery of the causes of the variations in the height of the tides. It was observed that when the conjunction or opposition of the sun and moon was most complete, the spring-tides occurred; when they were less complete, the tides were lower; and when the two lu-

minaries were farthest from a conjunction or opposition, a whole quadrant apart in the ecliptic, the least, or neap-tides, occurred. Hence, we concluded that the concurrence of the traction of the moon's force with the sun's, in the same line, is the cause of the higher tide.

If the corresponding variations in the antecedent and consequent are variations in quantity, and especially if they maintain an exact proportion in their increase or decrease, such as can be measured by numerical *ratios*, the induction is very clear. The doubling of A results in the doubling of X, the effect; the quadrupling of A in the quadrupling of X, for instance. Then A is clearly the cause of X, or, at least, a regular function of a cause of which X is an analogous function. And the latter conclusion enables us to predict the future result as certainly as the former. But the variations may be in other circumstances than quantity. For instance, if a given body is surmised to be the cause of motion in another body, and if the direction of the produced motion changes regularly in correspondence with the changed direction of the first body, we conclude that our surmise is correct. Or else, again, both motions are functions of some force not yet detected, to which they are both related by a causal tie; so that the regularity of the observed law of motion is safely assumed.

These five methods of interpreting nature, with their canons, appear to present all the valid means in the possession of science. No other are suggested. But the following reasoning seems to show that there can be no other. If the antecedent, which seems to be next the effect, could be surely known in every case to be really the nearest antecedent, no canons of induction would need to be applied. The simple observation would directly show us the causal tie, and, therefore, the natural law. (It is only necessary to say, that by *nearest* antecedent is not meant the one nearest in time or space; for in this sense an inefficient may be as close to the effect as an efficient antecedent; but we mean the nearest in the sense of efficiency.) The whole problem, then, is to make sure that, between the effect and the nearest visible antecedent, some invisible or unnoted antecedent has not come. Now, the only ways to test this, in man's power, are by some elimination of parts of the sequences, or some variation of parts. The methods of agreement, difference, and resi-

dues, if applied in their direct and converse modes, exhaust all the eliminations practicable, whether of causal or non-causal antecedents, or of essential or non-essential sequents. The method of corresponding variations completes the use of the remaining resource. These methods are but the effectuating of that task which the sagacity of Lord Bacon pointed out: the separation of the irrelevant instances from our observed sequences, so that the truly causal ones may be disclosed. That which he foreshadowed, the slow and painstaking care of other philosophers has carried out to its details, and presented with more exactitude. It may be rash to assert that no other method for separating the *post hoc* from the *propter hoc* will be added by the future advancements of logic. Thus far this critical science has advanced in the ablest hands of our day.

Dr. Whewell impugns, indeed, these methods as artificial and fruitless. He questions whether it is by them truth is really discovered, and challenges Mr. Mill to name the important physical laws which the discoverers have professed to reach by either of these methods. The answer to this view is, first, to deny Whewell's allegation. All the valid inductions of common experience and of inductive science have been virtually made by these "methods." And, as we remarked, experiment, the great lever of induction in the physicist's hands, is both a virtual and a formal appeal to the "method of difference." The second answer is, that a logical science, in one sense, has not for its end the discovery of truth in the sense of the invention of it, but the proper function of logic is *to test* the processes of invention after they are suggested. Logic is the critical science. The syllogism, in its other or deductive aspect, is not the inventive *organon*. Its office is to sit as judge on the processes of deductive thought which claim to lead to truth. The function of the syllogism is to hold up its form as a standard of those relations of propositions which make illations valid, that the professed reasonings presented by the inventive faculty, suggestion, may be tried by that sure rule. So, the rules of the inductive syllogism are not claimed to be valuable because they are suggestive of unseen truths, but because they try and discriminate, in the suggestions supposed or claimed to be inductive, between the valid and the invalid. The processes which are active in leading to the un-

known truth are observation, hypothesis, and the "scientific imagination," with experiment. Again, it is but seldom that the vigorous minds which have reasoned deductively to valuable truths, have expressed their arguments in formal syllogisms. Even geometers do not do this, with all the exactness of their noble science. The reasoner does not usually proceed further than using *enthymemes* or *sorites* in the formal statement of his arguments; often he is not even so formal as this. But none the less is the syllogism the full form of each valid step; and the test of its validity is, in the last resort, whether the step can be stated in a syllogism of lawful mode and figure. So it may be true that a Galileo, a Newton, a Franklin, a Maury, may not have expressed his inductive argument in the technical form of either of the five methods; but if his induction is demonstrative, *he has virtually, if informally, employed them.* The test of its validity is, in the last resort, whether his inductive process can be expanded into one of them, and find in it its full and exact expression.

But it has been admitted that even these methods of induction do not always lead to absolutely demonstrated results. The insufficiency of the method of agreement was clearly evinced: either one of three contingencies (see p. 397) would vitiate the conclusion. Even the method of difference, the most exact of all, we found (see p. 399) only gave an absolutely certain result, on condition we could know positively that, between the two sequences, $A+B+C$ followed by $X+Y+Z$, and $B+C$ followed by $Y+Z$, we had made no difference among the antecedents except the exclusion of A . But, obviously, that is a thing very hard for us, in most cases, to know positively, and in many cases impossible to know. Yet, if it is not known, our inference that A is the efficient of X , is not absolutely sure, because the possibility remains that the failure of X to appear among the second set of effects may be due, not solely to the absence of A from among the antecedents, but to that other unnoticed change which was made among them when removing A . Hence, another work remains before an inductive demonstration is complete. This is *Verification.*

Now, obviously, one approximate method of verification is to apply a second method and canon of induction, or a third, in ad-

dition to a first. If they give the same result, the probable evidence mounts up towards certainty with a multiplying ratio. But in many cases only one method is applicable. The most complete verification is obtained by experimenting backwards. Having reasoned to the conclusion that X is the effect of A, the student of nature constructs an experiment, in which A is made to arise alone. If X follows, and the conditions of the case are such he can know that no other antecedent capable of producing X has been present, his induction is verified. Of this the method of Franklin is an instance, when he completed the inductive argument that the lightning of the clouds is electricity. His experiments on electrical bodies, and his observation of the lightnings, had suggested the belief that the causal energy was the same. This was, so far, only an induction by comparison and simple enumeration of instances. The lightnings were apparently followed by some of the consequences of the electric energy. Now, if the two are in reality the same energy, the lightning should experimentally produce all the known effects of the electric excitement. To verify this, as is known, Franklin availed himself of the ingenious expedient of the kite. He thus found that a conductor, excited no otherwise than from the energy of the lightning cloud, emitted the spark, communicated the muscular shock, charged the Leyden jar, and did all that the electrical machine had done. Thus, an only probable induction was verified and raised to the rank of a certainty.

Verification is not confined to experiment; but sometimes a sagacious observation of nature will detect her giving the confirmation. Of this the most splendid instance is the confirmation of Sir Isaac Newton's hypothesis of the orbital movements of the planets by the force of gravity. He had these data of probability. The law of *inertia* seemed to give a cause for a tangential motion absolutely constant. But Copernicus and Galileo had taught that the planetary motions were orbital around the sun as a centre. There was the great mechanical law of the parallelogram of forces, which teaches us that the mass acted on by two *momenta* in two lines, will move in the diagonal. Add to the inherent tangential *momentum*, then, a centripetal force, and the orbital motion seems accounted for. Of this orbital compound motion, the centripetal element appeared as real a

falling to the centre as that of the stone (or the famous apple) falling to the earth. But now our terrestrial experiences had taught him most familiarly how this falling to the earth is the effect of gravity. The lines pursued by all falling bodies tend to the earth's centre. Obviously the earth draws them to her centre. Now, this attraction of gravity acts not only at the earth's surface, but above its surface to the highest distances attained by mountains and balloons. It obviously acts on the clouds and their contents. *Why suppose it limited at all?* Make the supposition that it is universal, though diminishing in intensity with distance, and why may not this be the very reason of all these centripetal motions? Can one guess by what ratio the force of gravity will diminish with distance? If it expands itself in every direction around its centre, it would appear that its intensity in each point should diminish by the same ratio by which the surface of a sphere increases; that is, with the square of the *radius*. May it not be, then, that while the tangential motion of each planet is but the original impulse in a straight line, preserved absolutely constant by *inertia*, the centripetal or falling motion compounded therewith, is just the effect of this gravitation, acting with an energy inversely as the squares of the distances?

Such was the dazzling hypothesis. (We profess to state it, of course, not in the very words of Newton, but in the tenor of his expositors.) But he was too good a logician to assume it as proved; he had a probable induction thus far, nothing more. Verification was needful. He first established the law of planetary attraction, using Kepler's facts (or so-called laws) as his minor premises. Knowing thus the attraction between the moon and the earth, he supposed a piece of the moon brought to the surface of the earth, and from the established law of its attraction, computed the quantity and direction of the descent this piece would make in one second when it came to the tops of the highest mountains. He found that this was identical with the descent, both in direction and amount, of a piece of the mountain, as acted on by *gravity*. From the identity of behavior he inferred (by Rule II. of his *Regulae Philosophandi*) that the force which makes the planetary attraction is identical with the force of gravity. Thus the grandest hypothesis ever constructed

by a scientific man, was converted by this verification (afterwards extended to the other planets) into an established truth.

Thus it is successful verification which completes the inductive demonstration. Where no verification is possible, many, or even most, of our inductions may remain but probabilities. But they are not therefore wholly useless; for, first, they may guide the investigator in the invention of tentative hypotheses; and, second, as we have seen, they may lend to practical life a guidance which, though not certain, has its value. But such an induction has no right to be set up as a proposition in science.

INDUCTION IS SYLLOGISM.

It is now time that we returned and redeemed our promise to show that induction is but the old syllogistic logic, inasmuch as each demonstrative process is but an enthymeme, whose real major premise is the intuitive judgment of cause, or some corollary thereof. We are glad to have the powerful and very emphatic testimony of Mr. Mill to this doctrine. In Book III., Chap. XXI., he says: "As we recognized in the commencement, and have been enabled to see more clearly in the progress of the investigation, the basis of all these logical operations is the law of causation. The validity of all the inductive methods depends on the assumption that every event, or the beginning of every phenomenon, must have some cause—some antecedent on the existence of which it is invariably and unconditionally consequent. In the method of agreement, this is obvious, that method avowedly proceeding on the supposition that we have found the true cause as soon as we have negatived every other. The assertion is equally true of the method of difference. That method authorizes us to infer a general law from two instances: one in which A exists together with a multitude of other circumstances, and B follows; another, in which A being removed and all other circumstances remaining the same, B is prevented. What, however, does this prove? It proves that B, in the particular instance, cannot have had any other cause than A; but to conclude from this that A was the cause, or that A will, on other occasions, be followed by B, is only allowable on the assumption that B must have some cause; that among its antecedents, in any single instance in which it occurs, there must be

one which has the capacity of producing it at other times. This being admitted, it is seen that, in the case in question, that antecedent can be no other than A; but that, if it be no other than A, it must be A, is not proved, by these instances, at least, but taken for granted. There is no need to spend time in proving that the same thing is true in the other inductive methods. The universality of the law of causation is assumed in them all."

Let us submit this assertion to a more critical examination; and first as to the method of agreement. Refer to page 396. In the first case, or cluster of cases, we saw $A+B+C$ followed (possibly among other effects) by X. In the second, $A+D+E$, and in the third, $A+F+G$, are also followed by X. The reasoning, rigidly stated, now proceeds thus (and that it may proceed strictly, it is necessary to make the supposition that no other causal antecedents are present, except A, B, C, in the first case, etc., which, in practice, it will usually be very difficult to know): In the first case, the cause of X must have been either A or B or C, or some combination of them. Why? Because it is a universal *a priori* truth that there is no effect without a cause. This step, thrown into a formal syllogism, will be:

1. No effect can arise without a cause.
2. But X arose preceded only by $A+B+C$.

Therefore A or B or C, or some combination of them, must be cause of X.

So we prove that, in the second case, $A+D+E$, and in the third, $A+F+G$, must have caused X. But next we construct another syllogism:

1. A cause must be *present at the rise* of the effect (immediate corollary from the intuition of power and efficiency in cause).
2. B and C were absent in the 2d and 3d cases; D and E were absent in the 1st and 3d cases; F and G were absent in the 2d and 3d cases, while yet X was always present;

Therefore, none of these, but only A, was cause of X each time.

But why the last part of our conclusion? Why may we not conclude that A was cause of X at one of its occurrences, and D at another, and G at another? A third syllogism precludes this:

1. "Like causes produce like effects."
2. None but A could be possible cause of all the Xs;

Therefore A was only cause of each X.

The method of difference (see page 398) proceeds thus: In one case, or set of cases, $A+B+C$ are followed by $X+Y+Z$. In another case, or set of cases, $B+C$ are followed only by $Y+Z$. As we saw, to entitle us to proceed rigidly, we must know that, in the second case, the absence of A is the only differing circumstance in the cluster of antecedents; that no other change in them has been made. We then conclude certainly that A caused X. The proceeding is a syllogism.

1. Like causes produce like effects.

2. But in the second case $B+C$ did not produce X, which was present in the first case;

Therefore neither B nor C is cause of X. And, since there is no effect without its cause, A must be cause of X.

The third method of induction (see pp. 400, 401) was a combination of the first two, in which the affirmative result of the method of agreement was strengthened by the privative result of the method of difference. The syllogism of the first part has been already given. In the second part, the process is like that of the method of difference.

1. Like causes always produce like effects.

2. But neither $B+C+D$, nor B, D, E, in the second class of instances, produced X;

Therefore neither of them is cause of X. But, as there can be no effect without a cause, A was the true cause of X.

The fourth method is that of residues (see p. 401). What observation gives us is a cluster of antecedents, $A+B+C$, usually followed by a cluster of effects, $X+Y+Z$. We prove that A produces only X, and B only Y. The inference which remains is, that C is the cause of Z. The syllogism is the following:

1. Like causes always produce like effects.

2. But A produces only X, and B only Y;

Therefore neither is cause of Z. But as there can be no effect without a cause, the remaining antecedent, C, must be cause of Z.

This formulation of the inference enables us to see with great clearness what are the conditions necessary to make it demonstrative. We must know, first, that A, B, and C are all the an-

tecedents present which could be causal of Z, or, in other words, that there is no possible cause latent. We must know, first, that A or B produce only X and Y, and that Z is not also another effect of one of them or of their combination. For it is not impossible in itself that a cause may, under changed conditions, produce a second effect, different from the first, or at least differently conditioned. The intuition, like cause, like effect, is only a universal truth, while the cause is conditioned in the same way.

The last method of induction is that by noting the corresponding variations of antecedent and consequent. If a change in the circumstance of A is invariably followed by a corresponding change in X, we infer that A causes X. What is the analysis of this inference? Our intuition of cause is of that which has *efficient power* over its effect. This intuition involves the consequence that only an efficient cause could thus invariably propagate corresponding change in a sequent. But to make this consequence rigid, we must know that nothing varies in the cluster of antecedents, except that one of them which we suppose to be connected with the varying sequent. For, if other things among the antecedents vary, those other things may have to do with the variations in the sequent. But, with this caution, we may frame this syllogism:

1. Whatever sequent varies always with a given antecedent must receive its causal power.

2. But X varies always as A varies, no other change causal of X concurring;

Therefore X is the effect of A.

Thus, by the successive examination of all the methods of induction, it is shown that they are all virtually syllogistical. The simple and satisfactory conclusion is thus reached, which unifies our theory of logic, and which also secures for careful and sufficient inductions that apodeictic character which is so essential to make them scientific propositions, and which we yet saw denied to them by so many great logicians. Induction and deduction are not two forms of reasoning, but one and the same. The demonstrative induction is but that species of syllogism which, getting its minor premise from observed sequences of fact, gets its major premise from the intuition of cause.

III.

THE METAPHYSICAL AND THEOLOGICAL APPLICATIONS OF INDUCTION AND ANALOGY.

IT is to be lamented that Mr. Mill, after teaching so much valuable truth, and displaying so just an insight up to this point, should then assert a view of our universal judgment of cause, which, if true, would destroy his own science. He believes, after the perverse metaphysic of his father, Mr. James Mill, and of the school of Hume, that the mind has no such universal *a priori* judgments. He believes that our general judgment of cause is itself empirical, and is gotten simply by combining a multitude of inductions *enumerationis simplicis*. But these, he admits, are not demonstrative; and the whole and sole use of all the canons of induction is to lead from these invalid colligations to certain truths. And he has confessed that this is only done by assuming the universal law of cause; so that his conception of the whole inductive logic is of a process which assumes its own conclusion as its own premise! That he is not misrepresented, will appear from the following citations from his *Logic*, Book III., Chap. XXI.: "As was observed in a former place, the belief we entertain in the universality throughout nature of the law of cause and effect, is itself an instance of induction, and by no means one of the earliest which any of us, or which mankind in general, can have made. We arrive at this universal law by generalization from many laws of inferior generality." (P. 100.) "Is there not, then, an inconsistency in contrasting the looseness of one method with the rigidity of another, when that other is indebted to the looser method for its own foundation?" (P. 101.) "Can we prove a proposition by an argument which it takes for granted?" (P. 96.) This question, Mr. Mill then says, he has "purposely stated in the strongest terms it will admit of," in order to reject the doctrine of a belief in causation as a necessary intuitive law, and to assert his (as we think, erroneous) doctrine, which attempts to make the inductive process prove its own fundamental premise. His apology for this violation of the very first

principle of logic and common sense is, that the belief in causation, while only an empirical induction, is "an empirical law coëxtensive with all human experience; at which point the distinction between empirical laws and laws of nature vanishes, and the proposition takes its place among the most firmly established as well as the largest truths accessible to science." (P. 103.)

One question dissipates this attempted solution. Is a process of inductive demonstration only valid, then, to one whose empirical knowledge "is coëxtensive with all human experience"? No. Mr. Mill, for instance, when explaining the proof of a natural law by the "method of difference," made these two correct statements: that this method is rigidly conclusive when its conditions are observed; and that it is by this method the common people really infer the commonly known laws. It appears, then, by his own statement, that a beginner in inductive reasoning, long before he has widened his knowledge until it is "coëxtensive with all human experience," may make, and does make, inductions to general laws that are valid. Whence does he procure his universal major premise? Again: the empirical knowledge of the most learned observer in the world, bears but a minute, almost an infinitesimal, ratio to the multitude of consecutions of events which take place outside of his knowledge. The idea that mere empirical observation can ever establish a law as universal, is therefore delusive. It proceeds upon the supposition that, as the number of agreeing observed instances is widened, the probability grows toward a certainty that their agreement expresses the universal law, because the cases actually tested bear a so much larger ratio to the cases not tested. But it must be remembered, if the intuitive and original character of our judgment of cause be denied, we have no means, except the empirical, to know whether the cases of sequence still untested, and therefore unknown, will conform to our supposed law or not. And the belief arising out of this supposed *calculus* of probabilities is utterly deceptive. For the number of cases tested, however large, is still, in the mind of the most learned physicist, infinitesimally small, compared with the number of the unknown cases occurring in nature, not to speak of the more multitudinous cases in past ages. When the physicist has ob-

served for years, the number of instances empirically tested does bear a larger ratio to the number with which he began. True, and this is precisely the delusion which cheated Mr. Mill's mind. But it is the increased ratio of the empirically known to the unknown which is necessary, for the purpose of even grounding a probability. But this still remains infinitesimally small. Mr. Mill obviously has in his mind some conception of concurring witnesses, confirming each other's testimony. The analogy is plausible, but it should be carefully considered whether it is just and exact. When a court of law would ascertain the truth as to a crime, we may suppose that more or less doubt rests on the competency or credibility of the first witness summoned. But his statement is taken; yet it is no sufficient ground on which to condemn a citizen. A second witness, whose credibility is also imperfect, is called; and his statement concurs with the first. If it is manifest no collusion exists, the correspondence of his statement with the first lends it confirmation. If many witnesses of this kind, each independent, tell the same story, although neither one would have been trustworthy enough, alone, to condemn a man, yet the concurrence begets a practical certainty, on which a court might even proceed to convict. Now, Mr. Mill's thought evidently is, that a similar cumulative process goes on, as one induction is added to another, with results which appear mutually confirmatory. According to him, the uniformity of nature is assumed as the general premise, in each of these inductions. But it has to be employed as a major premise, while it is still only an assumption without proof. But this, that, and the other process, grounded in it, turn out so as to correspond with each other and with experience, until at last the inference in favor of it becomes sufficiently cumulative to be taken as a practical certainty.

The remarks already made, when considered, will show that this analogy is deceptive. Why does the judge, after examining many witnesses, each of imperfect credibility, yet conclude from the concurrence of their statements, that he has the truth? Because he deems the number examined such as is nearly exhaustive of the whole body of possible evidence. Suppose that judges, after examining even ten such witnesses, were taught that the whole number of spectators of the crime was not, as is custo-

mary even in public cases, some twelve, or possibly twenty, bystanders, but that the number of equally near eye-witnesses was ten thousand, and that there was in each of the unexamined nine thousand nine hundred and ninety, any, even the slightest, tendency to contradict possibly the statement of the ten. The judge would in that case feel that he had no certainty. There is the concurrence of the ten thus far examined? Yes; but there is also some possibility that the next ten may concurrently contradict them; and the same possibility is repeated with nine hundred and eighty other tens. Had the case been this: the whole number of possible witnesses being twelve, or possibly twenty, ten have been actually examined and found concurrent without collusion, the cumulative probability arising out of this concurrence of the ten might weigh very potently against any surmise or expectation of a contrary testimony in the two, or even the ten, not examined. This is the case which has deceived Mr. Mill. But it is not the case at all which the inductive reasoner has in hand. The number of sequences tested by physicists bears a most minute *ratio* to the untested sequences, in which, on Mr. Mill's theory, there is an *a priori* possibility of a contradictory law. He has himself given us a remarkable confession of this, Book III., Chap. XXI, in his assertion that, *after* all our inductive researches, we still have no evidence that this uniformity of nature is the law of the universe. We may assume it only of "that portion of it which is within the range of our means of sure observation."

Again, the postulate of the uniformity of nature would not be, on Mr. Mill's theory, even one that might be provisionally assumed, because it is obnoxious at its first suggestion, and throughout our provisional course of inquiry, to apparent contradictions. To the merely empirical eye nature appears variable and capricious almost as often as she does constant. So that, had our inductions only an empirical basis, instances of apparent testimony against this general premise might multiply as fast as instances of seeming concurrence in its favor. The real reason that the results of induction are not thus embarrassed is, that true induction is not merely empirical, as Mr. Mill supposes. Once more, if the general premise underlying each case of induction is only an assumption, then it is *a priori* possible it

may involve an error. If it does, why may not that element of error be multiplied and spread itself through the body of connected processes in a geometrical degree? Then, the body of supposed science is always liable to turn out, after all, like the Ptolemaic hypothesis of the heavens, an inverted pyramid, an ingenious complication of propositions forced into a seeming harmony by their common trait of involving the radical error? Science has often shown that a hypothetic structure may be widely built out, and may stand long in apparent strength, and yet be overthrown.

We close this refutation with this testimony from Esser, adopted by Hamilton (*Logic, Lecture 32, end*): "It is possible only in one way to raise induction and analogy from mere probability to complete certainty, namely, to demonstrate that the principles which lie at the root of these processes, and which we have already stated, are either necessary laws of thought, or necessary laws of nature. To demonstrate that they are necessary laws of thought is impossible, for logic not only does not allow inference from many to all, but expressly rejects it. Again, to demonstrate that they are necessary laws of nature, is equally impossible. This has, indeed, been attempted, from the uniformity of nature, but in vain. For it is incompetent to evince the necessity of the inference of induction and analogy from the fact denominated *the law of nature*, seeing that this law itself can only be discovered by the way of induction and analogy. In this attempted demonstration there is thus the most glaring *petitio principii*. The result which has been previously given remains, therefore, intact. Induction and analogy guarantee no perfect certainty, but only a high degree of probability, while all probability rests, at best, on induction and analogy, and nothing else."

Hamilton and his German teacher, Esser, here do two things, one of which is right and the other is wrong. They utterly refute Mill's attempt to ground an apodeictic induction in his false metaphysics as to man's primitive judgment. This is the right thing. They also deny to the inductive logic all apodeictic character. This is their wrong teaching. Surely this conclusion is as much against common sense and the universal practical convictions of mankind, as it is against their experience. Men as-

surely believe that they have a multitude of certain demonstrated inductions. They are right in believing so. On these practical inductions, simple and brief in their processes it may be, yet real inductions, men are proceeding with absolute confidence, in their business, every day of their lives. It is by an induction that we all know we shall die. Does any man think his own death only a high probability? All know death is certain. Here are all the modern triumphs of physical science, which civilized mankind regard as much their assured possession as the pure propositions of geometry. No one regards their laws as of only probable truth. The world intrusts its wealth, health, life, to them with absolute faith. But most of the laws of physics are truths of induction. Hamilton's conclusion, then, while right in denying a foundation for their certainty where Mill and his predecessors propose to place it, in the uniformities of nature, is wrong in allowing to the inductive logic only probable force. He, like the rest, overlooked too much the concern which our primary judgment of causation has in these processes. They did not correctly apprehend the relation of this great intuition to them. It is humbly claimed that, in explaining that relation, by means of a rigid and exhaustive analysis of the inductive methods, this branch of logic has been reconciled with itself, and with the practical convictions of mankind. Its complete exploits of proof are discriminated from its incomplete ones. The former are lifted out of their uncertainty, to the prerogative of the syllogism, by showing that they do not conclude from some to all, but from a universal and necessary judgment to particulars and individuals. Why should it be thought a strange thing that this primary judgment should be found to hold so fundamental a place at the very corner-stone of the sciences? The further philosophy is rightly pursued, the more is the unique importance of this great norm of the reason, *Ex nihilo nihil*, in all the departments of human thought disclosed. It is the regulative notion of the reason.

In defending the intuitive quality of this judgment, then, we are defending the very being of the natural sciences, and also of theology. This is the principle of the reason, on which both the cosmologic and teleological arguments for the being of a God are founded. Hume, the great finisher of the Sensationalist

metaphysics, saw that in denying to the mind an intuition of cause, he was undermining those arguments. Teach with him, that this judgment is only an empirical one, learned from experience ; and his cavil against those arguments, that the world, if an effect, is one too singular and unique to be argued about as we argue of common experienced effects, at once becomes formidable. To undermine theology was his purpose. But we have shown that his metaphysics also undermines the sciences. The inductive method, on this philosophy of Hume, becomes as baseless and uncertain as he wished theology to be ; and its doctrines are degraded from certainties to guesses. The history of the inductive sciences illustrates this influence. When they were prosecuted by the Boyles, Newtons, and the illustrious company of Christian physicists, whose metaphysic was that of Cudworth, Clarke, and Butler, they gave the world those splendid and solid results which constitute the wonders of modern civilization. But when the votaries of the inductive sciences, like Dr. Huxley, have embraced the empiricism of Hume, Comte, and Mill, they stagger and grope, and give the world, in place of true science, the vain hypotheses of evolutionism and materialism. In asserting the true nature of induction we have been pleading the cause of science, no less than of theology.

FINAL CAUSE AND INDUCTION.

If we may judge from the gentleman last named, the hostility of the empirical school is particularly directed against the theistic doctrine of Final Causes. They see how intimately it is connected with the teleological argument for the being and attributes of God. The Aristotelians, it will be remembered, were accustomed to say that an effect, in order to be fully thought, must be considered in its *material*, its *formal*, its *efficient*, and its *final* cause. No intelligent agent acts without an *aim* ; for he cannot, as intelligent, act without motive. The purpose of coördinating the effect he produces to some end which, in his view, has some value, is implied in his action ; and the supposed value of that end is his motive for the volition. In this sense it may be considered as the psychological cause, *aitia*, of the effect. This is *final cause*. If the universe is the product of intelligence, and is governed by intelligence, then it follows that every physical

effect has also a final cause. This is the doctrine which is the especial object of the empiricist's opposition. He is fond of quoting the words of Bacon, *Novum Organum*, L. II., Aphorism 2: "*At ex his causa finalis tantum abest ut prosit, ut etiam scientias corrumpat, nisi in hominis actionibus.*" But further examination of Bacon's system would have shown them that it was not the belief in final causes he disapproved, but that illicit assumption of a particular purpose of the Creator in a particular effect, in advance of inductive proof, which he had found corrupting physical science in the hands of the scholastics.¹ When, for instance, he saw them arguing that the "waters which were above the firmament" must mean a literal transparent ocean of water in the inter-planetary spaces, because God's final cause for placing it there was to arrest and temper the beams of the sun, which otherwise would scorch the planets too much, Bacon very properly objected to this assumption of a final cause in the midst of the inquiry into a physical fact. In its proper place he does due honor to the doctrine of final cause. He was too wise to reject it. For it is the meeting-point of theology, philosophy, and the inductive logic. Mr. Dugald Stewart (Vol. III. *Collected Writings*, Ch. IV., § 6) has elegantly explained Bacon's true position, cited the approbation of Boyle, Cudworth, and Newton for the study of final causes, and shown their importance as a guide to inductive inquiry. Descartes professed to decline their consideration, on the ground that it was presumptuous for a creature so short-sighted as man to undertake to impute designs to God's actions. This objection is met at once by distinguishing between the lawful and unlawful uses of this inquiry. To assume that God always has some designed rational end for all his creations and actions, this surely is not presumption, but only the necessary respect for his wisdom; to suppose that he had not always such designs, this would be the presumption—yea, the insult—for it would ascribe to him the action of working when he had no rational motive; a surmise necessarily disparaging to his wisdom. Which particular design God has in a given structure, this we are not to presume, but humbly to learn from his teachings through his works, in such cases as they disclose their end; and in all other cases we are to remain modest

¹See *De Augustis Scient.*, L. III., ch. 4, 5.

in our ignorance. But the doctrine that each thing has *some* final cause, that a wise Creator did not make it aimlessly, this is the main guide of induction. It is by its light we are guided to the discovery of the laws of cause and effect. The illustration given by Dr. Harvey's discovery of the circulation of the blood is equally splendid and familiar. He himself informed Boyle that he was led to it by the fact that he found in the veins membranous valves opening towards the heart, and in the arteries similar valves opening the other way. He reflected that nature never does anything in vain (which is the same thing as saying that every structure has some final cause); and he was thus taught that the blood flows inward to the heart from the various parts of the body by the veins, and outward by the arteries. In like manner, the doctrine that every structure has certainly *some* function, is the very lever of the construction of comparative anatomy. But what is this function but the final cause of the structure? To discover the function is the main task this science proposes to itself. This is the end pursued through all the comparative dissections. And when the function, or final cause, is discovered, the physiologist knows that he has discovered a general law, not only of that variety or species, but of all species possessing that organ. Cuvier argued: No animal devoid of canine teeth will ever be found with its feet armed with prehensile claws. Why? Because the function of the canine teeth is to masticate living prey; but nature, after depriving the mouth of such teeth, and equipping it only with graminivorous teeth, will never perpetrate the anomaly of arming the feet with claws whose function is to catch living prey. Such is the character of the arguments of this great science. Deny the doctrine of final cause, and it has no basis.

Indeed, if final causes are discarded, there is no longer any basis for any inductive demonstration. The object of this process, in every branch of science, is to discover a *general and permanent law*. How do we accomplish this? Let the admitted answer be repeated: It is accomplished by distinguishing from among the seeming antecedents of a given effect that one which is the "invariable unconditional antecedent" (Mill). For the very nature of inductive logic is to assure us that, when we have truly found this invariable unconditional antecedent in

some cases, it will infallibly introduce that effect in all similar cases. This is what is assumed as the "natural law." But how are we authorized to infer this? By our general premise concerning "the uniformity of nature." But the system which discards final cause also denies that there is any intuition of a necessary law of cause. It denies that there is any cognition of an efficient power in cause, for the senses perceive nothing but a sequence. It teaches that the belief in the invariability of natural law is itself but an empirical conclusion, and one which cannot possibly be proved to be universal or necessary, since it begins in no necessary first truth, but only in probabilities. Then, it is impossible the mind can validly conclude the connection between any antecedent whatever and any consequent to be universal and necessary. For where does that connection abide? On this system it can abide only in the material things which exhibit the *phenomena*. But they are dead, senseless, unknowing, unremembering, involuntary matter; matter which, as it is empirically observed, exhibits itself to us as infinitely variable, and unaccountably variable. From such premises the expectation of any permanent law whatsoever is unwarranted, and scientific induction out of the question.

Now, if there were no other ground for invariable unconditional sequence, would an intuitive expectation of the universality of any law of cause be better grounded than this empirical one? Let this be pondered: our main effort has been to show that this expectation is intuitive, and not merely empirical, and that therefore it is the inductive inference holds good. Could the intuitive or *a priori* reason consistently hold this expectation if it saw in a true cause no efficient power? Obviously not. This would be to expect the first link certainly to draw in the second, when there was no certain connection between them. But again, if efficient power in a second cause is not the expression of any final cause whatsoever, in any intelligent agent, would the reason ever regard it as a *certain* connection between the parts of the sequence? Obviously not. For, the first lesson the reason has learned about the material bodies which are the seats of the *phenomena*, is, that they are blind, inert, unintelligent. All the education the reason has received about these bodies is, that they are *subject to variation*. Our

whole discussion is about "effects." But what is effect save change? The very problem of all science is, *Nature's changes*. How did the reason learn from nature's perpetual variations, then, to trust in the invariability of nature? And especially when this nature is material, and too blind to have consciousness either of her own changes or stability, of her observance or violation of her supposed laws? To explain this intuitive expectation of the invariability of causal changes, as a healthy act of the reason, there must be somewhere a sufficient cause of the law in nature. And the only sufficient cause is the final cause which is the expression of the intelligence which made and governs nature. We believe in the stability of a natural law when we discover it, only because we believe in *the function* which a stable intelligence has designed in endowing that thing with that law. Why are we so certain that "like causes always produce like effects"? Because the same reason tells us that the power deposited in that natural cause was put there by a supreme intelligence, and, therefore, for a final cause; and that the wisdom which planned will certainly regulate, on the same consistent plan, the machinery of causation there established. The postulates of theism are necessary to ground the inferences of induction. The doctrine of divine purpose, and that of the stability of the law of true causes, are the answering parts of one system of thought. When this is asserted, it is not designed to retract the proposition so often asserted as fundamental, that our belief in the regularity of the law of cause is intuitive, or to represent that judgment now, as a *deduction* from the propositions of theism. What is meant is this: that while the Creator did fashion the human reason so as to be intuitively necessitated to believe in cause, that he might be consistent in doing so he also gave it the evidence of his own causation and intelligent design in all his works. The two judgments are complementary to each other; the suppression of the latter would leave the other inconsistent. *God's constancy to his own ends* is the only explanation of that stability, which he has necessitated us to expect in the laws of the second causes by which he designs to effectuate those ends. Or else, the alternative explanation must be, that the causal ties in physical sequences are eternal and necessary, essentially immanent in the very being of the

material bodies acting and acted on, *and this is fatalism*. Let the Huxleys and Comtes, then, choose between this absolute fatalism and the doctrine of final causes. They have no other alternative.

EXPERIENCE AND ANALOGY.

It has been debated, what relation the popular arguments from experience bear to inductions. If the reader has accepted the view of the inductive logic here taught, he will answer that *experimental arguments are identical* with inductive. That is to say, they are nothing but popular attempts to reason inductively; and they differ from scientific inductions only in the simplicity of the process attempted (which is most frequently by the "Method of Difference"), the homeliness of the cases argued, the smaller number of the particulars colligated, and the heedlessness or inaccuracy commonly practiced. So far Macaulay was correct in his amusing application of the Baconian method. A moment's consideration shows that the attempt made by the experimental argument is either an imperfect induction *per enumerationem simplicem*, or else it is an attempt to develop a law of cause among experienced instances, by some canon of inference. "It is observed that rains often follow the new moons" (so the populace suppose). "Therefore, the changes of the moon somehow cause rain." Such is the most imperfect and invalid form of the process. In the picture drawn by Macaulay, an attempt is made by the plain squire to apply a canon of inference. "I ate mince pies on Monday and Wednesday, and I was kept awake by indigestion all night." This is the *comparentia ad intellectum instantiarum convenientium*. "I did not eat any on Tuesday and Friday, and I was quite well." This is the *comparentia instantiarum in proximo quae natura data privantur*. "I ate very sparingly of them on Sunday, and was very slightly indisposed in the evening. But on Christmas day I almost dined on them, and was so ill that I was in some danger." This is the *comparentia instantiarum secundum majus et minus*. "It cannot have been the brandy I took with them. For I have drunk brandy for years, without being the worse for it." This is the *rejectio naturarum*. Our invalid then proceeds to what is termed by Bacon the *vindemiatio*, and pronounces that mince pies do not agree with him.

So the most of the practical truths men use in their daily life are but easy inductions by the method of difference. That fire burns, that water quenches thirst, that alcohol intoxicates, that emetics nauseate—these common judgments are made, and usually made so early and so easily in our experience, that we cease to analyze them by comparing our conscious antecedents in the instances when we were burned, or satiated, or intoxicated, or nauseated, with the instances when we were not, and noting that the only difference in the antecedents was the presence of the fire, or the water, or the alcohol, or the emetic.

The question, What is the analogical argument? has been greatly confused by varying definitions of the word "analogy." Some of these, as the one from Quintilian prefixed by Bishop Butler to *The Analogy* (*Ejus haec vis est, ut id quod dubium est ad aliquid simile, de quo non quaeritur, referat, ut incerta certis probet*), are not incorrect, but are indefinite. Such, also, is Dr. S. Johnson's: "A resemblance between things with regard to some circumstance or effects, as when learning is said to *enlighten* the mind." It would appear that in popular language the word is often used as a synonym of the word likeness or resemblance. Things are said to have analogy because they have like properties. It is obvious that, if this is all the word means, we have no use for it. Some, seeing this, propose that where we see between two objects diversity of qualities and yet a likeness in some one quality, we shall term these analogous. According to this view, analogy would be resemblance in diversity. But again, it is obvious that we have no use for the term, for it only describes what we have described already as partial or incomplete resemblance. Moreover, the definition is fatally defective, in that it fails to signalize the qualities or circumstances in which the analogous things must agree, while differing in others. On that discrimination it is obvious the validity of an analogical argument, from one of these things to the other, must turn. Stewart, in one place, distinguishes resemblance from analogy thus: resemblance is similarity of property between individuals; analogy is similarity between *species* or *genera*. But he almost immediately confesses that this is a distinction without a difference. The act of comparison by which we colligate two agreeing individuals in a *species*, does not differ from that by which we

colligate two agreeing *species* under a *genus*. As Hamilton has so luminously shown by his discussion of "extension" and "intension," the only difference is, that in making the sub-class, we cognize fewer individuals and more agreeing attributes; and in the larger class, more individuals and fewer agreeing attributes.

Hamilton aims, after his favorite teacher, Esser, to discriminate analogy very sharply; yet his distinction is also unsatisfactory (*Logic*, pp. 450, 455). He teaches that the inference of induction is, when from observing that many individuals of a class have a given quality, we predicate it of *all* the individuals of the class. The inference of analogy is, when from observing that several individuals agree in two or more qualities, we conclude that they agree in all the qualities essential to the class, and we collect them under it. The inference of induction may be illustrated thus: a class is composed of A, B, C, D, E. We observe in A, B, C, a given property, Z; whence we conclude the same property qualifies D and E. The inference of analogy would be illustrated thus: We have a class which is defined by the essential qualities X, Y, Z. Examining an individual, A, not yet grouped under this class, we find in it the properties X and Y; whence we infer, without examining further, that A also has the other property, Z, and thus belongs to the class. Of this description we observe, first, that both inferences are from the some to the all, and therefore, as Hamilton admits, not demonstrative. The first, which he calls the inference of induction, is in fact sophistical, and has no proper place in logic. For, how came D and E to be in the class supposed, when their possession of the essential class-property, Z, has not yet been ascertained, either by observation or inference? It must be observed that the places of D and E in the class are conceded first, in order to prepare the way for the inference of induction, which extends to them the class-property Z; whereas, if that property had not been already ascribed, they would not have place in the class at all. Further, if there is any even probable authority for extending the property Z to them, in advance of actual inspection, that authority must come from the second kind of inference, called the inference of analogy. The one inference, then, is only a corollary of the other, instead of being a distinct logical pro-

cess. This attempted distinction, therefore, gives us no help in defining the argument by analogy. We have on preceding pages explained the real processes of the mind in the ascription of class-attributes and the formation of classes. The remarks there made will sufficiently clear up this subject.

The only mode of making the doctrine perspicuous is to restrict the word analogy to a particular kind of likeness. While resemblance, the basis of classification, is similarity of properties in single objects, analogy should be defined as *parallelism of relations between cases*. Resemblance is between an object and an object, either individuals or classes. Analogy is between a pair of objects and a pair of objects. Both Stewart and Hamilton mention this view of the matter, but seem to mention it only to discard it. But Whately sees the value of this view, and defines analogy as parallelism of relations. The most definite conception of analogy is given by a mathematical equation of ratios. Thus, $3 : 9 :: 4 : 12$; or $9 \div 3 = 12 \div 4$. Neither of these pairs of numbers is equal, nor are their sums equal. But there is one relation between 3 and 9 which is identical with a relation between 4 and 12. It is, that in each pair the smaller is one-third part of the larger. The "mathematical proportion," then, is a perfect analogy; and it gives us the most definite and exact conception. And inasmuch as the relation between the two pairs is not only like, but identical, the expression $9 \div 3 = 12 \div 4$ is a true equation, and may be used as a premise for demonstrations as exact and rigid as any other mathematical proof. Let it, then, be agreed that our nomenclature shall be cleared of confusion by using the word analogy in the sense only of resemblance of relations between pairs, and we shall grasp a tenable conception of the analogical argument.

Relations are multifarious. There may be, between all objects qualified by quantity, relations of quantity, as *ratio* and equality. There may be, again, between events connected in sequence of time, relations of causality. There may be, between bodies, relations of space; but as space is measurable, these would resolve themselves into the first class. Again, between organisms, there may be relations of function, and these being causal, resolve themselves into the second class. We have seen that in a mathematical proportion, identity of *ratios* may give us

demonstrated results. So, in a causal analogy, that parallelism of relations which is complete and amounts to identity, may give a demonstrative conclusion. What else is the demonstrative induction by the method of difference? It is but the establishment of full parallel or identity between the causal relation in a pair of terms, the antecedent and consequent, namely, in an observed sequence, and other antecedents and consequents in future sequences not yet observed. And this identity of causal relations is the ground of our belief that the same sequence will recur. This is what gives us the "law of nature" as to that class of phenomena. But if the parallelism of relations is imperfect, or imperfectly ascertained, then the analogical inference is only probable; and the probability diminishes as the parallelism of relations weakens.

If this perspicuous view of analogy is true, we are led to results very different from those announced by the eminent logicians criticized. But the results, if tenable, greatly simplify and unify this department of logic. Instead of separating the analogical argument from both the experimental and the inductive, we find that the analogical is but the common method, including both the others. We have already shown that the experimental inference is simply a plain and brief induction. An inductive argument is simply an inference from that subdivision of the analogical argument (from parallelism of relations between two or more pairs) where the relations in question are the causal relations in sequences. The inference from a complete parallelism in causal relations is the apodeictic induction; the inference from an imperfect parallelism of causal relations is the probable induction, that *per enumerationem simplicem*. Previous writers have been mistaken also, in deciding that the analogical argument cannot rise above probability (as we saw Hamilton declare of the inductive). In fact, the analogical argument, like the inductive, which is a branch of it, may be demonstrative, or it may be only probable, according to the completeness of the parallel between the relations compared or its incompleteness.

THE APODEICTIC INDUCTION.

In concluding this exposition, then, it is necessary to remark

on the looseness and confusion which have prevailed in the use of the term induction, as of the word "analogy." 1. Sometimes the mere colligation of resembling cases has been called induction. 2. Sometimes the name has been given to the mere tentative inference from the some of the observed cases to the all, including the unobserved. 3. Sometimes it has been used to describe what is in reality no *process* of argument at all, but the mere formulating in a single proposition of a class of observed facts, as when, having seen by inspection a given predication true of each and every individual separately, we predicate it of the class. Thus Hamilton, more than once. 4. But the *inductive demonstration* is wholly another and a higher matter. It is the valid inference of a law of nature from observed instances of sequence, by applying to them a universal necessary judgment, as premise, the intuition of cause for every effect. It has been often said, as by Grote's *Aristotle*, for instance, that induction is a different process from syllogism, and is, in fact, preliminary thereto; that induction prepares the propositions from which syllogism reasons. This is true of that induction, abusively so called, which we have just numbered first and third. It is not true of inductive demonstration. It has usually been assumed that while induction is a species of reasoning, it is a different, and even an opposite, species from deduction. The first and third actions of the mind, abusively called inductions, do indeed differ from deduction; but they are not argumentative processes at all; they do not lead to new truth, either inwards or downwards. They merely formulate in general terms, or in general propositions, individual percepts or individual judgments already attained. True induction, or inductive demonstration, is simply one department of syllogistic reasoning, and is as truly deductive as the rest of syllogism; giving us, namely, those deductions which flow from the combination of the universal and necessary intuition of cause, with observed facts of sequence.

This explanation of the nature of the Inductive Logic powerfully confirms the cautions of its wisest practitioners, as to the necessity of painstaking care in its pursuit. It is a method of ascertaining truth closely conformed to the divine apophthegm, "With the lowly is wisdom." It is evidently a modest science. Only the greatest patience, candor, and caution in observing, and

the most honest self-denial in guarding against the seduction of one's own hypotheses, can lead to safe results. After this review, the charge which Mr. Mill brought against much of the pretended inductive science of our day, quoted by us at the outset, appears every way just. What else than unsafe results can be expected from persons who have never truly apprehended what the inductive argument is, when they venture to employ it, with the most confused notions of its real nature, and under the *stimulus* of competition, haste, prejudice, and love of hypothesis? Time and the future have a huge work of winnowing to perform upon the fruits of the busy mental activity of this generation, before the true wheat is gathered into the garners of science.

As Moses and our Saviour epitomized the Ten Commandments into the one great law of love, so the canons of valid induction may be popularly summarized in one law. It is this: *So long as all the known facts can be reconciled with any other hypothesis whatsoever than the one propounded as the inference of the induction, even though that other hypothesis be no better than an invention or surmise, the inductive argument is invalid to give a demonstration; it yields only a probability.* This rule receives an excellent illustration from the legal rule of "circumstantial evidence" in criminal trials. And the illustration is so good for two reasons: that there is so close a resemblance, in many points, between inductive reasoning and circumstantial evidence; and that the great men who, as jurists, have settled the principles of the legal science of evidence, have brought to their problem the ripest human sagacity, sobered and steadied by the consideration that these principles were to have application, in dreadful earnest, to the lives and liberty of all citizens, including themselves. Let us suppose, now, a case in which a murder has been committed, in darkness and supposed privacy, with a firearm. No other species of evidence is supposed to be available than the circumstantial. The prosecution therefore collect every, even the most minute fact, and, with great ingenuity and plausibility, they construct this hypothesis of guilt: that the dead man was feloniously shot by A. B. So many observed facts seem to tally with this, that all men lean to the conclusion A. B. is probably guilty. But the learned judge instructs the jury that the prosecution are bound to show, not only that

the hypothesis of A. B.'s guilt *may satisfy* all the observed facts, but to demonstrate absolutely that *it alone can satisfy* them ; so that the logical result shall be, not only that we may, but that we must, adopt this as the only true explanation of the circumstances proven. And the judge will authorize the defence to test that point thus : If another hypothesis than A. B.'s guilt, which, as a proposition, is naturally feasible, can be even invented, though unsupported by any array of proved facts, which may also satisfy the facts established before the court, the prosecution have failed to establish the guilt of the accused. The ingenuity of the lawyers on that side is no less than was supposed, and the probability of A. B.'s guilt may remain ; but it is not *proved*, and the man must be discharged.

This principle of jurisprudence is in strict accordance with the logic of induction. The analysis of the judge's grounds of ruling is this : no one can assert that *every event*, preceding and attending the killing, has been ascertained and stated by the prosecution. That this remark is true, appears sufficiently from the fact that both sides postulate that the killing was done in darkness and in the absence of spectators. Of course, then, the probability, or at least possibility, always remains, that while the facts given in testimony are all true, other circumstances also truly occurred, not appearing in testimony, and so not considered by anybody. But may it not be that, if there were such other circumstances, and if they were established in testimony, we should see them to be material ? They might contain what would refute the hypothesis of A. B.'s guilt, or suggest some other. How shall we be sure, in our ignorance, that the case may not be such, in truth, in its unknown circumstances ? Only by making an induction which shall be *positively exclusive* of that other hypothesis ; that is to say, only by showing that any unknown circumstances of the killing, if brought to light, *could not* weaken the hypothesis of A. B.'s guilt. And this is not shown as long as circumstances naturally feasible, which would supersede that hypothesis, can be imagined or suggested. In other words, in order to raise the argument on the circumstances to the grade of a demonstration, it must be like the positive induction, by the method of difference. The effect investigated is the killing ; the cause assigned is A. B.'s agency. To prove

this hypothesis, it must not only be shown that the presence of A. B. *plus* any cluster of known or unknown antecedents, D, C, E, etc., could cause the killing; but it must also be shown that the presence of all those other antecedents, D, C, E, etc., *minus* A. B.'s agency, could not cause the killing. See the *Canon of the Method of Difference*, p. 398. And as the second killing of the same dead man is impossible, no experiment can be exactly instituted to apply the method of difference in this case. The completion of the argument must be by demonstrative deduction. Thus this scientific canon of induction receives an apt illustration from this employment of it in the rigid science of jurisprudence; and the correctness and usefulness of the canon is splendidly evinced in this great instance.

This seems the proper place, also, to state and explain the relations between inductive inference and parole-testimony. We will do this by resuming our supposition. Just when the prosecutors are in the full tide of their ingenious and very highly probable circumstantial argument to A. B.'s guilt, the defence introduce an eye-witness named M. On examining him, it is evident that M. is naturally competent to have been an eye-witness of the killing, that is to say, that no natural impossibility of his having witnessed it, as from a demonstrated *alibi* during the night when it happened, exists. But M. testifies that he lodged in the room with the dead man on that night, and saw him killed by another agency than A. B.'s; we will say, for instance, by the dead man's own suicidal hand. The prosecution may, of course, disparage the *credibility* of this witness by raising the question, Why his testimony has remained so long latent? Let us, then, to clear away this complication, suppose further, that M. explains this reasonably; as, by showing that as he rushed horrified from the scene of the tragedy through the darkness to summon other witnesses and assistance, he had been suddenly kidnapped and detained by his own enemies. What is now the effect of this parole-evidence as against the circumstantial? The learned judge rules that, unless the prosecution have valid grounds for impugning M.'s credibility, their circumstantial evidence breaks down wholly before it. They reply that they cannot impugn M.'s credibility. The judge then instantly decides that they have no case; declines to hear further argument, and

if the prosecution will not take his advice to discharge the accused by a "*nolle prosequi*," instructs the jury to acquit. The industry and ingenuity of the prosecution are no less than they were. But it is logically worthless against the knowledge of an admitted eye-witness. The analysis on which this correct conclusion grounds itself, is similar to the previous. It is admitted by all that this killing may have been preceded and attended by other circumstances than those ascertained in the circumstantial evidence. Unless the induction is of that exclusive and demonstrative sort which proves that the possible unknown circumstances *cannot have been* material to the causation of the killing, and therefore could not, if known, shake the conclusion that A. B.'s act was the cause; then there is a remaining probability that the cause was not in A. B., but in those omitted antecedents. Hence, when M. testifies, he places the causation there, where confessedly there is room for it to be placed. His testimony is legitimate, and goes with the whole weight of the moral credibility he deserves, to establish the fact against the hypothesis.

We thus learn that unless the induction be positively demonstrative, it must give way in the presence of any adequate intelligent parole-evidence affirming a different cause for the phenomenon. Another more popular reason supports this conclusion. Does one say, "The living witness may be dishonest or deceived; but my facts and inductive argument are wholly dispassionate, impartial, and valid"? He forgets that his facts also have no better foundation than the professed eye-witnessing of some human witness. Does he say, "They are facts; for I saw them"? He is but a human witness. Or, if he derives his facts from the observations of others, they are mere human witnesses. But the facts are a premise of his inductive logic. The inference cannot be more valid than its premise. It thus appears that it is wholly unreasonable to claim superiority for an induction over testimony, for this is as though one should claim that "testimony is stronger than testimony." The only consistent meaning would be the arrogant assumption that "my testimony is honest and the other's dishonest." This conclusion, that competent testimony is superior to any except an absolute exclusive induction, is practically accepted by all sound physicists. Let all the facts previously known tend to refer the effect to a supposed cause, so

that the scientific world is almost prepared to accept it as a law; if one competent observer arises, testifying to another actual cause for the effect, seen by him to produce it in a single case, the other hypothesis is withdrawn. For science admits that here is a case which cannot be reduced under it. An illustrious instance will be remembered in the first telescopic examinations of Galileo. He saw that the planet Venus was *gibbous* at a time and in a way she would not have been according to the Ptolemaic hypothesis. That one observation, with men of true science, made an end of the Ptolemaic theory. The only alternatives were to surrender it, or to say that Galileo did not see Venus gibbous at that part of her orbit.

The nature and methods of the inductive logic have now been discussed purely in their formal aspect. So far as the views advanced differ from the best writers, the difference is in favor of a simplification of the principles, a closer conformity to sound philosophy, and a natural explanation of what had been left by others as either imperfections or mysteries of the results. Especially is it claimed, that the inductive logic is, by our exposition, rescued from that fatal accusation of incompleteness of demonstration, with which the greatest previous logicians, as Hamilton, close their discussions of it. Whereas they decide so positively, that no inductive inference can rise above probability; the common sense of mankind has always insisted that some inductive inferences do rise above probability, and mankind have, in all ages, persisted in venturing their lives and interests upon some inductive inferences, without having their confidence in their validity refuted by events. Here was a most awkward contradiction between common sense and philosophy. This contradiction we claim to have reconciled, by showing that some inductive inferences are apodeictic, not being in truth inferences of an illegitimate order "from the some to the all," but inferences in a regular syllogism, from a universal necessary judgment. It is always one of the soundest features of a philosophy that it ratifies and explains the conclusions of common sense. Our theory of induction also bears this signature of truth, that while it earnestly claims for that branch of logic some demonstrative conclusions, it gives a natural explanation how men, and even able scientific men, are continually advancing with con-

fidence so many faulty and erroneous inductions. This is because the methods of the demonstrative inductions are few, because they require a rigid compliance with their conditions, and because, amidst the fascinating complications which so many physical problems offer, the observance of these safe conditions is often difficult, and demands unusual patience, perspicuity, and candor. Especially is the confused state of these sciences accounted for, by the fact that the investigators were proceeding upon erroneous theories of inductive logic, which failed to discriminate the valid from the imperfectly valid processes. Mr. J. S. Mill has treated the subject with superior insight, in the main, to any other British or American writer, because he comes after his able competitors, and because he brought to this branch of logic the resources of great learning and acuteness. Now, the reader is requested to note, that while truth has compelled the criticism and correction of his error as to the necessary and universal judgment underlying the inductive syllogism, the essential and vital features of his system are retained; and that in a form even more practical and useful than his. These are: 1, That there is a demonstrative induction. 2, That its essential basis is the universal judgment of cause and effect. 3, That there are no other methods of discriminating the valid induction from the invalid, than the five he enumerates; and that these are only valid when guarded as he directs. The practical applications of his system are obviously not disturbed, but confirmed, by the theory asserted here against him, that the fundamental premise is not an empirical but an intuitive judgment.

THE INDUCTIVE ARGUMENT ILLUSTRATED BY APPLICATION TO CASES.

This discussion will be concluded by applying the principles of logic taught above to a few physical doctrines which have recently interested the scientific world.

1. That the theory of the equivalency and transformation of energy has not yet been made more than a hypothesis, was intimated on page 387. What is denied is, that it has been extended as a valid induction to all the energies of inorganic matter. We have never seen, for its supposed extension to vital energies, any portion of evidence whatever, or anything more

than groundless assertion. It cannot claim to be an induction, even as to the forces of inorganic matter, even when tried by the popular criterion. It does not preclude the rival hypothesis, that there are as many permanent and distinct powers in matter, as there are essential properties; which powers are not annihilated on the completion of their effects, but only restored to an *equilibrium*, in which they exist still as potential tendencies. This theory is not only not excluded, but accounts for many cases for which the other theory of the "equivalency and transformation of energy" does not account. The first also solves successfully the very cases, like that of the absorption of so much sensible caloric, reappearing in the form of so much elasticity, which are claimed as favorable to the latter. Let us suppose that caloric is a persistent and distinct molecular energy, which never really transforms itself into and disappears in elastic force; but that the application of the caloric is only the cause of release of the elastic force from the state of potential tendency to activity; while the caloric, having done that work, is itself remanded, for the time, to its former potentiality. Then, the equivalency between the caloric recalled and the elastic force released, would of course follow. It would be the old case of the correspondency of action and reaction. But a more serious defect is, that the theory has not been extended to some material energies, as that of gravitation, by any collection of sequences giving even the invalid induction *per enumerationem simplicem*. Next, we have seen that the theory cannot meet the question, What becomes of the forces radiated outwards from the exterior bounds of the universe; and how, on that theory, can we escape the conclusion that the total aggregate of force, instead of being persistent and identical, as the theory wishes to claim, is diminishing, and tends to total cessation and stagnation? Thus the theory fails to meet the grand final test stated on p. 405. Nor would any one individual instance of the theory (as this: that it is the heat, and not the distinct power of elasticity released by the heat, which lifts the piston in the steam-cylinder) stand the test of either one of the canons of induction. Let the reader attempt it, and see for himself. And once more: the *verification* of the equivalency of what this theory calls the transformed force, has never been attempted even, except as to

the related energies of caloric and elasticity; and we suspect the further verification will ever be impracticable.

It is worthy of inquiry also whether this hypothesis, if adopted, would not destroy the very foundation of the inductive process. That foundation is, "Like causes, like effects." The plurality of effects is accounted for by referring them correctly to their different causes. But, according to this theory, *there are no different causes*—there is but one cause. The search after efficient cause, which has been proved to be the vital problem of induction, must be degraded into the inquiry after the uniform antecedent, an inquiry which, as we showed, could lead to no assured result.

2. The laws of refraction revealed by the spectroscope are now supposed to be so established for all worlds as to be relied on to teach us the chemistry of the heavenly bodies. Let us see first to what extent those laws are demonstrated for the material elements of our planet. The analyst proceeds thus, for instance: When vapor of sodium is present in an incandescent flame, the rays of white light coming through that flame, being enlarged into a spectrum, exhibit certain black lines in certain places. When the sodium vapor is removed from the flame, those lines disappear from the spectrum cast by those rays. Now, it may be claimed that this is a proof, by the method of difference, the most rigid of all, that sodium always causes those lines in the spectrum. It is conceded that this may be a valid induction, to a certain extent. Let us refer to pages 398-405, and we see that, provided the experimenter can be certain he has made no change whatever in the flame inspected, nor in the refraction, save the removal of the sodium vapor, it is proved that sodium is *a cause* of those lines. But it is not yet proved to be the *only cause*, for similar effects may be produced by more than one cause. Let the analysis be extended, then, to all the sixty-six simple substances catalogued by analytical chemistry, and let it be tested by experiment that none of the others produce the same lines in the spectrum. Then it may be considered proven that sodium is not only *a cause*, but *always the cause*, of those lines, just so far as, and no farther than, it is proved that chemistry has already discovered all the elemental material substances in this world. In the present advanced stage of chemi-

cal research, it is admitted that the probability is *very strong* that the sodium vapor is the only cause of those particular lines in the spectrum. It is certain, by the method of difference, that it is a cause of them. That is to say, the causation of those lines is certainly connected with that metal, either directly, by its efficiency of them, or relatively, by the constant connection of both of them with some other efficient still undetected. A law is revealed which may be relied on as to this earth.

But, as Dr. William B. Carpenter cautioned the admirers of the spectrum analysis, in his inaugural lecture before the British Association, the induction does not hold when extended to other worlds. Its invalidity is not now inferred from the facts that the pencils of light from the stars are so exceedingly slender, and that they have to pass through unknown possible influences in penetrating the whole thickness of our atmosphere, nor from the exceeding difficulty of making so entire a separation of these minute and faint pencils of light in the tube of the spectroscope from other very minute rays, direct or refracted, travelling on lines which vary from them by infinitesimal angles, as is necessary in experiments so delicate; for these difficulties concern rather the practical manipulator than the logician. But the chasm in the induction is this: all that the most valid application of the method of difference can by itself prove is, that A is *one efficient* of X. It does not disprove this proposition: that nature may contain other efficient of X. It may prove that, *ceteris paribus*, all A's will produce X. But it does not prove that all X's are produced by A. The concession which we made as to earthly chemistry, that all so-called *sodium lines* are produced by sodium, rests on a further fact (which is an enumeration of facts only, and not on an induction) that all the other known simple substances have been tried and failed to produce the *sodium lines*, coupled with the probable inference that analytical chemistry has been carried so far on this earth, *it is not likely any substance capable of producing sodium lines remains undetected* among earthly materials. But as to other worlds, we have made no chemical analyses! We know not what unknown simple substances endued with we know not what properties, would be found there. And obviously, to infer an analysis from this feature of a spectrum of that world's ray, and then reason about

that spectrum from that assumed *analysis*, is but "reasoning in a circle." As a demonstration, it is worthless. Nor does it seem likely that this fatal chasm in its logic can ever be bridged. All that we can be taught is a possibility of the presence of the same simple substances, in part, in our world and other worlds. This possibility receives some probable confirmation from the fact that some of those substances, as iron and nickel, are found in meteoric stones; that is, if the theory is valid that these are fragments of planetary bodies.

3. Another very important application of these logical principles is to the inductions of geologists concerning the mode of formation of *strata* and mineral deposits. The rule has just been recalled, that the law, "Like causes, like effects," does not authorize its converse, "Like effects reveal the same cause." For, as is so obviously clear, two independent causes may produce effects exactly similar. Now, much of the supposed inductive reasoning of treatises on geology is, in reality, but an application of this vicious converse. Observation shows us a given stratum of rock or indurated sand and slime, resulting from sedimentary deposition from water. The inference is, therefore, all stratified rocks are sedimentary. And some treatises on geology assume this unsafe and invalid surmise so absolutely as to use the words "sedimentary" and "stratified" as synonyms. A very plain and useful instance of this sophism is given by the case of the Italian savant who inferred an immense age for the strata in a volcanic spot of South Italy, by examining a well. The sides of this little excavation showed certain strata of volcanic earth superposed on lava. The savant's assumption was, that all this earth was formed gradually by disintegration of hard lava; and as the process is notoriously slow, the thickness of the beds of loose earth denoted a vast lapse of time. Now, had he been certain that disintegration was the *only* cause of volcanic earth, his inference might have been worth something. But the heedlessness of his logic was put to shame by a very simple statement of fact, made by the peasants. Disintegration of hard lava was not the only cause of volcanic earth. Another cause was dust and ashes, showers from the neighboring volcano. These peasants had been actual eye-witnesses of several such emissions, which, guided by a favoring breeze, had covered

their fields with an inch or two of new soil in a single night. And by the simple light of this other cause, which the great savant had not thought of, it was clearly shown that the accumulation for which he required many scores of centuries, had been the actual work of about two hundred years.

To the candid mind these hints are enough. The most careful observer is most fully aware of these facts: that our knowledge of the terrestrial energies which have exerted themselves in our globe, is imperfect; that the grade of speed at which known forces are now observed to act, may have been exceedingly different at other times and under other conditions of temperature and climate; that the causations which would need to be accurately determined, in order to settle many of these physical questions, were probably complicated beyond all reach of our observation and ascertainment at this late day.

4. The evolution theory presents a most interesting and instructive case for the application of this logic. Its main points are: that what we supposed to be distinct *genera* of animated beings did not originate in the creation of first progenitors, from whom all the subsequent individuals descended by a generation which transmitted, by propagation, precisely the properties essential to the *genus*; but that higher *genera* were slowly evolved from lower; that the causes of the differentiations wherein the more developed individuals differ from their less developed progenitors, are to be found in three unintelligent physical influences, heredity, the influence of the environment on the being's powers, and the survival of the fittest. The observed facts from which this hypothesis claims to derive its induction, may be grouped under these general statements: that in fact the known *genera* of animated beings form a continuous ascending scale, from the most rudimental up to man, the most highly organized; thus suggesting the ascent of organization along this ladder, from a lower stage to a higher; that a multitude of organs and limbs are actually seen to grow from their infantile to their adult states, under the interaction of their environment and the instinctive animal exertions of them; that the conditions of animal existence are, in the general, such that the individuals possessing most of the natural vigor, qualifying them to reproduce a strong or a developed progeny, are most likely to survive, while the less

qualified perish ; and that observed facts in the breeding of animals present cases in which the rule does not hold that "Like produces only its like," but often it produces the slightly unlike, differing from itself by a slight shade of improvement or deterioration. These facts, the theory claims, when a very long time is allowed for the slow and irregular, but in the main progressive, action of the forces they disclose, prove that all animated *genera* can be accounted for as the ultimate progeny of the most rudimentary protozoön.

The task in hand here is not to give a full refutation of this theory, but to criticize it in the light of the logical principles established, simply in order to see whether it is an induction. It appears at once that it has no claim to come under the head of either method of induction, not even of the loosest, the method of agreement. Indeed, it cannot be said to have a single *instance*, much less an agreeing multitude, in the proper sense of inductive instances. To resort for simplification to our notation, let A stand for the aggregate of supposed evolutionary agencies, which are the combined cause ; let X stand for the effect, *a new genus*. There has not been presented one instance, as yet, in which A has been followed by X, even seemingly, A being accompanied or unaccompanied by other antecedents, B, C, D, etc. The utmost which can be claimed is, that a few "varieties" have been evolved, but no permanent *species or genus*, which can meet the tests of generic character. Even these "varieties" cannot be proved to be the effects of the supposed evolving physical causes, since it does not appear that they have evolved themselves, except when these unintelligent influences were guided by a rational purpose, as that of the stock-breeder or bird-fancier. Again, the theory fails as to man, the rational, and the highest result of the supposed evolution, in that its energies are unintelligent and blind ; but man has a reason. There must be enough in the cause to account for the effect. And it fails as to man and all the lower animals, in that their organs all display, even down to the lowest, the work of thoughtful design and the intelligent selection of final cause ; whereas the evolving energies are all blind and unintelligent. Nor has the first instance been found where the influences of "environment" have evolved a single new organ or physical faculty, in

the sense necessary to the theory. The facts observed are these : that when nature has implanted the generic organ or function by regular propagation, but in the infantile state, the "environment" has presented the occasion, not the cause, for its growth, by its own exercise up to its adult strength. The fish's fin grows by beating the water, in this sense; the bird's wing by beating the air; the child's arm by the wielding of his toys. But where is the first instance that the environment has evolved a new organ over and above the generic model? Where has environment placed a new fin on a fish's back, or an additional finger on a youth's hand? The instances ought to be of this nature to give any show of an induction. And the organ evolved ought to become not merely an individual peculiarity, but a permanent trait transmitted uniformly by propagation.

The canon of the inductive logic requires, again, that all other possible causes, other than the one claimed in the hypothesis, shall be excluded by at least some of the known instances. But the theistic account, which is made entirely probable, to say the least, by arguments in morals and natural theology, presents another sufficient cause in the creative power and wisdom. Since the origin of species antedates, confessedly, all human observation and history, this cause for it is probable, until atheism is demonstrated. Even were the evolution theory an induction from real instances, in which these evolving influences were truly adequate to the effect, there would be no valid induction until the theistic cause was positively excluded by a demonstration of atheism. And to offer the conclusion which would flow from such an induction, when completed, as sufficient for that atheistic demonstration of the non-existence of a Creator, which alone would complete the induction, this would plainly be "reasoning in a circle." The conclusion would have to be assumed in order to make out the process leading to it. But supposing there may be a Creator of perfect wisdom and power and full sovereignty, it is always supposable that he may have seen reasons for clothing his creatures with those very qualities on which evolution argues against a Creator. Is it said that the regular gradations of organized life suggest the belief that the higher forms were evolved from the lower, along the stages of this ladder? But the theistic hypothesis suggests, with more probabil-

ity, the belief that the Creator had reasons for filling all the stages of this ascending scale with *genera* and *species* which are yet distinct. To lift the former surmise to the faintest approach to an induction, the latter hypothesis must be precluded.

Once more, the scheme is fatally defective in that it has *no verification*. Not a single new *genus*, or even individual, has been presented, or can be evolved by experiment, to confirm the hypothesis. Indeed, it is impossible, from the nature of the case, that there can be a verification, since the advocates of the scheme admit that the latest evolution, that of man, was completed long before the earliest human history. The most that can be said for this theory is, that it is an ingenious collection of guesses, which bear a fanciful, but deceptive, likeness to real analogies.

So far the pretended argument goes in its simpler form. Its manifest invalidity constrains some evolutionists, as Le Conte, to surrender it. But these assert that deeper researches into the parallelisms of organic relations give a truly inductive ground for their theory. It is claimed that the likeness between the stages which Agassiz, chiefly, disclosed in embryology, paleontology, and our existing gradations in natural history, now called the ontogenic, the phylogenic, and the taxonomic gradations, establishes evolution by a solid induction. The animals now upon the earth form a gradation, through the four grand divisions of radiates, molluses, articulates, and vertebrates, from the lowest and simplest up to the most complicated and highest. So, evolutionists assert, the living creatures made known by the fossils as once having lived in paleontologic ages, show the same gradation. And third, the transformations through which the foetal organisms, even of the highest species, pass from the *ovum* to the adult, exhibit the same gradation. The proposed argument is, that these analogies give an inductive proof that *species are evolved from species* by an equally natural law of evolution.

Let it be again observed that all we need attempt, in criticizing this supposed argument by the principles of induction, is to show that the process is invalid. And we would preface the further criticism by the *caveat* that we do not admit the parallelism of the three sets of instances in the sense claimed by evolutionists. The paleontologic series, for instance, in order to sup-

port this pretended evolutionist induction, should be a series of higher and more complete animal forms succeeding the more rudimental in time. But such it is not. At each paleontologic period, some of the four groups of living creatures are found coëxisting, in at least some types of each, and not merely successive. The palæozoic strata are found to contain vertebrate fishes, along with the radiates and molluscs of that first period. And, if we may trust Agassiz's assertion, there is no evidence that the embryonic changes of any individual animal of a higher group exemplifies all the gradations from the lowest group up to its own. These mutations of its foetal life only illustrate fully the gradations of the species in its own group.

But, waiving for the time these questions of fact, we show, in this pretended induction, this vital defect: it mistakes an analogy (an imperfect one) in the method of action of certain vital energies for a causal identity. The essential link of a demonstrative induction is lacking. If we take, for instance, the embryonic order of development, all that is proved by the multitude of cases colligated is, that the individual *ova* are all endued with a vital energy which causes, and thus insures, the growth of each individual into the matured type of its own species. For such, and such alone, is the result, as observed. In no single case has an individual *ovum*, be its analogy of mode of development to that of other species what it may, resulted in an evolution into a different species from its own. Hence, there is not a particle of inductive evidence that this causal energy which we see at work is competent to such evolution. Each individual gives an instance of a development through an embryonic series. True. But in every instance the development terminates within the strict limits of its own species; and the induction from the latter set of facts is precisely as broad and as inexorable as from the former.

Again, the analogies noted all receive their sufficient solution from another hypothesis, namely this, that they are the expressions of a common plan of thought, by which the creative Mind voluntarily regulates its creative and providential actions. Now, as we saw, the conclusion from an induction is not demonstrated, unless the instances collected preclude all other probable, and even possible, hypotheses. Here is the other hypothesis,

not only probable and intrinsically reasonable, but, in the light of other arguments, certain—the theistic one: that the reason why the vital energies wrought in paleontologic creatures in a way analogous to the way they work now is, that the same God created and governed then, and that he sees good reasons for following, in the different ages, similar types of working. It might be conceded that the analogies under discussion, if viewed alone, would be insufficient to prove the existence and action of a God. Yet they do suffice to show that solution a probable one. This alone is enough to prove the evolutionist conclusion invalid.

The argument, then, is not a demonstrative induction. Here our logical criticism might stop. But it will be instructive to show how it is confirmed by the positive refutation which other laws and facts of natural history inflict upon the evolution theory. This is excluded, as a tenable explanation of the organized universe, by the following instances, which do have, what the previous analogies have not, an application in strict accordance with the principles of induction.

1. No existing species has displayed a particle of tendency towards the change in a single truly specific attribute, within the longest period of human history. The mummies, as well as the effigies, of the living creatures associated with the oldest Egyptian remains, were found by Cuvier and by Kunth specifically identical with the same creatures now existing in Egypt. Researches into antiquity have everywhere led to the same result. Now, if evolution of one species from another is to be inductively proved, some instances at least tending to the result must be adduced. The fact that all human knowledge through three or four thousand years presents no approach to a single instance, is fatal.

2. In paleontology, each species, so far as known from its fossils, has remained absolutely fixed during the continuance of its period. It is very true, that a species may be found in a subsequent cosmical period, showing resemblances to, and improvements on, a given extinct species of the previous cosmical period. But this fact makes nothing for evolution, because science shows that there has been, between the two periods and their two sets of living creatures as two wholes, a clear breach,

interrupting the natural and regular forces of reproduction. The evolutionist must show some instance where, within the limits of some one cosmical period, a different species has been naturally evolved from one simpler than itself.

3. If the existence of the higher forms of life were accounted for by slow evolutions from the lowest, then the paleontologic history should unquestionably present us with this state of facts: First, with a period of the simplest forms, as the radiates; then, afterwards, with a period of more developed forms, as molluscs; then with the still higher, as the articulates; and then with a period of the highest. But the state of the facts is exactly the opposite. All the paleontologic periods give us some of the four groups contemporaneously.

4. The methods of nature, in the formation of the four groups, are essentially different. While some of the species belonging to one group have a higher organization than others, they all display a community of plan in their structure. But when we pass to another group, we meet a different plan. Hence we infer that even if we could do what has never been done, find an actual case of the evolution of a species from a lower one of the same group, the barriers separating the groups as grand divisions would still be insuperable. Their several plans of structure are too different for the transmutation of one into another.

5. Men speak of organic life as if its different species formed one regular and continuous series "from the monad up to man." This is found to be a misconception. The animal kingdom is composed of a number of partial series. When the attempt is made to range all these in one single continuous series, fatal dislocations appear. The line of progress is not a continuous ascending line.

6. The theory of evolution assigns great force to the influence of "environment," in developing organs into those of a new species. But naturalists tell us that they find a number of the most diversified types existing and prospering together for long ages under identical circumstances. But, were evolution true, the identity of the whole environment ought to be working an assimilation of the various types subjected to it. Again, identical species are found persisting for long ages under the most diversified environments. These facts show that there has been

deposited within each species its own form of vital energy, which resists differentiation, and insists, against any influence of a changed environment, on reproducing only its own type. The rational inference is, that either each species is eternal, an impossible proposition, or else each points to an extra-natural Power, which deposited its specific vital energy in it at its beginning.

And that *Power*, in the last place, was *Mind*, because every adaptation of organs to their functions, every reappearing analogy of structures in successive cosmical periods, every relation instituted between the individual and its environment or its fellow-creatures, discloses *thought*. But evolution is claimed to be only a physical process.

Such is the use of the observed facts of the animal kingdom, as sanctioned by the true principles of the inductive logic. The result of this correct colligation is to show that evolution cannot be true.

A leading American evolutionist¹ insists that we shall accept the instance of the cock developed from the egg as the true type of his evolution theory; and he claims that every such instance gives him an inductive argument by analogy to support that theory. I cite this because it suggests precisely the conclusive points with which I close this refutation of evolution. The instance gives me two lines of remark, each fatal to the theory.

First, it betrays the most sophisticated and misleading confusion between two concepts entirely distinct; a confusion by which, I observe, evolutionists generally cheat themselves and their readers. They confound development with evolution, which is an essentially different thing. The production of the cock from the egg is a case of development, which is the gradual enlargement and completion of an individual adult organism from its individual specific germ by laws of growth absolutely defined in each case by the limits of the species. Such development everybody admits, whether a rustic or a scientific man. For the world is full of it; every animal, including the human, growing to its adult size from its foetal germ, every oak growing from its acorn, every corn stalk from its seed, is an instance of this development. But the proposition of evolution-

¹ *Evolution and its Relation to Religious Thought*, by Joseph LeConte.

ists is wholly another matter; its claim is that whole new species are gradually grown from organic germs which were at first outside their own limits of species. Now every instance of that development which we all believe in takes place strictly within the lines and limitations of the energies of its own species, deposited by God in the specific germs. Every instance of evolution of species, had such ever occurred, would have taken place in express violation of these lines and limitations of specific energies. Here is a fatal breach of analogy between the two sets of instances. The very point in debate is, whether these distinctive limitations of species uniformly govern in each case of development? Every instance of development known to science goes to prove that they do; the very point of the evolution hypothesis is to claim that they do not. It is, therefore, but scurvy sophistry to present us these admitted instances of development of individuals as analogical proofs of exactly the opposite law in the evolutionary species.

Second, we claim that the case of the growth of the cock from the egg is a fairly representative instance of all the cases in which we find organic nature doing her wondrous work. For every fact marking the origin of the cock from the egg finds its just parallel in a manner in which every other organism in the world, vegetable and animal, has arisen. The essential fact in every case is that the organic germ from which we see the development proceed, has owed its own existence to a previous adult organism. This universal fact destroys the evolution hypothesis and establishes that of the Bible. (See Gen., chapters i., ii.) First, the adults created by God "producing seed after their kind"; then, the subsequent generations developed from these seeds within the strict lines of their limits. For, if the evolution hypothesis has any proof at all, it is the inductive proof. The only data of the inductive argument are observed facts. Where there are no facts to ground it, there is no argument. Here, then, every fact in the world is against the evolution argument. For nobody in the world ever knew of an egg capable of hatching a cock, which was not laid by a previous existing adult hen. Thus every fact of observation proves that organisms began by creation, and not by evolution.

Now the evolutionist may retort that nobody ever knew of a

hen which was not produced from a previous egg. He will say: "Here is a full Roland for my Oliver;" that he thus proves the egg was before the hen at least, as well as I proved that the hen was before the egg. But I reply: It is not true that nobody ever saw a hen which was not the product of a previous egg. Adam did. But the evolutionist will demur that Adam seeing the hen which never came from an egg is an unscientific assumption, because theological, and not to be admitted in this debate (of which last conclusion the only major premise seems to be that nothing theological is true; which, if admitted, is an equivalent proposition to this, viz., that evolutionism is, of course, atheism). But for argument's sake we waive this. The state of the debate would then be: that, while nobody ever saw an egg which did not proceed from the previous hen, on the other hand, nobody since Adam ever saw a hen which did not proceed from a previous egg. So it would appear at this stage, there are inductions equally good, one proving that the hen was before the egg, the other proving that the egg was before the hen. But, if we may not listen to Adam's testimony, there are other inductive facts fatal to the hypothesis that the egg was before the hen. One fact is this: that in order to produce the adult fowl there must not only be an egg but a hen to hatch it. According to the course of nature (and if there were any evolution it would be a purely natural process) the parent hen's incubation is as necessary as the egg. So, then, the hen must be before the egg. But worse yet for evolution, the egg which has not been preceded by the copulation of the male with the hen can never hatch a fowl with or without incubation, natural or artificial. And I rest upon the fact that this is true absolutely and universally of every egg known to human observation. So, then, it is proved that not only was a hen before the first egg but a cock also. The opposite induction remains without a single fact to build on. It is overthrown by absolutely every fact known to human observation. It is, therefore, equally an insult to logic and to common sense.

Let us make another application of these logical principles, and that the most important of all. It concerns the limits of the *a posteriori* inference from similarity of results to identity of cause, concerning the origin of the structures composing the

crust of our earth. If theism is admitted to be not demonstrated, but even possible, then, according to the rules of induction, such inference from naturalness of structure to natural origin is inconclusive. This follows from two of its rules: first, the analogical argument from similarity of result to identity of cause, must give way before competent and credible parole evidence. The supposed but invalid argument is: we see natural agencies producing this and that structure; therefore, all similar structures are of natural origin. But if there be a creative God, *there* is a different sufficient cause for the origin of the earlier. And if a witness appears who may be naturally competent to testify, his testimony wholly supersedes the evidence of the supposed analogy. The only way to uphold it is to attack the credibility of that witness. If his credibility is not successfully impeached, the analogical argument must yield before it.

But such a parole-witness appears in the book known as the Christian Scriptures. It assumes to testify that there is a creator, and that he here gives his own witness to his supernatural creation of the first structures. The value of any induction from naturalness of traits to a natural origin of those structures, must depend therefore upon the other question: whether this witness is competent and credible. Some persons attempt to evade their logical obligation here by saying, that these are theological questions with which physical science, as such, has no concern; that they restrict themselves properly to the lights of this department, and, in assigning a natural origin to these structures, speak only for science. But this is a violation of the principles of natural induction, which must necessarily include some adjustment of the relations between analogy and testimony; seeing the truth of the very facts, claimed as analogical, itself rests on testimony. Further, the questions, whether there is a creator, and whether there have been creative causations, enter into this argument, not as theological, but as natural questions. In their relations to the inductive problem, they are as purely physical questions, as the question whether a given rock is the result of fusion or sedimentary deposition from water. A moment's reflection will show the justice of this statement. And hence it follows that an *a posteriori* analogical argument on this topic is entirely fragmentary, and inconclusive, until the claims of this parole-witness

are entertained and adjusted. The historical and the physical parts of the argument cannot be thus rent asunder and legitimately pursued apart.

The second rule of induction which applies to show this reasoning invalid, is that pointed out on p. 437. If there may be two antecedents, either of which is competent efficiently to produce an effect (naming one of them A, and the effect X), the closest possible induction can only prove that all A's will, *ceteris paribus*, produce X; but cannot prove that all X's are produced by A. Now, *until atheism is demonstrated*, another competent cause for natural structures may be supposed as possibly existing in the existence and action of a God. And whatever is the strength of the probable or demonstrative evidence that there is a God, from whatever valid quarter drawn, there is just so much probability of error in the attempted induction, which assigns a natural origin to all structures. To attempt to exclude the divine cause by the force of this *a posteriori* analogy is to reason in a circle; because the validity of the analogy depends wholly on the prior exclusion of the divine cause. Second, a wise Creator must have had some final cause guiding his action. We should not be so presumptuous as to surmise in advance what particular final cause prompted a given creative act, but when his own subsequent action has disclosed it, we are on safe ground. It is always safe to conclude that the object for which a wise and sovereign Creator produced a given thing is the object to which we see him devoting it. When, therefore, we see him in his subsequent providence subjecting all things to the reign of natural law, we may safely conclude that, when he created them, he designed to subject them to natural law. But that which is to be ruled by natural law must needs be thoroughly natural in traits. Hence this Creator must have made the first structures, which in their origin were supernatural, in their properties entirely natural. Whence it follows that the inference from naturalness of qualities to a natural origin would be, as to those structures, wholly worthless. Let it be repeated also: that whatever probability or certainty there is of God's existence, from any source of evidence, just so much evidence is there of this defect in the naturalistic argument. Or, in other words, to make it conclusive, its advocate must *demonstrate*, not surmise,

the truth of atheism. But John Foster has shown that this is impossible.

Third. The argument is peculiarly conclusive as to living creatures. If there was a Creator, he created the first individuals of a species to be, by reproduction, the heads of the species. But in order to do this, these first parents must have been created natural. What are the qualities connoted by any name of species? The most accurate answer which the science of natural history itself can make is: they are precisely those which are transmitted regularly from parents to progeny in the propagation of the species. Then, these first individuals, in order to fulfil their final cause, to be the heads of their species, must have been, while supernatural in origin, as thoroughly natural in qualities as any of their natural offspring.

Fourth. If this be denied, then we must assign a natural parent before the first parent of each species. Thus we should be involved in an infinite series, in a multitude of instances, without cause external to themselves; a result which science herself has discarded as an impossible absurdity. Suppose, for explanation, that an observer has found some part of the very organism of one of those first heads of species, which on the theistic scheme, was directly created by God. He would, of course, find in this fossil every property of the natural structure. Yet he cannot infer thence a natural origin for it, because on the hypothesis it is absolutely a first thing. But suppose that he may assign for it a natural origin. That origin then will be, propagation by birth from prior parents. And should a fossil organ of that parent be found, the same argument would apply again! Thus we should be driven to a ridiculous *regressus*. It is concluded, therefore, with the most perfect logical rigidity, that the argument from naturalness of structure to a natural origin is inconclusive, until the impossibility of creative agency in any age prior to authentic human testimony is demonstrated.

Fifth. This absurd *regressus* may be shown in a general way, by testing this analogical argument upon the "nebular hypothesis"; that guess which the atheist La Place suggested as only a possible hypothesis for the origin of the universe, and which some Christian physicists now seem so ready to adopt, without proof, as the real account of the matter. Let us suppose the

scientific observer from some other system watching this vast incandescent mass of "star-dust," rotating around an axis of motion, with which the nebular hypothesis begins. If he uses the analogical reasoning we are criticizing, he must proceed thus: Matter is naturally inert; *momentum* must therefore be derived from some prior material force. This rotary motion, which the nebular hypothesis supposes to be the first state, cannot be the first state. Again, vapor implies evaporation. Sensible heat suggests latent heat. Hence this other first state of incandescent volatilization cannot be the first state. Thus, on this logic, before each first state there must have been another first state.

"Beneath the lowest deep,

Another depth still threatening to devour me, opens wide."

This, then, is the eternity of "Naturalismus"—it is atheism.

This wholesome limitation of analogical inference has been sometimes met with disdainful resistance. It has been said that it would subvert the very basis of natural science. It is exclaimed, "If we may not securely reason, 'Like causes, like effects,' the very lever of scientific discovery is taken from us." The answer is very simple: that there is no intention to rob science of her prime *organon*, "Like causes, like effects." The main drift of this treatise has been to defend and explain it. Only we do not desire to see the votaries of inductive science disgracing themselves by the very shallow blunder (a blunder which the school boy's class-book of Logic points out) of mistaking an all important proposition for its erroneous converse, "Like effects, the same cause." This is really the extent of our caution. The inductive logic is in no danger of being cramped or restricted by theology within the proper domain of natural science. That domain is the known present and the known past of human history, where testimony and experience give us sufficient assurance of the absence of the supernatural. In this field natural induction is useful and legitimate; it has been the honored instrument of splendid and beneficent achievements. Let physicists continue to employ it there, to the full, for the further benefit of mankind and the illustration of the Creator's wisdom and glory. But in the unknown eternity of the past prior to human history, it has no place. It is like the mariner's compass

carried into the stellar spaces. We know that the poles of this globe have a certain attraction for it, and, therefore, on this globe it is a precious guide. But away in the regions of Arcturus or the Pleiades, where we are not certain whether the spheres have poles, or whether they are magnetic, we are not authorized to follow it.

One more application will be made, and this to a supposed social and moral induction; in order to exhibit the fitness of the logical canons for ethical as well as physical science. The case is that of the colligation of instances, so often presented by the enthusiastic fanatics in the cause of secular education, as a proof of their proposition that this species of education promotes virtue and suppresses crime. The supposed evidence is, that the statistics of prisons, penitentiaries, and criminal convictions usually show a ratio of illiterate to educated criminals considerably larger than the ratio of illiterate to lettered citizens in the commonwealth. The governor of an American commonwealth, for instance, reported that of all the convicts in his state-penitentiary for ten years, only a little more than ten per cent. could read and write. And he presented this as a conclusive demonstration that illiteracy was the cause, and a knowledge of letters would be the sufficient cure, of crime.

Now, a very simple application of the logical criticism discloses the inconclusiveness of this popular argument. The effect to be accounted for is, breaches of statute laws. The observed antecedent to this effect is, in a large majority of cases in this State, ignorance of letters. Obviously, this is but an induction *per enumerationem simplicem*, which gives no proof whether the sequence gives a *post hoc* or a *propter hoc*. The argument offers neither canon of induction to complete the separation. We have in this enumeration nothing whatever to teach us whether the true efficient of the crimes does not lie, hitherto unnoted, between the supposed antecedent, illiteracy, and the effect. The pretended argument gives us no ground whatever for excluding this other obvious hypothesis, that something else may have been the true cause of the crimes, of which cause the illiteracy itself may be also another coördinate effect.

As soon as another equally authentic enumeration is compared with the previous one, the justice of this suspicion is fully

confirmed. Further study of the statistics of crime shows, that while American prisons contain a larger percentage of illiterate criminals than American society contains of illiterate free citizens, yet the *ratio of criminals to the whole number of citizens* in any given community is uniformly *far larger where all, or nearly all, adults can read and write*, and far smaller where fewer of the adults can read and write. For instance, in Boston, the boastful metropolis of free schools, with scarcely an adult who could not read and write, the census of 1850 showed that the white persons in jails, penitentiaries, and almshouses bore to the whole white population the ratio of one in every thirty-four. But in Richmond, the capital of a State endlessly reviled for its illiteracy, the same classes of whites bore to the whole number of white citizens the ratio of one to every one hundred and twelve! The difference in favor of the less lettered communities, as revealed by subsequent censuses, is still more astounding; and this, when extended to the whole South, as compared with the North, and as deduced by Northern students of statistics.

Now, were these enumerations of sequences employed in the same illogical way, they would seem to demonstrate exactly the opposite conclusion: *that the knowledge of letters causes crime, and illiteracy causes virtue*. This is a sufficiently biting demonstration of the worthlessness of the pretended induction. The true solution to which the comparison of the two enumerations points, is this: that neither letters nor illiteracy cause crime in America, but another combination of moral causes, to which these states of the population are themselves related as effects. In any given prison will be found a majority of prisoners who cannot read and write. This does not prove that the possession of these arts is preventive of crime, as the other statistics show. But as American society happens to be constituted, the rearing of children without a knowledge of letters has happened to be the usual accompaniment of a domestic condition of penury and moral degradation, while families of substance and domestic morality have usually given letters to their children. Thus it is made plain that it is not the illiteracy, but the penury and domestic degradation which are the real causes of crime. The illiteracy turns out not to be the cause at all, but an incident or appendage which the domestic habits of Americans have con-

nected with the real cause, the combination of want and domestic degradation.

But when, by the intrusive activity of the civil government, the children of destitute and morally degraded families are universally invested with the arts of reading and writing, without that moral and economical elevation of the parents and children, to work which the State and State schools are so nearly impotent, then the result is a fearful increase in the *ratio* of criminals to the whole number of citizens. The explanation is, that it is the want and family degradation which together is the main efficient cause of crime, and which the knowledge of letters, while those continue, rather aggravates than checks.

SPURIOUS RELIGIOUS EXCITEMENTS.¹

IT is believed all thoughtful Christians are alive to the fact that religious excitements, which consist of temporary movements of the emotions devoid of any saving operation of the Truth on the reason and conscience, are equally frequent and mischievous in America. This judgment not seldom expresses itself in very queer and inaccurate forms. Thus: good brethren write to the religious journals grateful accounts of a work of grace in their charges, and tell the editors that "they are happy to say, the work has been purely rational and quiet, and attended by not the slightest excitement." They forget that the efficacious (not possibly, tempestuous) movement of the feelings is just as essential a part of a true religious experience, as the illumination of the intellect by divine truth; for indeed, there is no such thing as the implantation of practical principle, or the right decisions of the will, without feeling. In estimating a work of divine grace as genuine, we should rather ask ourselves whether the right feelings are excited, and excited by divine cause. If so, we need not fear the most intense excitement. This misconception is parallel to the one uttered by public speakers, when they assure their hearers that, designing to show them the respect due to rational beings, and to use the honesty suitable to true patriots, "they shall make no appeal to their feelings, but address themselves only to their understandings." This is virtually impossible. On all practical subjects, truth is only influential as it stimulates some practical feeling. There is no logical appeal of the rhetorical nature which does not include and appeal to feeling. Does the orator proclaim, for instance, that waiving all appeals to passion, he will only address his hearers' intellects to prove what is for their interest, or "for their honor," or "for the good of their country"? What is he really doing except appealing to the emotions of desire for wealth, or love of applause, or patriotism?

¹ From *The Presbyterian Quarterly*, October, 1887.

In the *Southern Presbyterian Review*, 1884, I presented a discussion on the psychology of the feelings. I wish to recall a few of the fundamental positions there established. The function of *feeling* is as essential to the human spirit, and as ever present, as the function of cognition. The two are ever combined, as the heat-rays and the light-rays are intermingled in the sunbeams. But the consciousness intuitively recognizes the difference of the two functions, so that it is superfluous to define them. "Feeling is the temperature of thought." The same kind of feeling may differ in degree of intensity, as the heat-ray in the brilliant winter sunbeam differs from that in the fiery glare of the "dog days"; but the thermometer shows there is still caloric in the most wintry sunbeam, and even in the block of crystal ice. So a human spirit is never devoid of some degree of that feeling which the truth then engaging the intelligence tends to excite. No object is or can be inducement to volition unless it be apprehended by the soul as being both in the category of the true and of the good. But, that function of soul by which the object is taken as a good, is desire, an act of feeling. Whence it follows, that an element of feeling is as essential to every rational volition as an act of cognition. The truly different sorts of feelings were distinguished and classified. But this all important division of them was seen to be into the passions, and the active feelings; between those impressions upon the sensibility of the soul, caused from without, and in receiving which the soul is itself passive, and its spontaneity has no self-determining power (as pain, panic, sympathy) on the one hand, and on the other hand those subjective feelings which, while occasioned from without, are self-determined by the spontaneity from within and in which the soul is essentially active, (as desire, benevolence, ambition, etc.)

It may be asked here: Does the writer intend to rest the authority of his distinction between genuine and spurious religious experiences on a human psychology? By no means. The Scriptures are the only sure source of this discrimination. Its declarations, such as that sanctification is only by revealed truth, its anthropology, its doctrine of redemption, and its examples of saving conversions, give the faithful student full guidance as to the conduct of gospel work, and the separation of the stony-

ground hearers from the true. But it is claimed that the psychology outlined above is the psychology of the Bible. It is that theory of man's powers everywhere assumed and postulated in Scripture. It gives that theory of human action on which all the instances, the narratives, and the precepts of Scripture ground themselves. Hence these mental laws and facts are of use, not as the mistress, but as the hand-maid of Scripture, to explain and illustrate those cautions which the Bible gives us.

One inference is simple and clear. The excitement of mere sensibilities, however strong or frequent, can offer no evidence whatever of a sanctified state. The soul is passive in them; their efficient cause is objective. An instinctive susceptibility in the soul provides the only condition requisite for their rise when the outward cause is applied. Hence the excitement of these sensibilities is no more evidence of change or rectification in the free agency, than the shivering of the winter wayfarer's limbs when wet by the storms. Now the doctrine of Scripture is that man's spontaneity is, in his natural state, wholly disinclined and made opposite (yet freely) to godliness, so that he has no ability of will for any spiritual act pertaining to salvation. But it is promised that, in regeneration, God's people shall be willing in the day of his power. He so enlightens their minds in the knowledge of Christ, and renews their wills, that they are both persuaded and enabled to embrace Jesus Christ. The very spontaneity is revolutionized. Now the stimulation of merely passive sensibilities, in which the will has no causal part, can never be evidence of that saving change. No evidence of it appears, until the subjective desires and the will exhibit their change to the new direction. That fear, that selfish joy, that hope, that sympathy are excited, proves nothing. But when the soul freely exercises a "hungering and thirsting after righteousness," hatred of sin, desire of God's favor, love of his truth, zeal for his honor, this evinces the sanctifying revolution.

Shall we conclude then that the excitement of the passive sensibilities by the pastor is wholly useless? This class of feelings presents the occasion (not the cause) for the rise of the subjective and spontaneous emotions. This is all. It is this connection which so often misleads the mental analyst into a confusion of the two classes of feelings. The efficient cause may

be restrained from acting by the absence of the necessary occasion; this is true. But it is equally true, that the occasion, in the absence of the efficient cause, is powerless to leaving any effect. If the pastor aims to move the sensibilities merely for the purpose of gaining the attention of the soul to saving truth, and presents that truth faithfully the moment his impression is made, he does well. If he makes these sensibilities an end, instead of a means, he is mischievously abusing his people's souls.

People are ever prone to think that they are feeling religiously because they have feelings round about religion. Their sensibilities have been aroused in connection with death and eternity, for instance; so, as these are religious topics, they suppose they are growing quite religious. The simplest way to clear away these perilous illusions is, to ask What emotions, connected with religious topics as their occasions, are natural to the carnal man? These may be said to be, first, the emotions of taste, or the mental-æsthetic; second, the involuntary moral emotion of self-blame, or remorse; third, the natural self-interested emotions of fear and hope, and desire of future security and enjoyment; and fourth, the emotion of instinctive sympathy. The following conclusions concerning these feelings need only to be stated, in order to be admitted.

The æsthetic feeling may be as naturally stimulated by the features of sublimity and beauty of God's natural attributes, and of the gospel-story, as by a cataract, an ocean, a starlit sky, or a Shakespearean hero. Now it is most obvious that the movements of taste, in these latter cases, carry no moral imperative whatever. They have no more power to reform the will than strains of music or odors of flowers. Yet how many souls are deluded into supposing that they love God, duty, and gospel-truth, because these æsthetic sensibilities are stimulated in connection with such topics!

When the ethical reason pronounces its judgment of wrongfulness upon any action or principle, this may be attended by the feeling of moral reprehension. If it is one's own action which must be condemned, the feeling takes on the more pungent form of remorse. But this feeling is no function of the soul's spontaneity. Its rise is purely involuntary; its natural

effect is to be the penal retribution, and not the restrainer of sin.

How completely this feeling is disconnected with the correct regulation or reformation of the will, appears from this: that the transgressor's will is usually striving with all his might not to feel the remorse, or to forget it, while conscience makes him feel it in spite of himself. A Judas felt it most keenly while he rushed to self-destruction. It is the most prevalent emotion of hell, which gives us the crowning proof that it has no power to purify the heart. But many transgressors are persuaded that they exercise repentance because they feel remorse for conscious sins. Man's native selfishness is all-sufficient to make him desire the pleasurable, or natural good, and fear and shun the painful, or natural evil. Those desires and aversions, with the fears and hopes which expectation suggests, and the corresponding terrors and joys of anticipation, may be stimulated by any natural good or evil, more or less remote, the conception of which occupies the mental attention distinctly. Just as the thoughtless child dreads the lash that is expected in the next moment, and the more thoughtful person dreads the lash of next week or next month, just so naturally a carnal man, who is intellectually convinced of his immortality and identity, may dread the pains, or rejoice in the fancied pleasures, of another life. He may fear death, not only with the unreasoning instinct of the brute, but also with the rational dread (rational, though purely selfish) of its penal consequences. Selfishness, with awakened attention and mental conviction, suffices fully for all this. In all these feelings there is nothing one whit more characteristic of a new heart, or more controlling of the evil will, than in the wicked sensualist's dread of the colic which may follow his excess, or the determined outlaw's fear of the sheriff. Yet how many deluded souls fancy that, because they feel these selfish fears or joys in connection with death and judgment, they are becoming strongly religious. And unfortunately they are encouraged by multitudes of preachers of the gospel to make this fatal mistake. Turretin has distinguished the truth here by a single pair of phrases, as by a beam of sunlight. He says: Whereas the stony-ground believer embraces Christ solely *pro bono jucundo*, the gospel offers him mainly *pro bono honesto*. True faith desires

and embraces Christ chiefly as a Saviour from sin and pollution. The false believer embraces him only as a Saviour from suffering and punishment. Holy Scripture is always careful to represent Christ in the former light. His "name is Jesus because he saves his people from their sins." He gives himself to redeem us from all iniquity, and to purify us unto himself a peculiar people, zealous of good works. But preachers so prevalently paint the gospel as God's method of delivering sinners from penal pains and bestowing the enjoyment of a sensuous paradise, and the guilty selfishness of hearers is so exclusively exercised about selfish deliverance, that we apprehend most men are permitted to conceive of the gospel remedy solely as a *bonum jucundum*, a provision for simply procuring their selfish advantage. It is true that, if asked, Is not the gospel to make you good also? many of them might reply with a listless "Yes." They have a vague apprehension that their grasping the *bonum jucundum* is somehow conditioned on their becoming better; and they suppose they are willing to accept this uninteresting formality for the sake of the enjoyment that follows it, just as the epicure tolerates the tedious grace for the sake of the dainties which are to come after at the feast. But were one to tell this gourmand that the grace was the real chief-end of the feast, and the eating a subordinate incident thereto, he would be exceedingly amazed and incredulous. Such would also be the feeling of many subjects of modern revivals, if the Bible conception of redemption were forced on their minds. Hence, one great reform in our preaching must be to return to the scriptural presentation of the gospel in this particular. A grand reform is needed here. This grovelling, utilitarian conception of redemption must be banished. Men must be taught that the blessing is only for them "who hunger and thirst after righteousness," not for those who selfishly desire to grasp enjoyment only, and to shun pain. They must be made to see clearly that such a concern does not in the least differentiate them from reprobate souls in hell, or hardened felons on earth; not even from the thievish fox caught in a trap.

The fourth and the most deceptive natural feeling of the carnal man is instinctive sympathy. It will be necessary to state the nature and conditions of this feeling. First, it belongs to

the passive sensibilities, not to the spontaneous appetencies. It is purely instinctive, appearing as powerfully in animals as in men. Witness the excitement of a flock of birds over the cries of a single comrade, and the "stampede" of a herd of oxen. Next, it is even in man an unintelligent feeling in this sense: that if the emotion of another be merely seen and heard, sympathy is propagated, although the sympathizer understands nothing of the cause of the feeling he witnesses. We come upon a child, who is an utter stranger, weeping; we share the sympathetic saddening before he has had time to tell us what causes his tears. We enter a room where our friends are drowned in laughter. Before we have asked the question, "Friends, what is the jest?" we find ourselves smiling. We see two strangers afar off exchanging blows; we feel the excitement stimulating us to run thither, while ignorant of the quarrel. Sympathy is in its rise unintelligent and instinctive. The only condition requisite for it, is the beholding of the feeling in a fellow. Third, this law of feeling extends to all the emotions natural to man. We so often connect the word with the emotion of grief, that we overlook its applicability to other feelings, and we forget even its etymology: *παθος*, in Greek philosophy, did not mean grief only, but every exercise of feeling; so *συμπαθεῖν* is to share by spiritual contagion any *παθος* we witness in our fellows. We sympathize with merriment, joy, fear, anger, hope, benevolence, moral approbation, courage, panic, just as truly as with grief. Fourth, the nature of the emotion witnessed determines, without any volition of our own, the nature of the feeling injected into us. Sympathy with joy is a lesser joy. The glow is that of the secondary rainbow reflecting, but usually in a weaker degree, precisely the tints of the primary arch.

The reader is now prepared to admit these conclusions: that sympathy may infect men with a phase of religious emotion, as of any other; that the sympathetic emotions, though thus related as to their source, have no spiritual character whatever in themselves—for they are involuntary, they are unintelligent, they are passive effects on an instinctive sensibility, giving no expression to the will, and not regulating it nor regulated by it. The animal feels these sympathies as really as the man.

The reader should notice that these propositions are asserted

only of the simple sensibility, the immediate reflex of strong feeling witnessed. It is not denied that the capacity of sympathy is a social trait implanted by a wise Creator for practical purposes. It is the instrumental occasion of many useful results. Thus, upon the excitement of sympathy with grief follow the appetency to succor the sufferer, and the benevolent volition. The first is the occasion, not the cause, of the second. On our natural sympathy with the actions we witness, follows our impulse to imitate. But imitation is the great lever of education. So sympathy has been called the sacred "orator's right arm." Let us understand precisely what it could and cannot do in gaining lodgment for divine truth in the sinner's soul. This truth and this alone is the instrument of sanctification. To Presbyterians the demonstration of this is superfluous. It is impossible for the truth to work sanctification except as it is intelligently received into the mind. Light must reach the heart through the understanding, for the soul only feels healthily according as it sees. To the inattentive mind the truth being unheard, is as though it were not. Hence it is of prime importance to awaken the listless attention. Whatever innocently does this is therefore a useful preliminary instrument for applying the truth. This, sympathy aids to effect. The emotion of the orator arouses the slumbering attention of the sinner, and temporarily wins his ear for the sacred word. Another influence of awakened sympathy may also be conceded. By one application of the law of association, the warmth of a feeling existing in the mind is communicated temporarily to any object coexisting with it in the mind; though that object be in itself indifferent to that soul. The stone dropped into the heated furnace is not combustible, is no source of caloric; but by contact it imbibes some of the heat which flames there, and remains hot for a little time after it is drawn out. So the mind warmed with emotion, either original or sympathetic, is a furnace which gives some of its warmth to truth or concepts coexisting in it, otherwise cold and indifferent to it. But the warmth is merely temporary.

The whole use, then, of the sympathetic excitement is to catch the attention and warm it. But it is the truth thus lodged in the attention that must do the whole work of sanctification. Here is the all-important discrimination. Attention, sympa-

thetic warmth, are merely a preparation for casting in the seed of the Word. The preacher who satisfies himself with exciting the sympathies, and neglects to throw in at once the vital truth, is like the husbandman who digs and rakes the soil, and then idly expects the crop, though he has put in no living seed. The only result is a more rampant growth of weeds. How often do we see this mistake committed! The preacher either displays, in his own person, a high-wrought religious emotion, or stirs the natural sensibilities by painting in exciting and pictorial words and gestures, some natural feeling connected by its occasion with a religious topic, as a touching death or other bereavement; or he stimulates the selfish fears by painting the agonies of a lost soul, or the selfish desires and hopes by a sensuous description of the pleasures of heaven. Then, if sympathetic feeling is awakened, or the carnal passions of hope, fear and desire are moved, he acts as though his work were done. He permits and encourages the hearers to flatter themselves that they are religious, because they are feeling something round about religion. I repeat: if this stimulation of carnal and sympathetic feeling is not at once and wisely used, and used solely as a secondary means of fixing a warmed attention on didactic truth, which is the sole instrument of conversion and sanctification, then the preacher has mischievously abused the souls of his hearers. The first and most obvious mischief is the encouragement of a fatal deception and self-flattery. Unrenewed men are tacitly invited to regard themselves as either born again, or at least in a most encouraging progress towards that blessing; while in fact they have not felt a single feeling or principle which may not be the mere natural product of a dead heart. This delusion has slain its "tens of thousands."

The reader will remember the masterly exposition by Bishop Butler of the laws of habit as affecting the sensibilities and active powers. Its truth is too fully admitted to need argument. By this law of habit, the sensibilities are inevitably dulled by repeated impressions. By the same law, the appetencies and will are strengthened by voluntary exercise. Thus, if impressions on the sensibilities are followed by their legitimate exertion of the active powers, the soul as a whole, while it grows calmer and less excitable, grows stronger and more energetic in

its activities, and is confirmed in the paths of right action. But if the sensibilities are stimulated by objects which make no call, and offer no scope for right action, as by fictitious and unreal pictures of human passion, the soul is uselessly hackneyed and worn, and thus depraved. Here we find one of the fundamental objections to habitual novel reading. The excitement of the sympathies by warmly colored, but unreal, portraiture of passions, where there cannot possibly be any corresponding right action by the reader inasmuch as the agents and sufferers are imaginary, depraves the sensibilities without any retrieval of the soul's state in the corresponding cultivation of the active powers. The longer such reading is continued, the more does the young person become at once sentimental and unfeeling. The result is a selfish and morbid craving for excitement, coupled with a callous selfishness, dead to the claims of real charity and duty. The same objection lies against theatrical exhibitions, and for the same reason. Now this species of spurious religious excitement is obnoxious to the same charge. In its practical results it is fictitious. The merely sensational preacher is no more than a novelist or a comedian, with this circumstance, that he connects topics, popularly deemed religious, with his fictitious arts. He abuses and hackneys the souls of his hearers in the same general way, rendering them at once sentimental and hard, selfishly fond of excitement, but callous to conscience and duty.

Once more ; spiritual pride is as natural to man as breathing, or as sin. Its only corrective is sanctifying grace. Let the suggestion be once lodged in a heart not really humbled and cleansed by grace, that the man is reconciled to God, has "become good," is a favorite of God and heir of glory—that soul cannot fail to be swept away by the gales of spiritual pride. Let observation teach us here. Was there ever a deceived votary of a false religion, of Islam, of Buddhism, of Brahmanism, of Popery, who was not in reality puffed up by spiritual pride? It cannot be otherwise with a deceived votary of a Protestant creed. The circumstance that there is divine truth in this creed, which has no vital influence on his heart, is no safeguard. The only preventive of spiritual pride is the contrition which accompanies saving repentance. Here, also, is the explanation of the

fact, that the hearty votaries of those professedly Christian creeds which have more of Pelagianism than of gospel in them, are most bigoted and most hopelessly inaccessible to truth. Their adamant shield is spiritual pride, fostered by a spurious hope, and unchastened by sovereign grace. Of all such self-deceivers our Saviour has decided that "the publicans and harlots enter into the kingdom before them."

These plain facts and principles condemn nearly every feature of the modern new measure "revival." The preaching and other religious instructions are shaped with a main view to excite the carnal emotions and the instinctive sympathies, while no due care is taken to present saving, didactic truth to the understanding thus temporarily stimulated. As soon as some persons, professed Christians, or awakened "mourners," are infected with any lively passion, let it be however carnal and fleeting, a spectacular display is made of it, with confident laudations of it as unquestionably precious and saving, with the design of exciting the remainder of the crowd with the sympathetic contagion. Every adjunct of fiery declamation, animated singing, groans, tears, exclamations, noisy prayers, is added so as to shake the nerves and add the tumult of a hysterical animal excitement to the sympathetic wave. Every youth or impressible girl who is seen to tremble, or grow pale, or shed tears, is assured that he or she is under the workings of the Holy Spirit, and is driven by threats of vexing that awful and essential Agent of salvation to join the spectacular show, and add himself to the exciting pantomime. Meanwhile, most probably their minds are blank of every intelligent or conscientious view of the truth; they had been tittering or whispering a little while before, during the pretended didactic part of the exercises; they could give no intelligent account now of their own sudden excitement, and, in fact, it is no more akin to any spiritual, rational, or sanctifying cause, than the quiver of the nostrils of a horse at the sound of the bugle and the fox-hounds. But they join the mourners, and the manipulation proceeds. Of course, the sympathetic wave, called religious, reaches them more and more. As I have shown, it is the very nature of sympathy to assume the character of the emotion with which we sympathize. Thus this purely natural and instinctive sensibility takes on the form of *religious feeling*,

because it is sympathy with religious feeling in others. The subject calls it by religious names—awakening, conviction, repentance—while in reality it is only related to them as a man's shadow is to the living man. Meantime, the preachers talk to them as though the feelings were certainly genuine and spiritual. With this sympathetic current there may mingle sundry deep original feelings about the soul, to which, we have seen, the dead, carnal heart is fully competent by itself. These are fear, remorse, shame, desire of applause, craving for future, selfish, welfare, spiritual pride. Here we have the elements of every spurious grace. The "sorrow of the world that worketh death" is mistaken for saving repentance. By a natural law of the feelings, relaxation must follow high tension—the calm must succeed the storm. This quiet is confounded with "peace in believing." The selfish prospect of security produces great elation. This is supposed to be spiritual joy. When the soul is removed from the *stimuli* of the revival appliances, it of course sinks into the most painful vacuity, on which supervene restlessness and doubt. So, most naturally, it craves to renew the illusions, and has, for a time, a certain longing for and pleasure in the scenes, the measures, and the agents of its pleasing intoxication. These are mistaken for love for God's house, worship and people. Then the befooled soul goes on until it is betrayed into an erroneous profession of religion, and a dead church membership. He is now in the position in which the great enemy of souls would most desire to have him, and where his salvation is more difficult and improbable than anywhere else.

The most fearful part of these transactions is the unscriptural rashness of the professed guides of souls. They not only permit and encourage these perilous confusions of thought, but pass judgment on the exercises of their supposed converts with a haste and confidence which angels would shudder to indulge. Here, for instance, is a hurried, ignorant young person, no real pains having been taken to instruct his understanding in the nature of sin and redemption, or to test his apprehension of gospel truths. In his tempestuous excitement of fear and sympathy, he is told that he is unquestionably under the influence of God's Spirit. When he has been coaxed, or flattered, or wearied into

some random declaration that he thinks he loves his Saviour, joyful proclamation is made that here is another soul born to God, and the brethren are called on to rejoice over him. But no time has been allowed this supposed convert for self-examination; no care to discriminate between spiritual and carnal affections, or for the subsidence of the froth of animal and sympathetic excitements; no delay is allowed to see the fruits of holy living, the only test which Christ allows as sufficient for other than the omniscient judgment. Thus, over-zealous and heedless men, ignorant of the first principles of psychology, and unconscious of the ruinous effects they may be producing, sport with the very heart-strings of the spiritual life, and that in the most critical moments. It were a less criminal madness for a surgeon's raw apprentice to try experiments with his master's keen bistoury on the patient's jugular vein.

These abuses are the less excusable in any minister, because the Scriptures which he holds in his hands tell him plainly enough without the lights of philosophy, the wrongness of all these practices. No inspired apostle ever dared to pass a verdict upon the genuineness of a case of religious excitement with the rashness seen on these occasions. Christ has forewarned us that converts can only be known correctly by their fruits. Paul has sternly enjoined every workman upon the visible church, whose foundation is Christ, to "take heed how he buildeth thereupon." He has told us that the materials placed by us upon this structure may be genuine converts, as permanent as gold, silver, and costly stones; or worthless and pretended converts, comparable to "wood, hay and stubble;" that our work is to be all tried by the fire of God's judgments, in which our perishable additions will be burned up; and if we are ourselves saved, it will be as though we were saved by fire. The terrible results of self-deception and the deceitfulness of the heart are dwelt upon, and men are urged to self-examination.

The ulterior evils of these rash measures are immense. A standard and type of religious experience are propagated by them in America, as utterly unscriptural and false as those prevalent in Popish lauds. So long as the subjects are susceptible of the sympathetic passion, they are taught to consider themselves in a high and certain state of grace. All just and scrip-

tural marks of a gracious state are overlooked and even despised. Is their conduct immoral, their temper bitter and unchristian, their minds utterly dark as to distinctive gospel truths? This makes no difference; they are still excited and "happified" in meetings; they sing and shout, and sway to and fro with religious feelings. Thus these worthless, sympathetic passions are trusted in as the sure signatures of the Spirit's work.

Of the man who passes through this process of false conversion, our Saviour's declaration is eminently true: "The last state of that man is worse than the first." The cases are not few which backslide early, and are again "converted," until the process has been repeated several times. These men are usually found most utterly hardened and profane, and hopelessly impervious to divine truth. Their souls are utterly seared by spurious fires of feeling. The state of those who remain undeceived, and in the communion of the church, is almost as hopeless. "Having a name to live, they are dead." Their misconception as to their own state is armor of proof against warning.

The results of these "revivals" are usually announced at once, with overweening confidence, as works of God's Spirit. A minister reports to his church paper that he has just shared in a glorious work at a given place, in which the Holy Ghost was present with power, and "forty souls were born into the kingdom." Now, the man of common sense will remember how confidently this same revivalist made similar reports last year, the year before, and perhaps many years previously. He was each time equally confident that it was the Spirit's work. But this man must know that in each previous case, time has already given stubborn refutation to his verdict upon the work. Four-fifths of those who, he was certain, were converted by God, have already gone back to the world, and declare that they were never converted at all. The means he has just used in his last revival are precisely the same used in his previous ones. The false fruits wore at first just the aspect which his last converts now wear. Is it not altogether probable that they are really of the same unstable character? But this minister declares positively that these are God's works. Now, the cool, critical world looks on and observes these hard facts. It asks, What sort of people are these special guardians and expounders of Christianity? Are

they romantic fools, who cannot be taught by clear experience, or are they conscious and intentional liars? The world is quite charitable, and probably adopts the former solution. And this solution, that the representatives of Christianity are men hopelessly and childishly overweening in their delusions, carries this corollary for the most of worldly men who adopt it: That Christianity itself is an unhealthy fanaticism, since it makes its chosen teachers such fanatics, unteachable by solid facts. Thus, the Christian ministry, who ought to be a class venerable in the eyes of men, are made contemptible. Civility restrains the expression of this estimate, but it none the less degrades the ministry in the eyes of intelligent men of the world, as a class who are excused from the charge of conscious imposture only on the theory of their being incurably silly and fanatical.

In the denominations which most practice the so-called "revival measures," abundance of facts obtrude themselves which are conclusive enough to open the eyes of the blind and the ears of the deaf. Instances may be found, where annual additions have been reported, such that, if the sums were taken, and only subjected to a fair deduction for deaths and removals, these churches should number hundreds, or even a thousand members, and should be in a splendid state of prosperity. But the same church-reports still set these churches down as containing fifty or seventy members. Others, which have been boasting these magnificent processes, are moribund, and some have been "revived" to death.

But the men who work this machinery, notwithstanding the fatal condemnation of the facts, are not blind! What are the causes of their perseverance in methods so worthless? One cause is, doubtless, an honest, but ignorant zeal. In the bustle and heat of this zeal, they overlook the unpleasant facts, and still go on, "supposing that they verily do God service." Another subtle and far-reaching cause is an erroneous, synergistic theology. The man who believes in the efficient coöperation of the sinner's will with the divine will, in the initial quickening of his soul, will, of course, seek to stimulate that human will to the saving acts by all the same expedients by which men seek to educe in their fellows carnal acts of will. Why not? Why should not the evangelist practice to evoke that act of will from

the man on which he believes the saving action of the Almighty pivots, by the same kind of arts the recruiting sergeant practices—the martial song, the thrilling fife and palpitating drum, the spectacular display of previous recruits in their shining new uniforms—until the young yeoman has “committed” himself by taking the “queen’s shilling”? That volition settles it that the queen is to make him her soldier. It must be the youth’s decision, but, when once made for a moment, it decides his state. Thus a synergistic theology fosters these “revival measures,” as they, in turn, incline towards a synergistic creed. Doubtless, many ministers are unconsciously swayed by the natural love of excitement. This is the same instinct which leads school-boys and clowns to run to witness a dog-fight, Spaniards to the cock-fight and the bull-fight, sporting men to the pugilist’s ring, and theatre-goers to the comedy. This natural instinct prompts many an evangelist, without his being distinctly aware of it, to prefer the stirring scenes of the spurious revival to the sober, quiet, laborious work of religious teaching. But it is obvious that this motive is as unworthy as it is natural.

Another motive which prompts men to persevere in these demonstrably futile methods is the desire to count large and immediate results. To this they are spurred by inconsiderate, but honest zeal, and by the partisan rivalries of their denominations. These unworthy motives they sanctify to themselves, and thus conceal from their own consciences the real complexion of them. No word is needed to show how unwise and unsuitable they are to the Christian minister. Here should be pointed out the intrinsic weakness of the current system of employing travelling revivalists in settled churches. No matter how orthodox the man may be, the very nature of his task lays a certain urgency and stress upon him, to show, somehow, immediate results before the close of his meeting. If he does not, the very ground of his vocation as a “revivalist” is gone. He has been sent for to do this one thing, to gratify the hopes, zeal and pride of the good people by, at least, a show of immediate fruits. If he fails in this, he will not be sent for. This is too strong a temptation for any mere mortal to endure without yielding. But the prime fact which decides all true results of gospel means is, that the Holy Ghost alone is the Agent of effectual calling; and

He is sovereign. His new-creating breath "bloweth where it listeth." His command to the sower of the word may be expressed in Solomon's words: "In the morning sow thy seed; and in the evening hold not thy hand; for *thou* knowest not which shall prosper, whether this or that." The best minister on earth may be appointed by God's secret purpose to the sad mission given to Isaiah, to Jeremiah, and even to their Lord during his earthly course, "to stretch forth their hands all the day long to a disobedient and gainsaying people." Hence, this evangelist has put himself under an almost fatal temptation to resort to some illicit expedients which will produce, in appearance, immediate results. How few, even of the orthodox, escape that temptation!

An old and shrewd practitioner of these human means of religious excitements, was once asked by a man of the world, "if it were possible he could be blind to the futility of most of the pretended conversions?" The answer was: "Of course not; we are not fools." "Why then," said the man, "do you employ these measures?" The preacher answered: "Because a few are truly converted, and make stable, useful Christians; and the rest when they find out the shallowness of their experiences, are simply where they were before." The worldly-wise preacher's statement involved two capital errors. It assumed that the "revival measures" were the effective instruments of the conversion of the genuine few; and that without these expedients they would have remained out of Christ. This is utterly false. The solid conversion of those souls took place not by cause of, but in spite of, the human expedients. The work was the result of sober Christian example, and previous didactic teaching in gospel truths, and had there been no "revival measures" these souls would have come out for Christ, perhaps a little later, but more intelligently and decisively. The mistake as to the second class, "the stony ground believers," is far more tragical. *They are not left where they were before*; "the last state of these men is worse than the first." I will not repeat the explanation of the depraving influences sure to be exerted upon the heart; but I will add one still more disastrous result. These deceptive processes usually *end in making the subjects infidels*. Some who keep their names on the communion rolls are secret infidels;

nearly all who withdraw their names are open infidels, unless they are too unthinking and ignorant to reflect and draw inferences. First, every young person who has a spark of self-respect is mortified at being thrust into a false position, especially on so high and solemn a subject. Pride is wounded. He feels that he has been imposed on, and resents it. This wounded pride, unwilling to take the blame on itself, directs its anger against the agents of the mortifying cheat. But to despise the representatives of Christianity is practically very near to despising Christianity. The most earnest and clear-minded of these temporary converts has now what appears to him, with a terrible plausibility, the experimental argument to prove that evangelical religion is a deception. He says he knows he was honest and sincere in the novel exercises to which he was subjected, and in a sense he says truly. The religious teachers themselves assured him, in the name of God, that they were genuine works of grace. Did they not formally publish in the religious journals that it was the Holy Spirit's work? If these appointed teachers do not know, who can? Yet now this backslider says himself, "I have the stubborn proof of a long and sad experience, a prayerless and godless life, that there never was any real spiritual change in me." Who can be more earnest than he was? It is, then, the logical conclusion, that all supposed cases of regeneration are deceptive. "Many," he says, "have had the honesty like myself to come out of the church candidly, shoulder the mortification of their mistake, and avow the truth." Those who remain "professors" are to be accounted for in two ways. The larger part know in their hearts just as well as we do, that their exercises were always a cheat, but they prefer to *live a lie*, rather than make the humiliating avowal, and for these we feel only contempt. The minority remain honestly self-deceived by reason of impressible and enthusiastic temperaments. For these, if they are social and moral, and do not cant, we can feel most kindly, and respect their amiable delusion. It would be unkind to distrust it. This reasoning having led them to discredit entirely the work of the Holy Ghost, leads next to the denial of his personality. The backslider sinks to the ranks of a gross Socinian, or becomes a Deist or an Agnostic. Let the history of our virtual infidels be examined and their early reli-

gious life traced; here will be found the source and cause of their error. "Their name is Legion." He who inquires of the openly ungodly adults of our land, will be astounded to find how large a majority of them were once in the church. They conceal, as well as they can, what they regard as the "disgraceful episode" in their history. Their attitude is that of silent, but cold and impregnable skepticism, based, as they think, on the argument of actual experience. In fact, spurious revivals we honestly regard as the chief bane of our Protestantism. We believe that they are the chief cause, under the prime source, original sin, which has deteriorated the average standard of holy living, principles, and morality, and the church discipline of our religion, until it has nearly lost its practical power over the public conscience. Striking the average of the whole nominal membership of the Protestant churches, the outside world does not credit us for any higher standard than we are in the habit of ascribing to the Synagogue, and to American Popery. How far is the world wrong in its estimate? That denomination which shall sternly use its ecclesiastical authority, under Christ's law, to inhibit these human methods and to compel its teachers back to the scriptural and only real means, will earn the credit of being the defender of an endangered gospel.

One corollary from this discussion is: How perilous is it to entrust the care of souls to an ignorant zeal! None but an educated ministry can be expected, humanly speaking, to resist the seductions of the "revival measures," or to guard themselves from the plausible blunders we have analyzed above. And the church which entrusts the care of souls to lay-evangelists, self-appointed and irresponsible to the ecclesiastical government appointed by Christ, betrays its charge and duty.

No man is fit for the care of souls, except he is deeply imbued with scriptural piety and grace. He must have a faith firm as a rock, and humble as strong, with profound submission to the divine will, which will calm him amidst all delays and all discouragements that God will bless his own word in his own chosen time. He must have that self-abnegation which will make him willing to bear the evil repute of an unfruitful ministry, if the Lord so ordains, and unblenchingly refuse to resort

to any unauthorized means to escape this cross. He must have the moral courage to withstand that demand of ill-considered zeal in his brethren, parallel to the *ardor purus civium juvenium* in politics. He must have the unflagging diligence and love for souls which will make him persevere in preaching the gospel publicly, and from house to house, under the delay of fruit. Nothing can give these except large measures of grace and prayer.

FINAL CAUSE.¹

OF the four "causes," or necessary conditions of every new effect, taught by Aristotelians, the last was the "Final Cause," τὸ τέλος, or τὸ ὅ ἐνεκα, "that for the sake of which" this effect was produced. This result, for the sake of which the effect has been produced, is termed "final," because it is of the nature of a designed end; and "cause," in that it has obviously influenced the form or shape given to the result, and the selection of materials and physical causes employed. Final cause thus always involves a judgment adapting means to an end, and implies the agency of some rational agent.

2. The question, Do any of the structures of nature evince final cause? is the same with the question, Is the "teleological argument" valid to prove the being of a personal and rational Creator? The essence of that argument is to infer that, wherever nature presents us with structures, and especially organs adapted to natural ends, there has been contrivance, and also choice of the physical means so adapted. But contrivance and choice are functions of thought and will, such as are performed only by some rational person. And so, as material nature is not intelligent or free, such adapted structures as man did not produce must be the work of a supernatural person. This reasoning has satisfied every sound mind, Pagan and Christian, from Job to Newton. Yet it is now boldly assailed by evolutionists.

3. Some attempt to borrow an objection which Descartes, very inconsistently for him, suggested: That "he deems he cannot without temerity attempt to investigate God's ends" (*Meditations*, iv. 20). "We ought not to arrogate to ourselves so much as to suppose that we can be sharers of God's counsels" (*Prin. Phil.* i. 28). The argument is, that if there is an intelligent First Cause, he must be of infinite intelligence; whence it is presump-

¹This paper was read before the Victoria Institute, London, Feb. 15, 1886.

tuous in a finite mind to say that, in given effects, he was prompted by such or such designs. We are out of our depth. But the reply is, that this objection misstates the point of our doctrine. We do not presume to say, in advance of the practical disclosure of God's purposes in a given work, what they are, or ought to be; or that we know all of them exactly; but only that he is prompted in his constructions by some rational purpose. And this is not presumptuous, but profoundly reverential; for it is but concluding that God is too wise to have motiveless volitions. Again, when we see certain structures obviously adapted to certain functions, and regularly performing them, it is not an arrogant, but a supremely reverential inference, that those functions were among God's purposed ends in producing those structures; for this is but concluding that the thing we see him do is a thing he meant to do!

4. Next, we hear many quoting Lord Bacon against the study of final causes. They would fain represent him as teaching that the assertion of final causes is incompatible with, and exclusive of, the establishment of efficient physical causes. But as these latter are the real, proximate producers of all *phenomena*, it is by the study of them that men gain all their mastery over nature, and make all true advances in science. Whence, they argue, all study or assertion of final causes is inimical to true science. Thus they quote Bacon, as, for instance, in the *Novum Organum* (lib. i. Apothegm, 48): "Yet the human intellect, not knowing where to pause, still seeks for causes more known. Then, tending after the remoter, it recoils from the nearer; to-wit, to final causes, which are plainly rather from the nature of man, than of the Universe; and from this source they have corrupted philosophy in wondrous ways."

5. Now, Lord Bacon's own words prove that he does not condemn, but highly esteems the inquiry after final causes in its proper place, the higher philosophy and natural theology. He is himself a pronounced theist, and infers his confident belief in God from the teleological argument. The whole extent of his caution is, that when the matter in hand is physical, and the problem is to discover the true, invariable, physical efficient of a class of *phenomena*, we confuse ourselves by mixing the question of final cause. Thus, in the *Advancement of Learning*, he

himself divides true science into physical and metaphysical; the former teaching the physical efficient causes of effects; the latter, under two divisions, teaching: 1. The Doctrine of Forms; 2. The Doctrine of Final Causes. And this third, culminating in theology, he deems the splendid apex of the pyramid of human knowledge.

6. In the second book of his work on the *Advancement of Learning* he says: "The second part of metaphysics is the inquiry into final causes, which I am moved to report, not as omitted, but as misplaced;"—(he then gives instances of propositions about final causes improperly thrust into physical inquiries);—"not because those final causes are not true, and worthy to be inquired, being kept within their own province; but because these excursions into the limits of physical causes have bred a vastness and solitude in that track. For otherwise, keeping their precincts and borders, men are extremely deceived if they think there is an enmity or repugnancy between them."

7. In fact, the two imply each other. If there is a God pursuing his purposed ends, or final causes, he will, of course, pursue these through the efficient physical causes. It is the very adaptation of these to be the right means for bringing God's ends, under the conditions established by his providence, which discloses final causes. It is the physical cause, gravity, which adapts the clock-weight to move the wheels and hands of the clock. Shall we, therefore, say it is contradictory to ascribe to the clock, as its final cause, the function of indicating time? Does the fact that the physical cause—gravity—produces the motions weaken the inference we draw from the complicated adjustments, that this machine had an intelligent clockmaker? No; the strength of that inference is in this very fact, that here the blind force of gravity is caused to realize an end so unlike its usual physical effects in the fall of hailstones and raindrops, of leaves and decayed branches.

8. The evolutionist says, then, that since the physical cause is efficient of the effect, this is enough to account for all actual results, without assigning any "final cause." The *lens*, for instance, has physical power to refract light. If we find a natural *lens* in a human eye, we have sufficient cause to account for the formation of the *spectrum*, the function from which theists infer

their final cause; and the logical mind has no need to resort to a theory of "contrivance" and "final cause" for this organ. Function is not the determining cause, but only the physical result of the existence of the organ. Birds did not get wings in order to fly, but they simply fly because they have wings. As to the complex structures called organs, the evolutionist thinks his theory accounts for their existence, without any rational agent pursuing purposed ends. That just this configuration of a universe, with all its complicated structures, is physically possible (*i. e.* possible as the result of physical causes), is sufficiently proved by the fact, that it exists as it is; for theists themselves admit that it is the physical causes which contain the efficient causation of it. These are, as interpreted by evolutionists, slight differentiations from the parent types, in natural reproductions (variations which may be either slightly hurtful to the progeny, slightly beneficial, or neutral), the plastic action of environment in developing rudimental organs, and the survival of the fittest. Allow, now, a time sufficiently vast for these causes to have exhibited, countless numbers of times, all possible variations and developments; under the rule of the survival of the fittest, the actual configurations we see may have become permanent, while all the agencies bringing them to pass acted unintelligently and fortuitously.

9. Such, as members of this institute well know, is the latest position of anti-theistic science, so-called. The whole plausibility is involved in a confusion of the notions of fortuity and causation. This we now proceed very simply to unravel. The universal, necessary; and intuitive judgment, that every effect must have an adequate cause, ensures every man's thinking that each event in a series of *phenomena* must have such a cause preceding it, however we may fail in detecting it. In this sense, we cannot believe that any event is fortuitous. But the concurrence or coincidence of two such events, each in its place in its own series caused, may be thought by us as uncaused, the one event by the other or its series, and thus the concurrence, not either event, may be thought as truly fortuitous. Thus, the coincidence of a comet's nearest approach to our planet, with a disastrous conflagration in a capital city, may be believed by us to be, so far as the concurrence in time is concerned, entirely

by chance. We no longer believe that comets have any power to "shake war, pestilence or fire from their horrent hair" on our earth. Yet we have no doubt that a physical cause propels that comet in its orbit every time it approaches the earth, or that some adequate local cause wrought that conflagration in the metropolis. But, now, suppose this coincidence of the comet's *perigee* and the conflagration should recur a number of times? The reason would then see, in the frequency and regularity of that recurrence, a *new phenomenon*, additional to the individual ones of comet and fire; a new effect as much requiring its own adequate cause, as each of these demands its physical cause. This regular recurrence of the coincidence is now an additional fact. It cannot be accounted for by fortuity. Its regularity forbids that supposition. The physical cause of each event, comet's approach and conflagration, is adequate, each to the production of its own effect. But the new effect to be accounted for is the concurrence. This is regular; but we know that the sure attribute of the results of blind chance or fortuity is uncertainty, irregularity, confusion. The very first recurrence of such a coincidence begets a faint, probable expectation of a new connecting cause. All logicians agree that this probability mounts up, as the instances of regular concurrence are multiplied, in a geometric ratio; and when the instances become numerous, the expectation of an additional coördinating cause becomes the highest practical certainty. It becomes rationally impossible to believe that these frequent and regular concurrences of the effects came from the blind, fortuitous coincidence of the physical causes, acting each separately from the other.

10. The real case, then, is this: each physical cause, as such, is only efficient of the immediate, blind result next to it. Grant it the conditions, and it can do this one thing always, and always as blindly as the first time. Gravity will cause the mass thrown into the air to fall back to the earth, to fall anywhere, or on anything, gravity neither knowing nor caring where. But here are several batteries of cannon set in array to break down an enemy's wall. What we observe as fact is, that the guns throw solid shot convergently at every discharge, upon a single fixed spot in the opposing curtain, with the evident design to concentrate their force and break down one chasm in that

wall. Now, it is a mere mockery to say that, given the cannon and the balls, the explosive force of gunpowder, and gravity, the fall of these shots is accounted for. These physical causes would account for their random fall, anywhere, uselessly, or as probably upon the heads of the gunners' friends. The thing to be accounted for is their regular convergence. This is an additional fact; the blind physical causes do not and cannot account for it; it discloses design.

11. The human eye, for instance, is composed of atoms of oxygen, hydrogen, carbon, nitrogen, with a few others of phosphorus and lime. Chemical affinity may arrange an ounce or two of these atoms into a compound, which may be, so far as any determination of that blind cause goes, of any shape, or amorphous, fluid or solid, useful, useless, or hurtful to sensitive beings. But here are countless millions of reptiles, birds, quadrupeds, and men, creatures designed to live in the light and air, of whom the men number twelve hundred millions at least, in each individual of whom there is a pair of eyes, except in the imperfect births. Numerous and exceedingly delicate adjustments were necessary in each separate eye to effectuate the end of an eye—vision. The pupil must open on the exterior front, and not somewhere within the socket; the interior of the ball must be a *camera obscura*. There must be refracting, transparent bodies to bend the rays of light; achromatic refraction must be produced; focal distances must be adjusted aright; there must be a sensitive sheet of nerve to receive the *spectrum*; the sensation of this image must be conveyed by the optic chords to the *sensorium*; the animal's perceptive faculty must be coördinated as a cognitive power to this sensorial feeling; the brow and lids must be contrived to protect the wondrous organ. Here, already, is a number of coincidences, and the failure of one would prevent the end—vision. Let the probability that the unintelligent cause, chemical affinity, would, in its blindness, hit upon one of these requisites of a seeing eye, be expressed by any fraction, we care not how large. Then, according to the established law of logic, the probability that the same cause will produce a coincidence of two requisites is found by multiplying together the two fractions representing the two separate probabilities. Thus, also, the joint concurrence of a third has

a probability expressed by the very small fraction produced by multiplying together the three denominators. Before we have done with the coördinations of a single eye, we thus have a probability, almost infinitely great, against its production by physical law alone. But in each head are two eyes, concurring in single vision, which doubles the almost infinite improbability. It is multiplied again by all the millions of the human and animal races. But this is not all. To say nothing of the coincidence of means in inorganic and vegetable nature, there are in animals many other organs besides eyes, which, if not as complicated, yet exhibit their distinct coördinations. These must multiply the improbability that fortuity produced all the former results! Thus the power of members and the capacity of human conception are exhausted before we approach the absurdity of this theory of the production of ends in nature without final cause.

12. We look, then, at these combinations of means to results or functions, which unintelligent physical causes could not account for, and we perceive this further fact: Adjustments or coördinations are regularly made, in order to certain ends. The nature of the end proposed has determined the nature of the physical means selected, and the combination thereof. Thus, as the ship is evidently designed and purposed for sailing, so is the ear for hearing, and the eye for seeing. The function of sailing has determined the materials and structure of the ship; the function of hearing, those of the ear; the function of seeing, those of the eye. But the ship-building must be before the sailing; the ear and eye must exist before the hearing and seeing. The facts which we have, then, are these: Here are ends, coming after their means, which yet have acted causatively on their own precedent means! But every physical cause precedes its own effect. No physical cause can act until it exists. Here, however, are ends, which exercise the influence of causes, and yet, against all physical nature, are causes before they have existence, and act backwards up the stream of time! Here is the function of sailing, which has effectively caused a given structure in a ship-yard, before this function was.

13. To solve this paradox, there is only one way possible for the human mind. There must have been *prescience of that fu-*

ture function. It is impossible that it can have acted causally, as we see it act in fact, except as it is foreseen. But foresight is cognition; it is a function of intelligence; it cannot be less. A mind has been at work, preconceiving that function and the things requisite to it, choosing the appropriate means, purposing the effective coördinations therefor, and thus shaping the work of the physical causes. *This is "final cause."*

14. There is one sphere within which the mind has intuitive and absolute knowledge of the working of final causes, as every atheist admits. This is the sphere of one's own consciousness and will. The man knows that he himself pursues final causes when he conceives and elects future ends, selects means, and adapts them to his own purposed results. But is he not equally certain that his fellow-man also pursues final causes? Doubtless. It is instructive to inquire how he comes to that certainty as to his fellow's soul. He has no actual vision of that other's subjective states. Men have no windows in their breasts into which their neighbors peep, and actually see the machinery of mind and will moving. But this man knows that his fellow is pursuing final causes generically like those he consciously pursues himself, because he observes the other's outward acts, and infers final causes in the other's mind from the great mental law of "like causes, like effects," by an induction guided by the perfect visible analogy.

15. But when we observe, in nature, these visible actions exactly analogous to combinations seen in our fellow-man when he pursues his final causes, why do not the same analogy and induction justify us in ascribing the same solution,—that there are final causes in nature also? Why is not the one induction as valid as the other? There is no difference. It is vain to object, that whereas we see in our fellow a rational person, we see in nature no personality, but only sets of material bodies and natural causations; for it is not true that we *see* in our neighbor a rational person, competent to deal with final causes. His soul is his personality! And this is no more directly visible to us than God is visible in nature. What we see in our neighbor is a series of bodily actions executed by members and limbs as material as the physical organs of animals; it is only by an induction from a valid analogy between his acts and our

own that we learn the rational personality behind his material actions. The analogy is no weaker which shows us God's personality behind the final causes of nature. The question returns, Why is it not as valid?

16. Is a different objection raised: That man's pursuit of his final causes is personal and consciously extra-natural, exercised by personal faculties acting from without upon material nature, while the powers which operate everything in nature are immanent in nature? The replies are two: First, in the sense of this discussion, human nature is not extra-natural, but is one of the ordinary spheres of nature, and is connected with the lower spheres by natural laws as regular as any. When the personal will of a man pursues a final cause, he does it through means purely natural; there is, indeed, a supra-material power at work, coördinating mind; but nothing extra-natural or supra-natural appears. Why, then, may we not press an analogy so purely natural through all the spheres of nature? Second, our opponents [Evolutionists, or Materialists, or Agnostics] refute themselves fatally, for they are the very men who insist on obliterating even that reasonable distinction which we make between the material and mental spheres. They plead for *monism* in some form; they deny that mind and matter are substantively distinct; they insist on including them in one theory of substance and force. They have, then, utterly destroyed their own premise by denying the very distinction between personal mind and nature, on which alone their objection rests. On their ground, our analogical induction for final cause in nature is a perfect proof. They admit that our minds consciously pursue final causes. But mind and physical nature, say they, are manifestations of the same substance and force. Hence, when we see the parallel coördinations of physical causes to future ends in nature, just like those we consciously employ, there is no other inference possible but that nature, like us, pursues final causes.

17. The exception of Hume and his followers of our generation is already virtually answered. He cavilled that the inference from our conscious employment of final causes to the same fact in nature is unsound, because of the difference between a person and a natural agency. Mr. Mill has echoed the cavil,

while completely refuting it in another place. Mr. H. Spencer has reproduced it in the charge that the inference labors under the vice of *anthropomorphism*; that it leaps from the conscious experience of our limited minds to an imaginary acting of an infinite mind (if there is any divine mind), about which we can certainly know nothing as to its laws of acting; and it unwarrantably concludes that this absolute Being chooses and thinks as we finite, dependent beings do. The *argumentum ad hominem* just stated would be a sufficient reply. Or we might urge that, if God has made the human mind "after his image, in his likeness," this would effectually guarantee all our legitimately rational processes of thought against vice from *anthropomorphism*; for, in thinking according to the natural laws of our minds, we would be thinking precisely as God bids us think. And, should Mr. Spencer say that we must not "beg the question" by assuming this theistic account of man's origin, we might at least retort that neither should he beg the question by denying it. We might also urge that the difference between the normal acting of a finite mind and of an infinite one can only be a difference of degree, not of essence; that the thinking of the finite, when done according to its laws of thought, must be good as far as it goes; only, the divine thinking, while just like it within the narrow limits, goes greatly farther. Sir Isaac Newton knew vastly more mathematics than the school-child; yet, when the school-child did its little "sum" in simple addition, "according to rule," Newton would have pronounced it right; nor would he have done that "sum" in any other than the child's method. Once more: the unreasonableness of the demand that we shall reject any conception of the divine working, though reached by normal (human) inference, merely because it may be anthropomorphic, appears thus. It would equally forbid us to think or learn at all, either concerning God, or any Being or concept different from man; for, if we are not allowed to think in the forms of thought natural and normal for us, we are forbidden to think at all. All man's cognition must be anthropomorphic, or nothing.

18. But the complete answer to these exceptions is in the facts already insisted on: that, in reasoning from "finality" in nature

¹*Theism*, Part I, "Marks of Design in Nature."

to "intentionality," we are but obeying an inevitable necessity; we are not consulting any peculiarity of human laws of thought. In the operations of nature, just as much as in our own consciousness, we actually see ends which follow after their physical efficient exerting a causal influence backward, before they come into existence, on the collocations of their own physical means, which precede. There is no way possible in physical nature by which a cause can act before it is. The law of physical causation is absolute; a cause must have existed in order to operate. Hence we are driven out of physical nature to find the explanation of this thing,—driven, not by some merely human law of thought, but by an absolute necessity of thought. The final cause which acted before it existed must have preëxisted in forethought. Forethought is a function of mind. Therefore, there must be a Mind behind nature, older and greater than all the contrivances of nature. A great amount of thinking has been done in the finalities of nature. Who did that thinking? Not nature. Then God. The only alternative hypothesis is that of chance. We have seen that hypothesis fall into utter ruin and disgrace before the facts.

19. Were all the claims of the evolutionist granted, this would not extinguish the teleological argument, but only remove its *data* back in time, and simplify them in number. For then the facts we should have would be these: a few, or possibly one primordial form of animated matter, slowly, but regularly, producing all the orderly wonders of life, up to man, through the sure action of the simple laws of slight variation, influence of environment, survival of the fittest. Here, again, are wonderful adaptations to ends. And chance would equally be excluded by the numbers, the regularity, the beneficence of the immense results. The problem would recur: Who adjusted those few, but ancient, elements so as to evolve all this? Teleology is as apparent as ever. We may even urge that the distance, the multitude, the complex regularity of the later effects which we now witness, illustrate the greatness of the thinking but the more. The justice of this point may appear from the fact that there are theistic evolutionists who make the very claim just urged. They advance the evolutionist theory, and in the same breath they stoutly assert that in doing so they have not weak-

ened, but improved, the grounds of the teleological argument. However we may judge their concession of this improved theory of evolution to be unwise and weak, this other assertion is solid, that they are no whit inferior in knowledge or logic to their atheistic comrades and co-laborers, who pronounce the teleological argument dead.

20. The attempt to account for structures adapted to functions by evolution has no pretence even of applying, except in organized beings which perpetually reproduce their kinds; for it is the claim of slight variations in generation, and of the fuller development of nascent new organs by the reaction of environment, which form the "working parts" of the theory. But clear instances of finality are not confined to these vegetable and living beings. There are wondrous adaptations in the chemical facts of inorganic nature, in the mechanism of the heavenly bodies, in the facts of meteorology. Here, then, their speculation breaks down hopelessly. Have suns and stars, for instance, attained to their present exquisite adjustments of relation and perfection of being by the blind experiments of countless reproductions? Then the fossil suns, unfitted to survive, ought to lie about us as thick as fossil polypi and mollusks!

21. The claim that a blind *conatus* towards higher action, felt in the animal, may have assisted the plastic influence of environment from without in developing rudimental organs, cannot assist the evolutionists. They differ among themselves as to the mode of such influence; they contradict each other. Natural history fatally discredits the claim by saying that the organ must be possessed by the species of animals before any of them could feel any *conatus* towards its use. Can seeing be before eyes, even in conception? No. How, then, could eyeless animals feel any *conatus* to see? Let no one be deluded by the statement that a blind boy among us may feel a yearning to see. He is a defective exception in a seeing species, who do crave to see because they already have eyes, and who suggest to their blind fellow the share in this desire by the other faculty of speech. It still remains true that the species must have eyes beforehand, in order that individuals may experience a *conatus* for seeing. But the case to be accounted for would be the beginning of such *conatus* in some individual of a species, none of

which had the organ for the function, and in which, consequently, none had even the idea of the function or its pleasures as the objective of such desire. If they resort to the assertion that this *conatus* towards a function may be instinctive and unintelligent, the fatal answers are: that their own sciences of zoölogy and physiology assure us that instincts are not found in cases where the organs for their exercise do not exist; and that an instinctive *conatus*, being blind and fortuitous, would never produce results of such regularity and completeness, and those exactly alike in each of the multitudes of a species.

22. But the most utter collapse of the attempt to explain the finalities of nature by the laws of a supposed evolution occurs when we approach those classes of organs which complete their development while the influences of environment and function are entirely excluded; and these are exceedingly numerous. The fowl in the shell has already developed wings to fly with, in a marble case which excluded every atom of air, the *medium* for flying. So this animal has perfected a pair of lungs for breathing, where there has never been any air to inhale. It has matured a perfect pair of eyes to see with, in a prison where there has never entered a ray of light. It has an *apparatus* of nutrition in complete working order, including the interadjustments of beak, tongue, swallow, craw, gizzard, digestive stomach, and intestine, although hitherto its only nutrition has been from the egg which enclosed it, and this has been introduced into its circulation in a different manner. This instance of the fowl has been stated in detail, that it may suggest to the hearer a multitude of like ones. The argument is, that physical causes can only act when in juxtaposition, both as to time and place, with the bodies which receive their efficiency. But here environment and function were wholly absent until the results—wings, eyes, ears, lungs, alimentary canal,—were completed. Therefore they had no causal connection whatever as physical causes. Their influence could only have been as final causes.

23. Perhaps the deepest mysteries and wonders of nature are those presented in the functions of reproduction. And to these nature attaches her greatest importance, as she shows by many signs, seeing the very existence of the *genera* and *species* depends on this. The organs of reproduction present instances most

fatal to our opponents in all those cases where the male organs are in one individual, and the female in a different one of the same species, and where their development is complete before they either can or do react upon each other in any manner. These instances not only include the great majority of the animal species, but many kinds of plants and trees, or, at least, different flowers of the same tree. The organs are exceedingly unlike each other, yet exactly adapted for future coöperation. This fitness is constituted not only by structure of masses, but by the most refined and minute molecular arrangements. If either of these delicate provisions is out of place, nature's end is disappointed. Must not these organs be constructed for each other? Yet the reaction of environment had no influence on their development, for all interaction has been excluded until the maturity of the structures. Final cause is here too clear to admit of doubt when the cases are duly considered.

24. The argument will close with these general assertions. Our conclusion has in its favor the decided assent of the common sense of nearly all mankind, and of nearly all schools of philosophy. All common men of good sense have believed they saw, in the adjustments of the parts of nature to intended functions, final causes and the presence of a supernatural mind. The only exceptions have been savages like the African Bushmen, so degraded as to have attained to few processes of inferential thought on any subject. All speculative philosophers have been fully convinced of the same conclusion, from Job to Hamilton and Janet, except those who have displayed eccentricity in their philosophy, either by materialism, ultra-idealism, or pantheism. This *consensus* of both the unlearned and the learned will weigh much with the healthy and modest reason.

25. The postulate that each organ is designed for an appropriate function is the very pole-star of all inductive reasoning and experiment in the study of organized nature. At least, every naturalist proceeds on this maxim as his general principle; and if he meets instances which do not seem to conform to it, he at once discounts them as *lusus nature*, or reserves them for closer inquiry. When the botanist, the zoölogist, the student of human physiology, detects a new organ, not described before in his science, he at once assumes that it has a function. To the ascer-

tainment of this function he now directs all his observations and experiments; until he demonstrates what it is, he feels that the novelty he has discovered is unexplained; when he has ascertained the function, he deems that he has reduced the new discovery into its scientific place. Without the guidance of this postulate of adapted function for each organ, science would be paralyzed, and its order would become anarchy. The instances are so illustrious, from Harvey's inference by the valvular membranes in the arteries to a circulation of the blood, down to the last researches of zoölogy and botany, that citation is needless for the learned. But this postulate is precisely the doctrine of final cause.

26. Belief in final cause is the essential counterpart to, and immediate inference from, the belief in causation. But this is the very foundation of inductive logic. There is no physicist who does not concur with us in saying that all induction from instances observed to laws of nature is grounded in the "uniformity of nature." But has this nature any stable uniformity? Is not her attribute variation and fickleness? The first aspect of her realm is mutation, boundless mutation. Or, if she is found to have, in another aspect, that stability of causation necessary to found all induction, how comes she, amidst her mutabilities, to have this uniformity? Her own attributes are endless change, *and blindness*. Her forces are absolutely unintelligent and unremembering. No one of them is able to know for itself whether it is conforming to any previous uniformity or not; no one is competent to remember any rule to which it ought to conform. Plainly, then, were material nature left to the control of physical laws alone, she must exhibit either a chaotic anarchy, or the rigidity of a mechanical fate. Either condition, if dominant in nature, would equally unfit her to be the home of rational free agents and the subject of inductive science. Let the hearer think and see. Nature is uniform, neither chaotic nor fatalistic, because she is directed by a Mind, because intelligence directs her unintelligent physical causes to preconceived, rational purposes. Her uniformities are but the expressions of these purposes, which are stable, because they are the volitions of an infinite, immutable Mind, "whose purposes shall stand, and who doeth all his good pleasure," because

all his volitions are guided from the first by absolute knowledge and wisdom, perfect rectitude, and full benevolence. Nature is stable, only because the counsels of the God who uses her for his ends are stable.

None but theists can consistently use induction.

The CHAIRMAN (D. Howard, Esq., Vice-President of Chemical Society).—We have, in the first place, to thank the author of this paper, whom we would gladly have welcomed among us, had he been able to leave his distant home. Having been, a quarter of a century ago, a very distinguished soldier, he has since added to that distinction the further claim upon our recognition which belongs to his position as a professor and deep thinker. It may seem strange that after all these years of discussion we should still have to go back to so elementary a matter as the causes which Aristotle classed as first causes. And yet there are few things which create so much discussion as the question of first cause. I once heard a distinguished lawyer ask a distinguished physician, in cross-examination, what was the cause of a man's illness, and the physician answered: "If you will tell me what you mean by 'cause,' I will answer the question." The lawyer, however, thought better of it, and the question was not answered; and we were consequently cheated out of a very important discussion. Doubtless, the barrister was astute enough to know that most men would have fallen into the trap he had laid, and, in describing the cause of the man's illness, have afforded a chance for a clever rejoinder. And so it is in the matter before us. We see men entirely ignoring the very ancient distinction between the different causes by confusing, under the common term "causes," all those which Aristotle, if not the first to draw attention to, was undoubtedly the first to classify. The more we pursue the question, the more evident it is that, take what view we may of creation, whether we consider the present state of things to have been brought about by evolution, or by a mere single act of creation, we are just as much unable to escape from the argument of final cause in the one case as in the other. We are, in fact, unable to free our minds from the belief that there has been a distinct purpose in nature. It is, I believe, perfectly true that there is nothing in the belief in evolution to prevent a full and complete belief in a final power and creative cause, though I quite share the author's view of the very incomplete proof of the universality of evolution. Therefore, this question of final cause is by no means one which it is needless to discuss in these days. It is not one, I think, which has been so thoroughly thrashed out that there is no necessity to say any more upon it. There are, however, many here who, I believe, are well able to discuss the subject, and I hope they will give us the benefit of their thoughts upon it.

MR. HASTINGS C. DENT, C. E., F. L. S.—In offering a few remarks on this subject, I would first of all say that there have been few papers read in this room to which I have listened with deeper interest; and I cannot but regard it as a most important contribution to the transactions of this Society. I propose to confine my remarks to a few criticisms, and I may say that there are many points in the paper which are so very clear and plain that I might almost call them axioms. I will draw attention to some half dozen of these, and the first to which I would refer relates to contrivance and choice. In section 2, the author says: "Wherever nature presents us with structures, and especially organs, adapted to natural ends, there has been contrivance, and also choice of the physical means so adapted. But

contrivance and choice are functions of thought and will, such as are performed only by some rational persons." There is a very admirable illustration of this given in section 7. It is not the old idea of Paley about the watch, but rather an enlargement of that idea. The author says, "Here the blind force of gravity is caused to realize an end so unlike its usual physical effects in the fall of hail-stones and rain-drops, of leaves and decayed branches." Then I come to axiom No. 2, which is to be found in section 8. The author says, "Function is not the determining cause, but only the physical result of the existence of the organ. Birds did not get wings in order to fly; but they simply fly because they have wings." In the same way, we are told in paragraph 12, "Adjustments, or coördinations, are regularly made in order to certain ends;" and again, on the same page, "As the ship is evidently designed and purposed for sailing, so is the ear for hearing and the eye for seeing." Axiom No. 3 is given in section 9, where the author says, "We know that the sure attribute of the results of blind chance or fortuity is uncertainty, irregularity, confusion;" and then we have axiom No. 4, a little further down, "It becomes rationally impossible to believe that these frequent and regular concurrences of the effects came from the blind, fortuitous coincidence of the physical causes, acting each separately from the other." Again, in the concluding part of section 17, we are told, "The difference between the normal acting of a finite mind and an infinite one can only be a difference of degree, not of essence;" and then we have an analogy between the child's sums and those of Sir Isaac Newton. The fifth axiom is to be found at the end of paragraph 20, where the author confutes the theory of gradual evolution, or the doctrine of organisms obtaining perfection. Here the author gives us a splendid specimen of analytical reasoning, by citing the case of the sun and the stars, as to which he says, "Have suns and stars, for instance, attained to their present exquisite adjustments of relation and perfection of being, by the blind experiments of countless reproduction? Then, the fossil suns, unfitted to survive, ought to lie about us as thick as fossil polypi and mollusks." There is one more axiom. It appears at the end of section 21: "Their own sciences of zoölogy and physiology assure us that instincts are not found in cases where the organs for their exercise do not exist." May I be allowed, very humbly, to take exception to one item in section 22? I would venture to suggest that the argument there employed is weak, because it can be so easily controverted or answered by the evolutionists. The author says, "The most utter collapse of the attempts to explain the finalities of nature by the laws of a supposed evolution occurs when we approach those classes of organs which complete their development while the influences of environment and function are entirely excluded, and these are exceedingly numerous." He then refers to the fowl in the egg, as obtaining all its different organs necessary for the consumption of food, and the other needs of its being. Now, the evolutionist would say the fowl has merely inherited organs which are transmitted in the egg, and that, consequently, improvement or degeneration takes place after the animal has emerged from the egg-shell; every creature becoming more complex as the embryonic stage becomes more complicated. I do not know any creature that emerges from an egg without possessing some organs which it could not use while in the egg.

Rev. J. WHITE, M. A.—May I take the liberty of offering a few remarks? I think that, even if we admit all the evolutionists lay claim to, nevertheless, the teleological argument—that of a final cause for the existence of a rational and intelligent Creator—still remains unanswered. Evolution only accounts for the existence of the universe as a going machine, successive generations and variations

being continually produced, and those generations being perpetuated in a manner beneficial to the creatures generated. I say, admitting all this as an explanation of the natural history of the universe, it still fails to exclude the teleological argument that the creatures which exist must have had the power of variation bestowed upon them. The creature is put into an environment which enables it to fulfil its functions and to bring about the results we witness; but all this implies design and purpose. It is what could not have occurred by chance or accident. Therefore, I think material evolution does not militate against the belief we entertain, and that it is rational to entertain, as to the universe having been created by a God who had in view the perfection of the creatures by which it is inhabited. Evolution is to be regarded simply as one of the means by which this perfection and improvement have been brought about. In point of fact, the whole argument brought by the evolutionists against theism seems to me very like the old illustration which, in accounting for the movement of a watch, went back to the spring and left the origin of that part of the machinery unexplained. These scientific theorists attempt to explain the existence of the universe without a Creator. They merely explain some of the processes, but fail altogether to touch their origin. It is a very remarkable thing how completely all the efforts of human science have failed to explain the origin of anything. Professor Max Müller has pointed out that all the attempts to explain the beginning of any language have utterly failed, and that there is not the slightest prospect of our obtaining such knowledge. He adds the remark, that the human intellect seems equally to fail in ascertaining the beginning of everything else. Therefore, I cannot think that the argument for evolution—although I admit evolution to be true as far as it accounts for a considerable number of steps in the process by which the creatures of the universe have been improved—does dispose of the teleological argument for a final cause, which the author of this paper has put before us in so admirable a manner.

Mr. DENT.—I should like to ask the last speaker whether he accounts for the appearance of man by evolution?

Rev. J. WHITE.—My argument was only that, admitting evolution to be entirely proved, and that it could be shown that man was descended from an ape or a tadpole, still this does not do away with the teleological argument that there is design in nature, and that generation is only a means by which it is worked out.

Mr. DENT.—Does that not go against the statement of Genesis?

Rev. J. WHITE.—I only say, *supposing* the case of the evolutionist to be admitted, still it does not militate against, nor upset, the argument advanced in the paper. This was what I intended to express.

Capt. FRANCIS PETRIE (Hon. Sec.).—I have received the following communication from Surgeon-General C. A. Gordon, M. D., C. B., who is unavoidably prevented from being present:

“*Physical causes are the real proximate producers of all phenomena, Sec. 4.*”

“But the fact that they are so leaves the *ultimate cause* of those phenomena unexplained. For example, a match applied to gunpowder is the *immediate cause* of an explosion. But the *why* of this result is not explained by the occurrence of the explosion.

“In physiology we know that each organ in the body performs its own definite function, and none other; also, that the several functions of organs are influenced by immaterial causes, as the emotions, etc. The fact we know; the why remains mysterious and unknown.

“And so with particular causes of disease, and action of drugs employed in treat-

ment. The fact that definite effects follow the causes and the drugs is matter of experience. The why,—that is, the ultimate cause,—in the one case as in the other, is unrevealed.

“*Materialists assert that the phenomena of mind differ rather in degree than in kind from the phenomena of matter.*”

“As a matter of fact, as little is known of the ultimate and occult properties of matter as there is known of the corresponding properties and faculties of mind. As expressed by Baxter: ‘Men who believe that dead matter can produce the effects of life and reason are a hundred times more credulous than the most thorough-paced believer that ever existed.’”

THE CHAIRMAN.—I wish the author had been here to have answered the friendly criticisms that have been made upon his paper. The point Mr. Dent has called our attention to in regard to the answer of the evolutionist as to the formation and growth of the fowl in the egg, points to one of those curious things that have always passed my comprehension. It is assumed, undoubtedly, for a very good reason, as we see that such is the case in nature, that the influence of heredity is an immense power; but what right have we, from the theory of pure natural selection, to assume anything of the kind? What right have we to assume that extraordinary persistency of type which is one of the most remarkable characteristics of all animals? Granting, for the sake of argument, that the peculiar transformations undergone by the embryo are a proof of the past history of the race, how can we, from the characteristics before us, form a conclusion as to the cause of this? But there is, of course, the other possible explanation, that those singular points which are appealed to as evidences of past history, are evidences, not of past history, but of the present position of the animal in the scheme of creation. This is as much in favor of the teleological point of view as it is in favor of the evolutionist. We have to thank the author for a most interesting paper.

MR. D. M'LAREN.—In section 20 of the paper, the author speaks of the “wondrous adaptation in the chemical facts of inorganic nature in the mechanism of the heavenly bodies, in the facts of meteorology,” the slightest derangement of which would be fatal to the whole of the existing animal creation. Have the evolutionists attempted to notice or explain the adjustment of the masses, and forces, and distances of the heavenly bodies, as bearing on the argument in favor of teleology?

THE CHAIRMAN.—As far as my reading goes, there is absolutely no modern argument in that direction. Undoubtedly, a few centuries back the alchemists gave us a most interesting history of the evolution of matter, and Paracelsus gave us certain speculations which are not looked upon with respect by modern scientists.

MR. WISE.—We find in the amoeba that which corresponds to digestion, reproduction, and many of the functions of highly organized creatures like ourselves. I have been reading the introductory chapter to Foster's *Physiology*, and he there very beautifully shows that function precedes organization, while a great German physiologist says that organs are simply the localization of functions. I should like to know whether that is true or not?

THE CHAIRMAN.—I wish some able physiologist were here to answer that question. For my part I think there is a good deal more of organization in the amoeba than the microscope will show. The differentiation of protoplasm is not to be measured by our powers of perception.

MR. WISE.—It is said that they are jellies, which are purely transparent. Can we in that case discern anything corresponding to organization?

THE CHAIRMAN.—If an apparently perfectly structureless piece of jelly performs functions, is not that a proof of organization?

The meeting was then adjourned.

REMARKS ON THE FOREGOING PAPER, BY THE REV. R. COLLINS, M. A.

I am much indebted to the honorary secretary for sending me a proof of Dr. Dabney's paper. It seems to me to be the most lucid and closely reasoned essay upon the subject that I have read.

It is instructive to observe how difficult it is for the evolutionists, though they discard the doctrine of final causes, to escape its practical dominancy over their reasonings and methods. In their search after modifications in the structure and functions of plants and animals, they are guided, equally with Harvey, by the idea of some *object* to be accomplished. The evolutionist writes as though Nature were always working up to *quasi*-final causes, though his theory is that no such direct cause exists, there being no intelligence to plan such intention. Nature accomplishes what would be accomplished by an intelligence having an intention in view, and on the same lines, only by a different method, namely, that wherever Nature by any adventitious accidental change hits upon that which will give a plant or animal a better chance in the struggle for existence, that better chance, to be followed by an infinite number of better chances (though why so followed we are not clearly told), establishes a new dynasty. The result in the new dynasty is such as would be obtained by intelligent design. Thus the language of design is continually used. For instance (to take up the first evolution article that comes to hand, Mr. Grant Allen's *Dispersion of Seeds*, in *Knowledge*, November, 1885), we read, "This very sedentary nature of the plant kind renders necessary all sorts of curious devices and plans, on the part of parents, to secure the proper start in life for their young seedlings. Or rather, to put it with stricter biological correctness, it gives an extra chance in the struggle for existence to all those accidental variations which happen to tell at all in the direction of better and more perfect dispersion." Now here the first intuition of the mind is towards "devices and plans," which then is immediately corrected by the superior "accident" theory. If "*accidental variations, which happen to tell*" in the direction of more perfect establishment, really produce what would be produced by a wise design, why should we refuse to believe the design, and choose the incomparably more difficult theory that "*accidental variations*" alone, "*that happen to tell*," have accomplished precisely what design would accomplish? What scientific advantage has the "*accidental variations*" theory over the final cause, which is, after all, practically admitted? How design has worked is another matter. Its method may be a perfectly legitimate subject of inquiry. It may have worked, perhaps, in part by variations in plants and animals. But when I speak of variations as "*accidental*," what do I really mean by "*accidental*?" Have I any proof that what seems to me to be accidental is not the result of some law or some intention? Professor Huxley seems to imply such a law or laws, and to deny anything actually accidental, when he says, "The whole world, living and not living, is the result of the mutual interaction, according to definite laws, of the forces possessed by the molecules of which the primitive nebulousity of the universe was composed." "If this be true," he goes on to say, "it is no less certain that the existing world lay, potentially, in the cosmic vapor, and that a sufficient intelligence could, from a knowledge of the properties of the molecules of

that vapor, have predicted, say the fauna of Britain in 1869, with as much certainty as one can say what will happen to the vapor of the breath on a cold winter's day." These laws, then, govern what the evolutionists elsewhere call "accidents." Whether Mr. Herbert Spencer's "energy" would eliminate "accident," strictly speaking, from the universe, or not, I cannot tell. But if so, it explodes the whole of Mr. Darwin's theory, based on the "survival of the fittest," at least, as it is used by the evolutionists. The only value of Mr. Spencer's "energy," however, to many of us, is to cover an infinity of nebulous thought; for the idea conveyed by the word is simply "power for work," wherever found. And it is difficult to see what we can really establish upon the endeavor to unify in speech or theory the power for work of some kind or other that exists all over the universe. But if there be one such "energy" behind its manifold ramifications, and if it be working out such harmonies and adaptations in nature as would be worked out in obedience to final causes existing in some intelligent intention, is that "energy" blindly-intelligent or *quasi*-intelligent? or how am I to understand it? Does it only prompt "accidental variations"? or does it work on definite lines? If the latter, where is the "accident"? And if the energy develops final causes, how are we to eliminate from it the attribute of Mind?

Surely in eliminating the doctrine of final causes from the universe, the evolutionists destroy the only real guide we can take for unravelling, so far as we can unravel, the functions of nature. Moreover, they thus deny that which they themselves practically follow throughout their investigations.

"Accident" *versus* "certainty," as a guide to the explanation of the harmonies and adaptations of the universe, seems to be the greatest philosophical paradox conceivable.

ANTI-BIBLICAL THEORIES OF RIGHTS.¹

WHEN the friends of the Bible win a victory over one phase of infidelity, they naturally hope that there will be a truce in the warfare and they may enjoy peace. But the hope is ill-founded. We should have foreseen this, had we considered that the real source of infidelity is always in the pride, self-will and ungodliness of man's nature. So that, when men are defeated on one line of attack, a part of them at least will be certainly prompted by their natural enmity to God's Word to hunt for some other weapon against it. Rational deism, from Bolingbroke to Hume, received a Waterloo defeat at the hands of Bishop Butler and the other Christian apologists, and well-informed enemies surrendered it. But neology raised its head, and for two generations opened a way for virtual infidels. History and biblical criticism in the hands of the Bengels, Delitzschs, Leuthards, have blocked that way, and Tübingen is silent, or at least discredited. Then came the anti-Mosaic geology and evolution—the one attacking the recent origin of man, the flood, etc., the other presuming to construct a creation without a creator. These two are now passing into the “sere and yellow leaf.” More correct natural science now points with certainty to a deluge, to the recency of the last glacial epoch, the newness of the present face of the continents, and consequently to the late appearance of man upon the earth. Agassiz, M. Paul Janet and Sir William Dawson reinstate the doctrines of final cause and fixed genera of organic life upon their impregnable basis.

But we may expect no respite in the warfare. Another hostile banner is already unfurled, and has gathered its millions of unbelievers for a new attack upon God's Holy Word. This assault proceeds from the side of professed social science. It appears

¹ This article appeared in the *Presbyterian Quarterly* for July, 1888.

in those dogmas of social rights which are historically known as the Jacobinical, and which have been transferred from the atheistic French radicals to the free Protestant countries. The object of the Scriptures is to teach the way of redemption and sanctification for sinful man; yet incidentally they teach, by precept and implication, those equitable principles on which all constitutional governments are founded. So far as God gave to the chosen people a political form, the one which he preferred was a confederation of little republican bodies represented by their elderships. (Ex. xviii. 25, 26; Ex. iii. 16; Num. xi. 16, 17; Num. xxxii. 20-27.)

When he conceded to them, as it were under protest, a regal form, it was a constitutional and elective monarchy. (1 Sam. x. 24, 25.) The rights of each tribe were secured against vital infringement of this constitution by its own veto power. They retained the prerogative of protecting themselves against the usurpations of the elective king by withdrawing at their own sovereign discretion from the confederation. (1 Kings, xii. 13-16.)

The history of the secession of the ten tribes under Jeroboam is often misunderstood through gross carelessness. No divine disapprobation is anywhere expressed against the ten tribes for exercising their right of withdrawal from the perverted federation. When Rehoboam began a war of coercion he was sternly forbidden by God to pursue it. (1 Kings, xii. 24.)

The act by which "Jeroboam made Israel to sin against the Lord" was wholly another and subsequent one—his meddling with the divinely appointed constitution of the church to promote merely political ends. (1 Kings, xii. 26-28.)

Thus, while the Bible history does not prohibit stronger forms of government as sins *per se*, it indicates God's preference for the representative republic as distinguished from the levelling democracy; and to this theory of human rights all its moral teachings correspond. On the one hand, it constitutes civil society of superiors, inferiors and equals (see Shorter Catechism, Question 64), making the household represented by the parent and master the integral unit of the social fabric, assigning to each order, higher or lower, its rule or subordination under the distributive equity of the law. On the other hand, it protected

each order in its legal privileges, and prohibited oppression and injustice as to all.

In a word, the maxim of the scriptural social ethics may be justly expressed in the great words of the British Constitution, "Peer and peasant are equal before the law," which were the guide of a Pym, a Hampden, a Sydney, a Locke, a Chatham, and equally of Hancock, Adams, Washington, Mason and Henry. Their theory assigned to the different classes of human beings in the commonwealth different grades of privilege and of function, according to their different natures and qualifications; but it held that the inferior is shielded in his right to his smaller franchise, by the same relation to the common heavenly Father, by the same Golden Rule and the equitable right which shields the superior in the enjoyment of his larger powers. The functions and privileges of the peer are in some respects very different from those of the peasant; but the same law protects them both in their several rights, and commands them both as to their several duties. This theory thus established between all men a moral, but not a mechanical equality. Higher and lower hold alike the same relation to the supreme ruler and ordainer of the commonwealth, God; yet they hold different relations to each other in society, corresponding to their differing capacities and fitnesses, which equity itself demands. Job understood this maxim of Bible republicanism, as he shows (chap. xxxi. 13, 14, 15): "If I did despise the cause of my man-servant or of my maid-servant, when they contended with me; what, then, shall I do when God riseth up? and when he visiteth, what shall I answer him? Did not he that made me in the womb make him?" So Paul, two thousand years later (Eph. vi. 9; Col. iv. 1). *Κύριοι* give to your *δούλοι* those things which are just and equal. The two teach the same doctrine. On the one hand, they assert the relation of superior and inferior, with their unequal franchises; on the other hand, they assert in the same breath the equal moral obligation of both as bearing the common relation to the one divine maker and judge.

The radical social theory asserts, under the same name, a totally different doctrine; its maxim is "all men are born free and equal." It supposes the social fabric constituted of individuals naturally absolute and sovereign as its integers, and

this by some sort of social contract, in entering which individual men act with a freedom equally complete as to God and each other. It defines each one's natural liberty as freedom to do whatever he wishes, and his civil liberty, after he optionally enters society, as that remainder of his natural prerogative not surrendered to the social contract. Consequently the theory teaches that exactly the same surrender must be exacted of each one under this social contract, whence each individual is inalienably entitled to all the same franchises and functions in society as well as to his moral equality; so that it is a natural iniquity to withhold from any adult person by law any prerogative which is legally conferred on any other member in society. The equality must be mechanical as well as moral, else the society is charged with natural injustice.

Every fair mind sees that this is not only a different but an opposite social theory. Yet its advocates are accustomed to advance it as the equivalent of the other, to teach it under the same nomenclature, and to assert that the difference between them is purely visionary. So widespread and profound is this confusion of thought, that the majority of the American people and of their teachers practically know and hold no other theory than the Jacobin one. They assume, as a matter of course, that it is this theory which is the firm logical basis of constitutional government; whereas history and science show that it is a fatal heresy of thought, which uproots every possible foundation of just freedom, and grounds only the most ruthless despotism. But none the less is this the passionate belief of millions, for the sake of which they are willing to assail the Bible itself.

The least reflection points out that this theory involves the following corollaries: (1), There can be no just imputation of the consequences of conduct from one human being to another in society; (2), No adult person can be justly debarred from any privilege allowed to any other person in the order or society, except for conviction of crime; (3), All distinctions of "caste" are essentially and inevitably wicked and oppressive; (4), Of course every adult is equally entitled to the franchise of voting and being voted for, and all restrictions here, except for the conviction of crime, are natural injustice; (5), Equal rights and suffrage ought to be conceded to women in every respect as to

men. If any advocate of the Jacobin theory recoils from this corollary, he is absolutely inconsistent, by reason of his bondage to former prejudices and unreasoning habits of thought: so argues John Stuart Mill irrefragably in his treatise on the *Subjection of Women*. If the Jacobin theory be true, then woman must be allowed access to every male avocation, including government, and war if she wishes it, to suffrage, to every political office, to as absolute freedom from her husband in the marriage relation as she enjoyed before her union to him, and to as absolute control of her own property and earnings as that claimed by the single gentleman, as against her own husband. That Mill infers correctly from his premises needs no arguing. If it is a just principle that no adult male shall be debarred from suffrage or office by reason of "race, color, or previous condition of bondage," then indisputably no adult female can be justly debarred from them by reason of sex, or previous legal subjection under the "common law." If it is a natural injustice to debar an adult male from these rights because of a black or yellow face, it must be an equal injustice to debar other adults because of a beardless face. If kinky hair should not disfranchise, then by parative reasoning flowing tresses should not disfranchise. (5). Last, if the Jacobin theory be true, then slavery in all its forms must be essentially unrighteous; of which institution the essential feature is, that citizens are invested with property in the involuntary labor of adult human beings, and control over their persons. The absolute necessity of this corollary is now asserted by all who hold the Jacobin theory intelligently: as, for instance, by Mr. Mill. They invariably deduce their doctrine from those principles, and they say, that since those principles are established, argument on the subject of human bondage is absolutely closed; and history gives this curious illustration of the necessity of this logical connection: that the first application of the doctrine of theoretical abolitionism ever made was that applied by Robespierre, the master of the French Jacobins, to the French colonies. We are told that he prided himself much on his political philosophy, and that one day when he was expounding it in the national assembly, some one said: "Monsieur, those dogmas, if carried out, would require the emancipation of all the Africans in the

colonies, which would, of course, ruin those precious appendages of France." To which he angrily replied: "Then let the colonies perish, rather than this social philosophy shall be denied." Of which the result was, in fact, the St. Domingo of to-day.

Now my purpose in this essay is not at all to discuss these two theories of human rights, or to refute the latter and establish the former. Although such discussion would strictly belong to the science of moral philosophy, and is indeed a vital part thereof, the fastidious might perhaps deem it unfit for a theological review in these "piping times of peace." My sole object is to examine the scriptural question, whether or not the integrity of the Bible can be made to consist with the Jacobin theory and its necessary corollaries; and this inquiry is purely religious and theological. The Christian church as such has no direct didactic concern with it, and no legislative and judicial concern with it, except as it furnishes infidelity weapons to assail God's Word. Our church has always properly held, that whenever any science so-called, whether psychological, moral, or even physical, is used to assail the integrity of the rule of faith, that use at once makes the defensive discussion of that hostile science a theological function, both proper and necessary for the church. I cite from our Confession a notable instance: For centuries the psychological problem concerning the rise of volition has been debated between philosophers, the Scotists approving, and the Thomists denying, the equilibrium and self-determination of the will. The Westminster Assembly perceived that the Scotists' psychology was employed to sophisticate the revealed doctrines of original sin and effectual calling. They, therefore, in Chap. ix., "Of Free Will," determine and settle so much of this doctrine of psychology as is needed to substantiate the Scriptures. So, recently, our Assembly, upon perceiving that a doctrine of mere physical science, evolution, was liable to be used for impugning the testimony of Scripture, dealt with that foreign doctrine both didactically and judicially. They were consistent. For, I repeat, whenever any doctrine from any whither is employed to assail that divine testimony which our Lord has committed to the church, there the defensive discussion of that doctrine has become theological, and is an obligatory part of the church's divine testimony.

But my purpose does not go so far as even this. My object is merely to point out the coming contest, and to warn the defenders of the faith of its certainty. My wish is to make all Christians face this plain question: Will you surrender the inspiration of the Scriptures to these assaults of a social science so-called? If not, what? That the issue has been made and must be met, I shall show by laying two sets of facts alongside of each other. One is, that the Jacobin theory, already held by millions and confidently claiming for itself all the honors of republicanism and liberty, does assert, and must assert, all the corollaries above stated. The other set of facts is, that the Scriptures deny every one of them, and that with a fatal distinctness which no honest exposition can evade. Doubtless, during this long and tremendous conflict we shall see the same thing repeated which we have seen in recent decades: timid and uncandid minds, anxious still to "ride a fence" after it is totally blown away by the hurricane of anti-christian attack, attempting to reconcile opposites by various exegetical wriggings. But we shall again see it end in futility, and candid assailant and candid defender will both agree that the Bible means what it says, and must either fall squarely or must stand by the overthrow of all attacking parties. The rest of our work will therefore be little more than the examination of the actual teachings of Scripture.

1. The Jacobin theory totally repudiates all imputation of the consequences of moral conduct from one person to another as irrational and essentially unjust. It declares that "imputed guilt is imputed nonsense." From its premises it must declare thus, for it asserts that each individual enters social existence as an independent integer, possessed of complete natural liberty and full equality. But the Bible scheme of social existence is full of this imputation. I shall not dwell upon the first grand case, the sin and fall of the race in Adam, although it is still determining, in a tremendous manner, the conditions of each individual's entrance into social existence. I add other instances, some of which are equally extensive. "The woman was first in the transgression," for which God laid upon Eve two penalties (Gen. iii. 16), subordination to her husband and the sorrows peculiar to motherhood. The New Testament declares (1 Tim. ii. 11 to end) that it is right her daughters shall continue to en-

duce these penalties to the end of the world. (See also 1 Peter, iii. 1-6.) In Genesis ix. 25-27, Ham, the son of Noah, is guilty of an unfilial crime. His posterity are condemned with him and share the penalty to this day. In Ex. xx. 5, God declares that he will visit the iniquity of the fathers upon the children to the third and fourth generations. Amalek met Israel in the time of his flight and distress with robbery and murder, instead of hospitality. Not only were the immediate actors punished by Joshua, but the descendants of Amalek are excluded forever from the house of the Lord, for the crime of their fathers. (Deut. xxv. 19.) It is needless to multiply instances, except one more, which shall refute the favorite dream of the rationalists that Jesus substituted a milder and juster law. For this Jesus said to the Jews of his own day (Matt. xxiii. 32-36): "Fill ye up then the measure of your fathers: . . . that upon you may come all the righteous blood shed upon the earth, from the blood of righteous Abel unto the blood of Zacharias, son of Barachias, whom ye slew between the temple and the altar. Verily I say unto you, all these things shall come upon this generation." We thus find this principle of imputation extended into the New Testament, by the authority of Jesus himself, as a just principle.

2. Whereas Jacobinism asserts that no privilege or franchise enjoyed by some adults in the state can be justly withheld from any other order of adults, God's word entirely discards this rule. Not to speak of the subordination of women and domestic bondage (of which more anon), God distributed the franchises unequally in the Hebrew commonwealth. The priestly family possessed, by inheritance, certain teaching and ruling functions which the descendants of no other tribe could share. There was a certain law of primogeniture, entitled the right of the first-born, which the younger sons did not share equally, and which the father himself could not alienate. (Deut. xxi. 15, 16.) The fathers of houses (Ex. xviii. 21; Josh. xxii. 14), in virtue of their patriarchal authority, held a senatorial dignity, and this evidently for life. (See also the history of Barzillai.)

In the New Testament, the apostle Peter (1 Eph. ii. 13) enjoins Christians to submit themselves "to every ordinance of man for the Lord's sake, whether it be to the king as supreme, or unto

governors, as unto them that are sent by him for the punishment of evil-doers and for the praise of them that do well." Here a distribution of powers between different ranks, emperor, proconsuls, and subjects, is distinctly recognized. "Render, therefore, to all their dues: tribute to whom tribute is due; custom to whom custom; fear to whom fear; honor to whom honor." (Rom. xiii. 7.) "Likewise, also, these filthy dreamers defile the flesh, despise dominion, and speak evil of dignities." (Jude, 8.)

3. Nothing is more obnoxious to the principles of Jacobinism than what it denounces as "caste." It delights to use this word because it is freighted with bad associations derived from the stories we hear of the oppressive hereditary distinctions of the people in Hindostan. Of course there is a sense in which every just conscience reprehends inequalities of caste. This is where they are made pretext for depriving an order or class of citizens of privileges which belong to them of right, and for whose exercise they are morally and intellectually qualified. But this is entirely a different thing from saying that all the different orders of persons in a state are naturally and morally entitled to all the same privileges, whether qualified or not, simply because they are men and adults. The Jacobin trick of sophistry is to confound these different propositions together; and when they denounce "wicked caste," the application they make of their denunciation includes not only oppressive inequalities, but every difference in the distribution of powers and privileges. Now, the Scriptures recognize and ordain such distribution; or, if the reader pleases, such distinctions of caste in the latter sense. Such is the stubborn fact. Thus, in the Hebrew commonwealth, the descendants of Levi were disfranchised of one privilege which belonged to all their brethren of the other tribes; and enfranchised with another privilege from which all their brethren were excluded. A Levite could not hold an inch of land in severalty. (Num. xviii. 22, 23.) No member of another tribe, not even of the princely tribe of Judah, could perform even the lowest function in the tabernacle. (Heb. vii. 13, 14.) These differences are nowhere grounded in any statement that the children of Levi were more or less intelligent and religious than their fellow-citizens. Another "caste distinction" appears among the descendants of Levi himself. The sons

of Aaron alone could offer sacrifices or incense in the sanctuary. The Levites could only be underlings or assistants to their brethren the priests. Among the sons of Aaron another hereditary distinction presents itself. The individual who had the right of the first born took the high priesthood, with its superior prerogatives. He alone could go into the Holy of Holies. He alone could offer the sacrifice on the great annual day of atonement. But this privilege was limited by a certain hereditary disqualification. He could only marry a virgin (Lev. xxi. 13, 14), and was forbidden to marry a widow (as his fellow-citizens might legally do), however virtuous and religious. A "caste distinction" is also found among the bondmen, whose subjection was legalized by the constitution. A person of Hebrew blood could only be enslaved for six years. A person of foreign blood could be held in hereditary slavery, although born within the land of Israel as much as the other. It was also provided that the treatment of bondmen of Hebrew blood should be more lenient. (Lev. xxv. 42-47.) A "caste distinction" was also provided concerning the entrance of persons of foreign blood into the Hebrew state and church. (Exodus xvii. 16; Deut. xxiii. 3-8.) The descendants of Amalek were forever inhibited. The descendants of Ammon and Moab were debarred to the tenth generation. The Egyptians and Edomites could be admitted at the third generation; the one, because their patriarch Esau was brother to Jacob, the other, because the Israelites had once lived in Egypt.

Let the inference from these histories be clearly understood. It is not claimed that these caste distinctions established by God himself obligate us positively to establish similar distinctions in our day. But the fact that God once saw fit to establish them does prove that they cannot be essentially sinful. To assert that they are, impugns the righteousness of God. Whence it follows, in direct opposition to the Jacobin theory, that should suitable circumstances again arise such "caste distinctions" may be righteous. It will be exclaimed that the New Testament reversed all this. We shall be reminded of Paul's famous declaration (Col. iii. 11): "Where there is neither Jew nor Greek, circumcision nor uncircumcision, barbarian, Scythian, bond nor free, but Christ is all and in all"; or this (Gal. iii. 28): "There is

neither Jew nor Greek, there is neither bond nor free, there is neither male nor female, for ye are all one in Christ Jesus." But before a literal and mechanical equality can be inferred from these, it must be settled what the Holy Spirit meant by being "one in Christ," and whether the parts which are combined to construct a component unity are not always unequal instead of equal. The latter is certainly the apostle's teaching when he compares the spiritual body to the animal body, with many members of dissimilar honor. The apostle himself demonstrates that he never designed the levelling sense to be put upon his words by proceeding after he had uttered them to subject women in one sense to an inequality by imposing upon them ecclesiastical subordination, and even a different dress, in the church. The Scriptures thus teach that all distinctions of caste are not unjust in the sense charged by the current theory.

4. God's commonwealth was not founded on universal suffrage. That he rejected the Jacobinical principle is plain from the history of the Gibeonites. They were exempted by covenant with Joshua from the doom of extinction, and retained a title to homes for many generations upon the soil of Palestine, and, as we see from 2 Sam. xxi. 6, they were very carefully protected in certain rights by the government. They were not domestic slaves, neither were they fully enfranchised citizens. From the higher franchises of that rank they were shut out by a hereditary disqualification, and this was done by God's express enactment. (Josh. ix. 27.) This instance impinges against the Jacobin theory in two other ways, indicated in our second and third heads. Individual descendants of the Gibeonites, however law-abiding and gifted with natural capacity, did not enjoy "*la carrière ouverte aux talents*" equally with the young Israelites, which the Jacobin theory demands indiscriminately as the inalienable right of all. And to make the matter worse, the Scripture declares that this disqualification descended by imputation from the guilt of the first generation's paganism and fraud upon Joshua.

5. We have shown that the claim known as that of women's rights is an inevitable corollary of the radical theory. Our purpose here is not to debate the wisdom or equity of that claim, but to show what God thinks of it. In Gen. iii. 16, he legislates

for Eve as the representative of all her daughters, putting her in subordination to the authority of her husband: "Thy desire shall be to thy husband, and he shall rule over thee." If a Hebrew landholder had male descendants when he died, his daughters inherited no share in his land. They could inherit land in cases where there was no male heir. And this was the legislation, not of Moses, but of God himself. (Num. xxvii. 8.) It is more decisive to add, that the New Testament continues to assign subordination to women. 1 Cor. xi. 3: "The head of the woman is the man." 1 Cor. xiv. 34: "Let your women keep silence in the churches, for it is not permitted unto them to speak; but they are commanded to be under obedience, as also saith the law." Eph. v. 22-24: "Wives, submit yourselves unto your own husbands, as unto the Lord, for the husband is the head of the wife, even as Christ is the head of the church. . . . Therefore as the church is subject unto Christ, so let the wives be to their own husbands in everything." 1 Tim. ii. 11, 12: "Let the woman learn in silence, with all subjection. But I suffer not a woman to teach nor to usurp authority over the man, but to be in silence," (*οὐδὲ ἀθέητεῖν ἀνδρὸς*, "nor to dominate man." The concept of usurpation is only implicit in the Greek verb.) 1 Tim. v. 14: "I will, therefore, that the younger women marry, bear children, guide the house, give none occasion to the adversary to speak reproachfully." Titus, ii. 4, 5: "That they may teach the young women to be sober, to love their husbands, to love their children, to be discreet, chaste, keepers at home, good, obedient to their own husbands, that the word of God be not blasphemed." 1 Pet. iii. 1, 5, 6: "Likewise, ye wives, be in subjection to your own husbands, that if any obey not the word they also without the word may be won by the conversation of the wives; for after this manner in the old time the holy women also, who trusted in God, adorned themselves, being in subjection to their own husbands, even as Sarah obeyed Abraham, calling him lord."

Thus, explicit and repeated, are the precepts of the Scripture on this head. In the new dispensation they are even plainer than in the old. How many thousands of women are there, professed members of Christ's church, who rid themselves of all these precepts with a disdainful toss, saying: "Oh! Paul was but

a crusty old bachelor. It was the men who legislated thus in their pride of sex. Had women written, all would have been different." I would request such fair reasoners to look this question steadily in the face. Is this the legislation of men, or of God speaking by men? If they say the former, is not this virtual infidelity? If the latter, had they not better take care, "lest haply they be found even fighting against God." instead of against a "crusty old bachelor"?

One of the weak evasions attempted is to plead that this subordination of the women of Peter's and Paul's day was enjoined only because of their low grade of intelligence and morality, these female Christians being supposed to be but sorry creatures, recently converted from paganism. The apostles refute this, as does church history, both of which give the highest praise to the Christian women of the primitive church. Especially does the apostle Peter ruin this sophism when he illustrates the duty of obedience by the godly example of the noblest princesses of Israel's heroic age.

6. The sixth and last issue between Jacobinism and the inspiration of Scripture is concerning the lawfulness of domestic slavery. The two sides of this issue are defined with perfect sharpness. The political theory says the subjection of one human being in bondage to another, except for conviction of crime, is essentially and always unrighteous. The Scriptures indisputably declare, in both Testaments, that it is not always essentially unrighteous, since they legitimate it under suitable circumstances, and declare that godly masters may so hold the relation as to make it equitable and righteous. I shall not now go fully into the scriptural argument on this point, because my whole object is gained by showing that the contradiction exists, without discussing which side has the right, and because I have so fully discussed the whole question in my *Defence of Virginia and the South*. It is only necessary to name the leading facts: (a,) That God predicted the rise of the institution of domestic bondage as the penalty and remedy for the bad morals of those subjected to it (Gen. ix. 25); (b,) That God protects property in slaves, exactly as any other kind of property, in the sacred Decalogue itself (Exod. xx. 17); (c,) That numerous slaves were bestowed on Abraham, the "friend of God," as marks of the

favor of divine providence (Gen. xxiv. 35); (*d*,) That the relation of master and bondman was sanctified by the administration of a divine sacrament, which the bondman received on the ground of the master's faith (Gen. xvii. 27); (*e*,) That the angel of the covenant himself remanded a fugitive slave, Hagar, to her mistress, but afterwards assisted her in the same journey when legally manumitted (Gen. xxi. 17-21); (*f*,) That the civil laws of Moses expressly allowed Hebrew citizens to purchase pagans as life-long and hereditary slaves (Lev. xxv. 44-46); (*g*,) That the law declares such slaves (that is, their involuntary labor) to be property. The reader is advised to consult here the irrefragable exegesis of Dr. Moses Stuart of Andover. He will see that this argument is no construction of sectional prejudice. The New Testament left the institution with precisely the same sanction as the Old. Were there any ground for the plea that the Old Testament also legalized polygamy and capricious divorce, which we now regard as immoral, this fact would utterly refute it. For while the New Testament prohibited these wrongs, it left slavery untouched. But I also deny that the Old Testament anywhere legalized polygamy and capricious divorce. To charge it in the sense of this evasive plea impugns the inspiration of Moses and the prophets. That is to say, it is virtual infidelity. And this infidel assault upon Moses and the prophets equally attacks Christ and his apostles. It is vain to advance the theory (which is but the old Socinian theory) that the New Testament corrected and amended whatever was harsh or barbarous in the Old. For, in the first place, I utterly deny the assertion. The New Testament left the relation of master and bondman just where Moses placed it. And, in the second place, Jesus and his apostles expressly guarantee the inspiration of Moses, without any reservation (see Luke xvi. 31; John v. 46; Luke xxiv. 26, 27; 2 Tim. iii. 16, 17; John xii. 36; Acts, xxviii. 25; Heb. iii. 7; 2 Peter i. 21), so that they have embarked their credit as divine and infallible teachers along with that of Moses. Both must stand or fall together. Whenever a person declares that whatsoever he speaks is given to him to speak from God (John xvii. 8), and then assures us that another person has spoken infallibly and divinely, upon ascertaining that the latter has in fact spoken erroneously and immorally, we can only con-

demn the former as both mistaken and dishonest. (The blasphemy is not mine!) This stubborn corollary every clear mind must draw sooner or later, and not all the rationalistic glozings of deceitful exegesis can prevent it. He who attacks the inspiration of Moses attacks also the inspiration and the moral character of Jesus. "No man can serve two masters." Let every one make up his mind honestly either to reject the Bible as a fable, and thus preserve his Jacobin humanitarianism, or frankly to surrender the latter in order to retain the gospel.

But let us see what the New Testament says concerning the relation of master and bondman. It does indeed command all, if they assume this relation, to fulfil it in a Christian spirit, in the fear of an impartial God. (Eph. vi. 9.) It also prohibits all unrighteous abuses of the relation, whether by masters (Col. iv. 1) or by bondmen. (Col. iii. 22-25.) Slave-holders, like the godly centurion (Luke vii. 2-9) and Cornelius (Acts x. 34, 35), are commended for their Christian consistency, without a word of caution or exception, on account of this relation. The Redeemer, in Luke xvii. 7-10, grounds his argument to prove that not even the truest Christian obedience can bring God in our debt, upon a logical analogy, whose very point is that the master is legally invested with a prior title to, and property in, the labor of his bondman. In the beautiful parable of the prodigal son (Luke xv. 19), when Christ would illustrate the thoroughness of his contrition, he does it by using the acknowledged fact that the condition of the hired servant in the slave-holder's household was the lowest and least privileged, *i. e.*, the *δοῦλος* was above the *μισθωτός*. The apostles enjoin on bondmen conscientious service to their masters, even when unjust (1 Pet. ii. 18, 19); but so much the more willing and conscientious when those masters are brother members in the Christian church. (1 Tim. vi. 1, 2.) The Apostle Paul holds that, if masters do their duty, the relation may be lawfully continued, and is just and equitable. The Apostle Paul remands a fugitive slave to his master Philemon, after that slave's conversion, and that although he is at the time in great need of the assistance of such a servant. And so distinctly does he recognize Philemon's lawful property in the involuntary labor of his fugitive slave that he actually binds himself, in writing, to pay its pecuniary value himself, that

thereby he may gain free forgiveness for Onesimus. In 1 Tim. vi. 3-5, the apostle condemns such as would dare to dispute the righteous obligation of even Christian bondmen, as proud, ignorant, perverse, contentious, untruthful, corrupt in mind and mercenary; and he requires believers to separate themselves from such teachers.

The glosses which attempt to evade these clear declarations are well known. They assert that, though Christ and his apostles knew that the relation was intrinsically wicked, they forbore to condemn it expressly, on account of its wide prevalence, the jealousy of owners, the dangers of popular convulsions and politic caution; while they secretly provided for its extinction by inculcating gospel principles in general. Such is the most decent reconciliation, which even the pious and evangelical Scott can find between his Bible and his politics. Every perspicacious mind sees that it is false to all the facts of the history, dishonorable to Christ, and inconsistent with all true conceptions of his inspiration and Messiahship. He and his apostles absolutely deny that they keep back any precept from any consideration of policy or caution. (John xvii. 8; Acts xx. 20, 27.) They expressly repudiate this theory of their mission, as though they had this deceitful theory then before their eyes. They invariably attack other evils, such as idolatry, polygamy, and impurity, which were far more prevalent and more strongly entrenched in prejudices than domestic slavery. They ground the spread and protection of their gospel on the omnipotence of God, not on the policy of men, and reject with a lofty and holy disdain all this species of paltering to sin which this gloss imputes to them.

The honest student, then, of the New Testament can make nothing less of its teachings on this point than that domestic slavery, as defined in God's word and practiced in the manner enjoined in the Epistles, is still a lawful relation under the new dispensation as well as under the old. Let me be allowed to pause here, and add a few words in explanation of the relation which the orthodox Presbyterian Church in America has always held to this subject. Since domestic bondage is a civic and secular relation, which God has declared may be lawfully held under suitable conditions, the church may not prohibit it cate-

gorically to her members, nor may she interfere with the commonwealth by her spiritual authority, either to institute it or to abolish it. Had her Lord declared it to be intrinsically sinful, then it would have been her duty to prohibit it to her members, and to enforce this prohibition by her spiritual discipline, in spite of the commonwealth's allowance, or even positive injunction. The church and her presbyters, then, have no concern to favor or oppose this civic relation, but only to protect the integrity of her divine rule of faith as involved in the debate concerning it. Her only other concern with it is so to evangelize masters and bondmen as to make the relation a blessing to both, and to retrench all its sinful abuses. Now, then, if the opponents of this relation object to it and urge its overthrow on the ground that it is economically less profitable or less promotive of economic advantage than the hireling systems of labor, we, as presbyters, have nothing whatever to say, although fully aware that the testimony of facts and the government itself have repeatedly contradicted that position. Had its opponents claimed any legal or constitutional arguments entitling them to meddle with it or restrict it in States other than their own, we, as presbyters, should have been absolutely silent. Had its opponents asserted that we were grievously neglecting the duties of the relation and permitting abuses of it so as to impair the happiness of our dependent fellow-creatures, and to displease the God of the poor, we, as Christians, should have bowed meekly, as to the faithful rebuke of friends, and should have been thankful for their aid and instruction to teach us how to use the relation more righteously and mercifully. It is when they assert that the relation is intrinsically wicked, and that even its maintenance without abuses is to be condemned by the spiritual authority of the church and prevented by her discipline, that they obtrude the issue, and the one issue, which we, as presbyters, are entitled and bound to meet; for they thereby assail the morality, and thus the truth, of those Scriptures which God has given to the church as her testimony, which, if she does not uphold, she ceases to be a church, and "they teach for doctrines the commandments of men," which Christ prohibits his church either to do or to endure. What I thus declare concerning this last point of domestic bondage I now also assert

concerning the five previous ones. The church has no commission to advocate or to oppose any political doctrines, logical or illogical, Jacobinical, republican, or royalist, as such. It is only when they are so advanced as to taint the integrity of her divine rule of faith that they concern her, and then her concern is only to defend the testimony her Lord has committed to her, which she must do against "all comers," be their pretext what it may.

It is from this point of view that I say it behooves the watchmen upon the walls of Zion to consider and estimate the extent of the danger now arising from this source. If they observe intelligently they will see that peril is portentous. They will detect this radical theory of human rights and equality, born of atheism, but masquerading in the garb of true Bible republicanism, everywhere teaching corollaries—which they teach inevitably because they follow necessarily from their first principles—which contradict the express teachings of Scripture. We see this theory passionately held by millions of nominal Christians in the most Protestant lands, perhaps by the great majority of such, with the blind and passionate devotion of partizanship. Every sensible man knows the power of political partizanship as one of the most difficult things in the world to overcome, by either truth or conscience. Hence, we have no right to be surprised that this collision between the popular political theory, so flattering to the self-will and pride of the human heart, and so clad in the raiment of pretended philanthropy on the one part, and the Holy Scriptures on the other part, requiring men, as they do, to bow their pride and self-will to a divine authority, has become the occasion of tens of thousands making themselves blatant infidels, and of millions becoming virtual unbelievers. Those who wish to hold both the contradictories have indeed been busy for two generations weaving veils of special pleadings and deceitful expositions of Scripture wherewith to conceal the inevitable contradiction. But these veils are continually wearing too thin to hide it, and the bolder minds rend them one after another and cast them away. The only permanent effect of these sophisms is to damage the respectability of the Christian bodies and scholars who employ them, and to debauch their own intellectual honesty. Meantime, the authority

of Holy Scripture as an infallible rule of faith sinks lower and lower with the masses of Protestant Christendom. Is it not now a rarity to find a Christian of culture who reads his Bible with the full faith which his grandparents were wont to exercise; and when an educated man now-a-days avows that he still does so, does he not excite a stare from other Christians? The recent history of the church presents startling instances of this departure of her spiritual power and glory. When the fashion of the day betrayed the excellent Dr. Thomas Scott into the insertion of the wretched sophism exposed above in his commentary on the Epistles, the "Evangelical party" in the Anglican Church was powerful, respectable and useful. It stood in the forefront of English Christianity, boasting a galaxy of the greatest British divines, statesmen and scholars. Now who so poor as to do it reverence? Romanizers, Ritualists, Broad Churchmen, in the Anglican body, speak of it as a dead donkey, and glory over its impotency. So the great evangelical Baptist body was a glorious bulwark of the gospel in the days of Robert Hall, Ryland, and Andrew Fuller. To-day we see it so honey-combed with rationalism that Mr. Spurgeon can no longer give the Baptist Union the countenance of his orthodoxy; and he testifies that attacks may be heard from its pulpits upon every distinctively evangelical point. What is it that has so wofully tainted these once excellent bodies? Is not a part of the answer to be found here: that the Quaker Clarkson, with his pretended inner light his preferred guide rather than God's written word, and his Socinianizing theory of inspiration in attacking the British and New England slave trade (which deserved his attack), also attacked the relation of domestic servitude with indiscriminate rage, and supported his rationalism with arguments of human invention, piously borrowed even from French atheism? British Christianity, awakened at last to tardy remorse for the bad eminence of their race as the leading slave catchers of the world, was seized with a colic-spasm of virtue on that subject, and very naturally sought to atone for its iniquities in the one extreme by rushing into the other. Thus it not only aimed to seize the glory of suppressors of the African slave trade—a glory which belonged to Virginia, first of all the commonwealths of the world, by a prior title of forty years—but became fanatically aboli-

tionist. Then the problem for evangelical fanatics was how to reconcile their anti-scriptural dogma with the Scriptures. With this problem Exeter Hall Christianity has been wrestling for fifty years by the deplorable methods above described, and while they have not made the reconciliation, they have succeeded by those methods in making the world skeptical of their sincerity, and in sowing broadcast the seeds of a licentious rationalism. Their pupils, when taught to interpret the unpalatable political truth out of the declarations of Jesus, Moses and Paul, continue to use the same slippery methods to interpret the unpalatable theological truths also out of the Bible, as depravity, predestination, gratuitous justification, inability, eternal retribution.

The most sorrowful aspect of the matter is that, as fast as the candor of these Christians forces them to recognize the contradiction as real, they usually elect to throw their faith overboard rather than their politics. This election they not seldom carry out openly, but more often covertly and gradually, giving up first their faith in plenary inspiration, then in the Mosaic inspiration, at last in the Bible itself, and employing progressive forms of exegetical jugglery, to ease themselves down from the lower position to the lowest. Perhaps the most melancholy and notorious of such election is that seen in the great American divine and expositor, who has done more than any other Presbyterian to spread the humanitarian theology through the bulk of his denomination, whose doctrines indeed, overflowing the earlier and safer teachings of the senior Alexander and Hodge, have covered them out of sight in the present current of religious thought. This great man declares deliberately and solemnly in his published works, that were he shut up to the alternative between accepting the sense of Scripture so obvious to the old interpreters, which recognizes domestic servitude as a relation which may be lawful under suitable conditions, or of surrendering his political opinions on that subject, he should throw away his Bible in order to retain those opinions; and he solemnly warns that class of expositors represented by Drs. Hodge, Thornwell and N. L. Rice, that they had better stop their efforts to substantiate that exposition of Scripture, because if they succeeded the only effect would be, not to defend old institutions, but to drive all right-

mind Christians like himself into infidelity. Let the reader look also at the case of Bishop Colenso, who, when he had expended the whole learning and labor of his latter years in attacking the inspiration of the Old Testament, which in his ordination vows he had sworn to defend, expressly accounted for and justified his course by the fact that he had adopted the new humanitarian politics. The reader may see a more flagrant instance nearer home. Ingersoll, the son of an Old School Presbyterian minister, glories in trampling his father's Bible in the mire of foulest abuse. He tells the public that his abolitionism is a prime moving cause with him to spurn Christianity.

Such is the outlook. On the other side, adverse circumstances virtually paralyze all the human powers which should be arrayed in defence of the Bible. Doubtless, many divines remain in the countries and communions infected who see the truth and believe it. They are called conservative, and wish to be considered so. But the only element of conservatism which they call into action at this critical juncture is caution, a caution which prevents their jeopardizing their own quiet and prosperity by coming to the front and meeting the insolent aggression of the new opinions. They dissent, but practically they acquiesce. They commit the same mistake in tactics which General Charles Lee committed one hundred and ten years ago at the battle of Monmouth, and which he himself expressed so pungently in his impertinent reply to his commanding general. When Washington met him retiring instead of attacking, as he had been ordered, he asked him, with stern dignity: "General Lee, what does this mean?" To which the witty Englishman replied: "I suppose it means that I am imbued with rather too much of that rascally virtue, caution, in which your excellency is known to excel." Washington was cautious, but he knew when to be cautious and when overcaution became the most fearful rashness, and vigorous audacity the only true prudence. There seems no encouragement to expect that these more enlightened friends of Scripture inspiration will employ the Washingtonian tactics in the impending conflicts. History teaches us that thus far in its preliminary stages, while still possessed of the superior weight of character, position, and even numbers, they have in every instance so misplaced their caution as to give the victory to which they were

entitled to the insolent and aggressive minority. How will such men act now that that minority has become a majority flushed with triumph?

Thus circumstances make it, humanly speaking, certain that there is but one small quarter of Protestant Christendom from which frank opposition to the new opinions is to be expected. The current sweeps too strongly, the error is too popular. Such determined opposition as would be adequate to stem it would be too inconvenient. Now the circumstance which is so untoward for the cause of truth is this, that the conquering section in America, in order to carry out its purposes, found it desirable to load that obscure district of Christendom with mountains of obloquy, heaped on it with a systematic and gigantic diligence for more than a generation, and they have succeeded to their heart's content in making that district odious and contemptible throughout the Protestant world. Thus, whatever of hard-earned experience, whatever of true insight, whatever of faithful and generous zeal the good men of that section may desire to bring to the defence of the common Christianity, the world is determined beforehand to reject. "Can any good come out of Nazareth?" The world has been told, that of course warnings and declarations coming from that quarter have a perverse source. This will be believed. All that the enemies of the Bible need do to neutralize our honest efforts in the great defence will be to cry, "Oh, those are the extravagances of a sour pessimist!" or, "These are but the grumbings of defeated malice and spite against the righteous conquerors!" Now, that an individual servant of God and truth should be subjected to such taunts is of exceedingly little moment. The momentous result against the interest of the truth is, that the only part of the king's army which is in condition to do staunch battle for his truth is to be discounted in the tug of war. Thus the enemy of the truth has adroitly succeeded in so arranging, beforehand, the conditions of the campaign as to neutralize the powers of resistance, and, humanly speaking, to insure the victory for himself, because the professed friends of the truth will be crushed for want of that sturdy assistance which they themselves had previously disabled by slanders, prompted by their own interested purposes. There will be seen in the result the grimmest "poetic

justice" of divine providence. But the Lord still has faithful servants, and the truth still has steadfast witnesses, who will recognize no duty as superior to that of maintaining Christ's testimony against all odds.

The facts just stated show that the struggle cannot but be long and arduous. The friends of truth must therefore "with good advice make war." While never shirking ecclesiastical discussion when the aggressiveness of error challenges them to it, their chief reliance for victory must be upon the faithful preaching of the old-fashioned gospel and upon godly living. Like the martyr church of Revelation they must "conquer by the blood of the Lamb and by the testimony of Jesus, and by not loving their lives unto the death." Divisions in the ranks of the defenders of the truth, professedly united up to a recent date, are a discouraging sign; but the general decline in the standard of Christian living which these have imbibed as an infection from the rationalistic side is a far more ominous sign; "the battle is the Lord's, not man's." He will not deem it worth his while to work a victory for the sake of a mere dead ecclesiastical orthodoxy, which is to be as barren of the fruits of holy living as the code of its assailants. If the communions which profess to stand up for the integrity of Scripture have the nerve to resume strict church discipline, to enforce on their professed members a strict separation from the world, and thus to present to it a Christian life beautiful and awful for its purity as of old, they will conquer. If they lack this nerve and shirk this purification of themselves, they will be defeated; they will also be corrupted; and after a deceitful season of bustle and pretended Christian progress, having the form of godliness but denying the power thereof, a wide and long eclipse will come over Protestant Christendom, the righteous judgment of a holy God. His true people, perhaps for dreary generations, will be his despised and scattered ones mourning in secret places; and when his times of revival shall return again he will raise up new instruments of his own.

The friends of truth must contend in the spirit of humility. "God resisteth the proud, but giveth strength unto the lowly." They will, of course, recognize themselves as still possessed of the honorable trust, God's truth; they must, of course, believe those who assail them as less honored with this noble trust than

themselves; for else what cause have they to contend? But they must always remember the apostle's word, "What have ye that ye did not receive? Now then, why do ye glory in it as though ye had not received it?" If we really have this loyalty to Scripture and to him who gave it, it is of grace. It is God's inworking, not our personal credit. Had he not wrought it in us, "the natural mind," which is just as native to us as to the other sons of Adam, would doubtless be prompting us, like other rationalists, to treat the old gospel claims as "foolishness." And there is a special reason for such Christian modesty in the case of Southern Christians. The fact that we are now standing on the side of Christ is due in part to a train of secular circumstances with reference to which we had no free agency, and therefore no personal credit. Providence ordained that the modern rationalism should select as its concrete object of attack our form of society and our rights. God thus shut us up to the study and clear apprehension of the religious issue, and decided the side we should take in the contest. But on the other hand, the sophism is obtruded at this point which is just as silly and absurd as pride in us would be misplaced. This asserts that our claim of a mission to testify for God's truth against any professed Christians is necessarily the sinful vainglory in us. According to this absurdity the purest church on earth could not dare to testify that any other professed communion of Christians, even prelatists, papists, Greeks, Socinians, were any less orthodox than themselves. And if these are no less orthodox, what right has this purest church to contend against any of them? "God resisteth the proud," but we apprehend also that he does not like sham charity and contemptible logical dishonesties.

Since the opinions and practices hostile to the Scriptures are so protean, so subtile, and so widely diffused, there is no chance for a successful defense of the truth except in uncompromising resistance to the beginnings of error; to parley is to be defeated. The steps in the "down-grade" progress are gentle, and slide easily one into the other, but the sure end of the descent is none the less fatal. He who yields the first step so complicates his subsequent resistance as to insure his defeat. There is but one safe position for the sacramental host: to stand on the whole Scripture, and refuse to concede a single point.

As to the secular and political doctrines which involve the points of assault upon the rule of faith, the church's true position is wholly defensive. She has no secular institutions, good or bad, to advocate as her ecclesiastical mission. That is simply and solely to deliver the whole revealed will of God for man's salvation. She has no spiritual power to make anything sin, or anything duty, which the Bible has not made such. But if she would not walk into the fatal ambuscades of the enemies of Scripture, she must have a clear and exact perception of the extent of this defensive duty. When encroachers usurp spiritual authority to lay upon the consciences of Christians any extra-scriptural doctrine or requirement, they thereby make that encroachment a part of their ecclesiastical code. And they thus make it the right and duty of the friends of truth, in the exercise of their spiritual and ecclesiastical power, to examine and reject such new doctrine claiming to be spiritual and ecclesiastical. The friends of truth are to do this, not in order to encroach upon, but to protect, liberty of conscience in God's children. Failing to understand this part of their defensive duty, they betray the cause entrusted to them to the cunning aggression.

It is the fashion to say that the metes and bounds between the kingdoms of Christ and of Cæsar have always been, and must continue to be, very undefined and vague. This I utterly deny. They have, indeed, been constantly overstepped, but this is because there have always been churchmen greedy of power, worldly-minded and dictatorial. Men demand of us that we shall draw an exact dividing line between the two jurisdictions, defining everywhere the points at which they meet. The demand is preposterous, because the two kingdoms are not spread upon one plane, but occupy different spheres. There is no zigzag mathematical line to be drawn in such a case, but the clear space separating the two spheres is all the more easy to be seen by honest eyes. It is pretended that there is great room for debate between fair constructions of the famous rule that church synods must handle and determine nothing except what is ecclesiastical. I am sure the wise men who stated it saw no room at all for such debate. I remember that when they selected these words for their rule, they had also declared

that Holy Scripture was the sufficient and sole statute-book of Christ's *ecclesia*. Hence, their rule means plainly that church synods must handle and determine just what Holy Scripture determines, and nothing else; and they must determine what they handle precisely as Scripture does. Is not that distinct enough? Or, if any one seeks further definition, it may be found very simply in this direction. Let us premise first, that whatever is expressly set down in Scripture, and whatever follows therefrom by good and necessary consequence, are binding on the Christian conscience. Now, all possible human actions must fall in one of these three classes: (1,) Actions which Scripture positively enjoins; (2,) Actions which Scripture positively forbids; (3,) Actions which Scripture leaves indifferent. In the first case, church courts are to enjoin all that God enjoins, and nothing else, and because he enjoins it. In the second case, they are to prohibit what he prohibits, and on the ground of his authority. In the third case, they are to leave the actions of his people free to be determined by each one's own prudence and liberty, and this because *God has left them free*.

MONISM.¹

MONISTS postulate the doctrine, that the result of a true philosophy ought to be to unify the whole system of human thought, by ultimately resolving all the multiplicity and diversity of beings into one single substance, and all effects into the power of its single energy. They think this true, real being a *Μονος*, and the whole universe of spirit and matter, in its reality, an absolute monad: duality even, of real being, they cannot be reconciled to; plurality of distinct powers, they think unphilosophical. Hence it must be true, somehow, that either the multiplicity and diversity must be only apparent; or these beings must be only apparent, or else modal and temporary manifestations of the one absolute Being. The highest problem of all monistic systems is to make this resolution of the many into the One by some speculation. On this we remark:

1. The monistic tendency has been, in fact, widely influential in philosophy for two thousand four hundred years. It was the animating principle of the Eleatic school five hundred years before Christ. Zenophanes, announcing the unity of deity, also denied that real being could either begin to be or cease to be. This central doctrine obviously imposed on his school the task of either accounting for temporal and changing beings as modal manifestations of the one, eternal substance, or with his successor Zeno, denying flatly that temporal and differing things had any true being or were anything more than delusions; or, with Heraclitus of resolving all, both the absolute One, and the temporal many, into one stream of endless becomings and endings.

Plato's later metaphysics, after he had refined away from the sober, Socratic influence, unfolded strong monistic tendencies.

¹ A lecture delivered before the American Association of Christian Philosophy at University Place, New York City.

He went ever nearer to the ideal scheme of resolving the being of God, the eternal *Toöv*, into idea; and matter, as well as finite mind, into the emanations of the eternal ideas. When we pass to modern philosophy, the pantheistic scheme of Spinoza reappears as rigid and complete monism. Its main postulates are, that only eternal and necessary Being can be real; that its actual beginning in time, *ex nihilo*, is impossible; that absolute and necessary Being can be but One; that hence, all seeming individual, temporal, and differing beings, must be but modal manifestations of the eternal One; and that we must accept this explanation even as to phenomenal entities so opposite as mind and matter, good and evil, virtue and vice.

German idealism in all its phases, from Fichte, through Schelling, Hegel, Schleiermacher, Schopenhauer, to Hartmann, glories in being Monist, and disdains all systems which do not tend to this result. Its whole effort is, under one scheme or another, to identify the world of thought known in subjective consciousness, the world known as objective and the eternal mind as one. To this day after all the hopeless self-contradictions and mutually destructive refutations of these schools, publishing their own futility, we see the monistic tendency captivating the larger part of German philosophy, and disposing its authors to deny the name of true philosophers to all who refuse to speculate for the monist result, even when the names are as illustrious as those of Reid, Jouffroy, Hamilton, Cousin and McCosh.

Perhaps the most surprising evidence of the pertinacity of the tendency is that seen in the materialistic philosophy, so called, of our own age, from Hartley and Priestley, to H. Spencer. Auguste Comte's positive philosophy is a stark attempt to establish monism, by reducing all science and philosophy and theology at once, to the science of sensible phenomena and their physical laws. Instead of seeking, with the idealists, to merge the objective world into subjective thought, he attempts the opposite: to reduce all thought to physical energy. Herbert Spencer, discarding both spirit and God, attempts to construct his whole universe of mind and nature out of matter eternally existent, and material force eternally persistent. He asserts the very essence of monism with the sharpest dogmatism, declaring

that our system of thought cannot have any pretension to be a philosophy until it has explained every being and every effect in the universe as the outcome of one substance and one force.

2. We will now place ourselves in the monist's point of view, and endeavor to represent fairly whatever seems to him specious or plausible in favor of his conclusion. He urges that the function of philosophy is to unify thought. The rudiments of cognitions are given to the unscientific mind in the form of individual, successive, diverse, or even discordant percepts. The business of the science of mind is to explain and so to unify these into system; to show how they compose one whole of thought. Thus: the forming of a simple judgment in the understanding is a unifying act of thought, it places one subject and one predicate in the unity of a single affirmation in thought. Again, what is the mind's act in forming a concept or general idea of a class? By comparing acts it collects individual objects made known to it in perception, which have agreeing marks or attributes, into a single cognition, which represents the common marks of all. The concept is thus a unification of many into a more complete one. So, the logical process of proof (by syllogism) also pursues this unification in thought, continually bringing the lower and more diverse and numerous propositions in the conclusions under the logical control of the fewer and higher premises, until all are unified under the primitive judgments of the reason. The old realist theory of general ideas, again, reigned nearly unquestioned from Plato to Roscelin; that in every concept there must be besides the individuals denoted by the class name, an *ens reale*, either *ante res individuales*, or *in rebus* connoted by that term. Now add the undisputed rule of the logicians: that intension of concepts varies inversely with their extension; that as the larger genus includes more individuals than any one of its species, it expresses fewer of those attributes which differentiate species and genera from one another. Hence, at the top of the generalizing process there must be a *summum genus*, including in its concept all individual beings of all *genera* and *species*, but connoting only the one attribute of existence. Then ought there not to be, answering to this *summum genus*, an *ens realissimum*, *in rebus* and also in this case, *ante res*? Is not

this monism? Does not this show us the whole peripatetic scheme tending to that culmination?

Once more, it was the glory of the metaphysical thought of Greece that in spite of the prevalent polytheism of the myths and poets their philosophy led them up to monotheism. Zeno-phanes, Plato, Socrates, Aristotle, Plotinus, were monotheists; they correctly unified their thought by tracing the whole cosmos of effects to a single divine, absolute Cause, as to their efficient source. Should they not have completed the process of unification by tracing all phenomenal being up to the one absolute Substance? This is what monism is attempting to complete. When all the better part of Greek philosophy became Christian, the attempt of all the better divines to combine the doctrine of the Trinity with monotheism resulted in "Monarchianism." The personality of the Word and Spirit was acknowledged, but the person of the Father was held forth as *Μοναρχία*, the substantive source of the other two persons whom he perpetually and eternally emits from himself by a process of self-differentiation. Why should we not extend this genesis to all other individual beings?

Finally, consistent unity throughout must be the characteristic of any system of truths. Hence, since philosophy should aim to systematize all the spheres of truth, it should seek their unity in an absolute monism. Such is the plea; let us now examine its validity. Our position is, that these affirmative arguments are only specious, and that the theory is as erroneous as it is hurtful to sound thought and philosophy.

3. Monism is to be rejected, because, (*a.*) Its inevitable corollary must be either atheism or pantheism. If there is no being that is real in the universe, except the One, the absolute Being; if all phenomenal beings are but *modi subsistendi* of this one, then it must include God along with all creatures (so called) in substantive oneness. Only by saying there is no God, can this rigid conclusion be avoided. It is not said that every monist has avowed either, or that all of them have seen clearly whither their speculation will lead them. It is not forgotten that even a Hegel deemed he could honestly conform to the Lutheran Church. But none the less is the corollary as unavoidable as it is simple.

The power of the practical tendency is seen in such facts as these: that most monists, Greek and modern, have been pantheists; that Spinoza's, the most perspicuous and exact of all systems of monism, was as rigidly pantheistic; that when the amiable Schleiermacher had once been imbued with Hegel's monism, his plan of Christianity at once sunk to a pan-Christianity, or baptized pantheism.

Now, therefore, every argument against atheism or pantheism is an argument against monism. Against either scheme the objections are numerous and momentous. Pantheism is practical atheism.

(*b.*) Monistic speculations are obviously the results of an over-eager craving for simplification. But this tendency has ever been the snare and plague of science, the mother of loose hypotheses, the unwholesome excitant of the scientific imagination, the tempter to false analyses and hasty inductions. In this case, it has prompted the monist to assume far more than his premises authorize. It is perfectly true, for instance, that all truths should be interconsistent; and that, so far as the human mind has grasp to see their relations, a correct system of truths will make them appear so. But it has never been proved that they must all express attributes of one single substance, or laws of one single force, in order to be interconsistent. The laws of two distinct spheres of being cannot lack harmony with each other merely because distinct; all that is requisite here is that they do not positively clash. But especially is this to be pondered: that the providential control of the One Almighty over both the departments of being, material and spiritual, is all that is needed to unify their laws, and insure harmony to their interactions. Hence, it is proven, there is no need to predicate anything more than this supreme providence to insure full harmony of truth in the philosophy which attempts to explain the universe. The all-controlling will of the One God gives all the monism true thought requires.

(*c.*) The place, time and manner in which monists set up their darling principle stamp their proceeding as more fatally unscientific. From the Eleatics to the modern idealists, they take up the monistic hypothesis as a first postulate at the beginning, instead of a final induction or conclusion at the end.

Thus, the former begin their very first construction by postulating that real existence cannot be beginning existence or ending existence. Spinoza places as his first proposition the assertion that true substance must inevitably be absolute and unbeginning. Later and more idealistic pantheists all virtually set out with the postulate that the objective must be reduced to the subjective, whether facts permit it or not, as the recent materialists all begin, with equal imperiousness, by resolving that the subjective shall be merged in the objective.

But surely it is time philosophy had learned the lesson of true induction, that science should obey its facts instead of dictating them! Mental science is just as much a science of observation as physical, only its facts are to be observed in the field of consciousness, instead of the outer material world. These facts of consciousness are to be carefully and impartially watched, compared, noted in many agreeing instances, and verified, until we are certain we have the generic facts of man's mental nature, and not some irregular exceptions; just as the astronomer, the chemist, the botanist, establishes his facts of the stars, the molecules, and the flowers. Then has philosophy *data*, and then only; *data* from which she can proceed to construct mental science. It is very true that these *data* of mental facts will include more than the mere sensationalist allows, sense-perceptions and their colligations; they will include primitive judgments of universal, necessary truth. But the claim of every proposition to be ranked among these must be tested by the infallible criteria of primariness, universality, and necessity. Only then can they take their places as unquestioned truths. The license of the monists may be best seen by supposing that some other science had presumed to proceed in this way. Let us suppose, for example, that chemistry had resolved to be monistic in spite of nature's facts; that, fascinated by love of hypothesis and the seductions of a false simplification, she had begun thus: Since God is one, I will suppose, as of course, that matter, which is the creative effluence of his eternal unit-thought and power, must be one also; that so perfect a cause could not have been so inconsistent as to create any matter inferior in its essence to the most perfect; that science must unify itself; and chemistry is not truly unified until she holds all apparently

different masses of matter to be only modifications of one original simple substance, and all its molecular changes mere variations of one and the same force. So this chemist proceeds to say: Lead is gold, and sulphur is a modification of gold, and iron is also a phase of gold; for my science shall have but one simple substance at its source. It will not matter to him that no mortal has ever seen sulphur or iron transmuted out of gold or into gold. It will give him no pause that after the final analyses of the crucible, the menstruum, and the galvanic current, after the most refined and almost spiritual tests of the spectroscope, the iron and sulphur appear as obstinately ultimate and simple and separate substances as the gold itself. It does not matter to him; he will hold his monistic fancy in spite of facts, or the total absence of facts. There shall be but one ultimate substance of matter, so he postulates. What would have been the scientific worth of such a chemistry? History answers: It could give us the silly dreams of alchemy. It could befool generations of patient students into the worthless search for the "powder of projection," which should transmute lead into gold. But the modern chemistry which has endowed civilized man with his amazing power over nature has proceeded in exactly the opposite way: by humility, not by dogmatism; by asking nature for her facts, and listening meekly for her answers, instead of dictating what they shall be, in order that they may gratify a love of imaginary symmetry. Thus our true science, instead of a material monism, has given us sixty-four simple substances, each irreducible into the other. Why did One First Cause make so many? True science answers that she does not know. Her modest, but beneficent, province is not to solve captious questions of this kind.

So, a true philosophy must accept the facts given by nature, in the sphere of consciousness and observation, and must follow those facts whithersoever they logically lead, if this be to a dualism of matter and spirit, instead of trying to distort the facts to suit a preconceived postulate. Philosophy must not stumble at mysteries, but only at contradictions; for every one of her lines of light leads out to some point in the dark circumference of mystery.

(2.) Here it is claimed is the fatal defect of all monistic

schemes : they disclose hopeless contradictions of our necessary laws of thought and truths of experience, as their inevitable corollaries. Thus Spinoza, having assumed that all real existence must be absolute existence, and therefore one is obliged to teach that modes of extension and modes of thought can both qualify and at the same time be the *Ita*; and thus, that phenomenal beings as real and true to our experience as any *a priori* cognition, or as this very *Ita* itself, are both modes of the One, although a part of them are qualified by size, figure, ponderosity, impenetrability, color; and the other part universally and utterly lack every one of these qualities, and are qualified by thought, sensibility, desire, spontaneity, and self-action. But this is not a mystery, it is a self-contradiction. The qualities of matter and extension cannot be relevant to spirit, nor those of thought, feeling, and volition to matter. They utterly exclude each other. Descartes was right: the common sense of mankind is right in thus judging. The proof is that just so soon as we attempt to ascribe intelligence and will to matter, or qualities of extension to spirit, utterly absurd and impossible fancies are asserted.

Spinoza teaches us that the Absolute Being must inevitably have an immutable sameness and necessity of being so strict as to necessitate its absolute unity. Yet he has to teach, in order to carry out this monism, that this monad exists, at the same instant of time, not only in numberless diversities of mode, but in utterly opposite modes, as for instance, as solid, liquid and gaseous at the same instant. All that science teaches us is, that modes may succeed each other in the same matter, as when a given mass of H^2O exists, first as ice, afterwards as water, and after that as vapor or steam. Or, worse yet, that this One so necessary, eternal and absolute in its unity, may at the same moment of time, hate a Frenchman and love a Frenchman in the two modal manifestations of German and Gaul, and may hate sin and love the same sin in the two manifestations, at the same moment, of good souls and bad souls! Yet this same Spinoza could not admit that infinite, eternal power and wisdom can make a beginning of real being objective to itself. Truly, this is "straining out the gnat and swallowing the camel."

Or, if we pass to the more recent forms of monism, we find them all from Fichte to Hartmann, recognizing the necessity for

their theory of reducing all our objective modifications of soul to the subjective by some shadowy process of "return upon itself," or self-limitation. The two parts of consciousness are irreducible. No better practical proof of this need be asked than that each successive attempt has been a hopeless failure. Who—what monist even—is now satisfied with Fichte's plan for such reduction? or with Schelling's? or with Hegel's? or with Schopenhauers? or with Schleiermacher's? or with Hartmann's? The writer was personally assured by Hermann Lotze before his death that Schleiermacherism was vanishing out of German philosophy and "would leave no results whatever." Indeed the scheme of the latter, viewed aright, is a confession that to reduce all objective mental modifications to the subjective *ought to be* for philosophy an impossible task. For in order to attempt the task after the failures of his predecessors, he is fain to make this process a function of unconsciousness! It is effected before the absolute comes to consciousness, and in order that it may come to consciousness. But philosophy should be the science of consciousness. We are required to believe that the phenomenal universe, everywhere teeming with thought, knowledge, conscious, intelligent will, is the result of processes in a Thing, which knew nothing, yet filled a universe with knowledge. But this desperate final resort of Hartmann suggests the simple proof that the reduction attempted is impossible. Thus, the most palpable and impressive conviction human minds have of the reality of objective things is that gained when we know them as limiting our own volitions, or as affecting us with conscious impressions when we know we did not produce these by our volition. A scribe moves his hand briskly; it is stopped by the edge of the desk, and that sharply enough to produce some pain. Now, he is conscious that he did produce that motion of his hand by his own subjective volition. He is equally conscious that he did not produce the solid obstruction and the pain by his own subjective volition. If he does not certainly know these two facts, he knows no content of consciousness whatever. Even Hegel's starting point for a philosophy is gone.

Again, men must think their own volitions the most clear and definite function of their selfhood, the most certainly subjective.

of all their subjectivities. When they are distinctly conscious of modifications of mind *not self-produced*, they consequently have here the most positive evidence of the not-self. It is easy to see how the ideal monist will be inclined to answer when we press him with the question: How is it that we are unconscious of this process of reduction by which the not-me identifies itself with the me, if it really takes place in thought? His escape must be to remind us of that doctrine of Leibnitz, endorsed by Sir William Hamilton, that there may be some modifications of thought out of consciousness, or back of it. But, first, the only instances of such unconscious processes ever verified by psychology are merely of those inchoate risings of relations between cognitions, which are in order to definite cognitions—as, for instance, the unthought ties of suggestion which influence the rise of associated ideas into conscious thought—which themselves never become explicit judgments; and second, that it is the very nature of rational volition that it must be conscious; if not conscious, it is nothing. But it has been shown how it is chiefly the presence and absence of conscious volitions which demonstrate to us the reality of the not-me and its distinctness from the me.

(e.) But there is one intuitive judgment so uniformly disregarded by all monists, that it deserves to be signalized apart. This is the necessary judgment that action must imply an agent, as qualities imply an underlying substance. And hence common sense declares that a series of actions or functions of a substance cannot constitute the being of that substance. It must exist as substance, in order to act, or have processes take place. To this rule the intuitive common sense of all the world bears witness. When they see an action, they know there must be an agent, and that the agent is something substantive, not identical with its acts, but the source of them. The whole scientific mind of the world proceeds on the same intuitive belief. Physical action must imply physical agents. The series of actions science always regards as not identical with the agents, but as proceeding from them. When the theory was surrendered, for instance, that electricity is a fluid sliding over the surface of electrical bodies, it followed that the whole scientific mind of the world demanded the conclusion that it is a molecular energy of some

substance—possibly an unknown one. When the undulatory theory of light was adopted, the scientific mind of the world at once adopted as the necessary consequence the existence of an ether filling all the interstellar spaces, and even transparent fluids and solids. For why? Has the ether ever been touched, seen, weighed, smelt? No. But the necessary law of the reason compels men to believe that if there are undulations, there must be *something* to undulate, and that the mere action cannot actually constitute the being of this *thing*.

But this simple dictum of necessary truth monists constantly discard. It seems to cost them no effort to go in express opposition to this inevitable judgment. For instance, Heraclitus thinks that the mere act of becoming may constitute the being of the most permanent and substantive things in the universe, rocks, planets, individual souls, God himself. Plato when leaning to idealism, thinks that somehow, *ὄλη* itself, deemed by all other Greek schools an eternal, self-existent substance, may be only an eternal emanation of the One: being constituted, namely, of his archetypal thought. That is, a mere function of a spiritual substance may actually be a material substance. Platonic realists find the generic *Res* only in the general concepts which God thinks; and yet believe one of these “generals,” while a true thing, truer indeed than any individual of the genus, exists *ante res individuales*. This delusion could only be made possible by the absurdity we combat. When we come to modern monists we find Spinoza attempting to account for all finite substantive things as mere modes of development—functional acts of the absolute Thing *To Παν*. So German idealists propose, one way or another, to construct all substantive spirits, including God, out of a series of acts of consciousness. They would fain have us believe that the solid rock, deep down in the mountain, has its being actually constituted of the self-limitation of some consciousness somewhere.

The theory only makes its first pretended movement by defying the common sense of mankind. Possibly a poor excuse might be found for this utter blunder in the case of the Greeks, in the fact that their nomenclature was vague. It made *ὄνσια* stand for being or entity, nature and substance. But men had no excuse after the Latin had so exactly defined the difference

between mere *esse*, *essentia*, and *substantia*. An *act* has *esse*, or entity, while going on. But it is an opposite kind of entity from substance.

In favor of monism there is left, then, only the craving for excessive simplification, and the repugnance to the mystery of the origin of contingent beings. Against it stand the fatal contradictions to necessary intuitions and real facts of experience. Monism asks: How does even an infinite agent produce an actual beginning of real beings *ex nihilo*? Sound philosophy must answer: It does not know; it cannot explain that action to human comprehension. But sound philosophy can show that this is no objection, because it can be proved that such explanation lies beyond the conditions of human knowledge. Those conditions understood, we see that we had no right to expect to be able to comprehend the beginning *ex nihilo* of contingent being, nor to stumble at the fact. The human mind is equally incompetent to see how the wonder was wrought by omnipotence, and to say he could not work it. If the fact that he did work it is proven *a posteriori*, or testified by his own word, sound reason acquiesces in the fact unexplained.

For what are the limits and conditions of human knowledge? We will not say with the sensationalists, that they are simply the limits of sense-perceptions and their combinations in memory and association. We hold as firmly as any transcendentalist, that there are also certain primitive judgments and intuitive abstract notions in the reason, not collected from sense-perceptions and experience by any mere process of generalization, or by any deduction, but rather the conditions *a priori* for formulating all valid perceptions and deductions. But while these rational first cognitions are not causally derived from sense-perceptions, *they can find their occasions nowhere save in sense-perceptions*. This is the vital truth established by Locke amidst so many half-truths and errors. For instance: The mind can never have derived its abstract notion of power in cause, and its intuitive belief that every beginning phenomenon must have its own efficient cause, from watching a phenomenon follow its antecedent. But none the less, the mind would never have enounced this judgment and notion to itself, had it not seen instances of effects, either by the consciousness or the bodily senses.

Thus, even these highest and regulative truths, while not experiential in their evidence, are conditioned on experience for their occasions.

Is not this a fair inference, that our competency to judge the metes and bounds of a causal power must be limited to cases within man's experience? But of actual beginnings of contingent existence, either material or spiritual, man has no experience and no observation; and he can have none. Not of any material beginning, since physics teaches us that every atom of matter was already existing before man appeared in the universe, and that all seeming beginnings of masses or bodies have been merely the collecting and joining or organizing of atoms already existing; not of any spiritual contingent Being, since sense-perception teaches us nothing direct concerning spirits that are immaterial, but they are directly known only in consciousness. But consciousness is the subjective faculty. Now, no soul can ever know or realize by consciousness its own beginning, because it must already have begun to be in order to have consciousness; nor its own ending, because in the ending of its being would be the extinction of consciousness. It is only the Mind which never began and can never end, the Eternal, Self-existent One, which can by any possibility construe to itself finite beginnings and endings.

We say to the monist, then: Pause; both you and we are out of our depth; we are in a region of ontology where we can safely neither affirm, nor deny, nor comprehend, nor explain. Let us lay our hands upon our mouths. The conclusion of the matter is to confess with the apostle (Hebrews xi. 3), that the doctrine of the beginning of contingent being is one of faith, not of philosophy: *Πίστει νοοῦμεν κατηρτίσθαι τοὺς αἰῶνας ῥήματι θεοῦ εἰς τὸ μὴ ἐκ φανομένων τὰ βλέπομενα γεγονέναι.* And here is strong evidence of his acquaintance with the whole range of speculative human thought. He says at once to the Pythagorean, the Eleatic, the atomist, the Platonist, the Stagyrite: Vain men, you are out of your depth. The same inspired caution is as good for Spinoza and the most modern idealist or monist.

THE FACULTY DISCOURSE.¹

YOUNG LADIES AND GENTLEMAN:

ONE year ago it was your good fortune to be instructed in the importance of moral and mental honesty by one whose whole private and public life has been an incorporate example of his noble theme.² You saw, indeed, the frame once so instinct with vigor and nerve whenever the call of duty and danger inspired him, now bent under the premature weight of years and unrewarded toils; you heard the voice which could once ring like the clarion in the forefront of battle, unstrung by sorrow and lassitude. But you beheld the manly spirit disdaining at once the infirmities of the flesh and the depression of defeat, glowing as strongly and brightly as in the days of his prime. You should account it one of the richest boons of providence to your youth, that you had the privilege of hearing him bear his witness to the supreme claim and worth of honor and truth. The heart that can swell with generous applause at such a career, and with eager aspiration to imitate it, is ennobled by its emotions and instructs itself more grandly than the pen or tongue of the writer can teach it. I know well, that no words I shall utter will carry the endorsement of such a heroic life, yet the momentous importance of his theme justifies me in renewing it in another of its aspects.

There are truths so fundamental to the welfare of mankind, that they cannot grow trite, as there are names of such immortal glory that it can never be commonplace to cite their authority. Such a name is Washington's and such a truth is the one I now quote from his valedictory letter to the American people.

“Of all the dispositions and habits which lead to political prosperity, religion and morality, are indispensable supports.

¹ A discourse at the Commencement of the University of Texas, 1889. Delivered by appointment of the faculty to the students.

² Lieutenant General D. H. Hill.

In vain would that man claim the attribute of patriotism, who should labor to subvert these great pillars of human happiness, these foremost props of the duties of men and citizens. The mere politician equally with the pious man ought to respect and cherish them. A volume could not trace all their connections with private and public felicity. . . . Let us with caution indulge the supposition that morality can be sustained without religion. Whatever may be conceded to the influence of refined education on minds of peculiar structure, reason and experience both forbid us to expect that national morality can prevail in exclusion of religious principles. It is substantially true, that virtue or morality is a necessary spring of popular government."

This thesis I might substantiate by several arguments, beginning with the one advanced by "the father of his country." If the reverence be lost which should hedge the inviolable sanctity of oaths, what defence have we left, for either good name, property or life when these are drawn into the courts of justice? If probity and the righteous fear of the judge of all the earth be lost, we have no longer a guarantee for the integrity of our magistrates or the fidelity of the executors of the laws. It has been well argued that mutual confidence is the cement of society and of the commerce of men in their affairs, but for this confidence there is no basis but integrity and fidelity. It is these qualities which inspire the industry, the frugality and the order whence flow the wealth, numbers and strength of the commonwealth. Virtue is the only foundation of the family and the only guide in the rearing of the young for future citizenship.

But it is not necessary to pursue the demonstration. The most conclusive proof may be seen in the fate of two contrasted societies; such, for instance, as the commonwealth of the Kiowas or Comanches in America, with either of the cantons of Protestant Switzerland. Why is the former ill-housed, ill-clad, half-starved, miserable, and pauperized, and tending toward an ignoble extinction? Yet their goodly heritage was in the fertile prairies and under the genial skies of this Texas, while the latter inheriting a narrow and stony territory under a rude sky, and iron bound by the savage Alps, has had for centuries a history of happiness, plenty and power with the promise of indefinite prosperity hereafter. Because the Swiss are Christians and

moral; while the savages were pagan and vicious. Because the well grounded apprehension of wicked aggressions suppressed all the beneficent exertions of their natural aspirations, and left them to indolence, violence, systematic theft, and the neglect of domestic duties. The source of savagery is sin. The same vice will in time sink any prosperous, civilized society into the same despicable misery. We may be reminded that these savages retain along with their vices, certain virtues, fortitude, bravery, and loyalty to engagements of their plighted faith to friends; that in this last quality they set an example which many more civilized men would do well to imitate. These praises so far as they are just, only confirm our conclusion, so ruinous are bad morals to men's social welfare, an utter desertion of such virtues would make even existence impossible. Some virtues must be maintained by self-interest even to furnish the conditions for the gregariousness of the savages. Should these also be discarded, their absence would speedily bring the end of their misery and their existence.

But I do not propose to argue formally what no one will avowedly dispute. I propose rather to explain and enforce. And, first, I must beg you to beware of inferring from my urgency in asserting civic and personal morality as all essential means for free government and social welfare, that this is the sole ground of moral obligation. The maxim, that "Honesty is the best policy," has been repeated so often, there is ground to fear many have concluded that the goodness of the policy is what makes the honesty. When once this grovelling conception is adopted, there is a speedy and fatal end, both of the formal correctness of action promoted by this reasoning of expediency, and of all true inward moral principles and desert. The quality of the action is decided exclusively by the complexion of its inward motive. He who has done the thing right in form, not supremely because it is right, but because it is politic, has no virtue in that act; all the credit he can claim is that of shrewdness and regulated selfishness. Not until the sentiment of duty for its own sake and from reverence for the all perfect God, in whose holiness virtue is impersonated in its perfect beauty, becomes the ruling motive of our acts, do virtues even begin in us. Nor will the doctrine of expediency long suffice to retain

even the dead and soulless image of it in the outward conduct. All our observation tells us that soon after honesty comes to be valued for the goodness of its policy, the same politic calculations begin to impel men to all dishonesties. The explanation and reason ought to be very patent.

The internal motive of these morals of expediency is, after all, nothing else than selfishness, refined and regulated. But selfishness when dominant is sinful, the fruitful mother of every kind of sin, injustice, envy, cruelty and oppression. Can one cast out devils through Beelzebub, the prince of devils? Nay, verily; the parent chief will only propagate and cherish his own kind. In vain will you plead with an intellect perverted and darkened by this passion of selfishness, that he ought to see even the most self-denying act of equity apparently most damaging to self-interest will yet result in the final, and broadest experience in advantage to self. This is truth; such a truth as the infinite, beneficent, and unselfish intelligence of God can see clearly and can delight in. But it is one which your selfish, politic mind, will not and cannot believe in. Such a mind concludes thus, under subtile and forcible temptations: "Yes! of course, honesty is always the best policy for other people to pursue towards me, and frequently for me towards them. But this dishonesty will be my best policy now; for my superior shrewdness will enable me to reap the benefit of it, without the bad consequences it might entail on more bungling hands." Thus under this false philosophy each man advises and expects his fellow to pursue the good policy of honest living, while each one secretly proposes to depart from it for his own advantage. The whole company sink into hypocrisy and moral putrescence.

If this discourse, young gentlemen, is to be worth any more to you than a decent and pretentious deceit, it must succeed in impressing reason and conscience with the stern and inexorable necessity of the highest and purest standard of civic morality for citizens of all elective and free republics. Unless I succeed in doing this, I shall have done nothing more than amuse or weary you. Give me then, I pray you, your candid attention to a few lines of thought of entire simplicity and obvious truth, which I am about to present. While civil government is in its

highest aspect the ordinance of our Maker for our good and his honor, on its human side it is to be viewed as a moral association of equals formed for their common and equitable good. The commonwealth is not entitled to engross to itself all rights or to claim to be the source and dispenser of all privileges and duties. Both the individual and family are before the commonwealth. They exist and hold their rights not by its authority or sufferance, but by the direct authority and gift of the God who created both them and it. The commonwealth exists for the good of the families, not these for its behoof. The servant shall not be above his master. It is, then, only a part of the functions of social life which pertain to the commonwealth to be exercised or decided by it. But as to these, its legitimate functions and powers, the citizens hold to each other the moral relation of a great co-partnery. A part of their heritage of powers they have cast in as subscribers to the common stock. The one duty of this political firm or co-partnership and of each of its partners in his public actions, is to pursue the common and equitable good of the firm, and that alone. It is on this firm, as a whole, losses must fall. To the firm belong all the gains and profits of the common functions performed for it. These gains are to be all distributed among all the co-partners according to the equities of the compact which created the co-partnership. Each partner is honorably free to employ the time, effort, and capital which he did not subscribe to the firm, and which remain individually his own, for the private behoof of himself and family.

But if he uses the name, credit, or capital of the firm for private ends, as for ventures of which the losses will be thrown on the firm and the gains conveyed to his own individual pocket, he is a swindler. The dishonesty is so patent that a court of equity would legally enjoin it, and give relief to his defrauded partners. The whole community of merchants would concur in "sending him to Coventry." He would take his proper place, in their estimation, as a virtual thief.

No other rule of honesty can be found for the citizen in all his public or civic acts, as a member of the great political co-partnership of the commonwealth in voting, legislating, buying and selling with the State and the performance of stipulated official

duties. How, now, do the practices, prevalent in America, stand this plain and recognized test? What shall be said of him who aims to make his politics pay? Of him who demands, for what the commonwealth needs to buy, more than the market-price would enable him to extract from the private dealer? Of him who, at the polls or in a legislature, votes for a measure of class privileges designed to rob his fellow-citizens for the benefit of the class to which he belongs? Can any complication of these measures of wrong-doing, and blindness of a corrupted public sentiment, veil this moral obliquity from an honest mind? Some one may attempt to escape the condemnation by exclaiming: "Oh! this is a theory of civic virtue too abstract and puritanical for a real world!!" This I deny, with emphasis. The assertion combines a sophism and a direct historical falsehood, with an insult to their fellow-citizens. There are yet men, and public men, who act up to this theory of civic obligation. Well is it for America that there are, else our civilization would be doomed to the destiny of the Comanche!

A Washington, a Jefferson, a Henry, a Madison, a Monroe lived up to this standard, and ever disdained to adopt a lower one. He who understands the history of the country knows that but for the confidence of the American people that their trusted leaders held this standard, federal institutions would have been impossible on this continent. Every other man can live up to the same standard unless he deliberately prefers gain to principle. But the deplorable prevalence of the lower standard of civic morality which in the exactly parallel relations of a co-partnership would stamp any man as a scoundrel, discloses a principle of human nature, of profound moment here.

This is the tendency to do wrong in associated, more readily than in individual acts. The director of a business corporation sanctions for the agents of the company, exactions and oppressions which he would be ashamed to perpetrate personally on his neighbor. The Puritan, who in his own household is a stickler for Sabbath observance, is a well-pleased stockholder in the lucrative railroad which tramples God's Sabbath law in the dust with insolent boldness every week. The same delusion misleads the public acts of nations. There is probably nowhere a people which can count more persons of exalted dignity and

genuine piety among its members, or which is as generally guided by honesty and truth as the English people. But this was the nation which in its organic capacity, sought to monopolize the African slave trade for nearly a hundred years, which waged the two iniquitous opium wars in China, and is to-day, by virtue of the triumph of its Christian arms, coining its Indian revenue out of the crime and self-destruction and idiocy of the Chinese people; which in 1861, was too righteous to recognize an independent Confederacy, entitled by its own international law to recognition, because tainted with the sin of slave-holding, and which yet had been eager in 1846 to recognize the republic of Texas, tainted with the same sin, if she might thereby cripple her rival, the United States.

This guilty hallucination concerning the veniality of associated sins is easily explained. The victims of the wrong are out of sight of the perpetrators, and do not obtrude their misery and their reproaches with an inconvenient individuality. The wrong-doers can sin without directly soiling their own dainty fingers; they get the wrongs perpetrated by the official hands of paid agents, who can say they have themselves no responsibility. The wrong-doers imagine that responsibility and guilt are so subdivided among the multitude that only an infinitesimal share attaches to each one. This is, indeed, a very shallow delusion. It has been long ago exploded by the wise man, when he said: "Though hand join in hand, yet shall not the wicked go unpunished." This simple thought refutes it; that if the supreme judge once allowed this rule of subdivision, evil men would only need to associate a sufficient number of accomplices in each transgression in order to rob him of all practical control. Even the plain and unrefined justice expressed in our criminal statutes exposes the falsehood. By that law the guilt of a collective concerted sin is not divided, but multiplied. If twelve men conspire to murder one, the law makes twelve full murderers; for each is held such, as an accessory before the fact.

But none the less does this delusion everywhere cheat the consciences of men. They flatter themselves that the guilt of associated wrongs inflicted by the popular majority is venial, or practically nothing.

As we combine these conclusions, they give us a deduction

concerning our topic as alarming as it is true. Its high standard of civic virtues is essential to the welfare of the state. Its maintenance is also extremely difficult, and beset by peculiar and subtle temptations. It is a quality very hard to keep, and easy to lose. But the people which loses it is ruined with a most loathsome ruin.

The solemnity of this dilemma is further enhanced by another social law which I aim now to explain. We have just seen that it is natural to men to allow themselves far more moral license in their associated and public acts than in their individual and private. But, on the other hand, the example set by political parties and rulers, in those public acts in which they so easily allow themselves immoral licenses, is the most powerful influence, forming, for good or evil, the moral character of the people. Thus speaks Mr. Calhoun, in his precious *Disquisition on the Philosophy of Government*, while contrasting the two theories of popular or elective government :

“For of all the causes which conspire to form the character of a people, those by which power, influence, and standing in the government are most certainly and readily obtained are by far the most powerful. These are the objects most eagerly sought of all others by the talented and aspiring, and the possession of which commands the greatest respect and admiration. But just in proportion to this respect and admiration will be their appreciation by those whose energy, intellect, and position in society are calculated to exert the greatest influence in forming the character of a people. If knowledge, wisdom, patriotism, and virtue be the most certain means of acquiring them, these qualities will be most highly appreciated; and this would cause them to become prominent traits in the character of the people. But if, on the contrary, cunning, fraud, treachery, and party devotion be the most certain, they will be the most highly prized, and will become marked features in their character. So powerful, indeed, is the operation of the concurrent majority in this respect, that if it were possible for a corrupt and degenerate community to establish and maintain a well-organized government of the kind, it would, of itself, purify and regenerate them; while, on the other hand, a government based wholly on the numerical majority would just as certainly corrupt and de-

base the most patriotic and virtuous people. So great is their influence in this respect, that just as the one or the other element predominates in the construction of any government, in the same proportion will the character of the government and of the people rise or sink in the scale of patriotism and virtue. Neither religion nor education can counteract the strong tendency of the numerical majority to corrupt and debase the people."

Well did Thomas Fuller exclaim: "Oh, what a legislative power hath the example of princes!" Let the populace witness the winning of the prizes, which most stimulate the desires, by the arts of slander, sophism and bribery. Let them see the practitioners of corruption and peculation crowned with wealth and the applause of the crowds and even the flatteries of sycophantic priests of religion. Let them have the examples of fraudulent constructions and broken pledges set them by the supreme heads of earthly authority; and nothing can result from the principles of imitation and ambition but a flood of vice which will either corrode and dissolve the foundations of free government, or sweep them before the torrents of national convulsions.

There is another consideration which intensifies the urgency of the peril. No human engine of moral degradation is so effective as the subjugation of a people formerly free. It unstrings the moral character by dishonoring it, and taking away ruthlessly the "point of honor," around which self-respect and pride are centered. By the burning resentments for the wrongs perpetrated upon the conquered, it suggests the most seductive temptations to adopt illicit methods of relief or retaliation. It subjects its victims to losses and miseries, which they can neither resist by manly force nor endure without intolerable sufferings. The escape from this cruel dilemma seems to be found only in frauds. Hence chicanery has ever been the weapon of the subjugated. It was doubtless this lesson, taught by all history, which prompted our wise forefathers to prefer a government of free consent, to one of force. But the artifices and tricks by which the unhappy victims relieve themselves for a time, from the wrongs they suffer, minister the succor at a deadly cost—that of their own manhood and civic virtue. Unhappily the illustration of this danger is too near at hand.

We have seen the peace, property and order of our commonwealths so imperiled by the changes in suffrage forced upon these States, that the citizens saw no escape from ruin except in those arts of the weak by which this suffrage might be illicitly controlled. Even religious men justified these arts. They said they were the only means left them to save their property, their families, and even their lives from a fate as loathsome as threatening, and society from anarchy. They pleaded that "necessity knows no law." With the unfailing versatility and ability of the southern character, they had often succeeded to the vexation and disappointment of their rulers. Yes! But they have also succeeded in teaching themselves, their opponents and posterity a lesson as fatal as anarchy; the art and custom of debauching the purity of elections. No statesman has ever doubted that this custom, once established, must be the destruction of free elective government. It poisons the stream of authority at its fountain head. Will this art, first adopted under the supposed stress of necessity, be laid aside when the necessity ends? Alas, No! Neither by its inventors, nor by their opponents thirsting and burning for retaliation. The recurring exigencies of party contests will ever seem to the rivals another necessity, justifying the resort to the same crooked weapons. Their previous use will appear to compel their further use. Will they not be repeated until just government becomes a fiction? Will not white men learn to use these weapons against white opponents, appearing in their eyes as detestable and dangerous as the negroes against whom they were first forged? One glance at this question shows us that supreme fortitude, wisdom and purity would scarcely be sufficient to meet it. Will a conquered and dispirited people exert these heroic qualities?

The general aspect of our institutions and another illustration of this burning question, is not sectional, but of continental dimensions. This is the civil service reform which was to replace the dangerous and corrupting "spoils system" of appointment to office. A few years ago both parties which had previously waged war on each other by means of this system, seemed to concur in putting it away. With the levity of party rivalry, they challenged each other to concur in the much applauded reform; and sought to see which could out-grimace the other in affected

zeal for it. Presidents uttered pious homilies upon the law and promised its execution, "in a convenient season."

But, "can men draw out leviathan with a hook? or his tongue with a cord which they let down? Canst thou put a hook into his nose? or bore his jaw through with a thorn? Wilt thou play with him as with a bird? or wilt thou bind him for thy maidens"? The monster is not to be thus subdued. Let us consider for a moment what means will be requisite for the real and effective introduction of the better system. There needs to be a party, self-denying and virtuous enough, upon winning an arduous and costly presidential campaign, to leave all the offices, except those properly vacated for the unfaithfulness of their incumbents, undisturbed in the hands of the existing officers, and those officers political opponents. For, let us suppose that the winners should expel them, and seek to justify their act by pleading that these occupants of office had come in as spoilsmen, by partisan appointment, and that, therefore, the seats of power must be cleansed of them before a permanent beginning of the cleaner system could be made. Then on the next turn of the wheel of political fortune, the opposite party, now new victors, would be sure to condemn that act as one of partisan greed, to be retaliated by another expulsion. Thus the true reformer could never begin. Each party would be heard as now professing loyalty to the principle, but postponing its real application for another political revenge.

Is there a party, is there a body of citizens in this country, rich and strong enough to win a presidential campaign, magnanimous, pure and patriotic enough to perform the labor of the contest and yet to forego the official spoils of the victory when won for the sake of a principle?

Is my question answered with an incredulous smile? If no such virtue can be found among us, then the fate of elective government here is sealed.

To any mind which conceives aright the relation of the present system to parties, aspirants and the people of the country severally, this conclusion is too plain to be contested. According to the theory of constitutional government, the sovereignty abides in the people, and they depute so much of their power as the constitution stipulates to the rulers whom they choose to elect in the free exercise of their own judgments, and all offi-

cial powers are to be held and received for the service and behoof of the people whose money pays their salaries. But according to the "spoils system," the people's money is paid to office holders, nominally indeed for their services to the people, but actually for their partisan services to the successful aspirant, who is most probably inimical to the true rights and interest of the people, whom he thus dominates. As long as human nature is human, we must expect these hirelings of party to press the designs of the leaders who are to reward them, with every art of fraud, sophism, slander, and bribery. Are they not themselves already bribed by the prospect of rewards to be paid? The history of the last fifty years in the United States, since a victorious demagogue shamelessly announced the rule that "to the victors belong the spoils of office," confirms the reasoning too mournfully to permit debate. As well might a people have expected freedom under the late Roman emperors, whose "Praetorian Cohorts" set up the purple to the highest bidder, as under a system where the leader of the camp usurps the people's money to hire these mercenary hosts of officials, to browbeat, delude, and bribe them, by whose plunder they are to be rewarded, not for serving, but for enslaving their masters, the people. Either America must find citizens numerous enough to compose a majority, intelligent enough to see the peril and its only remedy, and self-denying and magnanimous enough to bear all the expense and toil of this gigantic struggle against official tyranny wielding the powers and revenues of the continent, and willing to do all this without any partisan reward, purely for the sake of country, truth and right; or the doom of free institutions in America is fixed. Our coming history is destined to pass, like that of the Roman republic, through a series of civic corruptions and wars to a similar end.

The commonwealths of modern times have slowly emerged from savage conditions, and the elevating power has been, in its real source, moral. The real difference between the lowest and the highest social state of national masses is much less than men imagine. The submersion into barbarism is a possibility much nearer and more facile than we think. Our present civilization is, after all, only supported by a crust which is but thin. It is luxuriant and rank, like the vines and gardens which flourish on the rich volcanic soils of New Zealand, with

the devouring fires raging or smouldering but a few feet below. The green is, perhaps, the more rich, and the growth the more rapid, because of the very heats which arise from the sulphurous abysses of fire below, and not, like the vegetation of healthier climes, from the clear and temperate warmth of a genial sky. Thoughtless men rejoice in the rank promise of the crop. But each imprudent stroke may begin a fissure through which the mad fires will burst out, widening the fatal rent by their own fury, until the verdant growth is first shrivelled, and then engulfed in the lake of flame below. This risk every public man in our country is now running by every act which weakens the public virtue. Let men beware. The fires are not far below our surface. Their mephitic fumes are infecting the upper air. Their mutterings are audible beneath our feet. The man who weakens the thin crust by any stroke assaulting or undermining the integrity of public and social life is the enemy of his country and of his kind.

What is the lesson of general history, but that every nation or commonwealth which has fallen, has fallen really by its own vices? Outward assaults have been only the occasions; their decays of virtue the only efficient causes. Thus sank Assyria, Egypt, Persia, Israel, Greece, Rome, Spain, Bengal, and imperial France, and Poland. Thus, in a sense, fell our own Confederacy; not, indeed, by vices greater than those of its assailants, but by defects of the higher virtues requisite for so arduous a contest. There is no doubt but the Southern people were more religious and conscientious than their opponents. When Providence has a design not to destroy a people, but to purify and elevate them, he has often employed as his instrument a people more wicked than themselves. But we had a whole world to resist. Notwithstanding the fact that we were called, with eight millions of white people, to defend our States against the combined proletaries and wealth of America and Europe. Had the moral tone of the whole people been as high as that of their best exemplars, they would have been unconquerable. They fell, not before the millions of bayonets which confronted them, but by reason of the more mischievous economic heresies which their rulers applied to their finances and diplomacy, and yet more by force of the relaxed morals which these fatal errors of policy produced. My proof is this:

To point you to that minority of citizen soldiers, so well represented by Stonewall Jackson, whose devotion to duty and their country was honest and active. Let us suppose the whole of the small armies we were able to keep in the field, animated by their intelligence, bravery and courage, and sustained by the rest of the eight millions at home with equal public spirit and devotion to duty. Would they ever have been overpowered even by a whole world in arms? Had every private in the rank and file of those terrible battalions been a Jackson, and the whole directed by the consummate wisdom of a Lee, they would have cut through the multitudinous hosts of mercenaries, as the armored war-ship pierces the froth upon the turbulent waves. Lord Macaulay tells us of Cromwell's Ironsides. He ascribes their prowess not so much to the strict drill which that great soldier imposed upon them, as to their high morality and religious faith. He tells us that both in England and upon the continent, they not only overcame every corps that dared to meet them in the shock of arms, but shattered and destroyed it. Such Ironsides had our armies of Jackson been. The state, all infused with these men's virtue, had been absolute, invulnerable, the Achilles of the nations, not from a baptism in the Stygian flood of lucre and deceitful arts, but panoplied from the arsenals of eternal truth and justice, whose king and Lord is the God of providence.

I have spoken of the lesson of universal history. To him who reads it aright, there is one deeper truth which grounds and accounts for the one I have cited. History is but the evolution of God's will. Its events arise under his permission or direction, and must in the final issue conspire to execute his ends. But he is the God of truth and purity. He has founded all his numerous works of nature upon the eternal rules of truth and order, and shall he not thus found, still more, his government of moral creatures? The invisible atoms of chemistry, in all their infinite number and countless combinations obey with unerring correctness their laws of union. The germs of organic life all reproduce after their kind, with universal fidelity. Planets and suns in all their devious circles through the skies, observe their time with mathematical exactitude. In the more august sphere of the spiritual conscience, the same law of truth reigns absolute and unquestioned by the right reason. Shall not this God

impose the same rule upon the destiny of his responsible creatures and make the universe know that it is righteousness which exalteth a nation, but sin is a reproach to any people?

Young gentleman, we of the generation which is about to pass off the arena, must revert to you in terms of anxious and solemn affection. We leave you a momentous and difficult task, the restoration of the cause of constitutional freedom, which is the same as the cause of pure morals, which was compromised in our unfortunate hands. Dare we after our disastrous failure, lift our heads before you as advisers, as monitors? Our justification is to point to our wounds, our premature gray hairs, the hundred battle fields watered with our blood or sweat, the thick strewn graves of our companions, our broken fortunes, and to claim that we did what we could to save your heritage for you. Had we all possessed the higher virtues of our dead heroes, we should have saved it for you instead of leaving it in jeopardy. Perhaps no qualities short of the purity, courage, and devotion, in which some of us came short, will suffice to you for the task of rescue and redemption which you are to undertake.

The better part of my powers was spent in the faithful endeavor to aid in forming my mother commonwealth to the virtues which ennoble and fortify the state. She is in bonds and in widow's weeds, and alas! and alas! trailing her garments of woe in dishonor. Having no more a place there, I have brought such powers as remain, half-broken and spent, to the service of your State, in whose broader domain, and under whose brighter sun and more youthful and cheerful auspices, we trust a happier end may be achieved.

We old men stand before you with awful reverence—you who are the rulers of the arena henceforth—and as we lower the point of our weapons, sorely tried in our combats, before you, we say, with the ancient gladiators: "*Morituri Salutamus*": all hail to you! not Caesars guilty of your country's blood, but Quirites, her free and true defenders. Take the weapons forged of adamantine truth from our failing hands. May they be more prosperous in the new grasp than in the old. But for this result there must be one supreme legend emblazoned on your standards and your hearts: "Let all your ends be your God's, your country's and the truth's." "*In hoc signo vinces.*"

THE STANDARD OF ORDINATION.¹

IT is a pungent affliction to me to read two overtures from the respected Presbyteries of Wilmington and East Hanover, asking of the General Assembly the repudiation for our church of its time-honored and most vital attribute, an educated ministry. Those who advocate this revolution are doubtless moved by laudable zeal to multiply ministers faster, and thus to extend the operations of our church more rapidly. This zeal is commendable, but it out-runs all discretion.

Surely it ought to be enough to bring cautious men to a stand to witness the sweeping and summary way in which it is proposed to forsake the whole past policy of our church on this point. One of their amendments requires that when presbyteries proceed to ordain ministers they shall not require them to exhibit any classical scholarship whatever, nor any knowledge of philosophy, nor of either of the languages of inspiration. Here are whole continents of those acquirements our wise fathers deemed essential, swept away by one rash touch of a pen!!! This takes one's breath away.

The overture does indeed indicate a compensation, when it says that such requirements, out of place at ordination, are to find their appropriate position at licensure. I seek in vain for any consolation in this deceptive intimation. For, first, the arrangement proposed, if carried out in good faith, would be utterly illogical. According to our constitution, licensure is an advancement merely provisional and contingent; it merely makes the licensed man a "probationer *for* the ministry," and leaves him a mere layman invested with no franchise of office, whom the presbytery may degrade at its discretion without any judicial trial whatever. But it is ordination which makes the man official presbyter and herald, and that for life. Here, then,

¹From the *Christian Observer*, of May, 1891.

is the vital step of the governing presbytery. Here, then, should be the crucial tests of fitness. To neglect them here, and remit them to the previous non-essential stage is, both in the classical and popular sense of the word, preposterous.

This inversion would of itself ensure neglect of proper tests throughout the whole course of trial without any more bad legislation; but when we come to the new provision for licensure, the last ghost of a consolation vanishes. For presbyteries are forbidden to require any Latin exegesis, and are authorized at their discretion to dispense with every other test of classical, philosophical, and biblical scholarship. Everybody who knows presbyteries knows that this dispensing power, if granted, would usually be exercised. Thus, our time-honored requirements of real education are first kicked out of the rules for ordination. Conservative men are told that they shall be consoled by finding these requirements in the rules for licensure. But when we come to them, we find them virtually absent there also. Thus, practically, they are kicked adroitly outside of our church.

Moreover, were the requirements faithfully retained at licensure, the change would work the worst possible expediency; for it would offer a tacit premium to the probationer to cease his liberal studies in the interval between licensure and ordination, which is the very time when he ought to be most diligent in them. He is thus deliberately invited to become a poorer scholar just as he approaches the fuller responsibilities of his arduous vocation. I know not what expedient could be adopted better suited to teach our young ministers a practical contempt for scholarship.

I would oppose this perilous innovation with all my might by these further arguments.

I. The manner in which our presbyteries are already employing the existing provision for licensing and ordaining "*extraordinary cases*," renders any change utterly needless, even from the point of view of the innovators. This useful provision is doubtless much abused, so much so that without any further loose legislation, all the half qualified men whom the loosest lover of change desires, may easily find their way into our ministry. The provision is plainly intended by the constitution to meet this case only: Here is a Christian gentleman who ex-

hibits, in addition to holy character, experience, wisdom and prudence, and the aptness to teach and talent of command required by the Apostle of Timothy, thorough mental culture, and intelligence as acquired and attested in some other educated profession, such as the law, medicine, or the professor's chair; which thorough culture acquired in a different direction, may be honestly accepted as a real equivalent for classical and Hebrewistic learning.

“The law hath that extent, no more.”

But how do we see it applied? To such cases as these: To some zealous middle aged man who has no culture, and never will have any in either direction, neither in classical English literature, nor in the ancient classics, nor in the languages of inspiration, nor in sciences, medicine, nor law. Here is a younger man who is said to be a good fellow, but without income, who thinks he cannot get his own consent to go through the long course of studies required by our book, so he claims to be made an “extraordinary case;” when the only thing “extraordinary” about him is, that he lacks the pluck and conscientious industry which alone could give assurance of permanent usefulness in the ministry, for a person deprived of early education. Here is another young man who, without any thorough culture, has some natural gift of fluent, plausible speech, in whose favor some congregation sends up to presbytery the assurance that he preaches abundantly well enough for them. The soft-hearted presbytery makes him an “extraordinary case,” when they ought to have foreseen that the most certain and ordinary result would be that this fluency, unchastened by thorough mental discipline, is going to be his snare and his ruin. And here is another uneducated man, a very good fellow, who has a sweetheart, and who thinks he must marry at once, and that he never could stand the postponement required by a thorough course of study. So some kind presbytery makes him an “extraordinary case,” with the most regular and ordinary result of forever spoiling the career of him and a very amiable young woman.

These are no travesties. I make here two points—the door into our ministry is already made too wide, instead of needing to be further widened; and, secondly, “if these things be done

in the green tree, what will be done in the dry?" With our present explicit and strict laws, we already have a mischievous looseness. The adoption of the loose laws demanded by the revolutionists in the hands of such presbyteries as ours, will gradually result in total looseness. Practically, we should have no barrier at all against an ignorant ministry.

II. The overture asserts that their design is "to remove those barriers for which no sufficient reason can be found either in the word of God, or in the dictates of human expediency, that now debar from our ministry many men who are qualified both by nature and by grace for the exercise of its functions."

I expressly take issue with this declaration as to every proposition and every intimation it includes. I shall show expressly that each one is a mistake, and is contrary to the facts. What are the supposed needless barriers? The overture defines them for us: a knowledge of the Latin language, of philosophy, of science, and of the languages of inspiration. I assert that none of them are "barriers" to the fit minister, but suitable requirements. I assert that in fact no qualified man is kept out of the Presbyterian ministry by these supposed barriers. Some *suppose* they are kept out by them? Yes. But the fact that they allow these proper requisitions to estop their progress is the perfect demonstration that they are not qualified men. These righteous requirements never kept the carpenter, John D. Matthews, nor the penniless plow boy, John H. Rice, nor the middle aged sailor, Dr. Harding, out of the ranks of our learned ministry. And let us notice the cardinal omission of the overture in its enumeration of qualifications. It mentions qualities of nature and qualities of grace, but the Bible and the Constitution of our church insist on a third which the overture adroitly omits. This is *acquired knowledge*. "The priest's lips should keep knowledge." Every line of Scripture which touches upon the topic teaches us that native vigor of faculty can be no substitute for the acquired knowledge to be employed in the sacred profession, any more than the muscular symmetry of a carpenter's two arms enables him to build a wooden house without tools and lumber.

Our church has provided a mode of entrance into the ministry for all proper extraordinary cases. To all other candidates she

offers pecuniary assistance which she will continue for seven years, if necessary, until the scholastic requirements are obtained. Whence it follows as matter of fact that no man whom God has called is "debarred" from the ministry by these requirements. The things which really debar such supposed cases are self-sufficiency, the arduous nature of the calling, impatience, indolence. And these, when indulged, prove them not to be "qualified by grace."

But I can tell brethren, from an intimate acquaintance of forty-seven years with candidates and theological education, how numerous young men of real value are deterred from our ministry. *It is by a natural disgust at the facility and unfaithfulness with which its honors are bestowed.* Let the reader represent to himself the kind of young Christian whom we ought to wish to get into our ministry. He will be one distinguished for strictness of conscience, thoroughness of effort, high and noble aspirations, intelligence, and an exalted reverential conception of the sacred office. Is not this the kind of young man we want? Well, as an eager spectator, he sees the presbyteries shirking a part of their duty in trying their candidates, and many of these candidates consequently shirking much of their duty in study; known in colleges as the self-indulgent, slack-twisted student, and unfaithful reciter in class, and consequently an unenergetic herald of salvation. The honorable young man is disgusted, grieved, chilled, and repelled. He no longer feels any aspiration to belong to ranks whose honors are thus disparaged, and bestowed as easily upon the unworthy as the worthy.

But if that young man witnessed what our Constitution designs, the strict and honest requirement of good scholarship and exalted Christian diligence; if he saw that the honors of the calling were hard to win, and worth winning, his sanctified ambition would be fired. He would remain eager to press into these worthy ranks.

This is human nature. Society and universities are full of illustrations of this powerful principle. When I began to teach in Union Seminary, in 1853, there were eleven students. In 1860, there were thirty-eight, and these were not drawn from inferior sources, but from the best Christian material of the

States. I do know, that the main influence under God which wrought this improvement was the increase in that institution of the thoroughness of the course of studies and strictness of the examinations.

The overture asserts "that no sufficient reason can be found in the word of God," for the constitutional requirements of our book. This I expressly contradict. Hear the words of the Saviour: "If the blind lead the blind, both shall fall into the ditch." He tells the heralds of the cross they must be "like unto householders who bring forth out of their treasure things new and old." The Apostle says: "They are stewards of the mysteries of God." They must be "apt to teach." They must be "workmen who need not to be ashamed, rightly dividing the word of truth." They must "continue in reading and in doctrine, giving themselves wholly to them." "Thou, therefore, which teachest another, teachest not thou thyself?" As elders, they must be "*able men*, such as fear God, men of truth, hating covetousness." (Ex. xviii. 21.) The first heralds of the new dispensation, notwithstanding their gifts of nature and of grace, were kept by their divine Master under three years' tuition.

What, now, is the plain amount of these precedents and express commands? It can be nothing less than this, that every minister must have, in addition to endowments of natural faculty and grace, an acquired knowledge, competent to teach the system of divine truth correctly and fully, and to defend that system by refuting all gainsayers. But that system is contained in the Scriptures of the Old and New Testaments. The Holy Spirit gave these in the Hebrew and Greek languages. It is these alone which are our infallible rule of faith, not any version, however honest and respectable. Every judicious student of exposition knows that when the question is raised upon him, whether a given explanation of a given text presented in English by a pious Scott, or Henry, or Ryle, or Alexander is really the mind of the Spirit, that question is not fully settled until the original is examined. No teacher has full right to adopt and indorse such uninspired explanations unless he is able to test them by the originals, at least with the help of text-books and lexicons.

Does one say the piety and the concilience of these English

expositors give a good probability that they explain the mind of the Spirit correctly? Let us grant it. But can that teacher who can give his pupils but a probability of what is the real mind of the Spirit, be called a "workman who needeth not to be ashamed, correctly dividing the word of truth"? Plainly not. Will one say the great mass of the laity cannot learn Greek and Hebrew and have only their English Bibles? I reply: So much the more reason is there that their authorized teachers shall be able to go to the real spring heads of truth.

But a much more important point remains. In construing the mind of the Spirit contained in any precept of Scripture, it is absolutely necessary to take into account the state of facts environing the men who first reviewed the precept. For instance, our Lord commanded his disciples to procure an upper room for his last passover, and "there to make ready" for it. Must they understand this express commandment as requiring them to provide chairs on which to sit around the supper table? Such would unquestionably be the meaning of the command to "make ready," upon the servitors of a modern supper. But we know very well, as the disciples knew, that our Lord did not mean chairs, but did mean the customary dinner couches. Now how are we so sure of this? Because we know with perfect certainty, though chiefly from uninspired witnesses, that chairs at meals were not then customary in Jerusalem, while these couches were generally used instead. The state of facts known to the disciples and their Lord must interpret to them the meaning of his precept. Now, then, when we hear the Lord and his apostles requiring ministers to be able expounders of Scripture, we know that he meant the Hebrew and Greek Scriptures, because we know that these were the languages in which believers then had the Scriptures, and in which the Holy Ghost had given them.

We are now at a point of view from which we easily see the sophistry of a favorite argument of the innovators. They exclaim, Paul authorized the church at Ephesus, under Timothy's moderatorship, to choose any male member their minister who possessed the aptness to teach and other qualifications. He might be a merchant or an intelligent mechanic. Paul did not require him to learn any dead language or foreign literature.

What right have we to require it now? Why not do as Paul did; elect any pious mechanic, merchant or farmer who knows the English language, and has good natural gifts?

I reply, that this would be virtually doing exactly the opposite thing to what Paul did. Here was the all-important fact conditioning Paul's requirements; that the Greek language (the more important of the two languages of inspiration) was the native vernacular of that sensible Ephesian mechanic; to us it is a learned dead language. Hebrew was also a living vernacular to most Jews. Now, then, this Ephesian minister was already possessed, even from childhood, of a competent and correct knowledge of the main language of inspiration. Its syntax was perfectly familiar to him by daily usage in his business and reading. The idiomatic force of its phrases was as clear to him as our English is to us. Moreover, all the social usages, civic institutions, religious opinions and customs of the day and country, which were the subjects of perpetual allusion and illustration in the sacred writings, were equally familiar to him.

But now that copious language is to us a dead language, all those familiar facts and usages in the light of which it was so perfectly easy for that Ephesian mechanic to understand the meaning of the apostles, all has passed away, and is to us matter of learned antiquarian research. How much laborious classical study is needed to put one of us English-speaking citizens abreast with that Ephesian mechanic in the knowledge of that language and all those facts and usages which were his familiar knowledge, but to us must be the learned science of antiquity. I confess as to myself that I do not believe that my classical and biblical studies, continued through a long and laborious life have brought me up to the practical level of that fortunate Greek mechanic, as to the correct apprehension of the Greek Scriptures.

But, when the apostle required of the ministers of that day a certain competency to teach the gospel, we must understand him as requiring a similar competency of all ministers of all subsequent ages. It would be mere dishonest paltering with the precept to understand it otherwise. If the passage of the languages of inspiration and the usages of the day and country out of

vernacular use into antiquity calls for more study from us, in order to attain that grade of competency, then it must be ours to give that additional study. How can the honest mind dispute this conclusion? Dare we say to our divine Lord that because the right performance of a duty has, in his providence, become more laborious, we shall shirk a part of it, and put him off with half-way service? Surely not. We see, then, that this plausible argument is deceitful; it "keeps the word of promise to the ear, but breaks it to the sense." Under the pretence of nominally following the apostles' method it introduces a principle exactly opposite to theirs in practical effect.

The duty of apologetic defence against errorists, so solemnly laid upon the pastors by the apostle, presents a powerful argument. Hear him, 2 Tim. iv. 2, "Reprove, rebuke, exhort with all long-suffering and doctrine." Titus i. 9, "That he may be able, by sound doctrine, both to exhort and to convince the gainsayers." The pastor is required to be competent, not only to instruct his flock in the revealed science of redemption, but to defend their faith by refuting and convincing all assailants. He must be able to do this "with *all* doctrine." How much *διδασκαλία* then must this pastor have? Just so much as the assailants of the gospel employ against it. If he is a good knight he must be so armed and equipped as to be able "to meet all comers." Now when we remember how rapidly the provinces of human knowledge are extended, and how audaciously infidels use the resources of every province to attack the gospel, is this a time for the faithful warriors of Christ to be divesting themselves of any part of their armor or weapons? Take not the mere letter, but the true spirit of the scriptural injunction, and we see that this Bible principle must require of pastors continually widening qualifications instead of contracted ones, as the expansion of secular knowledge furnishes the enemies of the cross with new and varied weapons. "To whom much is given, of them shall much be required." This is the law of Christ's kingdom and the measure of our responsibility. We Americans of this age are continually glorying in the *privilege* of our fuller light and culture. Is this only braggart lying, or do we really believe that we do enjoy this privilege of an advanced age? If we say the latter, then we are bound to admit that the fair prin-

ciple of that requirement which demanded competency of earlier ministers demands of us continually higher competency and wider knowledge. Scripture expressly requires us to be a better educated ministry than any that ever went before. Is this a time, then, for diminishing the learning of our ministers? It is going backward exactly when the Master says go forward.

In one word, if anything is made clear in the Bible concerning ministerial duty, this is clear: that Christ has appointed the pastors and evangelists of his church to be the teachers of religion to men, the appointed school-masters of the world in the one science of theology. But as Lord Bacon shows, this is the splendid apex of the whole pyramid of human knowledge. It is the mistress of all sciences to whom all the rest are tributary, history, ethnology, zoölogy, geology, literature, and especially philosophy, her nearest handmaid. The mistress must dominate all and rule all lest, becoming insurrectionary, they should use their hands to pull down the foundations of her throne. The teachers of the supreme science must not be ignorant of any other science. They ought to be strong enough to lead the leaders of all secular thought; for if they do not, the tendencies of the carnal mind will most assuredly prompt those secular leaders to array their followers against our King and his gospel.

Let us pause to see how practical this is, and how true. Somebody is asking, why may not a sensible good man, well acquainted with his English Bible, suffice to instruct his plain neighbors in this science of redemption? Possibly he might suffice if he and they were the only sorts of people in the world. But they are not. Our world is also full of authors, legislators, lawyers, physicians, scientists, historians, antiquaries, philosophers, all equipped with the resources of learning. Just so surely as Satan is hostile to Christ and the carnal mind is enmity against him, these learned classes will refuse to let this plain pastor and this plain people alone. Just so surely as hawks will eat pigeons, the very spirit of this "progressive learning" will insure perpetual interference by every channel which this intellectual activity opens up. As surely as this pastor lives, he will have to defend his plain people from all these pretentious assaults. And he will find that the less education his people

have the more educated skill will he have to employ to save them from seduction. Moreover, the learned assailants also have souls which need salvation, very sinful, miserable souls. This pastor owes missionary duty to them; in order to teach the supreme science to the learned does not he himself need to be learned?

Surely, then, this is no time to reduce the education of our ministers when every other profession is making gigantic efforts to increase this learning, and when the sister denominations, once satisfied with an unlettered ministry, are just learning the wiser lesson taught by our example in the past, and are making gigantic efforts to secure for themselves a learned ministry.

The untimeliness of this retrograde movement is powerfully illustrated in the matter of the Hebrew language. A new law is now proposed, the effect of which may be to exclude all knowledge of this language from every Presbyterian minister of the coming generation, and must be to make the knowledge of it rare among them. And this is proposed at the very time of day, not only when this remains one of the languages of inspiration, but when it is rapidly becoming again a living language in Christendom, having weekly newspapers published in it and translations made into it from English literary and infidel books; when the language is more studied than ever in great institutions of learning, and especially when Hebrew philology and criticism are just becoming the prime arsenal which furnishes the weapons to attack God's church. Is not this overture a fearful anachronism?

III. It is asserted that no reason for our standard of education can be found in "the dictates of human expediency." This again I expressly deny.

The whole experience of the patristic ages, and of the reformed churches for three hundred years, is on my side. In the Latin church the languages of inspiration were dead languages. The people had the word of God only in versions (*Vetus Itala* and *Vulgate*), but take notice! The method of recruiting the ministry was precisely that now recommended to us and now followed by the churches which we are bidden to imitate. Some ministers, as Jerome, were learned; the majority were not. *That was the ministry which created the whole popish apostasy!*

That was the ministry which invented the fatal errors of human priesthood, baptismal regeneration, real presence, and sacrifice in the supper, apostolic succession, monkery, prelacy, celibacy of clergy, persecution, penance and indulgence, false miracles, pelagianism, saint worship, idolatry, purgatory, and popery. The close reading of church history convinces any sober student that it was the ignorance of these men concerning the languages of inspiration and Hebrew archæology which was the main occasion of their fatal errors. Ought not this lesson of history to be vast and black enough to open the eyes of Protestants?

I assert that the strength, usefulness and respectability of the Presbyterian Church are chiefly due under God to her standard of education in her ministry. Had she adhered more faithfully to her legal standard she would be just so much stronger than she is.

It is well known that the innovators take the data of their supposed argument from expediency, from the apparent progress of sister churches which do not require a learned ministry. They suppose that these churches are thus enabled to multiply ministers more rapidly than we do, and that this is the valuable cause of their more rapid growth.

This argument is wholly deceptive. The growth of a church is, in fact, the consequence of a large complex of various causes. That must, therefore, be a fallacious argument which pitches upon one of these causes and assigns to it the whole result. If the superior growth is sound, the most effective cause of all is undoubtedly the secret agency of that Spirit who is sovereign, and "bloweth where he listeth." A Presbyterian must be the last man to dispute this. Then, it is bad reasoning for him to put the main stress upon any external trait, since all of them must be of very subordinate force. It would, perhaps, be more correct for him to infer that it is the superior prayerfulness, zeal, and holy living of these churches which make them more prosperous, if they are more prosperous. Or it may be the great fact that mankind are born carnal must make the Presbyterian Church less popular, whatever line of expediency it might adopt, because it presents, to the world only the simple church order of the Bible, and the strict and humbling doctrines of orthodoxy stripped of all the accessories which might conciliate

bigotry, ritualism, or self-righteousness. This would have to be settled before a safe inference could be drawn.

Is it argued that the other churches present us with really useful ministers, devoid of classical training? I am happy to grant this. But I have two answers. These honored ministers would have been yet more useful with a Presbyterian training; and second, our Presbyterian rule would have saved those churches from the incumbrance of that larger number of untrained ministers at the other end of the scale who have done more harm than good.

I urge again, that before we throw away our time-honored system to imitate these churches, it is all important that we ascertain how much of their supposed rapid progress is real and solid. An honest sifting of statistics would result in a surprising shrinkage.

I will recall an authentic incident of this. In the early stages of this ill-starred discussion against our educational standard, it was asserted that in a given commonwealth where the Presbyterians could count only eleven thousand communicants, a sister denomination, with an uneducated ministry, claimed seventy-five thousand. But when close inquiry was made of a competent and learned leader of that denomination in that State, he answered that those statistics had been gotten together irresponsibly upon a spread-eagle plan, and that, coming down to hard-pan, his denomination had about fifteen thousand actual communicants!

There is a vital reason for this shrinkage in the very nature of an uneducated ministry which furnishes me another powerful argument. American Protestantism is characterized by a peculiar evil which I may describe by the term "spurious revivalism." It has been often called the "New Measure System." The common mischief resulting from all its forms is the over-hasty reception into the communion of the churches, of multitudes of persons whom time proves to have experienced no spiritual change. This disastrous result is in some churches wrought without the machinery of sensational excitements, as where Pelagian or ritualistic teachings encourage men to come in heedlessly and coldly upon a mere profession of historical faith. In most cases, however, these mischievous accessions are brought about

by sensational human expedients. The ill-starred artists stimulate natural remorse and the merely sympathetic excitements of the natural feelings, and deceive themselves and encourage their victims to be deceived into mistaking these agitations for the real and saving work of the Holy Spirit with a criminal recklessness. They overlook the vital distinctions which the religious guide ought to make, which I have pointed out in the twenty-first article of my *Collected Discussions*, Vol. I., in exposition of 1 Cor. iii. 10-15.

This lamentable art has grown in America to great dimensions; the victims of its deception are to be counted by myriads. Its effects for good are so evanescent, that a religious profession has become contemptible in the eyes of critical worldly men. Many churches are loaded down with dead members. Church discipline becomes impracticable. This nominal membership includes tens of thousands of silent infidels who have inferred from the manifest deceitfulness of their own hot religious experience the deceptiveness of the gospel itself. The average standard of Christian morals is degraded throughout the country. The experience of a long life compels me sorrowfully to testify against this method of accessions as the grand peril and curse of American Protestantism. It has shorn the gospel among us of the larger part of its purifying power, and Christ of his honor, until our average Protestantism can scarcely boast of higher moral results than American popery. The mortifying result is, that after ninety years of boasted activity and asserted success in this species of evangelism in these United States, breeding and good manners, domestic purity, temperance, business morals and political morals, are at a lower ebb than in any nation in Protestant Christendom. The evil has become gigantic, and demands solemn protest and resistance.

I know it is an unpopular thing for a minister of the gospel to bear this witness. But it is true. And my regard for that account which I must soon render at a more awful bar than that of arrogant public opinion demands its utterance. Now, rational investigation and the induction of facts concur to prove that a lowering of the education of the ministry is ever the main promoter of this spurious revivalism.

There are certain motives which make it popular with its

practitioners in spite of the hard lessons of experience and the cautions of God's word. Those motives are of a coarse nature. They are the love of power, the ambition to count numbers, the hasty lust for visible success, the craving for theatrical excitements, with mistaken zeal for the good cause. In a free country the only antidotes for this mental disease are an enlightened conscience and the refining influence of mental culture. Many uncultivated spirits revel in these mental intoxications, but to the man of refined culture they are odious and repellant. It is of more importance to say that it is the accurate knowledge of theology, psychology and exegesis which enables the true scholar to discriminate between these spurious excitements and spiritual excitements. It is the half-taught Christian heated with misdirected zeal and untrained in the analysis of motives who is ever prone to make the fatal confusion. Indeed we find the craving for this power over the crowd is so seductive, that many are swept away by it who ought to know better. And none seem to be safe from the unwholesome infection unless they combine most thorough conscientiousness with high mental cultivation and a right knowledge of church history. So long as we fill the pulpit with half-educated men, we need expect nothing else than the obstinate prevalence of this coarse counterfeit method, notwithstanding all the demonstrations of past experience.

This explanation is exactly confirmed by the facts. Which are the denominations most notoriously characterized (and cursed) by these "new measure" revivals, so-called? Precisely those which permit an uneducated ministry, and among them the most obstinate practitioners of the false method will never be found in the persons of their best educated pastors. If we are unwilling to have our church corrupted and blighted by this false fire, we must raise, instead of lowering, our standard of ministerial education.

Since 1861, our church and church courts have been blessed with a delightful unity and harmony of orthodox doctrine. Is there any one who is willing to part with this happy harmony? But there is a consideration infinitely more exalted and sacred than our own religious enjoyment. God has committed to us as a church the one true doctrinal testimony. He has made it our

solemn duty to maintain it, and it alone. This is our stewardship; we have to give an awful account for it. But I assert that the only guarantee of doctrinal unity and orthodoxy, next to the inworking of God's Spirit, is a thoroughly educated ministry. The ministry are the main teachers of the churches' doctrinal system. When they divide, they infallibly divide the people. Again, I prove by both reason and fact that the only human safe-guard, under God, for orthodox unity is the requirement of thorough education in pastors.

Consider: Our Scriptural, Calvinistic theology has ever been to the opinionative a stumbling block, and to the carnal mind foolishness. Its doctrines are profound. They involve the most fundamental points of rival philosophies. The root principles of the opposing systems of theology are intricately related to each other and to these philosophies. In order that a man may be intelligently and logically grounded in the Calvinistic system, and able to distinguish all erroneous plausibilities from it, he needs to have his faculties disciplined by the highest philological and logical training. Again, our candidates for the pastoral office need to be kept together, and kept together long, during this formative period, while they are constructing for themselves their permanent systems of thought. Students educate each other more than their professors educate them.

Every active-minded young man comes to the Seminary with some doctrinal crotchet of his own. If he is left to nurse it by himself it becomes the root of dissent and of dissension. But in his three years' intercourse the friction of other minds rubs off the angle, and the man is saved from what would have proved a mischievous tangential movement. He learns to walk freely and of his own choice in the King's established highway. The whole body of students is kept under the guidance of the church's most enlightened and approved teachers long enough to establish them in the straight paths.

And let facts speak. The Southern Presbyterian Church, by virtue of her requirement of thorough training, enjoys orthodox harmony. The churches who admit uneducated ministers lack it. The confession of Alexander Campbell was notorious, "that in his communion all sorts of doctrine were preached by all sorts of men." The Cumberland Presbyterian Church is now agitated by doctrinal dissensions.

I greatly respect the immersionist churches, known as "Missionary Baptist." Many of their ministers preach the soundest doctrine. Some of their congregations present the best standard of Christian morals and discipline which I see anywhere in our backslidden land. But I have myself heard in Baptist pulpits all grades of doctrine, from Pelagianism, through evangelical Arminianism, up to strict Calvinism. Hear Mr. Spurgeon's testimony on this point against his own denomination in England. So even in the Southern Methodist Church the greatest theological antagonisms are found. Some are moderate Calvinists, the most are evangelical Arminians. I have heard some avow the deadliest dogmas of Pelagius, by reason of their lack of theological learning, ignorant of the fact that John Wesley, in his treatise on original sin (against Dr. Taylor, of Norwich), had condemned them as sternly as Turretin, Edwards or Hodge.

I must now remind my readers that when the innovators argue from the seeming success of a partially educated ministry in other churches, they forget a cardinal difference between our constitution and theirs. It is this: They all have a wide safety escape through which to rid themselves of their clerical failures. Our Constitution gives us none. Our principle is, Once a minister, always a minister. A man whom we ordain may show himself upon trial to be half furnished, or unfurnished; he may lose all relation to any congregation as either pastor or stated supply; no company of God's people chooses him to be either teacher or ruler to them; still we make him until death a full presbyter and minister, with power of rule in Presbytery, Synod and Assembly, over Christians who refuse to elect him as their representative. He cannot be stripped of this power except by judicial process, or upon his own request by a semi-judicial process.

But in the Methodist Church, when an inadequately furnished minister evinces his lack of acceptance, and ceases to serve a pastoral charge or a district, he ceases to be a member of the Conference. He is no longer a ruler in their church, but becomes virtually a lay-preacher. Or else a similar result is reached by putting him on the superannuated list. The Missionary Baptist and Campbellite communions are independent

in church government, and this gives them the same safety-valve. The ill-furnished minister, when he ceases to be a pastor, practically ceases to be a ruler, for there is no authoritative church court above the pastoral charge.

We find, then, that while these powerful churches have a wide front door for the entrance of the ministers, they save themselves from the disastrous consequences of a partially educated ministry by keeping open a very wide back door. We have no back door at all; yet some would have us imitate the imprudence of these churches without their safe-guard. They seem to find, practically, that they need a very wide back door indeed.

I was conversing with a distinguished Baptist divine concerning the numbers and power of his denomination in one of the great Southern commonwealths. He said that they counted six hundred ministers. I asked him how many were engaged in actual ministerial work? He replied, About two hundred. In my astonishment I exclaimed, Then what are the four hundred doing? He answered that many were teaching, many farming; some were practicing medicine; a few were lawyers; and many, from age or infirmity, were doing nothing. A similar inquiry as to the Methodist ministry in a large commonwealth gave like results.

Much more might be said. I trust enough has been said to convince the sober reader that what our church needs is a more faithful and strict execution of our rules by the presbyteries, instead of a degradation of them; well would it be for our church to listen at this juncture to the voice of her dead fathers. Dr. John Holt Rice, Sr., was undoubtedly one of the greatest and wisest of his illustrious generation of great men, perhaps the one Virginian entitled to a place abreast with Thomas Jefferson in transcendent abilities, learning, and vigor of style. I wish every Presbyterian could now read his masterly essay upon the evils of an uneducated ministry, in the *Virginia Literary and Evangelical Magazine*, Volume VIII.

THE IMMORTALITY OF THE SOUL.¹

THEY to whom the Bible is a sufficient rule of faith have this great question happily settled for themselves. For in the gospel, life and immortality are clearly brought to light. The doctrine is expressly asserted in a multitude of places, and is necessarily implied in the whole moral system which the Bible teaches. But unfortunately there are now many who hold the word of God as not authority. Christendom is infested with schools of evolution and materialism, which attempt to bring this great truth in doubt by their "philosophy, falsely so-called," and which mislead many unstable souls to their own undoing.

To such as will not look at the clear light of Scripture, we propose to offer the inferior light of the natural reason. The sun is immeasurably better than a torch, but a torch may yet save the man who has turned his back on the sun and plunged himself into darkness, from stumbling over a precipice into an unseen gulf. We claim that we are entitled to demand the attention of all such doubters to the rational argument; for as they have set up philosophy against the Bible, mere honesty requires them to listen to philosophy, the true philosophy, namely:

There is certainly probable force in the historical fact that most civilized men of all ages and countries have believed in the immortality of their souls, without the Bible. Even the American Indians have always believed in the Great Spirit, and expected a future existence in the happy hunting grounds. The ancient pagans universally believed in gods and a future state, except where they were corrupted by power and crime like the later Romans and Athenians, towards the verge of national putrescence. Their mythologies express the real forms of

¹ From *The Presbyterian Quarterly*, of October, 1892.

their original popular beliefs. Their philosophers, Socrates, Plato, Aristotle, held the immortality of the soul free from the fabulous coloring of the myths, but upon more solid and rational grounds. The fact that the ancient Egyptians certainly expected the future existence, not only of the soul but of the body, is manifest from their extraordinary care in embalming and preserving all the corpses of their dead. The ancient and the modern Chinese believe firmly in the future existence of the dead, otherwise their ancestor-worship, which is nearly the whole of their practical religion, would be an absurdity. The Indian races are firm believers in immortality, except as the pantheism of the Buddhist doctrine modifies their hope of an individual personal consciousness beyond death. The Scythians, Goths, and Scandinavians were firm believers in a future existence. The whole Mohammedan world holds immortality and a certain form of future rewards and punishments, just as distinctly and firmly as the Christian. We are also entitled to use the fact that immortality has always been the corner-stone of the Bible religion, among both Hebrews and Christians of all ages, as the factor in this historical argument. For this religion has either a divine origin, or it has not. To those who hold the former origin the question of immortality is settled; those who deny its divine origin must, of course, teach that Christianity, like the other religions of mankind, is the outgrowth of some natural principles of reason and feeling belonging to human nature. Our argument is, that on this lower ground Christianity must still be admitted to be the most highly developed, the most beneficial and the most intellectual of human religions. So that the question which agnostics are bound to answer is this: How comes this highest and noblest development of the religious thought of mankind to grasp the doctrine of immortality most clearly and strongly of all, unless there be in the human *essentia* a rational basis necessitating such a conclusion? And here is presented the point of this logic from the almost universal *consensus* of mankind. How is it that nearly all men, of the most different ages and religions, when they think, are lead to think to this conclusion, concerning a fact purely invisible and beyond the range of all earthly experience? There must be rational and active principles in human nature controll-

ing this result of the thought of mankind. Is it not a strange fact and one entitled to give men pause, that the supposed materialistic results of recent speculations, claiming to be scientific and advanced, bring their civilized advocates precisely to that lowest and grossest ignorance concerning man's spirit and destiny which characterizes the stupidest and filthiest savages in the world, Australian Blacks, and African Bushmen? It is these wretches nearest akin to brute beasts, who do the least thinking of all human beings, who are found to have thought downward to the same blank and grovelling nescience, which this pretended advanced science glories in attaining.

Let not the followers of Auguste Comte and of Beüchner and Spencer claim to be the original positivists and agnostics. The honor of their conclusions was anticipated long before precisely by those members of the human family lowest down towards the level of the ostriches and gorillas.

The proposition which soundest reason teaches us is this: that while the bodies of men after death return to dust and see corruption, their souls which neither die nor sleep have an immortal subsistence, which is continued independent of the body in individual consciousness and activity. This, of course, involves the belief that the earthly human person includes two distinct substances, an organized animal body, and an immaterial spiritual mind. It is of the continued substantive existence of this latter we are to inquire. Obviously the preliminary question must be concerning the real existence of such a spiritual substance in man. For if there is such a thing in him, it is at once a matter entirely credible that this thing may continue to exist, after the body is dissolved. It is a question for evidence; and affirmative evidence, if found, is, in the nature of the case, fully entitled to our credence. In order to determine the preliminary question it is desirable to clear away certain very shallow misconceptions, and to settle certain principles of common sense.

What do men mean by a substance? The correct answer is in general, that substance is that permanent underlying *thing* to which our minds refer those clusters of properties, or qualities which our senses perceive. What the bodily senses immediately perceive is the qualities—the mind's own power of thought always

leads it to believe in the underlying substance. Let us take a most familiar instance: A sensible child says, "I have an orange." If we ask him how he knows he has one, he will say: "I see it, handle it, smell it, and taste it." Just so; with his eyes he sees the yellow color, rough surface, and spherical shape; with his fingers he feels also its shape, its pimpled surface, and its solidity; with his nostrils he smells its odor; with the gustatory nerves in his mouth he tastes the flavor of the juice. Thus all that his bodily senses directly give him, is a cluster of qualities, yellowness, roughness, roundness, moderate solidity, fragrance, savor. But this child knows that he has in his hand something more than an associated cluster of qualities, a substantial orange. His common sense cannot be embarrassed by reminding him that he has not eyed or fingered, or smelt, or tasted, substance, but only properties. This child will answer: "That may be true, yet my mind makes me know that there is substance under all these properties." For while I see yellowness, if I should ask myself the question, Yellow what? I should try to answer, yellow nothing. This would be almost idiotic. If I know there is yellowness, then my mind makes me know there must be a *something* yellow. If I see roundness, I know there must be a something that is round, and so with all the other properties. If you forbid me to judge thus that there is a substantial orange in which all these properties abide, you will practically make me idiotic. I gave one simple instance. The same facts are true concerning every perception which rational human beings have concerning every concrete object.

This principle of common sense has also another class of applications. Whenever we see actions or functions going on, we must think an *agent* in order to account for them. It does not matter whether we see the agent or not; if we know the actions or functions are going on, our minds compel us to believe that there is an agent producing them. Let us suppose for instance, that a clear-headed country child or red man, who had never seen nor heard of a church bell, should come to a town and there hear one ringing. His mind would prompt him to ask: "What makes that sonorous noise, the like of which I never heard before?" He is compelled to believe before he sees anything, there is some substantive agent that makes the

noise, though as yet unknown to him. Try to persuade him out of this conviction; ask him: Do you see anything making the novel noise? No. Then why not conclude that nothing makes the noise? He will answer: because I am not an idiot; I hear the noise; if there were nothing there could be no noise to hear; I must know there is a substantive thing, an agent producing noise; otherwise noise could not be.

Now, these are the simple principles of common sense, which inevitably and universally regulate the thinking of every human being who is not idiotic or crazy, about every object of sensible knowledge. If the reader doubts this, let him watch the perceptions and thinking of himself and his fellow-creatures until he is fatigued and satisfied.

We come now to the simple application. Every man is absolutely conscious that he is all the time thinking, feeling, and willing; then there must be a substantial agent which performs these functions. Every man is conscious of powers and properties, of thought and feeling; then he is obliged to know there is a substance in him in which these powers and properties abide.

But what do we mean by the notion of substance? We are so familiar by perception with material substances, that possibly thoughtless persons may conclude that we have no valid notion of substance, except that which possesses the material properties, such as color, weight, solidity, size, shape; and such a thoughtless person, though compelled to admit that where so much thinking, feeling, and willing go on there must be a substance which thinks, might conclude hence that this substance must be material, the body, namely, or some part thereof. But the use of a little grain of common sense corrects this folly. Anybody knows that air is a substance as truly as granite rock, but air has no color nor shape, nor do we find out by our senses that it has any weight. Every person not idiotic believes that light is a substance, or else a motion in a substance, ether. But this ether has no color, or shape, or weight, nor is visible or tangible, nor did anybody ever smell it, or taste it, or hear it. Yet all teachers of physics tell us they are as certain of its substantial reality as of that of granite rock. For why? Because our common sense makes us know that, if there were not such a substantive thing as ether, there could never have been any

light for anybody to see. Thus we prove that the gross qualities of matter are not necessary to the rational notion of true substance. We are bound to believe in substances which have not those material properties. Then human souls may be one real kind of substances.

Does some one ask, What, then, belongs to the true notion of substance? Our common sense answers, It is that which is the real thing, a being possessed of sameness and permanency, the enduring basis of reality on which the known properties abide. This description includes spirit as fairly as matter. We assert that we shall find spirit to be that kind of substance which has no material sensible properties, but which lives, thinks, feels, and acts.

Suppose, now, some student of material science should tell us that none of his scientific observations have detected any spirit in any human anatomy. He means the observations made by his bodily senses. Now, how idle and silly is this! Of course, the bodily senses do not detect the presence of spirit, since it is correctly defined as a true substance, which has no bodily properties. This talk is just as smart as that of the booby who should say: "I don't believe there is any such substance as air in that hollow glass globe, because my eyes don't see anything in it; and when I poke my finger into it, I don't feel anything; and when I poke my nose and my tongue into it, I neither smell nor taste anything." Of course he does not, because what is air? A gas transparent and colorless, without solidity, tasteless and odorless. Yet everybody except that booby knows that that glass globe is full of a real substance named air, for its presence there is proved by other reasonable evidences to common sense. So it is mere babble for the materialist to say that the presence of spirit is not attested to him by the observation of any bodily sense. For the question is, may there not be in man another substance not possessed of sensible, material properties, and yet as real and as permanently substance as any stone or metal?

Let our common sense now take another step in advance. When I am directly conscious of a thing, I know it as absolutely as I can possibly know anything. If I were to doubt my own consciousness, I should have to doubt everything else, because everything I know is known to me only through the medium of

this consciousness. I now assert that the reality of the spiritual substance in me, is known to me by my immediate consciousness, and must be so known, every time I know anything outside of myself. For, the reality of the self which knows, is necessarily implied in the act of knowing everything else than self.

We are here stating the simplest possible truth of common sense. Let us take the plainest instance possible. We hear a wide-awake child exclaim: "I see the mule!" Who sees it, child? I do. Then there must be a *me* to do the seeing even more certainly than there is a mule to be seen. Child, if you are certain there is a mule, then you are still more immediately certain there is a *me*, a self, an *ego*. As soon as you state this the child sees that it is and must be so, unless he is an idiot.

This is exceedingly simple. Yes, so simple that no doubt the child often looks at mules, trees, houses, etc., without stopping to think about it. But when he is stopped by the question, he inevitably thinks it. He is more certain of the existence in himself of the *ego*, the substance which thinks, than he is of the reality of any and everything else about which he thinks.

These views of common sense are so simple, so easy, so indisputable, that people are tempted to overlook how much there is involved in them. Let us pause then and review. We have found that wherever we see properties we must believe in substances to which the mind refers these properties. Wherever we see action going on we must believe in substantive agents. Sensible material properties are not necessary to a true and permanent substance. Since every man is conscious of much thinking, feeling and choosing, he must believe in the real existence in himself of a substantive agent which does this thinking, feeling, and acting. If he did not believe in the reality of the *me* which sees and thinks, he could not believe in anything he saw or thought. Therefore he knows there is in him a thinking substance, more certainly than he knows anything else or everything else in the world; and these principles of common sense are so simple, so fundamental, so regulative of all thinking and knowing that if you could really make any man deny their force you would make that man an idiot. So direct and perfect is our demonstration.

The doubter may reply: "Of course, so much is indisputable. I must know there is a substance in me which thinks; but may not that substance be body, the whole *sensorium* or nervous structure inside the bones and muscles? or the brain? or the little cluster of lobes between the top of the spinal marrow and the base of the brain? or the pineal gland in the centre of that cluster?" This is a fair question, and it shall be fairly met. We know the properties of matter pretty well through the perception of our bodily senses. The inquiry now must be, whether we cannot know through the perceptions of consciousness the essential properties of this something which thinks. When we have informed ourselves certainly of these, we can compare them with the material properties, and decide this plain question of common sense: *Whether or not the two kinds of properties are enough alike to belong possibly to the same kind of substances?*

As intimated, we learn the properties of material things by the observations of our bodily senses. We learn the properties of the something in us that thinks, chiefly by the observations of consciousness, and also by watching and comparing the actings forth of the thinking agent in our fellow-creatures. Now, we are actually told that some are silly enough to assert that no observations are valid except those made upon outward things by our senses. When a child uses his eyesight to look at an orange, he finds out correctly that it is yellow. When he uses his ears to listen to the bell, he finds out certainly that it is sonorous. But they think this child finds out nothing certain concerning the being within, which does the seeing and listening, by watching its inward consciousness, because, forsooth, this is not sensuous observation! How stupid this is may appear by a plain question: would that child's hands and ears tell him anything about the properties of the orange and the bell, unless his sense perceptions of them were reported in his consciousness? Suppose he were asleep when the bell rang. These sonorous wavelets would pass through the air and agitate the *tympanum* and inner nerves of his ear just the same, but the child would know nothing about the bell. Why not? Because his consciousness does not take in the sound. Suppose that child is awake, and you hold the orange before his eyes, but his mind is so monopolized with an entrancing vision of next

Saturday's picnic that he fails to notice it at all. Again, his eyes tell him nothing about the orange. Why not? He was not attending to it, which is to say, the perception of it did not enter his consciousness. It is only by the mediation of consciousness that the observations of the senses tell us anything certain. Then it is the testimony of consciousness which is immediate and primary, while that of the senses is secondary and dependent. If the observations of consciousness are not to be trusted, those of the senses are for the stronger reason not to be trusted.

Hence it follows, that of all the things which we certainly know, the things of the inner consciousness are the most certain. First, then, I am immediately conscious that the something in me which thinks and feels, the self or *ego*, is all the time completely identical; however I may notice it at different times, I am conscious of its complete sameness; for instance, I go to sleep, that is, my bodily senses shut themselves up and for a time remembered consciousness is suspended. I wake, consciousness revives, and immediately I know that it is the same identical self which went to sleep some hours before. Sleep has made a deep gap in my sensations and my remembered thoughts and feelings; but I am certain it has made no gap at all in the sameness of the self. For, again, I am conscious of feeling the heat of fire, then afterwards of feeling the intense cold of the north wind; or at one time of being frightened by a malignant bull, and afterwards of being charmed by a mocking-bird; now of looking at an ugly clod, then of looking at the splendid sun. Now heat and cold are opposite sensations; fear and pleasure are opposite emotions; the ugly little image of the clod extremely different from the image of the sun; but I know that the self, the *me*, which experiences these different and opposite sensations and thoughts is completely the same. I believe in its perfect continuous identity; and let the reader notice that this belief cannot be a result from any process of comparison or reflection; because I must be sure beforehand of the sameness of the mind which does the comparing, or else the comparison is worthless, and concludes nothing. For instance, suppose two pairs of two children's eyes in separate rooms were looking at two apples; could there be any comparison determining which apple was the larger? What would the dispute be worth be-

tween the two little fools, each repeating that his apple was the bigger? Let one and the same pair of eyes look at both apples, then only comparison is possible deciding which is the bigger apple.

I purposely make these instances perfectly simple. They are fair, they convince us that the conviction of the mind's own identity has to be presupposed in order to authorize the mind to draw any other conclusions, by any process of reflection or comparison whatsoever. So that the first and most certain truth which I am obliged to know, concerning the something in me which thinks, is its perfect identity, its absolute sameness. But I see that nothing organized has this perfect sameness. No animal body, no tree, or plant remains the same two days, every one is losing something and gaining something, growing, dwindling, changing. Even the rock and the mountain change. The rain and the frost are continually washing off or scaling off parts. But I repeat; especially is perpetual change the attribute of every living, material organism, change of size and form, and even of constituent substance. Now, none of those who deny the spirituality of the mind ever dream of saying that thought can be the function of inorganic matter. No, they try to say, thought may be the function of organized matter, of matter most highly organized. But they admit that the most highly organized material substances are those which change most quickly. I make, then, this point: the self which thinks must be immaterial, because it possesses absolute identity, and no organized body of matter ever remains the same, in that high sense, two days together. In the second place, I know that the something in me which thinks is an absolute unit. This is involved in its identity. It is impossible for me to think of this *me* as divided or divisible. I am conscious it is undergoing constant changes or modifications in the form of different successive thoughts, perceptions, feelings, and volitions; but I know that this *me* is the unit-centre in which all these meet and out of which all my volitions go. I experience a variety of mental modifications, but each one of these is qualified by the same absolute unity. If I try to think of my sensation, my idea, my feeling, my volition, divided into halves or quarters, the statement becomes nonsense to me. But with all matter the case is exactly opposite; the smallest body of matter is divisible into

smaller. Each part subsists as an aggregation of smaller parts. The properties of matter are all divisible along with its masses. The whiteness of this wall may be literally divided along with the substance of the plastering into the whiteness of a multitude of points in the wall. Let an electrified steel rod be cut in two, we have two electrified rods; so the electricity may be subdivided along with the matter itself; but each affection of the mind is as complete a unit as the mind is. Thus I am bound to think that mind is immaterial. In the third place, my perceptions make me acquainted with the attributes of matter, and I perceive that they all belong to one class; they are all attributes of extension. The smallest material bodies have some size, all must have some shape or figure, they all weigh something, though some are lighter than others, they all subsist in the form either of gasses, or liquids, or solids. Most of them have colors. But when I turn to mind and its processes, I know that none of these attributes of extension can apply to them at all. Let us make the attempt. Let us try to say that this fine mind is finer than that other, because it has a circular or elliptical shape while the inferior one is three-cornered. Attempt to explain the fact that Mr. Calhoun's mind was greater than a peasant's because it was so many inches bigger, or so many pounds heavier. Let us attempt to give figure to our thoughts and feelings, or color, saying that some are three-cornered, some square, some circular, some red, some blue, and some black. Let us try to think of the top and bottom of a sentiment or a volition as we do of the top and bottom of a brick or a house. We speak of arguments sometimes as solid, but what we mean is that they are logically valid. We know that we cannot think them solid in the material sense of stones or wooden blocks. The very attempt to fix any attribute of matter upon mind or upon its processes becomes mere idiotic nonsense. This shows that the attributes of matter are not and cannot be relevant to mind. Why? Because they are opposite substances. Mind is pure, immaterial spirit; all the bodies our senses see are extended, divisible, ponderous, figured, in a word material.

In the fourth place, when I watch myself I am immediately conscious of my free-agency. In certain respects I choose for

myself what I attempt to do; nobody and nothing outside of self make me choose what I choose. The *me*, the thinking self, has this remarkable faculty of power, of self-determination. Thus self is an original spring-head of new actions and effects. Let no one deceive himself with the shallow notion that this power of free-agency is merely unobstructed execution by the muscles and members of purposes or volitions put into the soul. This is but half of the fact; the soul is free in forming those volitions. It is not forced to them, but is self-determined in them. Minds are originators of new actions and effects. Now matter has not and cannot have such free-agency. Science pronounces absolute *inertia* to be the first law of matter. Experience shows that if a material mass was once lying still it will be still in the same place forever, unless a force from without pushes it. If it is moving in any line with any given speed it is obliged to move on thus forever, unless something outside of itself stops it. Matter can receive effects; it can transmit them; it never originates any effect. It is impossible to conceive of matter as exercising intelligent choice, endowed with rational free-agency. He who tries to think thus of matter makes himself to that extent idiotic. But mind has free-agency, it chooses, it originates. Therefore mind must be a different substance from matter, an opposite substance. Mind is spiritual, matter is corporeal.

In the fifth place, corresponding to our conscious free-agency is our consciousness of our accountability, or moral responsibility for our conduct. This is an immediate conviction of our conscience which it is impossible for us to escape. It is equally impossible for us to ascribe accountability to material bodies. If I, by a volition of my free-agency, strike and wound the head of a man without provocation, I know it is a sin for which I am morally responsible. The wounded man knows it, every spectator knows it. Another man when walking in the forest has his head struck and wounded by a falling branch which the wind blows from a tree; this is not a sin but an accident; neither the wind nor the dead branch is accountable for it. The man would be idiotic to seriously judge either of them morally responsible. Here then is the crowning contrast between mind and matter: minds are accountable because they are intelligent and free-agents;

material bodies cannot be accountable; therefore we conclude again that minds and bodies are opposite kind of substance. Minds are immaterial substances distinct from the bodies which they inhabit for a time. They are indeed combined in the animated human person in a mysterious and intimate manner. Such combinations are credible, for similar ones frequently occur. But the two substances combined must be distinct, because it is impossible that any essential attribute of the one substance can be attached in thought to the other. Now let no one say that this is but a metaphysical argument. In the sense of such charges I deny it. It is not metaphysics, but the unavoidable conclusion of common sense. I ask the reader to go over these five steps again carefully. He will find that there is not a single position assumed which every man does not know to be true by his own necessary consciousness without being a philosopher at all. Every point in my argument is one of those necessary principles of knowledge which are found universally regulating the thoughts of all the people in the world who are in their right minds, principles of thinking which no man can reject from his mind without reducing himself towards the position of a lunatic or an idiot. It is from these simple principles I have drawn the conclusion that the mind, the something in us which thinks, is not a mere function or quality of something else, but a true permanent substance in itself; and since all its essential properties are the opposites of those of material bodies, souls are distinct kind of substance, immaterial spirits. I invite the reader to break these conclusions if he can do it honestly and truthfully. The more he tries the more he will be convinced that he cannot, because the premises are the necessary first facts of knowledge, and the conclusions follow by the force of common sense.

This fact that our spirits are naturally monads, shows that they will never cease to exist, by a powerful analogical argument. They may be justly called spiritual atoms, single and indivisible, in the same high, absolute sense with the ultimate atoms of matter. All science teaches us that no such atom of substance, once brought into existence by the Creator, is ever annihilated. This is the fixed conclusion of the material sciences themselves, as astronomy, chemistry, physics, and biology. None of these

sciences know of any kind of destruction of beings except dissolution and separation of their parts. The parts still exist as really as before in new states and places. When a piece of fuel is consumed in the fire, it is only ignorance which supposes that any of its substance is annihilated. All educated persons know that though the fuel is consumed, every atom of it still exists; science is able to catch and weigh every one of them. The mineral atoms remain in the ashes; the watery atoms have floated upward as vapor; a part of the carbon particles are sticking in the chimney-flue in the form of soot; another part is floating off in the form of smoke, as volatilized matter, and a part in the form of transparent carbonic acid gas; not an atom ceases to exist. Every fact in the whole range of experience goes to prove that not an atom of existing substance is annihilated in the greatest changes known to man; they only change places and states. Why then should people suppose that any change can annihilate the spiritual atoms—rational souls? He who ignorantly thinks that death does so, has the whole analogy of human science and knowledge against him. On which side then does the burden of proof lie? Manifestly on the side of the unbeliever. Every probability is against him: he must bring us positive proof on the opposite side demonstrating that souls are annihilated at death; otherwise the whole powerful probability arising out of this analogy remains in force in favor of immortality, and I assert there is not a spot in all the realms of human knowledge where the materialist can find one real ray of rebutting evidence. Every fact of physical science is against him; every doctrine of mental science is against him. He discredits the resurrection of Moses, Lazarus, Jesus, and Tabitha as fabulous. Then according to him, not a single witness has ever come back from the invisible region beyond the grave to testify whether men's souls live there or not.

I admit that I have not yet proved the immortality of the spirit positively and affirmatively. But I have shown that this proposition is credible and may be capable of proof. For, since spirits are substantive beings, and distinct kind of substances from bodies, the destruction of the bodies they inhabit no longer presents any necessary evidence that the spirits are destroyed by bodily death. It is just as possible and credible that the

death of the bodies may have no more influence on the continuing existence of the spirits than the stripping off of a child's clothing has upon his personal life. I am ready to admit that the first impression made on our sensations when we witness a death is different. The death of a human body is very impressive and awful. When we see the marble complexion, the glazed eye, the absolute and final arrest of sense and motion, the irreparable change from visible activity to dissolution and dust, it is not surprising that the first impression should be, with us sensuous creatures, This is the end of the whole being. The fact that the spirit of the deceased never returns in the ordinary course of nature to tell us whether it is still alive and active, awes the imagination, and suggests to the fancy the negative. But here we must remember how frequently the first sensible impressions are entirely delusive, and how they are contradicted by reason and fuller observation. The first impression with the child when he sees the acorn drop from the tree and lie frozen in the wintry earth, is that the acorn is dead. It is hard for him to believe that this little dry fragment of matter is the germ of a tree which will live for centuries a monarch of the forest. Nearly all the actual exploits of chemistry and electricity are equal surprises, wholly contrary to first impressions. Who supposed at first that gas tar, a thing black, stinking, and filthy, contained all the glories of the aniline dyes, until Hoffman proved it? How hard is it to believe that all the planets except two are much larger than this huge globe of ours, when they appear to us nothing but minute points of light in the nocturnal sky! Yet the astronomers prove by strict mathematics that they are larger than the earth. All intelligent persons see so many instances of the falsehood of these first impressions on sensation and fancy, that they cease to regard them as any tests of truth. We know that we must look beyond them for more reasonable proofs, and the question for us is, whether facts and reason do not prove that the immaterial spirit survives the death of the body.

The answer is, Yes.

For, *first*, strong probable proof appears in this fact, that the identity of the living spirit does certainly remain unchanged throughout sundry great changes undergone by the body. We

know that every human body changes from a living *fetus* to a living infant. It then changes into a grown man in his full vigor. It then passes into the decrepitude of age. But these impressive changes in the conditions of the body result in no change in the identity of the spirit which inhabits it. This is conscious of its own sameness throughout the changes. Hence there is a clear probability that the next change, bodily death, also may not interrupt the being of the living spirit. The body not only grows, but it may lose half its substance by emaciation from sickness; it may lose a whole limb by wounds or amputation; but the spirit consciously lives on without change or diminution of spiritual powers. This shows it to be probable that the final amputation, cutting off all its limbs from its use, will not interrupt the spirit's life. Indeed, we are assured by physiologists that there is a constant change in the material molecules which make up our bodies at any one time. Every tissue experiences wear and tear and nutrition. Particles which yesterday were vital parts are now "*necrosed*," and are expelled out of the system as alien matter, while their places in the living tissues are taken by new particles which yesterday belonged to a different vegetable or animal. It is every way probable that there is not one single molecule at this time in our bodies which was there some years ago. But while, between these two dates, our bodies have undergone this sweeping change, and those of that previous year have as literally and absolutely returned to their dust as will the corpse of the friend whom we bury to-day, our spirits are certain of their unchanging life and identity. In one word, every man's body is daily undergoing gradual death; this makes no change in the life and identity of the spirit. Hence the summary death of such a body presents no real evidence of the destruction of the spirit.

Second, Every time we go to sleep and awake we have probable proof that the spirit remains awake after the sleep of death. We are familiar with this nightly change. It does not frighten us or impress the imagination. But let us consider it as a rational man would, should it have come to him as an entire novelty. When we grow drowsy we are conscious of approaching insensibility. The senses are all ceasing to act and closing up. If the mind had no experience to teach it better and listened to the first

impression it would doubtless conclude: "This insensibility will be final; this last moment of consciousness is the last I shall ever experience." But every morning serves to correct this awful impression. Every awakening teaches us that this mimic death of the body has not in the least interrupted the life and conscious identity of the spirit. Hence the probability grows strong that the deeper sleep of death will not interrupt it, that this also will have its sure awakening.

Third, It is urged by materialists that so far as all experience goes the thinking being is dependent for all its perceptions upon its bodily sense organs and for the execution of all its volitions upon its nerves and muscles; hence they would have us infer that the soul is entirely dependent on its body for all its knowledge and activity, which is practically being dependent on the body for its existence, since without either knowledge or activity the soul would be practically non-existent. But how does the soul use its bodily organs of sense and motion? Obviously in the same general mode in which it uses external instruments.

The soul feels external bodies with its arms as it would feel bodies somewhat more distant with a stick. The soul sees luminous objects with its eyes just as it sees with a telescope or opera-glass. It hears sounds with its ears, much as it hears them with an ear-trumpet. The blind man does not lose his power of feeling by dropping his stick. The huntsman does not lose sight by breaking his field-glass nor the sense of hearing by losing his ear-trumpet. We know perfectly well that these bodily organs are not our minds but only instruments which our minds employ; therefore the loss of the instruments does not imply the destruction of the mind: it only leaves us in ignorance as to the other instruments of knowledge and action which the mind will learn how to employ when it shall lose these bodily ones. But more correct thought shows us that the spirit in its disembodied state will most probably not need or employ any organic instruments of perception. The only reason why she needs them now is probably because she is immured in an animal body. Her case is that of a state prisoner, who is confined for a time within the walls of a castle. He has been allowed five loop-holes in these walls in order to hold some intercourse with the outer world. At death the liberator comes

and proposes to demolish the roof and walls of his prison. Shall the prisoner be so thoughtless as to complain and object that in destroying his walls they are depriving him of his loop-holes, in consequence of which he will be able to see nothing of the outer world? The answer is plain: the only reason he needed loop-holes was that the wall imprisoned him; now that it is gone he needs none. He has free unobstructed light and vision all around him.

Fourth, The independence of the separate thinking substance is more strongly proved by this fact: that a number of its higher functions are performed without any dependence upon any bodily organ. Our eyes are the instruments with which we receive visual perceptions; through the ears we receive the acoustic; through the fingers the tactual; through the nostrils the olfactory; through the palate the gustatory. But our abstract general ideas, our cognitions of God, of time, of space, of infinity, of subjective consciousness, are ministered by no sense organ. Every avenue of sense may be locked up or disused, and yet these highest functions of spirit are in full activity. The animated body is still there, but it is contributing nothing to these most important functions of soul. Especially does the spirit assert its essential independence in its self-prompted volitions. We will rest this argument more especially upon that well known class of volitions whose object is not to move any bodily organ or member, but to direct the mind's own attention at will to its own chosen topic of inward meditation; and whose impulse does not come at all from any outward impression, but from the preference and purpose of the mind itself. Every man knows that his mind frequently performs these acts of voluntary attention prompted by nothing outside the mind, and directed to nothing outside of it. Here are cases of the mind moving itself, with which the body has nothing to do. The mind in these actions is as virtually disembodied as it will be when it shall have passed at death into the spirit world.

Some recent physiologists do indeed assert, in the interest of materialism, that we are partly mistaken in these facts. They say that every action, even the most abstract and subjective, in the mind is attended with brain action in the form of some molecular changes or readjustments in the nerve filaments and the

particles of grey matter forming the outer surface of the cerebrum. They would have us believe that when a man, meditating with closed eyes, revives the mental idea of the horse or the tree which he saw a year ago, there is as real nerve action, and indeed the same nerve action, in the brain as that by means of which he first got his visual perception of that object. They would have us believe that when we think our most abstract cognitions of God or eternity, there must be as real brain action as when we are hearing the sound of a trumpet. Thus they would make out our premises to be false, denying that the mind performs any functions of thoughts or volitions independently of brain motions.

When we ask them how they prove all this, we find there is no valid proof, and the theory remains a mere wilful, idle guess. We ask them, Has anybody ever *seen* these motions of nerve matter and changes of relative position between filaments and particles of grey matter? They confess, Nobody. They confess that they will be too minute to be perceived by the human eye. They know that no human eye ever had, or ever can have, an opportunity to watch them, because no vivisection could uncover the ganglia at the base of the brain, where they imagine these things go on, without instantly killing the subject of the experiment. Their indirect arguments are nothing but vague suppositions. The only real source of the fancy is the stubborn determination to reject the teaching of common sense that there is a separate spirit in man, and to make him no more than a material animal. Their real logic amounts only to this worthless argument in a circle: We do not choose to admit the existence in man, no matter how strong the proofs, of anything except animated matter. We are conscious that a great deal of thinking goes on in man; therefore animated matter does it all; therefore nothing exists in man except animated matter. This theory of universal molecular brain actions has never been proved, it is only guessed; it never can be proved.

But were it necessary, we might admit that coördinate nerve actions in the brain attend and wait upon every, even the most wholly abstract, process of mind, without in the least weakening our fourth argument. There are three remarks to which we ask the close attention of the reader, either one of which is sufficient

to prove this. First, the wonderful faculty of memory must be accounted for, whatever theory is adopted. This materialistic theory must teach, as it avowedly does, that the brain is literally and materially the storehouse of memory. It must teach that the way ideas are retained in memory is this: A new mark is imprinted on a portion of the brain matter when the idea first comes through sense-perception; and the reason why the idea remains in memory, and may be revived in recollection, is that the mark remains permanently on the brain matter, like a scratch, for instance, made by a diamond upon a pane of glass; and the immediate cause why the idea revives again in recollection is this, that the portion of brain matter has moved again with a counter-movement, the exact reëction of that which took place when the mark was first printed on it.

Some of them give us descriptions of what they suppose the action and counter-action of the mark to be which are all as imaginative and as truly without proof as the history of Jack the Giant-killer and his beanstalk. The most popular guess is this, that when the sense-impression first came into the brain it caused a change of adjustment between the ends or tips of certain nerve filaments and certain little masses of grey matter. So when the idea is revived in recollection, this results from the reëctionary change of position between those little masses and nerve filaments. We care not to discuss the particular shape of any of this idle dreaming. According to its authors every idea received into memory and stored up is represented by a distinct material mark upon a material mass. Now one remark breaks all this down into hopeless folly, viz., that the brain is a limited body while the power of human memory is indefinite and unlimited. The more ideas an educated man has the more new ideas he can acquire. Some great men know a hundred or a thousand times as much as other stupid and thoughtless people. But their brains if they differ in size at all are only larger by a few ounces at most. Voltaire had a multitude of ideas and a marvelous memory. His brain was one of the smallest found in a grown person. What is the use of saying that the mark printed on the brain by each idea may be very small? When the number that may be printed is absolutely unlimited the surface must get full no matter how small each mark, long before

the stock of ideas in memory is completed. Now add another fact, that it is most probable no idea once gained by the mind is ever lost wholly from the memory, but that all remain there unconscious and latent, and capable of being revived by some mental stimulus of suggestion during our future existence: this theory of material nerve markings becomes worthless and idle.

Second, Every man's mind knows that it usually directs its own attention by its own will. When he is lying in darkness with closed eyes he thinks of absent and abstract ideas of God, of duty, of eternity, and not because he is made to do so by physical causes, but *because he chooses*. He directs his own attention to these supersensuous thoughts. We know that sometimes men's minds do drift in involuntary reverie, but we know that men can stop this when they choose. We know that in most cases the mind directs its own thoughts, that it is not led by the nose, by exterior physical causes, but guides itself by its subjective will. Now let it be granted that all our mind processes, even the most supersensuous, are *accompanied by* molecular movements in the brain. Consciousness gives the highest of all evidence. This assures us that if there are any such molecular movements they are only consequences and not causes of the supersensuous actions of the mind. It is the mind that starts the process, it is the brain which responds. Let us suppose that never having seen horses and mounted men until recently it so happens that every time that we have seen the men they were mounted upon their horses; thereupon some chopper of logic like these materialists begins to argue: Gentlemen, you have never seen those men except upon their horses; you have never seen the men move but what you saw the horses move with them; therefore you are bound to believe that the man and the horse are the one and the same being, that each is the literal Centaur. We should reply to him: Nay but oh fool! have we not seen that it is the men who govern the horses, that the horses only move when the men spur them; therefore we know without waiting to see the man dismount that the horse is not one and the same being with the man but an inferior being and the servant of the man.

Third, We know that we are free-agents better than we know

any physiology, false or true. We know that we are free-agents even better than we know that we have vitalized brains inside our skulls, for we know our free-agency by immediate consciousness; but we know every fact of outward observation only as it is reported through this consciousness. Now if this materialistic theory of thought were true, we could not be free-agents. Every thought, feeling, volition, which arises in us would be the effect of a material movement. But matter cannot have any free-agency; and if matter thus governed us we could have none, our very nature would be a lie. Our own hourly experience gives us a perfect illustration of this argument. Our minds do have a class of ideas and a class of feelings whose immediate causes are found in certain movements of our corporeal nerve organs; they are what we call sensations. And about having them, when once those nerve organs are impressed by any external body beyond our control, we have no free-agency at all. If the norther has struck us, we have no more free-agency about feeling chilly, if a stone thrown by a bully has struck us, we have no more free-agency about feeling pain, if another man holds a rose under our nostrils, we have no more free-agency about smelling fragrance than if we were machines or blocks of stone. The knowing subject, mind, has indeed gotten the idea, the feeling; but it has gotten it from a material nerve organ; hence the mind wields no freedom in having it. So, if this materialistic theory of thought were true, if all our supersensuous thoughts, feelings and volitions were propagated from material nerve organs, we could have no free-agency anywhere. But we know we are free-agents to a certain degree.

At this point the solution becomes easy with those cavils against the spirituality and immortality of the soul, which are drawn from the results of concussions of the brain, suspending consciousness, and of lunacy and dotage. If the reader has attended to the remarks last made he will easily see that these facts do not prove the soul to be the brain. They only prove that in our present life the soul uses the brain as its instrument for a part of its processes. In dotage it is the bodily organs which are growing dull and decaying; this is the reason that recent impressions made through the senses are weak and consequently transient. But the facts impressed by sensation in

previous years, when the old man was in his bodily prime, are as strong and tenacious as ever. The old man forgets where he laid his pipe half an hour ago, but he remembers the events of his youth with more vividness than ever. This proves that the decay is only organic. Were it spiritual it would equally obliterate early recollections and recent ones. Again, in the infirm old man, while the memory of recent events seems dull, the faculties of judgment and conscience are unimpaired. His advice is as sound as ever, his practical wisdom as just. The best scientific men now regard all cases of mental disease as simply instances of disease in the nerve-organs, which the mind employs while united to the body. Borrowing the language of pathology, cases of lunacy are but "functional derangements" of the mind. There is no such thing as "organic disease" of the spirit. Whenever the wise physician can cure the nervous excitement by corporeal means, sanity returns of itself to the mind. If lunacy continues until death, it is because the disease of the nerve organ remains uncured. The mind is not released from the disturbing influences of the incurably morbid action of its instrument until the mysterious tie which unites mind to body in this life is finally sundered.

Another objection may here be noted: that a parallel argument may be constructed to prove the spirituality and immortality of the souls of brutes. The higher animals seem to have some mental faculties, as sensation, passions, memory, and a certain form of animal spontaneity. It is asked: Why do not the same arguments prove that the cause in brutes which perceives, feels, remembers and acts, is a distinct spiritual substance, and therefore capable of separate and independent subsistence without the body? One answer is, suppose they did! This would be no refutation. The conclusion might clash with many of our prejudices, might surprise us greatly, might perhaps dictate a change in much of our conduct towards the animals. If the premises of a given reasoner are found to prove another conclusion in addition to that which he had asserted from them, this is no proof at all that his argument is invalid. Let us suppose that a prosecutor of crime has argued that certain established facts prove John and Thomas to be guilty. It is no answer to cry that the same facts would also prove Richard to be

guilty. What if they do? It is still proved that John and Thomas are guilty. The only change in the case is that we now find the guilt extends further than was at first asserted. But in the second place, an argument for the spirituality and immortality of the higher animals will be found very defective when compared with the full argument for man's immortality. The heads of argument which we shall hereafter urge for the latter, are found to have no application to the brutes. But they are far the strongest arguments. The real nature of that principle in them which feels and remembers, is very mysterious to us; the medium of speech is lacking between us and them. The real nature of the brute's faculties is extremely obscure to us, and for this reason we are ignorant of what becomes of that principle when their bodies die. But the nature of the human faculties we can know thoroughly, and therefore we are able to infer what becomes of that spiritual substance endowed with those high faculties when men's bodies die. But obscure as is the nature of the sentient principles of brutes to us, it seems very clear that they lack those faculties and powers on which our argument, as to man, is chiefly founded.

Brutes have sense-perceptions, sensibilities, and memory. But there is every reason to believe that their memory is only of individual ideas of particular material objects. They never form rational, general concepts; they cannot reason concerning collective classes of things. They think no abstract, general truths; they have no judgments of taste or of conscience. Of all these, which are the truly spiritual functions of mind, of all notions and judgments of the beautiful, of the sublime, the obligatory, the morally meritorious, the regulative principles of logic, the rational purposive volition, they seem as incapable as is a vegetable. But these are precisely the functions of human minds, which, we are conscious, go on independently of corporeal organs. These are our crowning proofs of the spiritual independence of human minds.

Fifth, Our argument for man's immortality must now involve as a premise another great truth, the existence of a rational, personal God. We shall not pause to argue this, because it needs no argument. Men can only deny it at the cost of outraging every principle of common sense. The very existence of

a temporal universe proves an eternal God. The universal order of this universe, the appearance of design and contrivance everywhere in it, prove the existence of an intelligent and wise Creator. Every function of conscience within us recognizes a righteous, divine Ruler above us. Since the Creator is wise, we know that he had rational purposes for all that he has created. Therefore we know that if man had been made only for a brute's destiny, God never would have given man capacities and faculties so much above the brute's, so useless and out of place in a temporal and corporeal existence. The brute's instincts, animal sensibilities, and partial memory of particular ideas, coupled with his lack of reason, lack of forecast, lack of conscience, incapacity for religious and abstract knowledge, and lack of all desire for them, qualify him exactly for a temporary, corporeal life. But man's rationality, his unavoidable forecast concerning the future, his moral affections and intuitive judgments of duty, merit, and guilt, his religious nature, his unquenchable hopes and desires for unlimited moral good, are utterly out of place in a creature destined to only an animal and temporal life. No sensible man who believes in a God can believe that the Creator has made such a mistake. Does a rational man furnish sails to his ploughs, destined only to turn the soil of his fields, or cart-wheels to his ships, destined only to navigate the water, or eagles' wings to his gate-posts, planted fast in the soil?

Human experience fully confirms the verdict of Solomon, that the rational man who seeks his chief end in the enjoyments of the mortal life always finds it "vanity of vanities." Did not the wise Creator know that? Did he also perpetrate a vanity of vanities in creating a being thus needlessly endowed for a mere mortal existence, or dare we seriously charge upon him the reproach which the human anguish, in view of this futility and the death which ends it, only suggested: "Lord, wherefore hast thou made all men in vain"? Nay, this were blasphemy. To assert man's mere mortality is a parallel outrage upon all that is noblest in his nature. This outrage evolutionism, the recent and fashionable form of materialism, attempts to perpetrate. We ask it, whence man's mind with its noble and immortal endowments? It has to answer that it is only a function, evolved from mere matter, through the animals. Just as Dr. Darwin accounts for the

evolution of the human hand from the fore paw of an ape, so all the wonders of consciousness, intellect, taste, conscience, volition, and religious faith, are to be explained as the animal outgrowth of gregarious instincts and habitudes cultivated through them.

To any man who has either a single scientific idea touching the facts of consciousness, or a single throb of true moral feeling, this is simply monstrous. It, of course, denies the existence of any substance that thinks, distinct from animated matter. It utterly misconceives the unity which intuitively must be found underlying all the processes of reason in our minds. It overlooks utterly the distinction between instinctive and rational motives, thus making true free-agency, virtue, moral responsibility, merit and moral affection, impossible. It supposes that as the sense-perceptions and instincts of the beast have been expanded by association and habit into the intellect of a Newton, so the fear and habit of the beast cowering under his master's stroke, or licking the hand that feeds and fondles him, are the sole source of the noble dictates of conscience and virtue. The holy courage of the martyr, who braves the fire rather than violate the abstract claims of a divine truth, is but the outgrowth of the brutal tenacity of the mastiff, when he endures blows, and torments rather than unlock his fangs from the bloody flesh of his prey. The heroic fidelity of the patriot, in the face of the grimmest death, is but the quality of the dog which will fetch and carry at his master's bidding. The disinterested love of Christian mothers, the heavenly charity which delights to bless an enemy, the lofty aspirations of faith for the invisible and eternal purity of the skies, the redeeming love of Jesus, all that has ever thrilled a right soul with deathless rapture of admiration and elevated man towards his divine father, are destined to have neither a future nor a reward, any more than the fragrance of a rose, or the radiance of the plumage of the bird, or the serpent's scales. After a few years, all that shall forever be of the creature endowed with these glorious attributes, will be a handful of the same dust which is left by the rotting weed. The spirit which looked out through Newton's eye, and read through the riddles of the phenomenal world the secrets of eternal truth and the glories of an infinite God, went out as utterly in everlasting night as the light in the eye of the owl or bat, that could

only blink at the sunlight. These are the inevitable conclusions of evolutionism, and they are an outrage to the manhood of our race. What foul juggling fiend has possessed any cultivated man of this Christian age, that he should grovel through so many gross sophistries in order to dig his way down to this loathsome degradation? The ancient heathens worshipped brute beasts, but still they did not forget that they were themselves the offspring of God. It remained for this modern paganism to find the lowest deep, by choosing the beast for his parent, and casting his God utterly away.

Sixth, Pursuing this argument from the wisdom of God, we prove yet more clearly that he designs man for immortality by this marked human trait, that the faculties of man's spirit are so formed as to be capable of unlimited improvement and progress. The case of the brutes who are not designed for immortality is opposite. They can be trained and improved up to a certain very narrow limit, but there the progress stops. Some of their instincts are very wonderful, but the earliest generations had them just as fully as the latest. Neither individual animals nor races are capable of making continuous progress, and doubtless the bees of Abraham's day built their honey-comb just as mathematically as those of our enlightened century. We presume that the literary pigs of the ancients were just as well educated as those of the modern showmen. The mahouts of King Porus of India, trained their elephants to be precisely as sagacious as those of Barnum, and the ancient Hindoo jugglers managed their snakes and dancing monkeys so as to present the same surprising tricks exhibited by the moderns. But with man it is wholly otherwise. He also like the animals has a body and a few animal instincts. These are capable of improvement, precisely like those of the brutes, within certain narrow limits. Gymnastic exercises enable the athlete to run somewhat faster, jump somewhat higher, lift somewhat heavier burdens, and wrestle or box somewhat better than common men; but his advancement in all these particulars is cut short by very narrow boundaries. He cannot pass beyond these any more than the ancient Greek. No corporeal dexterity is acquired in our day beyond that of the ancient jugglers and gymnasts. When we pass to the faculties of man's spirit, we find all different.

These can be improved indefinitely and without any limitation whatever. The more the mind learns the more it can learn. When an Aristotle or a Cuvier has extended his knowledge beyond that of the peasant a thousand fold, he is better able than ever before to make further acquisitions. The same fact is true of the race. Each generation, may, if it chooses, preserve all the acquisitions both of faculty and knowledge made by parent generations, and may add to them. When we compare the powers of civilized man with those of savages, the former appears almost as a demigod to the latter; but civilized society is now prepared by virtue of these acquisitions to advance from its present position with accelerating speed. Recent events prove this; for the last forty years have witnessed an advancement in knowledge and power equal to the previous hundred years.

Why does an all-wise Creator endow our mental faculties with capacity for endless advancement unless he designs us for an endless life? Observation teaches us that wherever God placed a power in the human *essentia*, he has appointed some legitimate scope for its exercise. It is incredible that he should have given this most splendid power to man had he intended to make it futile by cutting short man's existence. When we visit a nursery farm, where the little scions of apple trees and the great shade trees are cultivated for sale, we see that the nurseryman has planted them one foot apart in rows not more distant than corn-rows; but we see by experience that it is the nature of these trees to grow continually until each one occupies an area of forty feet in diameter. How is this? This nurseryman is surely cultivating these scions with express view to their trans-plantation into another and wider field of growth, otherwise he is a fool.

Seventh, The argument is crowned and made unanswerable by considering man's moral faculties. These centre in the following intuitive and necessary rational judgments, which are universal among right-minded men, and more indisputable if possible than the axioms of logic and geometry. We have an intuitive notion of moral good and evil, of the distinction between virtue and vice, right and wrong, which cannot be explained by or reduced into any other notion. Every man, not insane or idiotic, knows self-evidently that he is under obliga-

tion to do the right and avoid the wrong. Every man knows that there is good-desert in doing the right and ill-desert in doing the wrong. Every man feels the satisfaction of a good conscience when he does the right disinterestedly, and the sting of remorse when he does evil. Take this set of judgments and sentiments out of a man's spirit and he ceases to be a man.

The German philosopher, Immanuel Kant, gives us this ingenious argument for immortality from this moral principle, "We know that it is our duty to practice all virtue and avoid all vice, as well as we know it is our duty to practice any virtue." That is to say, our judgment of obligation commands us to be morally perfect. Every sincerely good man is sincerely striving to be better and better, and no enlightened conscience will ever be satisfied short of moral perfection. This is then the voice of God, our maker, in our reasonable souls; and it is a voice of divine command. But experience teaches us that nobody has ever attained moral perfection in this mortal life.

Then surely there must be a future life in which progress in virtue may be made unto perfection. If God has not provided such a future state for us, he would never have laid this high command upon our souls. What should we think of his justice and equity if, after limiting our bodily growth to twenty-five years and fixing our bodily decay at three-score and ten, he had then commanded us every one to grow to be twenty feet tall? Nobody grows to much more than six feet in seventy years. How can we be commanded to grow to twenty feet if seventy years are the limit of our existence?

In the next place, our necessary judgment of demerit for sin and our sentiment of remorse make us all know that punishment ought to follow sin. Everybody expects that punishment will follow sin. We know that God is the fountain-head of moral obligation and the supreme moral ruler. We know that he wields a providential government over us. This is a truth so obvious as to force itself upon the dark mind of the pagan emperor Nebuchadnezzar, that God doeth his will among the armies of heaven and the inhabitants of this earth; and that there is none that can stay his hand, or say unto him, What doest thou? On the one hand it is entirely agreeable to reason and conscience to regard the miseries of this life as the punish-

ments, or at least the chastisements, of sin; but on the other hand, if there is no future life reason and conscience ought to pronounce these earthly punishments the whole punishments of sin.

Our intuitions ought to make us believe that, as this mortal life terminates, our penal debt is fully paid off, the ill-desert of sin satisfied and extinguished, and the creature, lately a transgressor, cleansed of its ill-desert and guilt. As the mortal approaches death, remorse ought to decline, and relax its pangs, so that in the moment of death the soul should be absolutely freed from death and fear and self-rebuke, and quit existence in a state of perfect moral peace.

But such is never the case with dying men, unless their intellects are oppressed by delirium or coma, or their consciences seared as with a hot iron. The soul of the dying man, if in a rational state, knows that its debt of punishment for sin is not fully paid. It knows that earthly sufferings are only the beginning of that payment. Conscience is not satisfied, but denounces the ill-desert of the soul more clearly and awfully than ever before. Fear and remorse are not assuaged, but increase their torments, and culminate in the last dreadful period of exit from this world. Such is the experience of every rational soul in dying, who has not drugged himself with some deadly delusion, unless he is calmed by the hope of pardoning mercy in the Divine Judge whom he knows he is to meet beyond the grave. These moral convictions of dying men are dictated by the most universal, the most necessary, the most fundamental judgments of human reason. Were there no such fact of a future existence to ground them, reason itself would be a lie, and man incapable of moral conclusions.

It is very well known how materialists endeavor to break this testimony of nature itself to immortality, by crying that this fear and remorse are merely the results of superstitious fictions working upon the ignorant imagination. This explanation is as silly as it is false to rational consciousness. It is but the same which is advanced by the pagan atheist Ovid: *Timor fecit Jæos*. Mr. Edmund Burke sufficiently exploded the miserable sophism by the scornful question, *Quis fecit timorem?* No one is afraid, unless he believes there is an object to be afraid of.

The belief in the reality of the object must be present beforehand, in order to generate the fear. Every man who is not trying to cheat himself knows that these moral judgments, which are so solemnly reinforced by death, are functions of the reason and not of the fancy. The imaginings of superstition with its morbid terrors are the abuse and travesty of these moral sentiments, and not their source.

There is another broad moral fact which completes the demonstration, both of a future life and of future rewards and punishments. When we compare our fellow-men together we see that they do not all receive their equal deserts in this life. Here wickedness often triumphs and innocence suffers. The wicked "spread themselves like the green bay tree," their strength is firm and there are no bands even in their death; but the righteous are afflicted every morning and chastened every evening. Not seldom the purest human lives are darkened during their larger part by unkindness, calamity, or bereavement, and are terminated by a painful disease culminating in yet more painful death. No compensation comes to them, but the existence which was continued under the twilight of suffering ends in darkness. When we set these afflicted lives over against the prosperity of the wicked there remains a moral mal-adjustment abhorrent and frightful to every moral sentiment, unless there is to be a more equitable settlement beyond. These facts are impregnable. Righteousness deserves reward, and sin deserves punishment. There is a righteous God who rules this world by his providence. His benevolence and equity make it impossible that he should visit earthly miseries upon any moral agent except as the just punishment of his sins. Since all of us suffer more or less, all of us are more or less sinners, as our own consciences fully testify; but men are not punished in this life in due proportion to their relative guilt. Therefore it must be that God completes the distribution of penalties in a future life. To deny this then is to impugn the existence or the holiness and justice of God; it is a burning insult to him, near akin to blasphemy.

Such is a moderate statement of the rational arguments which prove the immortality of our spirits and our accountability beyond death for our conduct. The course of the proof also shows that the denial of our conclusion would make mankind

practically brutes; for when we have proved that there exists in the human person a rational and spiritual substance, the spirit, we have virtually proved man's immortality. Prove successfully that man does not possess this distinct spiritual substance and *he is made a mere beast*. He may be a more refined beast than an elephant, a pointer dog, or a monkey, but still he is only a beast. That which alone differentiates him from brutes is gone.

It is known that there is a vain philosophy, which avows itself materialistic and which yet pretends to find something in this evolved and improved animal to which to attach a temporary moral personality, moral sentiments, and moral accountability. We assure such vain thinkers that their attempt is futile. When we try it at the bar of common sense and sound philosophy, it meets these crushing refutations. Our mind is nothing but a refined function of a material organism, and its highest sentiments are nothing but animal instincts grounded only in organic sensibilities, evolved into some advanced forms; then it is impossible there can be any valid concept of the moral good higher than that of mere animal good. It is also impossible that there can be any moral motive directing and restraining actions. Where there are no moral motives there can be no just responsibility. Again, if all man's high sentiments are but advanced evolutions from animal instincts there can be no rational free-agency. Has the hen, for instance, any rational free-agency when impelled by her instinct to incubate her eggs? But where there is no rational free-agency there can be no just moral responsibility.

An all perfect God is the only adequate standard of righteousness, as his preceptive will is the only sufficient practical source of obligation. Without an omniscient administrator and a future life no adequate administration of justice is possible. Thus the logic of philosophy proves that when God, spirit, and immortality are expunged morality becomes impossible.

The great sensuous masses of mankind will reach the same result by a simpler and shorter path. "Let us eat and drink, for to-morrow we die." We may be assured this will be the logic of the average man when taught materialism: "The scientists teach me that I am only a refined beast. Then if I choose, I

may act as a beast; there is no hereafter for me. Then I shall be a fool to deny myself anything I desire out of a regard for a hereafter. Experience teaches me that what they call wicked men may live very prosperously in their wickedness provided they are a little politic in observing a few cautions. Then there is no penalty for that sort of wickedness in this life, and as there is no future life, there is no penalty for it anywhere. Why should I not indulge myself in it? There is no such thing as an omniscient God, consequently I am free to do anything and everything I desire, provided these short-sighted men do not 'catch me at it.' Indeed, why should your materialists stop short of this unanswerable logic? "The scientists tell me that I am only a refined beast, and that my fellow-men are the same. A beast cannot be guilty of crime, and it is no crime to kill beasts; why then may I not kill any human beings whom I find it convenient to murder? Why may I not kill any of these scientists who have taught me this instructive lesson, provided I gain anything by it?" Practically, the result of this materialism always has been, and always will be, to disorganize human society, to let loose the flood-gates of crime, and to destroy civilization. In imperial Rome skepticism and materialism became the prevalent doctrines. With what result? History answers: The butcheries of Nero and his successors, the death of public virtue, and the utter putrescence of the once glorious Roman republic, which left it like a rotting behemoth to be torn to pieces by the Goths and Huns. Again, materialism became the dominant creed of the ruling faction in France in 1790. With what result? The fruit was the "Reign of Terror," which in five years annihilated fifty-two billions of francs of French wealth, made the streets of her cities run with the blood of judicial murders, perpetrated in the name of liberty more outrages and crimes against human rights than the autocratic Bourbons had wrought in five hundred years, and plunged Europe in two decades of causeless wars. Again in 1871 the International Communists, a faction of materialists, gained temporary possession of Paris. The consequence was a carnival of plunder and murder, until President Thiers crushed them out by force. Surely it is time then to learn that the tendency of this doctrine always has been, and always must be, by turning men into brutes, to

turn earth into a hell. There is no adequate restraint upon the wicked tendencies of man's fallen nature short of the authority of an omniscient, almighty God, and the fear of the righteous awards of immortality.

Shall all these stern lessons of history and of common sense be rebutted by the assertion that quite a number of our scientific evolutionists and materialists are quite nice, decent gentlemen? No doubt. But what makes them such? The traditional influences and habits of action resulting from that very Christianity which they are seeking to destroy. Their good citizenship is a temporary impulse communicated to them from God-fearing ancestors. Let them succeed in obliterating the belief in God and immortality, society will find too late that the whole source of the restraining impulse has been lost. The intellectual progeny will tend to become monsters, with the irresponsible ferocity of beasts energized by the powers of perverted rationality. Does a George Eliot, for instance, tell us that she still leaves an adequate object for the moral homage of her materialists in the noble concept of the "aggregate humanity," the worthy object of the humanitarian virtues? What is aggregate humanity? Where is it? According to her doctrine that huge part of the idol, which is composed of the past generations, is nowhere, is rotting in annihilation. According to her, the part of the idol which is to come in future generations is only an aggregate of beasts, a suitable object truly for moral homage! And worse still, this part is as yet a non-entity; and when it shall have become an actuality her votaries, whom she invites to worship it, will have become non-entities. Bah! Can the insolence of folly go further than this? Or are we told that these most decent scientists are doing nothing but following the lights of inductive science and bowing loyally to the truths of nature, wherever they meet them? We know that, so far as they array their zoology and histology as proofs of materialism, they are not paying loyal homage to the truths of natural science, but misconstruing and perverting them. We know that their attempt to disprove the existence of our rational spirits by means of the very exercise of the rational faculties can only turn out a logical suicide. It is as though one said to us, we have now proved experimentally that there are no eye-balls in human

heads. We ask, gentlemen, by what species of experiments do you prove that assertion? They answer, By a series of nice experiments made with our visual faculty. But if there are no eye-balls there is no visual faculty. Such experiments would be impossible. The analogy is exact. If these scientists did not possess a mind, endowed with supersensuous rational faculties, impossible to be the functions of mere material organism, faculties which are the indisputable signatures of distinct spiritual substance, the experiment of his biology would mean nothing to him. He thinks he is sacrificing at the altar of pure scientific truth. He deceives himself. He is sacrificing to an intellectual idol. Solomon tells us of men, who, while "scattering fire-brands, arrows and death," said, "Are we not in sport?" Ghastly sport it is! By what title can these mistaken interpreters of nature flatter themselves, that they are not scattering the fire-brands, arrows and death which their doctrine has always hitherto strewn among the nations?

INDEX.

- Abstract ideas and primitive truths denied and yet built upon by positivists, 43; the attempt to prove them empirical, 45; the tests of, 47.
- Agassiz, influenced by the positive philosophy, 31.
- Agnosticism and immortality of the soul, 570.
- Analogy, metaphysical and theological application of, 412, and experience, 423; what is, 424; definition of, 425; true view, 426.
- Anti-Christian science, cause of its rise, 116. caution against, 116; caution against based upon the threatening attitude of many physicists towards revelation, 118; its tendency towards skepticism, 121; the wide diffusion of its poison, 122; should not be allowed to boast of immunity from error, 124; its constant fluctuations and changes, 126; its large element of hypothesis, 125; its incompleteness, 127; best antidote for, 134; the caution against criticised by Dr. Woodrow, 137 (see *Woodrow*); facts proving its evil, 148.
- Anti-theological attitude of perverted science proved, 148; personal testimony, 148; inconsistencies into which believers have been led, 148.
- Anthropomorphism, H. Spencer's objection to doctrine of final cause, 485.
- Appetencies, inherent and functions of subjective activity, 217.
- Appetency, distinguished from sensibility, 280.
- Aristotle and the inductive method, 125.
- Arminianism, Wesley and Watson depart from worst extremes of, 182.
- Artificiality of manner, the estimate of it, 89; its sinfulness, 90.
- Association cannot account for the feelings, 287.
- Atheism, fostered by positivism, 29; Lord Bacon on the tendency towards in philosophy, 156; tendency towards in pushing God back in the line of causation, 112; the ultimate tendency of naturalistic theories, 133, 135.
- Atonement, the, and Wesleyanism, 183.
- Augustine quoted on nature of concupiscence, 226.
- Authority in religion, sources of, 119; value, 121.
- Bacon, Lord, on "Final Cause," 477; on "Inductio Simplicis Enumerationis," 173; on tendency in philosophy towards atheism, 156; not the author of the inductive method, 349; method, 353; doctrine of "Final Cause," 419; "Novum Organum," 124.
- Barnes on slavery, discussed by Bledsoe, 63.
- Bible, the, and geology, 91; its improper defence, 93; its authority in matters of science, 95; how its testimony as to creation must be understood, 117; Rome an enemy to a free, 72; sneered at by scientists, 151; teaches scientific facts in popular language, 96; independence of science, 98. (See *Infallibility and Revelation*.)
- Biology, its place in the positive philosophy, 26.
- Blackstone's theory of civic ethics, 303.
- Bledsoe (A.) his antecedents, 61; on slavery, 62, commended, 69; his philosophy, 181; history of, 181; relations to the church, 182; establishes the *Southern Review*, 182; seeks a doctrinal meeting point for Calvinists and Arminians, 182; recognizes connection between theory of free-agency and doctrines of grace, 183; attempt to justify God in permitting sin, 184; a new statement of an old error, 184; conditions under which his reasoning would be sound, 185; fails to perceive distinction between sensibility and desire, between motive and inducement, 185; omits fact of permanent, subjective, disposition in his analysis of free-agency, 186; practically asserts *scientia media*, 187; misunderstands true nature of argument from God's foreknowledge to certainty of the Creator's will, 188; mistakes the nature of free-agency, 189; teaches a theory that leads to blank Pelagianism, 190; talks like Hobbes and Spinoza, 190; on infant salvation, 192; on the dogma of baptismal regeneration, 193; misjudges Westminster Assembly, 193; departure from Wesley and Watson on original sin, 195; regards the condition of infants a misfortune, not original sin, 196; regards inherited depravity only a misfortune, 197; position as to infant damnation disproved, 197ff; logical result of his view of free-agency, 200; departure from Methodists on "perseverance of the saints," 205; inconsistencies, 207; practical effect of teaching his views, 208; on free-agency, 211; the mischief his views exert, 211; his errors and their insidiousness, 212; accuses the author of ignorance and imbecility, 212; is mistaken, 213; and self-contradictory, 213; ignores subjective disposition in discussing the rise of volition, 213; views on contingency of responsible volitions, 214; inconsistency and incoherency, 214; on the mind as cause or efficient of volition, 214; on distinction between motive and inducement, 216; his reasonings against Edwards, 219; does not understand what the Calvinist means by efficient motive, 219ff; resents the charge of Pelagianism, 222ff; claims that he holds the Wesleyan Theology, 229; on Adam's holiness, 230; his Wesleyanism in a pitiable plight, 231; special theory of free-agency, 235; wrongfully charges the author with not discussing it, 236; use of the term "motive," 237; repudiates Edward's definition of freedom, 238; answer to argument from man's consciousness as to origin of volitions, 241; answer to argument from character, 243; objections rebutted, 244; his view of intention or design, 244; distinguishes "logical certainty" from "causal certainty," 252; resists argument from God's foreknowledge, 250; his evasion, 253; evasion of the argument for true theory of volition from regeneration, 261; evasion of the *reductio ad absurdum* of his theory of the will, 262; his effort to change the issue of the debate, 264; his notion of cause and effect, 265; his *petitio principii*, 265; forced to a sensationalist analysis, 266.
- Boyd, H. H., views on union of United Synod of the South, 166.

- Brown, Dr. Thomas, on the emotions, 271.
- Büchner, Dr., declares the ideas of God and science incompatible, 168.
- Buckle, philosophy of, 143; *History of Civilization* reviewed, 22; influenced by the positive philosophy, 30.
- Bunsen's views on the age of man, 127.
- Butler, Bishop, on the laws of habit, 464.
- Calhoun, John C., and slavery, 66.
- Calvinism, and Arminianism, a meeting point sought for by Dr. Bledsoe, 182; taught in the Thirty-nine Articles, 193.
- Cana, miracle at, 173.
- Carpenter, Dr., on the unreliability of geological theories, 158; on the spectroscope, 163; on relation of science and revelation, 169; caution in respect to spectrum analysis, 437.
- Causation, and association, 53; distinguished from fortuity, 479; the law of, and inductive demonstration, 378; a necessary intuition of the reason, 378, 380; Mills's doctrine of, 412; disproved, 413; value of the true doctrine of, 417; reason for the hostility of the empirical school, 418.
- Cause and effect, the law of, 129; converse not true, 130; law of not to be reversed, 131.
- Cause, Final, 476. (See *Final Cause*.)
- Causes, nature of physical, and their induction, 376; the chief question, 376; the need for a true psychology in determining the question, 377; the fundamental character of the question, 378; the law of causation a necessary intuition of the reason, 378, 380; the properties of substances, 379; the grounds for believing their permanency, 380; properties not permanent that can produce effects, 381; distinction of *accidentia* and *attributa*, 379, 381; the varying effect of permanent properties considered, 386; "the equivalency and transformation of energy," 387, 434; judgment of believed by Mill to be empirical, 412; Mill's view disproved, 413; value of the right view of, 417: "Final Cause," 418. (See *Causation*.)
- Certainty, distinguished from compulsion, 190.
- Character, ground of, and relation to rise of volitions, 243.
- Charters, origin of, 330.
- Church and State, 320; different theories of relation, 323.
- Church courts, their fallibility, 115.
- Circumstantial evidence, rule governing, 170; application of the principle to creation, 171.
- Civic ethics, the various theories of, 302; as that of natural liberty and social contract, 302; the theistic, 303; the legitimist, 305; refutation of the latter, 306; the social contract theory refuted, 307; is false to facts, 307; is atheistic and unchristian, discards moral distinction, lacks basis of facts, and is illogical, 308; is attended by evil results, 309; cannot account for certain powers, 310; proper theory, 311; Hobbes' error, 312; historical proof, 313; the Declaration of Independence misunderstood, 314; equality misunderstood, 315; logical results of the Jacobin doctrine, 316; our inalienable rights, 317; revolution, 319; relation of church and state, and persecution, 320; theories of relation of church and state, 323; development of the doctrine of religious liberty, 326.
- Civic morality, 536; need for and beauty and desirability of, 539.
- Civil liberty, what is, 311; Bledsoe on, 62.
- Columbia Seminary, or Dr. Dabney's memorial, 138; Judge Perkins's endowment, 140.
- Common sufficient grace, 183.
- Compulsion, distinguished from certainty, 190.
- Comte's, Auguste, philosophy, 142, 143; on the uniformity of nature, 372; *Cours de Philosophie Positive* examined, 22; Guizot's view of, 23; the pretended founder of positivism, 22; his arrogance and tyranny, 23; conceit, 24; denies and then uses psychology, 25, 36; the practical results of his philosophy, 60.
- Concupiscence, is it sin? 225; Augustine on, 226.
- Confession of Faith and Catechisms a doctrinal covenant, 139.
- Consciousness, testimony of to the origin of volitions, 241.
- Contrivance a function of thought, 476; argument from, for a Gcd, assailed by evolutionists, 476.
- Corporations, personal responsibility not obliterated by, 540.
- Corporations, private, political tendencies of, 329; origin of, 330; what they are, 331; proper reasons for, 332; not needed in America, 333; dangers, 334; State laws, 337; specimens, 338; feudal system, the, 329; reasons against, 338; (1) wastefulness, 340; (2) wrongful use of money power, 341; (3) undermine domestic and personal independence, 342; (4) seriously affect the general virtue, 343; by corrupting legislators, 343 by avoiding responsibility, 344; by multiplying chances for secret fraud, 346.
- Cosmogony, theories of, 105; relation to geology, 147.
- Creation must be a miracle, 28, 40; relation to scientific hypotheses, 107; traits of naturalness in, 109; proper conception of, 114; theories of, 118; bearing of the doctrine of, 128ff; sufficiently accounts for what lies beyond authentic history, 130; the doctrine of, and its relation to theories of cosmogony, 143; Moses' account must be accepted and bowed to by science, 152.
- Damnation of infants, the accusation of Dr. Bledsoe, 192.
- Darwin, philosophy of, 143, 147.
- Dead languages, Rome's reason for using, 70.
- Death, relation to doctrine of immortality, 583; does not destroy the soul, 584ff.
- Declaration of Independence, the true meaning of, 313.
- Deduction and induction, current use of the terms, 349.
- Deluge, modern theory of, 118.
- Depravity as regarded by Wesleyanism, 183; the Bible teaches, 197; native, as related to the emotions, 295; meaning of 297; proof of, 298ff.; remedy for, 301.
- Descartes' objection to doctrine of Final Cause, 476.
- Desire and sensibility, distinction between, 185.
- Determination of the will, how brought about, 238, 240; distinguished from the self-determination of the soul, 240.
- Development theory, the, 119.
- Disposition, permanent, subjective, an important element in free-agency, 186; relation to motives and actions, 187; is it itself sin, 200ff; objections answered 203; its place in the rise of volition, 213; Dr. Bledsoe on, 215; *a priori* to the operation of inducement, 218; relation to responsibility, 233; relation to the motives, 284.
- Education, Roman Catholic, 70; sinister motives, 78; true purpose, 79.
- Education for the ministry, standard of, 551. (See *ordination*.)
- Edwards' argument concerning the certainty of the acts of free-agents, 187; not free from confusion in distinction between subjective motive and objective inducement, 219; use of the term motive, 237; use of the term necessity, 237; definition of freedom, 238; blemishes in his argument, 239.
- Elect infants who die in infancy, meaning of the phrase, 193.
- Emotions, the subject usually neglected, 271; Brown's classification, 271; McCosh's classification, 272; objections to these classifica-

- tions, 272; importance of the discussion, 273; relation of feeling and thought, 274-279; number of the terms expressing feeling, 275; difference in degree, 276; relation to the judgment, 277; need to properly separate pungency or agitation from the essence of the feelings, 278; the simple, original, characteristic elements of, 280; sensibility and appetency distinguished, 280; grounds of this distinction, 281; conditions under which feelings arise, 283; relation to cognition, 284; to *habitus*, 284; present themselves in pairs, 286; the associational theory of Hartley *et al.*, 287; and its refutation, 288; the theory from self-calculation after experience, and its refutation, 290; the author's classification, 291; the moral quality of, 294; may they be used as *stimulus*? 294; manifestation of purpose, or "final cause," in the structure of, 295; relation of depravity to the other feelings, 295; Kant's view of depravity, 295; proof that depravity is a spring of feelings and volitions, 297; from conciseness, 297; from early development in childhood, along with reason, etc., 298; from its universality, 299; from its resistance to duty, love, and all inducements to the contrary, 299; the remedy for the disease, 301; spurious religions, 456.
- Emulation, proper use of, 294.
- England, positivism in, 22.
- Equality, false claim of, 315.
- Equilibrium of the will in the Arminian theology, 182.
- Equivalency and transformation of energy, the doctrine of, 387; disproved, 434.
- Esser's testimony as to induction and analogy, 416; definition of analogy, 425.
- Ethics, civic. (See *Civic*.)
- Ethnology, modern theory of, 119.
- Evolution, 119; application of the inductive method to theories of, 439, *et seq.*
- Evolutionists deny the teleological argument, 476; their account of results, 478; their claims, even if granted, do not destroy the argument, 486; but they do not apply, 487.
- Exact sciences, 152
- Excitements, spurious religious, their frequency, 456; the true psychology of, 457; are excitements always useless? 458; feeling religiously and feeling *about* religion, 459; feeling and the will, 460; Turretin's testimony, 460; sympathy and religion, 461; proper use of sympathy, 463; influence of habit, 464; spiritual pride, 465; "new measure," revival, 466; methods and objections, 467; ulterior evils, 468; the attempted justification, 472; proved sophistical, 473; practical results, 473.
- Experience and analogy, relation to induction, 423.
- Extraordinary cases, provision for, 552; provision abused, 553. (See *Ordination*.)
- Fall, the consequences of, upon man's mind, 116.
- Fallibility of church courts, 116.
- Fatalism, a result of the positive philosophy, 28.
- Feeling (see *Emotions*), relation to thought, 274.
- Final cause and induction, 418; essential to inductive demonstration, 420; definition of, 476; do the structures of nature evince? 476; Descartes' objection to doctrine of, 476; Bacon has been misjudged, 477; physical causes and final cause, 478; the evolutionist's method of accounting for results, 478; position of anti-theistic science, 479; the confusion of fortuity and causation, 479; the two distinguished, 480; illustrated by the eye, 481; the relation and adaptation of means to end, 482; this accounted for only by prescience, 483; objection of Hume and others answered, 484; Spencer's charge of anthropomorphism, 485; answered, 486; evolutionists' claims do not destroy the argument from Final Cause, but only push back its *data*, 486; evolutionists' claims, however, do not apply, 487; Final Cause shown clearly in reproduction, 488; doctrine shown by the common sense of mankind, 489; principles of induction, 489; belief in causation, 490; comments upon the author's views, 491.
- Fleming on induction, 362.
- Foreknowledge, nature of God's, 188; relation to free-agency and origin of volitions, 248, 250; doctrine of mediate, 256, 257.
- Fossils, pre-adamite, 106; teaching of, 174; origin of, 175.
- Free-agency and positivism, 34; and responsibility, 184; permanent, subjective, disposition an important element, 186; misunderstood by Dr. Bledsoe, 189; Alexander, (A.), on the will, 184, 185; relation to God's word, 191; importance as a problem in philosophy, 211; Dr. Bledsoe's recognition of this, 211; the mischief of his views, 211; Bledsoe's view of, 235; fundamental importance of the doctrine, 236; nature of the discussion of, 236; distinguished from free-will, 238; relation to origin of volitions, 239.
- Freedom, Edwards' definition of, 233; definition of the Confession, 239.
- French Revolution, the, and Civic Ethics, 313.
- Geology, and the Bible, 91; proper method of defining the relations between, 91; the arrogance of geologists, 92; the wisdom of the Bible's defenders, 93; the fickle policy of professed defenders of the Bible, 94; the Bible's degree of authority, 95; proper concessions to be made, 97; burden of proof in discussion rests upon the scientist, 100; reasons therefor, 101; bearing of the doctrine of creation, 107; changes in theories of, 125; modern study of tends to naturalistic opinions, 139; different theories of, 140; decision for none, 144; theories of unreliable, 158; Dr. Carpenter on, 159; its classification, 160.
- Government, radical theory of, 499. (See *Rights*.)
- Grote's interpretation of induction, 350; impugns the inductive methods, 404.
- Guizot's judgment upon Comte, 23.
- Hamilton, Sir Wm., on distinction between sensibilities and conative powers, 218; on the emotions, 271, 280; on application of induction and analogy, 416; definition of analogy, 425; on the inductive method, 356; looseness of use of terms, 428.
- Hartley's theory of the emotions, 287; refuted 288.
- Hitchcock's argument as to natural laws, 110.
- Hobbes' theory of causative efficiency of motive, 217; view of Civic Ethics, 312.
- Holiness, concreated, Bledsoe's views of, 230; relation to volition, 244.
- Hume's argument, 38; unreasonable, 111.
- Huxley, philosophy of, 143, 147.
- Hypothesis, a leading element in current physical science, 126.
- Idealism, German, and Monism, 524.
- Identity of the spirit, 578, 583.
- Immortality of the soul, 569; the universal belief of, 569; the Greek philosophers', Buddhists', Mohammedans' and others' views, 570; this universal belief must be accounted for by agnostics, 570; the inquiry as to immortality turns upon the question of the existence of a spiritual substance in man, 571; substance defined, 572; application, 573; objection of material science that spirit has never been seen, 574; answered, 574; the relation of consciousness, the thinking self, 575, 578; may this substance be material? 576; the difference in the properties of material

- and spiritual substances, and of their apprehension, 576, 579; identity of the Ego, 577; its absolute unity, 578; its classification of properties, 579; its free-agency, 579; its accountability, 580; the doctrine of immortality, credible and capable of proof, 582; the relation of death, 583; the immaterial spirit survives bodily death, 583; proved (1), by the continued identity of the living spirit, 583; (2), by the renewal of consciousness after sleep, 584; (3), by the relation of bodily sense and organs to the spirit, as its external instruments, 585; (4), by the fact that many of the highest functions of the soul are performed without dependence upon any bodily organ, 586; objection of materialists to the last argument, 586; answered, 587ff; (5), by the existence of God, 592; (6), by the spirit's capacity for unlimited improvement and progress, 595; (7), by the nature of man's moral faculties, 596; the denial of these proofs would make man a brute, 600; the practical result of disbelief in immortality, 609; shown in history, 601
- Imputation, doctrine of repudiated by Jacobinism, 503.
- Index expurgatorius*, 75.
- Inducement and motive, distinction between, 185; not perceived by Dr. Bledsoe, 190; relation of disposition to, 218. (See *Motive*.)
- Induction and deduction, current use of the terms, 349.
- Induction, the fundamental ground of, 489.
- Inductive demonstration, what is, 349.
- Inductive method, not first invented and used by Bacon, 124, 151.
- Inductive Logic Discussed, 349; vague opinions of its nature, 349; this vagueness accounted for, 350; the disagements of professed logicians, 350; as Grote, 351; St. Hilaire, 352, 356; Whewell, 352, 360; Ueberweg, 353; Lord Bacon's method, 353; Mill's verdict on the Baconian *Organum*, 355; Sir Isaac Newton's advance, 356; Sir William Hamilton's view, 356; Archbishop Whately's interpretation of the true method, 358; and the difficulties in his syllogism, 359; Lord Macaulay's view, 362; Fleming's, 362; McCosh's, 363; Bowen's, 363; Porter's, 363; Dugald Stewart's, 363; Mill's, 366; Mill's view inconsistent, 368; ignores effects which are negative, 369; benefits of this historical review, 370; the uniformity of nature considered, 371; how induction cannot be a demonstration, 374; but what it does teach, 375; the induction of physical causes, 376; a true psychology necessary to explain, 377; the law of causation the foundation of inductive demonstration, 378; the permanency of the properties of substances, 379; grounds for believing their permanency, 380; the varying effects of permanent properties considered, 386; the equivalency and transformation of energy, 387; the aim of real induction, 389; the induction from agreeing instances remains probability only, 391; reasons therefor, 392; the methods of induction, 394; "method of agreement," 396; "method of differences," 398; a combination of these two, 400; "method of residues," 401; "method of corresponding variations," 402; this enumeration exhaustive, 403; when these methods are insufficient, 405; the verification, 405; induction in syllogistic form, 408; metaphysical and theological application, 412; Mill's doctrine of cause disproved 414; Esser's and Hamilton's views, 416; value of right doctrine of cause, 417; final cause and induction, 418; reason for the hostility of the empirical school 418; Bacon quoted, 419; without final causes inductive demonstration has no basis, 420; the results of intuitive expectation of universality of law of cause, 421; experience and analogy, 423; relation to induction, 423; definitions of analogy, 424; the true view, 426; the apodeictic induction, 427; looseness of terms, 428; the caution necessary in applying induction, 428; the comprehensive law, 429; analogy of the courts, 430; relation of parole testimony, 431; summary of the discussion, 433; illustration by application to theory of "equivalency and transformation of energy," 434; to theories based upon spectroscopic phenomena, 436; to geology, 438; to theories of evolution, 439; to ethical problems, 453.
- Infallibility of the Bible, not to be surrendered, 121; the ground of its acceptance as a rule of faith and life, 123; not recognized by scientists, 151; how approximated by science, 152.
- Infant salvation, 192.
- Inspiration, best method of defence, 138; discredited by certain physicists, 119; the practical effect of Jacobinism upon one's views of, 516; "Innate ideas," 42.
- Intuitive beliefs, observation and experience not the proof of, 48, 49.
- Jacobinism, 500. (See *Rights*.)
- Jacobin, doctrine of civic liberty, 314; logical results of, 316.
- Kant, on the emotions, 271, 295.
- Language, its relation to literature and civilization, 71; its special relation to religion, 71.
- Legal Profession, Morality of, 1; theory of, 2; not merely commercial or pecuniary, 4; not justified, professionally or morally, in advocacy of cause known to be unrighteous 4; evil shown by present state of administration of justice, 5; by the tendency to descend to still lower grades of expedients and usages, 7; and the temptation irresistible, 9; by the fact that it gives an unlawful view of a court of justice, 10; which is concerned with truth and right, and is not a debating society, 11; by the shifting of responsibility which it involves, 13, 16; and by the evil done to one's own virtue by the advocacy of that which is known to be evil, 18.
- Legitimist theory of civic ethics, 305.
- Leibnitz and Locke, 41.
- Liberty, and slavery, 61; definition of, 62; relation of civil and natural, 311.
- Liberty, religious, development of the doctrine, 326.
- Locke, on the emotions, 280.
- Lubbock's, Sir J., views of origin of our civilization, 27.
- Lyell, Sir Charles, on the world's age, 101, 141, 144, 158, 160.
- Macaulay, Lord, on the inductive method, 362.
- Man, age of, upon the globe, 118.
- Master and slave, is the relation right? 64.
- Materialism, the result of the positive philosophy, 142, 27.
- Materialistic philosophy and monism, 524.
- McCosh on the emotions, 271; on induction, 363.
- Memorial on seminary instruction, 137; its treatment, 138.
- Metaphysics repudiated by positivism, 37; and yet used, 38; need for it, 40.
- Method of difference, the common method, 424.
- Mill, John Stuart, Logic reviewed, 22; influenced by the positive philosophy, 30, 57; on absolute truths, 52; philosophy of, 143; on generalizing from experience, 173; testimony against false physical science, 350; disparagement of the Baconian method, 355; statement of the inductive logic, 366; defects, 368; on the uniformity of nature, 372; follows the perverse metaphysic of James Mill, and Hume, 412.
- Miller, Hugh, on the world's age, 101, 103.
- Mind of man, the, impaired by the fall,

- Mohammedanism and the immortality of the soul, 570.
- Molina, and the doctrine of mediate foreknowledge, 257.
- Monad, the spirit a, 578, 581.
- Monism, statement of the doctrine, 523; its influence and early teachers, 523; seen also in German idealism and materialism, 524; the arguments offered to substantiate, 525; these arguments examined, 526; the doctrine leads inevitably to atheism or pantheism, 526; is the result of an over eager craving for simplification, 527; is unscientific in place, time, and manner, 527; contradicts the necessary laws of thought and truths of experience, 530; denies the intuitive judgment that action must imply an agent, 532.
- Moral evidence for the truth of the Bible, 123; its nature and conditions, 124ff.
- Moral faculties, their relation to immortality, 596;
- Morality of the legal profession, 1.
- Morell's *Speculative Philosophy* reviewed, 22.
- Moses and the Westminster Confession's interpretation of, 179.
- Motive and inducement, distinction between, 185; not perceived by Dr. Bledsoe, 190.
- Motive, its efficiency, 216; distinguished from inducement, 216; distinction has been overlooked in philosophy, 216, 218; results of wrong views of its relation to volition, 217, 218.
- Motives, relative, strength of, 267; Bledsoe's view of, 267; the true view, 263; the term as used by Bledsoe, 233, 237; distinguished from inducement, 237; what is an efficient? 237; not properly distinguished from inducement by Edwards, 239; motives, subjective, determine the morality of volitions, 274.
- Mysticism, in the early church, 117.
- Naturalism and positivism, 22, 29; exaltation of, by the physical sciences, 118; its atheistical tendency, 128; the author accused of a wrong use of the word, 159.
- Naturalness, traits of essential in a creation, 131; proved, 132; to deny is belief in infinite series of finite organisms, 132; the argument from, 143; traits of in an immediate creation, 144; traits of, reasons for in creation, 164; do not invalidate supernatural origin of the world, 166; Prof. F. H. Smith's views, 169.
- Natural theology, discarded by Dr. Hooker, 43.
- Nature, the interpretation of, according to Lord Bacon, 354; uniformity considered, 371. (See *Causes, physical*.)
- Nature, uniformity of, Mill's theory, 415.
- Nebular hypothesis, the, 119, 126, 163.
- Necessity, the term not objectionable when properly interpreted, 237; meaning of, 241.
- Negroes, enfranchisement of and Jacobinism, 316.
- Newton, Sir Isaac, on the inductive method, 356.
- Oaths, the sanctity of based in religious obligation, 537.
- Omnipotence and wisdom of God sufficiently account for creation, 134.
- Ordination, the lowering of the standard of, 551; arguments against, 552; extraordinary cases already provided for, 552; the grounds for seeking a lowering considered, 554; the standard in Paul's day, 557; the demands of modern culture in other professions, 561; the results in other churches considered, 561.
- Original sin, and infant damnation, 194; Wesley and Watson on, 195; proof of, 197ff; Bledsoe on, 229; Wesley on, 229, 248; relation to true doctrine of volition, 260.
- Palmer, B. M., words of, 165.
- Pantheism, the necessary corollary of monism, 526.
- Parole-testimony and induction, 431; on evolution, 449.
- Passion, proper meaning of, 276.
- Pelagianism, Dr. Bledsoe accused of, 222; what is, 222; Dr. Bledsoe's acceptance of its principles, 223ff; Bledsoe's view of relation to volition, 256; position of Dr. Taylor, 230; of Bledsoe, 231; Watson on, 232.
- Perseverance of the saints, Bledsoe's doctrine of, 205, 247, 248.
- Philosophy of volition. (See *Volition*.)
- Philosophy, the positive. (See *Positivism*.)
- Physics, the theological relation of, 156.
- Policy or expediency, not the test of right, 6.
- Political rights, incidentally taught in the Scriptures, 498. (See *Rights*.)
- Politics and religion, 536.
- Polygamy, and slavery not comparable, 63.
- Popish literature, etc., 70.
- Porter, Noah, on the emotions, 271, 280; on induction, 363.
- Positivism, its pretext, 24; its claim, 24; its fundamental character and principles, 25; its classification of human science, 26; its corollaries, 27; rank materialism, 27; rigid fatalism, 28; its influence on the Continent and in Great Britain, 29, 30; productive of atheism and irreligion, 29; its power illustrated in the case of John Stuart Mill, 30; and of Thomas Buckle, 30; and of Dr. Hooker, 31; influence in America, 31; leads to despair, 32; its affectation of philosophic calmness, 32; its bigotry, 32; its baseless character exposed, 33; it is arrayed against rudimental instincts of man's reason and conscience, 33; it misstates the history of the human mind, 34; it makes an impotent defence of man's free agency, 35; it scouts all metaphysical science, 37; and yet must needs use it, 38; the relationship to exploded vagaries, 38; one-sided and fragmentary in its observations of the effects in nature, 41; it despises abstract ideas and primitive judgments, 43; and yet of necessity builds every thing upon them, 43; its reasoning concerning intuitive beliefs or judgments, 48, 50, 51; vicious view of association, 53; false claim of the greater fruitfulness of physical sciences, 57; is itself not "positive," 58; its unhappy results and inefficiency, 60; the name affected by modern philosophy, 117; definition of, 141; relation to monism, 524.
- Protestantism and religious discussion, 73; and free inquiry, 74.
- Psychology, reason and need for, and results of, 37, 40, 377; used by the positivist, 38, 43; that of common sense, 45.
- Pulpit style, simplicity in, 80; causes for violation of, 81; need for, 82; not opposed to the demands of a true rhetoric, 82; is natural, 83; demanded by the preacher's topic and aim, 83; by the nature of the soul's operations, 84; by the acknowledgments of those who are perverted, 85; by the preacher's subject and purpose, 85; simplicity not baldness, 87; its consistency and appropriateness, 88.
- Reason, rudimental instincts of, repudiate positivism, 33.
- Regeneration, and true theory of volition, 260.
- Religion and political prosperity, 536.
- Religious excitements, spurious, 456.
- Representative government, doctrine of, taught in Scriptures, 498.
- Responsibility, personal, for official acts, 16.
- Responsibility and disposition, 233; and free-agency, 236; of individuals for acts of corporate bodies, 540.
- Revelation, its independence of science, 98; may use illustrations, 98; threatening attitude of physicists towards, 118; the hostile and depreciatory posture and tone of physicists, 119; entitled to the ground until disproved, 127; its adequate account of phenomena, 128.

- Revivals of religion, falsely so called, 456; (see *Excitements*), new measures in, 466; methods and objections, 467; practical results, 472, *et seq*; new measures, 565.
- Revolution, when right and under what circumstances, 319.
- Rights, Anti-Biblical Theories of, based in enmity to God, 497; assuming new forms, 497; proper theory incidentally taught in S. S., 498; radical theory of, 499; accepted, through thoughtlessness, in America, 500; corollaries of this theory, 500; woman suffrage, 501; slavery, 501; can the Jacobin theory and the Bible stand together, 502; the theory repudiates the general doctrine of imputation, 503; denies distinctions of franchise or privilege, 504; abhors what it wrongfully calls "caste," 505; demands universal suffrage, 507; necessitates "woman's rights," 507; denies the lawfulness of slavery, 509; the danger of the theory, 514; effect upon faith, 516; especially in inspiration, 516; the duty of right-minded Christians, 518; especially as to the beginnings of error, 520.
- Roman Catholic literature and education, 70.
- Rome and literature and education, 70; an enemy to a free Bible, 72; and discussion, 73; opposed to free inquiry, 73; and private judgment, 73; punishes wisdom and truth, 75, 76; whom she condemns, 75, 77; her false claims rebutted, 76, 78; true purpose in her educational methods, 79.
- Sanctification and the sensibilities, 458.
- Science, classification of Comte, 26; natural, and theology, 91; the authority of the Bible, 95; conclusions not definite and perfect, 100-105; caution against anti-Christian, 116; tendency to become anti-theological, 118; accounted for, 118; substituted by some for revelation, 119; its imperious attitude, 119; unwarranted accusations, 120; practical claim of infallibility, 121; should not be allowed to boast of immunity from error, 124; its advances admitted, 124; but certain claims disproved, 125; its hypotheses, 126; changeableness, 126; its incompleteness, 127; burden of proof rests upon it, 127; all not opposed, 141, 144, 145, 150; physical has an anti-theological tendency, 145; but tendency may be counter-veiled, 146; reasons for anti-theological tendency, 146; claimed by Dr. Woodrow to be silent as to origin of forces and agents, 147; the evil tendency claimed to be in the student, not in the science, 148; natural, objection to its introduction into a seminary course of study, 138; grounds of objection, 138, 139; its fallibility, 151; uncertainties of, 151; is still correcting itself, 151; relation to revelation, their "metes and bounds," 144; their relation in respect to fallibility and infallibility, 151; not upon a level as sources of knowledge, 152; theological relations of, 156; idea of, declared by Blücher incompatible with the idea of God, 168; anti-theistic, position of, 479.
- Scientia media*, Bledsoe on, 187; origin of the doctrine of, 256; repudiated by Rome, 257; disproved, 258; by the fact that it ascribes to God inferential knowledge, 258; by its consequences, 259.
- Scientists, their usual arrogance, 151; not always true to the inductive method, 151.
- Second table of the law and the legal profession, 1.
- Self-determining power of the will, Bledsoe's views of, 184.
- Sensibilities, religious, (See *Excitements*.)
- Sensibility, and desire, distinction between, 185; and functions of, 280.
- Sensualistic philosophy, the, 117, 141, 142, held by John Stuart Mill, 30; its inconsistency, 50.
- Sin, origin of, and Bledsoe's theory of holiness, 245; relation to free-agency and rise of volitions, 260.
- Skepticism, metaphysical, 38; of some modern scientists, 121; universal, not the result of skepticism concerning some teachings of science, 149.
- Slavery, 61; arguments for, 62; defect in, 62; and polygamy, 63; the only solution of political questions connected with, 64; mistaken method of debating, 64; its abstract lawfulness or unlawfulness the question, 64; the constitution, 65; need for proper consideration, 66; moderation and soundness needed at the South in discussing, 66; arguments that are unsound, 67; and Jacobinism, 501, 509; the Bible doctrine, 509ff.
- Smith, Prof. F. H., on doctrine of "naturalness" in a creation, 169.
- Sociology, its place in the positive philosophy, 26.
- Sophistry is falsehood, 8.
- Soul, The Immortality of, 569. (See *Immortality*.)
- South, true policy of, in reference to slavery, 68.
- Spectroscope, its revelations considered, 163; theories based upon the, 436; Dr. Carpenter's caution, 437.
- Spinoza's pantheism, 530.
- Spontaneity, man's, 34.
- Stahl on civic ethics, 304.
- Stewart, Dugald, on induction, 363; system baseless, 365; akin to Hume's philosophy, 365.
- Style, simplicity in pulpit, 80; naturalness, 83. Substance, what is, 571; the teachings of common sense, 572.
- Supernaturalism, demanded and implied in nature, 40.
- Syllogism, the age of the, 349; applied to the inductive method, 408.
- Sympathy, relation of, to religious affections, 461; proper use of, 463.
- Taylors's, Dr., Pelagianism, 230, 231.
- Teleological argument for God's existence, 476.
- Theodicy, Bledsoe's sophistical, 61, 181, 189, 190.
- Theological Seminaries, management of, 137.
- Theology, and science, 91, 156; is it a human science? 153.
- Thirty nine Articles, the, and Calvinism, 193.
- Thought, feeling the temperature of, 274.
- Truth, the power and triumph of, 136.
- Turretin on religious emotions, 460.
- Twisse's Dr., views on decrees of God, 193.
- Ueberweg's interpretation of Aristotle, 353.⁴
- United Synod of the South, terms of union with, 165.
- Unity of the spirit, 578, 581.
- Vernacular tongues, why disused by Rome, 70.
- Vicariously, a man may not do wrong, 12.
- Volitions, not uncaused, 184; follows subjective motive, 185, 187; God's knowledge of, 187; the philosophy of, 211; relation to disposition, 213; in the mind the efficient or cause, 214; Bledsoe's view of this, 214, 215; Bible psychology on the rise of, 218; how they arise in a free agent, 239; the answers of three classes, 240; the testimony of consciousness, 241; of character, 243; proofs of the correctness of the author's view, 241; from consciousness, 241; from character 243; objections answered, 244-245; from the certainty of influence, in education etc., 246; from the rational and moral nature of free volitions, 246; from a proper test of man's free choice concerning his *summum bonum*, 247; from the nature of God and all rational beings, 247; from God's foreknowledge, foreordination, prediction and providence relative to acts of free agents, 248; from true doctrine of regeneration, 260; from the results of the adoption of the opposite, 261; their morality

- determined by subjective motives, 274 ; relation to free-agency, 282.
- Watson's modified Arminianism, 182.
- Wesley, John, nearer truth than early Arminianism, 182 ; on original sin, 229, 248.
- Wesleyanism's teaching as to depravity, 183.
- Wesleyans, unconscious orthodoxy of many, 183.
- Westminster Confession on Creation, 177, 178.
- Whateley's, Archbishop, objection to the Aristotelian syllogism of induction, 357 ; his explanation of induction, 358, objections, 359.
- Whewell's interpretation of Aristotle, 352, 360.
- Wisdom and omnipotence of God sufficiently account for creation, 134.
- Will, the equilibrium of the, 182, 184 ; the Wesleyan view of its ability, 183 ; Edwards on the, 183 ; Bledsoe on the self-determining power of, 184 ; what Calvinists mean by "the corruption of the," 281 ; the meaning of the term, 236 ; free, an ambiguous term, 238 ; the right theory of, 241. (See *Free-agency* and *Volition*.)
- Woman suffrage necessary if the Jacobin theory of government be accepted, 501, 507 ; arguments against, 507.
- Woodrow, Dr. James, criticism of the caution against anti-Christian science, 137 ; charges that the author disallows and rejects all physical science, 140 ; a misconception, 140 ; charges with ignorance, 141 ; misunderstanding and contradictions, 142 ; letter to, 143 ; amazing misapprehension and misconception, 145 ; declares natural science to be silent as to origin of forces and agents, 147 ; claims that the anti theological tendency is in the student, not in the science, 148 ; led into inconsistencies, 148 ; accuses the author of teaching universal skepticism, 149 ; this charge a blunder, 150 ; degrades the knowledge of God through revelation to the level of the knowledge acquired through the physical sciences, 152 ; wrong view of theology, 153 ; opposed to the Confession, 153 ; claims that God's children may ask and enjoy spiritual guidance when they study God's works as well as his word, 154 ; fulfils a prophecy of the evil of teaching science in a theological chair, 155 ; heaps scorn upon the idea that science has any theological tendency, 154 ; accuses the author of culpable ignorance, 155, 157 ; the charge refuted, 155 ; personalities, 165.
- World, the age of the, 101, 104.