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## ARTICLE VII.

## THE RELATIONS AND CONSEQUENT MUTUAL DUTIES BETWEEN THE PHILOSOPHER AND THE THEOLOGIAN.

By Edward Hitchcock, D. D., LL. D., President of Amherst College, and Professor of Natural Theology.

THE history of the manner in which philosophy has been treated by theologians, and theology by philosophers, is very instructive and suggestive. Some of the former have taken philosophy into a close and most cordial embrace, and allowed it to modify, and even form a part of the foundation of their whole system of doctrines; and, as you looked at the stately pile, you could not be certain whether the human or the divine had most to do in its erection.

Another class have been as jealous of philosophy, as if its touch were infectious, and its infection death; and it would seem as if they took special pains to make their professedly biblical system of truth look as distorted and angular as possible, lest they should be suspected of having used the moulding and the dressing tool of reason, to give it form and symmetry.

On the other hand, the tendency among philosophers has been to rank theology below the other sciences. Some of them have maintained that the two departments are quite independent of each other, and that the question of agreement between them, is one with which they are not concerned. Their business is to discover the truths of science, and to leave theology to take care of itself. Others admit the desirableness of a reconciliation, but are quite jealous of any claims, on the part of revelation, to superior authority.

But though thus diverse and conflicting have been the views of theologians and philosophers, respecting their mutual relations and duties, yet the history of the connection or opposition between theological and philosophical systems, has constituted no small part of the annals of the church. And from that history we learn two things: first, that there is an important connection, and consequently there are important duties between the theologian and the philosopher; and secondly, that these relations and duties have been, and still are, sadly misunderstood or neglected. No code of principles, defining those relations and duties, has yet been elaborated; and hence these classes have often treated each other like the partisans

in a border warfare; and prejudice and illiberality have been the impelling forces, rather than Christianity or philosophy.

In this paper I propose to discuss the relations between the theologian and the philosopher; or to state the subject more specifically, *I shall attempt to enucleate and examine the principles which should regulate the intercourse and feelings of these two classes of society.*

I employ the term philosophy in its broadest signification, embracing all science, physical, intellectual, and moral. Yet for special reasons, I shall rest my eye chiefly upon, and derive my illustration from, inductive or physical science. For, in the first place, circumstances beyond my control, and connected chiefly with health, have turned my attention mainly to this department of philosophy; secondly, the claims and bearings of moral and intellectual philosophy, oftener, and with a power which it would be in vain for me to aspire after, have been brought before the readers of this Journal. And finally and especially, a deepening interest seems to be gathering around physical science, both as a rich repository of arguments for, and illustrations of, religion, and a magazine of missiles to hurl against it.

*The first means which I shall employ, for determining this platform of principles, consists in an appeal to reason and Scripture.*

We need, however, as a basis for our enquiries, to define the limits and the functions of philosophy and of theology. The first searches out and classifies the laws of nature; the second presents the principles of religion, natural and revealed, in a scientific or systematic form. Theology, therefore, has a right to employ whatever facts and reasonings it can find in philosophy, illustrative of religion. The principles of reasoning, too, are the same as in philosophy. But it possesses, in addition, an infallible standard of appeal for all subjects that are above reason. The object of philosophy is to explain the phenomena of nature, mental, moral, and material; that of theology is exclusively to defend and enforce the moral relations of the universe. Hence, the two subjects are almost entirely distinct in their aim. The only point where they pursue the same track, is in the department of moral philosophy, which has derived from revealed theology the only true foundation on which to build, and that is, the character of man as a fallen being. Incidentally, however, the two branches treat of the same subject; as, for instance, the creation, the deluge, and the destruction of the world, and its organic races. But since revelation does not pretend to teach science, nor even to use language, in its strictly scientific

sense, we ought to expect in such cases, only that there shall be no real, although there may be an apparent discrepancy between the two records.

Thus distinct, in nature and in function, are these two great departments of human knowledge. Both do, indeed, connect with the same Infinite Source of all knowledge; but they occupy separate and clearly defined provinces, and those at work in one field need not encroach upon, or despise and overlook, those in the other. Providence intended that they should be mutual helps, and mutually deferential. That theology has a vast preëminence, does not justify an undervaluation of philosophy, as if it were of no consequence.

This course of remark leads naturally to the attempt to lay down as the first article of the mutual creed of the philosopher and the theologian, this principle:—That on the question of authority, while science should receive all the credit which its various degrees of evidence deserve, theology has a higher claim than any branch of knowledge not strictly demonstrative. A mathematical demonstration, no sane mind can resist; and little less certain are the physico-mathematical sciences. But where scientific conclusions depend only upon probable evidence, observation, and experiment, for example, there is some room for mistake and false inference. And is it not reasonable to maintain that theology has a higher claim to credence than the probabilities of any single science? For the evidences of its truth, drawn from so many sources, and so diverse, must be considered as outweighing the evidence of any single science, dependent upon experiment or observation. If, therefore, a direct collision could be made out between such a science and religion, and we were compelled to choose between the two, theology must carry the day.

I make this supposition, not because such an alternative ever has occurred, or ever will occur, but merely to show what are the relative claims to deference, of theology and probable science. Not unfrequently, where only an apparent discrepancy has manifested itself between revelation and some yet imperfect science, the self-confident sceptic considers the fate of Christianity as decided. But that is only a flippant philosophy, which will not rank revealed truth above any single science founded upon probable evidence. Not only does theology stand above all other sciences in the importance and dignity of its principles, but in the authority with which it speaks; for it rests mainly on inspired testimony.

On the other hand, however, not a few divines demand for theol-

ogy, not only superior authority, but will allow none at all to science, in matters of religion.

"We have," say they, "an inspired record, and its declarations are not to be set aside, or modified in the least, by any pretended discoveries or theories of blind and perverted human reason. God has spoken, who cannot lie, and His Word is to be received implicitly, whatever may become of the supposed facts or conclusions of weak and ignorant man."

Such reasoning overlooks one important principle. All will agree that when we know certainly what God has revealed, we are to receive it without modification. But He has revealed Himself through human language, and given us no inspired interpreters. We are to ascertain the meaning of Scripture, essentially as we do that of any other writings. Accordingly we do not hesitate to resort to philosophy and history, as guides in our exegesis. Nor do we refuse the light that comes to us from the deciphered hieroglyphics of Egypt, and the disinterred relics of Nineveh. Why, then, should not the testimony of science be employed to elucidate the meaning of Scripture, especially when it opens archives a thousand times more ancient, and no less distinct than those of Egypt and Nineveh? No reasonable philosopher asks that science should be allowed to set aside, or modify, anything which God hath spoken; but only, that it should be employed to ascertain what He has spoken; for without the aid of science, men have sometimes been unable to understand aright the language of Scripture; as in the rising and the setting of the sun, and the immobility of the earth, described in the Bible. Before astronomy had ascertained the earth's true diurnal and annual motions, the Scriptural statements were not, and could not be, understood aright. And the same may be true in respect to phenomena dependent upon other sciences.

A second principle of this creed, if it be not too obvious, and too generally acknowledged, to require a formal statement, takes the ground, that as a means of moral reformation and regulation of human affairs, philosophy has little power, and is not to be brought into comparison with theology. Both reason and experience have given so many striking illustrations of this truth, that it seems strange any should wish to repeat the experiment. But it is done every few years; nay, at all times we find men zealous in advocating some new philosophic scheme for reforming and perfecting human society, whose essential element is something different from the method pointed out in the Bible. The new system may have some princ-

ple in common with Christianity; but the author of it relies rather on the differences which he has superadded, than on the agreement. Yet what multitudes of such schemes, after an ephemeral excitement, become the bye-word of the world, and pass silently into that oblivious receptacle of things, "Abortive, monstrous, or unkindly mixed," described by Milton:

" All these, upwhirled aloft,  
Flew o'er the back side of the world, far off,  
Into a limbo large and wide, since called  
The Paradise of Fools: — to few unknown  
Long after." —

A third important principle, which reason teaches as appropriate for this mutual creed, is, that entire harmony will be the final result of all researches in philosophy and religion. It is strange how any other view of the matter can be entertained by men who profess to believe that the God of nature is the God of revelation. For what are nature and revelation, but different developments of one great system, emanating from the same infinite mind? Yet not a few theologians look upon science as a dangerous ally of revelation; and maintain that we are not to seek for harmony between them. "The Bible," say they, "was given for our infallible guide, and it is of little consequence whether its teachings coincide with those of philosophy. The history of the church shows us that the two have always been in collision, and it is a dangerous enterprise for the religious man to labor for their reconciliation. Let him follow the teachings of revelation implicitly, nor suffer any of its statements to be modified by the pretended facts, or theoretical deductions of science.

Does this seem to any to be a caricature? Take, then, the words of a distinguished American divine. "We are not a little alarmed," says he, "at the tendency of the age to reduce the great facts narrated in the Bible, to the standard of natural science." "Human science is a changing and restless thing. It is well that it is so."

On the other hand, not a few scientific men, although professing respect for the Bible, and faith in it, yet feel as if its statements should have no weight, even upon any matter of fact which comes under the cognizance of philosophy. Science, it is thought, has its own appropriate evidences, which must be admitted, whatever else goes against it. The Bible was not given to teach science, and therefore it was never intended to be authoritative in such matters.

Now, if these two classes of men were to lay it down as a settled principle, that all science, and all religion, are certain ultimately to harmonize throughout, it would remove this mutual jealousy and distrust; nor would the parties be disposed to stand aloof from each other, and to treat one another as enemies. If they are ultimately to be entirely one, then they are essentially so now, and all discrepancy is apparent only. Therefore should the philosopher and the theologian feel as if they were brothers, whose business it is, in mutual good will, to elucidate and bring into harmony different portions of the same eternal truth.

Another article of this mutual creed should be, that scientific men may have the freest and the fullest liberty of investigation. They have not always had it. "We remember," says Melville, "how, in darker days, ecclesiastics set themselves against philosophers, who were investigating the motions of the heavenly bodies, apprehensive that the new theories were at variance with the Bible, and therefore resolved to denounce them as heresies, and stop their spread by persecution." Open persecution is unpopular now; but I fear that a remnant of the same feelings still lingers in some minds. They will not say directly to the scientific man: "abstain from your researches, for they seem to threaten injury to religion;" but their fears of some disastrous influence make them jealous of the man, and fearful that his scientific conclusions may lead himself and others astray; and hence they withdraw their confidence from him, and thus take the most effectual way to alienate and make a sensitive mind sceptical. But how narrow are such views! and how idle the fear of collision between science and revelation! How much more noble and truly Christian, are the sentiments of Dr. Pys Smith! Only let the investigation be sufficient, and the induction honest; let observation take its farthest flight; let experiment penetrate into all the recesses of nature; let the veil of ages be lifted up from all that has hitherto been unknown, if such a course were possible — religion need not fear; Christianity is secure, and true science will always pay homage to the Divine Creator and Sovereign, *of whom, and through whom, and to whom, are all things, and unto whom be glory forever.*

The difference in the character of the language of science and that frequently employed in religion, suggests a fifth article of the supposed platform. Different principles of interpretation to some extent are demanded in the two departments. True science employs terms that are precise, definite, literal, with scarcely more than one meaning, and adapted only to cultivated minds. Religion, especially the

Bible, makes use of language that is indefinite, loose, and multiform in signification, often highly figurative, and adapted, not only to the popular mind, but to men in an early and rude state of society. Science, for instance, could not, as the Bible can and does, represent the work of creation in one chapter, as occupying six days, and in the next chapter, as completed in one day. It could not, like the Bible, speak of the sun's rising and setting, and of the earth's immobility. Meteorology could not describe the concave above our heads as a solid expanse, having windows, or openings, for the rain to pass from the clouds beyond. Nor could physiology represent the bones to be the seat of pain, or psychology refer intellectual operations to the region of the kidneys. Neither could systematic theology in one place represent God as having repented that he had made man, and in another, exhibit him as without variableness or shadow of turning. But all this can the Bible do, in perfect consistency with its infallible inspiration, because it was the language of common life; and common sense can interpret it, so that every suspicion of self-contradiction shall vanish. Indeed, had its language been strictly scientific, it might have formed a good text-book in philosophy, but it would have been a poor guide to salvation. Yet the attempt to force the language of the Bible into the strait jacket of science, has been prolific of mistakes and errors.

Another principle, which maintains that the Bible has anticipated some scientific discoveries, should be settled and form a part of this mutual creed. In my view it should be settled in the negative. For if we admit that one modern discovery can be found in the Bible, how can we vindicate that book in those numerous cases where it speaks of natural phenomena in accordance with the monstrously absurd notions which prevailed among those to whom it was originally addressed? If it describes the science of the nineteenth century in one instance, why not in all? But admit that it was foreign to the object of revelation to teach science, and we can see why its descriptions of natural things accord with optical, but not physical truth; and, then, there is no difficulty in enucleating the true meaning of the sacred writers. Interpreted by such a principle, we should not conclude that Job meant to reveal the Copernican system, because he speaks of the earth as hanging upon nothing; especially as in another place he refers to the pillars on which the earth rests. But both phrases are quite natural and proper for one of the most allegorical books of the Bible, when regarded as vivid poetical images. The grand distinction between the Bible and all other professed

revelations is, not that it has anticipated scientific discoveries, but that there is nothing in its statements which those discoveries contradict or invalidate. Often has the sceptic announced such discrepancies; but in the end, the Bible has always been shown consistent with itself and with science. Now this is true of no other professedly inspired books. The Koran and the Védas are often in direct collision with astronomy, geology, anatomy and physiology; and when you have proved them false in science, you have destroyed their authority in religion. Proudly above them all stands the Bible; and so long as it can maintain this position, we may be sure of its Divine original; for any mere human production, embracing so many authors, and reaching through so many thousands of years in its history, could not have avoided collision with scientific truth.

Once more; theologians and philosophers should mutually require that those who undertake to pronounce judgment upon points of connection between science and religion, should be well acquainted with both sides of the question. I do not say equally well acquainted; for so limited are the human faculties, that he who is eminent in one department of knowledge, can hardly be expected to be equally familiar with another. But a respectable knowledge of any subject is essential to decide upon its relations to other subjects. And it ought to be a settled principle, that an opinion upon any point of science or religion is entitled to no respect, if it can be shown that the man does not understand the subject upon which he writes. For eminence in one department of knowledge gives a man no claims to credence in another which he has never studied. A man, for instance, may be most distinguished in science, so that his word is law; and yet never having given his attention to theology, he is utterly unfit to judge of the bearings of scientific facts or theories upon religion. We listen with great respect to the opinions of an eminent divine upon those theological principles to which he has devoted so much thought and study. But if he undertakes to dogmatize upon matters of science, when his very language shows him quite ignorant of its principles, and swayed by prejudice, what claim can his opinions have to our reception or respect?

The distinguished Scotch divine, who uses the following language respecting geology and geologists, no doubt supposed himself doing an important service to religion by his denunciations. "Geology," says he, "as sometimes conducted, is a monument of human presumption, which would be truly ridiculous were it not offensive by its impiety." "Thus proving morals with a spark of intellect and

a moment for observation, during which they take a hasty glance of a few superficial appearances, [geologists] dream themselves authorized to give the lie to Him who made and fashioned them, and everything which they see." The same may be said of another eminent divine, who applies similar remarks to the whole of physical science. "The third fact," says he, "here revealed in [Genesis] is, that this world was created in six days. Here, again, the Scriptures are at issue with science. Modern geologists tell us that this is not possible; and all we need reply to the bold assertion is: *with men this is impossible, but with God all things are possible.*" "Natural science is confessedly progressive, and, therefore, comparatively crude. Geology is in its infancy."

Now whatever effect such language may have upon persons who have given no attention to science, what but a bad influence can it have upon the naturalist, who sees on the very pages from which I have quoted, the most decisive evidence that the writers do not understand the subject; not from want of ability, but because other studies have engaged their attention. Suppose that in reading a commentary on Job, the writer had inadvertently disclosed the fact, that he knew nothing of the Hebrew grammar, nor even of the Hebrew alphabet. From that moment his criticisms, however much of talent they might discover, would be regarded with indifference, if not with pity or contempt, by the Christian and the scholar.

It would be easy to quote examples of an analogous character from the philosophers. I might refer to the extraordinary and even ridiculous exegetical principles adopted by the physico-theologists of the last century to prove their favorite dogma, that the principles of physical science are all to be found in the Bible, as given by Calcott in his work on the Deluge, and by Hutchinson in his twelve volumes entitled "*Moses's Principia.*" But more appropriately may I refer to a writer of our own times eminent enough in science to be selected to write one of the Bridgewater Treatises. In his interpretation of the phrase "*windows of heavens*" in Genesis, Mr. Kirby makes it mean, "*cracks and volcanic vents in the earth, through which water and air rushed inwardly and outwardly with such violence as to tear the crust to pieces.*"

I quote another example from a naturalist and philosopher still more eminent, not because it has the dreamy character of that just given, but because I know how the following passage has struck some of the most distinguished and liberal Hebrew and biblical scholars in our land. While they sat gladly at the feet of this

author in all matters of physical science, they regretted that the same discrimination and long study had not been given to the science of biblical interpretation before an exegesis of Genesis had been thrown out so confidently, which is contrary to the obvious sense and to the almost universal opinion of biblical writers. I speak not here of the truth or falsehood of the theory of this distinguished man, whose writings exhibit so much of the true spirit of religion, and who takes so noble a stand against the flippant scepticism of sciolists, but refer simply to this particular exegesis of Genesis.

“The advocates of identity of origin for all the several races of men, as springing from only one primitive pair,” says Professor Agassiz, “have no argument to urge in support of that position, but simply a vulgar prejudice, based on some few obscure passages of the Bible, which may after all be capable of a different interpretation.”—“To suppose that all men originated from Adam and Eve, is to give to the Mosaic record a meaning that it was never intended to have.”

It is very probable that some may be ready to apply to me personally the exhortation: *physician, heal thyself*. For some do regard me as having violated the rule which I am urging upon others, by advancing interpretations of Scripture which no sound biblical scholar can admit. On two points especially has this charge been made. I have advocated that exegesis of Genesis, which permits the intercalation of a long and indefinite period between the beginning and the first demiurgic day; and, also, that exegesis of Peter, which makes him teach that this earth and its atmosphere, after being burnt up and renovated, will become the new heavens and the new earth.

Now were these interpretations original with myself, and now first proposed in opposition to the whole array of biblical critics, I might well confess myself guilty, and conclude that my zeal to sustain a favorite theory had blinded by judgment. But in fact these views, both of Genesis and of Peter, have been advocated by the early Fathers of the church, and by a large number of the ablest modern interpreters and divines. As to the meaning of Peter, Dr. Griffin says, that the view above referred to “has been the more common opinion of the Christian Fathers, of the divines of the reformation, and of the critics and annotators who have since flourished.” I must disclaim, therefore, both the honor and the odium of these views, and say, that if I am wrong in their advocacy, it is because I have been led astray by such men as Augustine, Theodoret, Justin Martyr,

Origen, Luther, the elder Rosenmüller, Tholuck, Dathe, Pye Smith, Patrick, Chalmers, Knapp and Griffin.

Finally, it ought to be a position admitted by the philosopher and the theologian, that the facts and principles of science, brought before an unsophisticated mind, are favorable to piety. A contrary impression prevails extensively; just because not a few scientific men, in spite of science and not through its influence, have been sceptics. Their hearts were wrong when they began the study; and then, according to a general law of human nature, the purest truth became only a means of increasing their perversity. But had their hearts been right at first, that same truth would have nourished and strengthened their faith and love. Why should it not be so? For what is true science, but an exhibition of God's plans and operations? And will any one maintain that a survey of what God has planned and is executing, should have an unfavorable moral effect upon an unperverted and unprejudiced mind? If it does, it must be through the influence of extraneous causes; such as pride, prejudice, bad education, or bad habits; for which science is not accountable. Oh no! the temple of nature is a holy place for a holy heart. Pure fire is always burning upon its altar, and its harmonies are ever hymning the praises of its great Architect; inviting all who enter to join the chorus. It needs a perverse and hardened heart to resist the good influences that emanate from its shrines.

*A consideration of the mutual interest of the theologian and the philosopher constitutes a second means for determining the principles by which their feelings and intercourse should be regulated.*

It hardly needs a formal argument to show, that it is for the interest of both to bring revelation and science into entire harmony. The established and intelligent Christian will not, indeed, be greatly disturbed because an alleged scientific discovery is said to come into collision with the Bible. But there are others, predisposed to disbelieve revelation, who will gladly seize upon such examples to fortify themselves in scepticism. Religion, therefore, suffers by merely apparent incongruity between science and revelation. Nor can it be a matter of indifference to philosophers, to be looked upon as throwing doubt upon man's highest hopes and interests, by those who defend these interests, and who have taken a most important part in time past in advancing science. Suspicion and alienated feeling between these classes, operate most disastrously upon both; and, therefore, mutual interest demands their united efforts to remove apparent discrepancies.

A second consideration of importance in this connection, is, that science is the great storehouse of facts on which is based the whole system of natural religion. And when we recollect that natural religion does not stop with the mere demonstration of the being and attributes of the Deity, but establishes his natural and moral government over the world, and man's correspondent obligations; also his common, special and miraculous Providence, and the doctrine of his purposes or decrees, we see how important is this use of science. At this day, indeed, how can the theologian dispense with its facts in their religious applications? Let the works of Ray, Derham, Wollaston, Paley, Crombie, Brown, Chalmers, and the other authors of the Bridgewater Treatises, testify to their importance. For though the divine may stand firm upon the evidence of history, prophecy and internal character to sustain the Bible, yet if he can show that its truths are in agreement with nature, and are even sustained and illustrated by it, his appeal, in this thinking and reasoning age, will come home with much more convincing power. He cannot dispense with the facts of science and yet be a *workman that needeth not to be ashamed.*

On the other hand, the philosopher should not forget that the religious applications of science are its most important use. When he thinks what knowledge has done in elevating and civilizing society, and in multiplying the comforts and luxuries of life, he is apt to forget its religious bearings. But these in fact transcend in importance its worldly influences, as much as eternity transcends time. And most sadly does he degrade science, who overlooks its religious applications. These form the ground of its truest dignity, and they alone link it to the permanently grand and the eternal.

But philosophy may also be employed in defending and illustrating revealed truth. Of this we have a splendid example in the "Analogy" of Bishop Butler; whose grand principle has been applied successfully by Barnes to nearly all the peculiar doctrines of revelation. Of all efforts to meet sceptical objections to evangelical Christianity, this is the most thorough and complete; and were this work more carefully studied, along with such authors as Chalmers, Harris, Whewell, Sedgwick, Isaac Taylor and McCosh, who extend and illustrate analogous principles, the flippant and superficial sciolism of the day, that would metamorphose the Deity into natural law, would find little favor.

Nor are these religious applications of philosophy confined to the older and more mathematical sciences. Nay, those more recent, and

dependent mainly upon experiment and observation, when rightly understood, are remarkably prolific of religious illustrations. Chemistry and physiology, for example, throw much light upon the doctrine of the resurrection of the body, and vindicate it against objections otherwise unanswerable. The former science, also, points us to the true meaning of those Scriptures that describe the destruction of the world by fire; showing us that it is change of form in the matter of the globe, but not its annihilation. Meteorology teaches us how to understand the language of Scripture respecting the firmament above us. And geology, especially, lends confirmation to the biblical history of man's creation as a comparatively recent event; it shows us how we should understand the Scriptural cosmogony, points out a new argument for the Divine existence, and lends such decisive corroboration to the revealed doctrines of special and miraculous Providence, and Divine benevolence, that these truths could not consistently be excluded from the creed of philosophy, though the testimony of the Bible were lost.

Surely, then, the interests of theology demand that the religious applications of science should not be overlooked; and, on the other hand, science should count it the highest honor to be able to throw even a ray of light upon God's written Word.

I venture here to suggest another use to which science may be applied by the theologian. It is well known that sharp discussions not unfrequently occur, respecting the meaning of the language of the ablest divines after their decease; and they are charged with teaching contradictory principles. It is well known, also, how great complaint is often made by controversial writers, of the misunderstanding of their views by their opponents. But how seldom do discussions of this sort occur respecting the meaning of eminent mathematicians, natural philosophers, and naturalists! Nor does this result from entire unity of views, and the certainty of every principle discussed in these sciences. But it springs mainly from the definiteness and precision of the language which is employed. Take botany or chemistry, for example: how can men be in doubt about the meaning of a sentence, when almost every word in it has a settled and usually a single sense? I do not suppose that equal precision could be introduced into theology, because it treats of natures more subtle than those of physical science. But I suggest whether divines, in the definition of their terms, might not advantageously consult the directness, singleness, and precision of physical science more, and the wariness, subtilty, and equivocal senses of metaphysics less. I fancy that

in the style of Dr. Chalmers, which, although sometimes too stately, is always clear, we have an example of this improved phraseology. I doubt whether posterity will hesitate much as to the meaning of his writings; and perhaps the unsanctified ambition of the earlier periods of his ministry, which led him to devote so much time to mathematics, chemistry, and natural history, will be thus overruled to the benefit of theology.

Every true philosopher, no less than the religious man, should be desirous that his pursuits may accomplish the most possible for the good of society, for benevolence is a duty of natural as well as revealed religion. Now the cultivation of science alone, in a community where atheism or infidelity predominates, is most likely to prove a great curse. Knowledge puffeth up; and hence mere scientific acquisitions tend to foster pride, selfishness, and inordinate ambition, and to exalt the brilliant few at the expense of the degraded many. The result will be, that the most furious passions of our nature will exhibit their deadliest malignity, in a community where science is cultivated, but spurns the aid of religion.

What a terrible illustration of this truth has been exhibited during the last century in the centre of European civilization! Never did France show more of brilliant scientific skill, than during the savage days of her first revolution; and her whole subsequent history teaches us how dangerous it is to commit the power, which science bestows, into irreligious hands. The meteoric explosion which was the result, not only rent that unhappy country to atoms, but sent its iron fragments into every European land, and the death-groan that followed has hardly yet died upon our ears. It was a dear-bought, yet impressive lesson of the danger of committing scientific power into the hands of irreligion; and it should lead the philosopher to feel the necessity of spiritual influence to control the energies of science. Truly, as Coleridge remarks, "all the products of the mere understanding partake of death;" and as Lord Bacon still more appropriately observes, "in knowledge, without love, there is ever something of malignity."

But there is another important fact on this subject. The general diffusion of scientific knowledge through a community can never take place without the aid of Christianity. There may be an aristocracy of learning, as in the case just quoted, but religion alone will provide for general education. Left to the influence of any other principle, the favored and enlightened few will keep down and oppress the ignorant masses. Popular education is found only in connection with

revelation. So says the history of the world; and an analysis of human nature shows us that it must be so. Hence every philosopher, who is a friend to his species, will feel it his duty to promote the diffusion of Christianity as well as of science. Thus only can the greatest good be secured to the whole.

*The third means of ascertaining and settling the principles that should regulate the intercourse and feelings of the theologian and philosopher, is by an appeal to history and observation.*

We thus learn the results of many well-tried experiments on this subject; and these should have all the force of law, and be incorporated into the code of mutually obligatory principles. They are more certain than the *à priori* deductions already considered, and I could wish that my space would allow a fuller enumeration of what has thus been taught.

One of the principles thus developed, is the danger of exalting philosophy above revelation. Unhappily, we can hardly glance at a page of ecclesiastical history, without finding instructive examples. Perhaps the Platonizing tendencies of the Christian Fathers for many centuries, are the most striking illustration in former times. It is hardly strange that those who came out of the schools of philosophy into the school of Christ, should be gratified to find, and be ready to suppose they could find, a correspondence between the doctrines of their old and new masters. And how natural, in such a case, to accommodate the principles of the new leader to those of the old one; or rather to exalt the teachings of the first above those of the last. Thus did the Fathers; and though Platonism was again and again driven out of the church, again and again was it brought back, demanding from time to time a new exorcism.

But though this incubus rested on the church for so many centuries, and often well nigh stopped its breath, modern divines seem to have gained little wisdom by the severe lesson. Plato and Aristotle, indeed, no longer vex the church by name. But their spirit, like the exorcised demon of old, walking through dry places and seeking rest in vain, has commissioned seven other spirits to return into the sacred enclosure, not merely to modify Christianity, but to expel it. Hence, in modern theological literature, we have profound works on the Gospel, whose object is to prove the Gospel a fable; treatises on dogmatics, without any doctrines; and lives of Christ, from which Christ is excluded. Instead of one or two leaders, as of old, we now have scores. Having the shoulders of those old giants, Plato and Aristotle, to stand upon and start from, it is only necessary to be

provided with a huge pair of transcendental wings to seem very large to a wondering world, as they soar away into the mysterious ether, into which those old giants found it difficult to rise, because the clogs of common sense hung so heavily upon them.

Justice requires me to add, in this connection, that the philosophy which has thus been exalted above revelation so often and so disastressfully, is not that of induction, but of abstraction; not that of Bacon and Newton, and Whewell, but that of Hobbes, and Hume, and Diderot. I know that there always has been, and still is, a strong jealousy of physical science, as if it were hostile to religion; but where is the evidence of such hostility? What philosopher of the Baconian school has ever erected within the church a tower that overlooked and overawed Christianity itself, and made it a resort for those too proud to submit to revealed truth? But how often has the deductive philosophy done this? Divines seem prone to forget the distinction drawn with such a vigorous hand by Isaac Taylor: "The entire mass of intellectual and theological philosophy," says he, "divides itself into two claims, the one irreconcilably opposed to the other. The first is, in its spirit and in all its doctrines, coexistent with human feelings and interests. The second is, both as a whole and in its several parts, paradoxical. The first is the philosophy of modesty, of inquiry, of induction and of belief. The second is the philosophy of abstraction, as opposed to induction; and of impudence as opposed to a respectful attention to nature and to evidence. The first takes natural and mathematical science by the hand, observes the same methods, labors to promote the same ends, and the systems are never at variance. The second stands, ruffian-like, upon the road of knowledge, and denies progress to the human mind. The first shows an interminable and practicable, though difficult ascent. The second leads to the brink of an abyss, into which reason and hope must together plunge. The first is grave, laborious, and productive. The second ends in a jest, of which man and the world and its Maker are the subject."

A second instructive fact taught us by history and observation, is the strong tendency to substitute a dogmatic and denunciatory spirit for knowledge and argument. Men of superior intellect and extensive erudition, are very apt to do this, in respect to subjects to which they have never given special attention. Some new science or discovery has been brought forward in such an aspect, as seems to the theologian to conflict with religion. He has never studied the science, it may be, and cannot therefore hold an argument on the subject. But he

feels deeply the wound inflicted on revelation; and he cannot sit still and see that cause suffer, which he loves so well. He denounces the new discovery, therefore, and gives no doubtful intimation that its advocates are sceptics, trusting to his reputation as a theologian to enforce his opinion upon the public. Some, whose organ of veneration is large, swallow the *ex-cathedra* judgment with no wry faces. Others, more discerning, see through the ruse, and sigh over human weakness. Scientific men look upon the whole with silent contempt, nor deign to attempt an answer to dogmatism and personal abuse.

Sometimes, however, a scene equally absurd is witnessed on the other side. A scientific man, desirous of extending his discoveries into the domain of religion, ventures upon interpretations of Scripture, or statements of doctrine, that show him quite ignorant of both. The practised theologian points out the fallacy of his reasoning so clearly as to wound his pride. But instead of generously confessing his error, he resorts to charges of bigotry, narrow mindedness, and ignorance of science; and dogmatically maintains that science is to be followed, whatever becomes of revelation. He shows towards it and its defenders the same bitter, bigoted spirit which he censures in his opponents. Their arguments he cannot answer, because he has never studied hermeneutics or theology. And so he wraps himself up in the cloak of self-conceited wisdom, and substitutes contempt for logic. Men talk much of the *odium theologicum*, as if it were the quintessence of gall. But really, the *odium scientificum* is often a much more concentrated mixture. The most illiberal of all bigots, are those who fancy themselves the very pinks of liberality; and pride never assumes such lofty airs, as when it curls the lip of the self-satisfied philosopher, who is destitute of Christian humility.

The disastrous influence of mutual jealousy and hard speeches, between theologians and philosophers, is a third lesson most impressively taught by history and observation. Although many distinguished divines have been eminent philosophers, and science is largely indebted to the clerical profession, yet, in general, the two classes have kept very much apart from each other. This is particularly the case in respect to the cultivators of physical science. In general, they have an impression that theologians feel no sympathy with their pursuits, and are not only ignorant of science, but prejudiced against it, as unfriendly to religion. And the fact that so few in the ministerial office do regard attention to natural science; by this

ministry, as entirely appropriate, fosters this false notion. But it awakens deep prejudices in these scientific minds against clergymen, because they cannot see why the ministers of God should not take interest enough in his material works to study them. Prejudice prevents that intimate acquaintanceship which would be its cure. It engenders distrust and produces severe judgments, and keeps those apart who should be cordial friends, because they are both engaged in the same great business of developing the works and ways of the Almighty.

This jealousy and want of acquaintance with each other produces a reaction on the part of theologians, who, also, become censorious and distrustful of men of science. They learn that some such are sceptics, and they presume that nearly all are. Hence, when some new scientific discovery is announced, which seems unfavorable in its bearings upon revelation, theologians are at once suspicious that the author of it is intentionally aiming a blow at Christianity; although the greater probability is, that its bearings upon religion never entered his mind. But too often, in such cases, the zealous vindicator of the truth throws out such an insinuation in the public ear, and if the scientific man is not a meek Christian, the ungenerous suggestion may convert into an enemy of the faith, one who before was only negligent of it, or indifferent towards it.

But this is not the worst of it. Such a course produces a conviction on the public mind, that men of science teach one thing, and theologians another. Nor can there be a doubt that there is a strong disposition among intelligent men, who are not pious, to take sides with science, even when it seems hostile to revelation; and thus may the severe and unfounded judgment of the theologian, in respect to science, confirm and multiply men of sceptical views.

This point may be illustrated by the history of geology. Ever since Cowper, in his oft quoted lines, charged geologists with digging and boring the strata, in order to disprove the history of Moses, almost all subsequent writers have repeated the accusation; and I doubt not that the almost universal belief now, is, that the works of geologists abound with open or covert attacks upon revelation. But the impression is entirely erroneous. In perhaps four out of five of those works, you will find able attempts to reconcile the facts of geology with Scripture; but I have never met with a single attempt, in any language, by any respectable geologist, to adduce the facts of the science to the discredit of revelation. Many of them are, doubtless, sceptical; but they have not done this thing, as they are charged,

If it has been done at all, it is by men of no reputation as geologists. Yet probably it will require another quarter of a century to rid the public mind of this false impression.<sup>1</sup>

Now all these false notions would be avoided, if men of science and theologians would cultivate a close acquaintance. If men of science were often to come into contact with divines, instead of finding them narrow-minded, bigoted, and unfriendly, as they now suppose, they would, in general, be gratified by their enlarged and liberal views, their ability and candor in looking at scientific truth, and their ardent love of all kinds of knowledge, and cordial efforts to promote it; and many they would find to be successful and eminent cultivators of science. In like manner would scientific men appear in a quite different light to theologians. Instead of subtle and designing enemies of Christianity, they would find many to be its firm friends; and nearly all entertaining for revelation the highest respect. Their chief fault is, that in their ardent and exclusive devotion to science, they are apt to neglect that higher attention to religion which its claims demand; a charge, however, which I fear lies equally against most other classes of society. They would find, in fact, almost without exception, that these men were ready publicly to express their regard for religion; and while they would contend

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<sup>1</sup> How easy would it be to substantiate these statements by quotations from the most eminent geological writers of the last fifty years; such as Jameson, Silliman, Buckland, Coneybeare, Mantell, Sedgwick, Lyell, Macculloch, Miller, etc. But I will refer only to a recent work by two eminent French geologists, C. D'Orbigny and A. Geste, published in Paris, in 1851, entitled, "Geologie appliquee aux Arts et a l'Agriculture." Coming from a city generally regarded as the centre of European scepticism, and whose learned men have been considered as unfriendly to the Bible, it is gratifying to find that these authors, after a laborious attempt to bring revelation and geology into harmony, pass the following noble eulogium upon the sacred volume.

"In view of the chronological agreement between Genesis and the most authentic geological facts, we cannot but accord to this mysterious book, something profound and supernatural. If the mind is not convinced, it at least bows reverently before such writings, brought out in an age when we cannot suppose the first elements of the natural sciences were known, and which embraces a development of the principal events of which our globe has been the theatre. We find in Genesis something so simple, so touching, and so superior, in respect to morality and philosophy, that the sceptic, astonished moreover at the genius that could foretell facts which scientific researches should demonstrate so many ages afterwards, is forced to acknowledge that there is, in this book, the evidence of an inspiration, secret and supernatural; an inspiration, which he cannot comprehend, which he cannot explain, but which strongly affects him, presses upon him, and controls him." — p. 107.

for the fullest liberty of investigation into every department of nature, they would resent the charge of intentionally aiming to injure the credit and authority of revelation.

If I mistake not, a reference to the British Association for the advancement of science, will not only confirm these suggestions, but show that British divines are ahead of Americans on this subject. That Association embraces all the most eminent scientific men in the kingdom, as well as many from the continent; and they meet yearly, to spend a week together in scientific discussions. Here we might expect, if anywhere among the cultivators of physical science, an exhibition of religious scepticism. But the fact is, a decidedly religious tone has always been exhibited in that meeting. Whenever a fitting opportunity presented, the addresses of the presiding officer, and of the members, have exhibited a spirit not only religious in the general sense of the term, but in its Christian sense. Said Sir R. H. Inglis, the president in 1847, "I will only add my firm belief, that every advance in our knowledge of the natural world, will, if rightly directed by the spirit of true humility, and with a prayer for God's blessing, advance us in a knowledge of himself, and will prepare us to receive his revelation of his will with profound reverence." In echoing similar sentiments from Dr. Abercrombie at the meeting in Edinburgh, in 1834, Professor Sedgwick remarked, that "the pursuits of science, instead of leading to infidelity, have a contrary tendency; they tend rather to strengthen religious principle, and to confirm moral conduct.

One of the most gratifying features of the meeting of this body in Edinburgh, in 1850, which I had the pleasure of attending, was the strong religious influence which was manifested. This resulted, in part, perhaps, from the fact that the meeting was presided over by that truly Christian philosopher, Sir David Brewster. But his noble address was warmly seconded by others. Said Dr. Robinson, the eminent astronomer, in complimenting Dr. Mantell's lecture on the gigantic extinct birds of New Zealand, "this lecture speaks to us of God: yea more, it speaks to us of Jesus Christ,"—alluding to the fact that these birds were discovered by missionaries; and that sentiment was warmly cheered by the immense audience, of more than one thousand persons, embracing some twenty of the nobility, a hundred members of the Royal Societies of England and Scotland, sixty professors in the Universities and Colleges, a hundred physicians, and a hundred clergymen. Aye, a hundred clergymen; and in the fact I discover the main secret of the religious tone that has

characterized these meetings. And here it is, as it seems to me, our British brethren are ahead of us in this country. For there is also an American Scientific Association, on essentially the same plan as the British. It has now been in existence twelve years, and I have attended all its annual meetings, save two; nor have I ever seen any other feeling manifested than respect for religion. But I am sorry to say, that I have met there only a very few of my clerical brethren. If they desire to witness in this body as decided an influence in favor of religion as is exhibited on the other side of the Atlantic, they have only to attend its meetings and take an active part in its labors.

A fourth lesson taught by history and observation, is, that neither philosophy nor biblical interpretation have yet arrived at a perfect and unchangeable state.

Mathematics is the only science that can lay claim to infallibility; and even this admits of progress; so that new religious applications may arise from new researches. The other sciences range widely along the scale of probability and certainty in their conclusions. Many points in them all, and in some nearly every point, admit of further elucidation; such as may considerably modify their religious bearings. Let the history of philosophy, even in the exact sciences, and eminently in the psychological and moral, teach us how vain is the pretence that they can assume no new phase in relation to religion. How cautious, therefore, should the philosopher be, to distinguish between the settled and the changeable principles of science, before he pronounces any of them in collision with inspired truth.

On the other hand, however, let the theologian remember, that, though the principles of the Bible be infallible and unchangeable, not so is its interpretation. Passing by the wild rationalistic theory of accommodation in biblical hermeneutics, it is still true, that on many principles of their science, exegetical writers are not agreed. The result is diversity of signification, when they interpret the Word of God. Yet to avoid misapprehension, let me avow my conviction, that, so far as the essentials of salvation are concerned, the Bible is so plain a book, that no theories of interpretation, advocated by honest Christian men, can conceal these great truths. In fact, so prominently do they stand out in the Scriptures, that it needs no rules to make them intelligible, save what common sense and common honesty supply; and hence no sophistries of the interpreter can long conceal them from the people. But very different is the case with some of those parts of Scripture *hard to be understood*, and of

others, which cannot be understood till researches and discoveries in philology, history, and science, have given us the clue. So long as these discoveries continue to be made, will the meaning of some passages of Scripture be liable to modification; and at present these branches of learning are far enough from perfection. It is impossible, therefore, that the meaning of some portions of Scripture should not receive some modifications for a long time to come; and he does the most injury to the cause of religion, who rejects every new interpretation, and considers it dangerous to disturb the settled notions of men as to the meaning even of the less important portions of Scripture. He must have a weak faith in the Bible, who fears to have every passage in it subjected to the most thorough scrutiny, under the concentrated light which all literature and all science can pour upon it. And he must have a very narrow view of literature and science, who fancies that they have done all they can do to elucidate the sacred text. Yet how common the notion among divines, that, while "human science is a changing and a restless thing," theology, — not merely its frame-work, but its entire covering, coloring, and appendages, — has long since received its last finish.

The fifth lesson taught us by history and observation, is the weakness and folly of predicting or apprehending injury to Christianity from scientific discoveries. Such fears and predictions are not uncommon. On the one hand, the infidel, by a hasty inference, feels confident that the new discoveries will give a deadly blow to what he regards a false system; and he exults in the anticipated discomfiture of the Christian church. Some intelligent Christians, also, become alarmed at the threatening aspect of the new views, and tremble for the result. But how vain are all such fears and predictions! It is the fiftieth time in which Christianity has seemed to the sanguine sceptic and the timorous believer to be in great peril; and yet not even an outpost has been lost in this guerilla warfare. Discoveries in astronomy, geology, chemistry, and physiology, have often looked threatening for a while; but how entirely have they melted away before brighter light and more careful study. Moreover, every new assault upon Christianity seems to develop its inherent strength, and to weaken the power of its adversaries; because, once discomfited, they can never rise again. It will be time for the infidel to begin to hope, when he shall see, what he has not yet seen, a single stone struck from one of the bastions of this massive fortress by his artillery. And strange that any believer should be anxious for the future, when the history of the past shows him that every

science, which for a time has been forced into the ranks of the enemy, and made to assume a hostile attitude, has, in the end, turned out to be an efficient ally.

History and observation sustain us in going further than this; they show us, that, as a general rule, the more threatening have been the developments of any science in its earlier periods in respect to Christianity, the more strong and abundant have been its ultimate support and illustration of religion. The introduction of the Copernican system of astronomy seemed, to the divines of that day, utterly irreconcilable to revelation; and they contended against it as if the life of religion were at stake. Nevertheless, the demonstrations of physics triumphed over councils and decrees; but instead of proving the death of religion, what Christian does not rejoice in the rich illustrations and auxiliary support which revelation has derived from astronomy? especially in furnishing to the commentator the true principle of interpreting texts of Scripture that relate to natural phenomena. So, too, chemistry was employed for a time by the exalting sceptic, and to the alarm of the timid believer, in disproving the future conflagration of the earth. Yet not only has this envenomed arrow fallen harmless to the ground, but the science has furnished materials enough for at least one volume as a prize essay, entitled, "Chemistry as exemplifying the Wisdom and Beneficence of God;" and other similar volumes might easily follow. During the early part of the present century, no science excited so much of this false alarm as geology. But already, if I do not mistake public opinion, the tables are well nigh turned, and, save here and there a disconsolate few, who have so long been chanting the death-song of Christianity that they can never change their notes, the ministers of Christ now find among the religious applications of this science, rich illustrations of divine truths; and from the disinterred relics of the deep bedded strata, there comes forth a voice in defence of the peculiar doctrines of the reformation, and a new argument for the Divine existence. So that, in fact, this new field of religious literature is already becoming attractive and prolific in publications. To geology, therefore, may be applied the riddle of Samson: *out of the eater comes forth meat, and out of the strong comes forth sweetness.*

Now in view of such results, we may confidently predict that some recent and yet imperfect sciences, lying on the outskirts of physiology and psychology, although at present greatly perverted by sciolism, and made to bear unfavorably both upon morals and religion, will in the end afford a support to both, proportionably strong. What they

need now is careful investigation by clear-headed men of the Baconian school, who are familiar both with physical and intellectual science. But so long have these subjects been in the hands of charlatans, or of men with limited and partial views, that able and respectable philosophers, especially among the clergy, shrink from their investigation, lest the title of phrenologist, or mesmerist, or spiritualist, should destroy their reputation and usefulness. It ought not so to be; and I am satisfied that not until this thorough investigation takes place, will these branches of knowledge be placed upon the same sure footing on which other departments of experimental science rest. At present, they seem to me like some large temple, or palace, mostly buried by rubbish, with only here and there some tower, or minaret, or column, projecting above the surface. Around these detached parts, groups are gathered endeavoring to show that each tower or column is a complete temple. But not till the vast piles of rubbish are removed, will the real temple exhibit its true proportions and character. When this is done, I fancy that the structure will be found a noble one, and worthy of the Infinite Architect.

I have time to derive only one other lesson from history and observation on this subject. They show us how unwise it is to denounce any new discovery, or theory in science, when they are first broached, as hostile to religion; and especially to take the ground that if the new views are true, the Bible must be false. There is a strong temptation to do this. Men of ardent temperament, who love the Bible, when anything is advanced which can be construed into hostility to its statements, feel as we all do when anything is suggested derogatory to the character of a near friend. We rush to the defence without waiting for the dictates of prudence, and thus we may injure instead of assisting our friend. Much more liable are we to injure the Bible. There is no need of such haste. Christianity stands on too firm and broad a base to be overturned by one or a hundred such blows as have hitherto been aimed against it. The true policy is to wait for a time, to see whether we fully understand the new views, and whether they conflict with the letter or the spirit of revelation. Suppose the theologian should take ground which he is compelled afterwards to abandon, and to fall in with the new discovery. With how bad a grace will he come over to the new ground after severely denouncing as infidels, those who adopted it? How likely to lose the public respect, and to make sceptics of those who were before only indifferent? How mortifying must it have been to the theologians who, one hundred and fifty years ago, denounced

astronomy, to see its discoveries at length introduced into the almanac, and testifying of their bigotry to all classes. Who can doubt that many a man, in despising them, was led to despise the sacred cause which they were appointed to defend? Yet the theologians honestly believed that to admit the earth's annual and diurnal revolution would overthrow the Bible. But how much better to have waited a little before avowing their convictions.

How little heed, however, do men give to the mistakes of their predecessors! The same eagerness and hot haste have been manifested in our own day to rush into the conflict with scientific men, as they have brought out new discoveries apparently unfriendly in their bearing upon revelation. Divines, eager for the onset, have not waited till they could study the subject and understand it; but have rushed upon the foe, confident that by abstractions and denunciation, if by no other weapons, they could crush him. Often have they found themselves in conflict with a windmill, and all they have accomplished has been to make themselves ridiculous, as with fallen crest and trailing plumes they have left the field. A little delay would have taught them, that sometimes at least, the better part of valor is discretion.

Allow me to refer to a very recent example where the caution which I recommend would have been wisely adopted. Some of our zoölogists have advanced views respecting the specific unity and unity of origin of the human race, that are in conflict with the common understanding of revelation; and at once able divines took the ground that such views are irreconcilably opposed to the whole scheme of the Bible. They may be so; but why declare it before the subject has been more thoroughly discussed, and we are sure that we understand it? It may turn out, and such is my own conviction, that the zoölogists have too hastily decided this question, because they judged of it chiefly from facts in the limited field of their own science. Suppose it should appear that eminent naturalists are divided in opinion on the subject. Suppose that, when they assert that there are several species of men, they are unable to tell us what constitutes a species, and cannot draw a line of distinction between species and varieties. Suppose that we should find zoölogists entirely disagreed on the subject of hybridity. Suppose it should appear that the laws of distribution in the species and varieties of the lower animals, which is the grand argument for proving a diversity of origin in the case of man, should be found greatly modified in respect to him, by his cosmopolite character and ability, through suppo-

rior mental endowments, to adapt himself to different circumstances. Suppose we should find examples of varieties of men, who have passed from the highest to the lowest races, save in color, through the influence of deteriorating causes long acting. Suppose it should appear that ethnology and psychology are entitled to as much weight in their testimony on this subject as zoölogy, and that they should pronounce in favor of a unity of origin. Suppose it should be found that many other elements of this most difficult subject are yet not well enough understood to reason from, and demand long and patient investigation. Or make the most unfavorable supposition, viz. that the preponderance of evidence favors the idea of a diversity of origin; is it quite certain that we must give up the Bible, or its more important doctrines? Would the discrepancy appear so great, as it did when the Copernican system was first announced? Shame on us, that we feel so fearful in respect to God's Word, and those eternal truths that form the groundwork of the scheme of salvation. Right is it that we should address ourselves manfully to every argument that bears upon revelation; but how unwise, when it is wholly unnecessary, to take ground which we may be compelled with a bad grace to relinquish.

In conclusion, let me recapitulate the principles, which, as I have endeavored to show, should be the common creed, and regulate the intercourse and feelings of the theologian and philosopher.

They should start with the principle, that theology is entitled to higher respect, as a standard of appeal, than any branch of knowledge not strictly demonstrative.

It should also be admitted that, as a means of moral reformation and a regulator of human affairs, philosophy has little comparative power.

They can agree, also, in the position, that entire harmony will be the final result of all researches in philosophy and religion.

To the scientific man should be granted the freest and the fullest liberty of investigation.

The language of science and of Scripture, as well as of popular religious literature, require different, or at least modified, principles of interpretation.

Revelation has not anticipated scientific discovery.

It is required that those who pronounce judgment on points of connection between science and revelation, should be well acquainted with both subjects.

The facts and principles of science, to an unprejudiced, unsophisticated mind, are favorable to piety.

They form a vast storehouse for the use of natural theology.

They cast light upon, and illustrate, revelation.

The harmony of science and revelation is mutually beneficial.

The cultivation of science, without the restraints of religion, often proves very disastrous.

The general diffusion of science through a community is impossible without religion.

The precise language of science may be useful in stating the principles of theology.

History shows impressively the danger of exalting philosophy above revelation.

And the evils of substituting a denunciatory spirit for knowledge and argument.

It shows us, also, the evils of mutual jealousy and hard speeches between theologians and philosophers.

And the folly and weakness of predicting injury to revelation from scientific discoveries.

The more threatening to religion the developments of any science at first, the more abundant will be its defence and illustration of religion ultimately.

Finally, it is unwise hastily to denounce any new discovery as unfriendly to religion, and much safer to wait till its nature and bearing are well understood.

Now, in conclusion, is not a code of this description needed? I feel the imperfection of this first effort to draw it out; but I offer it as the beginning of a necessary work. Had the common ground on which divines and philosophers may stand, been cleared up and marked out centuries ago, how many violations of sacred charity and good manners, how many unreasonable jealousies and prejudices, how many angry controversies might have been prevented; and how much nearer to entire harmony might science and religion ere this have been brought! And how many more examples would the page of history have presented, of genuine, humble-hearted, Christian philosophers, and of high-minded, liberal-hearted, philosophic divines!

It is such men that are wanted in the ranks of science, and the ranks of theology; and the principles, which I have pointed out at this time, are well adapted to form them. Could I excite a desire in the hearts of our students in theology to take this high position, I should not have written in vain. For what is a Christian Philosopher? He is a man who loves nature, and with untiring industry endeavors to penetrate her mysteries. With a mind too large for

narrow views, too generous and frank for distorting prejudice, and too pure to be the slave of appetite and passion, he calmly surveys the phenomena of nature, to learn from thence the great plan of the universe as it lay originally in the Divine Mind. Nor does he stop when he has found out the mechanical, chemical and organic laws of nature; but rises to those higher principles by which the moral relations of man to his Maker are disclosed. Hence he receives with gratitude and joy those richer disclosures of truth which revelation brings. To its authority he bows reverently and rejoicingly; and counts it the best use he can make of science, to render it tributary to revelation, and to the cultivation of his own piety. He exhibits a generous enthusiasm in the cultivation of science; but he has a stronger desire to have it associated with religion; and hence he cherishes a high respect for those whose business it is to teach it. Indeed, the noblest example of a true Christian philosopher is seen in the able and faithful minister of the Gospel, who employs a thorough knowledge of science, not merely to enlighten the ignorant, but to illustrate and enforce the higher principles of religion.

On the other hand, if I were to give a definition of the highest style of a philosophic divine, it would be synonymous with that of the Christian philosopher. I should represent him as one whose grand object is to glorify God in the salvation of men, by means of the Gospel of Christ; but who made the whole circle of knowledge, literary and scientific, subservient to his great object.

Thus may the philosopher and the theologian be combined in the same individual. And why should they not? To whom is it more fitting to be an interpreter of nature, than to him, who interprets God's work of revelation? Were such an identity more often realized, there would no longer be need to draw out a code of principles for regulating the conduct and feelings of those no longer twain. It would be like laying down a set of rules for regulating the conduct of the different members of the same individual, toward one another.

If, then, the theologian and philosopher may be thus identified, it must be because the principles of theology are in harmony with those of philosophy. Theology does, indeed, develop principles which the sounding line of philosophy cannot reach. But so far as the two systems can be compared, they coincide. And we may be sure that whatever goes by the name of science, which contradicts a fair and enlightened exhibition of revealed truth, is only false philosophy. To develop this harmony should be an object of the Christian philos-

try, second only in importance to its first aim, that of the personal salvation of men. Indeed, so enlightened at this day is the popular mind in matters of science, that a large class of intelligent men will not listen to the claims of Christianity till they are satisfied it does not conflict with science. It is gratifying to find our young brethren, as they issue yearly from our Theological Institutions, so well qualified, by their enlarged and accurate knowledge both of science and theology, to engage successfully in this noble work. We bid them God speed in it; and so does the voice of history. For it tells them that the issue of every assault upon religion, with weapons drawn from science, has been to bring revelation and philosophy into closer agreement; and hence may we confidently anticipate ultimate and entire harmony. It is gratifying, also, to remember, amid all the conflicts of opinion on earth, that all truth originally sprang from the same pure source — the Infinite Mind. But as it enters this world, its rays are separated, colored and distorted, by the media through which they pass; by human ignorance, prejudice, pride and passion. It is the noble work committed to divines and philosophers, so to prepare and adjust the rectifying glasses of reason and revelation, that they shall collect and rearrange these scattered rays into a pure and uncolored beam, that shall spread the light of heaven over the darkness of earth. Oh! as I look down the vista of years, the sweet vision rises before me. The storm of conflicting opinions has passed by, and I hear only the distant dying thunder, while the spent lightning plays harmlessly around the horizon. The sun of truth looks forth in glory behind the retiring cloud, on whose face it has painted a bow of harmonious colors — a sign of peace to the world, as its evening comes on, and a pledge of the cloudless and immortal day that is to succeed.