

ON THE METHOD
IN WHICH
METAPHYSICS SHOULD BE PROSECUTED:

BEING
INTRODUCTORY LECTURE OF DR. M'COSSH,
IN QUEEN'S COLLEGE, BELFAST,
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Dr. M'COSSH, appointed to the chair of metaphysics and logic, in the Queen's College, delivered, yesterday, his first lecture. The welcome given to the learned professor, on making his appearance, must have been highly flattering to him. All the seats in the room were occupied before the period for opening the business; and the audience comprised most of the professors and students of the college, a large number of the clergymen and other professional gentlemen of the town, together with several ladies. From all present the applause was general; and, at several portions of the lecture, Dr. M'COSSH was interrupted by loud plaudits. The subject was so ably discussed, we give a full report of the learned professor's observations, as follows:—

Metaphysics, as the very name implies, stands in some kind of relation to physics. It may be useful, first, to take a glance at physics, with a view to the better comprehension of the nature and object of metaphysics. Physics is the exposition of the sensible, that is, of whatever falls under the senses. Sometimes the science observes, sometimes it classifies, sometimes it analyses, sometimes it infers; but, whatever process it performs, it has always the sensible for its object matter. During the last three hundred years, the sciences which treat of the different departments of the material universe have made great and rapid progress. We have now obtained truths in astronomy, in optics, in chemistry, in botany, in anatomy, which subsequent investigation cannot possibly set aside. It is not the ingenious speculation of one man superseded by the ingenious speculation of another who succeeds, but it is the discovery of one man made the steps—cut out, as it were, in the rock—by which another man mounts to a height from which he has a wider and more commanding view. In this

walk, one man does not seek to overturn his neighbour, that he may stand in his place, but rather to employ the road which his neighbour has opened for him, and thus to march on to regions as yet unexplored. Thus, in one department, we find Copernicus maintaining that the earth moved; Galileo applying the principles of mechanics to the motion of the earth in its orbit; Kepler proving that the planets moved in elliptic orbits; Newton demonstrating that they moved in obedience to a force which varied inversely according to the square of the distance; and later investigators—such as Lagrange and Laplace—applying the law of gravitation to the explanation of the whole movements of the planetary system. These physical sciences are at various stages of advancement. Some, such as those which treat of electricity and the chemistry of organised bodies, are as yet in their childhood—a most promising childhood, I grant; others, such as the chemistry of unorganised bodies, and the various branches of natural history, are in the full vigour, and animated with the hope of youth; while a third class, including astronomy and optics, have acquired the confirmed habits and ripeness of age. All these sciences have already yielded a rich harvest of practical fruits. The mariner ploughs the deep, looking to formulas which are the results of astronomical calculations. The miner sinks his shaft under the guidance of the generalised investigations of geology; and he performs his subterranean journey bearing a lamp which refined chemical experiment has furnished to him. Our clothes are woven by machinery constructed according to the principles of one science, and are dyed by agents which are used according to the rules of another science. We are carried along the surface of the ground by a power which chemistry taught us how to employ; and we receive intelligence from distant countries with lightning velocity through an agency which scientific men first brought to light, and have now enabled us to control. The physical sciences do not need, in this age, to stand on the defensive, and to bring proof of their utility. If you require evidence of their beneficial tendency, they say,—Look around you and you will see proof abundant in the clothes which you wear, in the food which you eat, in the furniture of your dwellings, in the fields yielding a larger return to improving agriculture. "I cannot see the advantages of the physical sciences," said a learned antiquarian who had nearly lost his sight in poring over the musty records of ancient lore, and who was obliged, in consequence, to use glasses. "Why, Sir," replied the scientific man to whom the remark was addressed, "in order to see the advantages of these sciences, you need

look no farther than those artificial aids which you have called in, the better to enable you to unfold to these degenerate times the wisdom of the ancients."

But here the question occurs, how has it happened that the physical sciences, after a long winter, have made such rapid progress—as rapid as the growth of grass and grain in the Arctic regions, where the one week they see the soil covered with snow and bound with ice, and the next week they observe it decked with the most luxuriant verdure. The answer, I believe, will be found in the circumstance that the right method of investigation has been employed. That method is the method of induction. According to it, you do not sit down in your study and determine by speculation or inward cogitation—as the ancient school-men did, or as some modern German metaphysicians still do—what the world must be. But as physics can be known only through the senses, the investigator uses his senses and instruments fitted to aid the senses, and he observes what nature really is; and then, by those faculties which God has given him, he perceives relations among objects, and classifies them according to their relations; and thus he arrives at laws, which, in the converse process of deduction, he can henceforth use in order to determine what must be the result of certain agencies in operation. This was the method employed by Galileo, and carried on by Tycho Brahe and Kepler. This method was introduced by them as an art, and, in the age succeeding, was generalised into a science by our great countryman, Lord Bacon. I speak of the method beginning as an art; for, I believe that art, in its initiatory steps, commonly precedes science, and then science comes in greatly to improve art. The method thus introduced as an art by Galileo and others, and generalised into a science by Bacon, has ever since been applied as an art; and now there can be no doubt of its utility. There may be disputes still as to its precise metaphysical nature, and as to the extent of its application, but there can be none as to its power to unlock the deepest secrets of nature. Its advocates can now do, as the agriculturist does, when he has tried for years a new manure, and found it successful—he takes the man who would doubt of its power to his farm, and says, "See, there are the effects of it; there is my neighbour's ground, poor and sterile; and here is my ground, rich and fertile." There might still be doubts, it is true, in such a case, as to whether the manure would be equally productive if applied to all kinds of soil; but there could be none as to its utility in regard to the lands to which it had been applied. The Baconian philosophy, to use a phrase of its great founder, has stood such an *experimentum*

omnis. We point, first, to the fruitlessness of physical speculations in those ages and nations which did not employ this method, and then to the exuberant foliage and fruits which have burst forth since the application of the method. There may still be disputes as to the subjects to which the inductive method is applicable; but there can be none as to its fruitfulness in the fields to which it has been applied.

Bacon, like Moses, led us forth at last,
The barren wilderness he passed,
Did on the very borders stand
Of the blessed promised land,
And from the mountain's top of his exalted wit
Saw it himself, and shewed us it.

As Moses was succeeded by a Joshua, so Bacon has been followed by persons trained under him, who have taken possession of the territory which he described. The comparison might be carried out still further, and it might be maintained, that as when Joshua died there remained very much land to be possessed, so there remain to this day important fields of inquiry to which the Baconian induction has never been applied in a systematic manner. To this subject we shall return forthwith.

But, first, the question presses itself upon us—Is there no other science than the science of physics? The answer to the question will depend on the answer which we give to the other question—Is there no other existence in the world than the sensible? If there be something else which has an existence, that surely may be made the subject of investigation. There is, at least, one other thing which has as certain an existence as matter, and that is the mind, which contemplates matter. The very existence of a science of physics implies that there is something above physics. The knowledge of the sensible implies the hyper-sensible. I shall suppose the world to be as it is in all its physical departments, but that there is no mind to inspect it; and where, I ask, would be the science of physics? When I say of matter, I perceive it, I affirm not only the existence of matter, but of a mind making matter the subject of contemplation. Physics, whatever some say to the contrary, implies the possibility of a metaphysics. For, that mind which investigates matter, may, in its turn, be made the subject of investigation. Nay, there are grand mental principles underlying all physical inquiry, and without which physical inquiry would not be possible.* No man sees a law of nature with his bodily eye—no man can taste it, or smell it, or hear it,

* This has been shown by Whewell, in his able work on the Philosophy of the Inductive Sciences.

or handle it. Newton (according to the popular story) saw the apple fall to the ground; but he did not see the law of gravitation. The Abbé Hâüy saw the crystal as it fell accidentally from his hands to the ground; but he did not see those beautiful laws of crystallography which occurred to his reflecting mind, as in sadness he gathered up the broken fragments. Okon saw the blanched skull of a deer in the Hartz forest; but many a man had seen a like phenomenon before, and there was a powerful mental capacity implied in the conclusion to which he came—Here is a series of bones similar to the series in the back-bone. What can be nobler than the physical universe? We answer, the mind which contemplates that universe. What can penetrate deeper, it may be asked, than chemistry, which shows us the very elements of bodies, or than those beautiful microscopical observations with polarized light, which enable us to look into the very interior of matter? We answer, the mind which has penetrated thus far, and can comprehend all this. There is something larger than the law of gravitation, and that is the capacity of thought which discovered and can take in that law.—We reckon the mind of Newton a grander object in itself than all the discoveries made by it. What, it is asked, can penetrate farther into space than the telescope? We answer, the imagination, which, when you have taken it to the farthest point to which Lord Rosse's instrument can reach, launches forth into an infinite space beyond. What can carry us farther back than geology? We answer, the mind, which, when you have conducted it to the beginning of the creation, declares, there must have been an eternity before this. And then it is never to be forgotten that the very greatness of the physical universe proves that there is a yet greater existence—a Being who at first made and still upholds it all—who was before it, who is in it, and yet above it. Matter is great, we admit; but the more we magnify it, the more do we magnify a power above it. There is, then, a something underlying all physics, and this is metaphysics. The sensible would be dead and useless without the hyper-sensible to contemplate it. There are principles underlying all physical investigation, and these are metaphysical. In mathematics there are axioms which mathematics uses, but brings no proof of them. In statics and dynamics, it is assumed that every effect has a cause; and this principle is a metaphysical principle. In every branch of natural history there is a capacity for classification implied in the classifications of which that science consists. May not these mental capacities and principles, by which all other things are investigated, be themselves investigated? May not this eye, which inspects

all other things, be itself inspected? We maintain that it can; for, as by the senses we come to know the world without us, so, by consciousness, we come to know the world within us. It is the world within—the realm of thought—the intuitions of mind, intellectual and moral—the laws of intellect working upon the knowledge conveyed by these intuitions—the mind observing—the mind comparing—the mind classifying—the mind reasoning; this is the world which we are to help to open up to the student of metaphysics and logic.

We are aware of the prepossessions entertained by many in our country against metaphysics. The very word is distasteful to them. It is associated, in their minds, with a misty atmosphere without, and an aching head within; with much labour and small wages; much speculation and little truth; much discussion and few settled principles. Ever since the days of Aristophanes, who in his *Clouds* confounded in one indiscriminate condemnation the true method with the false; and those who were prosecuting science in the right method with the mere pretenders to it; Socrates with the sophists who were put down by him, the most popular definition of metaphysics is cloudland—a region above the earth, but beneath the heavens. Every man who can write sufficiently obscurely on a sufficiently obscure subject is dubbed a metaphysician. To admit a man into the society of metaphysicians it is supposed that he must do something very like what the celebrated Leibnitz did, when, on hearing of a society of alchemists, he was seized with a strong desire to join their company. "As he was absolutely ignorant," says Mr. H. Rogers, from whom we take the anecdote, "of all their terms of art, he knew not how to negotiate an introduction. Happily, he recollected that their ignorance must be quite equal to his own, and so, boldly extracting from the writings of the most celebrated alchemists all the most obscure terms he could find, he composed a letter of which he did not understand a syllable, and from that moment, if one may indulge the paradox, became as knowing as themselves. What was dark to himself was happily quite clear to these *Illustriati*, who, following the usual instinct for nonsense, or afraid to be thought ignorant, professed to argue favourably of one who could write so profoundly. They invited him to assist at their conferences, introduced him to their laboratory, and made him their secretary." Now, according to the idea of some, the company of metaphysicians is very much like the society of alchemists, and he is regarded as entitled to become a member who can write a treatise understood neither by him who reads nor by him who writes it.

Now, we are not in circumstances at present to ex-

plain fully what we mean by metaphysics, and what by logic. Verbal definitions should be put at the beginning of a science, but real definitions come in at the close—after the subject has been investigated. But, generally, we may state that, under metaphysics, we propose to unfold those mental principles which are implied in investigation of every kind. By logic, we understand, with Kant and Sir William Hamilton, the exposition of the laws of thought—of the necessary, or, as we would call them, constitutional laws of thought—included in all investigation, whatever be the subject matter. Metaphysics, the wider subject, includes not only thought or intellect, but, primarily, the intuitions by which all our primary knowledge is obtained. Logic will practically be the introduction, and metaphysics the full carrying out, of the science. In the class of logic, we shall explain the terms, give an exposition of the laws of simple apprehension or conception, of judgment, of reasoning, and shew how they are applied in actual science, inductive and deductive. In the higher class of metaphysics, we shall endeavour to give a comprehensive view of the intuitions, and of the original and fundamental principles of knowledge and belief given us by these intuitions—principles lying at the foundation of every kind of investigation, physical or moral.

We do not propose, in our present lecture, to point out the precise nature and limits of the branches taught by us; this will be done in future lectures. But we think it of importance, at this early stage, thus to indicate, in a general way, what is to be the subject matter of our investigations—namely, the constitutional laws of thought and intuition. We do so for the special purpose of shewing that metaphysics has a field capable of being cultivated. It is the more necessary to do this, from the circumstance that metaphysics has often aimed at an impracticable end through impracticable means, and has thus given ground for all the charges which have been brought against it. It has often claimed to be something far loftier than a science—to be a philosophy which can, by its own principles, determine all about God, the soul, and the world. Nay, it is represented by many in the present day as having for its grand aim the attainment of the absolute and the unconditioned. Such a metaphysics must ever disappoint, and that in proportion to the pretensions made by it. It reminds us of those old *de jure* sovereigns, to be found now in various countries of Europe, whom no nation will permit to be *de facto* sovereigns, the very greatness of their pretensions rendering it impossible that their just claims can be attended to. Yet, there they are clinging to their pretensions all the more

closely and jealously, because none but a few adherents are disposed to admit them. Of a like precarious nature is the authority now exercised by a metaphysics which will not condescend to come down to the level of the other sciences. Dislodged from place to place, this kind of metaphysics has now ascended an inaccessible height, from which it cannot be dislodged, but from which it can exercise no influence.

But, while this has been the character of a certain kind of metaphysics, it has not been the character of all metaphysics—it has not been the character of the British metaphysics, generally. I believe that it is possible to produce a metaphysics founded on scientific principles, and yielding the most valuable results; nay, that this has already been so far accomplished. But why, it may be asked, has the one kind been so useless and another kind been fruitful? I believe the cause to lie in this, that one class of philosophers has not pursued the right method, whereas another has: the one class has proceeded in a spirit of *a priori* speculation, whereas the other has set itself down to inquire, in the Baconian spirit, into the constitution and laws of the human mind.

I am aware, that one of these parties will repudiate the very idea of the possibility of applying the method of induction to metaphysics. Metaphysics, they say, is something far above induction—it is a philosophy at the bottom of all induction and all science. We cannot in this lecture, nor until we have the materials gathered in the prosecution of our investigation, fully expose the fallacy which lurks under this representation. In my humble opinion, there has crept into the German metaphysics, and into the Anglo-German metaphysics, so popular in the present day, and running through much of our higher literature, an error as fatal as that ideal theory which was expelled by Dr. Thomas Reid. But, while we cannot, at present, pursue the fallacy through all its retreats, we may point to its main lurking place, and shew on what grounds we maintain that the principles of inductive investigation can be applied to metaphysics. The fundamental error of this whole school lies in supposing the mind to be natively possessed of certain grand general ideas, such as those of space and time, of cause and effect; whereas, it is merely possessed of capacities which enable it to acquire the knowledge of these; and this, not in the abstract, but in the concrete, in the first instance. From this fundamental error, there proceeds the other error that there are certain philosophical principles which can be reached without the trouble of induction.

Locke shewed, demonstratively we think, that man does not come into the world furnished with a stock of

ideas. But, when he proceeded to build up his system, and to shew how the mind attained the ideas possessed by it, he took far too limited a view of man's intuitional powers and of the knowledge thence acquired. He supposed that the materials of all our knowledge were derived from sensation and reflexion—meaning, by reflexion, the reflex observation of the working of the human soul. In opposition to Locke, Leibnitz, and in an after age, Kant shewed, we think conclusively, that there are certain ideas, such as those of space and time, of moral good and evil, which never could be obtained in this way. Their arguments on this subject never have been met, and, I believe, never will be met, by any follower of Locke. But Kant and the German school erred in supposing that the mind had certain ideas of abstract or general truths, which sprang up on the occasion of the exercise of sensation. Locke thus erred by defect, and Kant and his followers by excess. Locke did not see that there must be more inlets to knowledge than sensation and reflexion, taken in the narrow sense of the terms. Kant and the school which he originated did not see, clearly and steadily, that man's primitive and intuitive knowledge is of individual concrete objects. To illustrate our meaning by an instance—we hold that the child does not, upon seeing an object, immediately entertain an abstract idea of space. The formation of the abstract idea of space comes at a much later date, and upon the reflexion beginning to be exercised. It is the same with the idea of time. The child does not, upon an event being remembered, immediately entertain the idea of time; it merely has the knowledge of the event having been before the mind at a previous date; and it is at a much later period of life that it abstracts the time from the events which have happened in time. We are convinced that Locke committed a most fatal mistake in overlooking some of the most essential elements of man's intuitional knowledge. But still, when we have sufficiently widened man's intuitive knowledge, we maintain, that it is by the very process pointed out by Locke that the mind arrives at those grand general ideas which it comes to entertain in the necessary exercise of thought. It is by means of the principles now indicated, rather than developed, that I endeavour to take from each of these two great rival schools—that of Locke, and that of Kant—that of Britain, and that of Germany—the real truths which it contains, and combine them into one.

We hold, on the one hand, that the mind originally has not anything that may be described as ideas. Not only has the mind no ideas before it when it comes into the world—it has not in some latent chamber a stock of

ideas ready to spring forth when the mind is excited by sensible objects. But we hold, on the other hand, that the mind is endowed with capacities many and varied, and proceeds spontaneously on certain great fundamental principles. Man comes into the world with intuitions, by which he knows directly the world without and the world within. But then, all his intuitive knowledge is of individual concrete objects. The mind has not, as the German metaphysicians seem to think, an intuitive abstract idea of space awakened by the first exercise of the sense of touch, but merely the knowledge of an object existing in space. The mind having thus, by intuition, acquired a knowledge of individual objects, there are intellectual faculties ready to perceive the relations existing between these objects, and to abstract and generalise. True, there are fundamental principles which lead the mind thus to know objects, and thus to discover relations between them; but these principles cannot be the direct object of consciousness. The mind acts according to these principles, but it does so spontaneously, without knowing what the principles are. The discovery of these principles must be a subsequent act, and a reflex act; that is, of the mind looking in upon itself, and observing and generalising its own workings. But it follows, from this representation (and the correctness of it we hope to be able to establish in our course of lectures), that the precise nature of the intuitive principles of the human mind must be discovered by induction. True, these intuitions act in the human mind, whether we discover them, whether we reflect upon them or no. But if we are to use them reflectively, if we are to become philosophers, and employ them as grand general principles, we must first settle what they are; and I know of no other way in which this work can be conducted, with any hope of success, but by the inductive method which Bacon was the first to expound. Man knows, judges, reasons spontaneously; and there must be principles acting as the grounds or laws of all these acts. But, while man performs these acts spontaneously, he does not know what these principles are spontaneously. In order to know what these principles are, he must, by a reflex act, carefully inspect the spontaneous actings of the soul, and the generalisation of those will give him the principle of which the spontaneous acts are the manifestation. In short, he must do as Newton did, when, from viewing the phenomena of the planetary system, he arrived at the law of the planetary system. The same God who gave to the planets their laws gave to the human mind its laws. The laws of the planets operate spontaneously; the laws of the human mind do also operate

spontaneously; and, in order to discover either the one or the other, there must be a course of accurate and painstaking induction.

It is because metaphysics has so often been prosecuted in a different spirit, that it has been like the swinging upon a hinge, motion without progress—or rather a kind of flight into heaven like that of a balloon, followed by a collapse and a fall, happy only if, in its gyrations, it does not cast out those who have committed themselves to it into an abyss. There is at present, I am aware, a reaction in favour of metaphysics—yes, of the very kind of metaphysics now referred to. But the tide will very soon be followed by an ebb, if metaphysicians are to give us imposing systems, which discuss everything against metaphysics should be followed, in a succeeding age, by a reaction in its favour, it is most certain that every reaction in its favour will be weaker, like the waves of a receding tide, unless it can give us, what physics has given us, something clear and certain. Modern times will not insist on metaphysics, or on any one science, doing everything; but it will insist on metaphysics, and every other science, yielding some truth on which the understanding can settle and the heart repose.

Metaphysics, properly prosecuted, is capable of furnishing such results. And it has been prosecuted, in the right method, by many, in different countries and ages. In general metaphysics it was so prosecuted by Reid, who, if he did no more, at least laid a foundation, and by Dugald Stewart, who ornamented and completed that foundation. Dr. Thomas Brown, to some extent, departed from this method, and analysed before he had made sufficiently careful observation; but we have been brought back to the true method by Sir William Hamilton, in those learned and original discussions, of which he has yet given us too few. It is the method, too, pursued by Cousin, except when he is at times smitten with admiration of imposing German systems. Then, in particular departments, we have admirable exemplifications of the right method in Aristotle's analysis of reasoning, and in the exposition of the moral constitution of man by Butler and Chalmers. All these men, and many others, have discovered and unfolded grand truths, which subsequent investigation will tend only to confirm and extend.

It will be one beneficial result of the adoption of this method, that it will determine for us what metaphysics can do and what it cannot do. For, by some of its advocates metaphysics has been represented as capable of performing everything. It has declared itself capable of giving us a true religion, a correct ethics, and

even a grand system of natural philosophy—in short, solving the problems of God, the soul, and the world. Such pretensions only expose it to ridicule. Archbishop Whately has done great service to logic by confining it within its own province. That person will confer a similar boon on metaphysics who will shew what its province is, and confine it within its own domains. Metaphysics has a most important field, which it should occupy, and seek to cultivate. It has as its field the whole constitution of the human mind, and there by induction it has to discover and unfold those first principles which are at the foundation of all investigation. Let it be laid down as a rule, that no principle is to be assumed as a first principle which cannot be shewn to be in the very constitution of the human mind. This will at once clear the atmosphere, no doubt of some prettily gilded clouds, but it will clear it, too, of all damp and disease-breeding mists. But let it also be laid down as a rule, that whatever can be shewn to be in the very constitution of the mind is to be regarded as a first principle, and by a diligent inquiry into the mind we shall be able to discover a set of principles which will constitute a solid basis for every kind of legitimate investigation, secular and sacred.

There are some men of eminence in the present day who seem to admit no first principles. This is a matter of little moment in the practical affairs of life, or in physical investigation, because *their* objects, constantly pressing themselves on the notice of the senses, keep men right in spite of their bad principles or their want of principles. But it is very different in regard to those great questions which come to be discussed in ethics and in theology—those great truths relating to God and the world—to come, which, in much the same way as the heavens lie all around, above, and below our earth, furnishing to it its light—these great truths, we say, which lie all around, above, and below our every day duties, and supply us with breath, and light to enable us to perform them. A man will not be tempted, by any sophistry, to doubt of the necessary connexion of cause and effect when he is thirsty, and sees a cup of water before him; in such case he will put forth his hand and take it, knowing that it will quench his thirst. But he may be led by a wretched sophistry to deny the necessary relation of cause and effect when it would lead him upwards from God's works to God himself, or induce him to betake himself in faith to that God who alone can give satisfaction and refreshing to the soul.

Again, there are some men in our day who would multiply first principles to an extravagant extent—

who would admit first principles without first inquiring whether they have a title to be regarded as first principles; who would admit them without first inquiring whether they have a necessary place in the constitution of the human mind—admitting them without first inquiring whether God has required us to admit them. This habit is as unfavourable to freedom and independence of thought as the other is to solid faith. He who submits to every one who claims authority over him will soon find his intellect prostrated, and all buoyancy of spirit crushed, as by a burden bound to him, and underneath which he laboriously moves with downcast look and bending frame.

This is the effect of these two opposite methods, in the first instance. In the end, they often, at least in speculative matters, come to agree, just as extremes meet—just as the extreme East and West meet on the horizon of our globes. He who sets out with trusting no one, will, in the end, as feeling his misery, be tempted to confide in the first hypocrite who addresses him with sufficient plausibility. Again, he who trusts every one will, in the end, find himself suspecting his best friend. Hence, we find that a scepticism in all matters has commonly led to a foolish credulity in some matters, while a weak credulity in some matters has often generated a spirit of incredulity in matters in general. Some have no foundation, and yet would build, and they erect a most insecure fabric. Some have too large a foundation, and, feeling it to be hopeless to cover it all, they erect nothing. Hence the dreadful conflicts which are raging, in the breasts of individuals, between faith and unbelief; hence the oscillations to and fro of credence, the swinging on this side and on that of the point of rest, by which our age is characterised. There are persons in our day who have flung themselves into the heart of the weakest systems of credulity, to avoid being left in the dark abyss of Atheism; just as the drowning man will leap into the craziest boat to avoid being plunged in the waters. Again, there are persons driven to unbelief, as feeling that these systems have nothing to stand on. And between these two extremes there are a still greater number who are seeking rest and finding none—ever swinging, like a pendulum, past the point of rest.*

* I find the following in an influential London paper. I should be glad to find it contradicted.—“In Oxford, at the present moment, there are numbers of men, of good intellect and the best intentions, struggling manfully, but unfortunately, and in many cases hopelessly, in the vast ocean of German thought, without pilot or rudder, or skill to use one. Many of these are landed upon the barren shores of Pantheism, or are stranded upon the

"Who art thou?" we say to every principle which would claim authority over us. "What is thy nature, that thou puttest forth such pretensions? and what is the ground on which you urge your claims?" I say so not in a spirit of cavilling, but from an anxious desire to discover the truth; not as summarily setting aside these claims, but as having determined to inquire into them in a candid spirit. "I have long been acknowledged," says this principle which would claim my subjection. I reply, if this be all the right you have to urge your claim, I reject it. "But I have been acknowledged by famous doctors in the schools," is the farther claim now put forth. But not on this ground either will I admit your pretensions. For, the question occurs, how have you come to be adopted, by long successive ages, or by eminent teachers? You must have had grounds by which you gained their belief; well, let these grounds be laid before me, that I may judge for myself. "Well then," says this principle, "I claim authority on the ground that I am in the very constitution of your nature—I am there as a fundamental law of belief—I am there because God has placed me there." I now admit, at once, this is a good claim, if you can prove the fact on which you rest it; and, in order to determine what is the fact, we forthwith begin to inquire whether this really be a constituent principle of the human mind, and if, upon investigation, we come to discover that it is so—that it is there as a ruling principle—that it is in the very constitution of the soul, so that it cannot be separated from it, planted there by the God who made me—then I will—I must bow to it. Inquiry now ceases, because inquiry is satisfied. My faith is gained; but, then, it is not an uninquiring credulity, but a conviction, the result of inquiry; and I cleave to it all the more firmly because of the previous inquiry. I test all pretended authoritative principles in this way, rejecting, as first principles, those which cannot stand this test, and adopting those which can stand it. I have now a foundation as broad as God has made it, but no broader—broad enough to admit a stable superstructure, but not broad enough to bear a weak credulity. This is the method which I follow in philosophy. It is, if I do not mistake, the method which enlightened men of every creed profess to follow in religion. In religion we first inquire what God has been pleased to reveal, and then we bow to it in deepest reverence.

school of Atheism. They have undertaken a voyage without any of the necessary preparations; and the result is too often disastrous. Any one well acquainted with Oxford will bear testimony to the truth of our description."—*Daily News*.

In like manner in philosophy, I first inquire what principles God has implanted in my constitution, and, taking these with me, I proceed to gather facts by experience, and to erect the fabric of truth as a solid, compact structure, resting on a sure foundation. By this means we get, not a philosophy constructed arbitrarily by human speculation, but truly a Divine Philosophy, embodying those principles which God Himself has planted in our very nature.

In this our fallen world the temple of truth stands on the very verge of a troubled stream; and from this stream two counter currents are setting in in this our day. One of these would undermine the foundation of the temple, sweep all its materials away, and so scatter them that they can never be reunited. Another would lift the foundation, on the pretence of laying it somewhere else, but where, when it was laid, it would find itself speedily overturned. And these currents are not to be turned aside by mere floating sentiment, nor to be driven back by a mere literature. No; the currents will soon sweep these away, as a powerful stream would sweep away straw and sand and rubbish, set up to arrest it—nay, after it had swept them away, would use them in its work of destruction. The man who knows what this age—an age which is going down to the foundation of things—requires, must sink a pile, sink it deeply, and fix it deep as in the rock; and then this fine sentiment and this fine literature, as now having something to which to adhere, will gather around it, and add to the stability of the whole. It is for this end that I have come to this place—not to earn an honourable livelihood—not to hold a place of honour—but to establish in the minds of the youth of this district, so far as they come under my influence, certain great intellectual principles, which will abide with them through life, and guide them in all their future inquiries.

The youth attending this college come under my care at a most interesting period of their lives. They come under me at the time when reflection (I use the term as distinguished from spontaneous thought) begins. Intellectually considered, there are certain most interesting stages, as it appears to me, in the progress of the youthful mind. These are the transition periods of life; for, as those landscapes (as some one has remarked) are the most beautiful which lie between hill and valley, so those periods of life are commonly the most interesting in which one state of thought and feeling is giving way to another. How intensely interesting must be the first knowledge acquired by the infant of sounds, and shapes, and colours, and it expresses the pleasure which it feels

by those smiles which reward the mother for all the anxious days and nights during which she has watched over her babe! Again, how interesting the period when words come to the aid of thought, and the child rings its vocables the livelong day! How interesting, too, those periods at which books begin to throw open their treasures gathered for our good by Hebrew prophets, by Greek and Roman sages, and by the great and good in all ages! But, there is a time which, I think, transcends in importance, if not in interest, all of these. It is the time when reflective thought is first awakened—when we begin to look back on all these acquisitions, and to look in upon the mind which has acquired them. A new world then bursts upon the view, as wonderful as the world which burst upon the infant when the physical world became known to it through all its senses. It is at this important, yet critical, period that the youth are put under my care—the time when principles are laid—the time when character is formed. The tree is not so confirmed as to be unsusceptible of having a direction imparted to it, and yet it is sufficiently mature to retain the shape which it is made to take. I am at one and the same time encouraged by the prospect of usefulness, and awed under a sense of responsibility. I magnify mine office, and yet I feel that just because of its magnitude it is difficult. I feel encouraged by the prospect of having under me ardent youths, feeling a delight in the exercise of their faculties, as frisking lambs feel a pleasure in the exercise of their limbs; “searching after truth,” as Locke says, “as a sort of hawking and hunting wherein the very pursuit makes a great part of the pleasure;” expatiating with rapture on the new country thrown open to them, and gazing with emotion on new and gorgeous scenes. But I feel, too, that I have received these youth with principles yet untainted; and woe be to me if I do not seek to establish such principles as may stand the test of all future inquiries, and be the basis on which to rear a goodly structure of sound opinions and wholesome sentiment, and thus enable each in his sphere to shed around him a hallowed influence. A professor blessed of God may, in this respect, be like the central sun, with planets circulating around him, and these each the centre round which others revolve; and thus, the influence of the professor from his chair may reach to the most distant hamlet of the country through which his students are scattered. [Dr. McCosh then concluded, amid general and prolonged applause.]