

Saviour taught a different lesson when he reminded the Jews that the true God was the God of the living and not of the dead, and that, therefore, His friends, Abraham, Isaac and Jacob, were not dead, but living. Heresy, however, is so enlightened that it will not listen to Christ our Lord, much less to His Apostles and Evangelists, but it willingly goes to school to the Pagan Maximus of Madaura, to the heretic Vigilantius, and is delighted to learn from them that the Abrahams, Isaacs and Jacobs of the Old Testament, the Peters, Pauls, Clements, Polycarps and Namphanions of the New, are nothing but "dead men," and that they have left behind them only "carcasses" that are worthy of no respect.

THE WEAPONS OF SO-CALLED MODERN SCIENCE.

IN the beginning of the modern era, dating it from the Renaissance, the controversies which the Church had to engage in were carried on with a recognized basis of Revelation. Controversy turned upon the extent and meaning of that Revelation. Protestantism, springing naturally from the Renaissance, began early to empty into its true channel of rationalism, which was widened and deepened by the French Sons of the Revival, who had not chosen to break definitely with orthodoxy until they broke with Christianity. The Bible ceased, conspicuously, to be drawn so much into controversy, as an authority. The bitterest attacks upon the Church were made in the name of Metaphysics. This Metaphysics, that discarded the supernatural, soon rejected the immaterial. The accumulated wealth of material science seeming to store the magazines of war, the basis of the anti-Christian aggression was, at length, formulated thus: Christianity is in antagonism with the material order of the universe. There is a clearly marked scale of descent:

Facilis descensus averni.

The outcome of it all, in practical life, is the "animal ethics," so highly extolled by the "thinkers." As compared with the sixteenth century, the whole form of aggression has been changed—tactics, arms, and words of command. The question comes back

¹ The very word that Beza impiously applies to the Sacred Body of our Saviour after death.

upon us, daily,—and as it is an important one, there is no harm in repeating it,—Are we properly equipped for the conflict?

Our enemies have left the old battle-ground. They no longer uphold the false against the true Christianity. Finding that, on the field of the Supernatural, the scriptures and tradition, which they had tried to use, only turned against them as engines of destruction, they have deserted this field, and now contend, with every round of sophistry, that the supernatural, for the sanctions of whose revelations they so stubbornly fought, does not exist at all. They have thrown themselves, heart and soul, into the exploration of the not merely natural, but of the sensible, the visible, the tangible; and, holding up every molecule of earth, now try to make it pose as an argument—a long-hidden argument which they have found—against Christianity and Revelation. And they are teachers. They have made explorations, and, in their expositions, can figure as teachers. What wonder, then, if, after listening to learned discourses that evidence great research and long experiment, people who do not understand the long, earnest and intricate preamble, but who know the meaning of the one invariable conclusion drawn, *i.e.*, that the Revelations of Christianity are contradictory to the facts of "SCIENCE,"—what wonder if people begin to doubt? Not, certainly, that the argument is anything more than jugglery; but the children of darkness are wiser in their generation than the children of light. With one object in view—the overthrow of Christianity—they, literally, leave no stone unturned, if the mere turning of it can but add to their air of research. Their thesis, or, if they start without thesis, their conclusion, is always this: Science is the antithesis of faith, and the success of their efforts is too evident and too disastrous to be ignored. With the mass of men to-day the dominant idea is the wonderful leap physical science has suddenly taken into its maturity, waiting long like the cereus, and then bursting forth into glory in a night; and with this idea dominating the whole harmony of their thoughts, they feel glad to have lived and to have been born in such an era of science; and their faith is simple belief in its future power. It has done so much, it has proved itself to them in so much, that, when its "high-priests" come forward and declare that it has moulded the casket and woven the shroud and pall of Revelation, they, too often, quietly submit.

There are multitudes who make at least a pretence of seeing in the Bible nothing more than one of the variations of human emotion. We no longer hear controversies on the Trinity or Unity of God, the twofold Will of Christ, the middle state of Purgatory, the jurisdiction of Peter. The chief points attacked to-day are the very elementary truths of religion—of natural religion. A

hundred Reviews, stamped with names that carry learned appendices, scatter plausible sophistry over the world, and it is taken up and popularized in a thousand ways, so that it may not fail to reach the lowliest. Here and there we meet with an erudite refutation; and we rest satisfied that our work has been done. But the evil is not undone. It continues to be spread with feverish solicitude in newspapers and reviews, in class-rooms, in lecture halls, in parlors. Women, girls just entering society, are eager to show that they are not behind the age, and ask with a sparkle of vanity where the defenders of Christianity have hid themselves, at the approach of the great machine of Science.

Many calm themselves with the reflection that the very absurdity of the attack makes it harmless. This is a very false view of the case, and one as fatal as it is false. We are not pessimists. It is not pessimism to admit the height and build of your adversary and the length of his arm and to prepare accordingly. Mr. Mallock, whom we cite in the character of inquirer which he chooses to assume, says: "We are literally in an age to which history can show no parallel, and which is new to the experience of humanity; and though the moral dejection we have been dwelling on may have had many counterparts in other times, this is, as it were, solid substance, whereas they were only shadows."¹ Cardinal Newman does not hesitate to point to the calm threatening growth of positivism as to a phenomenon vaster than the mere outburst of a heresy. Neither can we disregard the testimony of those few—alas, too few—who, having helped to unchain the winds, are now recoiling in horror at their work. Even ten years ago, the profession of faith applauded to the echo in the socialistic congress of workingmen showed that the new metaphysical theories had reached their ethics, and had become a social reality. "They speak to us of a future life, they speak to us of heaven; but science has proved that this is all a dream, a lie. We do not want any of it. What we demand is hell—nothingness—with all the voluptuousness that goes before."² M. Jules Simon put it all in a sentence for the French people: "*Nous étions croyants, nous sommes devenus sceptiques, demain nous serons nihilistes.*" "We were believers, we have become sceptics, to-morrow we shall be nihilists."

A few years ago when Virchow, Haeckel and Oscar Schmitt put their heads together to deliberate upon the school programmes of Germany, it was asked whether monistic atheism should be reserved for the higher education, or whether it should not be introduced into the intermediate schools, and given in successive doses

¹ *Is Life Worth Living?* p. 197.

² From Report in *Bien Public* of Ghent, Sept. 12th, 1877.

in the primary schools, so that it might enter gradually into the family, and that children might grow up to it. Virchow could not bring himself to pronounce for the latter plan, but the others did not shrink from it. The *Revue Scientifique* (May 18th, 1878) answered boldly that it was expedient to lead the child gradually from anthropomorphism to the theory of the "unknowable," and to avow frankly that we do not know where the world came from or what becomes of us when we die.

All science may be divided, according to its object, into supernatural and natural. The object of supernatural science is God. St. Thomas tells us that it is God, considered as supreme cause; not merely in so far as we can know Him through creatures, for thus He may be the object of philosophy, but also and especially as to that which belongs to His own proper knowledge of Himself, and which He has communicated to us by revelation.¹

Natural science may be subdivided into that which has for its object intellectual and moral truths, and that which has for its object purely material phenomena. The former constitutes philosophy proper, more specifically metaphysics; the latter, embracing the material universe, constitutes physics. Metaphysics, employing consciousness and reason, discusses primary truths, substantial causes, questions of origin and finality, the essence of the necessary, the contingent, the immaterial, the free, etc. The domain of physics is circumscribed by the limits of purely material phenomena,—of that which can be reached by the five senses. Hence the term physics extends not only to that which is commonly called physics, but also to chemistry, geology, meteorology, and even to biology, which has for its object the sensible phenomena of life. Physics tries by repeated experiment to deduce the general laws that govern what is material in the universe in its material action. It is clear, then, that physics holds the lowest place in the hierarchy of the sciences. Physics as a science is as far below metaphysics as sight is below intelligence. Physics is a science which is, objectively, purely material, yet some of its devotees have had the presumption to arrogate to it the name of "Science," to the exclusion of every other science; and themselves they have crowned as "Scientists." From the definitions of the three orders of science it should be easy to determine their respective limits. But the lowest order, having with an amazing charlatanism hung up its sign, "all things knowable *à bon marché*," professes to have superseded the two other orders, denying or declaring unattainable or mythical those realms which, with all its presumption and effrontery, it acknowledges it cannot reach.

Step into its wonderful palace of knowledge. Its princes, coun-

¹ Summ. Theol., P. I, Q. 1, a 6.

terfeiting the air of a very suave conservatism, will meet you at the portal.

"Ah! Seeking for knowledge?"

"Yes, I want some instruction about God and immortality."

"Ah! Yes; I see—about—well, the fact is, science has no data on those points. It has never had any evidence that these things exist at all. Science adheres strictly to facts,—visible, tangible, audible facts,—and draws its conclusions after testing its facts under modifying influences. As to the things you speak of, science has not yet one fact, not to speak of a series of facts. Hence, science not only cannot draw a conclusion; science cannot even propound a theory. All science can do is to ignore such things. Science has gone high into the upper strata of the air and deep into the bowels of the earth, and has found nothing to indicate the existence of what you speak of. Hence, having no time to lose, it has relegated all such things to the region of the unknowable. This is the very mildest attitude it can assume. And it takes this position only out of courtesy to those who, less instructed, still hold on to what science really knows to be a fable. Science, I say, knows this; for, having explored all realms, it has proved it by a negative argument, by elimination. This argument is too lengthy for the majority of mankind to follow through all its details; so science avoids useless discussion with most men by saying: 'It may be so. We do not know. We have not found it.' But go in. Walk through the Palace at your leisure. Put a few questions to the Operators."

You advance, and, at once, there bursts upon your view a scene that makes you feel like a very Aladdin in the land of Alchemy. Here are no idlers. You accost an operator, and ask him for some information about miracles.

"Miracles! Yes. I know what you mean. We do not use the word. It is no longer found in our vocabulary, except as a mythological term. See that coil of wire? With that I can talk across the ocean. Is that what you call a miracle? The paradoxes of nature we are putting into toys. You say there are a great many things we do not know. Oh, yes; there are a great many. But, give us time. See what we have done in a quarter of a century!"

"But the spiritual soul, what can you say about that?"

"The spiritual soul! Well, we say nothing about it. We have never found it. And if there is one thing that we have done more than another, it is to study every fibre of the human frame. We have resolved it into its last elements; and what you call soul we now call mechanism. You have only to disturb some essential valve or pump, and it will not work. The same thing happens when you loosen the piston of a locomotive. The locomotive cannot

go. Of course, there are certain secrets in the complicated movement called life, that we have not yet reached; but we know all the elements, and we are on the way."

Well, if this is not a quackery that outdoes in brazenness all the quackeries at which men have ever gaped in awe! Quackery is defined in the dictionaries as "false pretensions to a knowledge of physic." What other name than that of supereminent, transcendental quackery can we apply to these "false pretensions to a knowledge of all things?" The Positivist school contents itself with saying that the questions which regard origin, substance, final cause, first cause, are absolutely inaccessible to us, because they lie outside the range of sensible observation. The avowedly materialistic school goes farther, and professes to decide all problems moral, metaphysical and religious. With the same code of laws which it has picked up out of matter, it passes sentence on ideas and atoms, on force and will, on intelligence and motion. Both materialistic monism and positivism repudiate the immaterial, as rationalism before them repudiated the supernatural.

The scientific question, therefore, which confronts us to-day, resolves itself into this: Must we admit a contradiction between the positive data of the experience of the senses and the teachings of conscience, reason and faith? between the testimony of the external faculties and the testimony of the internal? between the testimony of the internal faculties to-day and the testimony of the external faculties handed down to us by tradition? To keep up with modern progress, must we keep throwing away, as we would so much ballast, the deep-seated, uniform, universal beliefs of the human race? To be, and to be deemed, worthy of the future, must we deny the past, its glories, its geniuses, its thought?

This is not an arbitrary statement of the question. It is the one to which an affirmative answer is urged upon us in the name of science. We have to answer that there is not and cannot be opposition between knowledge and knowledge respectively in the three orders. Physics deals merely with the laws that rule matter in its material action. As physics it has not to ask, "whence or why matter?" It takes what it can find, what it can see, hear and feel, watches it to see how it acts, and then records the result of its experiment. If it attempts to do more, it goes out of its province. Philosophy, metaphysics, determines, in general, the nature of the material and the immaterial, the finite and the necessary. Theology, using a new light, faith, writes higher truths, supernatural; and it sheds this new light upon truths even physical and metaphysical, and illuminates them for the ken of a higher intelligence, to become the tenets of a higher belief. The three orders of knowledge are not contradictory. It is not necessary to deny the

existence of the higher order simply because its truths are not visible by the light of the lower; simply because we cannot build it up from the principles that suffice in the lower domain of matter. There is no more reason in this—less reason—than there would be in denying the existence of the golden harvest bathed in sunlight, because we should not be able to fathom it by the data, the handful of facts we might have gathered by the aid of a safety lamp down in the azoic stratum of primitive granite. We should not deny the flight of birds because we cannot fly ourselves; especially when we see the birds flying.

We should not deny the possibility of a second story to a building simply because our scaffolding will not reach high enough to make a second story, especially when we see houses of four, five and six stories all along the block. And yet similar things a few of the most forward and loud-spoken "scientists" arrogantly insist must be done. Verily, it would make one wroth if it were not such a comedy, and it would make one laugh were there not tears of tragedy at the end. But why is it that men will be deceived? Because most men are able to see better than they are able to think. When they have been shown through the brimming storehouse of visible wonders whose existence they had not suspected, they are disposed to believe the lie, the *ne plus ultra*, that is drawn as a conclusion. And the other reason is this: that when the lie favors the gratification of their gross desires, by eliminating conscience and the hereafter, they are doubly disposed to adopt it as the norma for the ethics of life.

In what has been hitherto said mention has been purposely omitted of that group in the departments of knowledge which, classified as one physical science under the heading of erudition, would embrace archæology, philology and historical criticism. Erudition is in the sphere of the natural sciences, and has played a great part in apologetics. The demonstration of Christianity reposes definitively on historical fact. From history we have an invincible proof of the Apostolicity, the Sanctity and the Divinity of the Church, and of its paramount civilizing action on the world. The adversaries of Christianity have been almost entirely driven from this field. Pope Leo XIII., in his letter to the erudite scholars, Cardinals Hergenröther and Pitra, urges them to strengthen and fortify with evidences of historical truth the position that has been attained. For us—the English-speaking Catholics—the war was long carried on upon the domain of history, for the mere reason that the press was in the hands of our adversaries. They have been almost routed from this battle ground, and have entrenched themselves behind the barrier of matter, professing to ignore facts that imply the action of free will. There is a beautifully mournful

passage in M. Renan's *Dialogues et Fragments Philosophiques*, which runs thus: "Here upon the seashore I was seized with regret at having preferred the historical sciences to those of nature. . . . There was a time when I was impassioned by these latter studies in the highest degree; but I was drawn away from them by philology and history. Yet every time that I converse with the *savants* I ask myself whether, in espousing the science of history, I have chosen the better part.

"What are the three or four thousand years which we can know out of the infinite duration that has gone before us! . . . History in its common acceptation—that is, the series of facts which we know of the development of humanity—is only an imperceptible portion of the true history, understood as the tableau of what we can know of the development of the universe." And he sings in the same strain, but more intensely, in an article in the *Revue des deux Mondes*: "I was drawn to the historical sciences, petty conjectural sciences, which are continually undoing themselves, and which will be rejected in a hundred years. Things now point to an age when man shall have little interest in his past. I fear much that the precious documents of the Academy of Inscriptions and Belles-Lettres, destined to give exactness to history, will mould before they are read.

"It is by chemistry at one end and astronomy at the other, and especially by general physiology, that we hold the secret of being, of the world, of God—as you choose to call it. The regret of my life is to have chosen for my studies a kind of research which will never have any influence, and which will always remain only as interesting considerations upon a reality gone forever."¹

This is lugubrious. It is one more "epitaph written by himself." He had in view the sceptical school to which he belongs. His estimate does not affect the real science of historical fact and of the development of humanity. But his testimony is valuable as an intellectual weather-vane, showing the real direction of ideas towards the purely material sciences, where adventurers are constructing the new faith, monist or nihilist, to continue the war against the faith of ages. The natural domain of history has been deserted, and matter, *pure matter*, has been chosen as the stronghold. The once favorite arms of historical criticism, philology and rational exegesis, have been thrown away. We may judge of the condition of these weapons in the hands of unbelievers, when we see them, to-day, obliged to go as far as India to produce, as arguments against Christianity, falsified translations from a language little known in the Occident. To the testimony of Renan, it may

¹ Page 153, ann. 1876.

² "Revue des deux Mondes," Dec. 15th, 1881.

be well to add that of his master, Friederich Strauss. We take from what he called his *Confession* :

“ Men must go, men will go thither—to the science of nature. . . . We, philologists and critical theologians, made an idle display of words when we decreed the end of the miracles. Our sentence met with no echo, because we did not teach men to do without the miracle. We could not provide a force of nature to take its place at the very point where it was found indispensable. Science (Darwinism) has discovered this force, this action of nature ; it has opened the door through which a happier posterity shall drive out the supernatural forever.”¹

There is opened up to us a new Crusade. Our present Sovereign Pontiff says : “ It is necessary, therefore, for the defender of the Faith to apply himself, more than ever, to the study of the natural sciences.”²

The defence is not nearly so difficult as that which had to be conducted on the basis of Scripture, Tradition, History or Metaphysics. There is no scientific knowledge so easy of acquirement as general physics and biology. They are the more necessary to the apologist because they are popular, attractive, and, in a degree, accessible to all. They are bound up with daily life, with the industries of the world. They are of things visible. They make pictures for books. They form the riches of museums and exhibitions.

It is their very easiness of acquirement that has been utilized to make them instruments of evil. The natural curiosity of the child is stimulated in the primary classes, and explanations are given and his questions are answered in such a way that, even from his Primer of Geology, he goes forth with the germs of all the sophisms and negations of “ Science.” These negations and sophisms strike deeper than does historic untruth, with which school books are still teeming ; deeper, too, than rationalistic criticism. For whilst the untruth of history and rationalism in interpretation disturb religion and faith, confound the origin of worships and lead to religious scepticism, they, nevertheless, leave humanity and do not ignore a moral order. Hence it is still possible, out of their ruins, to rebuild the edifice of truth. But presumptuous physics and biology strike at metaphysics. It is not merely the origin of Christianity that they assail, but the origin of the visible universe and of man. They strive to do away with the idea of God and of the soul, to enforce that of identity between man and beast. This is a low and loathsome form of aggression, no doubt ; but, driven

¹ “ The Old and the New Faith,” § 54.

² Encyclical of Feb. 15, 1882.

from every other position, the enemies of Christianity have not hesitated to take this one, and even to glory in its degradation.

The character, therefore, of the apologetics called for to-day is eminently "scientific," using the word "scientific" in its much abused sense. The work to be done is to oppose the true science to the false. There is great scope for those who wish to engage in the defence of Christianity on the new battle ground of "Science." Their method should be one of untiring attack. However, mere ridicule will not do. They must be skilled in the facts of their case. They must "speak that which they do know;" but then they must speak it as "plain, blunt" men, and be not afraid, in season and out of season, with all patience, to hold up to scorn the logical bankruptcy of scientific charlatans. We purposely abstain from names in this article. Hitherto, as a rule, there has been too much hesitancy. One cause of this has been lack of knowledge of the bare facts of physical science. This can be remedied by study.

Another cause has been a fear of departing from the etiquette prescribed for religious controversy. Of course, where there was profession of religious belief, and where we had to begin by supposing men in good faith, we could not but laud their sincerity and the necessity of following the dictates of conscience, even whilst we offered them a new light which, owing to the circumstances of their lives, it had not been their good fortune to fall in with. But with the "scientific" adversaries this cannot hold. In their denial of God they are either sincere or not sincere. If they are not sincere, why should we pay court to their hypocrisy and treat them as if they were? If they insist that they are sincere, then we know that only the fool has said in his heart, there is no God.

There is a great work to be done. It may, indeed, be tiresome to follow them, to track their steps, to watch the results of their explorations, so as to be able to expose the chicanery with which they set forth their gathered treasures. But we have to follow them. They are wolves in sheep's clothing, and we must be ready when they appear to strip them of their masquerade. Theory—hypothesis—has reached its "lowest depth," but beneath that "lowest depth a lower deep . . . threatening to devour . . . opens wide." It is the "lower deep" of practice, the ethics of materialistic atheism, which means the search for brute satisfaction, without even the instinct of brute restraint. Though there are still multitudes who pray and who die consoled by faith and hope, how many are there not who go into eternity after coldly abdicating their sonship, their faith, their hope,—leaning, as they say, on the authority of "Science." There is no sadder picture in the panorama of the wanderings of human intelligence.