

ON THE SUPPOSED ANTAGONISM BETWEEN REVEALED RELIGION AND NATURAL SCIENCE.

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(Read before the Christchurch Catholic Literary Institution on Dec. 8, 1884.)

I HAVE been induced to bring before this Society a paper on "The Relations between Religion and Science," because I find that some good people seem still to look on Science with distrust as antagonistic to revealed religion, and thus play into the hands of those who would willingly acknowledge, or, rather, who proudly boast that they are antagonistic, and who furthermore declare that as science is, and always must be, supreme, wherever the teachings of science are in opposition to those of religion, religion must give way. Now, my object in this paper is to show you as briefly and plainly as I can that science, true science, is not in any respect antagonistic to revealed religion. And by this I do not mean to enunciate the truism that because science is simply the knowledge of God's works, and religion is God's revelation of Himself to His creatures, there can be no antagonism between the two. To assert this would be needless. What I propose is to bring before you such evidence as, I think, will prove it. First let us define our terms. What is Revealed Religion? In this room, and to this audience, it is hardly necessary to say that by revealed religion I mean the doctrines of the Catholic Church, as defined by her infallible authority. I do not mean the opinions of individual theologians, however eminent, unless these opinions have been adopted by the Church and taught authoritatively; still less, of course, do I mean those loose interpretations and pious opinions which no instructed Catholic would consider binding on his conscience. This definition at once disposes of a host of objections which Protestants are obliged to combat respecting the account of the creation as given in Genesis, the Deluge, the miracles of the sun standing still at Joshua's command, etc. As Catholics we have really no concern with these disputes. We are not tied to the text of the Bible as Protestants are; we have an infallible interpreter of it, and on points upon which the Church has not spoken authoritatively, we must not attempt to decide. Now, the Church has not uttered any authoritative interpretation of the first chapter of Genesis, which may bear various interpretations, and has received them from learned theologians. Similarly with regard to the universality of the Deluge, opinions are so divided that an animated discussion has been going on for months in the *London Tablet* on the question. The Rt. Rev. the Bishop of Clifton maintaining for one that the Deluge was not universal. As far as this goes, even geologists are not quite agreed. The tradition of a deluge in which all mankind were destroyed, save a few individuals, is one of the most widely spread traditions existing amongst mankind. Geological questions are, therefore, open questions—so are the interpretations to be given to the account of the deluge and of the sun standing still. We have thus a great advantage over Protestants on these points, inasmuch as the Church, not having authoritatively declared herself, we can accept and discuss any facts that may be brought forward. Next, what is Science? Well, science is a word derived with the least possible change from the Latin word *scientia*, which signifies knowledge—knowledge in the abstract, then skill or expertness. Cicero says, for instance, that the ignorance of future evils is more useful than the knowledge (*scientia*) of them. But in the sense in which the word science is generally employed, it means something more than knowledge in the abstract, or the knowledge of common things, which can be and is acquired daily by every human being of sound mind, or even than skill in the mechanical arts, though these may require, for properly understanding them, an acquaintance with some science:—it means knowledge which is full and accurate, systematized and arranged. A science comprises all that is known about any given subject, including not merely a general acquaintance with it, but such an exact knowledge of details as may enable its possessor thoroughly to understand its laws, and to know at least whether anything he sees or reads of is contrary to those laws, or incompatible with them, or whether it forms a new fact or phenomenon to be taken into account. For instance, the science of botany comprises vegetable physiology or the laws of plant life, and systematic botany or the description and classification of all known plants. A man who is a fair botanist is acquainted with all the known facts of vegetable physiology, with all its settled laws; he has also a general acquaintance with all the best known and commonest species, general families and natural orders of plants. He is able if a new plant is presented to him to fix at once its position in the vegetable kingdom within certain narrow limits; he can generally say to what order it belongs, sometimes to what genus, and by reference to his books of what species it is. This is the kind of knowledge which is called science. Now sciences are divisible into theoretical or abstract, and practical or concrete, and a mere enumeration of these will show without further argument that some of them can have no point of contact with the dogmas of revealed religion, and therefore no antagonism to them. First, take mathematics, the science of numbers, and geometry, the science of space. It is obvious that these, the foundation of all the sciences, can have no possible antagonism to religion. They belong to different spheres of thought. The multiplication table, algebra, and Euclid's elements are of no religion, and a man will admit that ten times five are fifty, or that all equilateral triangles are likewise equiangular, whether he be Pope of Rome or President of the Mormon community. Physics, or natural philosophy, as it used to be called, which comprises the laws of matter, solid and fluid, including gravity, electricity, heat, galvanism, light, sound, the laws of fluids, etc., is another branch of science which deals with matters of which religion takes no cognizance. Chemistry is another science of the same kind. Biology, or the science of living beings, including both animal and vegetable physiology, psychology, or the science of mind, and the new science, which may almost be said to be the creation of Herbert Spencer, sociology, or the science

of mankind as social beings—all touch on points in which religion is interested. There is also a science which I have not found mentioned in any list I have read, the science of theology, the science which treats of the Being and attributes of God, and of His relation to His creatures. This is a science which has occupied the most brilliant and powerful intellects the world has ever seen. It has, like every other science, its technical terms; it requires years of patient study to master it, and yet we find men who do not even know its technicalities, boldly, and with all the calmness of entire ignorance, discussing and deciding upon the most complicated and difficult questions in it. This phenomenon, peculiar to the present age, is worthy of note. The concrete or applied sciences are very numerous. Those which, in the popular estimate, give the character of a scientist to the student of them, are geology, including mineralogy, palæontology, etc., meteorology, astronomy, the higher departments of medicine, ethnology, etc. Now, when we maintain that none of the ascertained facts or phenomena known to science are opposed to Divine revelation as taught by the Catholic Church, and that none of the laws of nature which are known to be true with that certitude with which, for example, we know that air expands when heated, or that water expands on becoming ice, are contrary to Divine revelation, we shall probably be met by the objection that every miracle recorded in Holy Scripture is a plain proof to the contrary. Not so; the Church in teaching us to believe in miracles, in no way disputes the existence of natural law, no way asserts that the law which the miracle violates is a fallacy of the scientist. On the contrary, could some extraordinary phenomenon be explained by the operation of natural causes, it would cease to be considered a miracle. When cures supposed to be miraculous are effected, say by the relics of a saint, the ecclesiastical authorities first ascertain the exact truth as to the facts; then they ask learned physicians whether the cures could have taken place by the operation of natural laws. If they reply in the affirmative, *cadit questio*, the cure is no miracle. Miracle, then, recognises law—miracle is the suspension of natural law. The ordinary and regular sequence of phenomena, we call the laws of nature. Religion recognises those laws, and considers miracle as a supernatural action of the Almighty Creator of the Universe in suspending for a time and for a purpose, the action of those laws. Our Lord's first miracle, the conversion of the water into wine, is absolutely inexplicable on any natural grounds. There are elements in wine which do not exist in water; the chemical element carbon, which is largely contained in wine, is not present in water. Therefore, to make wine directly out of water involved a creative act. It would be absurd to suppose that because the chemist can prove that elements exist in wine that do not exist in water, therefore chemistry and religion are antagonistic. Religion admits the fact, and glories in it as a miracle. Or take the doctrine of the Resurrection. Every Christian believes in the resurrection of the dead. Science teaches us that every dead body becomes in time decomposed into new compounds, or becomes converted into vegetable or animal life, and perhaps thence passes in the shape of food into the bodies of other human beings, of whose bodies the atoms that were part of their predecessors form essential parts. Perhaps there is not a human being living in any civilised community in whose body there are not atoms of carbon, or phosphorous, or lime, which have been previously constituents of the bodily frame of other human beings. But how does this conflict with the doctrine of the resurrection of the dead? In no way. St. Paul explains to us what is the nature of this resurrection when he says, "So also is the resurrection of the dead. It is sown in corruption; it shall rise in incorruption. . . . It is sown a natural body; it shall rise a spiritual body. If there be a natural body, there is also a spiritual body." And again, "Now this I say, brethren, that flesh and blood cannot possess the Kingdom of God . . . for this corruptible must put on incorruption, and this mortal must put on immortality." Evidently the spiritual body of which St. Paul writes is totally different in its qualities from the body which we can weigh and measure, analyse and dissect; the biologist has nothing to do with it. Now, so fast is the field of human knowledge that no man, whatever his mental powers may be, is capable of mastering more than a very small portion of it. For remember what Sir Isaac Newton said towards the close of his life, "I feel like a child walking by the sea of knowledge, and now and then picking up a pebble on its shore." Although it is the educational fashion of the present day to teach children and youths of both sexes little scraps of all sorts of science, you must not think that these little scraps, even if acquired perfectly from little manuals, entitle the student of them to consider himself as the master of the science. It is only when the student has become a man that he becomes capable of knowing what he has to learn, and of learning it. And when he has selected the branch to which he has resolved to apply himself, he requires, in many cases, years of arduous study before he can master what other men have done and published. He may then, if he has other qualifications to which we need not here allude, be qualified to teach the science either by word of mouth, or by publishing works in which is epitomized, collected, or systematized, the results of other men's labours. There are men who have devoted their lives to science who never got beyond this stage. They are men of science, often very useful men—plodding, practical, industrious; but not being endowed with much originality of thought, or being destitute of imagination, which is absolutely necessary for an investigator who seeks *rerum cognoscere causas*, or being quiet and unambitious by temperament, they are content merely to acquire and add to their knowledge of other men's work. Next in rank above these are the workers in various branches of natural science, such as mineralogy, botany, zoology, palæontology, chemistry, etc., who take up some particular branch, and devote themselves to adding new facts to their science, without troubling themselves with endeavouring to discover new laws. These are the men who describe new or hitherto undescribed forms of animal or vegetable life. One will take up some branch of botany—ferns, perhaps, or mosses, or seaweeds, and work at it for years. Wherever he goes such a man is happy. He is on the hunt for some rare specimen or some new species. So minute is the subdivision of the sciences, and so difficult