## THE POSSIBILITY OF MIRACLES.

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There are very many intelligent and educated people who doubt the possibility of a miracle. Of these the great majority, perhaps, from indifference or out of respect for Christian belief, rarely or never express the doubt; but it festers. When expressed it often takes the form of a positive denial of possibility. This makes its appearance in literature, and especially in what may be called semi-religious literature, as in the "Leben Jesu" of Strauss, the "Vie de Jesus" of Renan and the Robert Elsmere of Mrs. Ward. This positive disbelief is also distinctly avowed by some Philosophical Schools, as by the Comtists of France and England. Moreover the. doubt and denial is often outspoken by Physicists, principally by those who have not studied closely the fundamental principles on which all physical science rests, or who do not recur to these principles in their consideration of this matter. This imposing array of unbelievers and the haughty attitude assumed in these days by Philosophy and Physical Science in disregard of the claims of religious doctrine and the historical verity of Scripture, troubles the minds of many Christians, and therefore calls for special and thoughtful consideration.

If an avowed disbeliever be asked why he rejects miracles, let us say those of the New Testament, his answer would likely run about thus: A violation of Natural Law is impossible; a miracle is a violation of Natural Law; therefore a miracle is impossible. This very simple reasoning he seems to regard as unanswerable. If the objector be a Deist, to him it might be said: You reject the Scriptures, but you believe in God, and with God all things are possible. Perhaps he would reply: Very true;

but the laws of nature are God's laws; He enacted them. Surely He will not violate His own laws; for in His perfection, He is self-consistent, and therefore a miracle is morally impossible, which in this case is equivalent to absolutely impossible. This sort of reasoning, when failing of conviction, is nevertheless calculated to inject doubt and give trouble.

Now let it be observed that the famous and familiar phrase: "A violation of natural law," on which both the foregoing reasonings turn, is not at all clear in its meaning. Natural law, or a law of nature, is only a generalized statement of the orderly action of physical forces, its universality being justified by their strictly invariable uniformity of action. Hence the supposition that, at any time or under any circumstances, the play of these physical forces among themselves does not conform to the law. is a contradiction of its strict universality; which is to deny that the law is truly a law. The supposition of a deviation from established order, as expressed in a law of nature, is therefore incredible and indeed inconceivable. In case of the law of Gravitation, for example, that every particle of matter attracts every other, it is impossible to conceive of a deviation or a failure, or a so-called violation, without giving up the law. The law of the Conservation of Energy, that during the interaction of natural forces within a given system, effecting changes in its members, there is to the system as a whole neither gain nor loss of energy, is now so thoroughly established that no physicist will allow the possibility of an exceptional case; and indeed, metaphysically viewed, an exception is inconceivable. It is true beyond all question that the notion of a violation of natural order or law, in the sense supposed, is absurd. The Duke of Argyle, in "The Reign of Law," and Professor Drummond. in "Natural Law in the Spiritual World," and others endeavor to save this point by supposing that there may be some unknown higher or wider law, which would include the exceptional case. But this is to abandon the

known law for one unknown, which is unscientific and cannot be allowed.

Let us avoid confusing the vague, obscure and even senseless phrase, "a violation of natural law," with the notion of the interaction of natural forces. Natural forces often co-operate, but also they often, very often, counteract one another. In navigation an adverse wind counteracts the propelling force of an ocean current, and so retards the ship. Forces often neutralize one another; as the weight of a vast rock is neutralized by the resisting earth on which it presses at rest. Examples lie on every hand, and are familiar to everybody. But nobody ever thinks or speaks of such counteraction as a violation of natural order of law. The distinction is simple and clear, but is not always observed by thinkers and writers. The counteraction of forces, an important feature in the present discussion, is in no sense a violation of any law; but, on the contrary, operates strictly according to law.

It is evident, however, from the use made of the lame phrase, a "violation of natural law," in the reasonings cited at the outset, that the violation is supposed to be accomplished by the interference of the energy of a Will, acting upon and among the physical forces. Well, does this implied supposition remove the obscurity of the phrase? Indeed we all know, very clearly and distinctly, what is meant by a violation of a moral law, e. g. Thou shalt not steal. For a moral law is a mandate, addressed to a will capable of obeying or disobeying; and to disobey the mandate is to violate the law. Moral law is expressed in the Imperative mood, and is imposed by authority previous to the voluntary act. But natural law is a very different thing. It is not mandatory, not addressed to a will but simply to intelligence, e. g. the Law of Gravitation and the Law of Conservation already cited. Natural or physical law is expressed always in the indicative mood, is subsequent to the facts indicated. and, as already said, is merely a generalized statement of their universal and invariable order. The notion of

a violation by voluntary energy is obviously brought over from moral law, and attributed to natural law with which it is utterly incongruous. The notion of obedience is often, in like manner, carried over to natural law, and we hear of the perfect obedience of the planets to the laws of motion and gravitation, which is commended for imitation in human conduct. But this is wholly inept. There is no obedience, for there is no alternative. The notions of obedience and of violation are equally incongruous to the notion of natural law, and can be applied to it only by a somewhat strained metaphor.

It is thoroughly familiar that voluntary energy does interact with the various forms of physical energy, for such interaction occurs at every moment of active human life. A child tosses a ball upward and catches it on its return. This apparently simple event is really exceedingly complex, defying a complete analysis by the psychologists and physiologists. The playful will of the child brings into action select brain centres. These propagate nervous energy to the corresponding muscles. The ball flies upward in opposition to gravitation, which, on its return, is again counteracted in the catching. In this play there is much that is inexplicable. Especially, how does mind act on brain; how does voluntary energy become transformed into physical energy? The question how inquires for a means or medium. But so far as we know there is no medium affording explanation. know the fact beyond all question, and it seems to be ultimate and not more mysterious than the transformations of physical energies, one into another. Yet no one ever thinks or speaks of the tossing of a ball as a violation of natural law, or even a deviation from the order determined by its antecedents. To think of it or speak of it as supernatural would be absurd.

Thus Man has at command of his will certain muscular movements, by which he can move things from place to place, or counteract their motion. This, as Bacon first observed, is all that he can physically do; yet by this

power alone, intelligently used, he tunnels the Alps, builds cities, wraps the earth with iron, and in general produces results that never would come to pass under the action of natural forces alone. By the exercise of his voluntary energy through his muscles, he is enabled to co-operate with, or to counteract, the various forms of physical energy. But observe, again, that such interaction either in co-operating or counteracting, is in no sense a violation of the laws of physical energy, nor does it ever supersede them, but simply modifies the physical action by the introduction of an extraneous force, to-wit: the Energy of Will. No human power can violate a law of nature. It often produces disasters, but disasters of all sorts are in strictness physically legitimate, whether it be an earthquake's ruin, or the designed burning of a city by incendiaries, or the wreck of a vessel due to a mistake in steering, or a deliberate suicide. Such events are extraordinary in the sense of being infrequent, but are never classed as supernatural.

It seems, then, from the foregoing statements, that we hold, with the unexceptionable strictness of the most rigid physicist, to the doctrine of the fixed, invariable and inviolable order of nature as expressed in natural law. Moreover, we hold that the intervention of the energy of the free will of man among the purely physical forces, while it modifies their action and results, does not affect this fixed invariability. Because, however, of the objectionable phraseology in which the doctrine is usually clothed, and because of the apparently infinite variety, superficially viewed, in natural and human events, it is needful to examine the doctrine more closely and point out more exactly what is meant by the fixed, invariable and inviolable order in these events.

Every change, that is to say every event, in the world of things and men is determined without alternative to be just what it is by immediate causative antecedents. The cause of a change or event is the aggregate of all its immediately conditioning antecedents. The foregoing is a statement of the universal, unexceptionable fact of causation, which is the fundamental fact governing the material universe. The principle resolves into two axioms which it is impossible for the intellect of man to reject, they being intuitively true. First, the axiom of change; every change or event is caused; and second, the axiom of uniformity: Like causes have like effects. reverse of the latter is also intuitively true, but does not especially concern the present discussion. these axioms all the activities of mankind are founded: all interpretation of the past; all forecast of the future; all explanation of the manifold changes in the material They therefore constitute the ultimate basis of all physical sciences, and are the formal and ultimate principles of all the laws of nature, and of the economics of society. It is true that the choice of a will between possible alternatives is free, but this, not being a change in itself, does not constitute an exception, since it alone does not come under the category of causation.

Let us consider for a moment the axiom of uniformity: Like causes have like effects, as the basis of all physical science. It expresses formally all that is meant by order in nature, and when applied to a series of observed facts. justifies their generalization in the form of a natural law. The fall of an apple, the whirl of a planet, the arrangement of geological strata, and the growth of a forest (the energy of vitality being one of the causative antecedents). are natural events, and we expect the like result in like cases with the utmost confidence in conformity with the law. But, be it observed, natural law thus evolved will not account for driving a nail with a hammer, or for the growth of a city. In these and like cases, human voluntary energy intervenes among the natural forces and contributes to the event, and becomes an important and essential part of the cause which, be it remembered, is the total of the conditioning antecedents in their entirety. The human energy thus intervening co-operates with the physical energies, or modifies or even nullifies them by counteraction. Now again, let it be observed that this intervention, even in the case of extreme counteraction, is in the strictest sense in accord with the axiom of uniformity; for any like intervention at any time or place will produce like effect. It is very possible for the intervention of human energy among natural physical energies greatly to vary the effect; but it is utterly impossible for such intervention, involving even extreme counteraction, to produce an effect other than what the like causative antecedents always have and always will produce, thus conforming to the axiom of uniformity.

It is quite manifest that, beside those events which occur in inanimate nature and invariably conform to law with absolute uniformity, there is another class not usually regarded as natural but as artificial, in which the energy of animal and especially of human volition plays an essential and perhaps an overruling part among the antecedents; as, for instance, in the building of a city or the tossing of a ball. Also it is manifest that, in these artificial events, not only is there no violation of law, but they conform strictly to the fundamental principle of natural law, the principle of uniformity that like causes have like effects. Hence no one ever speaks or thinks of them as violations of law, or even as exceptional in the general order of the world.

There is, however, still another class of events of which we have historical evidence, particularly the Biblical miracles, which are apart from either of the classes already mentioned and are rightly accounted supernatural. This term "supernatural" stands greatly in need of accurate positive definition. We use it here without attempting such definition and in its usual negative sense as qualifying events which are not explicable by natural physical causes, nor by any intervention of human agency. Such events are therefore usually attributed to higher mystical powers in conflict with and overruling the other causal antecedents.

The argument now before us, let it be remarked, is not for those who profess pantheism or materialism or any other form of atheism, philosophical or brutal. rather for those who believe in a personal God, as Creator and Ruler, but who, without much thought on the matter, are inclined to doubt or even to disbelieve, "under the light of modern science," in the possibility of a miracle. Also it is for the avowed deist who rejects the holy Scriptures on this ground, and for the physicist who limits himself to his narrow field and arrogantly denies the supernatural. Let us seek to know what is meant by the term "miracle" which, though very familiar, also stands greatly in need of accurate definition. A miracle is a supernatural event, consequent upon the intervention of divine energy among its natural antecedents, co-operating or colliding with them and becoming an essential and overruling factor in the total cause. This is not what is usually called a popular definition, but it correctly comprises and unfolds the essence of the term, and is applicable to the biblical miracles generally. We cite especially: Water made wine, Cleansing a leper, Stilling a tempest, and Raising the dead.

In order to be clear and to argue the question pointedly. several observations are perhaps needful. noted, then, that in this strictly logical conception of a miracle, there is no infraction of any recognized natural law, no disregard of scientific doctrine, no deviation from the great principles that underlie all true science ancient and modern, and which regulate the whole practical world of men and things. A miracle has a cause, a fully adequate cause; for what may not divine energy do. either alone or in combination with natural forces? Moreover, the fundamental scientific axiom that like causes have like effects is perfectly consistent with the miraculous. Were there today a tempest on the Lake of Galilee and should the divine energy of Jesus again oppose the warring elements, instantly there would be peace and calm. No believer in the first event can possibly doubt this, for like causes have like effects with absolute certainty. This uniformity characterized the oft-repeated healings and the raising of the dead.

In the next place, let it be noted that the conception of the intervention of spiritual energy and its combination with natural forces is not at all new. Indeed to every man it is a most familiar experience, occurring in every voluntary movement of his limbs. Now if, with his small power narrowly limited to moving things from place, he is able to accomplish the wonders that are changing the face of the earth, what may not divine energy in similar combination accomplish by its unlimited power?

Should it be said that such combination especially at a distance, as is apparently the case in many miracles, is incomprehensible and therefore incredible, we reply that the same occurs among natural forces. The earth compels the moon to move in an orbit. How? I know not, and Newton did not know. But we all know that it does do so. How do I bend my arm? I know not. I will to bend it and it bends. What nexus there is between mind and brain, between will and nerve, so that the action of one becomes the efficient cause of a change in the other, we know not and no physiologist can tell us. These facts are incomprehensible, but they are facts beyond all Since these facts are credible in the highest degree, surely we may believe that divine will may combine with natural forces, overruling them, although indeed we do not know how. The analogy between the two cases is so close and strong that they are equally credible.

Finally we re-state the important truth that the principle of causation is the universally governing principle of the world of things and men. The axioms by which it is fully expressed have also been stated and been the subject of sufficient comment. It has been pointed out not only that they are the basis of all physical science, and so the essence of all natural law, but also that the practical conduct of all men at all times is in accord

There is no explanation of past events, or forecast of those future, but by virtue of these axioms, especially that of uniformity, as fundamental in every case. The world is built that way. Now we who here speak and are spoken to are theists. We hold that God made the world, and made it thus. Moreover he has always governed it, and still governs it, by the principle of causation. Our faith in this principle is unconsciously unlimited. Every lesson drawn from experience is based upon it, and every device in the ordering and furtherance of our well-being. Otherwise there would be nothing for us in the world, and human life would be impossible. The uniformity of nature is the faithfulness of God. In the miraculous events recorded in the Scriptures, He has never in any case deviated from it or contravened it, but in every case has supplied an adequate cause for the event, a cause which if ever repeated, would reproduce the event always and with the strictest uniformity. How shallow then the saving that a miracle is impossible becuse it is a violation of natural law; for it is now surely evident that it strictly conforms to the basic principle of all natural law. Still more shallow is the saying that in a miracle God violates His own established laws, which is morally impossible. Truly it is morally impossible, indeed absolutely impossible. It clearly appears, however, that He has never in any miracle or in aught else been unfaithful, but has strictly conformed therein to His immutable ordinance. Surely the biblical miracles are possible and credible.

To deny this conclusion, on the ground that it is illogical and unscientific, would stultify the recusant; for, in the enlarged and legitimate view we have taken of conformity to the fundamental axioms of science it is rigidly logical and scientific.