

Theology on the Web.org.uk

Making Biblical Scholarship Accessible

This document was supplied for free educational purposes. Unless it is in the public domain, it may not be sold for profit or hosted on a webserver without the permission of the copyright holder.

If you find it of help to you and would like to support the ministry of Theology on the Web, please consider using the links below:



Buy me a coffee

<https://www.buymeacoffee.com/theology>



PATREON

<https://patreon.com/theologyontheweb>

PayPal

<https://paypal.me/robbradshaw>

A table of contents for *Journal of the Transactions of the Victoria Institute* can be found here:

https://biblicalstudies.org.uk/articles_jtvi-01.php

JOURNAL OF
THE TRANSACTIONS

OF

The Victoria Institute,

OR,

Philosophical Society of Great Britain.

VOL. LXI.



LONDON:

(Published by the Institute, 1, Central Buildings, Westminster, S.W.1.)

ALL RIGHTS RESERVED.

1929

726TH ORDINARY GENERAL MEETING,
HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, S.W.1, ON MONDAY, JUNE 3RD, 1929,
AT 4.30 P.M.

DR. JAMES W. THIRTLE, M.R.A.S., IN THE CHAIR.

The Minutes of the previous Meeting were read, confirmed, and signed, and the HON. SECRETARY announced the election of the following:—As Associates: Alfred Phibbs, Esq.; the Rev. F. E. Marsh, D.D.; W. B. Sommers, Esq., M.B., F.R.C.S.; the Rev. D. E. Hart-Davies, M.A., D.D.; Andrew Williamson, Esq.; Commander W. H. N. Yonge, R.N. (ret.).

The HON. SECRETARY also announced the name of the successful candidate in the Triennial Langhorne Orchard Prize Essay Competition. This was founded six years ago in memory of Prof. Langhorne Orchard—a Vice-President of the Society—by his daughter, Mrs. W. Langhorne Cooper. The subject proposed for the Competition was “The Bearing of Modern Discovery on the Historicity of the Noachian Deluge.” The name of the successful candidate was Lieut.-Col. L. M. Davies, R.A., F.G.S. Other valuable essays were sent in, but that of Col. Davies was awarded the prize of £20 and the commemorative medal. Unfortunately the Colonel’s military duties prevented his attendance, but he was hoping to be present in the course of the next session to read his essay.

The CHAIRMAN then called on the President, Sir Ambrose Fleming, D.Sc., F.R.S., to deliver the Annual Address on “Nature and the Supernatural.”

NATURE AND THE SUPERNATURAL.

By SIR AMBROSE FLEMING, M.A., D.Sc., F.R.S. (*President*).

THE trend of modern thought as exhibited in much scientific and popular literature, also to some extent in theological writings, is to deny the probability of any sudden discontinuities or interruptions in the order of events in Nature, perceptible by us, and to assume everywhere an unbroken interconnection of a kind possible of comprehension by us.

Thus we now endeavour to find as far as possible mechanical, physical, or chemical explanations of natural phenomena, and are not willing to admit the happening of any event which contradicts our normal experiences or cannot be explained by reference to phenomena or causes with which we are already to some extent familiar.

Even where there is some very obvious *hiatus*, as between living and dead matter, it is very common to assume that we

shall one day be able to discover the exact nature of this difference, trace out its stages, and explain it without reference to any supernatural agency.

This conviction of the continuity and unchangeableness of phenomena in the external world, and that there is nothing in it which is, or should be, beyond the power of the human intellect to explore and explain, is, however, a plant of rather recent growth.

For primitive man everything that presented itself to his mind was so novel, and mostly so inexplicable, that no departure from usual occurrences would have seemed strange or improbable. In the childhood of the world nothing that could happen would have been considered miraculous in our sense of this term.

Modern science, experimental, inductive and deductive, is almost entirely the achievement of the last 300 years. Its chief pioneers were Descartes (1596-1650), Galileo (1564-1642), Gilbert of Colchester (1540-1603), and, in a less degree, Francis Bacon, and it had as its great initiator Sir Isaac Newton (1642-1727), who was born in the year (1642) that Galileo died.

The result of three centuries of intellectual labour has been to establish firmly a belief in the general constancy of events and phenomena in the material world. If that constancy did not exist to a very great extent, there could be no scientific investigation, invention, or research. It would be useless for men to expend a lifetime of labour in determining and measuring effects or physical quantities, such as the velocity of light, the mechanical equivalent of heat, or weights of atoms, if these were liable to sudden or gradual change.

1.—THE MEANING OF THE PHRASE "LAWS OF NATURE."

As far as we have been able to explore the phenomena of the material world they appear to remain constant from age to age; they vary neither with time nor distance. An atom of hydrogen in a far distant star on the confines of the universe has the same radiative powers, as shown by its spectral lines, as an atom of hydrogen in our terrestrial laboratories when observed under the same conditions. All our scientific investigation to-day is based upon, and supports, the conclusion that the phenomena of the material world, as far as we have accurately ascertained them, exhibit no variability, but remain the same. We speak

of these observed uniformities as the "Laws of Nature," and we commonly say they are constant or invariable.

The word "law" as here used has somewhat different significations from the same word when used in legislative or moral statements. In the latter case the term "law" implies a regulation or restriction of some kind which must be obeyed. Penalties are often attached to breaches or neglect of it. We thus speak of the "Common Law of England" or of the "Divine laws."

There is then associated with the word "law," in this sense, the idea of compulsion or necessity, and of consequences which may be serious for non-attention to the law. Even in matters such as games there are so-called "laws" of cricket, or golf, or chess. Anyone who intentionally disregards them is shut out from participation in these pursuits by those who accept the rules as necessary.

In the scientific use of the word "law," in such phrases as "the law of gravitation" or "the laws of optics," the term "law" merely means an observed uniformity or effect which may often be expressed in numerical form.

Thus we state Newton's "law of gravitation" to be the observed fact, that masses of matter draw or attract one another with a force which is proportional to the numerical product of the masses, and inversely proportional to the square of their distance. The general truth of this statement is confirmed by the fact that we are able by means of it to predict astronomical events such as eclipses, the accuracy of which is proved by agreement with the results of observation. Einstein has, however, recently modified this law slightly, and given an expression for it which includes certain observations which Newton's law did not cover. In the same way there are innumerable other physical and chemical observations which by their uniform occurrence enable us to make a general statement or "law" which summarizes these experiences.

But now it should be noticed that, although we are in this way able to sum up the results of countless observations in a so-called "law of Nature," we are seldom if ever justified in saying that there can never be any deviations from it or them.

Suppose we release a stone from our hand, and notice that it falls towards the centre of the earth at a certain rate. Let us suppose the experiment conducted a million times with the same result. We have merely established an enormous prob-

ability that if it is tried once more a similar result will take place. We have not however established any necessity that it *must* take place. The idea of necessity or of compulsion does not enter into the question. All that our extended investigation of the physical world has done for us is to create an immense probability that the events in the material world will happen in the future as we have found them happen in the past. We are not entitled, however, to postulate that there never can be any variation in the happenings when they take place under the same conditions. The reason for this is that our knowledge of these so-called "laws of Nature" is indeed extremely limited.

As regards our experience of the phenomena in the physical world, we are in the position of a person who has seen a very small portion of a certain curve and determined its curvature, but he is not therefore justified in asserting that its curvature at all other unseen parts is the same. At certain places discontinuities or sudden changes of curvature may take place which are beyond the scope of his present vision.

The great achievements in scientific invention and research, especially in the last century, have, however, resulted in the production of a widespread conviction that the order of Nature, or what we call its "laws," are inevitably invariable. In other words, that there is not only an order as far as observed by us, but that the sequence of phenomena is necessary and is never changed.

This does not imply that entirely new phenomena or effects cannot be discovered, but it implies a conviction that when they are found we shall be able to trace a definite connection with other already known effects, or explain them consistently with already accepted interpretation of known phenomena, and find the new effects in course of time also to exhibit the same characteristic constancy.

Thus, in the closing years of last century, between 1895 and 1899, a series of discoveries were made by men of genius which totally changed the previously held ideas or theories of matter, and introduced us to new and very astonishing phenomena. Up to that time, although much knowledge had been accumulated by chemists concerning the combination of atoms, the structure of the atom itself had never been disclosed. Atoms were considered as infinitely hard unbreakable particles into the interior of which we could never penetrate.

In the same way our ideas of the nature of light were once limited to the radiations which affect the eye, and to a certain small range of non-visible rays at opposite ends of the spectrum having, respectively, heating and photographic power, called the dark heat and ultra-violet or actinic rays. The discovery in 1895 of the X-rays by Röntgen, and that of the Hertzian waves previously discovered, made known to us a vast extension of the spectrum beyond the violet and red light, and gave us the means of photographing the bones in the living hand or foot, or the coins inside a leather purse, and of conducting wireless telegraphy.

In 1896 the discovery by Becquerel of the power of Uranium ores, such as pitch-blende, to blacken a photographic plate, led to the great discovery of radium by M. and Mme. Curie, and all the surprising powers of the radioactive elements.

The epoch-making discoveries of Rutherford, Ramsay, Soddy, and many others, and that of Sir J. J. Thomson of the existence of the electron or atom of electricity as a constituent of all chemical atoms, led at last to a consistent theory of the atomic structure, which regards it as a miniature solar system in which electrons circulate round a nucleus built up of protons or atoms of positive electricity and of electrons or atoms of negative electricity. In all this mass of new knowledge we recognize, however, no discontinuity with the old knowledge, but only an extension of it, and a still unbroken reign of law. We are able to construct reasonable hypotheses which give us the power to visualize the atomic structure to some extent, but these are taken as merely guides for further experimental work and not assumed to be absolute representations of the actual structures.

It was in former times taken for granted extensively that a mechanical explanation of physical phenomena would hold good, and that such a reduction of observed effects to mechanism or motion was always possible. We are not so confident of it at the present time. The gap between living and non-living matter, for instance, has not been bridged. Although some biologists, such as Bastian, asserted that they had produced living organisms from non-living material, the results of more careful work seemed to be against this conclusion. The tendency of scientific thought has been then to regard the material universe as an entity existing in itself and by itself, and containing within itself all the resources necessary for its evolution or development.

In the latter half of the last century the term Evolution began to be used to describe the gradual progress of the universe of material things from one state to another more complicated, complete, or varied. The whole entirety of existing things and beings was spoken of as "Nature," but this term gradually acquired a certain degree of personality as if it were a causative agent apart from the things themselves, in such phrases as "Nature abhors a vacuum," or "Nature does this, that, or the other." In like manner the term Evolution came to be used as the name for a certain designing or controlling power, and not merely limited to its use as a general term describing the slow and gradual progress of the Universe from one state to another.

These ideas, viz., the assumed inviolability of the "laws of Nature," and the operation of an agency called Evolution, which is regarded as an automatic agency shaping or guiding the gradual changes in Nature, have exerted in the last half-century or more a very powerful influence on scientific and popular thought. One result has been to undermine belief almost entirely in the past occurrence of any interruptions or exceptions to what are called the laws of Nature, and to render belief in so-called miracles more difficult or impossible. According to Matthew Arnold, "miracles do not happen."

This does not mean that we invariably deny the actual occurrence or historical truth of exceptional events, but that an attempt would at once be made to explain them as the outcome or result of known and comprehensible antecedents. If that could not be done, the general tendency would be rather to doubt the accuracy or truth of the observations than the real interruption in any long-observed sequence of events. This, of course, is the essence of David Hume's argument against miracles, viz., that it is more likely the witnesses should be mistaken or deceived than that the event violating prolonged normal experience should have occurred.

We cannot however ignore the fact that there is a large body of evidence for the happening of many events which are outside all normal experience, and are not explicable as arising from known causes. It has, therefore, been usual to assume that all events coming within our cognizance may be divided into natural and supernatural.

2.—DEFINITIONS OF THE TERMS “MIRACLE” AND “SUPERNATURAL.”

At this stage, however, a little more careful statement must be made as to the events which ought to be included under the terms supernatural or miraculous. It is clear that not every wonderful or exceptional event can be included. As soon as we know, or can probably demonstrate, that the event in question depends upon powers or phenomena previously in any degree familiar to us, it ceases to be supernatural or miraculous.

In a pre-scientific age such exceptional events as a total solar eclipse, the appearance of a new and brilliant star, or a great meteoric shower or comet were regarded as supernatural or miraculous. But to us with our astronomical knowledge they are not so.

Even when the complete mechanism of some new happening is not known to us, analogy may lead us to see that the normal chain of cause and effect may not be broken by its occurrence. Thus, for instance, we all know that mental emotions, such as fear, anger, or joy, can disturb the bodily functions and secretions, and that an optimistic or hopeful temperament assists recovery from certain bodily complaints. Hence we are not indisposed to grant that a strong conviction of recovery will or can overcome functional disorders; in other words, that so-called faith cures are possible without passing outside of the natural order of events

A not unusual definition of a miracle is that it is a “breach of the laws of Nature.” This statement, however, takes for granted that we have a perfectly complete knowledge of these so-called laws or uniformities. All that we do know is, that over a certain period of time we have observed that certain events take place in a certain manner and sequence. Our evidence of this for the most part depends on human testimony and extends possibly over a very limited time. We have each of us, for instance, observed that the sun rises, or that day succeeds night for the span of our past lifetime. How do we know it took place before we were born? Only because we have been told by older persons that it did so happen. Our knowledge of the uniformities of Nature is then chiefly based on human testimony.

Very few persons have verified for themselves more than the

smallest fraction of the regular occurrences in Nature even in one branch of science, and then only over a limited space of time. The main facts are taken for granted on the evidence of experts deemed to be worthy of confidence. Hence to declare that a miracle is a breach of the laws of Nature is to assume a far more extensive knowledge of those uniformities or laws than we actually do possess. Both the existence of the uniformity and any departure from it, that is both the "law" and the supposed "breach" of it, are only established by the sufficient testimony of competent witnesses.

We have then to be very cautious in declaring that any particular event is a breach of the laws of Nature, because our so-called "law" may be only a limited part of a more complete phenomenon, including also the exception or breach in question, as well as the more usual uniformity.

This matter was very well expounded in a book entitled *The Ninth Bridgewater Treatise*, by an eminent mathematician and scientific man, Charles Babbage, published many years ago, in 1838. Babbage was the inventor of certain machines called calculating engines. The purpose of these appliances was to exhibit on dials or print down numbers following a certain assigned rule or law.

Thus, for instance, if we take the series of natural numbers 1, 2, 3, 4, etc., and multiply each by itself, we obtain a series 1, 4, 9, 16, etc., called the square numbers. Now, of course, any child can give these squares up, say, to 12 times 12, but if we were asked to give immediately the square, say, of 51492 it would take some time to work it out, and one might make a mistake. The object of these engines then was to give the absolutely correct answer.

Now, Babbage uses the following illustration to show how cautious we should be in asserting that we have sufficient knowledge to justify a general statement being made from a finite number of observations. He supposes an observer to operate one of these calculating engines, and, if he lived long enough, to observe that the machine had exhibited, say, 100 million terms of the series of square numbers without exception. Would not anyone then feel perfectly confident in asserting after this experience that the machine was set to produce these numbers and no others? But Babbage tells us the machine could be arranged so that at any assigned place it would interpolate one or more numbers which did not agree with the law of the

squares. Hence the true law of the machine was not simply to exhibit the series of square numbers, but that series with one single interpolation not agreeing with it. Babbage employs this fact as an illustration that a miracle, though an apparent exception to an observed uniformity, may yet be included in a larger and more complete order or harmony.

3.—THE BIBLICAL MIRACLES.

From these topics we are led naturally to consider the important matter of the Biblical miracles. In so doing we must approach the subject from a definite standpoint. If we consider the Universe to be a self-ordered entity, the origin of which we are unable to conjecture, but possibly infinite in past duration, then the utmost that can be said is that its various phenomena may be found to result from certain general or fixed principles, and though catastrophic events might occur, they would have no significance with regard to such intelligent beings as ourselves, the product of gradual evolution from lower organisms. From such a standpoint miracles such as the Biblical could have no meaning or importance.

On the other hand, if we take a different standpoint, and regard this Universe as the Creation of One Supreme God infinite in Wisdom, Power and Love, and the intelligent and spiritual occupants of it such as ourselves as His offspring, then two conditions seem necessary. In the first place, such Universe must exhibit generally an order and regularity in its phenomena, otherwise we should continually be put to mental confusion, and unable to draw any inferences from it as to the Wisdom and Power of which it is a witness. But, on the other hand, such order and regularity, if absolute and complete, has a tendency to deflect our attention from the Supreme Personal Intelligence which gives rise to it, and to engender the belief that this order and regularity is self-produced and self-maintained.

It seems necessary then that there should be certain interruptions or discontinuities of that order, and the occurrence of events, which will draw attention powerfully to the truth that the Universe is not self-ordered or self-maintained, but exists only from moment to moment by the ever-acting will and purposes

of Almighty God. These exceptional events having a moral or spiritual end in view constitute the miracles which are such a striking feature of the Biblical history and narrative.

The fundamental purpose of this Universe is the Glory of God ; making manifest to the intelligent, moral, and spiritual individuals in it the Wisdom, Power, Love, and Grace, and other Divine attributes, to the end that it may excite in them praise, adoration, and filial love, so that they may have communion with the Father of Spirits, and be co-workers with Him in the development of His great purposes throughout the series of eternity. For this purpose the created Universe of things must be a place of education and spiritual training.

One basic lesson to be learnt is, then, the constancy and unchangeableness of God—the same yesterday, to-day, and for ever, in whom is “ no variableness neither shadow of turning.”

We have this set before us in the universal reign of natural law, in the large constancy of physical phenomena, and by our discovery that in the physical Universe everything and every act is regulated minutely by number, weight, and measure. But if that were the only lesson taught we might retain the conviction of the uniformity of events, but lose sight of the truth that it is intended to teach.

Hence a second condition seems to be essential, and that is the evidence of Divine power in apparent departures from this uniformity, but which may indeed be contained in a larger and more extensive uniformity.

When we take a broad outlook on the Biblical miracles, we see they do not occur indiscriminately, but in groups or periods closely connected with the beginning or end of great dispensations, and have definite aims. Thus there are special Theophanies or Appearances of God, and certain miracles described in connection with the creation of Man and the Adamic age which ended with the Flood. Then another group characterized the Patriarchal dispensation and the Call and Covenant with Abraham. A third group is associated with the Covenant with the Chosen Nation and their Exodus from Egypt ; a fourth with the Great prophetic period, especially that of Elijah and Elisha ; a fifth with the Captivity period, and the revelations to Daniel ; then a sixth manifestation, the greatest of all. “ When the Word became flesh, and dwelt amongst us, and we beheld His glory as of the only begotten of the Father, full of grace and truth ” (John i, 14). Finally, these special manifestations

of Divine Power gradually ceased in the subsequent Apostolic age.

In all these we have a certain group of miracles which comprise the provision of food, the healing of diseases, and the raising of the dead to life: all of them meeting the most urgent of human needs for nourishment, health, and continuance of personal existence, in such manner as to teach that these great requirements come to us as gifts of God, and not as the mere outcome solely of human efforts or the spontaneous operation of the energies of Nature. Then there are a large number of instances in which the great forces and energies of Nature are directed and controlled so as to show that there is a supreme and controlling Power in and above Nature. Lightning, storms, earthquakes, floods and winds, the animal creation, and all the agencies in the physical world obey Him who brought them into existence, and they execute His Will. Ps. cxlviii is a great anthem describing the manner in which all the powers of Nature, "Fire and hail, snow and vapour, stormy wind fulfilling his word," praise the Name of the Lord.

If we admit that the physical Universe is not self-produced, the outcome of impersonal agencies, but is the handiwork of God; can we refuse to admit also that He can control the energies he has brought into existence? We ourselves possess this power to a very limited extent. We can divert the otherwise wasted power of a waterfall or river and make it drive our trains or light our towns. We can utilize to some extent the tidal energy, and we may one day be able to do the same with solar heat, or atmospheric electricity, or the heat stored in the earth.

Many of the miracles of the Bible, especially in the Old Testament, seem to have been, not any suspension or reversal of normal operations in Nature, but a control or guidance of them for Divine purposes. Thus at the Exodus, when the Israelites escaped from the pursuing Egyptians by crossing some water called a "sea," we read: "The Lord caused the sea to go back by a strong east wind all that night, and made the sea dry land" (Exod. xiv, 21). The passage of the Jordan by the hosts of Israel at the entrance into Palestine may have been achieved by a similar natural agency, suitably timed.

We cannot, however, presume to say that the Biblical miracles do not ever involve special acts of Divine will, suspending or reversing normal operations in Nature, or could be explained, if we knew enough, by the operation of agencies with which we

are already familiar. Nevertheless, it must not be assumed that the miracles of the Bible are arbitrary interferences altogether detached from the main stream of events. They may be the result of putting into action forces or agencies of which we are ignorant, as a rule latent and reserved for special Divine operations.

We ourselves, for instance, by special electromagnetic actions, can make a heavy metal ring float in the air, as was shown by the writer in lecture experiments many years ago. We thus oppose the normal action of gravitation by another supercontrolling action. Are we then entitled to say that the story of Elisha causing an iron axe-head to float on water was untrue, because we do not understand how it can have been done? (2 Kings vi, 6.)

4.—EVIDENCE FOR MIRACLES NOT ALL OF EQUAL VALUE.

It is however unquestionable that there are differences in the essential character of the various Biblical miracles as well as in the evidence for their historical actuality. Nevertheless, the strong evidence which can be produced for some of them communicates support to the veracity of statement concerning others.

Thus, the keystone of the arch of truth in connection with the Gospel miracles is the direct and indirect evidence which exists for the historic actuality of the Resurrection of Our Lord, as, and in literal accordance with, the statements of the Gospel authors. If this is true, as we believe it to be, it makes all the rest of the signs and mighty works He performed not only antecedently possible, but essentially necessary.

The usual method employed by rationalist opponents of Biblical truth, in discrediting accounts of miracles, is to select some of the Old Testament miracles for which the independent testimony is small, and meet it with ridicule or assertions of its impossibility or non-historical character, and then argue from this that disbelief is justified in the case of the New Testament miracles. Although this may be skilful as a controversial method, it is entirely unsound as an argument.

The unquestionable evidence which exists for the greatest of these supernatural events, viz., the Resurrection of our Lord, contributes to render possible and probable all others.

The Bible, moreover, has a remarkable power of establishing its historical accuracy. The spade of the explorer has many times over undermined the hasty conclusions of the literary critic, and may do still more yet.

It would be impossible to summarize here even the smallest fraction of the evidence for that supernatural event the Resurrection, which has been the subject of countless volumes. The attempt to explain it on a naturalistic basis, as in the so-called "swoon" or "hallucination" theories, has been found hopelessly insufficient to meet the facts.* Apart from the emphatic and uncontradicted evidence given by the disciples and witnesses themselves as recorded in the Gospel narratives, the earliest origin or sources of which critical opinion now dates within thirty or thirty-five years or so of this event, there is the indirect evidence of the establishment and rapid upgrowth of the Christian Church founded essentially on faith on its historic occurrence.

The principle of the "sufficient cause" applies not only to physical events, but also to the events of history.

There is no adequate explanation of the sudden rise and growth of the Christian Church apart from the supernatural events which preceded and accompanied it. Its early history does not agree at all with that of the man-made religions such as Mohammedanism, Buddhism, or Confucianism. Mohammedanism was propagated largely by the sword wielded for it; but Christianity, in spite of the sword wielded against it. The fact remains that before the Resurrection the disciples are always represented in the Gospel narratives as a band of rather self-seeking men, one of whom betrayed, another denied, and all forsook their Master in the critical hour. A few weeks after they are found to be with one exception a cohort of most courageous men, persistent in spite of threats or prosecution in giving emphatic testimony to the bodily Resurrection and Messiahship of their Lord.

We are told in the Acts of the Apostles that 3,000 persons were converted on the day of Pentecost to that faith, and very shortly after another 5,000. Is it conceivable these 8,000 persons

* This hypothesis has been critically discussed by many writers. A recent and very able article, by the Rev. Professor W. M. Alexander, in *The Evangelical Quarterly* for January, 1929, on "The Resurrection of Our Lord," deals with it briefly.

could have given their allegiance so suddenly and firmly to a faith based on deception or fraud.*

On the other hand, it is necessary to remember that these conversions were in themselves a miracle. They were not the outcome merely of an intellectual conviction or of an appeal to the reason alone, they were the miraculous result of the Pentecostal gift of the Spirit, when, with the sound of a mighty rushing wind, it came upon the assembled first disciples, giving them an utterance in foreign speech of the wonderful works of God and crowning each lowly head with cloven tongues of mysterious flame.

Several incidents which are mentioned, as it were casually, in the Acts of the Apostles show clearly that there were unusual events at the Resurrection which had a very great effect upon contemporary witnesses of them.

It is stated that soon after the day of Pentecost "a great company of the priests were obedient to the faith" (Acts vi, 7). This clearly means that amongst the Temple priests many were convinced of the fact of the Resurrection and of the Messiahship of Him whom the chief priests had caused to be put to death. These converted priests were in a position to know certain things which were probably not known immediately to the general public.

The three Synoptic gospels all tell us that at the moment our Lord expired on the Cross "the veil of the temple was rent in twain from the top to the bottom" (Matt. xxvii, 51). This veil was a very thick heavy curtain which separated the Holy Place in the Temple from the Holy of Holies. Into the Holy Place only the priests went daily to renew the shewbread, replenish the lamp with oil, and burn incense on the golden Altar. Into the Holy of Holies no one entered except the High Priest, and he only on the great day of Atonement. If, then, this curtain was suddenly torn from the top by invisible

* It does not, of course, follow that because a statement is accepted by numerous persons it is therefore necessarily true. The tenets and doctrines of Mohammedanism are thus widely accepted, but that does not prove their truth. In the case of the Christian Church there was objective proof of its supernatural character in the immediate production of an intensive charity, purity of life, and readiness to undergo the most appalling suffering rather than abandon its belief in the Resurrection and Deity of Christ which followed immediately on its establishment.

hands where no man could reach it, it would be known to the priests on duty only, and would cause them the greatest astonishment and perturbation. They would not be likely to publish this news at once. Then, again, certain inexplicable events must have taken place in the very early hours of the following Sunday when the Roman guard or watch set at the tomb came hurriedly back to the chief priests with the startling news of the stone rolled away by the Angel whose countenance was like lightning. This would at first be known only to the priests, and they attempted to suppress publication of these events by large bribes to the soldiers and promises to assist them to escape the penalties for deserting their post* (Matt. xxviii, 11-14).

These details surely could not have been pure fabrication nor legendary accretions on some simple narrative of a Roman execution, unless there had been essential truth at the back of them. People do not invent and circulate falsehoods that incriminate themselves.

The more the whole of the statements of the four Gospels as to the incidents of the Crucifixion are considered and compared, the more utterly improbable does it seem that they should have been the result of human imagination as regards their supernatural character.

5.—THE SUFFICIENCY OF HUMAN TESTIMONY TO THE SUPERNATURAL.

We have now seen that there is no *à priori* argument against the happening of miracles or so-called supernatural events which lie outside ordinary normal human experience. We cannot say

* It has been held that this guard did not consist of Roman soldiers, but was a civilian guard provided by the chief priests. Pilate's answer to the request to provide a guard, "Ye have a watch: go your way, make it as sure as ye can" (Matt. xxvii, 65), has been held to be a semi-contemptuous refusal of a military guard. If, however, the priests had provided their own watch, why does St. Matthew call them "soldiers," and why should the priests have attempted to bribe their own servants? If they were Roman soldiers no one would believe that they had deserted sentry duty without some very serious reason, because that was a military offence punishable by death. If they were not Romans, then the priests were self-condemned, because their own watch had failed to do the thing they were put there by them to do. In any case their excuse was a very bungling attempt to explain the empty tomb.

they are impossible. Their occurrence can, however, only be established by adequate testimony.

The argument of the Scotch philosopher, David Hume, was that these abnormal events are so improbable that no amount of human testimony can establish their actuality. Hume's statement is as follows.* He first assumes, in contradiction to that which has been above said, that a miracle is a violation of the laws of Nature, and he says that as unalterable experience has proved the latter to be invariable, no evidence is sufficient to establish the fact of the miracle. This, however, begs the whole question at issue. His exact words are: "The plain consequence is that no testimony is sufficient to establish a miracle, unless the testimony be of such a kind that its falsehood would be more miraculous than the fact it endeavours to establish."

Hume evidently here uses the word "miraculous" by mistake, in place of the proper word "improbable." Hume's argument, therefore, amounts to this, that the improbability of the falsehood of the testimony must be greater than the improbability of the occurrence of the thing testified.

In a chapter in the book above mentioned, Babbage endeavours to defeat Hume's assertion by a mathematical argument based on the Theory of Probabilities. This last is an important branch of mathematics which deals with the measurement of the chance or probability of certain events happening expressed numerically. Thus, if we put into a bag 1 black ball and 9 similar white ones, and ask a person to shut his eyes and draw one ball out of the bag at random, we may ask, what is the chance of his drawing the black ball? The answer is $1/10$ th, because there are 10 balls equally liable to be drawn but only 1 is black. In the same way the fraction $9/10$ th expresses the chance of drawing a white ball. Suppose then that two such bags are provided, and two independent persons blindfold both draw at random one ball each out of his bag. What is the chance that both will draw a black ball? The answer is $1/100$ th, because it can be shown that the probability of a double event is the product of the probabilities of the separate events. In the same way for three bags and three persons, the probability of all drawing black balls is $1/1000$ th.

Now Babbage applies this principle to the case of human testimony. He assumes there are independent witnesses to

* Hume's *Essays*, Edinburgh, 1817, No. ii, p. 117.

some abnormal event, each of whom may be supposed to be accurate or truthful in his statement, say, nine times out of ten and erroneous in one out of ten. Then he proves that if there are a very moderate number of such witnesses who independently agree in their testimony as to a very improbable fact, the improbability of being all wrong is greater than the improbability of the abnormal event.

Thus, if we take one witness alone, the chance of his being mistaken or untruthful, say, is $1/10$ th, or the improbability of his statement being wrong is represented by the reciprocal number 10. If there are two independent witnesses the probability of both being wrong is $1/100$ and the improbability is represented by 100. If there are 12 such independent witnesses, the probability of all being mistaken or untruthful is 1 divided by 10 multiplied 12 times by itself, or one-billionth, and the improbability of the total testimony being wrong is represented by the enormous number 1,000,000,000,000. If then the event to which they testify has an improbability represented by, say, a million million, it is clear that the united testimony of 12 or 13 independent witnesses is sufficient to establish it: in other words, to defeat Hume's argument against miracles.

The weak point in Babbage's argument seems to me to be that in the case of human beings we cannot divide their testimonies sharply into correct and incorrect, or true and false. All persons are more or less observant or unobservant, more or less careless, more or less biased, and hence all their statements as to events are more or less tinged with inaccuracy, forgetfulness, or want of truth. We cannot express this departure from perfection in testimony exactly by a numerical factor or fraction. Hence Babbage's method of test is hardly a valid or satisfactory one. The object of cross-examination in a Court of Law is, however, to test the weight to be attached to a witness's evidence, and we do arrive at an appreciation of it in a general way.

Broadly speaking, when a number of independent witnesses testify to the same abnormal event, we expect to find a certain difference as to detail in their testimony. If they agree too well, we at once suspect collusion. But, nevertheless, we expect a general agreement as to main facts. Also we expect that the occupation or state in life of each witness will to some extent determine the things to which they pay attention.

Again, if the witnesses were inventing a story rather than describing an actual experience, their past experience or education would colour their imaginative efforts. We have then to consider whether the statements made are such as the witnesses would be likely to concoct if not true, having regard to their station and life. The fact remains, however, that the independent but concordant evidence of a number of witnesses to an event gives an assurance of its occurrence which increases much faster than the number of witnesses. Thus, four such independent witnesses all agreeing give an assurance of truth much more than four times that given by a single witness.

In considering the actuality of historical events in a bygone age we cannot cross-examine the witnesses, and we have to rely solely on the recorded evidence or statements. These tests have been applied with the utmost care and skill to the records of the Synoptic Gospels and that of the fourth Gospel for the last hundred years or more. What concerns us, however, at the moment is the validity of the evidence as to supernatural events in them. It is almost universally granted by those whose opinion is worth anything at all, that the Gospel narratives are based broadly on historical facts. The tendency in many quarters is, however, to regard the supernatural events recorded as non-historical. Such critics would accept the ethical and religious teaching of Christ, such as that of regarding the brotherhood of man and the Fatherhood of God as of supreme importance, but would seek for naturalistic explanations of the miracles of healing and perhaps reject as mythical many of the others. Such process of separation, however, breaks down the consistency of the narrative as a whole, and leaves us without adequate cause or explanation of the accepted course of events.

Nothing is more certain than that the Christian Church was built up, not simply on an advocacy of Christ's ethical teaching, but on an unbreakable testimony of eye-witnesses to the supernatural event of the Resurrection. The first utterances of the Apostles were a reiteration of this fact at every opportunity. They charged the Sanhedrim with having "killed the Prince of Life whom God hath raised from the dead" (Acts iii, 15), and we are told "with great power gave the Apostles witness of the Resurrection of the Lord Jesus" (Acts iv, 33).

There was absolutely no contemporary evidence in opposition to this testimony. The Sanhedrim could have destroyed the faith of the nascent Church at once if they could have produced

the dead body of the Lord, or proved that it had been surreptitiously removed from the tomb. Why did they not do it? Simply because they could not.

We are left, therefore, with a very high degree of certainty by the internal evidence of the narratives themselves, that the supernatural events recorded are not the result of human imagination, nor of subsequent legend or myth embroidering an account of purely natural events. Either the record is literally true or else its creation and wide acceptance as true is almost as great a miracle as the events recorded.

6.—THE TRUE RELATION OF THE NATURAL AND SUPERNATURAL.

The distinction which we ordinarily draw between events called Natural and those called Supernatural depends (i) upon the frequency of their occurrence, or (ii) our power of reproducing them at will, or (iii) upon our ability to give an explanation of them in terms of familiar events.

An event of a kind which occurs frequently, or can be repeated at pleasure, or explained in known terms, we call Natural; but an event which is very rare or unique, cannot be repeated, or is inexplicable in terms of known phenomena, is called Supernatural. It is noteworthy, however, that no such distinction is drawn in Holy Scripture. Everything is there stated in a matter-of-fact way, and the events we call miraculous are related without any additional remarks to indicate them as supernormal or beyond expectation, but they are stated as done expressly and immediately by the Will of God. There is, however, a difficulty involved. We have present before us at all times the continual mystery of good and evil; of sin, sorrow, suffering, and death, no less than the pleasures and bounties of life.

How is this duality to be reconciled with the belief that all that happens is by the Will of an omnipotent and beneficent Creator whose tender mercies are over all His Works? This paradox has oppressed the minds of all serious thinkers from the dawn of history, and the pagan explanation of it was the assumption of two antagonistic Powers in the Universe, such as the Ormazd and Ahriman of Zoroaster, who respectively willed the good and the evil to man.

But we, who accept the Bible as an inspired communication

from the One Almighty Creator and Father of mankind, cannot for an instant entertain the idea that God permits or acquiesces in that which is not perfect good, even though it be in a form incomprehensible to us.

How then shall we reconcile this faith with facts ?

I humbly venture to suggest that the explanation is that the omnipotence of the All Holy Creator of the Universe is yet subject to the condition that even He cannot perform simultaneously operations which are the inverse of each other. He can create anything He pleases, but He cannot create and leave uncreated at the same instant. He can give or bestow what things or powers He chooses, but He cannot give and withdraw them at the same moment.

If then He has chosen to bestow on intelligent beings the power of free choice within limits, that choice may be exercised in opposition to or divergence from His Will or else there could be no bestowal of freedom. That free choice so exercised combined with a finite or very limited power to control the consequences of it lies at the root of all moral evil, and hence of suffering and sin. Critics will probably say that this plunges us at once into the metaphysical quagmire of the free-will controversy, but the common sense of mankind cuts the Gordian knot of determinism with the answer "*solvitur ambulando.*" We each of us here know at the back of our minds, that whatever may be the motives which induce us now to remain in this room, we *can* get up and walk out of it if we choose : that is, we can exercise free will.

The distinctions which then are fundamental, are those things or events which are in accordance with the Will of God and those things or events which are not. The former should be called natural, because they belong to the very essence of Creation or Nature. The latter are unnatural, because they are not in accord with that Holy Will. That there are things which may happen contrary to the Will of God is proved by many Scriptural statements, as in the petition "Thy Will be done on earth as it is in Heaven," for there is here an implication that it is not now done on earth as it is in Heaven.

The problem, then, if with deepest reverence we may use that term, before the Mind of God was to recover the Adamic race of mankind without compulsion of the Will, which would have destroyed personality, into a condition in which that human will is perfectly blended with the Divine. In other words,

in which the unnatural separation should be brought back into a natural union. As Tennyson says :—

“ Our wills are ours we know not how,
Our wills are ours to make them Thine.”

But it is clear that the Scriptural teaching involves much more than this, and that the separation, divergence, or opposition of the human will and the Divine was never intended to occur, was not at first manifested, and involved at its appearance not only a loss of a stupendous kind, but a debt or obligation which required remission.

I am well aware that Modernism in theology as well as Evolutionary theory repudiates entirely the doctrine of an Adamic “ Fall ” from perfection, and starts with the idea of a gradual ascent rather than a sudden descent. We have, however, to make our choice between building on the impregnable rock of Holy Scripture or on the shifting sands of the hypothesis of Evolution. The Scripture teaching as to the necessity of an Atonement is only consistent with its teaching as to a previous “ Fall.”

What was required to meet the case was not simply a gradual amelioration, but an entire reconstruction, a process which was, as it were, a second Creation over and above original Creation, and hence *Supernatural* in its essence and result. The whole scheme of redemption, therefore, as disclosed to us in the Old and New Covenants of the Bible, regarded as a Divine revelation, involves Divine operations which may truly be called *Supernatural* and outside of the normal course of Nature.

The forgiveness of sins, by a mediatorial sacrifice is supernatural, for there is no analogous process in the ordinary course of Nature. The recovery of human nature to its pristine condition of purity by the processes described by the New Testament terms justification and sanctification are supernatural, and do not take place naturally, and involve acts properly called miraculous. The Incarnation, the Vicarious Sacrifice, the Resurrection, Ascension, and the creation of the Christian Church are one and all *Supernatural* in this sense of the word, and are described in apostolic writings as mysteries. “ Great is the mystery of godliness : God was manifest in the flesh, justified in the Spirit, seen of angels, preached unto the Gentiles, believed on in the world, received up into glory ” (1 Tim. iii, 16).

On all sides there is a recognition that human nature has gone

extremely wrong, and that its wars, crimes, cruelties, inequalities, sufferings, and diseases are unnatural and call aloud for remedy. But the history of mankind is one long unfailling demonstration that no merely human effort is sufficient to remove and destroy these potent evils ; it can only be done by the special Supernatural agencies appointed by God.

The attempt, therefore, to eliminate or explain away the Supernatural elements in the written Word of God, or to ignore or deny the Supernatural attributes and powers of the Incarnate Word of God, deprives them of all life-giving power or potency to cure the death-producing ailments of human nature.

Anyone who will deal fairly with the history of the present and the past, can hardly fail to admit that humanity is not "slowly struggling upwards to the light" by the aid of its own intrinsic powers, but that apart from supernatural gifts and grace the future holds no assuring promise of a final conquest over the spiritual and material ills to which our flesh is heir.

On the call of the CHAIRMAN, a hearty vote of thanks was accorded to Sir Ambrose for his Address.