BIBLE SCHOOL SOURCE BOOK

"WHY BELIEVE? Be ready always to give an answer" (1 Peter 3:15 KJV)

DR. DESMOND FORD





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6th GNU Bible School Schedule

FRIDAY, MAY 19, 1995:

7:00 P.M. "The Miracle of Planet Earth and Family" - Dr. Desmond Ford

SABBATH, MAY 20, 1995:

9:30 A.M. "Because It's True: Historical Evidence" - Roy Gee

11:00 A.M. "The Miracle of the Jew" - Dr. Desmond Ford

Noon Fellowship Dinner

1:30 P.M. "Because It's True: Personal Evidence" - Roy Gee

3:00 P.M. Questions and Answers "The Miracle of the God-Man" - Dr. Desmond Ford

7:00 P.M. Social Hour

SUNDAY, MAY 21, 1995:

9:30 A.M. "Because It's True: Worldview Evidence" - Roy Gee

11:00 A.M. "The Miracle of the Book and Its Divine Witness" - Dr. Desmond Ford

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NATURAL THEOLOGY

THE DIVINE BENEVOLENCE

When God created the human species, either he wished their happiness, or he wished their misery, or he was indifferent and unconcerned about both.

If he had wished our misery, he might have made sure of his purpose, by forming our senses to be so many sores and pains to us, as they are now instruments of gratification and enjoyment; or by placing us amidst objects so ill-suited to our perceptions, as to have continually offended us, instead of ministering to our refreshment and delight. He might have made, for example, every thing we tasted, bitter; everything we saw, loathsome; everything we touched, a sting; every smell a stench; and every sound a discord.

If he had been indifferent about our happiness or misery, we must impute to our good fortune (as all design by this supposition is excluded) both the capacity of our senses to receive pleasure, and the supply of external objects fitted to produce it. But either of these (and still more both of them) being too much to be attributed to accident, nothing remains but the first supposition, that God, when he created the human species, wished their happiness; and made for them the provision which he has made, with that view, and for that purpose.

STATE OF THE ARGUMENT

In crossing a heath, suppose I pitched my foot against a *stone*, and were asked how the stone came to be there; I might possibly answer, that, for anything I knew to the contrary, it had lain there forever; nor would it perhaps be very easy to show the absurdity of this answer. But suppose I had found a *watch* upon the ground, and it should be inquired how the watch happened to be in that place; I should hardly think of the answer which I had before given - that, for anything I knew, the watch might have always been there. Yet why

should not this answer serve for the watch as well as for the stone? Why is it not admissible in the second case, as in the first? For this reason, and for no other, viz. that, when we come to inspect the watch, we perceive (what we could not discover in the stone) that its several parts are framed and put together for a purpose, e.g. that they are so formed and adjusted as to produce motion, and that motion so regulated as to point out the hour of the day; that, if the different parts had been differently shaped from what they are, of a different size from what they are, or placed after any other manner, or in any other, other than that in which they are placed, either no motion at all would have been carried on in the machine, or none which would have answered the use that is now served by it. To reckon up a few of the plainest of these parts, and of their offices, all tending to one result: We see a cylindrical box containing a coiled elastic spring, which by its endeavor to relax itself, turns round the box. We next observe a flexible chain (artificially wrought for the sake of flexure) communicating the action of the spring from the box to the fusee. We then find a series of wheels, the teeth of which catch in, and apply to, each other, conducting the motion from the fusee to the balance, and from the balance to the pointer; and at the same time, by the size and shape of those wheels, so regulating that motion, as to terminate in causing an index, by an equable and measured progression, to pass over a given space in a given time. We take notice that the wheels are made of brass in order to keep them from rust; the springs of steel, no other metal being so elastic; that over the face of the watch there is placed a glass, a material employed in no other part of the work, but in the room of which, if there had been any other than a transparent substance, the hour could not be seen without opening the case. This mechanism being observed (it requires indeed instrument, and perhaps some previous examination of the an knowledge of the subject, to perceive and understand it; but being once, as we have said, observed and understood,) the inference we think is inevitable, that the watch must have had a maker; that there must have existed, at some time, and at some place or other, an artificer or artificers who formed it for the purpose which we

find it actually to answer; who comprehended its construction, and designed its use.

I. Nor would it, I apprehend, weaken the conclusion, that we had never seen a watch made; that we had never known an artist capable of making one; that we were altogether incapable of executing such a piece of workmanship ourselves, or of understanding in what manner it was performed; all this being no more than what is true of some exquisite remains of ancient art, of some lost arts, and, to the generality of mankind, of the more curious productions of modern manufacture. Does one man in a million know how oval frames are turned? Ignorance of this kind exalts our opinion of the unseen and unknown artist's skill, if he be unseen and unknown, but raises no doubt in our minds of the existence and agency of such an artist, at some former time, and in some place or other. Nor can I perceive that it varies at all the inference, whether the question arise concerning a human agent, or concerning an agent of а different species, or an agent possessing, in some respects, a different nature.

II. Neither, secondly, would it invalidate our conclusion, that the watch sometimes went wrong, or that it seldom went exactly right. The purpose of the machinery, the design, and the designer, might be evident, and in the case supposed would be evident, in whatever way we accounted for the irregularity of the movement, or whether we could account for it or not. It is not necessary that a machine be perfect, in order to show with what design it was made; still less necessary, where the only question is, whether it were made with any design at all.

III. Nor, thirdly, would it bring any uncertainty into the argument, if there were a few parts of the watch, concerning which we could not discover, or had not yet discovered, in what manner they conduced to the general effect; or even some parts, concerning which we could not ascertain, whether they conduced to that effect in any manner whatever. For, as to the first branch of the case; if by the loss, or disorder, or decay of the parts in question, the movement of the watch were found in fact to be stopped, or disturbed, or retarded, no doubt would remain in our minds as to the

utility or intention of these parts, although we should be unable to investigate the manner according to which, or the connexion by which, the ultimate effect depended upon their action or assistance; and the more complex is the machine, the more likely is this obscurity to arise. Then, as to the second thing supposed, namely, that there were parts which might be spared, without prejudice to the movement of the watch, and that we had provided this by experiment - these superfluous parts, even if we were completely assured that they were such, would not vacate the reasoning which we had instituted concerning other parts. The indication of contrivance remained, with respect to them, nearly as it was before.

IV. Nor, fourthly, would any man in his senses think the existence of the watch, with its various machinery, accounted for, by being told that it was one out of possible combinations of material forms; that whatever we had found in the place where he found the watch, must have contained some internal configuration or other; and that this configuration might be the structure now exhibited, viz. of the works of a watch, as well as a different structure.

V. Nor, fifthly, would it yield his inquiry more satisfaction, to be answered, that there existed in things a principle of order, which had disposed the parts of the watch into their present form and situation. He never knew a watch made by the principle of order; nor can he even form to himself an idea of what is meant by a principle of order, distinct from the intelligence of the watchmaker.

VI. Sixthly, he would be surprised to hear that the mechanism of the watch was no proof of contrivance, only a motive to induce the mind to think so;

VII. And not less surprised to be informed, that the watch in his hand was nothing more than the result of the laws of *metallic* nature. It is a perversion of language to assign any law, as the efficient, operative cause of any thing. A law presupposes an agent; for it is only the mode, according to which an agent proceeds: it implies a power; for it is the order, according to which that power acts. Without this agent, without this power, which are both

distinct from itself, the *law* does nothing, is nothing. The expression, "the law of metallic nature," may sound strange and harsh to a philosophic ear; but it seems quite as justifiable as some others which are more familiar to him, such as "the law of vegetable nature," "the law of animal nature," or indeed as "the law of nature," in general, when assigned as the cause of phenomena, in exclusion of agency and power; or when it is substituted into the place of these.

VIII. Neither, lastly, would our observer be driven out of his conclusion, or from his confidence in its truth, by being told that he knew nothing at all about the matter. He knows enough for his argument; he knows the utility of the end; he knows the subserviency and adaptation of the means to the end. These points being known, his ignorance of other points, his doubts concerning other points, affect not the certainty of his reasoning. The consciousness of knowing little, need not beget a distrust of that which he does know.

STATE OF THE ARGUMENT CONTINUED

Suppose, in the next place, that the person who found the watch, should, after some time, discover, that in addition to all the properties which he had hitherto observed in it, it possessed the unexpected property of producing, in the course of its movement, another watch like itself (the thing is conceivable); that it contained within it a mechanism, a system of parts, a mould for instance, or a complex adjustment of laths, files, and other tools, evidently and separately calculated for this purpose; let us inquire, what effect ought such a discovery to have upon his former conclusion.

I. The first effect would be to increase his admiration of the contrivance, and his conviction of the consummate skill of the contriver. Whether he regarded the object of the contrivance, the distinct apparatus, the intricate, yet in many parts intelligible mechanism, by which it was carried on, he would perceive, in this new observation, nothing but an additional reason for doing what he

had already done - for referring the construction of the watch to design, and to supreme art. If that construction without this property, or, which is the same thing, before this property had been noticed, proved intention and art to have been employed about it; still more strong would the proof appear, when he came to the knowledge of this farther property, the crown and perfection of all the rest.

II. He would reflect, that though the watch before him were, in some sense, the maker of the watch, which was fabricated in the course of its movements, yet it was in a very different sense from that, in which a carpenter, for instance, is the maker of a chair; the author of its contrivance, the cause of the relation of its parts to their use. With respect to these, the first watch was no cause at all to the second; in no such sense as this was it the author of the constitution and order, either of the parts which the new watch contained, or of the parts by the aid and instrumentality of which it was produced. We might possibly say, by with great latitude of expression, that a stream of water ground corn; but no of latitude of expression would allow us to say, no stretch conjecture could lead us to think, that the stream of water built the mill, though it were too ancient for us to know who the builder was. What the stream of water does in the affair, is neither more nor less than this; by the application of an unintelligent impulse to a mechanism previously arranged, arranged independently of it, and arranged by intelligence, an effect is produced, viz. the corn is ground. But the effect results from the arrangement. The force of the stream cannot be said to be the cause or author of the effect, and plan in the still less of the arrangement. Understanding formation of the mill were not the less necessary, for any share which the water has in grinding the corn; yet is this share the that which the watch would have contributed to the same, as production of the new watch, upon the supposition assumed in the last section. Therefore,

III. Though it be now no longer probable, that the individual watch, which our observer had found, was made immediately by the hand of an artificer, yet doth not this alteration in anywise affect

the inference, that an artificer had been originally employed and concerned in the production. The argument from design remains as it was. Marks of design and contrivance are no more accounted for now, than they were before. In the same thing, we may ask for the cause of different properties. We may ask for the cause of the colour of a body, of its hardness, of its heat; and these causes may be all different. We are now asking for the cause of that subserviency to a use, that relation to an end, which we have remarked, in the watch before us. No answer is given to this question, by telling us that a preceding watch produced it. There cannot be design without a designer; contrivance, without a contriver; order, without choice; arrangement, without any thing capable of arranging; subserviency and relation to a purpose, without that which could intend a purpose; means suitable to an end, and executing their office in having ever been without the end end, that accomplishing it. Arrangement, accommodated to the means or contemplated, disposition of parts, subserviency of means to an end, relation of instruments to a use, imply the presence of intelligence and mind. No one, therefore, can rationally believe, that the insensible, inanimate watch, from which the watch before us issued, was the proper cause of the mechanism we so much admire in it; - could be truly said to have constructed the instrument, disposed of its parts, assigned their office, determined their order, action, and mutual dependency, combined their several motions into one result, and that also a result connected with the utilities of other beings. All these properties, therefore, are as much unaccounted for as they were before.

IV. Nor is anything gained by running the difficulty farther back, *i.e.* by supposing the watch before us to have been produced from another watch, that from a former, and so on indefinitely. Our going back ever so far, brings us no nearer to the least degree of satisfaction upon the subject. Contrivance is still unaccounted for. We still want a contriver. A designing mind is neither supplied by this supposition, nor dispensed with. If the difficulty were diminished the farther we went back, by going back indefinitely we might exhaust it. And this is the only case to which this sort of

reasoning applies. Where there is a tendency, or, as we increase the number of terms, a continual approach towards a limit, there, by supposing the number of terms to be what is called infinite, we may conceive the limit to be attained; but where there is no such tendency or approach, nothing is effected by lengthening the series. There is no difference as to the point in question (whatever there may be as to many points), between one series and another; between a series which is finite, and a series which is infinite. A chain, composed of an infinite number of links, can no more support itself, than a chain composed of a finite number of links. And of this we assured (though we never can have tried the experiment), are because, by increasing the number of links, from ten for instance to a hundred, from a hundred to a thousand, etc., we make not the smallest approach, we observe not the smallest tendency, towards self-support. There is no difference in this respect (yet there may be a great difference in several respects) between a chain of a greater or less length, between one chain and another, between one that is finite and one that is infinite. This very much resembles machine which we are inspecting, case before us. The the anđ design. construction, contrivance its demonstrates, bv Contrivance must have had a contriver; design, a designer; whether the machine immediately proceeded from another machine or not. That circumstance alters not the case. That other machine may, in like manner, have proceeded from a former machine; nor does that alter the case; contrivance must have had a contriver. That former one from one preceding it: no alteration still; a contriver is still no approach tendency is perceived, towards а NO necessary. diminution of this necessity. It is the same with any and every succession of these machines; a succession of ten, of a hundred, of a thousand; with one series, as with another: a series which is finite, as with a series which is infinite. In whatever other respects they may differ, in this they do not. In all equally, contrivance and design are unaccounted for.

The question is not simply, How came the first watch into existence? which question, it may be pretended, is done away by supposing the series of watches thus produced from one another to

have been infinite, and consequently to have had no such first, for which it was necessary to provide a cause. This, perhaps, would have been nearly the state of the question, if nothing had been before us unmechanized substance, without mark or unorganized, but an indication of contrivance. It might be difficult to show that such in either eternity, existed from have substance could not succession, (if it were possible, which I think it is not, for unorganized bodies to spring from one another), or by individual perpetuity. But that is not the question now. To suppose it to be so, is to suppose that it made no difference whether he had found a watch or a stone. As it is, the metaphysics of that question have no are examining, are seen the watch which we in for, place; for the end, means a purpose; end, design; contrivance, an adaptation to the purpose. And the question which irresistibly presses upon our thoughts is, whence this contrivance and design? The thing required is the intending mind, the adapting hand, the intelligence by which that hand was directed. This question, this demand, is not shaken off, by increasing a number or succession of by these properties; the more, nor destitute of substances, increasing that number to infinity. If it be said, that, upon the supposition of one watch being produced from another in the course of that other's movements, and by means of the mechanism within it, we have a cause for the watch in my hand, viz. the watch from which it proceeded: I deny, that for the design, the contrivance, the suitableness of means to an end, the adaptation of instruments to a (all which we discover in the watch), we have any cause use whatever. It is in vain, therefore, to assign a series of such causes, or to allege that a series may be carried back to infinity; for I do not admit that we have yet any cause at all of the finite or less any series of causes either still phenomena, infinite. Here is contrivance, but no contriver; proofs of design, but no designer.

V. Our observer would farther also reflect that the maker of the watch before him, was, in truth and reality, the maker of every watch produced from it; there being no difference (except that the latter manifests a more exquisite skill) between the making of

another watch with his own hands, by the mediation of files, lathes, chisels, etc. and the disposing, fixing, and inserting of these instruments, or of others equivalent to them, in the body of the watch already made, in such a manner, as to form a new watch in the course of the movements which he had given to the old one. It is only working by one set of tools, instead of another.

The conclusion which the first examination of the watch, of its works, construction, and movement, suggested, was, that it must have had, for the cause and author of that construction, an artificer, who understood its mechanism, and designed its use. This conclusion invincible. A second examination presents us with a new is discovery. The watch is found, in the course of its movement, to produce another watch, similar to itself; and not only so, but we perceive in it a system or organization, separately calculated for that purpose. What effect would this discovery have, or ought it to have, upon our former inference? What, as hath already been said, but to increase, beyond measure, our admiration of the skill, which had been employed in the formation of such a machine? Or shall it, instead of this, all at once turn us round opposite to an conclusion, viz. that no art or skill whatever has been concerned in the business, although all other evidences of art and skill remain as they were, and this last and supreme piece of art be now added to the rest? Can this be maintained without absurdity? Yet this is atheism.

APPLICATION OF THE ARGUMENT

This is atheism: for every indication of contrivance, every manifestation of design, which existed in the watch, exists in the works of nature; with the difference, on the side of nature, of being greater and more, and that in a degree which exceeds all computation. I mean that the contrivances of nature surpass the contrivances of art, in the complexity, subtilty, and curiosity of the mechanism; and still more, if possible, do they go beyond them in number and variety; yet, in a multitude of cases, are not less evidently mechanical, not less evidently contrivances, nor less

evidently accommodated to their end, or suited to their office, than are the most perfect productions of human ingenuity.

I know no better method of introducing so large a subject, than that of comparing a single thing with a single thing; an eye, for far as the examination of the example, with a telescope. As instrument goes, there is precisely the same proof that the eye was made for vision, as there is that the telescope was made for assisting it. They are made upon the same principles; both being adjusted to the laws by which the transmission and refraction of rays of light are regulated. I speak not of the origin of laws themselves; but such laws being fixed, the construction, in both cases, is adapted to them. For instance, these laws require, in order to produce the same effect, that the rays of light, in passing from water into the eye, should be refracted by a more convex surface, than when it passes out of air into the eye. Accordingly, we find that the eye of a fish, in that part of it called the is much rounder than the eye of terrestrial crystalline lens, animals. What plainer manifestation of design can there be than this difference? What could a mathematical instrument-maker have done more to show his knowledge of his principle, his application of that knowledge, his suiting of his means to his end; I will not say to display the compass or excellence of his skill and art, for in these comparison is indecorous, but to testify counsel, choice, a11 consideration, purpose?

To some it may appear a difference sufficient to destroy all similitude between the eye and the telescope, that the one is a perceiving organ, the other an unperceiving instrument. The fact is, that they are both instruments. And, as to the mechanism, at least as to mechanism being employed, and even as to the kind of it, this circumstance varies not the analogy at all. For observe, what the constitution of the eye is. It is necessary, in order to produce distinct vision, that an image or picture of the object be formed at the bottom of the eye. When this necessity arises, or how the picture is connected with the sensation, or contributes to it, it may be difficult, nay, we will confess, if you please, impossible for us to search out. But the present question is not concerned in

the inquiry. It may be true, that, in this, and in other instances, we trace mechanical contrivance a certain way; and that when we come to something which is not mechanical, or which is inscrutable. But this affects not the certainty of our investigation, as far as we have gone. The difference between an animal and an automatic statue, consists in this - that, in the animal, we trace the mechanism to a the mechanism certain point, and then we are stopped; either becoming too subtile for our discernment, or something else beside the known laws of mechanism taking place; whereas in the automation, for the comparatively few motions of which it is capable, we trace the mechanism throughout. But, up to the limit, the reasoning is as clear and certain in the one case, as in the other. In the example before us, it is a matter of certainty, because it is a matter which experience and observation demonstrate, that the formation of an image at the bottom of the eye is necessary to perfect vision. The image itself can be shown. Whatever affects the distinctness of the image, affects the distinctness of the vision. The formation then of such an image being necessary (no matter how) to the sense of sight, and to the exercise of that sense, the apparatus by which it is formed is constructed and put together, not only with infinitely more art, but upon the self-same principles of art, as in the telescope or the camera-obscura. The perception arising from the image may be laid out of the question; for the production of the image, these are instruments of the same kind. The end is the same; purpose in both alike; the is the same. The the means are contrivance for accomplishing that purpose is in both alike. The and the humours of the eye, bear a lenses of the telescopes, their figure, their complete resemblance to one another, in in their power over the rays of light, viz. in position, and bringing each pencil to a point at the right distance from the lens; namely, in the eye, at the exact place where the membrane is spread to receive it. How is it possible, under circumstances of such close affinity, and under the operation of equal evidence, to exclude acknowledge the proof of yet to contrivance from the one; contrivance having been employed, as the plainest and clearest of all propositions in the other?

The resemblance between the two cases is still more accurate, and obtains in more points than we have yet represented, or than we are, on the first view of the subject, aware of. In dioptric telescopes there is an imperfection of this nature. Pencils of light, in passing through glass lenses, are separated into different colours, thereby tinging the object, especially the edges of it, as if it were viewed through a prism. To correct this inconvenience, had been a long desideratum in the art. At last it came into the mind of a sagacious optician, to inquire how this matter was managed in the eye; in which, there was exactly the same difficulty to contend with, as in the telescope. His observation taught him, that, in the eye, the evil was cured by combining lenses composed of different substances, i.e. of substances which possessed different refracting powers. Our artist borrowed thence his hint; and produced a correction of the defect by imitating, in glasses made from different materials, the effects of the different humours through which the rays of light pass before they reach the bottom of the eye. Could this be in the eye without purpose, which suggested to the optician the only effectual means of attaining that purpose?

But farther; there are other points, not so much perhaps of strict resemblance between the two, as of superiority of the eye over the telescope; yet of a superiority which, being founded in the that regulate both, may furnish topics of fair and just laws comparison. Two things were wanted to the eye, which were not wanted (at least in the same degree) to the telescope; and these were the adaptation of the organ, first, to different degrees of light; and secondly, to the vast diversity of distance at which objects are viewed by the naked eye, viz. from a few inches to as many miles. These difficulties present not themselves to the maker of the telescope. He wants all the light he can get; and he never directs his instrument to objects near at hand. In the eye, both these cases were to be provided for; and for the purpose of providing for them, a subtile and appropriate mechanism is introduced.

I. In order to exclude excess of light, when it is excessive, and to render objects visible under obscurer degrees of it, when no more can be had, the hole or aperture in the eye, through which the

light enters, is so formed, as to contract or dilate itself for the purpose of admitting a greater or less number of rays at the same time. The chamber of the eye is a camera-obscura, which, when the light is too small, can enlarge its opening; when too strong, can again contract it; and that without any other assistance than that of its own exquisite machinery. It is farther also, in the human subject, to be observed, that this hole in the eye, which we call the pupil, under all its different dimensions, retains its exact circular shape. This is a structure extremely artificial. Let an artist only try to execute the same; he will find that his threads consideration and disposed with great strings must be and contrivance, to make a circle which shall continually change its diameter, yet preserve its form. This is done in the eye by an application of fibres, i.e. of strings similar, in their position and action, to what an artist would and must employ, if he had the same piece of workmanship to perform.

II. The second difficulty which has been stated was the suiting of the same organ to the perception of objects that lie near at hand, within a few inches, we will suppose, of the eye, and of objects which are placed at a considerable distance from it, that, for example, of as many furlongs (I speak in both cases of the distance at which distinct vision can be exercised.) Now this, according to the principles of optics, that is, according to the laws by which the transmission of light is regulated (and these laws are fixed) could not be done without the organ itself undergoing an alteration, and receiving an adjustment, that might correspond with the exigency of the case, that is to say, with the different inclination to one another under which the rays of light reached it. Rays issuing from points placed at a small distance from the eye, and which consequently must enter the eye in a spreading or diverging order, cannot, by the same optical instrument in the same state, be brought to a point, i.e. be made to form an image, in the same place with rays proceeding from objects situated at a much greater distance, and which rays arrive at the eye in directions nearly (and physically speaking) parallel. It requires a rounder lens to do it. The point of concourse behind the lens must fall

critically upon the retina, or the vision is confused; yet, other things remaining the same, this point, by the immutable properties of light, is carried farther back when the rays proceed from a near object, than when they are sent from one that is remote. A person who was using an optical instrument would manage this matter by changing, as the occasion required, his lens or his telescope; or by adjusting the distance of his glasses with his hand or his screw; but how is this to be managed in the eye? What the alteration was, or in what part of the eye it took place, or by what means it was effected (for if the known laws which govern the refraction of light be maintained, some alteration in the state of the organ there must be) had long formed a subject of inquiry and conjecture. The change, though sufficient for the purpose, is so minute as to elude ordinary observation. Some very late discoveries, deduced from a laborious and most accurate inspection of the structure and operation of the organ, seem at length to have ascertained the mechanical alteration which the parts of the eye undergo. It is found, that by the action of certain muscles, called the straight muscles, and which action is the most advantageous that could be imagined for the purpose - it is found, I say, that whenever the eye is directed to a near object, three changes are produced in it at the same time, all severally contributing to the adjustment required. The cornea, or outermost is rendered more round and prominent: coat of the eye, the crystalline lens underneath is pushed forward; and the axis of vision, as the depth of the eye is called, is elongated. These changes in the eye vary its power over the rays of light in such a manner and degree as to produce exactly the effect which is wanted, viz. the formation of an image upon the retina, whether the rays come to the eye in a state of divergency, which is the case when the object is near to the eye, or come parallel to one another, which is the case when the object is placed at a distance. Can anything be more decisive of contrivance than this is? The most secret laws of optics must have been known to the author of a structure endowed with such a capacity of change. It is as though an optician, when he had a nearer object to view, should rectify his instrument by

putting in another glass, at the same time drawing out also his tube in a different length.

Observe a new-born child first lifting up its eyelids. What does the opening of the curtain discover? The anterior part of two pellucid globes, which, when they come to be examined, are found to constructed upon strict optical principles; the self same be principles upon which we ourselves construct optical instruments. We find them perfect for the purpose of forming an image by refraction; composed of parts executing different offices: one part having fulfilled its office upon the pencil of light, delivering it over to the action of another part; that to a third, and so onward: the progressive action depending for its success upon the nicest and minutest adjustment of the parts concerned; yet these parts so in fact adjusted, as to produce, not by a simple action or effect, but by a combination of actions and effects, the result which is ultimately wanted. And forasmuch as this organ would have to operate under different circumstances, with strong degrees of light and with weak degrees, upon near objects and upon remote ones, and these which the to the laws by differences demanded, according transmission of light is regulated, a corresponding diversity of structure; that the aperture, for example, through which the light passes, should be larger or less; the lens rounder or flatter, or that their distance from the tablet, upon which the picture is delineated, should be shortened or lengthened; this, I say, being the case and the difficulty to which the eye was to be adapted, we and its several parts capable of being occasionally changed and a most artificial apparatus provided to produce that change. This is far beyond the common regulator of a watch, which requires the touch of a foreign hand to set it; but it is not altogether unlike Harrison's contrivance for making a watch regulate itself, bv inserting within it a machinery, which, by the artful use of the different expansion of metals, preserves the equability of the motion under all the various temperatures of heat and cold in which the instrument may happen to be placed. The ingenuity of this last contrivance has been justly praised. Shall, therefore, a structure which differs from it chiefly by surpassing it, be accounted no

contrivance at all? or, if it be a contrivance, that it is without a contriver?

But this, though much, is not the whole: by different species of animals the faculty we are describing is possessed in degrees suited to the different range of vision which their mode of life, and of procuring their food, requires. Birds, for instance, in general, procure their food by means of their beak; and the distance between the eye and the point of the beak being small, it becomes necessary that they should have the power of seeing very near objects distinctly. On the other hand, from being often elevated much above the ground, living in the air, and moving through it with great velocity, they require for their safety, as well as for assisting them in descrying their prey, a power of seeing at a great distance; a power of which, in birds of rapine, surprising examples are given. The fact accordingly is, that two peculiarities are found in the eyes of birds, both tending to facilitate the change upon which the adjustment of the eye to different distances depends. The one is a bony, yet in most species, a flexible rim or hoop, surrounding the broadest part of the eye; which, confining the action of the muscles to that part, increases the effect of their lateral pressure upon the orb, by which pressure its axis is elongated for the purpose of looking at very near objects. The other is an additional muscle, called the marsupium, to draw, on occasion, the chrystalline lens back, and to fit the same eye for the viewing of very distant objects. By these means, the eyes of birds can pass from one extreme to another of their scale of adjustment, with more ease and readiness than the eyes of other animals.

The eyes of fishes also, compared with those of terrestrial animals, exhibit certain distinctions of structure, adapted to their state and element. We have already observed upon the figure of the chrystalline compensating by its roundness the density of the medium through which their light passes. To which we have to add, that the eyes of fish, in their natural and indolent state, appear to be adjusted to near objects, in this respect differing from the human eye, as well as those of quadrupeds and birds. The ordinary shape of the fish's eye being in a much higher degree convex than that of

land animals, a corresponding difference attends its muscular conformation, viz. that it is throughout calculated for *flattening* the eye.

The *iris* also in the eyes of fish does not admit of contraction. This is a great difference, of which the probable reason is, that the diminished light in water is never too strong for the retina.

In the *eel*, which has to work its head through sand and gravel, the roughest and harshest substances, there is placed before the eye, and at some distance from it, a transparent, horny, convex case or covering, which, without obstructing the sight, defends the organ. To such an animal, could any thing be more wanted or more useful?

Thus, in comparing the eyes of different kinds of animals, we see in their resemblances and distinctions, one general plan laid down, and that plan varied with the varying exigencies to which it is to be applied.

There is one property however common, I believe, to all eyes, at least to all which have been examined, namely, that the optic nerve enters the bottom of the eye, not in the centre, or middle, but a little on one side; not in the point where the axis of the eye meets the retina, but between that point and the nose - the difference which this makes is, that no part of an object is unperceived by both eyes at the same time.

In considering vision as achieved by the means of an image formed at the bottom of the eye, we can never reflect without wonder upon the smallness, yet correctness, of the picture, the subtilty of the touch, the fineness of the lines. A landscape of five or six square leagues is brought into a space of half an inch diameter; yet the multitude of objects which it contains, are all preserved, are all discriminated in their magnitudes, positions, figures, colours. The prospect from Hampstead-hill is compressed into the compass of a circumstantially represented. Α stagecoach, six-pence, yet travelling at an ordinary speed for half an hour, passes, in the eye, only over one-twelfth of an inch, yet is this change of place in the image distinctly perceived throughout its whole progress; for

it is only by means of perception that the motion of the coach itself is made sensible to the eye. If anything can abate our admiration of the smallness of the visual tablet compared with the extent of vision, it is a reflection which the view of nature leads us every hour to make, viz. that, in the hands of the Creator, great and little are nothing.

Sturmius held, that the examination of the eye was a cure for atheism. Besides that conformity to optical principles which its amounts to а internal constitution displays, and which alone manifestation of intelligence having been exerted in the structure; besides this, which forms, no doubt, the leading character of the organ, there is to be seen, in every thing belonging to it and about anxietv for its an extraordinary degree of care, it. an its value and its to preservation, due, if we may SO speak, tenderness. It is lodged in a strong, deep, bony socket, composed of the junction of seven different bones, hollowed out at their edges. In some few species, as that of the coatimondi, the orbit is not bony throughout; but whenever this is the case, the upper, which is the deficient part, is supplied by a cartilaginous ligament; a substitution which shows the same care. Within this socket it is imbedded in fat, of all animal substances the best adapted both to its repose and motion. It is sheltered by the eyebrows; an arch of hair, which, like a thatched penthouse, prevents the sweat and moisture of the forehead from running down into it.

But it is still better protected by its *lid*. Of the superficial parts of the animal frame, I know none which, in its office and structure, is more deserving of attention than the eyelid. It defends the eye; it wipes it; it closes it in sleep. Are there, in any work of art whatever, purposes more evident than those which this organ fulfills? or an apparatus for executing those purposes more intelligible, more appropriate, or more mechanical? If it be overlooked by the observer of nature, it can only be because it is obvious and familiar. This is a tendency to be guarded against. We pass by the plainest instances, whilst we are exploring those which are rare and curious; by which conduct of the understanding, we sometimes neglect the strongest observations, being taken up with

others, which, though more recondite and scientific, are, as solid arguments, entitled to much less consideration.

In order to keep the eye moist and clean (which qualities are necessary to its brightness and its use), a wash is constantly supplied by a secretion for the purpose; and the superfluous brine is conveyed to the nose through a perforation in the bone as large as a goosequill. When once the fluid has entered the nose, it spreads itself upon the inside of the nostril, and is evaporated by the current of warm air, which, in the course of respiration, is continually passing over it. Can any pipe or outlet, for carrying off the waste liquor from a dye-house or a distillery, be more mechanical than this is? It is easily perceived, that the eye must want moisture; but could the want of the eye generate the gland which produces the tear, or bore the hole by which it is discharged - a hole through a bone?

It is observable, that this provision is not found in fish the element in which they live supplying a constant lotion to the eye.

It were, however, injustice to dismiss the eye as a piece of mechanism, without noticing that most exquisite of all contrivances, the nictilating membrane, which is found in the eyes of birds and of many quadrupeds. Its use is to sweep the eye, which it does in an instant; to spread over it the lachrymal humour; to defend it also from sudden injuries; yet not totally, when drawn upon the pupil, to shut out the light. The commodiousness with which it lies folded up in the upper corner of the eye, ready for use and action, and the quickness with which it executes its purpose, are properties known and obvious to every observer; but what is equally admirable, though not quite so obvious, is the combination of two kinds of substance, muscular and elastic, and of two different kinds of action, by which the motion of this membrane is performed. It is not, as in the ordinary cases, by the action of two antagonist muscles, one pulling reciprocal change that a is forward and the other backward, The membrane itself is an elastic effected; but it is thus: substance, capable of being drawn out by force like a piece of elastic gum, and by its own elasticity returning, when the force is

removed, to its former position. Such being its nature, in order to fit it up for its office, it is connected by a tendon or thread with a muscle in the back part of the eye; this tendon or thread, though strong, is so fine, as not to obstruct the sight, even when it passes across it; and the muscle itself, being placed in the back part of the eye, derives from its situation the advantage, not only of being secure, but of being out the way; which it would hardly have been in any position that could be assigned to it in the anterior part of the orb, where its function lies. When the muscle of the eye contracts, the membrane, by means the behind communicating thread, is instantly drawn over the fore-part of it. When the muscular contraction (which is a positive, and, most probably, a voluntary effort) ceases to be exerted, the elasticity alone of the membrane brings it back again to its position. Does not this, if any thing can do it, bespeak an artist, master of his work, acquainted with his materials? "Of a thousand other things," say the French Academicians, "we perceive not the contrivance, because we understand them only by the effects, of which we know not the causes: but we here treat of a machine, all the parts whereof are visible; and which need only be looked upon, to discover the reasons of its motion and action."

In the configuration of the muscle, which, though placed behind the eye, draws the nictilating membrane over the eye, there is what the authors, just now quoted, deservedly call a marvelous mechanism. I suppose this structure to be found in other animals; but, in the memoirs from which this account is taken, it is anatomically demonstrated only in the cassowary. The muscle is passed through a loop formed by another muscle; and is there inflected, as if it were round a pulley. This is a peculiarity; and observe the advantage of it. A single muscle with a straight tendon, which is the common muscular form, would have been sufficient, if it had had power to draw far enough. But the contraction, necessary to draw the membrane over the whole eye, required a longer muscle than could lie straight at the bottom of the eye. Therefore, in order to have a greater length in a less compass, the cord of the main muscle makes an angle. This, so far, answers the end; but, still farther, it makes

an angle, not round a fixed pivot, but round a loop formed by another muscle, which second muscle, whenever it contracts, of course twitches the first muscle at the point of inflection, and thereby assists the action designed by both.

One question may possibly have dwelt in the reader's mind during the perusal of these observations, namely, Why should not the Deity have given to the animal the faculty of vision at once? Why this circuitous perception; the ministry of so many means; an element provided for the purpose, reflected from opaque substances, refracted through transparent ones; and both according to precise laws; then, a complex organ, an intricate and artificial apparatus, in order, by the operation of this element, and in conformity with the restrictions of these laws, to produce an image upon a membrane communicating with the brain? Wherefore all this? Why make the difficulty in order to surmount it? If to perceive objects by some other mode than that of touch, or objects which lay out of the reach of these sense, were the thing proposed; could not a simple volition the Creator have communicated the capacity? Why resort to of contrivance, where power is omnipotent? Contrivance, by its very definition and nature, is the refuge of imperfection. То have recourse to expedients, implies difficulty, impediment, restraint, or defect of power. This question belongs to the other senses, as well as to sight; to the general functions of animal life, as nutrition, secretion, respiration; to the economy of vegetables; and indeed to almost all the operations of nature. The question, therefore, is of very wide extent; and amongst other answers which may be given to it, besides reasons of which probably we are ignorant, one answer is this: It is only by the display of contrivance, that the existence, the agency, the wisdom of the Deity, could be testified to his rational creatures. This is the scale by which we ascend to all the knowledge of our Creator which we possess, so far as it depends upon the phenomena, or the works of nature.

THE PUZZLE OF PERFECTION

One of the accomplishments of living systems which is, of course, guite without any analogy in the field of our technology is their capacity for self-duplication. With the dawn of the age of computers and automation after the Second World War, the theoretical possibility of constructing self-replicating automata was considered seriously by mathematicians and engineers. Von Neumann discussed the problem at length in his famous book Theory of Self-Reproducing Automata, but the practical difficulties of converting the dream into reality have proved too daunting. As Von Neumann pointed out, the construction of any sort of self-replicating automaton would necessitate the solution to three fundamental problems: that of storing information; that of duplicating information; and that of designing an automatic factory which could be programmed from the information store to construct all the other components of the machine as well as duplicating itself. The solution to all three problems is found in living things and their elucidation has been one of the triumphs of modern biology.

So efficient is the mechanism of information storage and so elegant the mechanism of duplication of this remarkable molecule that it is hard to escape the feeling that the DNA molecule may be the one and only perfect solution to the twin problems of information storage and duplication for self-replicating automata.

The solution to the problem of the automatic factory lies in the ribosome. Basically, the ribosome is a collection of some fifty or so large molecules, mainly proteins, which fit tightly together. Altogether the ribosome consists of a highly organized structure of more than one million atoms which can synthesize any protein which compromise its own structure - so the ribosome can construct itself!

The protein synthetic apparatus is also, however, the solution to an even deeper problem than that of self-replication. Proteins can be designed to perform structural, logical, and catalytic functions. For instance, they form the impervious materials of the skin, the contractile elements of muscles, the transparent substance

of the lens of the eye: and, because of their practically unlimited conceivable biochemical object can be potential, almost anv ultimately constructing using these remarkable molecules as basic structural and functional units. The choice of the protein synthetic apparatus as the solution to the problem of the automatic factory has deep implications. Not only does it represent a solution to one of the problems of designing a self-duplicating machine but it also that of problem, solution deeper a to an even represents constructing a universal automaton. The protein synthetic apparatus cannot only replicate itself but, in addition, if given the correct information, it can also construct any other biochemical machine, however great its complexity, just so long as its basic functional units are comprised of proteins, which, because of the near infinite number of uses to which they can be put, give it almost limitless potential.

It is astonishing to think that this remarkable piece of machinery, which possesses the ultimate capacity to construct every living thing that ever existed on Earth, from a giant redwood to the human brain, can construct all its own components in a matter of minutes and weigh less than 10-16 grams. It is of the order of several thousand million million times smaller than the smallest piece of functional machinery ever constructed by man.

Human intelligence is yet another achievement of life which has not been equalled in our technology, despite the tremendous effort and some significant advances which have been made in the past two decades towards the goal of artificial intelligence - a goal which may still be further away than is often assumed. As David Waltz points out in a recent article in the *Scientific American*, no machines have yet been constructed which can in any significant way mimic the cognitive capacities of the human brain. The most telling criticism of current work in artificial intelligence is that it has not been successful in modelling what is called common sense. As Waltz explains, we still do not understand how the human brain thinks:

substantially better models of human cognition must be developed before systems can be designed that will carry out even simplified versions of common-sense tasks. I expect the development of such models to keep me and many others fascinated for a long time.

It could turn out that both self-duplication and intelligence cannot be achieved in terms of a non-biological plastics' and metals' technology. Perhaps a fully intelligent machine, *i.e.* one that could mimic the intelligence of man, requires a structure approaching the complexity of the human brain which could mean, as we have been above, that the goal may never be reached, for an object of this complexity would require eternity for its assembly in terms of our current engineering capabilities.

The eerie artefact-like character of life and the analogy with our own advanced machines has an important philosophical consequence, for it provides the means for a powerful reformulation of the old analogical argument to design which has been one of the basic creationist arguments used throughout western history - going back to Aristotle and presented in its classic form by William Paley in his famous watch-to-watchmaker discourse.

According to Paley, we would never infer in the case of a machine, such as a watch, that its design was due to natural processes such as the wind and rain; rather, we would be obliged to postulate a watchmaker. Living things are similar to machines, exhibiting the same sort of adaptive complexity and we must, therefore, infer by analogy that their design is also the result of intelligent activity.

One of the principal weaknesses of this argument was raised by David Hume, who pointed out that organisms may be only superficially like machines but natural in essence. Only if an object is strikingly analogous to a machine in a very profound sense would the inference to design be valid. Hume's criticism is generally considered to have fatally weakened the basic analogical assumption upon which the inference to design is based, and it is certainly true that neither the eighteenth century nor at any time during the

past two centuries has there been sufficient evidence for believing that living organisms were like machines in any profound sense.

It is only possible to view an unknown object as an artefact of its design exploits well-understood technological principles and its creation can be precisely envisaged. For this reason, stone age man would have had great difficulty in recognizing the products of twentieth-century technology as machines and we ourselves would probably experience the same bewilderment at the artefacts of a technological civilization far in advance of our own.

How would stone age man have judged a motor car or a pocket calculator? Incapable of manufacturing anything other than a crudely tool, so primitive that it could hardly be shaped flint distinguished from a natural piece of rock, the inside of a pocket calculator would seem a purposeless tangle of strings - a random maze of straw trapped inside a leather bag. Even megalithic monuments like Stonehenge or the Pyramids, artefacts which are primitive from our twentieth century standpoint, would cause considerable confusion to a Paleolithic man. How would an ancient Egyptian have judged an airplane or a submarine? Only if our ancestors had seen a man in the cockpit of the airplane would they have grasped the incredible, that it was an artefact. It would, of course, be an artefact beyond their comprehension - an artefact of the gods.

It has only been over the past twenty years with the molecular biological revolution and with the advances in cybernetic and computer technology that Hume's criticism has been finally invalidated and the analogy between organisms and machines has at last become convincing. In opening up this extraordinary new world of living technology, biochemists have become fellow travelers with ultimate fiction writers, explorers in а world of science miracles of atomic technology, wondering incredulously as new engineering are continually brought to light in the course of their strange adventure into the microcosm of life. In every direction the journeys through this weird molecular biochemist gazes, as he labyrinth, he sees devices and appliances reminiscent of our own twentieth-century world of advanced technology. In the atomic fabric

of life, we have found a reflection of our own technology. We have seen a world as artificial as our own and as familiar as if we had held up a mirror to our own machines.

Paley was not only right in asserting the existence of an analogy between life and machines, but was also remarkably prophetic in guessing that the technological ingenuity realized in living systems is vastly in excess of anything yet accomplished by man.

Every indication of contrivance, every manifestation of design which existed in the watch exists in the works of nature with the difference, on the side of nature, being greater and more, and that in a degree which exceeds all computation . . . yet in a multitude of cases, are not less evidently mechanical, not less evidently contrivances, . . than are the most perfect productions of human ingenuity.

The almost irresistible force of the analogy has completely undermined the complacent assumption, prevalent in biological circles over most of the past century, that the design hypothesis can be excluded on the grounds that the notion is fundamentally a metaphysical *a priori* concept and therefore scientifically unsound. On the contrary, the inference to design is a purely a *posteriori* induction based on a ruthlessly consistent application of the logic of analogy. The conclusion may have religious implications, but it does not depend on religious presuppositions.

ANIMAL WISDOM

The robin that nested at your door goes south in the fall, but comes back to his old next the next spring. In September, flocks of most of our birds fly south, often over a thousand miles of open ocean, but they do not lose their way. The homing pigeon, confused by new sounds on a long journey in a closed box, circles for a moment and then heads almost unerringly for home. The bee finds its hive while the wind waving the grasses and trees blots out every

visible guide to its whereabouts. This homing sense is slightly developed in man, but he supplements his meager equipment with instruments of navigation.

The tiny insects must have microscopic eyes, how perfect we do not know, and the hawks, the eagle and the condor must have telescopic vision. If you let old Dobbin alone, he will keep to the road in the blackest night. He can see, dimly perhaps, but he notes the difference in temperature of the road and the sides with eyes that are slightly affected by the infra-red rays of the road. The owl can see the nice warm mouse as he runs in the cooler grass in the blackest night.

The ordinary scallop whose muscle we eat has several dozen beautiful eyes very like ours, which sparkle because each eye has unnumbered little reflectors which are said to enable it to see things right side up. These reflectors are not found in the human eye. Were these reflectors developed because of the absence of superior brain power in the scallop? As the number of eyes in animals ranges from two to thousands, and all are different, nature would have had a big job in developing the science of optics unless somewhere along the line there was a little help from Intelligence.

The honey bee is not attracted by the gaudy flowers as we see them, but sees by the ultra-violet light, which may make them even more beautiful to bees. From the rays of slower vibrations to the photographic plate and beyond are realms of beauty, joy, and inspiration which we are just beginning to appreciate and control. Let us hope that we can some day enjoy this wider realm of light by means of inventive genius. We can already detect the heat vibration of a distant star and measure its energy.

The honey-bee workers make chambers of different sizes in the comb used for breeding. Small chambers are constructed for the workers, larger ones for the drones, and special chambers for the prospective queens. The queen bee lays unfertilized eggs in the cells designed for males, but lays fertilized eggs in the proper chambers for the female workers and the possible queens. The workers, who are the modified females, having long since anticipated the coming of the new generation, are also prepared to furnish food

for the young bees by chewing and predigesting honey and pollen. They discontinue the process of chewing, including the predigesting, at a certain stage of the development of the males and females, and feed only honey and pollen. The females so treated become the workers.

For the females in the queen chambers, the diet of chewed and predigested food is continued. These specially treated females develop into queen bees, which alone produce fertile eggs. This process of reproduction involves special chambers, special eggs, and the marvelous effect of a change of diet. This means anticipation, discretion, and the application of a discovery of the effect of diet. These changes apply particularly to a community life and seem necessary to its existence. The knowledge and skills required must have been evolved after the beginnings of this community life, and are not necessarily inherent in the structure or the survival of the honey bee as such. The bee, therefore, seems to have outstripped man in knowledge of the effects of diet under certain conditions.

The dog's inquiring nose can sense the animal that has passed with a skill far superior to man's. All animals hear sounds, many of which are outside our range of vibration, with an acuteness that outstrips our limited sense of hearing.

One of the water spiders fashions a balloon-shaped nest of cobweb filaments and attaches it to some object under water. Then she ingeniously entangles an air bubble in the hairs of her underbody, carries it into the water, and releases it under the nest. This performance is repeated until the nest is inflated, when she proceeds to bring forth and raise her young safe from attack by air. Here we have a synthesis of the web, engineering, construction, and aeronautics. Chance perhaps, but that still leaves the spider unexplained.

The young salmon spends years at sea, then comes back to his own river, and, what is more, he travels up the side of the river into which flows the tributary in which he was born. What brings them back so definitely? If a salmon going up a river is transferred to another tributary, he will at once realize he is not in the right tributary and will fight his way down to the main stream and then

turn up against the current to finish his destiny. There is, however, a much more difficult problem in the exact reverse to solve in the case of the eel. These amazing creatures migrate at maturity from all the ponds and rivers everywhere - those from Europe across thousands of miles of ocean - all go to the abysmal deeps south of Bermuda. There they breed and die. The little ones, with no apparent means of knowing anything except that they are in a wilderness of water, start back and find their way to the shore from which their parents came and thence to every river, lake and little pond, so that each body of water is always populated with eels. They have braved the mighty currents, storms, and tides, and have conquered the beating waves on every shore. They can now grow and when they are mature, they will, by some mysterious law, go back through it to complete the cycle. Where does the directing impulse a11 originate? No American eel has ever been caught in European waters and no European eel has ever been caught in American waters. Nature has also delayed the maturity of the European eel by a year or more to make up for its much greater journey.

Animals seem to have telepathy. Who has not watch with admiration the sandpiper flying and wheeling till every white breast shows in the sunlight at the same instant?

A female moth placed in your attic by the open window will send out some subtle signal. Over an unbelievable area, the male moths of the same species will catch the message and respond in spite of your attempts to produce laboratory odors to disconcert them. Has the little creature a broadcasting station, and has the male moth a mental radio set besides his antennae? Does she shake the ether and does he catch the vibration? The katydid rubs its legs or wings together, and on a still night can be heard half a mile away. It shakes six hundred tons of air and calls its mate. Miss Moth, working in a different realm of physics and, in apparent silence, calls quite as effectively. Before the radio was discovered, scientists decided it was odor that attracted the male moth. It is a miracle either way, because the odor would have to travel in all directions, with or without the wind. The male moth would have to be

able to detect a molecule and sense the direction from whence it came.

Birds taken from their nests when they were young will, when mature, build nests in the pattern of their species. Hereditary habits have their origin deep in the mists of antiquity. Are these distinctive acts the result of chance or of an intelligent provision?

Many animals are like a lobster, which, having lost a claw, will by some restimulation of the cells and the reactivation of the genes discover that a part of the body is missing and restore it. When the work is complete, the cells stop work, for in some way they know it is guitting time. A freshwater polyp divided into halves can reform itself out of one of these halves. Cut off an angle worm's head and he will soon create a new one. We can stimulate healing, but when will our surgeons, if ever, know how to stimulate the cells to produce a new arm, flesh, bones, nails, and activating nerves? An extraordinary fact throws some light on this mystery of re-creation. If cells in the early stages of development are separated, each has the ability to create a complete animal. Therefore, if the original cell divides into two and they are separated, two individuals will be developed. This may account for identical twins, but it means much more - each cell at first is in detail potentially a complete individual.

To me, all this is a distinct manifestation of the goodness and greatness of God.

REVEALED THEOLOGY

SHOWN TO BE ORGANICALLY CONNECTED

A few years ago I was reading the works of Schopenhauer, the great German Buddhist philosopher. His system of the universe of knowledge and will he has embodied in two very large volumes, and in

the preface he says, "There is only one idea in these two volumes." He tried to express it as lucidly and as briefly as possible, and this was the result. I would ask your special attention to what he says. I have translated it from the German, so you must excuse the style. "A system of thoughts must have an architectonic structure, in which one part supports the other, but is not supported by it. The foundation supports the whole, but is itself not supported. The top stone is supported, but it supports nothing." That is one style of book. We are first to lay down a few axioms or admitted positions that have to bear the structure of the whole. Then you go on: "What you put upon it is supported by the foundation, but does not support the foundation. But there is another kind of book which is this. A work consisting of one idea, however comprehensive, must possess perfect unity. It may consist of parts, but they must be organically connected, so that each part supports the whole and is supported by the whole. No part is, so to say, first, and no part is last. The whole is illustrated by every minute part, and even the smallest part cannot be rightly understood unless the whole has been comprehended." What he means is this: "If a work consists of one idea, although that one idea is very comprehensive and has many ramifications, then the only way in which it can be set forth is as an organism. The whole idea will be in every part. The beginning cannot be properly understood unless you know also the end. The smaller and less important parts cannot be properly understood unless you know the whole. They throw light upon the whole, as the whole throws light upon them. In this case nothing can be done" (now listen to this) "but to read the book twice, and the first time with much patience, which can only be obtained by a freely granted confidence that the beginning presupposes the end, as much as the end presupposes the beginning, and the earlier part the later. Although each part may be as clearly expressed as is possible, yet its relation to the whole cannot be seen at first. When you read it the second time, all will appear in clear light." When I read this preface some years ago, I said, "That man has exactly explained the philosophy of the Bible." The Holy Ghost inspired the Book. God is the Author of the Book. You must read it the first time with a full

conviction that you can understand it only partially, for it is organically united. He, by whom the first three chapters of Genesis were inspired, saw in His mind the three last chapters of the book of Revelation. "God, who at sundry times and in divers manners spake unto the fathers by the prophets hath, in these last days, spoken unto us by his Son." And therefore when we have read the whole, and when we have got the solution and the key in the New Testament, then we must return against to the book of Genesis and read Moses and the prophets, in the light that God has given us throughout. The same Author; every minute part illustrated by the whole; the whole shedding light upon every minute part.

The ancient books and the new books, the book of Israel and the book of the Church, have exactly the same structure. No twins could be more alike in figure and in feature. It is God who is the beginning, who redeems, who teaches, who guides, who commands; first come the manifestations of God in creation, in the promise of redemption, in the election of Abraham, in the bringing of Israel out of Egypt, in the planting of the tabernacle and of the whole Levitical dispensation - the mighty acts, words, institutions, gifts, and promises vouchsafed by God through Moses. That is the foundation. After that there comes the history, how these promises were carried out into actual reality and appropriated by the nation, with all their backslidings. This is in the so-called history books, or, as the Jews call them, the earlier prophets. Then there is in the book of Psalms the response of the believer to what God has said, then the promise of the fulfillment and consummation of all God's purposes in the prophets. The order is the same in the New Testament. First comes, not what men think about God, but the His death. earth, of Christ on history incarnation, the resurrection, and ascension, the four gospels, just like the five Then there comes the history of how this was books of Moses. appropriated and actually carried out, the book of Acts, the planting of the Church in Israel, the planting of the Church among the Gentiles, and the response of believers to what is revealed,

given in the various epistles, so that the epistles, to a certain extent, take the position of the Psalms, as the response of faith unto the great things of God. And then at last there comes the Apocalypse, showing how all the promises will be fulfilled. This is the first point.

The second point is this. In both Testaments, the beginning germ everything that Here we come to follows. contains in Schopenhauer's idea. All that is in the later historical books and in the prophets, is in the five books of Moses; and all that is in the Acts and in the epistles and in the Apocalypse is also in the four gospels. And the position of Moses as an individual, as the person, as the man that wrote the books, is most important, for he is not like any other prophet. It is perfectly indifferent who wrote the second book of Samuel or the Chronicles, but ít is not · indifferent who wrote the five books of Moses. Moses wrote them; for this Moses is not merely a law-giver; he is not merely a prophet; he is everything in one person. He is the human mediator upon whom the whole structure of the Jewish history and of the teaching of God in Israel rests. And in the books of Moses you find everything. There is no prophecy given by the later prophets which is not already contained in the books of Moses; as, for instance, that Israel shall be called back from all the ends of the earth, and by the grace and Spirit of God become again His people, and that all families of the earth shall be blessed in the seed of Abraham, and that God shall finally bruise Satan under our feet when the Lord comes. All are in the books of Moses. And in the same way the gospels contain all the teaching, afterwards more fully developed, and all the predictions which are in the subsequent parts, namely, the epistles, etc.

The third thing is this. Strictly speaking, all those elements are in all the books of Scripture; that is to say, there are no books of which we can say, "These are simply historical;" or books of which we can say, "These are simply prophetical;" or books of which we can say, "These are simply lyrical;" but all the books, and everything, as I have said, united together, planted together, wrought in together, with the most exquisite harmony - not with the harmony which we see in a book of genius, although that is a kind of

illustration, but with the harmony which we see in everything on which God has breathed the breath of life. "Consider the lilies of the field." Why? Because God has clothed them, and therefore their beauty is much greater than anything which architecture or art of any kind can produce. The books of Moses are history; the books of Moses are teaching; the books of Moses are prophecy. The Psalms are not merely prayers, but prophecy. In the books of the prophets we have history. Thus, in the prophet Isaiah, the history of Hezekiah; in the prophet Daniel the history of God's manifestations at the court of the pagan monarchs. And so it is also in the other Book. The gospel contain history and teaching and response, like the psalms of Mary and of Zacharias and of Simeon. And as to prophecy the epistles are full of prophecy, until, at last, all the prophecy of the later scripture culminates in the Apocalypse, as the former scriptures had done in Daniel, the man greatly beloved, in whose book not merely Israel's future is predicted, but the future of the whole world; so all the scattered prophecy in the gospels and the epistles, and in the whole preceding scripture, culminates in that book which, in the latter days, as it was in the first ages of the Church, will become the beloved book of the Church - the revelation which God gave to His Son Jesus Christ.

THE WONDER OF THE BOOK

The wonder of the Book grows on us as our experience is enlarged, for the more deeply we search it the more we feel that the Bible is not merely a book, but **The Book**. As Sir Walter Scott once said: "In the whole world it is called 'the Book.' All other books are mere leaves, fragments."

Yes. It alone is the universal Book - the eternal Book. It is the Voice; all others are merely echoes, books for the hour. The Bible is the book for all time. It is the Book that stands alone; unapproachable in grandeur; mysterious in ascendancy; as high above

all other books as heaven above earth, as the Son of God above the sons of men.

THE WONDER OF ITS FORMATION

Now, one of the first things about this Book that evokes our wonder is the very fact of its existence. Anyone who has studied the history and origin of the Divine Word must be struck with wonderment at the mysterious method of its formation. That it ever was a book, and is today the Book of the modern world, is really a literary miracle. For there never was any order given to any man to plan the Bible, nor was there any concerted plan on the part of the men who wrote, to write the Bible.

The way in which the Bible gradually grew is one of the mysteries of time. Little by little, part by part, century after century, it came out in disconnected fragments and unrelated portions, written by various men, without any intention (so far as we can tell) of anything like concerted arrangement. One man wrote one part in Syria, another man wrote another part in Arabia, a third man wrote in Italy or Greece; some writers wrote hundreds of years after or before the others, and the first part was written many hundred years before the man who wrote the last part was born.

Now, take any other book you can think of on the spur of the moment, and think how it arose. You know fairly well how it arose. In nine cases out of ten a man determined to write a book, thought out the thoughts, collected the material, wrote it, or dictated it, had it copied or printed, and it was completed within two or three or more months or years.

The average book, we may suppose, takes from a year to ten years to produce, though a book like Gibbon's *Decline and Fall of the Roman Empire*, or Tennyson's poems, took longer to complete. But, generally speaking, any book you can think of has been produced by one man within his own generation.

Now, here is a book that took at least one thousand five hundred years to write, and spanned the span of sixty generations of this famous old world's history. It enlarges our conceptions of God;

it gives us new ideas of His infinite patience, as we think of the wonder of His calm, quiet waiting, as He watched the strain and the haste and the restlessness of man across the feverish years, as slowly and silently the Great Book grew. Here a little and there a little of it came on; here a bit of history and there a bit of prophecy; here a poem and there a biography; and at last in process of time, as silently as the house of the Lord of old (1 Kings vi. 7), it came forth before a needy world in its finished completeness.

When Moses died there were only five small portions; when David sat upon the throne there were a few parchments more; one by one princes and priests and prophets laid on the growing pile their greater and smaller contributions, until in process of time the whole Old Testament Bible was written in its entirety.

But the New Testament is a far greater miracle from the literary standpoint than the Old Testament. The Jews were not a writing people. Their training, as Bishop Westcott once said, was exclusively oral, and they had a disinclination for literary work. Not only so, but their Master was not a writer. He never wrote for publication, so far as we know, and the idea of their writing an additional or supplementary Bible would never seem to have entered the mind of His disciples. They would doubtless have sprung back with horror at the very idea of such a thing. So far fifty years after Jesus was born there was probably not a line of the New Testament written.

But then, by the mystic suggestion and overruling design of the Almighty Spirit, without any concerted collaboration or unity of plan, fragment by fragment, here a little letter, there a biography, the New Testament grew.

But remember; there was no pre-arrangement. It was not as if Matthew and Mark and Luke and John came together in committee, and, after solemn conference and seeking for the leading of the Spirit, Matthew undertook to write of Christ as the King, and Mark said, "I would like for my part to write of Him as the Worker," and Luke said, "And I think I will undertake to delineate Him as the Man," and then John said, "And I will crown it by writing of Him as the Son of God!" It was not as if Paul met James one day, and, after

talking and praying about it, Paul agreed to write of the dogmatic and James of the practical aspects of Christianity. Nothing of the sort. There is no trace of such a thing. They simply wrote as they were moved to meet some passing need, to express some earnest longing, to teach some glorious truth, by a letter, or a treatise, or a memoir; and so this composite of fragmentary memoirs and letters came into this miraculous unit that we call the New Testament.

Yes! The Book is marvelous; it is transcendental; it is altogether unexplainable. It is the miracle of literature in it formation.

THE WONDER OF ITS UNIFICATION

Another thing: We talk of this Bible as a book. We seldom think of it as a Library consisting of sixty-six separate volumes, written by between thirty and forty different authors, in three different languages, upon totally different topics, and under extraordinarily different circumstances.

One author wrote history, another biography, another about sanitary science and hygiene; one wrote on theology, another wrote philosophy and another, wrote on prophecy; some poetry, and jurisprudence, others on genealogy and ethnology, some on stories of adventure and travel of romantic interest. Why, if these sixty-six books were printed separately, in large-sized print and heavy paper, and bound in morocco, they would form a small library. And yet here we have them all, the whole sixty-six volumes, in a little book that a child can carry in its little hand.

And the strangest thing of all is, that though their subjects are so diverse and so difficult - the most difficult and abstruse of all conceivable subjects - though there was no possibility of anything like concerted action or transfer of literary responsibility (for it was impossible for the man who wrote the first pages to have had the slightest knowledge what the men would write about who wrote one thousand five hundred years after he was born), yet this miscellaneous collection of heterogeneous writings

is not only unified by the binder in one book, but so unified by God the Author that no one ever thinks of it today as anything else than One Book! And One Book it is, the miracle of all literary unity.

THE WONDER OF ITS AGE

Again, it is a wonder that that Book is here today. It is a wonder that we have a Bible at all when we think of its age. When we compare the Bible as a book with any other book in this respect, it is a perfect wonder. I will tell you why.

You all know that one of the great tests of literature is time. Do you know of any book that is read by men today, that was written one thousand years ago? Books that were the rage a few years ago are forgotten today. They were born, they were boomed, and they died. The cold hand of oblivion is laid upon them. Their force is spent. Their power is gone. Where is the book, after all, that is five hundred years old and read by the masses nowadays?

You can put it down for a certainty that the older a book is the smaller is its chance of surviving, or of being read by people of diverse nationalities.

Another thing. No book ever has had much chance of being circulated widely amongst a people from which it did not originate. No book, for instance, written by a Spaniard has much chance of being read by Germans. Germans, as a rule, read German works; Englishmen English works. What book do you know of, with a few great exceptions, such as Dante, Cervantes, Goethe, Dumas, Shakespeare, that has been able to overleap the bounds of nationality; and as to Turkey, India, or Mexico, or Brazil, what man out of a hundred could tell you whether they had any authors, or if they had, the name of one of their works?

But the marvelous thing about the Bible is that it is the only book in the world that has, in this way and to this marvelous degree, not only overleaped the barrier of time, but has also been able to overleap the barrier of nationality. It was written largely in a dead language, for the Hebrew language is not a language that is either spoken or written today; and yet that Book, written in a

dead language, written by men who died two thousand or three thousand years ago, is not only living today, but it is the most widely-circulated book in the world.

THE WONDER OF ITS SALE

Surely this is another marvelous thing. The Old Book is easily the best seller of the day. A leading bookseller was asked what book has the largest circulation. He did not mention the most recent novel or the latest scientific work. He said that the book which out-sells all the other books in the world was the book called the Bible. Other books compute their circulation by thousands; the Bible by millions! Every year sees it rendered into new languages and its circulation increased.

THE WONDER OF ITS INTEREST

Another marvelous thing about this book is that it is the only book in the world read by all classes and all sorts of people.

You know very well that literary people rarely read a child's book, and children would not read books of philosophy and science even if they could. If a book is philosophical and scientific, it commands the attention of literary people, and if it is a child's book, it is read in the nursery.

A wonderful thing it is to think that there is one book that differs from all others; a Book that is read to the little child and read by the old man as he trembles on the brink of the other world.

Years ago I heard the nurse reading a story to my child, and I said to her, "What is it that you are reading to the little one?" "I am reading the story of Joseph in the Bible," she answered. And the little child, in excitement, cried, "Please don't stop her, please," as she listened with delighted interest to the reading of a story that was written in Hebrew probably three thousand five hundred years ago.

And not far away from the room where the little child was listening, there sat one of the greatest of modern scientists, our

foremost Canadian scholar, the great Sir William Dawson, President of McGill College, Montreal, reading with profound devotion and a higher delight the pages of that same marvelous Book.

Here is a phenomenon. One of the ablest of modern scientists delights in the reading of a book which is the joy of a little child in the nursery! Verily it is without a parallel in literature. Our boys and girls read and study it in myriads of homes and Sunday schools; and great scholars like Newton and Herschel and Faraday and Brewster, and great statesmen like Gladstone and Lincoln, and great soldiers like Gustavus Adolphus and Gordon and Stonewall Jackson, have taken this book as the joy and the guide of their life.

THE WONDER OF ITS LANGUAGE

Another wonderful thing is that this book was not written in Athens, the seat of learning in Greece, nor in Alexandria in Egypt. It was not written by men who received their inspiration from the ancient sources of wisdom. It was written by men who lived in Palestine. Many of the writers were what we should call illiterate. Not only were they not university men, or scholars or original thinkers; they could not speak their own language purely. You remember Peter was trapped because his dialect betrayed him. He spoke like a Galilean. So did John (Acts iv. 13).

Any many of the men who wrote the Bible were men of that character. One was a farm hand. Another was a shepherd. They were men of no literary reputation. And yet from men of that type educationally has come a book that God in His mysterious power has so divested of all provincialism that it has become the standard of the language of the most literary nations of the world.

And not only so. It is a book that has gone to the North and South and East and West. It is the strongest factor in modern life today, and yet it is of the ancient world. It is the most potent factor in the influence of the great nations of the progressive West, and yet it proceeded from the narrowest and most conservative people of the unprogressive East. All its authors were Hebrews, and Hebrews by instinct and tradition, by education and sentiment, were

the narrowest of all narrow people. The Jew was not only narrow; he had no interest in other nations. You know what a time it took to get the idea into Peter's head that he ought to have an interest in the salvation of the Gentiles of the outside world. Only a miracle of special revelation did it. How do you explain then the fact that these ignorant men, these most uncosmopolitan men, with all their provincialism, and exclusiveness, and insularity, were enabled to write a Book which has become not only the book of the Jews, but The Book of the world today? It is a wonder to think that an old Hebrew book has in God's mystic Providence been so divested of all that the millions upon orientalism and Judaism, and rabbinism, millions of boys and girls and men and women who read it never think of it as the writing of Hebrews or the language of an ancient and oriental race. To them they are simply the words of their own dear mother-tongue. It is the English Bible; the best that our literature can give in simple noble prose, as Frederic Harrison once said in a lecture at Oxford.

And yet, wonderful to think of, the German never thinks of it in any other way, too. To him it is the German Bible.

THE WONDER OF ITS PRESERVATION

Another wonderful thing about the Bible is that it is almost the only book in the world that has stood ages of ferocious and incessant persecution. Century after century men have tried to burn it and to bury it. Crusade after crusade has been organized to extirpate it. Kings of the earth set themselves, and rulers of the church took counsel together, to destroy it from off the face of the earth.

Diocletian, the Roman Emperor, in 303 inaugurated the most terrific onslaught that the world has known upon a book. Every Bible almost was destroyed, myriads of Christians perished, and a column with the exterminated Bible over an erected of triumph was "Extincto nomine Christianorum" of the (The name inscription: Christians having been extinguished).

And yet, not many years after, the Bible came forth, as Noah from the ark, to re-people the earth, and in the year 325 Constantine enthroned the Bible as the Infallible Judge of Truth in the First General Council.

Then followed the prolonged persecution of medievalism. You all know how the Church of Rome denied the Scriptures to the people. The Church of Rome never trusted the people with the Bible. For ages it was practically an unknown book. Martin Luther was a grown-up man when he said that he had never seen a Bible in his life. No jailer ever kept a prisoner closer than the Church of Rome has kept the Bible from the people.

Not only so. In consequence of edicts of Councils, and bans and bulls of Popes, Bibles were burned and Bible readers sent by the Inquisition to rack and flame. Many of us have seen the very spot in Old London where baskets full of English Testaments were burned with great display by the order of Rome.

Yet perhaps the worst persecution of all has been during the last one hundred and fifty years. The bitterest foes of the Bible, curiously enough, were men who claimed liberty of thought, and Bolingbroke and Hume and Voltaire seemed so confident of the extermination of the Bible, that the Frenchman declared that a hundred years after his day not a Bible would be found save as an antiquarian curiosity.

Then came the German rationalistic host, with the fiercest and deadliest of all the attacks. Yet here the Bible is today, stronger than ever. It stands and it will stand. The adversaries have done their worst. They have charged their heaviest charge. They have fired their deadliest volley. Whatever unexpected adversaries appear in the future, no more destructive trios than Julian and Celsus and Porphyry, than Voltaire and Strauss and Renan, than Eichhorn and Wellhausen and Kuenen, will probably ever be confederate against it. Yet, in spite of all these age-long persecutions, the Word of the Lord is having free course and is being glorified.

The Bible is being circulated at the rate of about twelve million copies a year, in about five hundred languages of the globe. It has an influence it never possessed before. Verily, as we think

of it we may challenge our proud age with the challenge of Moses, and cry: "Ask now of the days that are past, which were before thee, since the day that God created man upon the earth, and ask from the one side of heaven unto the other, whether there hath been any such thing as this great thing is, or hath been heard like it?" (Deut. iv. 32).

THE SEVEN CROWNING WONDERS

But before I close, I would like briefly to refer to seven other things that are to my mind the crowning wonders of the Book.

IT IS SELF-AUTHENTICATED

There is, first, what we might call its selfauthenticatingness. You need no historical critic or university professor to prove that the Bible is God's own Word. The Holy Ghost alone is the Author and Giver of that conviction. If you will but hear the accents of His voice you will be assured beyond all possibility of argument that this book is God's own Word.

Men have come and still come to unsettle and destroy. The Spirit of Christ comes to validate and confirm with a Divine conviction and a Divine certainty that is incommunicable by mere reason, and is impervious to the assaults of doubt.

You have perhaps heard Spurgeon's famous story of the poor woman who was confronted by a modern agnostic, and asked: "What are you reading?" "I am reading the Word of God." "The Word of God? Who told you that?" "He told me so Himself." "Told you so? Why, how can you prove that?" Looking skyward, the poor soul said: "Can you prove to me that there is a sun up in the sky?" "Why, of course; the best proof is that it warms me, and I can see its light." "That's it!" was her joyous reply. "The best proof that this Book is the Word of God is that it warms and lights my soul."

IT IS INEXHAUSTIBLE

It is like a seed. You can tell how many acorns are on an oak, but you cannot tell how many oaks are in an acorn. The tree that grows from a seed produces in turn the seeds of other trees; each tree contains, say, a thousand seeds; each seed the germ of a thousand trees.

Its depth is infinite; its height is infinite. Millions of readers and writers, age after age, have dug in this unfathomable mine, and its depths are still unexhausted. Age after age it has generated, with ever-increasing creative power, ideas and plans, and schemes, and themes, and books. Yes, books; and in many cases books that are the only literature of the nation. The greatest minds have been its expositors. Myriads of students have studied it daily, and its readers from day to day can be numbered by millions.

The volumes that have been written on single chapters or even verses would fill the shelves of many a library, and today they are as fresh, as fertile, as inexhaustible, as the day they were first written. The treasures yet to be found are as the stars of the sky in infinity of multitude.

IT IS NON-IMPROVABLE

You cannot gild gold. You cannot paint rubies. You cannot brighten diamonds. And no artist can add any final touch to this finished Word of God. It stands as the sun in the sky. This proudpinnacled age can add nothing to it. If the greatest Bible-lovers of our own or any other times had attempted to improve it, their work would have been a patch and a disfigurement. It has the glory of God.

IT IS AUTHORITATIVE

This is another wonder. It breaks upon you as a Voice from Heaven. Five hundred times in the Pentateuch it prefaces or concludes its declarations with the sublime assertions, "the Lord

said," or "the Lord spake!" Three hundred times again in the following books it does the same, and in the prophetical books it does so twelve hundred times with such expressions as: "Hear the Word of the Lord," or "Thus saith the Lord."

No other book dares thus to address itself to the universal conscience. No other speaks with such binding claim, or presumes to command the obedience of mankind. The strange thing is that men in every age and clime acknowledge this claim. They know that the book speaks to their inner consciousness with an authority like the authority of God Himself.

IT IS PERENNIALLY RE-INSPIRED

Men think of the Bible as a book that was inspired. But the wonder of the Bible is that it is inspired. From the far-distant heights of time it comes sweeping into the hearts of men today, and the same breath of God that breathed into it its mystic life makes it live and energize again today. It is the Living Word, vital with the life of the Living God who gave it and gives it living power.

The twenty-third Psalm was inspired. But again and again today, as it is whispered in the hush of the death-chamber or read with the hidden cry "Open Thou mine eyes that I may behold the wondrous things of Thy law," it is re-inspired, and the Spirit makes it live once more.

for this is the most remarkable and unique feature of the Bible. I feel that it is *mine*. Its promises are mine. As I read the one hundred and third Psalm, it is not ancient Hebrew, it is present-day power; and I, a living soul, overwhelmed with gratitude, cry out: "Bless the Lord, O my soul."

The other day I took up an old Bible that my mother gave me, and I noted a verse in Genesis with a date written on the margin. There floated back upon my mind a time, some years ago, when I was in great trouble. I had to leave my dear wife and children, and to travel in quest of health in distant lands; and my heart within me was sad; and one day, on opening my Bible at random, as men say, my eye caught these words in Gen. xxviii. 15: "Behold, I am with thee,

and will keep thee in all places whither thou goest, and will bring thee again into this land." Shall I ever forget the flash of comfort that swept over my soul as I read that verse!

All the exegetes and critics in the world could never persuade my soul that that was a mere echo of some far-off relic of a Babylonian legend, or of an Oriental myth. No, no! That was a message to *me*. It came straight down to me. It swept into my soul as a Voice from heaven. It lifted me up, and no man will ever shake me out of the conviction that that message that day was God's own Word to me, inspiring because inspired, inspired because inspiring.

IT CREATES AND TRANSFORMS

It creates lives. It alters destinies. It inaugurates worldwide movements. It gives birth to immortal works. One of its texts transformed Luther and was the beginning of the greatest of modern epochs. It comes into communities of unrighteousness as a leaven of regenerative force. Great enterprises, philanthropic and redemptive; great institutions, therapeutic and educational, arise and stand as tributes to its vitalizing power. Ten thousand times ten thousand are evidences of the regenerative power of the Word of God which liveth and abideth forever.

IT REVEALS CHRIST

But the supreme wonder of the Book is Christ. He is its fullness, its centre, its fascination. It is all about Jesus! Old Testament and New Testament alike tell of Jesus, the great Fact of history, the great Force of history, the great Future of history; for of this Book it can be said: "The Glory of God doth lighten it, and the Lamb is the Light thereof."

And as long as men live upon the face of this globe, the Book that tells of that Supreme Personality, the Centre of a world's desire, Jesus - Jesus, the arch of the span of history, the keystone of the arch of prophecy -- Jesus, the Revealed, the Redeeming, the Risen, the Reigning, the Returning Lord - Jesus, the Desire of

all nations; so long will this Book draw men's hearts like a magnet, and men will stand by it, and live for it, and die for it.

THE LAST WORD

And, as I close, let me say this one word more. Do not think and do not say, as I have heard men say they think, that we ought to read this Book as we read any other book; that we ought to study it and analyze it just as we do any textbook in literature or science. No, no. When you come to this Book, come to it with awe. Regard it with reverence. Read it with a plea for the Spirit's help. "Put off thy shoes from off thy feet, for the place whereon thou standest is holy ground."

Never compare this Book with other books. Comparison is dangerous. They are of earth. This is from heaven. Do not think and do not say that this Book only contains the words of God! It is the Word of God. Think not of it as a good book, or even as a better book, but lift it in heart and mind and faith and love far, far above all, and ever regard it, not as the word of man, but as it is in truth, the Word of God; nay more, as the living Word of the in origin; eternal in duration; God: supernatural Living inexpressible in value; infinite in scope; divine in authorship; human in penmanship; regenerative in power; infallible in authority; in application; inspired in interest; personal universal in totality.

CHAPTER XX.

THAT THE JEWISH PROPHECIES CONFIRM THE TRUTH OF CHRISTIANITY.

(A.) THE PASSION PROPHECY OF ISAIAH.

(1.) The historical agreement, very striking.

(2.) The doctrinal agreement, equally so.

(3.) The modern Jewish interpretation, quite untenable.

(B.) THE PSALM OF THE CRUCIFIXION.

(1.) Its close agreement, all through.

(2.) Some objections, unimportant.

(C.) THE DIVINITY OF THE MESSIAH.

At least three distinct prophecies of this; and it is also involved in some hints as to the Doctrine of the Trinity.

(D.) CONCLUSION.

Why are not the prophecies plainer? Cumulative nature of the evidence.

WE propose to consider in this chapter what is called the argument from *Prophecy*. Now it is a remarkable and undisputed fact that for many centuries before the Christian era it was foretold that one of the Jewish nation—small and insignificant though it was—should be a blessing to all mankind. This promise is recorded as having been made both to Abraham, to Isaac, and to Jacob;¹ and as a matter of fact, Christianity was founded by a Jew, and has undoubtedly been a blessing

¹ Gen. 22. 18; 26. 4; 28. 14.

to the human race. This is at least a remarkable coincidence. And it is to be noticed that, as we proceed in the Old Testament, the statements about this future Messiah gradually become clearer and fuller, till at last, in the Prophets, we find whole chapters referring to Him, which Christians assert were actually fulfilled in Christ.

This argument is plainly of the utmost importance, and must therefore be examined at some length. Fortunately it is much simplified for two reasons. The first is that the question of dates is altogether excluded. As a rule, the most important point in an alleged prophecy is to show that it was written before its fulfilment. But here this is undisputed, since everyone admits that the whole of the Old Testament, except some of the apocryphal books, was written before the time of Christ. The second is, that the writings have been preserved by the Jews themselves, who, being adverse to the claims of Christianity, are hostile librarians, so we may be sure that not a single alteration in favour of Christianity has crept in anywhere.

We will now examine some of the strongest prophecies, avoiding all those that were only fulfilled in a figurative, or spiritual sense; and selecting whole passages rather than single texts. For though many of these latter are very applicable to Christ, they might also be applicable to someone else, such as His being preceded by a messenger, or His working miracles.¹ And we will first discuss somewhat fully both the great

¹ Mal. 3. 1; 4. 5; Isa. 35. 5-6.

Passion Prophecy of Isaiah, and the well-known Psalm of the Crucifixion; then we will examine more briefly a group of prophecies referring to the Divinity of the Messiah; and will conclude by considering an important objection.

(A.) The Passion Prophecy of Isaiah (52. 13-53. 12).

It may be pointed out at starting that there are no differences in translation worth speaking of; and that no one denies the antiquity of the passage, even if it was not written by Isaiah. Moreover, it is taken from a work avowedly prophetic. There is scarcely any doubt that the writer thought, and intended his readers to think, that he was foretelling future events. And it forms one complete whole, closely connected together and not mixed up with any other subject. And so in regard to its fulfilment, most of the details mentioned below occurred within a few hours. We will consider first the historical, and then the doctrinal agreement.

(I.) The Historical Agreement.

With regard to this, the following is the translation from the Revised Version, together with the corresponding events. It will be observed that the sufferings of the Messiah are usually expressed in the past tense, and His triumph in the future, the prophet placing himself, as it were, between the two. This seems to have been to emphasise the fact that the sufferings were the *cause* of the triumph, which could not be so graphically expressed in any other way. But the Hebrew tenses are rather uncertain, and what is translated as *past* in the Revised Version is

translated as *future* in the Authorised (e.g., the first part of 53. 2).

52. 13. 'Behold, my servant shall deal wisely, he shall be exalted and lifted up, and shall be very high.

14. 'Like as many were astonied at thee (his visage was so marred more than any man, and his form more than the sons of men) so shall he sprinkle many nations;

15. 'Kings shall shut their mouths at him: for that which had not been told them shall they see; and that which they had not heard shall they understand.

53. 1. 'Who hath believed our report?

'and to whom hath the arm of the Lord been revealed ?

The excellence of Christ's teaching and conduct is now generally admitted; while His exalted position as the object of worship by millions of men cannot be disputed.

And yet at the time of His death, which was in public so that many saw Him, the cruel <u>treatment</u> He had received (crowning with thorns, scourging, etc.) must have terribly disfigured His face and body.

But just as men were then astonished at the greatness of His sufferings, so are they now at the greatness of His triumph; even <u>Gentile kings</u> are silent with reverence,¹ when contemplating such an unheard-of story; which they, unlike the Jews, had never had announced to them beforehand by prophecy.

Indeed the account of His life, which the prophet is about to declare, is so marvellous that it can scarcely be believed.

The Arm of the Lord evidently means some instrument, or Person, which God uses for the accomplishment of His work, as a man might use his arm. And here it must be a *Person*, from the following words, 'For *he* grew up,' etc. It is thus a most suitable term for the Messiah, who, it is implied, would be recognised by hardly anyone.²

¹ Comp. Job 29. 9.

2. 'For he grew up before him as a tender plant, and as a root out of a dry ground :

he hath no form nor comeliness; and when we see him, there is no beauty that we should desire him.

3. 'He was despised, and rejected of men; a man of sorrows, and acquainted with grief: and as one from whom men hide their face he was despised, and we esteemed him not.

4. 'Surely he hath borne our griefs, and carried our sorrows: yet we did esteem him stricken, smitten of God, and afflicted.

5. 'But he was wounded for our transgressions, he was bruised for our iniquities : the chastise-

¹ John 1. 46; 7. 52.

This was because He lived at a place (Nazareth) which was always regarded as *dry ground* so far as anything good was concerned; and it was the very reason the Jews themselves gave for not believing on Him.¹ While the phrase 'He grew up *before Him*,' implies that though His early life had not been noticed by men, yet God had always taken a special interest in Him.

Moreover, His appearance was humble, and devoid of any outward splendour, such as might have been expected in the Messiah. And when at the time of His Passion, Pilate presented Him to the people, it was in such a state (crowned with thorns, etc.) that when they saw Him they did not desire Him.

But they at once rejected Him (as they had done often before) and asked for Barabbas instead; while He was despised and scorned by the soldiers at His trial, and by the Chief Priests and Rulers when He hung upon the Cross.

And His life was not only one of grief and sorrow, but such a death seemed to show that He was accursed of God, for the Jews so regarded anyone who was crucified.²

The scourging and other illtreatment is here referred to; including probably the nails,

² Deut. 21. 23; Gal. 3. 13.

ment of our peace was upon him; and with his stripes we are healed. 6. 'All we like sheep have gone astray; we have turned every one to his own way; and the Lord hath laid on him the iniquity of us all.

7. 'He was oppressed, yet he humbled himself and opened not his mouth; as a lamb that is led to the slaughter, and as a sheep that before her shearers is dumb; yea, he opened not his mouth.

8. 'By oppression and judgment he was taken away; and as for his generation, who among them considered that he was cut off out of the land of the living? for the transgression of my people was he stricken (or to whom the stroke was due, margin, and American R.V.)

9. 'And they made his grave with the wicked, and with the rich in his death (i.e., when he was dead. Comp. Ps. 6. 8); and spear, for the word trans-

Christ, who is frequently called the Lamb of God, not only bore His ill-treatment with the utmost patience, but refused to plead at His trial, to the utter astonishment of Pilate. The verse, it should be noticed, lays stress on the fact that *He* opened not *His mouth*, repeating it twice, as if it was very remarkable under the circumstances; and Pilate we are told marvelled greatly at it.¹

<u>He was not killed accident-</u> ally, or by the mob, but had a judicial trial; and was most unjustly condemned. While few, if any, of His contemporaries understood that His death was for the sins of the people, to whom the punishment was really due.

He was appointed to die between two robbers, and would doubtless have been buried with ordinary criminals, had not Joseph of Arimathea intervened; when, in strange contrast with His ignominious death, He was honourably buried by the rich (Joseph and Nicodemus), with costly spices, and in a rich man's tomb.²

¹ Matt 27. 14

² Matt. 27. 57; John 19. 39.

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although he had done no violence, neither was any deceit in his mouth.

'10. 'Yet it pleased the Lord to bruise him; he hath put him to grief : when thou shalt make his soul an offering for sin, he shall see his seed, he shall prolong his days, and the pleasure of the Lord shall prosper in his hand.

11. 'He shall see of the travail of his soul, and shall be satisfied : by his knowledge shall my righteous servant justify many : and he shall bear their iniquities.

12. Therefore will I divide him a portion with the great, and he shall divide the spoil with the strong;

unto death,

Although His judge repeatedly declared that He was innocent; and He Himself was able to state at His trial that He had always preached openly and had done nothing in secret.

Yet after His death He was to see His seed, and prolong His days, i.e., rise again from the The word seed can dead. scarcely mean literal children, since He was to obtain them by His death. And as it is sometimes used in Isaiah for a class of people,¹ it doubtless has this meaning here; and refers primarily to the disciples, whom Christ saw after His Resurrection, and called His children.²

And this is strongly confirmed by their being called the travail of His soul, not body. And the latter expression also implies that He had had some intense mental struggle comparable to the bodily pains of childbirth; which is very suitable to the mental agony which Christ endured, both in the Garden and on the Cross.³

His subsequent triumph in the Christian Church is here alluded to.

Moreover, His sufferings had because he poured out his soul been of some duration, as if He had slowly poured out His life-blood; an expression which is very appropriate to a lingering death like that of crucifixion.

² Mark 10. 24; John 21. 4. ¹ Isa. 1. 4; 14. 20; 57. 4. ³ Mark 14. 36; 15. 34.

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and was numbered with the transgressors: yet he bare the sin of many, and made intercession for the transgressors.' While the closing words exactly agree with His dying a shameful death between two robbers; and yet praying for His murderers, 'Father, forgive them.'

It seems hardly necessary to insist on the agreement shown above; it is indisputable. The sufferings and the triumph of the future Redeemer are foretold with equal confidence and with equal clearness, though they might well have seemed incompatible.

(2.) The Doctrinal Agreement.

We pass on now to the *doctrinal agreement*, for the significance of the passage does not depend on these prophecies alone, though they are sufficiently remarkable, but on the *meaning* which the writer assigns to the great tragedy. It is the Christian doctrine concerning Christ's death, and not merely the events attending it, which is here insisted on. This will be best shown by adopting the previous method of parallel columns, showing in the first the chief points in the Christian doctrine, and in the other the prophet's words corresponding to them.

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All mankind are sinners.

Christ alone was sinless.

He suffered not for His own sins, but for those of others. Nor was this the mere accidental suffering of an innocent man for a guilty one; it was a great work of *atonement*, an offering for sin. This is the central

'All we like sheep have gone astray; we have turned every one to his own way.'

' My righteous servant.'

'He had done no violence, neither was any deceit in his mouth.'

'Surely he hath borne our griefs, and carried our sorrows.'

'He was wounded for our transgressions, he was bruised for our iniquities; the chastisement of our peace (*i.e.*, which procured our peace) was upon

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feature of the Christian doctrine, and it is strongly emphasised in the prophecy, which is above all that of a *Saviour*.

And it involved not only bodily suffering, but mental and spiritual as well, due to His thus bearing the sins of the world.

And this Atonement was the fulfilment of all the old Jewish sacrifices :

There was thus a special fitness in Christ's being put to death at the time of the Jewish Passover; and His death being followed (as in these sacrifices) by the shedding of His blood, with the spear.

him; and with his stripes we are healed.'

'The Lord hath laid on him the iniquity of us all.'

'For the transgression of my people was he stricken.'

'When thou shalt make his soul an offering for sin.'

'And he shall bear their iniquities.'

'He bare the sin of many.'

'The travail of his soul.'

This is shown by the sacrificial language employed. Thus the offering for sin is the same word as that used in Leviticus and elsewhere for the guiltoffering (or trespass - offering, A.V.). And the curious expression So shall he sprinkle many nations evidently refers to the sprinkling of the blood in the Jewish sacrifices (e.g., Lev. 16. 14-19), as the same word is used, and means cleansing them from sin.

'As a lamb that is led to the slaughter.'

'He poured out his soul.' The words are literally as the lamb, apparently referring to the Paschal Lamb.¹ And its being led to the slaughter is also very appropriate to an animal being solemnly brought through the temple-courts for sacrifice. While He poured out his soul, naturally suggests pouring out the blood in the Jewish Sacrifices.

¹ Pulpit Commentary on Isa. 53. 7.

And yet it availed not only for the Jews, but for all mankind.

Moreover, Christ's sacrifice was voluntary. He said that He freely laid down His life, no one took it from Him; and that though His soul was sorrowful unto death, still this was the very object for which He had come. (John 10. 18; 12. 27; Matt. 26. 38).

And yet it was in a certain sense by God's appointment and acceptable to Him.

In consequence of this free offering of Himself, Christ founded His Church, a mighty empire, able to hold its own with the kingdoms of the world.

And His Church has been most successful in the salvation of sinners, which is above all what God wishes.

Moreover, Christ foresaw these fruits of His Passion, and was satisfied with them.

Lastly, Christians are justified only by Christ's Atonement.

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The many nations must include Gentiles as well as Jews; and that a Jew should have prophesied this is very remarkable, considering their exclusiveness.

'He poured out his soul unto death.' This implies that the act was voluntary, or it would be ' He died,' or ' He was put to death.' And this is rendered still clearer from the context. It was because He did this that He was to divide the spoil, etc. His death was thus the condition of His victory, and must clearly have been voluntary. And the same is shown by the words He humbled Himself, which also imply that the humiliation was voluntary, i.e., He let Himself be humbled.

'Yet it pleased the Lord to bruise him; he hath put him to grief.'

'Therefore will I divide him a portion with the great, and he shall divide the spoil with the strong.'

'He shall be exalted and lifted up, and shall be very high.'

' The pleasure of the Lord shall prosper in his hand.'

' He shall see his seed."

'He shall see of the travail of his soul and shall be satisfied.'

'By his knowledge (or by the knowledge of himself, American R.V.) shall my righteous servant justify many : and he shall béar their iniquities.'

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All this, it is plain, exactly suits the Christ of Christendom; and it is equally plain that it does not and cannot suit anyone else, since many of the Christian doctrines are quite unique, and do not occur in the Jewish or any other religion. This is indeed so striking, that if anyone acquainted with Christianity, but unacquainted with Isaiah, came across the passage for the first time, he would probably refer it to one of St. Paul's Epistles. And certainly, every word of it might be found there with perfect fitness.

(3.) The modern Jewish interpretation.

Now, what can be said on the other side? Many of the ancient Jews interpreted the passage as referring to their future Messiah;¹ but the modern Jews explain it as referring to the Jewish nation (or perhaps only to the religious part of it), which they say is here personified as a single man, the Servant of the Lord. And it must of course be admitted that Isaiah does frequently speak of the Jews as God's *servant* (*e.g.*, 'But thou Israel, my servant, and Jacob whom I have chosen,'),² though he nowhere else uses the term 'my *righteous* servant,' which he does here, and which would be obviously inapplicable to the nation.

But it is important to remember that this prophecy does not stand alone, and a little before we read in a similar passage, 'And now saith the Lord that formed me from the womb to be his servant, to bring Jacob again to him, and that Israel be gathered unto him :

¹ References are given in Edersheim's 'Life and Times of Jesus the Messiah,' 1901, vol. ii., p. 727; and i., p. 52.

Isa. 41. 8.

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(for I am honourable in the eyes of the Lord, and my God is become my strength :) yea, he saith, It is too light a thing that thou shouldest be my servant to raise up the tribes of Jacob, and to restore the preserved of Israel : I will also give thee for a light to the Gentiles, that thou mayest be my salvation unto the end of the earth. Thus saith the Lord, the Redeemer of Israel, and his Holy One, to him whom man despiseth, to him whom the nation abhorreth, to a servant of rulers : Kings shall see and arise ; princes, and they shall worship.'¹

Here it will be noticed the Lord's servant is twice distinguished from both Jacob and Israel, and evidently means the Messiah. While His having been watched over by God from childhood; His sinlessness (implied) in His being honourable in the sight of God); His bringing salvation to the Gentiles, as well as to the Jews; His humiliation in being despised of men and abhorred of the Jewish nation; and His subsequent triumph, even Gentile Kings submitting themselves to Him; are all alluded to, much as they are in the present passage. Again in two other passages, at least, the Lord's servant is clearly a person, real or imaginary, and not a nation. Could the following verse, for instance, (closely fulfilled by the way in Christ,) have been possibly intended for the Jewish nation? 'I gave my back to the smiters, and my cheeks to them that plucked off the hair, I hid not my face from shame and spitting.'²

² Isa. 50. 6-10; 42. 1-6. A somewhat similar expression is no doubt applied to Israel in Ps. 129. 1-3, but then this is stated.

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¹ Isa. 49. 5

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No doubt there is a difficulty in the prophet thus passing from one meaning of the word servant to another (especially in a closely connected passage),¹ and various attempts have been made to explain it; but it does not alter the fact that he does so. Perhaps the best explanation is that Israel was *intended* to be God's servant, but owing to their sins became unfitted; when God promised in the future to raise up a *righteous* servant, who should do all His pleasure and atone for Israel's failure. And we must remember the term *Servant* is applied to the Messiah both by Ezekiel, *My servant David*; and by Zechariah, *My Servant, the Branch* (which suggests the *tender plant* of this passage) as well as in the New Testament.²

Moreover, the Jewish interpretation not only leaves all the minuter details of the prophecy unexplained and inexplicable, but ignores its very essence, which, as before said, is the atoning character of the sufferings. No one can say that the sufferings of the Jews were voluntary, or that they were not for their own sins, but for those of other people, which were in consequence atoned for. Or, to put the argument in other words, if the *He* refers to the Jewish nation, to whom does the our refer in such sentences as *He was* wounded for our transgressions? This interpretation then is hopelessly untenable, and the passage either means what Christians assert, or it means nothing.

In conclusion, it must be again pointed out that all these minute historical details attending Christ's death,

¹ Isa. 49. 3, 5.

² Ezek. 34. 23; Zech. 3. 8; Acts 3. 13; Phil. 2. 7.

and all these remarkable Christian doctrines concerning it, are all found within fifteen verses of a writing avowedly prophetic, and written many centuries before the time of Christ. It would be hard to over-estimate the great improbability of all these coincidences being due to chance; indeed, such a conclusion seems incredible.

(B.) THE PSALM OF THE CRUCIFIXION (Ps. 22).¹

We pass on now to another most remarkable prophecy; for this well-known Psalm describes what can only be regarded as a *crucifixion*. The decisive verse is of course, *They pierced my hands and my feet*; but even apart from this, the various sufferings described cannot be all endured in any other form of death, such as stoning or beheading. And the Psalm agrees with the Death of Christ, both in its numerous details, and in its whole scope and meaning. We will therefore consider this close agreement first, and then some of the chief objections.

(I.) Its close agreement.

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We need not quote the Psalm at length, as it is so well known; but will point out the agreement verse by verse.

- Ver. 1. His feeling forsaken by God, and using these actual words: 'My God, my God, why hast thou forsaken me?'
 - 2. as well as praying for deliverance during the previous night;²
 - 3. though in spite of His sufferings, He casts no reproach upon God.

4. His belonging to God's chosen people, the Jews, so that He could speak of our fathers;

¹ This subject is discussed more fully in an article in the Churchman, April, 1912, by the present writer.
² Mark 14. 35; Heb. 5. 7.

- 5. who had so often been helped by God before.
- 6. His pitiable condition in being exposed to the scorn and reproach of men, and so despised by the people, that they even preferred a murderer instead.

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- 7. His being lifted up to die in public, so that those who
 passed by could see Him; and the way in which they mocked Him, shaking their heads, etc.
- 8. The exact words they used: He trusted on the Lord that He would deliver him, let Him deliver him seeing He delighteth in him (margin). These words show that the speakers themselves were Jews, and that <u>He was</u> thus put to death among His own nation. And the last clause can only be meant ironically in the sense that the <u>Sufferer claimed that God delighted in him</u>, claimed, that is, in some special sense to be beloved by God.¹
- 9. And, as a matter of fact, God had always watched over Him, even announcing His Name and work before He was born; and saving Him in His infancy from being slain by Herod.²
- 10. And in return His whole life had been dedicated to God; so that He could say that God had been His God, even from His birth.
- 11. His being abandoned by His disciples, and left without a helper;
- 12. though surrounded by His enemies, described as bulls of Bashan. This curious term is used elsewhere for the unjust rulers of the people,³ and was therefore very applicable to the chief priests and rulers, who had so unjustly condemned Him, and now stood round the Cross reviling Him.⁴ The custom of thus speaking of men as if they were animals, which seems to us so extraordinary, was thoroughly Eastern, and occurs repeatedly in the Bible.
- 13. And they continually insulted Him, gaping with the mouth being a common expression of contempt; ravening appropriate to the way in which they had thirsted for His blood before Pilate; and roaring to the great noise and tumult made by the people when doing so.⁵
- ¹ Matt. 27. 43. ³ Amos 4. I; Ezek. 39. 18. ⁵ E.g., Job 16. 10; Lam. 2. 16; Matt. 27. 23. ² Matt. 1. 21; comp. Isa. 49. 1, 5. ⁴ Matt. 27. 41; Luke 23. 35. ⁵ E.g., Job 16. 10; Lam. 2. 16; Matt. 27. 23.

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- 14. His side being pierced, so that there poured out a quantity of watery fluid (mixed with clots of blood), the probable cause of this-the rupture of the heart1being also hinted at ; while His bones were nearly out of joint, through the weight of the suspended Body.
- 15. His suffering extreme weakness, and extreme thirst, immediately before His death.²
- 16. His being crucified (i.e., His hands and feet being pierced), the men who did this being here called dogs. They were apparently a special set of men, and different from the Jews who had before been mocking Him. And as this was the very term used by Christ Himself for the Gentiles, in distinction to the Jews,³ it was peculiarly appropriate to the Gentile (Roman) soldiers who crucified Him.
- 17. And they also exposed and stretched out His Body, so that the bones stood out in relief. And they then stood watching Him;
- 18. and divided His garments among them, casting lots for one of them.

19. Then follows a short prayer.

- 20. The term sword, as it occurs in connection with the dog, the lion's mouth, and the wild oxen, need not be pressed literally; but may be used here (as in other cases)⁴ for any violent death. And in the New Testament it seems employed for all punishments, including probably a death by crucifixion (St. Peter's).⁵
- 21. While in spite of His troubles, and even death, He feels sure of deliverance. The sense is made plainer by putting a stop after oxen: Save me from the lion's mouth, yea, from the horns of the wild ozen. Thou hast answered me.
- 22. And now the strain suddenly changes, the Sufferer is
- somehow restored to life and freedom, and He at ||| once declares God's name unto His brethren. And yet as they were Jews, they must have known God's name before, so it probably means telling them something further about it; which shows that the

¹ See 'The Physical Cause of the Death of Christ,' by Dr. Symes Thompson, 1904.

- ² Lam. 4. 4; John 19. 28-30.
- ³ Matt. 15. 26.
- ⁵ Rom. 13. 4; Matt. 26. 52. ⁴ Comp. 2 Sam. 11. 24; 12. 9.

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Sufferer was in some sense a religious Teacher. And it exactly agrees with Christ's now declaring for the first time God's true and complete Name of, Father, Son, and Holy Ghost, unto His brethren, as He calls them, the Apostles.¹ And if we identify this appearance with that to the five hundred, it was literally in the midst of the congregation—in the presence, that is, of the first large Christian assembly.

23. Moreover, His deliverance is of world-wide significance, and great blessings are to follow from it. These commence with the Jews, who were in consequence to *praise* and glorify God; though mingled with their rejoicings there was to be a strange feeling of *awe* and dread; all of which was exactly fulfilled.²

24. And the blessings are somehow connected with God's not having despised, but having accepted, His sufferings.

25. And they include a reference to some vows (meaning uncertain);

- 26. and to a wonderful feast of which the poor, or meek, are to eat and be satisfied, because (unlike an ordinary meal) it is connected with their living for ever. It is hence often thought to refer to the Holy Communion, to which the same language seems applied; 'He that eateth this Bread shall live for ever.'³
- 27. And the blessings then extend to the Gentile nations also, even to the most distant parts of the world, who are now to become worshippers of the true God, Jehovah. And though this is perhaps the strangest part of the whole prophecy, its fulfilment is obvious to everyone. Christians exist in all known countries, and wherever there are Christians, Jehovah is worshipped.
- 28. To Whom the whole earth, both the Jewish kingdom, and the Gentile nations, really belongs.
- 29. And the rich all over the earth, Gentiles as well as Jews, are also to eat of this strange feast, so it cannot be a literal meal at Jerusalem or anywhere else; but one, like the Holy Communion, which is spiritual and world-wide, intended for all people of all nations.

¹ Matt 28. 10, 19; John 17. 26. ³ John 6. 58

- 30. After this we read of a seed serving Him, probably used here, as in Isaiah, of successive generations of disciples, each of which is to tell of this wonderful deliverance to the next. And this they have been doing for eighteen centuries.
- 31. And so they will continue doing to generations that are yet unborn. While the closing words, *He hath done it* (R.V.) are often taken as referring to the whole Psalm, and meaning that the work of suffering and atonement was now complete, *It is done*,¹ and they would thus correspond to Christ's closing words on the Cross, *It is finished*.

Everyone must admit that the agreement all through is very remarkable; though of course there are some objections.

(2.) Some objections.

The first is that there is nothing to show that the writer meant the Psalm to refer to the Messiah at all, though, strange to say, some of the Jews so interpreted it;² and therefore if there is an agreement, it is at most only a chance coincidence. But the idea of *all* these coincidences being due to chance is most improbable. And there certainly is some indication that it refers to the Messiah, since, as we have seen, it leads up to the conversion of the Gentiles, which the other Jewish prophets always associate with the times of the Messiah; and this is very significant.

Moreover, if the Psalm does not refer to Christ, it is difficult to see to whom it does refer, since it is quite inapplicable to David, or Hezekiah, or anyone else at

¹ Hengstenberg, Commentary on the Psalms, 1867, vol. i., pp. 364, 396.

² Edersheim, 1901, vol. ii., 718, 732; Hengstenberg, Christology of O. T., 1847, p. 80.

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