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EVOLUTION VERSUS CREATION

Second in the Series of Fundamentalist—Modernist Debates

BETWEEN

REV. JOHN ROACH STRATON, D.D.
Pastor Calvary Baptist Church, New York

AND

REV. CHARLES FRANCIS POTTER, M.A., S.T.M.
Minister West Side Unitarian Church, New York

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EVOLUTION VERSUS CREATION

REV. JOHN ROACH STRATON, D. D. and REV. CHARLES FRANCIS POTTER, M.A., S.T.M.

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This book contains the only official text of the second of a series of five theological debates between Rev. Charles Francis Potter, challenger, and Dr. John Roach Straton, to be published under the following titles:

I: THE BATTLE OVER THE BIBLE

Question: The Bible is the Infallible Word of God

II: EVOLUTION VERSUS CREATION

Question: The Earth and Man Came by Evolution

III: THE VIRGIN BIRTH—FACT OR FICTION?

Question: The Miraculous Virgin Birth of Jesus Christ is a Fact and an Essential Christian Doctrine

IV: WAS CHRIST BOTH GOD AND MAN? Question: Jesus Christ is the Only Divine Son of God

V: UTOPIA—BY MAN'S EFFORT OR CHRIST'S RETURN?

Question: Jesus Christ Will Return in Bodily Presence to this Earth and Establish the Reign of Universal Peace and Right-

Dr. Straton takes the affirmative in all but the second debate. The first debate was held in Calvary Baptist Church, New York on December 20, 1923, the second in Carnegie Hall, January 28, 1924, and the third and fourth also in Carnegie Hall, on March 22 and April 28, 1924. Copies of each debate will be published separately at 50 cents each and the entire series on completion will be reissued in one volume, cloth at \$2.00.

These debates may be obtained from the Religious Literature Departments of the Calvary Baptist Church and the West Side Unitarian Church or at all booksellers.

EVOLUTION VERSUS CREATION

Second in the Series of Fundamentalist-Modernist Debates

between

REV. JOHN ROACH STRATON, D.D. PASTOR, CALVARY BAPTIST CHURCH NEW YORK

and

REV. CHARLES FRANCIS POTTER, M.A., S.T.M.
MINISTER. WEST SIDE UNITARIAN CHURCH
NEW YORK



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EVOLUTION VERSUS CREATION

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INTRODUCTION

By Rev. John Roach Straton, D.D.

The debate which follows aroused intense interest not only in New York but throughout the country and even in foreign lands.

In delivering my speeches during the debate, I had, on account of the time limit, to condense some of the paragraphs that are herein printed and also some of the quotations from authorities. In preparation for the debate, as I did not know, of course, just what particular aspect of the very wide question of evolution Mr. Potter might emphasize in his opening argument, I had to be prepared thoroughly on every side of the question. I had in my manuscript, therefore, a number of very valuable quotations, and much other matter that is really important in the full consideration of the question of evolution, which I could not use on account of the time limit, and which is not printed in this book.

I purpose, therefore, bringing out another volume on the subject: "The New Infidelity—Evolution Versus God," in which I shall hope to give a thoroughgoing discussion of the entire subject of evolution, with an adequate exposition of Bible teaching as related to these issues, and also with a frank consideration of the conflict between the great doctrines of revealed religion and the evolutionary theories, and the disastrous results of the evolutionary teachings upon individual morals and Christian consecration.

I acknowledge Mr. Potter's courtesy in agreeing to the fuller quoting herein of authorities, etc., than was possible in the spoken debate.

I need only add that this second debate once more, I feel, justifies my original willingness to go into these debates, because, as I remarked in the introduction to the printed form of the first debate—"The Battle Over the Bible,"—I foresaw that they would bring before the people a clear statement of what Modernism really is and what it inevitably leads to.

JOHN ROACH STRATON.

Study of Calvary Baptist Church, New York City.

INTRODUCTION

By Rev. Charles Francis Potter, M.A., S.T.M.

I have agreed to the inclusion in Dr. Straton's speeches of more matter than he actually presented in the debate. As this extra matter is largely quotation from authorities, however, it does not change his line of argument, and makes the book more valuable.

There should be many debates on evolution in the coming years. Both evolutionists and creationists need to know more of each other's arguments, for there is much unscientific dogmatism on both sides.

Sometime I hope to participate in or listen to a debate phrased as follows:

"Resolved that evolution is a more reasonable theory for accounting for the origin of the earth and man than the Genesis creation story."

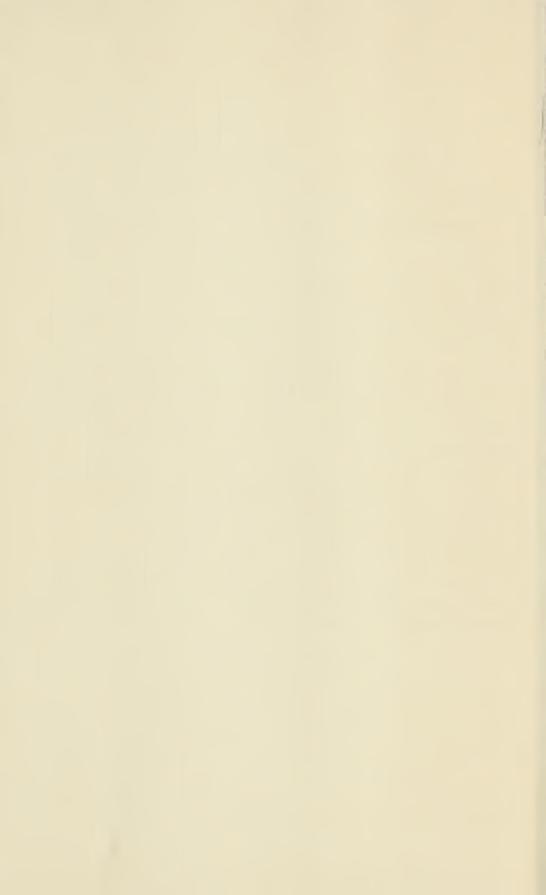
CHARLES FRANCIS POTTER.

Study of West Side Unitarian Church, New York City.



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FOR THE AFFIRMATIVE*

Question:

Resolved, That the Earth and Man Came by Evolution

Mr. Chairman, Honorable Judges, Worthy Opponent, Gentlemen of the Press, Ladies and Gentlemen of this audience and of the invisible audience of thousands of radio listeners:—

Ever since man has been on the earth he has been wondering how he got here, and how the earth got here.

The very earliest literature of our ancestors which we have yet discovered is largely concerned with these two great problems, and the first questions of the growing child of today are, "Who made me, and who made the earth?" Mankind, young and old, has always had an insatiable curiosity about these matters, and your presence here tonight indicates that the interest in these problems is not only as strong as in former times, but is even increasing. It will assist us in our approach to this question tonight if we examine some of the theories which savage and semi-civilized men have held.

LEGENDS OF CREATION

It is very fascinating to study the various legends of the different races of mankind, which tell about how they think the earth and man came into existence.

There is a tribe of Indians in Paraguay who believe that God originally existed in the shape of a beetle, liv-

^{*} First speech for the affirmative by Rev. Charles Francis Potter, Minister of West Side Unitarian Church.

ing in a hole in the earth. This beetle, they think, formed man and woman out of the clay which he excavated from this hole. Man and woman, according to them, were at first one being, like Siamese twins. This was rather awkward, so they asked the beetle to separate them. He cut them apart and gave them the power of having children. Accordingly, this man and woman became the father and mother of all mankind. A tribe of Mexicans, the Michoacans, believed that a great god, named Tucapacha, made the first man and woman out of clay. When the couple went to bathe, they melted in the water, so Tucapacha tried again and made them out of ashes, with a similar result. Growing wiser because of these failures, he made them out of metal, and they were able to take their bath without falling to pieces. From their children came all the races of men.

In West Africa, some of the tribes of Togoland believe that God still makes men from clay. When he wants to make a good man, he takes good clay. For a bad man he uses poor clay. They believe that in the beginning God made a man in this fashion and put him on the earth. After that God made a woman. The two looked at each other and, according to the legend, they began to laugh. Thereupon God made them go forth into the world. We might add to this legend that they have been laughing at each other ever since.

A tribe of Australian blacks living near Melbourne used to think that the creator, Pund-Jel, cut out great sheets of bark with a big knife. Then he mixed some clay and worked it up like putty to the proper consistency. Upon the pieces of bark he then moulded the clay into human form. He was so pleased with his work, that is, he saw that it was so good, that he danced around the images for joy. He did not like the bald appearance of the heads of the images, so he took some stringy

bark from the eucalyptus tree and made hair of it, which he put on the heads of the clay men. It was such an improvement that he danced around them again. Next, he lay down upon the images, and blew his breath forcibly into their mouths and their noses. Soon the images moved, spoke, and then stood up and were full-grown men.

This West African story will be recognized by those familiar with Greek mythology as resembling the one about Prometheus who, according to legend, moulded the earliest men from clay which he found at Penopeus at Phocis.

A Babylonian account of creation, preserved to us by Berosus, a Babylonian priest, says that the great god, Bel, cut off his own head. The blood was mixed with earth by the other gods. From the mixture the first men were made. The Babylonians said that that was why men were somewhat wise, because the mortal part, the clay, was mixed with the divine part, the blood.

Another tribe in that part of the earth had a legend which was quite similar to the Babylonian in many respects. The divine element in man was due, not to blood, as the Babylonians said, but to the divine breath which they believed was put into man in much the same fashion as the Australian blacks conceived of it, namely, by blowing it into man's mouth and nostrils.

The tribe of which I am speaking, which lived at the eastern end of the Mediterranean Sea many years ago, the Habiru, had other parts in their creation story which were very interesting. They were very inquisitive, these people, and asked a number of questions, and out of the answers to the questions grew their creation story.

The questions were very natural ones, such as, "How did the world get here?" "Where did man come from?" "Why is man different from the animals?" "Why is he conscious of sex and feels ashamed, while the beasts do

not?" "Why is it that man, who seems to be above the beasts, has to toil and labor and get his bread by the sweat of his brow?" "Why is it that women, unlike the beasts, seem to suffer so in childbirth?"

These and other questions they answered in their Creation story. Some of the answers in the legend were rather original. Others were evidently copied from old Babylonian, Chaldean and other creation myths with which they were somewhat familiar.

The Creation story which they finally evolved ran something like this:

When God created the earth he also created the heavens above the flat earth. It was all dark. The earth was formless, but God moved in spirit form in the space between the earth and the heavens, and he said, "Let light come." And light did come. And he separated the light from the darkness and he called the light day and the darkness night. The next day he saw that he was in trouble unless he made some improvements, for there were evidently waters in the heavens as well as waters on the earth. In order to separate the waters below from the waters above he made what they call a "rakia," like a great inverted bowl above the flat earth. This kept the heavenly waters from descending upon the earth. That was his second day's work. (Later on in the story we find that God got angry and opened some trap doors, or windows, or skylights in this "rakia" or firmament and let the heavenly waters down upon the earth and caused a great deluge.)

The third day he separated the dry land from the waters and created grass, seed-bearing herbs, and fruit trees.

The fourth day he fastened lights on the underside of this inverted bowl, or "rakia"—two big ones—one for the day time called the sun, one for the night called the moon, and a lot of smaller ones called stars.

The fifth day he created fishes and birds.

The sixth day he created the animals and man and woman and gave man the charge of all the animals.

On the evening of the sixth day he looked the whole creation over and decided it was very good, so he took the seventh day for a rest.

There were other versions of this creation story which this Semitic tribe at the east end of the Mediterranean Sea believed. In one of them God did not create man and woman together as this first account says, but made man some little time before he created woman. He made man out of the dust of the ground and breathed into his nostrils the breath of life. After the man had lived in the company of the animals for a while, he wanted better company, and God made him go to sleep, took out a rib, and made a woman for him. This rib story is a very common one, by the way, among several of the tribes of the earth. It was found widely current in Polynesia when the first white men visited the islands.

There were many other interesting things in connection with this Semitic legend, but as most of you have heard it before I will not go into them.

Of course you see the inconsistencies in this story. Notice that this primitive tribe very naively said that God created light on the first day, but that he did not make the sun, moon and stars until the fourth day. How could there be day and night without the sun? Then again, the whole idea of all creation being completed in six days of 24 hours each is extremely primitive. It is no use to say that these days were ages, because the word used is "yom" which, in the language of this tribe, means a day of 24 hours; more precisely, the light part of the 24 hours.

All these inconsistencies in the legend would merely amuse us, just as the similar ones of other tribes amused you tonight, if it were not for the fact that the creation story of this primitive tribe, the "Habiru," was passed on to their descendants and became very influential in the thought of a great many other nations who have lived since, for the "Habiru" were the Hebrews, and this is the story which you find in the first part of Genesis, in the Bible.

When the Christian Church was founded, the Jewish legend of creation was taken along into the new religion, and made a part of it. Down through the centuries, since the beginnings of Christianity, this Hebrew legend has persisted and is accepted by many people today as an actual scientific account. Many people actually believe that this gives an adequate explanation of how the earth and how man came. What is more, the reason why I am debating here tonight is because the Fundamentalists of today want this primitive Hebrew legend taught as actual scientific truth in our public schools in America.

Only last week the North Carolina State Board of Education with the approval of the Governor is reported to have prohibited the teaching of evolution in the schools under its jurisdiction.

I do not know whether or not my worthy opponent will champion this ancient Hebrew version of creation here tonight. I presume that he will, because he has constantly done so for a good many years, and he can hardly go back on it now. What I am here for tonight is to set forth before you a considerably different explanation of how the earth and man came, the theory of evolution, championed by the scientists of the modern world. I shall not set it forth in scientific phraseology, as I am not a scientist, but I shall endeavor to speak in plain language the arguments for evolution which seem to me valid. I bespeak your sympathetic attention.

Our debate resolution is stated, "Resolved, That the Earth and Man Came by Evolution." In order that we may not dovetail our arguments, but may really clash on the central issue of the entire debate, Dr. Straton and I have agreed to take for our common definition of Evolution the one given by LeConte. This definition is found in the book, "Evolution and Its Relation to Religious Thought," written by Joseph LeConte, at one time Professor of Biology and Natural History in the University of California. In the edition of 1889 the definition is found on page 8, and reads as follows:

"Evolution is (1) continuous, progressive change, (2) according to certain (that is, fixed) laws, (3) and

by means of resident forces."

You have noticed that there are two sections to the question under discussion. Dr. Straton and I thought it would be well to include the evolution of both the earth and man, inasmuch as these two were so closely related and are, in popular thought at least, always connected. I shall therefore devote the first part of my thesis to three arguments for the evolution of the earth, and the second part to eight arguments for the evolution of man.

ARGUMENTS FOR THE EVOLUTION OF THE EARTH

1. The Changes Now Going On

Even a child can notice the changes that are now going on in the earth. When you go to your favorite seashore next summer, you will find that the coast-line is somewhat different from what it was last summer. There is a deeper indentation here and a larger sandbar there. If you go to Niagara this summer, you may notice that the Gorge is cut deeper than it was when you went there on your wedding trip. Scientists have been able to reckon the age of Niagara Falls by figuring the rate at which those hard rocks are worn away by the action of the falling water.

Not long since, some of our Fundamentalist friends

thought that the hand of the Lord had been laid in chastening on the wicked people of certain sections of Japan. It is quite evident, however, that this was not a supernatural phenomenon, but a very natural occurrence in the evolution of the earth's crust. What happened at Tokyo was a change according to certain laws, and by means of resident forces, and was not due to the peculiar wickedness of people who happened to occupy that particular area. These changes and many others that are now going on point to the evolution of the earth. The great forces of erosion and the settling of the earth's crust are all recent chapters in the change of the earth from its earlier forms to its present one.

2. The Evidence of Past Changes

It is when we examine deep cuts into the earth's crust that we are able to see more clearly the drama of evolution as it has affected the earth. It is impossible, of course, to give in a few minutes the entire story of how the earth has evolved, but any one who has been down far enough into the earth's crust to visit a coal mine, knows that there we find many evidences of the fact that the earth was once much different from what it is now. Once I went down into a coal mine, and the miners brought me fossils which they had found. When you see in the coal the natural fossil imprint of a great equatorial fern, you realize that at one time that which is now black coal was the vegetation of a hot climate, and you know that conditions on the earth in that far distant time were considerably different from what they are now. In other words, the evolution of the earth becomes a real fact to you. You believe the geologist when he tells you that it took longer to lay down one vein of coal than the six thousand years which some ignorant people think comprises the time from the day of creation until now.

3. The Testimony of Astronomy

With the perfection of various instruments used by astronomers we have brought before our very eyes the view of the worlds in the making. There are now available for every one who cares to look at them, actual photographs of great stars and suns which are now in the condition in which the earth was millions of years before it cooled off enough for life to appear on it. Great spiral nebulae, huge rolling masses of gaseous vapor, looking very much like enormous Fourth of July pin-wheels, can actually be seen. They are in different stages of condensation. Some are hardly more than great areas of vapor. Others have a well-defined nucleus at the center. Still others, like our own sun, seem to be fairly solid, and gases appear as streamers from their circumference.

Sometime in the distant past, our own earth went through these stages and gradually cooled. The vapors condensed into water, and the earth became gradually fit for life. The spectroscope has revealed that the stars are composed of the same elements as the earth and astronomy proves the earth a satellite of the sun, hence we have proof of the origin of the earth from nebulous gaseous material.

If we use our own eyes in coal mines and at the small end of a great telescope, and if we then do even a very little thinking, we will, I think, be more inclined to believe in the evolution of the earth through long ages of time, rather than think that some Jehovah-God created it in one short 24-hour day, as the Hebrew legend says.

ARGUMENTS FOR THE EVOLUTION OF MAN

I. From Ancient Life on the Earth (Paleontology)

All the arguments which we shall present for the evolution of man are deduced from facts which may be verified by any one in this audience who will visit the various places where this information is available.

One of the earliest clues to the evolution of animal life on the earth was found in the various strata of the earth itself. In the processes of the evolution of the earth. mountains have been worn down by erosion, and the resultant sand and dirt, combined with the decaying animal and vegetable matter, has been deposited in strata or layers all over the surface of the earth. Obviously, the further down you dig the older are the layers which you find. In some places on the earth these layers have been almost undisturbed since they were laid down. In others, they have been tilted and sometimes completely reversed, but scientists are able to determine which are the older strata by a careful study of the various sections where rivers have cut deep gorges, or where cracks have occurred owing to volcanic action. When I drive from my home in Pelham to my church on 110th Street and ride along Riverside Drive, I look across at the Palisades and notice very distinct strata of different colored rocks on the Jersey side, a daily demonstration of the evolution of the earth.

Now when we examine these layers in places where they have not been disturbed, we find evidences of animal life in many of the layers, and the further down we go, the simpler become the forms of life. It is possible by painstaking study to discover a genuine progression of forms from ancient simpler forms to the modern highly complex animal organisms. In other words, we find a gradual progression from lower types to higher types of animal life as we proceed from the lower to the higher strata. We also find that the animals and plants of the highest, that is the newest geologic strata, resemble most the animals and plants of the present day.

Another law which appears from examination of these strata is this: Very commonly we find a new group of animals appearing near the end of some geologic age during which changes of climate were taking place. That new group, as a rule, became the dominant group of the next period, evidently because it had become somewhat hardened to the changed conditions and was ready to meet the trials of the new environment. (This is well pointed out on page 70 in Dr. Newman's "Readings in Evolution," published by the University of Chicago Press, which is one of the most satisfactory books on the whole subject of Evolution.)

From these readily observable facts it is evident to a logical mind that the geologic strata furnish very worth-while testimony of the evolution of animal life on the earth. When we add to this the recently available observations of those who have discovered the buried remains of man himself in these various strata we have a strong argument for the evolution of man himself.

I presume you are more or less familiar with the fossil remains of ancient man. In post-glacial time, about 25,000 years ago, lived an interesting people called the Cro-Magnon race. Their skeletons have been found in Europe. Twice as long ago lived the Neanderthal Man. 150,000 years ago, approximately, lived the Piltdown Race. Approximately 375,000 years ago lived the Heidelberg man, and the earliest human remains found upon the earth are those of the Pithecanthropus or Apeman found in Java, and dated by scientists about half a million years ago.

All these races that I have mentioned have left fossil specimens. When we compare their anatomical structure we find a steady growth away from the ape-like form toward the present human skeleton. Doubtless many more specimens will be found in the next few years. We have only begun to discover the scattered remains of our very ancient ancestors, but we have discovered enough

already to indicate a number of so-called "missing links" between the earlier types and the present.

2. From Geographical Distribution (Geography)

When Charles Darwin went "rolling down to Rio," and saw the armadillo "a-dilloing in his arma," he found that the peculiar group of archaic mammals known as edentates, or toothless ones, including the armadillos, sloths, and ant-eaters, was practically confined to South America. When he found that the *fossil* edentates are also found only in South America, he had a very powerful argument for evolution. These fossil edentates resemble the existing specimens, but differ from them by having less developed forms.

It was evident to him, as it is to us, that the present armadillos are changed descendants of the ancient ones. It is very doubtful if any of these armadillos were driven into the ark by Noah, because South America was absolutely unknown at that time, and under the then current modes of transportation it would have been very difficult to get them to the eastern end of the Mediterranean. It is quite evident then, that, to use the words of A. R. Wallace, "all the existing forms of life have been derived from other forms by a natural process of descent with modification, and that this same process has been in action during past geologic time."

3. From the Similarity of Man to Other Animals (Comparative Anatomy)

The third argument for the evolution of man is from the similarity of man's body to those of other animals. Comparative anatomy reveals that not only the higher mammals, but the lower ones, even the reptiles and fishes, have many striking similarities of structure to the skeleton of the human animal. The counterparts of our various organs can be found among practically all quadrupeds. Our arms correspond to their front legs, and so on all through the body. If God had created man to walk erect why did he give him a body so similar to the animals, a body which has many parts which are of no use to him, and often are dangerous to his life.

4. From Pensioners or Relics in Man's Body (Anatomy)

There are many vestigial remnants in man like the vermiform appendix, the rudimentary tail at the end of the backbone called by anatomists the coccyx, the wisdom teeth, the third eyelid, the muscles for moving the ear, and many others. These all are atavistic relics of animal ancestors. They had a use once but that use no longer remains. None of these things are of any possible use to us now, and they are frequently the seat of trouble. Prof. Osborne has called them "pensioners,"—that is, they are now supported by an organism to which they were once of service.

The coccyx or skeleton tail alone proves man's connection with the monkey family. If you were to take an X-ray photograph of the lower end of Mr. Bryan's backbone, you would have proof enough of the falsity of his arguments. There are even four muscles for wagging the tail, revealed by every dissection of a human body.

We never use our wisdom teeth, but our animal ancestors, who cracked bones, did have use for them. We certainly cannot deny our relation to our animal ancestors; it is only a false pride which leads us to disavow the connection.

5. From the Disadvantages of the Upright Position (Physiology)

Man is frequently uncomfortable because of the fact that he has to walk continually upon his hind legs. His body is not adapted for that position; particularly among women this causes great discomfort, especially in the abdominal region. This is well-known among doctors, who find that many of their cases are due to abdominal displacements consequent upon the upright position.

Any one who has observed the difficulty which children have in learning to walk, and who has noticed the ease with which other animals, which are quadrupeds, learn to walk within a few hours or days after birth, easily realizes that the upright position is not natural to man.

The fact that the arch of the foot so often breaks down is an indication that man was not originally intended to walk erect. The fact that man is forced by eye strain to wear spectacles, and that in sleep or after death the eyeballs tend to roll upward, is an indication that the eye has not yet accommodated itself to its comparatively new position. The form of rupture called "inguinal hernia" is due to pressure of the intestines on one of the veins in the abdomen. Quadrupeds do not have this derangement. It is entirely due to the upright position.

All these difficulties and others which might be mentioned are due to the fact that the upright position is still unnatural to us. This is one of the reasons why you seldom find a practicing physician who does not believe in evolution.

6. From Pre-Natal Life (Embryology)

The human embryo-foetus, the unborn child, passes through all stages of animal evolution from a primitive one-celled form, up through fishes, reptiles, and early mammals to man. Every doctor knows this fact, and many of them have in their possession preserved specimens of prematurely born human embryos which prove the theory of the evolution of the individual. At one stage the embryo has gill-slits; at another stage, a tail longer than its hind-legs, and at the sixth month, hair all over its body. Even after birth the human animal

exhibits certain simian characteristics, like tenacity of grip and inturned foot-soles.

Many a proud father has told me how strong his newly born infant was, how the child would grip his father's outstretched fingers and remain suspended for a full minute or longer. And every mother knows how the baby's legs and feet look startlingly like a monkey's when the child first begins to sit erect.

The evolution of each individual from a tiny cell through more and more complex and specialized forms up at last to man certainly shows the possibility of the race having come that way. Scientists tell us that each individual lives over again, recapitulates, the life of the race, so that each one of us, in his own biological development is an argument for the evolutionary process. Certainly if the individual evolves from a tiny cell, one one-hundred and twentieth of an inch in diameter, hardly visible to the naked eye, there is no real physical difficulty in the race having thus evolved. The study of embryology, therefore, contributes to the belief that man came by evolution.

7. From Creative Evolution As Practised by Scientists Today

New species of insects and plants have been produced by such scientists as the Morgan School and Luther Burbank. The spineless cactus and the loganberry are really new species. Experimentation with the drosophila, or fruit-flies, has, by changing and controlling the environment and food, produced more than fifty new species. Here we have evolution of plant and animal life going on right before our eyes.

8. From Blood Tests (Chemistry)

The chemical researches of Dr. George H. F. Nuttall of the University of California, and Professors Reichert

and Brown of the University of Pennsylvania have definitely proved man's blood relationship to the lower animals. Not only this, but the proportional relationship can be indicated almost to a mathematical exactness. Still further, the relation of the various types of animals to each other can be determined by the experiments with de-fibrinated human blood and the oxyhemoglobin crystals of the blood.

Because of all these scientific facts which we have deduced, for these eight reasons, we maintain that man's body has evolved from primitive life on the earth. Between the creation account in Genesis and the general theory of evolution, the probability is overwhelmingly on the side of the latter. Evolution best accounts for the known facts, especially recently ascertained ones. Furthermore, since Evolution gave the clue, there has been such a rapid growth of science that it has progressed and produced beneficial results more in the last few years than in the previous history of mankind. As President McMurrich, of the American Association for the Advancement of Science, said recently, "All through the almost overwhelming flood of new knowledge there runs the guiding clue supplied by the doctrine of evolution. That has been the stimulus and dominating idea in all these studies; without it many, very many of them would never have been conceived and knowledge would have lost thereby."

THE EVOLUTION OF MIND AND SOUL

You may have noticed that my arguments for the evolution of man have all been confined to proofs of the evolution of man's body, and you may be saying, "But how about his mind and soul?" May I remind you all, and call it especially to the attention of the judges, that inasmuch as man's mind and soul (whatever definitions we may give for mind and soul, and whether these be natural or supernatural phenomena), have never been

proved to exist apart from his body, it is not necessary for me to prove that they have come by evolution. My thesis, if you have agreed with me thus far, is therefore already proved.

But both the mind and soul of man have evolved. It is only necessary for me to call your attention to the earlier primitive theory of the origin of life and the present-day doctrine of Evolution to show the evolution of man's mind itself.

The earliest historic records we have and the comparative studies made of primitive races now existing show that man's mind was originally very simple and closely allied in its general processes to the mind of the animals. Indeed, it is hard to draw the line between an intelligent animal and a lower type of man in respect to the power of their minds.

As for man's soul, or his spiritual nature, we have only to compare the primitive religions, full of myths and queer fancies, with the developed religions of today, to be assured that just as man's body has developed, so has his mind and soul. The evolution of man's mind and soul, which a study of the human race reveals, is paralleled in the development of the individual: At first, a child has a very simple mental equipment which rapidly grows until he reaches his maturity. The religion of a child is very similar to the religion of the early races. At first he believes in myths and magic, and then reaches the Ten Commandment stage, from which, if his development be normal, he reaches the higher types of religious faith.

THE SO-CALLED "GAPS" IN EVOLUTION

Now as we view the whole drama of evolution there appear certain gaps which trouble some who otherwise are inclined to believe in the evolutionary process. They see evidences of the evolution of the earth once it got

started. They see evidences of the animal life on the earth once that got under way. They see evidences of the evolution of man, once he was separated from the animals, but just how the earth started and how animate life started on the inanimate planet, and how thinking reasoning man with a spiritual life developed from the animals, they cannot quite understand. Consequently there are many people who are semi-evolutionists and who believe that at these gaps or crises in the evolution of the earth and the life upon it, including man, some supernatural person must have stepped in. They think some creator made the earth in the first instance, that he introduced life upon the earth and that when that life evolved to a point where the animals might become man, then he inserted his hand in the machinery again and in some way put a soul into man. In other words, these people believe in a natural order of things except for certain appearances of the supernatural. But that is because these people still retain a belief in a transcendent God, a sort of absentee Lord of the Universe, who was not quite great enough to make a universe that would run itself, so he was obliged occasionally to insert his hand or his power and by a miracle add something vital.

Now, my idea of God is that he is a supremely powerful being—a personal force, not in personal form, who operates through natural laws. I believe that every event in nature occurs and has occurred by natural law.

I believe that at no time has a transcendent God interfered with the universe, but that God has been immanent in the evolutionary processes from the very beginning; that every upthrust of this life force has been a manifestation of God; that you and I are manifestations of God, rather imperfect to be sure, but progressing toward better things.

God is, and always has been, immanent in the universe.

He was existent in the spiral nebulae from which this earth was formed. He was existent in the matter which gradually cooled and which formed until this earth became more like what it is now. He was immanent in the dust and slime in the early stages. He was immanent in the first forms of animate life which came directly from the inanimate matter which existed before. He was immanent in every reaching upward of the earlier forms of life. He was immanent when our last animal ancestor became gradually conscious of himself and of his difference from the beasts which had preceded him.

God has been present at every progressive development of mankind since that day. There is nothing supernatural about it. It is all natural. No miracles have occurred unless all matter and life are miraculous.

I cannot believe in creation unless that creation is absolutely continuous, and if so, it becomes evolution. I maintain that the earth and all life upon it, and man himself, have all come by constant, progressive change according to certain laws and by means of resident forces, and I would include in these resident forces the life spirit, God, himself.

Evolution is not only not against God: it is our best evidence of Him. A wonderfully beautiful poem by the Unitarian Dr. William Herbert Carruth expresses the thought of God in Evolution:

"A fire-mist and a planet,
A crystal and a cell,
A jelly-fish and a saurian,
And caves where the cave-men dwell.
Then a glimpse of law and beauty
And a face turned from the sod:—
Some call it Evolution
And others call it God."

IN THE NEGATIVE*

There are but two notable theories concerning the origin of the earth and of man—one is creation by a living God; the other is evolution by dead force.

Evolution is not a fact of science, but a dogma of philosophy. Both its history and its essential nature prove that it belongs primarily to the realm of subjective speculation and not to the field of demonstrated fact. Even Professor Conklin, of Princeton, while declaring his acceptance of the theory of evolution, nevertheless says that "evolution must ever remain a theory." ("The Direction of Human Evolution"—preface.) Now a mere "theory" cannot be a science. Hence the term "the science of evolution" is a misnomer, and evolution should not seek to gain vogue by running on the prestige and popularity of the exact sciences.

Those of us who deny the theory of evolution, therefore, have no antagonism to true science. We only object to having that which is merely an hypothesis proclaimed dogmatically as though it were really fact. So far as I am personally concerned I am ready to accept evolution if it can really be proved true. Every man ought to be willing to accept truth from any quarter, however destructive it may be of former convictions. It is significant, however, that many who at first are fascinated by the plausible generalizations of evolution, turn from it after

^{*} First speech for the negative by Rev. John Roach Straton, D.D., Pastor, Calvary Baptist Church, New York.

fuller examination of its alleged evidence and more mature consideration of its claims.

The great scientist, Prof. George Romanes, of Oxford, had such an experience. For a period in his life he was an infidel and extreme evolutionist; and it is highly significant that during that time he wrote and spoke strongly against the Bible teaching of Creation, and against supernaturalism in all its forms. But later in life, through the letters of a Japanese missionary friend, dealing with experimental and practical religion, he changed his views entirely, accepted the Bible, and died in 1894, confessing his faith in God and in the full Diety of Jesus Christ. ("The Other Side of Evolution," p. 109.)

I, also, have had a similar experience. For quite a period of my life—extending into a part of the time that I have been a preacher—I was an evolutionist; or at least I thought that I was, and accepted that view of the universe and of man; but fuller study, both in the field of science and philosophy, not only convinced me that evolution is a colossal error, but that when logically followed out, it is utterly incompatible with the Christian religion.

My honorable opponent, before the first debate of this series, remarked that he had some advantage over me because before he became a Unitarian he was a Baptist, and therefore he thought he knew about what my arguments would be in the debate on the Bible.

I now profess the same advantage over him. I was once an evolutionist and sceptic, but I have come back to the truth of Creation by a living God rather than evolution by blind chance. Therefore, I can speak with a deeper degree of conviction than if I had not passed through such an experience. We have agreed to accept LeConte's concise definition, namely that evolution is "continuous progressive change, according to fixed laws, and by resident forces." We have the privilege, however,

of turning the light of other and fuller definitions from authoritative sources upon the question, that we may see clearly just what evolution really is and what it leads to.

ANTI-GOD AND ANTI-BIBLE

It is highly significant that the idea of evolution originated in pagan and heathen minds and was not a native product of the Christian intellect. The Greek philosophers speculated about the origin of the world in a fire mist, and Aristotle developed some of the main ideas of evolution long before Lamarck or Darwin or Spencer lived.

The Century Dictionary and Encyclopedia defines evolution in mechanical terms and as "opposed to creationism."

Huxley specifically declared: "It is clear that the doctrine of evolution is directly antagonistic to that of creation—as applied to the creation of the world as a whole, it is opposed to that of direct creative volition. Evolution, if consistently accepted, makes it impossible to believe the Bible."

Huxley's discussions with Gladstone and others were all based on the idea that the theory of evolution was incompatible with the Bible and the God of the Bible.

Sir Oliver Lodge says:

"Taught by science, we learn that there has been no fall of man; there has been a rise. Through an ape-like ancestry, back through a tadpole and fish-like ancestry, away to the early beginnings of life, the origin of man is being traced." ("Ideals of Science and Faith.")

In his article on evolution in the Encyclopedia Britannica, Professor James Sulley defines evolution as a "natural history of the cosmos, including organic beings, expressed in physical terms as a mechanical process." Lamarck, Darwin, Spencer and the more recent evolutionists, even those who try to hold on to faith in some

sort of God while still holding to these theories, all define evolution in purely mechanical terms which really, of necessity, exclude God. And Darwin lost his faith in a

living God through these evolutionary ideas.

Ernst Haeckel, the most logical, consistent and thoroughgoing of modern evolutionists, the only legitimate successor to Darwin's place and greatness, argued that evolution could completely dispense with the supernatural in any form and with any sort of personal interposition.

He explicitly denied the existence of a living God.

He said:

"This notion [of a personal God or creator] is rendered quite untenable by the advancements of Monistic science. It is already antiquated and is destined before the present century is ended to drop out of currency." ("Christianity and Anti-Christianity," p. 189.)

Another frank evolutionist, Carl Vogt, says:

"Evolution turns the Creator out of doors."

PANTHEISM AND MAN-WORSHIP

My opponent, therefore, cannot claim God as the "resident force" under our definition, as he tried to do, unless, indeed, he is willing to admit himself a Pantheist, and say that God is wholly locked up in nature. If we admit any god outside of nature, then we must say with Genesis: "In the beginning, God." A living God, therefore, must be before the material world which He made. Hence, He cannot be wholly in that material world. A living God must be transcendent as well as immanent. He is before and above the world, and yet in it through His providential control and directing care. The engineer cannot be in his engine. He is the maker and driver of the engine, and his skill and controlling power are in it, but the engineer himself cannot be in the fire and the steam that drive the engine. The idea of any sort of "spirit" or living God locked up in the earth as it passed

through stages of gaseous nebulosity and then of molten fire, etc., is simply unthinkable. It is an absurdity. The only possible god of evolution is the god of Pantheism, not a *living* being at all, but merely the "principle" or "law" of nature.

Now since the only god possible to evolution is Pantheism—god in nature as a mere "principle" or "law" or "eternal energy," as Spencer put it—it is proper that we should point out that Pantheism always has and always will lead to ruinous moral and social results when it is accepted by men.

For one thing, it leads to the worship of nature—principally the sun. And the awful immorality and the social decay of ancient Egypt, and other countries through the worship of the sun and of nature, should be a sufficient warning to us. Another inevitable and immediate result of Pantheism is that it leads to the deification of man, and hence to self-worship, with all the vanity and moral and social decay that inevitably follow such colossal error.

Therefore, the issue in this debate is not only an issue between creation and evolution, but between God and no God.

NO "THEISTIC" OR "CHRISTIAN" EVOLUTION

Furthermore, it is evident that there is no possible compromise between these two systems of thought. There is no middle ground. Either creation is true and evolution is false, or else evolution is true and creation is false. Either we must accept the revelation of a living God, and His creative and redemptive activities as given in the Bible, or we must utterly reject this and turn to the infidel philosophy of chance and materialism.

In other words, there is no such thing as so-called "theistic" or "Christian" evolution. Such terms are misnomers. Christianity is a religion founded on definite

historical facts. These facts—including the creation of the world, and the creation, fall and salvation of man—are recorded in the Bible. If, therefore, the Bible is rejected, Christianity itself is rejected. In the face of the essential nature of evolution, and in the light of definitions of it already given, the terms "Christianity" and "evolution" are mutually exclusive and self-contradictory. If it is Christianity, then it is not evolution; and if it is evolution, then it is not Christianity. The mixed teachings of such men as Henry Drummond, Lyman Abbott, and others, prove that they did not think these evolutionary theories through to their logical and inevitable conclusion in unbelief. Such men either do not know what real Christianity is, or else they do not know what real evolution is. They are manifestly self-deceived if they try to hold on to both evolution and Christianity.

THE QUESTION FOR DEBATE

The question for debate is, "Resolved, That the Earth and Man Came by Evolution." There are two parts in this resolution. The first relates to the origin of the earth and the second relates to the origin of man. The subject, therefore, involves first a consideration of inorganic evolution, or the alleged evolution of matter until it reached its present form in our earth; and the second, the question of organic evolution, with its alleged origin of life upon this planet, through materialistic natural forces, culminating in the coming of man.

My opponent is championing the affirmative in this debate, and because of the fact that he is seeking to establish a theory which is exactly contrary to the Revelation upon which Christendom has founded its life and institutions for thousands of years, the burden of proof is upon him. He must prove two things: first, that the earth originated or "came" by evolution; and, secondly, that man originated or "came" by evolution. He must

establish these two propositions by facts that are intelligible and convincing to the reasonable mind, and these facts must come in the form of credible evidence, and not mere supposition, guesses or hypotheses. Unless he can establish both of these propositions by facts, then he has lost the debate. My task in the debate is merely to point out the impossibility of his so doing, and to show that there is a far clearer and simpler way to account for the origin of the earth and man than by so-called evolution.

The question for debate is not, therefore, primarily a question of method. It is primarily a question of origins. Method cannot begin to work until something has originated for the method to work in or on. Hence a beginning must precede any evolution. The very name of such a book as Darwin's "Origin of Species" shows that. The real issue in the debate is whether the earth and man originated, or came, by design through the creative power of God, or by chance through the haphazard operation of evolution. It is the issue between naturalism and supernaturalism; between calculated planning and mere fortuitous circumstance.

It is to be clearly noted that there is a difference between evolution and development. The principle of development in human life, social institutions, and even animals under man's selective skill, is freely admitted. It is in this sense that the word evolution is often used by newspaper editors, speakers, magazine writers, etc. But this is radically different from evolution in the technical and scientific sense in which we are to consider it in this debate. In the technical sense it must be restricted to the alleged origin of matter and life through mechanical forces and without divine creative power; and, after such origin, the descent of all inorganic matter and all organic life from their simple primitive origins.

I ask the careful attention, then, of the judges and

the audience to the exact form of the question for debate, and the full content of the definition of evolution upon which my opponent and I have agreed. The question is "Resolved, That the Earth and Man Came—that is, Originated—by Evolution." The definition is that of the geologist LeConte, that evolution is "continuous progressive change; according to fixed laws; by resident forces." This means that evolution is (1) "continuous progressive change"; that is to say, its operation must be going on progressively now just as it is alleged it has always gone on in the past; (2) "according to fixed laws"; that is, there can be no change in the controlling laws and principles; evolution cannot be one thing in a former age and another thing today; and (3) "by resident forces"; that is, there can be no outside interference—all must come from within, however great the modifications and changes in outward forms may appear.

And, since it is claimed that evolution is a universal law that accounts for all things, and that it is operative everywhere, there ought to be an abundance of facts on all sides to prove it if it is really true. But when we turn to look for the facts, we find, strange to say, that

they are simply not there.

PART ONE

How the Earth Came

Let us take up first, then, the question of the origin of the earth. Notice, to begin with, that the scientists frankly admit that they do not know and therefore cannot tell us how the earth originated. Darwin himself said, positively, "The beginning of the universe is an unsolvable mystery." Notice that he admitted that it was not only a mystery, but an unsolvable mystery. Tyndal declared: "Evolution does not profess to solve the ultimate mystery of the universe." Prof. Clifford states it still more bluntly. He says: "Of the beginning of the

universe, we know nothing at all." Prof. Edward Clodd says: "Of the beginning, of what was before the present state of things, we know nothing and speculation is futile; but since everything points to the finite duration of the present creation, we must make a start somewhere" ("Story of Creation," p. 137).

But when we enter the so-called scientific field we are plunged immediately into a morass of speculations, hypotheses and guesses about alleged facts, on which no two of the scientists agree among themselves.

THE SLIPS OF SCIENTISTS VS. THE "MISTAKES OF MOSES"

My opponent, in our last debate, pointed out some alleged contradictions and supposed mistakes in the Bible. I wish now to point out some of the blunders of science.

For instance, the temperature of the interior of the earth is stated to be 1,530 degrees by one scientist, and 350,000 degrees by another! Herschel calculated the mountains on the moon to be half a mile high, but Ferguson said they were fifteen miles high. Lyell estimated that it had required over 35,000 years for the Niagara River to eat back to the present position of the falls, but he was later cut down to some 7,000 years. Lyell also calculated that the delta at the mouth of the Mississippi River had been 100,000 years in forming, but General Humphrey, of the U. S. Survey, estimated it at only 4,000 years.

Glance now at the startling variations in scientific guesses concerning the probable age of man. Myers says that the Old Stone Age of man is to be measured not by thousands but by millions of years. M. Rutot says the relics of man which have been found date back to 139,000 years ago. Osborn places the first real man 500,000 years ago; James Geikie, 200,000; Croll, 980,000; Sturge, 700,000; Townsend, 6,000; while Prof. LeConte

says: "The time which elapsed since man first appeared is still doubtful; some estimate it at more than 100,000 years, and some say 10,000." All the way from "millions" to 6,000 years! Well! well!

And when it comes to the question of the age of the earth, there is a variety and liberality of estimates, and a prodigal waste of ciphers, that fairly stagger the mind. No two of the scientists agree, even in their guesses, and when their estimates are brought side by side there is such a wide difference that the comparison becomes positively laughable. Prof. Ramsay, for example, estimated the age of our earth at fully 10,000 million years. Sir Charles Lyell estimated it at four hundred million years. Charles Darwin said that it was more than three hundred million years. Dr. Croll, in his book on "Stellar Evolution," said that "at most it was twenty millions of years," while Prof. Tait, in his "Recent Advances in Physical Science," said that the age of the earth is "at most ten million years." Now, my friends, here is a little discrepancy between the highest and lowest estimates of nine thousand nine hundred and ninety millions of years! Well, that is a right considerable slice of time, we must all admit.

When we hear people say, therefore: "I would believe the Bible if it agreed with science," we have to ask: "What science?" How can the Bible possibly agree with both Professor Ramsay and Professor Tait, or with both Darwin or Lyell, when they themselves are millenniums apart?

I quote these figures not in a spirit of levity nor because I am lacking in respect for true science, when it stays in its appointed field and remains on solid ground, but I merely give these figures to show that the scientists really know nothing about the origin of the world, its age, or how it came into existence.

SOME SCIENTIFIC GUESSES

But as Prof. Clodd says, the scientists and philosophers must make a start somewhere. Not having any real facts and no true knowledge, when they turn from revelation, they are driven to guesswork.

As I have anticipated my opponent's argument in its main points in preparation for the debate, I will take up in passing some of the points he made, reserving a consideration of other points for my rebuttal. This will be an economy of time, and as the main lines of alleged evidences for evolution are comparatively narrow, it is really necessary to handle the matter in this fashion.

I congratulate my opponent on the presentation he has made of his side of the question. To have such a weak case, he has done well.

Let us take up, then, some of the guesses which the scientists have made in their effort to account for the origin of the earth on a materialistic basis.

We will consider, first, the so-called "nebular hypothesis," which is the main effort that the mind of man has made to account for the beginning of the earth on naturalistic grounds. In this connection, my opponent referred to some of the spiral nebulæ which have been observed by astronomers. I only say in passing that astronomers differ widely among themselves as to just what these spiral nebulæ are, and as to their real significance. Certainly, they have no direct connection with the proposition that our earth originated in a mass of nebulous matter that threw off portions of itself which became the planets with their satellites, etc. All of this is not only a mere guess, as the very term "nebular hypothesis" proves, but it must be admitted when the simplest facts are known that it is a bad guess. It is founded upon a series of assumptions so gigantic that they stagger the rational mind of man and stretch human credulity to the very breaking point.

No two scientists agree about it. Tyndal says that the world began in a "fire mist" that contracted as it became cold; but Spencer says it was a cold cloud which became heated as it contracted! Which shall we believe? Well, we cannot believe either if we follow true scientific experience, for the gases (or fire mists) that we know anything about do not act in either of those ways today. Further, there are now facts sufficient to throw the "nebular hypothesis" entirely out of court.

The simple fact that some of the bodies in our solar system, as, for example, our own moon and the satellites of Jupiter and Saturn, revolve from west to east, while the moons of Uranus and Neptune revolve from east to west, explodes the theory that the bodies in our solar system were thrown off and set revolving by some central, revolving parent mass of matter, for in that event they would all of necessity have to revolve in the same direction.

Furthermore, it must be self-evident that if the bodies of matter in our solar system were all thrown off, revolving rapidly, from a revolving mass of "parent matter," they would all naturally revolve with at least something like the same approximate speed, due regard of course being had to size. But this reasonable expectation is not met. Two of the eight principal planets in our solar system—namely, Mercury and Venus—have almost no rotation at all. Both of them move around the sun with the same side practically always toward that central object, just in the same way that our moon moves around the earth. Mercury occupies 88 days in its orbit and Venus 224 days in its orbit. Mercury only turns upon its axis four times in a year, while Venus is slower still, and takes seven or eight months to make one complete rotation.

Yet, despite these facts, the evolutionists—and especially the popular writers of today who, through their

"Outlines of History," "Outlines of Science," "Stories of Mankind," "Stories of the Bible," etc., are so profoundly influencing our children with their skepticism—build their entire structure upon this impossible "nebular hypothesis" in some one of its numerous forms.

GUESSER USED DOGMATICALLY

Take, for example, Wells, in his book, "The Outline of History." Wells builds the entire framework of his book upon the nebular hypothesis as a beginning, and then he goes on, in the accepted fashion of evolutionists, to account for the origin of the earth, the beginning of life, etc., and then gives his sketchy outline of human history, and bases his skepticism and also his dangerous socialism on this foundation. On the very first page of his book, Wells speaks of the sun. He says that "it is a mass of flaming matter," and then on page three he gives his version of the nebular hypothesis and the origin of our earth. I call attention to the dogmatic tone of his assertions. Accepting the conclusion of the "scientists" to whom he refers, he says:

"Vast ages ago the sun was a spinning, flaring mass of matter, not yet concentrated into a compact center of heat and light, considerably larger than it is now, and spinning very much faster, and that as it whirled a series of fragments detached themselves from it and became the planets. Our earth is one of the planets."

So there we have it. One is moved to inquire, but how does Mr. Wells know all this? He speaks with such cocksureness that we might well imagine that he was present and observed these remarkable gyrations of the sun, and the striking origin of our earth, which he so emphatically and dogmatically asserts. One is inclined to apply to Mr. Wells the questions the Almighty asked Job:

"Who is this that darkeneth counsel by words without knowledge? Gird up now thy loins like a man; for I will

demand of thee, and answer thou me. Where wast thou when I laid the foundations of the earth? . . . When the morning stars sang together, and all the sons of God shouted for joy? Hast thou commanded the morning since thy days; and caused the dayspring to know his place? Knowest thou by what way is the light parted? Canst thou bind the sweet influences of Pleiades, or loose the bands of Orion? Hast thou an arm like God? or canst thou thunder with a voice like Him?"

And because of the intellectual pride and cock-sureness of some so-called "scholars" today, we greatly fear that Mr. Wells would not answer, as Job did, and say to God:

"I know that Thou canst do everything, and that no thought can be withholden from Thee. Wherefore I abhor

Myself, and repent in dust and ashes."

Now as to Mr. Wells' assertion, and the teaching of other evolutionists, that the sun is "a mass of flaming matter" and that our earth came from it, I wish to say that the latest scientific thought has reached the conclusion that the sun is not a mass of flaming matter at all. It is now believed that the sun is simply a gigantic center of electrical energy. Professor R. A. Milliken, winner of the Nobel prize, for example, late of the University of Chicago and now doing such a wonderful work in the West, is one of the greatest living authorities on radio activity. He asserts that real scientists long ago gave up the idea that the sun is a white-hot body engaged in cooling off. He says that the scientists have good evidence that the sun has existed much longer than such a process could possibly take. The assumption that heat waves could travel from any fire, however large, across 93 million miles of frozen space is impossible on the face of it. The new theory therefore, is that the sun is not "a mass of flaming matter" at all, but that it is simply a center of electrical energy-a great electro-magnetic field. The power of radio active matter, as these scientists point out. is indicated by the fact that, while radium is in the

process of disintegrating into lead it gives off 300,000 times as much heat as a piece of coal gives off in burning up. The scientists, therefore, are now arguing that the light and the heat that come to us from the sun are both electrical.

Therefore, the hypothesis that the sun, as the nebular, or parent mass of matter, threw off the earth and the other planets, breaks down completely.

THE PLANETESIMAL THEORY

Other hypotheses to account for the origin of the earth are just as unsatisfactory as the nebular hypothesis. My opponent did not touch upon the other theories, but as he may do so in his second speech, I anticipate him here. Perhaps the most popular theory, after the nebular hypothesis, is what is called "the planetesimal theory." Prof. Osborn seems to pin his faith to this particular theory. He says:

"According to the planetesimal theory as set forth by Chamberlain, the earth, instead of consisting of a primitive molten globe, as postulated by the old nebular hypothesis of Laplace, originated in a nebulous knot of solid matter as a nucleus of growth, which was fed by the infall or accretion of scattered nebulous matter (planetesimals) coming within the sphere of control of this knot." ("The Origin and Evolution of Life," p. 25.)

So, according to this, we started in a *knot* that had other matter dumped upon it, instead of a rotating ball of gas! We were created by a bombardment instead of a whirligig!

Well, we remark in passing, that the old earth is certainly tied up in a knot now, and all the gas—whether hot or cold, of statesmen, scientists, philosophers and debating preachers does not seem able to untie it!

But notice that this "planetesimal theory" is open to just as many fatal objections as the other nebular hypothesis. For one thing it is nothing but a guess.

For another thing, there is absolutely no explanation of how this solid "knot of matter" got there, and that is the question in this debate. Nor can this theory adequately account for the spherical form of the earth, or other vital phenomena—so we may just dismiss it as an incompetent witness, with the thanks of the court.

CHANCE VS. GOD

All of these theories try to substitute blind force or mere chance for the creative power of a living God, and I confidently submit that it is irrational so to do. It has been calculated, for example, that if the twenty-six letters of the alphabet were thrown about promiscuously by chance force, they might fall together in the present order of the alphabet—A-B-C-etc., once in five hundred million, million, million times that they were thus tossed up and allowed to fall by chance.

What then would be the probability of the countless combinations of nature coming together in the wonderful order of our earth if they had depended on the chance happenings to which evolution has to attribute them?

Not only is it true that scientific and philosophical speculation have not and cannot account for the origin of matter and force or energy, in our earth, but it is also true that there is no real knowledge concerning even the nature of matter and energy. The old "atomic theory," that matter is composed of minute indivisible particles, called "atoms" has had to be abandoned because the discovery of radio-activity and other facts about electricity seem to prove that the ultimate division of matter is not a solid particle, or "atom" at all, but rather a minute center of electrical energy, now called the "electron." The "electron" has simply crowded the "atom" off the stage! Therefore, the origin of the earth as a mass of matter is not only still an unsolved mystery, so far as science is concerned, but the origin and true nature of the

simplest component parts that make up matter are now confessed to be a greater mystery than ever before.

Because of the established laws of the indestructibility of matter and the conservation of energy, it is now known that the quantity of both matter and energy in the world is fixed. No means are known to science by which either matter or energy can be either increased or diminished.

Now, since the accepted definition of evolution is that it is "continuous progressive change," we would have to expect the continued origination of both matter and energy by the "fixed law" of evolution today just as it is alleged to have produced them in the past. Since no such thing is going on, but, on the other hand, since it is known that the quantity of both matter and energy are not now being increased, therefore evolution with its "continuous progressive change," must be abandoned, and we are driven, of necessity, back to the truth that the matter and energy now in the world came in the beginning by creation.

Furthermore, since it is admitted that the earth had a beginning, unless, we accept the fact of God as the Creator in that beginning, then we are driven to the absurdity of thought that nothing made something out of nothing.

PART Two

How Man Came

Coming, now, to the question of how man came, I remark merely that over against the evolutionary hypothesis is the plain statement of the Bible that "God created man in His own image."

That we may get a contrast between the two ideas of the origin and nature of man, I wish to give you first the picture of the Bible Adam and then the picture of the scientific Adam. I give you first the condensed Bible account as follows:

"And God said, let us make man in our image, after our likeness. . . . God created man in his own image, in the image of God created he him; male and female created He them. . . . The Lord God formed man of the dust of the ground and breathed into his nostrils the breath of life and man became a living soul. . . . God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it; and have dominion. And the Lord God took the man, and put him into the garden of Eden to dress it and to keep it." (Gen. 1:26, 27; 11,7,15.) There it is,—all beautiful, inspiring and ennobling.

Here, now, is the evolutionists' account, as stated by Darwin:

"Man is descended from a hairy quadruped, furnished with a tail and pointed ears, probably arboreal in its habits and an inhabitant of the Old World. This creature, if its whole structure had been examined by a naturalist, would have been classed among the Quadrumana, as surely as would the common and still more ancient progenitor of the Old and New World monkeys. The Quadrumana and all the higher mammals are probably derived from an ancient marsupial animal, and this through a long line of diversified forms, either from some reptile-like, or some amphibion-like creature, and this again from some fish-like animal." (Darwin's "Descent of Man," ii, 372.)

Professor Edward Clodd, in his book, "The Making of a Man" (page 126), goes a step further than Darwin and tells us that this creature was changed from an ape into a man largely by learning to throw things with his front feet. I am not exaggerating it one whit, and Professor Clodd is not writing in any humorous vein. He is most serious when he speaks of our arboreal ancestor. Hear him:

"While some for awhile remained arboreal in their habits, never moving easily on the ground, although making some approach to upright motion, as seen in the shambling gait of the man like apes others developed a way of walking on their hind legs which entirely set free the fore limbs as organs of handling and throwing. Whatever were the conditions which permitted this, the advantage which it gives is obvious. It was the making of a man" (page 126).

So we were made, not by God as Genesis says, but by learning to throw things with our front feet.

A "CLOSE-UP" OF THE SCIENTIFIC "ADAM"

Let us see, now, a yet fuller description of this our illustrious first father; a "close-up" as the movie people would say. Professor Morris gives us a full detailed description of this unseen, yet seemingly well-known ancestor, in his book on "The Destiny of Man" (page 55). He says:

"It was probably much smaller than existing man, little if any more than four feet in height, and not more than half the weight of man. Its body was covered, though not profusely, with hair; the hair of the head being wooly or frizzly in texture and the face provided with a beard. The face was not jet black, like a typical African, but of a dull brown color; the hair being somewhat similar in color. The arms were long and lank, the back being much curved, the chest flat and narrow, the abdomen protruding, the legs rather short and bowed, the walk a waddling motion somewhat like that of the gibbon. It had deep-set eyes, greatly protruding mouth with gaping lips, huge ears and general 'ape-like' aspect."

Now, remember my friends this is not from "Puck" or "Judge" but from the pages of a supposedly serious book. Professor Morris speaks with such confidence, and gives us withal, such a detailed description of this Adam of science that we really ought, I suppose, to feel indebted to him. And yet, despite the fact that even the color of this creature's hair and the set of his eyes is given to us, strange to say, neither Professor Morris nor any other man was there to see him, for he was the father of us all!

And it was this beast that was "The image of God" and to which God imparted His spirit, if we are to believe the "theistic evolutionists." Yes this strange creature was the Adam of "theistic evolution." And this creature, described by Darwin, Morris, and others, is the one who, according to "theistic evolution," fell. But, let us inquire. from what did he fall? It is certainly difficult to conceive of such a monster falling. With his protruding abdomen, his bowed legs, and his thick sensuous lips, it would seem that he was about as low as any creature could get without any further fall. A thing has to be at some elevation before it can fall, but how did this awful creature, who had had no elevation, fall?

A SCIENTIFIC GENEALOGY

This, too, is the creature which, according to "theistic evolution," is a type of Christ, who is "the second Adam," and through whom Christ's lineage is traced back to God himself. Listen then to the genealogy of Christ, as given by the Bible, and then by evolution. The genealogy of Mary the mother of Jesus runs along in its close as follows:

"Which was the son of Noah, which was the son of Lamech, which was the son of Mathusala, which was the son of Enoch, which was the son of Jared, which was the son of Maleleel, which was the son of Enos, which was the son of Seth, which was the son of Adam, which was the son of God" (Luke 3:36-38).

But the "theistic evolutionists" genealogy would have to run along as follows:

"Which was the son of Enos, which was the son of Seth, which was the son of Adam, which was the son of an apelike beast, which was the son of a reptile, which was the son of a fish, which was the son of a protoplasm, which was the son of a chemico-electrical reaction, which was the son of God."

Yes, that is about how the Adam of "theistic evolu-

tion" got here. And, as for Eve, why they say nothing at all about her. Will the women of today stand for that? Some women have complained about the "Eve" of the Bible, but evolution simply ignores woman all together; it does not dignify her by giving us any account of her origin whatsoever. It is always the "apeman" who is pictured. Now a woman can stand a reasonable amount of criticism, but to be utterly ignored usually makes her furious. How will the women, then, vote in this matter of evolution?

THE ADMISSIONS OF SCIENTISTS

Unless the Bible account of the creation of man is true, then, as in the case of the origin of our earth, we know absolutely nothing about the way in which man appeared upon this planet. The gap between dead matter and sentient life has never been bridged except by guesses. Sir William Thompson argued that life came to this planet on a meteor. It just rode in on a free ticket. This, I suppose, we ought to call the "Shenandoah" or "Dixmude theory."

I wish to quote from the scientists and philosophers themselves explicit admissions that they really know nothing about the origin of life. The great philosopher Kant said:

"Give me matter, and I will explain the formation of the world; but give me matter *only* and I cannot explain the formation of even a caterpillar."

Huxley says: "Of the causes which led to the origin of living matter, it may be said that we know absolutely nothing." Huxley, further, in his article on biology in the Encyclopedia Britannica, says: "The chasm between the not living and the living, the present state of knowledge cannot bridge." Herbert Spencer, in his work on biology (Vol. I, page 182), says: "The proximate chemical principles or chemical units—albumen, fibrine,

gelatine, or the hypothetical protein substances—cannot possess the property of forming the endlessly varied structures of animal forms." And Charles Darwin himself admitted that "spontaneous generation" was an impossibility of thought.

And now, to bring these admissions of scientists that they really know nothing about the origin of life strictly up to date, I wish to quote from Professor Edward Clodd. Professor Clodd is an evolutionist of recognized standing, yet he says:

"The absence of facts forces us to confine ourselves largely to suggestions and probabilities" ("Making of a Man," page 188).

I wish also to quote from Prof. Henry Fairfield Osborn, one of the most aggressive and prominent proponents of the evolutionary idea in America today. As we all know, he is at the head of the American Museum of Natural History. His admissions, therefore, that the scientists really know nothing about the origin of life must be considered final and indisputable. Listen, now, to what he says in perhaps his greatest book, "The Origin and Evolution of Life." He says, on page 67:

"The mode of the origin of life is a matter of pure speculation in which we have as yet little observation or uniformitarian reasoning to guide us, for all the experiments of Butschli and others to imitate the original life process have proved fruitless."

He then puts forward what he himself calls "five hypotheses" in regard to the origin of life, but all of this, note, he himself admits is "a matter of pure speculation." In other words, it really proves nothing. It only proves, I submit, that evolution belongs, as I said in the beginning, to the realm of subjective speculation and not the field of established facts. Darwin, in his works, used such terms as "it may be supposed," etc., over eight hundred times; and to show you further how

completely scientists are in the realm of what Osborn admitted is only "pure speculation," let me quote again from his book a typical sentence. He says, on page 132:

"The evolution of the articulates is believed to be as follows: From pre-Cambrian annelidan (wormlike) stock arose the trilobites with their chitinous armature and many jointed bodies. . . . Out of the eurypterid stock of Silurian times may have come the terrestrial scorpions . . . including the existing scorpions. It is also possible that the amphibious, terrestrial, and aërial Insecta were derived from the same . . . articulate. The true Crustacea also have probably developed out of the same pre-Cambrian stock."

Here, then, in this one brief quotation there are four may-have-beens, or mere possibilities, suspended one from the other! In this one quotation, Dr. Osborn dangles before us a hypothesis, on which he hangs a supposition, to which he attaches a guess, on which he pins a bare probability! It reminds one of the Scotchman's definition of scientific metaphysics. He said: "Imagine a fog bank. Now imagine a hole in the bank. Now imagine the bank gone, and the hole still there. That is metaphysics!"

SCIENTIFIC GUESSES ON THE ORIGIN OF MAN

There have been guesses many about the origin and development of life upon this planet. They have been even more varied, and, I say with respect, some of them more grotesque, than the theories about the origin of the earth. I wish to say here that I do not speak with any disrespect of science or scientists, nor am I prejudiced against the schools. I have been a student of science, to a limited extent, for many years, and rejoice in the great contribution which the exact sciences have made to the sum total of human knowledge and happiness. It was my privilege also to teach in two of our American universities for several years before I devoted my time entirely to the work of the ministry, and so I

desire the prosperity of a true and righteous educational system. But no man, however friendly he may be to science, and to the schools, can blind his eyes to the fact that a little group of men in this country, especially, seem determined to put over the evolutionary hypothesis, and thus to make good on their own theories. Their training in German universities, some elements of commercialism through the printing of textbooks, etc., and other considerations enter into this determination, and we have a full right to turn the light on and to demand facts rather than these wild guesses and theories, which are being dogmatically given to our children in the schools today, as though they were established truth.

Now, what is the state of the case as to the origin of man? Briefly it is this: the scientists have failed completely in their attempt to bridge the chasm between dead matter and sentient, ethical life. They have failed signally to make out a case for the evolutionary hypothesis, so far as the origin of life is concerned. Dr. Alfred R. Wallace, who was really the co-discoverer with Darwin of the theories of evolution in their modern form, frankly admits that there are gaps in the evolutionary scheme which are not only unbridged but are unbridgable. He says:

"There must have been three interpositions of a Divine and Supernatural Power to account for things as they are. The agreement of science with Genesis is surely very striking. There is a gulf between matter and nothing; another between life and the non-living; and a third between man and the lower creation—and science cannot bridge any of them."

I submit now that my honorable opponent has scarcely touched upon the real issue in this debate in all of his opening address. The issue is how the earth and man came—that is, how they originated—and not what happened after they got here; but my opponent has done all

that he could do in this connection, and he has done all that the scientists and the evolutionary philosophers of today have tried to do. Having failed to account for things in any rational way, or to produce any facts proving either the origin of the earth or the origin of man by natural forces, they have turned their attention to an effort to prove that evolution is a true process as applied to the development of life upon this planet, regardless of how it may have gotten here. They hope to make out a good case for the proposition that higher forms of life have evolved from lower, and then to urge that as presumptive evidence that the evolutionary process was continuous as regards the coming of life out of dead matter, even though that fact cannot be demonstrated.

I will meet my opponent, therefore, at this point, even though most of his arguments in these matters were not strictly upon the subject for debate.

There are at last but two great arguments for the evolutionary hypothesis as it relates to the development of life upon the planet. The first is the argument from biology and the second is the argument from geology. It is possible, therefore, to group my opponent's arguments under this broad and simple generalization. Let us take up first the arguments that lie in the field of biology.

THE ARGUMENT FROM BIOLOGY

Darwin's labors were largely in the field of biology. Darwin's theory of the origin of species, which has been and still is, in its broad outlines, the main theory, was founded on two ideas: one was the doctrine of "natural selection" through the brute struggle for existence and the "survival of the fittest"; and the other was that of the inheritance of acquired characters. He held that the fittest survived in the life struggle because they had rained certain advantages over their weaker fellows,

and that their naturally acquired characteristics passed down by heredity to their offspring. Thus, too, through the development and inheritance of many characteristics different from those in past generations, species originated in great varieties, and man finally emerged at the head of the procession.

But neither of these ideas of Darwin's has been proved true.

NO "NATURAL SELECTION"

Though admitting that there are over 2,000,000 species upon earth, Darwin himself had to say (Life and Letters, Vol. III, p. 25): "There are two or three million of species on earth—sufficient field, one might think, for observation. But it must be said today that, in spite of all the efforts of trained observers, not one change of a species into another is on record." This statement can be made with even greater confidence now, after a lapse of over half a century since Mr. Darwin made the above admission.

Dr. N. S. Shaler, Department of Geology, Harvard, says:

"It begins to be evident that the Darwinian hypothesis is still essentially unverified. . . . It is not yet proven that a single species of the two or three million now inhabiting the earth has been established solely or mainly by the operation of natural selection."

And John Burroughs, although an evolutionist up to his recent death, said of Darwin, in the August, 1920, "Atlantic Monthly":

"He has already been as completely shorn of his selection doctrines as Sampson was shorn of his locks."

If these statements from scientific men mean anything at all, they mean, at least, that pure Darwinism is altogether unproven, if not that it is dead. If now there is no "natural selection," then we are driven, of necessity, back to supernatural selection, but that violates the theory of evolution and is, therefore, contrary to the definition upon which we are going in this debate.

NO ACQUIRED CHARACTERS

Furthermore, the theory of acquired characters has not been proved by the scientists. The forms of vegetable and animal life that man succeeds in improving by human selection revert rapidly to type as soon as man's directing skill is withdrawn. This undeniable fact makes very reasonable the inference that there are certain established types and species which can be simply extended somewhat within the limits of the species, but that no change into a new species can come about either by natural or artificial selection. The scientist, Weismann, did some monumental work in this field, as did also Mendel. But no scientist has ever been able to bring forth a new species nor to demonstrate that acquired characters are hereditary.

My opponent referred to the work of Luther Burbank, but his assertion that Burbank has produced new species is not true. The loganberry, for example, is not a new species but simply a combination that comes from two berries belonging to the same species. Burbank and others have done wonderful things in producing varieties within species, and we rejoice in their work, but none of them have been able to leap over the bounds of species nor to prove that acquired characters are hereditary.

The very latest voice on this important subject was a statement during the recent sessions of the American Association for the Advancement of Science held in Cincinnati, Ohio. Dr. D. T. MacDougal, General Secretary of the Association, and Director of the Laboratory for Plant Physiology of the Carnegie Institution, declared

during the meeting of the Association, as quoted in the "New York Times" of January 2, 1924, that the inheritance of acquired characters had not been established. Later in an article under his own signature in the "Times" of January 20, 1924, he repeated these statements. In referring to the claims of Dr. Kammer, the Austrian scientist, who asserts that he has proved that characteristics induced in salamanders, frogs, etc., by the action of temperatures, water and other agencies, are fixed and transmitted to the progeny, Dr. MacDougal said: "His proofs are not regarded as adequate." Not only do American scientists refuse to admit the claims of Dr. Kammer, but Dr. MacDougal says that the English scientists take the same position. He declares:

"He has presented his results to biologists in England and their attitude is in accordance with that held here."

So far, then, as facts for establishing "natural selection" and the inheritance of "acquired characters" are concerned, there are no such facts.

SIMILARITY OF STRUCTURE

Taking up morphology, it is found that there is a general similarity of plan between the lower animals and man. It is pointed out that the fin of the fish, the wing of the bird, the flipper of the whale, the leg of the animal and the arm of man are similar in structure. It is argued, therefore, that all of these forms of life have come from some remote common ancestor.

There are also certain other resemblances between man and the lower animals that, it is said, point to the same conclusion. This argument, put into simple language, may be stated as follows: That man and monkey are so much alike that man must have come from some sort of remote monkey ancestor. Thus, the argument from resemblance is to the effect that similarity argues oneness of

original parentage, that similarity in structure and organic function is proof of common descent.

But in the name of all logic and all common sense and of sound reason, even granting for the sake of argument that such resemblances do exist, do they really prove the astounding conclusions that are founded upon them? I emphatically and without fear of successful contradiction declare that they do not. Resemblance proves nothing but resemblance. Similarity proves nothing but similarity.

For example, I myself have been often accused of resembling ex-President Woodrow Wilson. I do not know whether our honored ex-President has ever been given the affront of being told that he looks like me or not. If so, he possibly felt like one of the two friends who were given to joking each other because of their homeliness. They met on the street one day and one said to the other: "Jim, I met a man today who told me that I looked like you." Whereupon Jim doubled up his fist and said: "Where is the scoundrel? I want to maul him." "Oh," replied his friend, "you can't maul him. I killed him!" Seriously, my friends, I have been mistaken again and again for Woodrow Wilson, and once, while living in Baltimore, soon after Mr. Wilson married his present wife, Mrs. Straton and I together were mistaken for the President and Mrs. Wilson at a musical concert in the Lyric Theatre.

I submit that the argument of the evolutionists from resemblance proves only resemblance and not succession of descent. I have not descended from Woodrow Wilson, and I feel very sure that, staid Presbyterian that he is, he would emphatically disclaim any kinship whatever with a militant Baptist parson!

There are so many dissimilarities between man and the apes that the similarities are negligable— especially is this true in the realm of the mind, the moral and religious instincts, etc.

Virchow said: "The differences between man and monkey are so wide that almost any fragment is sufficient to diagnose them" ("Smithsonian Report," 1889, page 566).

RUDIMENTARY AND VESTIGIAL ORGANS

So, also, as to rudimentary or unused organs that are found in man and lower animals alike, and that my opponent discussed. They really prove nothing but resemblance, and no man can say that they are not really useful.

As we begin to push back the borders of our ignorance about these things light breaks in upon us. Professor Arthur Keith, in his address as President of the Anthropological Section of the British Association, meeting at Bournemouth ("Smithsonian Report," 1919, page 448), said:

"We have hitherto regarded the pineal gland, little bigger than a wheat grain and buried deeply in the brain, as a mere useless vestige of a median or parietal eye, derived from some distant human ancestor in whom that eye was functional, but on the clinical and experimental evidence now rapidly accumulating we must assign to it a place in the machinery which controls the growth of the body."

Of the thyroid gland, whose removal entails myxoedema, Huxley said: "The recent discovery of the important part played by the thyroid gland should be a warning to all speculators about useless organs."

And as for my opponent's references to Mr. Bryan's anatomy, I must express my surprise that he assailed our great commoner after that fashion when he is not here to defend his own tail!

Prof. A. Wilford Hall, in "The Problem of Human Life," so tersely refutes these false theories, that I must

quote him. On page 374: "Now, as regards the 'little tail of man,' about which Prof. Haeckel and Mr. Darwin have so much to say, and which is regarded by all evolutionists as such a powerful proof of man's descent from tailed ancestors, I wish to remark that a more manifest and inexcusable misconception was never harbored by men." Then the author goes on to state that the spine in all vertebrates develops first and the end protrudes until the fleshy portion develops to cover it. The fish, which according to evolution, did not have a tailed animal for an ancestor, also has this embryonic tail. Thus, the whole theory breaks down.

CLIMBING OUR OWN ANCESTRAL TREE

The same general arguments apply to embryology in other respects also. It has been found that embryos of different forms of life are somewhat alike. Therefore, it is argued that they all came from some original common ancestor. Furthermore, it is known that the human embryo passes through several distinct stages in its development, and it is claimed by some that these stages recapitulate the steps in the alleged evolutionary journey of the race upward from the original protoplasm to man. Haeckel confidently asserted these claims. He even named this process the "biogenetic law." He had us climbing our own family tree while we were still embryos!

I pointed out, in the beginning, that this is all nothing more than assumption and, as Osborn put it, lies in the realm of "pure speculation" and not of demonstrated fact. I now point out, further, that the idea that man has evolved from lower forms of life because the human embryo passes through a series of stages which are supposed to reflect the several stages in evolution, is not consistent with the accepted principles of the evolutionary hypothesis. For one thing, as to the rate of development, evolution presupposes a slow and tedious process

covering, as Wells and Osborn and all of the others of them say, "millions and millions and millions of years." But the human embryo passes through its stages of development with tremendous rapidity, and in the case of the embryos of some other forms of life the progress is so rapid that it seems almost miraculous. The evolutionary hypothesis, therefore, which scorns miracles in other fields, cannot invoke a sustaining miracle in its own behalf and to prove its own claim. These ideas have long since been exploded.

An object lesson is sometimes most useful in bringing to our minds a conclusive demonstration of truth. I have brought down tonight and I hold here in my hands two victrola records. They are exactly alike. They are made of precisely the same material. They weigh the same. They are the same shape. Their circumference and diameter are identical, and even if you look at them through the microscope you see the same succession of little scratches and indentations upon both of them. And yet if I put one of these on a victrola it produces an inspiring solo from Caruso's glorious voice. If I put the other on the victrola it produces one of the disgusting pieces of ragtime jazz which libels the holy name of music today. What does it mean? It means, my friends, that the resemblances between the two victrola records are merely superficial resemblances at non-essential points. It means that the essential characters of the two records are vitally different, and the final result from them conclusively proves that. While they look alike and feel alike and are the same size, etc., nevertheless, they are in essential nature absolutely and radically unlike.

Now I submit that the argument is conclusive that the same thing is true as regards the similarity between the human embryo and the embryos of the lower animals. The two are absolutely different and distinct in *essential* nature. They are vitally different one from the other,

despite surface resemblances, and, as with the victrola records, the final results from the two forms of embryo establish the fact that they are essentially different from each other even while still embryos. Professor Fairhurst, in his notable book "Organic Evolution Considered," states the case clearly and conclusively. He says:

"Taking the embryos of man and fish the argument of the evolutionist is as follows: The embryos of man and fish, at a certain stage of development, are closely alike in appearance; therefore, man and fish had a common ancestral origin. The conclusion which the evolutionist draws is based upon a mere seeming and very transient resemblance, while the fact that the two embryos are essentially unlike is shown by the vast distance apart at which they arrive by development. . . . The egg which can be developed into a man is just as different in nature from the egg of a fish as the man is from the fish. The eggs are essentially unlike. The essential qualities of eggs are beyond the power of the miscroscope to reveal. The human embryo is produced by human beings only; and whatever may be its miscroscopic appearance, it is at every stage of its development strictly human. Embryology, as applied to evolution, fails in that it deals only with the surface of things."

I submit that there is no possible rational reply to his conclusion. Embryology has been considered one of the very strongest arguments for evolution, and yet in the face of the real facts, it breaks down completely.

Indeed some of the facts as already remarked in connection with the time element, are really the reverse of what the theory of evolution calls for. So far as the human embryo is concerned, it is now admitted that the entire first half of the supposed evolutionary progression is not repeated at all. In speaking upon this point, Professor Fairhurst says ("Organic Evolution Considered," page 147):

"There are radical differences between the embryos of

vertebrates and invertebrates. Worms and other articulates in embryo lie doubled backwards around the yolk, while all vertebrates are doubled in the opposite direction. According to the theory that the embryonic condition is a recapitulation of the stages of organic evolution, this fundamental fact of invertebrate embryology ought to have been preserved by the vertebrate. Evolution gives no account of this reversal of position by the vertebrates."

The author of the article on Embryology in the Encyclopedia Britannica, Oskar Heurtwig, Erich Wasmann, and other embryologists have completely shattered the "fish-like gill slits" of the human embryo, and other similar false inductions from embryology.

WHY GOD MADE ANIMALS LIKE MAN

Is there, then, any rational way to account for the resemblances between man and the lower animals? Yes there is. It is the fact of creation of all by one God. This resemblance of parts is just what we should expect in things originating from one intelligent operator, whether Creator or manufacturer. It is found in every factory. The wheel is the same in the wheelbarrow, the cart, the carriage and the locomotive. In fact, uniformity of plan proves unity in the cause, and not the diversity which chance evolution would necessitate. The Bible teaches that God made the lower animals before he made man. We may regard them, in a way, as understudies. Every sculptor makes models before he carves his final statue—so, perhaps, God made the lower animals. found that a heart and circulatory system, lungs, brain, etc., all worked well. Looking with satisfaction upon these dumb creatures he had made, we may imagine Him saying: "Now, let us make man in our image, after our likeness!" The mere fact that all forms of animals have to breathe air and exist on the same sort of food largely necessitates more or less similarity between them.

THE ARGUMENT FROM GEOLOGY, THE ROCKS AND FOSSILS

The other great argument for evolution has been the argument from the rocks and fossils:—the argument from geology and paleontology. The argument here is that there has been a succession and ascent of life up to, and including man through lower forms of life, because of a succession of fossil life forms, which it is alleged are found in the rocks of the geological eras.

Dr. T. H. Morgan, of Columbia University, rests his faith in the theory of evolution on this geological foundation. He says:

"The direct evidence furnished by fossil remains is by all odds the strongest evidence we have in favor of organic evolution."

My opponent spoke with great confidence and assurance on this subject of the rocks, the "ancient life," in them, etc. But it is not true, as he asserts, that these matters are settled and proved. On the other hand, the methods and data on which the scientists ground the calculations behind their guesses and hypotheses are frequently so flimsy as to be utterly untrustworthy, especially as a foundation for sweeping aside the age-long faith of the race in the Bible as God's word, and in substituting for it the dogmas of speculative philosophy, and of what the Bible itself terms "science, falsely so called."

I wish to point out, in the beginning, that geologists and evolutionists who rely upon geology, convict themselves of begging the question or arguing in a circle. You ask the geologist, "how do you determine the age of the rocks and arrange your scheme of stratified rocks?" He answers: "Why, by the fossils that are in the rocks. We know that the simpler forms of life came first, and when we find these simpler forms in a given stratum of rock, we know, thereby, that that sort of stratum is the oldest." You ask the evolutionist upon what he founds his theory

of the succession of life, beginning with simple forms, coming up to the more complex and culminating in man, and he answers: "Why I found my conclusion on the record of the rocks. The simplest forms of life are found as fossils in the oldest rocks, and the more complex forms of life in the more recent rock formations, etc." Here, then, I submit, you have a complete case of begging the question or arguing in a circle. On both sides they assume the very thing that is to be proved. The geologist says the oldest rocks are the oldest because the simplest forms of life are in them. The evolutionist says that evolution is true because the simplest forms of life are in the oldest rocks. There could not be a more complete case of arguing in a circle, and neither argument, therefore, can be of any force.

FRAGMENTARY AND INADEQUATE EVIDENCE

Not only is this true, but the scientists themselves admit that the fossil remains and the evidences of evolution from the rocks are really fragmentary and obscure in the extreme. So much so, that thoughtful observers are more and more having to reject such evidence. When confronted with the absurdity of their evidence, in fact the practically complete absence of any evidence, the evolutionists fall back upon the incompleteness of the geological record. They say that there is evidence to support evolution if they could only find it. Darwin, again and again, so pleaded on behalf of his theory. He said:

"Looking not to any one time, but to all time, if my theory be true, numberless intermediate varieties, linking closely together all the species of the same group, must assuredly have existed; but the very process of natural selection constantly tends, as has been so often remarked, to exterminate the parent-forms and the intermediate links. Consequently, evidence of their former existence could be found only among fossil remains, which are preserved, as we shall at-

tempt to show in a future chapter, in an extremely imperfect and intermittent record" (page 184, "Origin of Species").

Darwin admits that there are some two or three million different species on the earth, and he tried bravely to get over the tremendous fact that no missing links between any of these species have been found. He says that the number of these *intermediate varieties* which have formerly existed must be "truly enormous," and then he appeals to the imperfection of the geological record to account for the overwhelming fact that *none* of them have been found. He says:

"Why then is not every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely-graduated organic chain; and this, perhaps, is the most obvious and serious objection which can be urged against the theory. The explanation lies, as I believe, in the extreme imperfection of the geological record" (page 334, "Origin of the Species").

The evolutionists, then, are like a litigant who comes into court with strong and positive evidence against him, but who says that while he has no evidence in his favor, nevertheless, such evidence ought to exist and no doubt does exist, but he has never been able to find it, despite diligent search; and yet, while he has no evidence, and while his opponent has strong evidence, nevertheless, he ought to be given the verdict because of his undiscovered evidence.

NO "MISSING LINKS"

Furthermore, the alleged "missing links" evidence is utterly inadequate and even laughably absurd. If the principle of evolution were true there would not only be missing links in the fossils, just as Darwin had to admit, but there ought to be living links on every side around us today. Instead of fixed species, with their several varieties, we would have a heterogeneous mess of living

forms upon the earth, each grading into the other. We would have budding legs and developing eyes and sprouting wings and other transitional forms all around us. For if it is true, then upon its fundamental principle of conformity, evolution ought to be still in progress on every side. Herbert Spencer gives away the case, in fact, by admitting this. In his work on "Ethics," in speaking of further social evolution which may be anticipated, he lays down a principle which must apply to all phases of evolution, including organic evolution. He says:

"It seems not only rational to believe in some further evolution, but irrational to doubt it; irrational to suppose that the causes which have in the past worked such wonderful effects will in the future work no effects."

Precisely so, and if evolution were true we would see it in progress on every side. What we do see, however, is not the development of one species into another, but a fixity of species which is guarded by the universal law of sterility. Even branch varieties of the same species produce only hybrids when they are crossed.

THE APE-MEN

Now, we find the same striking limits to species when we turn to the fossils in the rocks. No "missing links" connecting one species with others have ever been discovered, and the scientists in their frantic efforts and deep desire to find such links, in order that they might prove the evolutionary hypothesis, have been at times pathetic and at times amusing.

Take, for example, the so-called ape-men, the alleged missing links, replicas of which we find in the humorous department of the American Museum of Natural History, namely, the "Hall of the Age of Man." As for the alleged ape-men or "missing links," they are few in numbers and far between. Even Prof. Osborn has to

admit this. He says in his little book on "The Hall of the Age of Man":

"Five cases in the center hall are devoted to the story of man, and that it can be compressed into so small a space is an indication of the scarcity of his remains, for here are displayed reproductions of all of the notable specimens that have been discovered" (Leaflet No. 52, page 3).

Well, if evolution is a universal law, working in all past time and everywhere, why is there such a scarcity? And even in the case of the few so-called specimens they have, only minute bits of bone were found in each instance, and from these small fragments, imaginary re-creations have been made, and even then the scientists did not agree among themselves as to just how the restored men should have looked.

These so-called "ape-men" are figments of the heated and overly enthusiastic imagination of evolution's devotees. The "Piltdown man," for example, was no "man" at all. All that they found in the gravel pit in Sussex, England, near Piltdown Common, were two or three bits of skull-bone, a piece of jaw-bone, and a canine tooth. And these few fragments were not found all together and at one time by the same person. They were scattered widely in the gravel pit, some of them were found by one person and others by another person, and some of them were found in one year and others in another year. With these few little scraps, that a juggler could conceal in the palm of one hand, and found under these loose conditions, the scientists "reconstructed" the "Piltdown man" and proclaimed it as a new genus, which they called Eoanthropus or "Dawn-man," and they named the species "Dawsoni" in honor of Mr. Dawson, the English scientist. But after the first reconstruction by Dawson and Dr. A. Smith Woodward of the British Museum, Prof. Arthur Keith, Curator of the Royal College of Surgeons of London, took up these fragments of bone and

made a reconstructed man much higher than the ape-like creature that Drs. Dawson and Woodward had produced. Prof. Keith declared that the capacity of the Piltdown skull was nearer 1500 c.c. than 1070 as Dawson and Woodward had made it. And the climax was capped when Prof. Hrdlicka reached the conclusion that the Piltdown jaw and tooth did not belong with the fragments of skull at all but really "belonged to a fossil chimpanzee."

THE GREATEST HOAX OF ALL

And as for the "Java Ape-man," the case is even worse. Dr. Eugene Dubois, a Dutch physician, claimed to have found these bones in the Island of Java in 1891, but scientists have been suspicious about the genuineness of the find. There are only three fragments of this gentleman—the Java, or Trinil, Ape-man who, as mentioned by my opponent, has been given the overwhelming name "Pithecanthropus." There is a part of a skull, a part of a femur bone, and one molar tooth. The bones were not found at the same time or altogether in one place. The femur bone was found a year after the bit of skull was picked up. The bones were scattered far apart in a gravel pit on the bank of a rushing stream. The femur bone was fifty feet from where the skull was found. When Dr. Dubois discovered these pitiful bits of bones he announced his belief that they belonged to a being between the man apes and men.

Other scientists, however, who examined these bones asserted that the fragments did not belong to the same individual at all. The geologist, Dana, took the position that the bones, if they belonged to the same individual, belonged to a low-grade man or to an idiot. Virchow rejected them, and finally, another authority of the first rank, Prof. Klaatsch of Heidelberg University, declared that the creature was no missing link at all. And in a

recent magazine article, to top the whole matter off, one of our American writers, as before intimated, throws a doubt upon the honesty and genuineness of the fragments.

And yet the authorities at the Museum have made up not only a cast of this imaginary creature, but a bronze bust, and he is shown to our school children as one of the links in the ascent of man!

And as for the few other alleged specimens in the "Hall of the Age of Man," a few words will suffice. As for the "Heidelberg man," nothing of him except a piece of jaw-bone was found. He is one-half of one per cent. original and 99½ per cent "restoration."

The case is as bad with the others. The Neanderthal skull has provoked from competent authorities a dozen or more opinions concerning itself. Here are a few: the skull belonged to a human idiot (Blake, Vogt, Hoelder, Zittel); to an old Celt; to an old Hollander; to an old Frieslander, and last, but not least, to a Mongolian Cossack of the year 1814. It was of these remains that Huxley said:

"In no sense can the Neanderthal bones be regarded as the remains of a human being intermediate between men and apes."

Dr. Thomas Dwight, Parkman professor of anatomy in Harvard University, says:

"The Neanderthal man is not a specimen of a race arrested in its upward climb, but rather of a race thrown down from a still higher position."

The "Cro-Magnon" man proves nothing, as it is admitted that he is not a "missing link," but is the equal of men of today.

Then there is the Talgai skull, still shown in the case at the museum, but about which little is said these days, and rightly so. For Mr. Archibald Meston, of Australia, former Chief Protector of Aborigines, has shown that it is the skull of one of the Australian black boys shot and buried on the spot in 1848.

I have been many times in the American Museum of Natural History. It is a great and wonderful institution, and there is much of first-rate interest and value to be seen there. But frankly, the "Hall of the Age of Man," as before suggested, ought to be labelled "Our Humorous Department."

I was up there a little while ago for a long period with Dr. William Gregory, Dr. Osborn's right-hand man, and a professor in Columbia University.

I asked Prof. Gregory, after we had gone over the data about the Java Ape-man, how old scientists estimated these fossils were, and he told me that the estimate was 500,000 years. I now ask the judges and this audience, as I asked Prof. Gregory, if any thoughtful mind can really believe that those old bones laid there undisturbed, right beside what is now a rushing stream, for 500,000 years? Is it not the most remote chance, in the face of earthquakes, fire, and flood, and the radical changes in climate and condition through which our earth has been known to pass, that for 500,000 years of time those old bones, which were assumed to belong to the same individual in the beginning, had really stayed in that one position?

This, then, is the "evidence," so far as "missing links" are concerned, of the evolution of man from the beasts. That idea is a libel on man, and an insult to Almighty God. So fragmentary and unreliable is this "evidence" that no judge or jury would convict even a horse-thief on such evidence, and certainly we ought not on it to convict man of a brute ancestry or convict the Bible of lying. I verily believe that if the little basketful of musty old bones and fossils, which have been found, after all these years of search in every part of the world, were

brought together and presented as evidence for the evolution of man in any court of law, they would be thrown out of court with utmost scorn by judge and jury alike. They are simply not evidence according to any rules of evidence, either in law or true science.

ARTIFICIALITY OF THE GEOLOGICAL SCHEME

Not only is their alleged evidence utterly fragmentary and entirely inadequate, according to the admissions of Darwin, Osborn, and other scientists themselves, but it has now been demonstrated, as a result of recent research in the field of geology, that the whole arrangement of the rocks in the old geological scheme is altogether artificial. contrary to now known facts, and, therefore, that it must be repudiated entirely. I do not have to argue this matter, but will leave it to the most up-to-date voice of science itself. I have here the very latest book on geology. It is just off the press. It is called "The New Geology," and it is by Prof. George McCready Price, Professor of Geology in Union College, Nebraska. Prof. Price is a member of the American Association for the Advancement of Science, and other scientific societies. For over twenty years he has been engaged in gathering the data for this great and monumental book. The very name of the book is significant. It is "The New Geology," and Prof. Price argues that the time has come when the entire science of geology will have to be made over on a new and really scientific basis. He shows from facts gathered in every part of the world, accompanied by adequate diagrams, tables and beautiful illustrations, that the arrangement of the different sorts of rocks by the older geologists is not only a purely artificial and arbitrary scheme, but that the facts that have been discovered since that artificial arrangement of the rocks was worked out, utterly overthrow the whole scheme.

He shows that the stratified beds containing the fossils

are, as he puts it, "of quite limited extent, varying from a few square yards or a few acres, to a few hundred square miles in area," at most. He shows us from the facts, that the old "onion-coat" theory of the building up of the strata—the only logical theory, by the way, if evolution were really true—is not only utterly smashed to pieces and given up by scientists, but that their dependence upon these fragmentary beds has had to be given up because, as he says: "The various kinds of fossils, which were so long thought to be found only in the same relative order all over the globe wherever they occur, are now known to occur in practically every conceivable order" (Pages 17-18).

MAKING "FACTS" FIT

Instead of the older rocks being at the bottom, with the most primitive forms of fossils, and then the slightly less old on top of those, with the slightly higher fossil forms, and then the less old on top of that, and so on until the "younger" rocks, with the highly complex forms of life of recent times, on top, as was argued by my opponent, and as should be the case if there had been an orderly evolution, and if the different forms of life starting in remote ages had fallen down into the soil and been caught in the stratification as the deposits were made, and so on up to the age of man and his fossil remains, which should be right on the top of the whole series,—instead of all of this, Prof. Price shows that often the so-called oldest rocks are right on top of the strata and the so-called youngest are down at the bottom. He shows that some of the oldest rock stratas are up at the top of mountains, for example, and the youngest forms are down at the bottom of the mountains, and all in perfect order. He gives instances of this reverse order in stretches of territory in Europe and America, some of them as much as 1,800 miles long, containing as much as 20,000 square

miles of territory, making the thought of an "over-thrust" impossible. He shows that these examples of reverse strata are found almost everywhere, a notable one beginning in our own state of New York, and running away up into Canada.

And upon these undeniable facts, written in the record of the rocks themselves, and now discovered by fuller research, he reaches his conclusion, namely, that the old order of the rocks, as classified, have been thus classified in a fanciful and unnatural manner, because of the dominating prejudices in favor of the evolutionary theory. He says:

"The dominant idea, of course, in the minds of those who arranged the geological series was the evolution theory regarding the development of life, and this theory is embalmed in the arrangement which was thus made."

He shows how the arrangement was rearranged from time to time, known facts being made to fit into the subjective scheme of evolution. Therefore, he reaches his conclusion and says:

"In many ways, the current system of geological classification seems absurd for those who realize the fanciful—we might almost say, the farcical—character of the reasons behind such an arrangement" (Page 283).

He further says:

"We could arrange all the books in a library according to their titles, from A, B, and C, down to X, Y, and Z; but it would be a purely artificial scheme, and to say that this arrangement proved that the books arranged under A, B, and C must have been written and published long before those arranged under X, Y, and Z, would be absurd" (Page 19).

GEOLOGICAL FACTS AGAINST EVOLUTION

Prof. Price, therefore, as a result of his investigations in the field of geology, as well as of embryology and the other sciences involved in the theory of evolution, reaches in this great book the definite conclusion that the theory of evolution is not only unproved but that it is demonstrably false. He says, explicitly (Page 606):

"The net results of all modern scientific investigation seem to be that the plants and animals now alive could never have originated by any such method of gradual development as has been pictured to us in the name of natural science. Certain it is that modern biology, and geology also, for that matter, have simply developed a complete negative demonstration against the easy assumptions of the earlier scientists that plants and animals probably originated by a gradual progression from the lower to the higher types by processes similar to those which are now going on" (Page 606).

In the light of the undeniable geological facts which have now been assembled, Prof. Price, therefore formulates "The great law of conformable stratigraphic sequence," which, he says, may be stated as follows:

"Any kind of fossiliferous bed whatever, 'young' or 'old,' may be found occurring conformably on any other fossiliferous beds, 'older' or 'younger.'"

Then he adds:

"This law forever puts an end to all evolutionary speculations about the order in which the various plants and animals have developed, in the minds of those who are correctly informed regarding these facts. This law alone is quite sufficient to relegate the whole theory of organic evolution to the lumber room of science, there to become the amusement of the future students of the history of cosmological speculations" (Page 638).

These, then, are the conclusions of a thoroughly up-todate scientist, in the light of well-known and most recent facts.

FALSIFYING "FACTS"

Indeed, so flimsy are the alleged "facts" which have been assembled to bolster up the tottering theories of evolution, that some of its zealots have resorted to actual falsification in their efforts to make good on their theories.

Ernest Haeckel, for example, was caught falsifying, schematizing and forging certain diagrams by which he was endeavoring to prove his evolutionary theory. He was tried by the Jena University Court and the charge against him was *proved*. In reply, he said:

"I should feel utterly condemned and annihilated by the admission, were it not that hundreds of the best observers and most reputable biologists lie under the same charge. The great majority of all morphological, anatomical, histological and embryological diagrams are not true to nature but are more or less doctored, schematized and reconstructed."

No wonder, therefore, that Professor Price, in speaking of the frantic way in which the evolutionists twist and stretch everywhere in their effort to make facts fit in with their fancies, says:

"The astonishment which I feel is due to the amazing power of a preconceived theory to blind the eyes and stultify the reasoning power of the shrewdest observer when confronted with a series of facts for which their theory has made no provision."

In reaching these conclusions, Dr. Price is merely moving in line with other great scientists and thinkers who have been forced finally to reject evolution. Sir J. William Dawson, the great geologist of Canada, utterly rejected it and says: "It is one of the strangest phenomena of humanity; it is utterly destitute of proof" (Story of the Earth and Man, page 317).

UNDERSTANDABLE SOLUTIONS

There are rational and easy ways of accounting for the phenomena of the fossils in the rocks and other such problems. The fossil remains of the lower and simpler forms of life found in some geological beds, is easily accounted for because of the well-known fact, that lower forms of life live for the most part in shallow water or at the edge of the sea, while the vertebrates, the fish and the great sea monsters, live in the deep water. Walk along the sea shore today and you will find the simple shell fish, the little fiddler crabs, and other simple forms of life there in the shallow water, and then you will look out and see the whales spouting several miles at sea. If, therefore, the animal life in one section of the sea, with its shore, were to be now changed into fossils, and these fossils should be discovered in some after age, the discoverers would find the remains of the simple forms of life in one place and the remains of higher forms—fish and other sea monsters—in another part.

Furthermore, just as we see around us today different forms of life, from the simplest one-cell animal up to and including all the other animals and human forms, living side by side, so the simplest forms of animals and human life lived side by side in the ages that are gone. There is absolutely not one scintilla of proof from real facts that the lower forms of life came first on this earth, or the higher forms evolved out of the lower.

It has been claimed that we can arrange the past races in an ascending order as they worked in stone, bronze or iron, in their successive history. This is a false theory. We have all these "ages" existing today. On the other hand Dr. Livingstone found no stone age in Africa. Dr. Schliemann found in the ruins of Troy the bronze age below the stone age. The early Egyptians used bronze, the later ones stone tools. In the Chaldean tombs all these are found together. Europe had the metal age while America had the stone age ("Creation and Evolution," by Prof. Townsend).

Professor Price, in his great book from which I have before quoted, because of the now known facts, therefore, reaches the conclusions which I gave from him. Not only so, but he goes further still and gives facts which demonstrate that there has been a great universal catastrophe, which overwhelmed most of the life whose fossil forms we now find. He gives, for example, the fact that mighty schools of fish are found today embedded in rock strata as fossils, and he shows that there is absolutely no evidence that these fish quietly sank down into the mud, and that sediment through long periods of time formed about them. On the other hand, he shows that the fossils of the fish are found with all their fins extended, which is always the case when they die suddenly. He, therefore, shows that the wild guesses about the time required for the formation of the rock stratifications, the fossils, etc., is absolutely exaggerated, and he takes his position with Dawson and other geologists upon this matter of the time. His argument is overwhelming, that the phenomena which we find in connection with the fossils in the earth, are all to be accounted for most rationally on the ground that there was a universal deluge, arising, as he points out, perhaps, because of the change in the inclination of the earth's axis to the plane of its orbit, which change sent great floods of water, tidal waves, sweeping in from the sea, overwhelming all forms of life and piling mud and sediment upon them, which in the course of time changed into coal and rock.

This great scientist, with many others, therefore, is led back to the account of the Bible teaching about the deluge and the other facts that go with the whole record of Bible truth.

POSITIVE FACTS PROVING THAT THE EARTH AND MAN DID NOT COME BY EVOLUTION

Having shown from the admissions of the scientists themselves, and also from known facts, that the earth and man did not come by evolution, I wish now to present certain concrete facts which show that evolution is not

only unproved but that it is unprovable and impossible as a theory to account for the origin of the earth and man.

- I. If evolution is true, then we have two mutually self-contradictory and conflicting forces at work—one to preserve species without change, and the other to constantly change the species. Both of these things cannot be true.
 - 2. There is no natural or "spontaneous generation."

Having no real knowledge about the origin of life, the scientists first tried to make out a case for "spontaneous generation"; but they utterly failed in this, and had themselves to disallow this theory. The very term "spontaneous generation" is a begging of the question by evolutionists. It assumes the very thing that is to be proved.

As we know the world now, matter and spirit, are two absolutely different things. They are as wide as the poles apart. Mud and mire and slime and stone are not only totally dissimilar from reason, and hope and faith and love, but they cannot in anyway be compared one with the other.

If, then, we are told they were originally one,—that the first life germ awoke out of dead matter, we naturally look for clear and overwhelming facts to prove such an incredible miracle. But no such facts are forthcoming from evolution, and it has to be reluctantly admitted by the evolutionists.

Since, then, spontaneous generation of life is confessedly impossible, and therefore did not occur, we are driven back to accept the only other alternative, namely, the creative agency of a Living God.

3. Furthermore, since "evolution" means an unfolding or unrolling, it is self-evident that whatever is evolved must first have been involved. Our accepted definition is that evolution is by "resident forces." No creative forces therefore, can be allowed anywhere along the

upward path of the alleged evolution. All must come from within. That means that in the first life cell, germ, or protoplasm which appeared on this planet, all the phenomena, wonders, and glories of all after-life were potentially contained. This is too much to believe.

REPRODUCTION BEFORE EVOLUTION

Not only that, but on this whole matter of the alleged evolution of life, I wish to point out another most significant and really conclusive fact.

It is self-evident that there could be no evolution without the power of reproduction in living things. Since, then, reproduction is a prior condition to evolution, it, therefore, cannot be the product of evolution. Hence, we face the logical necessity for direct creation as a start for all developing life.

Furthermore, the power of reproduction is not in the embryo but only in the mature parent. Therefore, a parent form of life must have been created in the beginning to have produced the embryo from which offspring alone can come.

An egg does not produce an egg. It produces a chicken, and that produces another egg which produces another chicken, and so on and on. Not only is it true, however, that an embryo cannot produce an embryo, but it is also true that an embryo is not improvable. Improvement can come only in the matured form, and not in the germ or single life-cell, or embryo. The simplest form of multiplying life is the amoeba. The amoeba multiplies its kind, not through an embryo, but by dividing itself and thus forming into two amoebas, and they in turn divide and form into others, and thus multiply. But the two amoebas that came from the single amoeba are each exactly like the first amoeba. They have no resident force of self-improvement. The most serious obstacle in the way of the theory of ascending life is the

impossibility of explaining how the so-called protozoa—minute animals composed of a single cell,—ever passed into the metazoa,—animals composed of many cells. Nothing but evasion and the most impossible guesses has ever bridged this chasm in life's alleged development.

Since, then, the power of reproduction is not in the embryo or single life cell, and since the embryo is not improvable but only the mature product, therefore, life could not have developed by evolution. The proposition that life started from a single cell, which in some unexplained way awoke out of dead matter, is utterly untenable and irrational. The first protoplasmic life cell would either have died because of the harsh and inhospitable conditions around it, or if it had lived it could have had no power of reproduction, as it was only a cell or embryo. And even if it is conceived of as having the power of increasing by division like the amoeba, it could only have produced other amoebas, and they in turn others, so that the only form of life on the earth would have been amoebas.

Since, then, these low forms of life have no resident power of self-improvement, therefore, we are again driven to the plan of outside forces operating upon them to produce higher and more complex forms of life. But that is a violation of evolution, according to our accepted definition, and therefore, we are driven again to accept creation, or the operation of a Power outside of the original life forms, to account for all living things.

4. The human mind is not simply greater in degree than that of the lower animals, but is generically different in kind. This cannot be harmonized with the theory of evolution, and points to direct creative power.

The distinctive characteristics and capacities of man, especially his moral and religious endowments, are so impossible of explanation by the theory of evolution,

that truth demands recognition of direct creative purpose and power in explanation of man's origin and progress.

DEGENERATION VS. EVOLUTION

5. Many other positive facts could be cited disproving evolution—I point out only one more, namely, degeneration rather than evolution. There are ample grounds for the belief that both vegetable and animal life is in a process of degeneration and decay on this planet, rather than a process of evolution and improvement.

And this only goes to prove the teaching of the Bible that man is a fallen being and that, therefore, the world is moving toward judgment and the final re-creation of all things in a "new heavens and a new earth, wherein dwelleth righteousness."

There is such a thing as evolution of a kind in human affairs, but this also only proves that man is a fallen being who is frantically struggling to regain a lost estate.

A RATIONAL VIEW

Is there, then, any escape from these contradictions and absurdities into which speculative philosophy and an essentially godless materialism would plunge us? Is there any solid ground on which we can build our lives and found our hope of immortality?

Yes, I answer, with all confidence, there is ample ground. There are ways very near at hand by which we can solve the riddle of the universe and know the nature

and destiny of man.

I appeal first to a right view of the material world as a whole. The Bible says: "Speak to the earth, and it will teach you." When we view nature as a whole, and not in little scraps and sections as the evolutionists try to do, certain great overwhelming facts stand plainly out. One of these is the fact of harmony.

As we observe the world around us, there is harmony

everywhere. Now there can never be harmony without design. The fact that the universe is a cosmos instead of a chaos proves this. But if there is design behind the universe, there must also be mind, for mind only can design. Dead matter cannot design. Blind force cannot design. The chair here cannot design to give an address; nor can the steam that operates the locomotive design to make the machine which it runs. Only mind can design; and when we see, therefore, design behind nature and the life of man, we must conclude that the Creator has, or is, Mind.

This leads us to another advance step, namely, that if there is mind there must be personality, for mind is always one of the characteristics of a person. Thus, as we contemplate the great Mind behind the world we know that God must be a living person. Not, indeed, a person such as you and I. We are finite and limited personalities. God is the infinite, unlimited and eternal personality.

"We are broken lights of Thee— And Thou, O God, art more than we!"

Man is a living, loving, intelligent personality, and since it is inconceivable that the Creator should be less than His creation, we know that there is a God who is a living, loving, intelligent being!

But we can come home closer still in our thinking. We can turn to the very nature of our own minds and find the answer to the question of the origin of the world. The first dictum of the old Greek philosophy was "man, know thyself." I appeal to that. We have a sure foundation for rational appeal in the very nature of the human mind itself. Our minds are so constituted that we cannot separate between cause and effect. When we see a given effect we have at once to think of an adequate cause to produce this effect. We cannot avoid doing this.

It is written deep down in the very constitution of our beings so to do.

Here, in imagination, we may see a beautiful house standing in symmetry and majesty among its green trees -with its stately columns before it; its broad verandas and hospitable doors, and the inspiring symmetry of perfect walls and a noble roof. As we look upon such a scene as that we instinctively ask ourselves, "How did the house get there?" Now, we know that it did not come by chance. We might imagine all the materials of a house brought together in a great pile—all the braces and beams and boards and nails and shingles brought and dumped in together; and we might imagine, too, some unseen and mysterious force blindly stirring those materials, tossing them about, lifting them here, yonder and everywhere, but we know that a house would never result from any such process as that. No sleeper would find its position. No upright would reach its place. No weatherboarding would be nailed on, and no roof tree would rise above it all. Never can we have a house until there is a designing architect to plan it in his wisdom and execute it in his power. And so as we look out upon the great house we call the world, carpeted with the greenest grasses and the never-resting sea, walled in by the sweet air, domed by heaven's eternal blue and lighted by flaming sun and silvery moon, and the everlasting stars—as we see this great and beautiful home of man we must think of the Architect who designed it in His wisdom and who executed it in His love and power! And we have to violate the very constitution of our minds to do anything other than that. We cannot separate between cause and effect.

Notice, now, we do not say there is no existence without a cause. I have here a chair, and as I see that chair I instinctively ask what caused the chair. But the moment I see behind the chair the cabinetmaker, who designed and executed it, I am satisfied, and my mind

goes no further. It rests content in the creative possibility of the cabinetmaker's personality as the cause of the chair. So when we see behind the phenomena of the material world an existence who is all cause for the reason that He is infinite, then we may pause for we have found the First Cause. But that is precisely what our Bibles have been saying to us for all these years. "In the beginning, God created the heavens and the earth," and God "created man in His own image."

III

REBUTTAL FOR THE AFFIRMATIVE*

Mr. Chairman, Honorable Judges, Worthy Opponent and Dear Friends All: May I say in the beginning that the only point that I can find out that my opponent made was, that evolution is only a theory. And may I answer that immediately by saying that the Genesis story is only a theory, and a much worse theory. I presented to you in my first speech the various reasons appealing to a logical mind whereby the hypothesis of evolution seems to be a more acceptable guess than the absurd, grotesque story which we find in the first chapters of Genesis. I am reminded of the story of Frederick the Great and his flute. It was said that Frederick the Great loved music, but to be strictly accurate, you should say that what Frederick the Great loved was flute music, and if you wanted to tell the actual truth, what he liked most was the music of his own flute when he played it himself. And when my worthy opponent says that the doctrine of evolution is incompatible with religion, remember that all that it means is, that it is incompatible with his religion. When he says that it is impossible to put God in nature, when he denies the possibility of an immanent God, remember that it is the transcendent God which is not there. It is impossible, of course, to put the transcendent God in nature, as I very deliberately proved.

As for the Century Dictionary's definition which he quoted, that evolution is antagonistic to creationism, it is one of the best arguments for my side which has been

^{*} By Rev. Charles Francis Potter.

brought forward tonight. When he said that Huxley proved that evolution makes it impossible to believe in the Bible, I say, what of it? I thought we adequately disposed of that six weeks ago as far as this argument maintained. You cannot prove evolution by the Bible, but that is no argument on this platform against evolution. If Darwin lost faith in God, remember that it was the God of my worthy opponent that he lost faith in, and not in the immanent God of the Universe, for I am proud to say that the entire Darwin family were members of a Unitarian Church.

In the words of my opponent, quoting Haeckel, he said that Haeckel rejected God, and the actual words of the quotation were these: "Haeckel rejected a personal God, or Creator." Of course he did, but he did not reject an immanent God—the immanent God-life of the Universe. Others he quoted to prove that evolution turns the Creator out of doors, but what I am maintaining is, that the Creator concept of God ought to go out of doors. It is no longer of use. This is no argument whatever against the immanent God.

My worthy opponent pointed out, stating that I had not touched the question, that the question is, how the earth and man came, and not what happened after they got here. I wish to point out to you that he is still in bondage to the Genesis story, which presumes that the whole thing happened in six days long ago. I point out to you, as I did before, that the earth is still in the process of evolution. It has not yet fully come. We ourselves are still in a process of development, changing our form from quadrupeds to bipeds; we are still "evoluting." All the arguments that I brought forward proving the existence of evolution have to do with the earth and man as we find them today. What they were 4004 B. C. at nine o'clock of a Thursday morning, when Archbishop Usher thought the world was created, I do not know, because I was not

there, and my opponent does not know because he was not there. You see, there are two different conceptions altogether. My opponent wants to make out that the Garden of Eden was a symphony orchestra; that this earth is supposed to be a Paradise, a beautiful place. He wants to make out that, when the world was created and the Lord looked upon it and "saw that it was good," that it was really good; that everything was all right; that it was Paradise; that Adam and Eve were perfect husband and wife; that everything went along all right. That is what he is trying to point out, but that is the wrong conception of this earth altogether. This earth is not and never has been yet a symphony orchestra recital. This earth is a piano factory, and there are a lot of shavings around, and we are trying to make better instruments, and byeand-bye the harmony will come.

A great deal was made by my worthy opponent of the fact that scientists say that they know nothing or very little about the beginning of things. Now, the fact that Creationists think they know a lot about it is no argument whatever. To say "thus saith the Lord" does not make it so, you know. It is only what my worthy opponent and his predecessors way back to Moses think the Lord said, and we have got just as good a right to guess The fact that there are contradictions among scientists, paralleled by my worthy opponent to the facts which I pointed out in the first debate about the contradictions of the Bible, is utterly beside the case, because, while the advocates of the orthodox position about the Bible claim that it is infallible, scientists know enough to know that they do not know it all, and they do not claim to be infallible.

When LeConte, whose definition we are using, made the guess that the earth had existed from 10,000 to 100,000 years, may I point out to you that the book was published in 1889. He contrasted it with a statement made by Henry Fairfield Osborn in a book published in 1920, where the guess was 100,000 years. Scientists have learned something in 30 years, and they are willing to admit it. And may I point out that not even LeConte suggested as the date of the creation of the earth, 4004 B. C., which the Bible chronology would indicate. What I am arguing is, that the evolution of the earth took a long while and that it came by an evolutionary process, and that it was not done by Jehovah God some 6000 years ago.

My worthy opponent suggested, how does Wells know about the nebular hypothesis—was he there? Which is no argument whatever. What does my worthy opponent know about God making Adam and Eve? He was not there. If Prof. Milliken says that the sun is simply a great source of electrical energy, I do not see how that disproves evolution, do you? And if there is a planetesimal theory, all right; that does not disprove the evolution theory. These are only various experimental guesses that scientists are trying out. They are only sure that there is an evolutionary process. Whatever these other various branches of the theory may be, that does not disprove the central theory whatsoever.

Every bit of the evolutionary theory, so my opponent said, submits blind chance without God as the cause of things. I refer it to you as arbiters. Did I once refer the thing to blind chance, or did I leave God out? It is not so. The modern evolutionist, believing in God, does not talk of chance. He talks, as Bergson talks, of the vital impulse within all nature, which is the working of God Himself. Just because we cannot believe in a God with a long beard sitting upon a throne, to whom we must bow and kowtow as to an Oriental monarch, just because we cannot believe in that sort of God, the people who do not believe in evolution say that we do not believe in any God at all, and they have no right to say so. May

I point out to you that most of the evolutionists which were quoted by my worthy opponent are honored and respected members of churches today. Just because they happen not to belong to the Fundamentalist group is no argument whatever that they do not believe in God. When my friend said that not even the nature of matter is known, and dilated upon that subject, may I remind you that that is not the debate and has no connection with it whatsoever.

As for the arguments which he produced, I am rather puzzled, because, you see, contrary to the practice in debate, my opponent made his first speech a rebuttal. So I have got to rebut the rebuttal. He ridiculed the idea which I expressed as to how man came, and says that in the beginning God created the heavens and the earth and Adam and Eve. But that does not prove anything. He adduced no facts whatever to support his bare, bald statement. If he brings in the Bible as proof, that must be examined, and let me remind you that the statements made about the creation in Genesis were not made by people who were accustomed to stating facts in scientific language. They only gave what they thought happened, and a lot of things have been learned by the human race since first the Adam and Eve story gained circulation in popular literature among the Semitic tribes.

When he pictured to you the Bible Adam, such a glorified creature with such a glorified wife, he was drawing you a picture which no one can prove ever existed whatsoever. He did not produce the photograph, as I can produce the photograph of the spiral nebulæ in Andromeda. He quoted the Bible story, and told you that in the Bible account of creation you find dignity and beauty and law. And then he was so unwise as to bring in the question of the way woman was treated in that story. Just read it when you get home. And when he contrasted with admirable rhetoric the picture of Adam as given in

the Old Testament with the probable ancestor of man, his description of an animal ancestor was not very attractive. But, friends, haven't we got to the point where we do not need to be flattered by being told that we came from some angelic creature? Aren't we men and women enough today, haven't we progressed far enough in this evolution, so that we may take credit to ourselves that we have come up from something like that, instead of being ashamed of having come down?

The 800 probables, which he quotes from Darwin, contrasting them with the 800 or 900 "thus saith the Lords" of the Old Testament, are no argument whatever, because not definitely connected with the subject of the evening.

I was much obliged to him for having pointed out that man has turned from ape to man by throwing things with his front feet. The development of the human hand is well known by every educator today. If you take a small child and try to educate him through his eyes and ears alone, you make a sad mistake; indeed, the very reason why we have manual training in the schools is because man learned by using his hands, just as our ancestors did. I thank him for the statement.

I was very sorry that the contrast was drawn between the genealogy of Christ according to the Bible and the genealogy of man according to theistic evolution, "which was the son of the ape, which was the son of the reptile," and so forth. Ridicule, of course, my friends, is no argument, as we all recognize. There is no point whatever in pointing out the genealogy of Christ in this connection, because that does not enter into this debate. We will treat of that amply in later debates. But, to come to the point where my opponent approached the subject of discussion, evolution, may I say that to say, as he did, that God made all species, and that none have come since, is to get into very hot water, because, if God made all the species of living things and none have been made since,

remember that every species of animal parasite that inhabits man, every kind of "cootie," every germ of disease which we find on the earth, which is a living thing, as any doctor will tell you, must have been in Adam's body, and his 930 years must have been years of misery and suffering. The whole argument about species is a specious argument, because species run into genera, and genera into families, and families into orders, orders into classes, classes into branches, and branches bring us right back to our own primitive ancestor. You cannot draw the line between species, as any botanist or other student of science will easily tell you. You cannot say where one species ends and another begins. You can take the 600 varieties of aster, and they run so off into the other members of that same family that even a botanist cannot tell the difference, and when you find that the line breaks down there, you find it also breaks down between the genera, between the families, and so it goes, and brings us all back to that same ancestor, whom we may not be proud of, but from whom we are all directly descended.

As to acquired characters being not transmitted, my worthy opponent does not understand. Acquired characters are not transmitted to the direct offspring, but there is an influence upon the germ plasm which finds its effect in later generations.

As to his protest that Mr. Bryan was not here to defend himself: I simply used Mr. Bryan because I thought it was a little more polite than to say "my worthy opponent," but the same thing holds, and for the life of me I cannot see what my opponent's resemblance to Wilson has to do with this argument.

Let me say, in conclusion, answering his main argument, which really came at the very end, that this world is an effect, and that there must have been an adequate cause. I agree with him. When I disagree, it is only to maintain that this adequate cause has not got to be

the kind of God that he particularly believes in. The reason why many a religious person refuses to accept evolution is not because the proofs of it are not everywhere evident, but because he fears that by accepting it he will lose God. Man's reason is largely convinced as to evolution, almost persuaded, but his heart hesitates. The acceptance of evolution and its religious consequences, its influence on religion, does not mean abandoning God, but rather the acceptance of a different and I think a better conception of God. I believed once in my opponent's idea of God, but I do not now. The Genesis idea postulates a transcendent, even an anthropomorphic God-that is, a God made in man's bodily image, if you please. The evolution idea presents an immanent God, closer than breathing and nearer than hands and feet.

Just one question for my worthy opponent to answer: If God was able to interfere at certain crises in the past, this Hebrew anthropomorphic God, and do the things that he was supposed to have done at certain times in the past, why didn't he interfere between 1914 and 1918? No, my friends, the World War absolutely dissipated forever that idea of God. God is with us, but we have got to change our idea of God, as every great epoch has demanded a similar change. We must recognize that this God that we are talking of is the God who sleeps in the mineral, stirs in the vegetable, feels in the animal, and thinks in man, and if another World War is to be prevented, it must be done not by a transcendent God in the skies, but by the God in you and me.

It seems to me that the facts in the case have been presented to you, humbly, in the spirit of science—for science never says "Thus saith the Lord"; it only says, "I am trying to find the truth"—in that spirit, then, which it seems to me is a better spirit than the older one, we who believe in science and in evolution and in God

are finding that life takes on new meaning; that we have a great big job to do in this world, this piano factory that we are working in, and we are doing it with hope and joy and happiness in our hearts. We believe in evolution. We believe that the earth and man came by these resident forces according to fixed laws, which we cannot escape even by miracles when we want to; that it came by continuous, progressive change; that that is the hope of the world and not its despair, and that evolution reveals us God, rather than takes Him from us.

IV

REBUTTAL FOR THE NEGATIVE*

My friends, I will dispose of the humor first. I am glad that my honorable opponent was honorable enough at last to substitute me in Mr. Bryan's place. So I must now defend my own caudal appendage. My defense is this: My worthy opponent is free to believe that he has come along the route he has been arguing for tonight if he wants to, but he cannot make a monkey out of me! My opponent may admit these simian characters to his family tree if he so desires, but I confess I am a little more particular. I have a certain pride of ancestry. We have had five children in our home, and I have tried to instil into them the truth that, while they should not have a false pride, nevertheless it is true that blood counts and that they have something to live up to. I do not want to have to say to them, "While it is true that, on your mother's side you come from the Hillyers and Greens of Georgia, and on my mother's side, from the Carters and Lees of Virginia, and on my father's side, from the Douglasses and Stratons of Scotland, remember if you take a few more steps backward you will have to shake hands with a gorilla as your great, great, great grandfather!"

Now I know that when you go too far back you sometimes run into skeletons in the family closet. In my own family I have learned that more than one of those old fellows back there was strung up for loyalty to God and King. So I have to admit that some of my remote an-

^{*} By Rev. John Roach Straton.

cestors hung by their necks, but I am willing to stake my life on the proposition that none of them ever hung by their tails!

Honorable judges, ladies and gentlemen, it is time to come back to the subject of this debate. The subject is, "Resolved, That the Earth and Man Came by Evolution"; and the definition is, that evolution is "continuous, progressive change, according to fixed laws, by resident forces." And I submit, in all fairness, that my opponent has not established the proposition that the earth and man came by these means. The burden of proof is upon him, because he is seeking to discount that theory and that belief, drawn from a definite Revelation, which has been the foundation of our society for thousands of years, and which will finally produce the highest and most glorious civilization that the world can ever know. Yes, the burden was upon him, and to overthrow the accepted belief of Christtendom, it was necessary for him to produce facts that were acceptable to rational minds, and I submit that no such facts have been given.

No facts have been given, first of all, to bridge the gap between dead matter and sentient life; and then to bridge the gap between the alleged beginning of life in its low forms and its higher forms; and no argument and no facts have been given to bridge the tremendous gap between the crude instinct of the beast and the Godward aspirations of man.

Let me, therefore, just in rounding off our thought together, point out several things, meeting my opponent upon his own ground, that will answer, I think, satisfactorily the points he made, even though they were not directly on the subject for debate.

THE RELIABILITY OF THE BIBLE

He referred to the fact that the Bible ought not to be authority, and that we have no more grounds for believing what the Bible says than we have for believing these theories of evolution. Now, I submit that we have adequate grounds. We have the very facts of nature and life themselves, and we have also the long experience of the human race, verifying the teaching of the Bible!

My opponent harped much upon what he called the "absurd, grotesque story which we find in the first chapters of Genesis." But other thinkers do not share with my opponent his poor opinion of the Bible. Jean Paul said:

"The first leaf of the Mosaic record has more weight than all the folios of the men of science and philosophy combined."

This is true, and hair-splitting over differences about the alleged "errors" or the infallibility of the Bible does not at all change the fact that it is the greatest authority at last among the children of men. The Bible has been the great moral mentor and spiritual guide of the enlightened nations of the earth for thousands of years. Its influence is simply immeasurable, and its teachings have proved themselves to be truth because of the profound and uplifting power which they have exerted on the human race. It will take something more than the unsupported hypotheses of the materialists and the vague speculations of skeptics to overthrow it. The proposition that only a good tree can produce good fruit is undeniable, and the Bible comes to us with the credential of an age-long influence for righteousness and truth.

Whatever theory it sets forth, therefore, concerning the origin of the earth and man, has far stronger presuppositions in its favor than the wild and constantly changing theories of philosophers and the mutually contradictory ideas of scientists, because the Bible comes into court with a good reputation and a good influence, which could spring only from truth-telling and right character. My opponent answered my remark that Wells really knows nothing about how the earth began because he was not there when God made the earth. He replied by saying that I do not know anything about it either, or about God making Adam and Eve, because I was not there. It is very true that I was not there, and Mr. Wells was not there, and Mr. Potter was not there, but there was One who was there! Jehovah—Christ was there, and He has told us through inspired men just what happened. Thank God, therefore, that He has not left us to grope in darkness, and to become doped with doubt, but has given us a Revelation that answers the eternal questions of human life and destiny, that satisfies the longing soul of man, and that is a "lamp to our feet and a light to our pathway"!

So far as my opponent's characterizations of the God of the Bible are concerned, and so far as his repeated thrusts at the teachings of the Bible are concerned, I have time only to say that the God of the Bible is not at all the one-sided and ridiculous being which my opponent pictured Him. The God of the Bible is both immanent in nature and transcendent to nature. Therefore, He is a real God, and has all power in both the material and spiritual worlds.

I would say, therefore, to all the vain and intellectually proud Modernists, just as Jesus said to the self-satisfied and skeptical Sadducees of His day: "Ye do err: not

knowing the Scriptures nor the power of God."

And the point which my opponent made about the other creation myths and stories means merely that there was in the beginning a true understanding about the creation of the world, which was given, of necessity, by Revelation, but as the races scattered and became more and more sinful and degraded, the early purity of this tradition was perverted and corrupted and changed into many ridiculous forms. The mere fact that there are so

many common elements, as, for example, the use of clay, etc.—in these distorted creation stories which, as my opponent admitted, come from all parts of the earth, shows that they all must have had a common origin,—that they were all true in the beginning but were then perverted, as before remarked, and changed with the passing years into their later foolish forms.

THE BLOOD PROOF

The Bible teaching has been vindicated at many points. My opponent, for example, referred to the blood. Now the Bible teaching about the blood is verified by the real facts of science, and it also completely disproves the theory of evolution.

The fact that there is a great variety of blood in the different species of animals negatives the theory of evolution, the foundation of which is uniformity. Science agrees with the Bible that the life is in the blood, and if all forms of animal life had come from a common ancestry, then the blood of all would have to be the same. But we find the blood of birds and reptiles and men so different that if the blood of one of these be injected into the veins of the other, death immediately follows. The blood also makes the type of flesh. Science again agrees with the Bible that "all flesh is not the same flesh: but there is one kind of flesh of men, another flesh of beasts, another of fishes, and another of birds" (I Cor. 15:39). But if all animal life had sprung from a common ancestor, then all flesh would have to be the same flesh. The Bible says, further, that "God hath made of one blood all nations of men for to dwell on all the face of the earth" (Acts 17:26). The distinction, therefore, which the Bible draws between man and beast at the point of blood and flesh is confirmed absolutely by science, and it completely disproves the theory of evolution. The Bible is vindicated, by known facts whenever they are really discovered, and established.

THE FIXITY OF SPECIES

The teaching of the Bible stands vindicated and proved at another point, namely the fixity of species. Right here in Genesis the statement is made that when God created life-both vegetable and animal life-he ordained that all forms of life should bring forth only "after their kind" (Gen. 1:21), and according to their "seed" (Gen. I:II). Now, so far as all human observation and experience go, that law of God, as recorded in the Bible, has been obeyed during all the ages of time! Every form of animal life that we know anything about brings forth only "after its kind." Baboons do not produce peacocks, and acorns do not bring forth apple trees. No! each produces after its kind, just as the Bible says; and when all the theories and sceptical speculations are done, I am here tonight to say that the fixity of species answers the evolutionary hypothesis completely, absolutely and forever! The species are fixed, and the life forms are fixed, and whatever varieties may have developed within the bounds of the God-made species, have come about through God's wisdom and power, and according to the potentialities which He implanted in vegetable and animal forms, and because He commanded them to increase and multiply and replenish the earth.

If evolution were true, let me repeat, we ought to find everywhere not only the fossils of endless intermediate forms in transitional stages, recording the change from one thing into another, as I showed you, but we ought now to see all around us, if evolution is really a "continuous" process, these intermediate forms of life. We ought to see horses developing into super-horses, and men sprouting wings with which to fly, and so on ad infinitum. Why is it that we have come up in each species, just so

far and stopped, if evolution is really "continuous progressive change?" If it is that, it must go on! But it doesn't go on!

Thus we find in the deep truth of life itself—the closest and most obvious thing to us all—the reality of the Bible's teaching that each must increase "after its kind." There is a boundery which nature, or God, or whatever the power is, has fixed, and when that line is crossed, sterility is the result. Even when different branches of the same species are crossed, only hybrids result—and there is no offspring at all from crossing truly different species. The navel orange results from the grafting of two different types of orange, but the navel orange produces nothing from its seed. The mare and the donkey produce a mule, but the mule can produce nothing but a laugh! Bob Toombs, the Georgia statesman, said that "the mule is the most pathetic of all animals, in that he has neither the pride of ancestry nor the hope of posterity!" And that fixity of species, that fact of sterility when species are crossed, is a definite and everywhere present proof that the Bible is true and evolution is false!

I will admit that we have variation, and very wide variation, but because of this fixity, which is obvious and which science confirms, we know that it is variation only within the bounds of species. And this takes care of the question of "geographical distribution" that my opponent touched upon. The fact that the remains of elephants and other tropical animals have been found in North America, and that the remains of animals now found only in Australia have been found in England, goes to prove that the present continents were formerly all united, and this, with known changes of climate adequately accounts for the varieties of animals now found in different parts of the earth.

We not only see no changes in species now in progress, but there have been none, so far as men have been able

to observe, for thousands of years. We have the mummies of apes which have come down from ancient Egypt, but those apes, living over three thousand years ago, are the same as the apes of today. Not only so, but we find this same survival of species over even "millions of years," if we accept the long-time estimates of the evolutionists. There are forms of life, called bacteria, living and acting today just as they lived and acted when they attacked the bodies of mastodons and other animals in remote past ages. The scientists have found evidences of the work of these bacteria in the bones of those ancient fossils, showing that the bacteria lived and acted then precisely as they do now. This proves that species do not evolve but stand still, and if there is any change, facts prove that they degenerate rather than evolve to higher forms.

CREATIVE DESIGN

Another point at which the teaching of the Bible is vindicated by what we see around us, and by which the theory of evolution is completely disproved, is the fact of design in the wonderful adaptations of instincts to organs in many forms of life. I touched upon design in my first speech but give it now a somewhat different application. The thought of a halfway beaver, for example, surviving in the midst of many foes, and doing the wonderful things that a beaver has to do to live at all, is an absurd thought! The individual could not have survived for a day, and thus the species must have perished!

The idea of transitional amendments is, therefore, contradictory to the fundamental principles of evolution. Darwin teaches that any evolution in nature, any new bodily organ or feature, must be *profitable* to the individuals of a species in order for the species to survive (See page 77, "Origin of Species"). But a half-formed

wing or a budding leg or an incomplete eye would not be useful to the individual but an impediment. Only completed organs are useful to the individual. One principle of evolution is that nature abhors useless things and throws them off. Therefore, this other principle cannot be true that a useless half organ would be preserved by nature through long stretches of time, until it developed into a perfect organ through successive individuals!

Take again the water spider. Here is a creature so wonderful, and with habits of life so extraordinary, that it cannot possibly be conceived as coming from any process of evolution.

The water spider is a true spider, yet it lives much of the time and builds its nest under water, though it is an air-breathing animal like the other spiders. It first goes under the water and spins from its own body a waterproof silken envelope or bulb, which it attaches firmly to a rock or other object at the bottom of the water. The mouth of this bulb is downward, and of course in the beginning is filled with water, though it is waterproof on the outside. After making this home for itself, the water spider then goes to the surface and, because of the peculiar formation of the hairs on its legs, it can catch a bubble of air, which it carries down into the water and turns loose under its newly constructed home. The bubble of air rises until it strikes the top of the inside of the bulb, and there it stays, driving out a proportionate quantity of water. The spider then goes back and gets another bubble of air, and continues this operation until it has filled its house with air and driven out all the water. Then it lays its eggs, attaching them to the inside top wall of its house, and there rears its young in safety.

Now the spider could not possibly live and do these things unless it had a perfect instinct, and all of its organs were perfected for carrying out its instinct. The thought of a half water spider in the process of evolution is an absurdity! It would drown if it did not have all of the organs for spinning its waterproof house, on the one side, and all of the instincts through which it uses its organs and protects its young, on the other.

In Job God claims that He gives "the goodly wings unto the peacock," provides food for the ravens, causes the hawk to fly by His wisdom, to "stretch her wings toward the south," and the eagle to mount up at His command and "make her nest on high" (Job. 39). Thus the Bible teaches that God's designing wisdom and watchful care is over all things, and we see His handiwork in the wonders of nature on every hand.

EVOLUTION IMMORAL

There is another point at which the Bible is proved true and evolution false, and that is in the field of moral influence. Beyond any question, the evolutionary philosophy is a brutalizing and essentially immoral thing and it is utterly contrary to Bible teaching. Now I submit it as self-evident that nothing can be mentally true that is morally false. Truth is a unity, and nothing can be intellectually right that is ethically wrong. Now the theory of evolution is ethically wrong and it cannot, therefore, be intellectually right.

My opponent referred to God and the recent world War. He said that the war disproved the fact of a living transcendent God such as the Bible pictures. But his reference was not only untrue as to God, it was also most unfortunate for himself and the cause he is championing tonight.

A Living God was in the war. He saw to it that it was rightly won against overwhelming odds. He finally brought victory out of defeat for human liberty and eternal righteousness. Yes, through Christian America God triumphed in the war.

But I ask you to look at the really significant fact about the war, namely, the moral wreck and ruin which came to Germany, through the evolutionary philosophy, which really produced the war. The old Germany of Goethe and Schiller and Luther—the Germany of the Christmas tree, of neighborly kindness, of music, and art, and true science—was miseducated and debauched by the importation, through the Prussians, of the godless and destructive evolutionary philosophy. The military leaders of Prussia, encouraged by the Junkers, and the vain and ambitious Kaiser and his equally vain and ambitious forefathers, accepted and acted upon the teaching of Darwin as truth.

In one of the summaries of his "Origin of Species" Darwin speaks of evolution as the "one general law leading to the advancement of all organic beings—namely: multiply, vary, let the strongest live and the weakest die" (p. 297).

Here is "the survival of the fittest" with a vengeance! And this teaching bore its logical and inevitable fruit in Germany.

The half-crazed Nietzsche, who ended his days in the insane asylum, seized upon this teaching of Darwin with avidity, and from it he evolved his idea of the "superman"; and he taught the Germans that they were the supermen. He referred to the German proudly as the "blond beast." He glorified war and declared that it is a necessity. He utterly repudiated and rejected the Christian religion. He taught that Christ was a weakling, and that His religion was an enemy to the human race; that such things as love and sympathy and mercy are vices and not virtues, and that the strong ought to trample on and destroy the weak in order that "the fittest"

Trietschke and Von Bernhardi took this teaching of Darwin and Nietzsche as the basis of their philosophy,

may survive!

and they deliberately glorified war as Nietzsche had done. Their books were printed in cheap popular editions and spread by the Junkers and military masters of Germany throughout the empire, and thus the German nation was miseducated and misled.

Yes Germany took Darwinism literally. Darwin had taught the "survival of the fittest" in the brute struggle for supremacy, and Germany said: "That is true, and we propose to demonstrate that we are the fittest!" So she formulated her philosophy that "might makes right," which is simply a practical expression of Darwin's "survival of the fittest," and thus she sprung at the throat of an unsuspecting world!

Now, if Darwin taught truth, Germany was right, in 1914, and we cannot complain at the tearing up of treaties like "scraps of paper," at the wholesale raping of women, at the bombing of hospital ships, or the sending

of the Lusitania to the bottom of the sea!

Nor is that all that is to be said of the moral ruin wrought by Darwinism and evolution in general. The wave of animalism, with its corrupting influence upon morals, has come through this philosophy of animalism, which is prostituting and destroying the human race. If we are merely highly developed beasts, then why should we not live like beasts? Monkey men make monkey morals!

The glorification of the flesh over the spirit, of animalism over idealism, through the brute philosophy of evolution, is the real key to the moral decay of the times!

That talented Englishman, who writes under the non de plume of the "Gentleman with a Duster" did not overstate the case when, in his book on "Painted Windows," he denounced Darwinism as the fountain-head of these modern ills. It is true, my friends, that all of these dangerous and disgusting wrongs of today can be traced back, so far as their rapid increase is concerned, to the

time when the dark and sinister shadow of Darwinism fell across the fair fields of human life!

The truth of the creation as revealed in the Bible is an ennobling and inspiring truth. It links man to heaven and to God. The falsehood of evolution is a degrading and demoralizing one because it drags man down to beasthood and the mud.

THE TWO FUNDAMENTAL FALLACIES

In closing, I point out the two great fundamental fallacies of the evolutionary philosophy. The first is that nothing is fixed or final, but that all things are in a state of constant "flux and change." It is this false notion that is behind the mental weakness and the moral laxity of this philosophy. Because of this false idea, it is argued that there are no fixed and unchanging moral standards, and so the Ten Commnadments are jauntily thrown into the discard, and the youth of today are left to do as they please! The last sentence which is thrown on the screen in the film, "Evolution," which is being widely exhibited, is this: "The only unchanging thing is change."

It is as false as hell, and as ruinous as death! There are many things that are absolutely unchangeable. The proposition that twice two equals four is eternally true. The proposition that a straight line is the shortest distance between two points cannot "evolve" nor change nor alter forever. The true principles of physics and chemistry are unchangeable and eternal. The unchangeableness of "natural law" which the evolutionists invoke in their behalf negatives this other fundamental plea which they make of "continuous progressive change." The great ethical principles of justice, righteousness and truth are all unchanging. Likewise, the Word of God is "established forever in heaven." It cannot change, and

the Christ that it pictures is "the same yesterday, today and forever!"

The philosophy which teaches that all things are changing is not a true philosophy, and there are great enduring realities upon which we can build our lives, establish our homes, and develop a sane and noble society.

The other fundamental falsehood of evolution is that strife and struggle are the way of life. It is not true that the brute struggle for existence and the "survival of the fittest" are the profoundest facts of nature and life. There is another higher and greater truth, a more universal principle than the principle of conflict, competition and war, and that is the fact of co-operation, helpfulness, and sacrifice in service. Despite our superficial prattle about the "survival of the fittest," the fact stands that the forces which make for union and harmony have always been greater than the forces which make for disunion and strife. The fundamental fact that the universe is a cosmos instead of a chaos proves that. The cohesive forces are stronger than the disruptive forces; the centripetal forces are greater than the centrifugal forces; the sunshine is superior to the storm, and the light has the power to drive darkness away. So the struggle for life is not the greatest factor, nor is it the factor that should be most stressed. The struggle for the life of others is of far greater prominence in nature, when we but see the truth deeply enough. The little bird will battle more fiercely for its young than for its own food or life, and everywhere self-sacrifice for others is seen. Nature is not prevailingly, therefore, "red in tooth and claw." Nutrition is accompanied by reproduction, in order that life may continue, and the sacrifices of fatherhood and motherhood throughout all of nature are, in themselves, eloquent of the truth that unselfishness and concern for others is infinitely greater, as well as more beautiful and more important, than the selfish struggle for the "survival of the fittest." All of which is but proof of the cheering prophecy that "the meek shall inherit the earth, and shall delight themselves in the abundance of peace."

There is a great tenderness at the heart of the world, and this expresses itself in the highest truth known to man, namely, that "God is love." The supreme expression of that love in human history was the cross that stood on the place called Golgotha; and the One who was nailed to the cross has taught us that God is not a heartless force, but a heavenly Father who, because of His infinite love, gave His own son to die that we might be saved from sin and enter into everlasting life. It is the philosophy of the cross, with its great teaching of self-sacrifice in service, which is needed today, and not the philosophy of the brute struggle for survival, the philosophy of the shambles, which is the apotheosis of self and the mother of all wars, immoralities, hatreds and wrongs.

It is not true that we came up from the slime and the beasts through the jungle, and that we pass out into a night of oblivion unlighted by a single star. It is true that "in the beginning God created the heavens and the earth" and that He made "man in His own image." It is true that we came from God through the Garden, and that we are destined by obedience to Him to an eternity of joy in a land that is "fairer than day," where we will meet again our loved ones who went before, and upon whose blissful shore there falls no shadow and rests no stain!

The great need of the times is not self-assertiveness and arrogant pride, but humility, gentleness and selfsacrifice in service.

With the simple faith of a little child, therefore, we can say with Cecil Frances Alexander, in his exquisite

poem, to which I have ventured to add a closing verse of my own:

"All things bright and beautiful,
All creatures great and small,
All things wise and wonderful,
The Lord God made them all.
Each little flower that opens,
Each little bird that sings,
He made their glowing colors,
He made their tiny wings.

"The purple-headed mountain,
The rivers running by,
The sunset and the morning,
That brightens up the sky;
The cold wind in the winter,
The pleasant summer sun,
The ripe fruits in the garden,
He made them every one.

"The tall trees in the greenwood,
The meadows where we play,
The rushes by the water,
We gather every day.
He gave us eyes to see them,
And lips that we might tell,
How great is God Almighty,
Who has made all things well."

The Bible as our Helper,
And Jesus as our friend,
To die on dark Golgotha
To make us good again.
God gave us hearts to love Him,
And tongues His praise to tell—
How good is God Almighty,
Who maketh all things well!

V

THE JUDGES' REPORT

Presiding Officer, Judge William Harman Black of the New York Supreme Court, introduced Judge Almet F. Jenks who, on behalf of the judges, announced that they had decided unanimously in favor of Dr. Straton, and the negative.

The judges were Judge Almet F. Jenks, of the New York Supreme Court, Judge Phillip J. McCook, of the New York Supreme Court, and Hon. Frank P. Walsh,

former Chairman of the War Industries Board.











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