

The Existence of God

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A Debate

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Dean L. C. Sears, M.A., Ph. D.—Chairman Oct. 6, 7.

President George S. Benson, M.A., L.L.D.—Chairman, Oct. 8, 9

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Dedication

To

B. Frank Rhodes

Friend and Brother

Introduction

By

F. W. MATTOX, M.A., PH.D.

Truth comes by earnest investigation of all available evidence. This conclusion is readily admitted by all men. Accordingly, in order to find truth on any subject, there must be an earnest search of all available sources for pertinent evidence. Furthermore, the earnest seeker for truth must ever be ready to examine any new evidence.

With the above principles in mind, the reader of this debate is ready to benefit by his study, for here you will find two very opposing positions set forth by men who are accounted among the strongest of their respective persuasions. Mr. Teller is secretary of the Association for the Advancement of Atheism in America and has for twenty years had access to all of the material accumulated by this association. In addition to this source of information he is a careful student of psychology and logic and is well qualified to set forth the bases for the belief that the world is the result of chance and that there is no God to whom men owe responsibility.

Professor Bales is Head of the Department of Bible in Harding College, Searcy, Arkansas. Harding College is one of the most conservative and fundamental religious schools in the United States. It is controlled and operated by members of the church of Christ. Mr. Bales received his Ph. D. degree from the University of California where he studied the philosophies of Naturalism and by training is prepared to deal with the subject of this debate on the scholarly level.

The debate was conducted in the auditorium of Harding College and was attended by the entire student body, faculty, and towns people of Searcy, as well as visiting preachers and Atheists. The speeches were transcribed as they were delivered and later taken from the records and put into manuscript form. Each participant has had opportunity to go over his speeches and smooth them up, where needed, for publication.

In recent years there has been a growing indifference to vital

issues. It is time for all men to look earnestly into the question of this discussion. If there is a God in Heaven who has revealed Himself to men it is the most vital consideration that can enter the mind of men. If there is not a God to whom men owe their allegiance, then men ought to be freed from such convictions and live in harmony with the stark reality that this life is all and the end is the tomb. The difference is too great to cast off lightly. This debate is accordingly set forth in printed form with the hope that men everywhere will become increasingly aware of these distinctions and the results of following such contrary paths through life.

Searcy, Arkansas,

October 28, 1948

BALES - TELLER DEBATE

FIRST PROPOSITION

Resolved: The Universe is the Product of Son-intelligent Causes.

WOOLSEY TELLER in the affirmative.

JAMES D. BALES in the negative.

First Night-Teller's First Speech

Mr. Chairman, Dr. Bales, Ladies and Gentlemen: Before proceeding to the subject of our discussion this evening, permit me to thank the officials of the college, Dr. Bales, and each and every one of you for making possible this debate. Having so registered my appreciation of your courtesy, I nevertheless must state that I am amazed. I am amazed that in this time and age we should be assembled here tonight to discuss the existence of a ghost. Ghost-believing—God is a ghost, according to the theological definition—has largely gone out of existence except among primitive tribes, a few backward individuals, and the theologians, who necessarily must keep up the belief in God in order to make it their profession.

In the world of science God-believing has largely gone by the board. Not many years ago Professor Leuba of Bryn Mawr College sent out a questionnaire to a great number of American men of science. There is a book entitled "American Men of Science," and in it are listed those who are engaged in conspicuous work in all lines and activities of science. Dr. Leuba questioned them about their belief in God and their belief in immortality. We are not concerned with immortality tonight, but we are concerned with the belief in God, and the returns received by Professor Leuba are definitely on the side of atheism. I have his figures before me. Dr. Leuba wrote a work called "The Beliefs in God and Immortality." You can get it, maybe, in the library of your college. Perhaps you can't. But get it anyway.

I have here the later figures of Dr. Leuba, published in Harper's

Magazine in 1934, and they are even more significant than those which were given in his book, because they indicate a trend decidedly toward unbelief and disbelief in God. I do not mean to bother you with figures, but his investigation amounted to this: seven **out** of every ten scientists disbelieved in, or had doubts as to the existence of God. Now, these are the men, Ladies and Gentlemen, who are engaged in the work that is closest to nature; and if these men, who are making profound studies in the field of medicine, physiology, psychology, biology, and the other sciences, come to that conclusion, it is time for you to take note. You may say to yourself, "in following the theologians I am on the wrong track "

I think there are definite proofs of the non-existence of God right within reach of your own lives. Many in this audience are young—young men and women—and I dare say a large proportion of you may have participated in the last war. If you did", you know its horrors, its agony, its distress, and what it meant to millions of homes. All things which are vile and vicious entered the world war. What was God doing during all that time? On the assumption of the theologians, there is somebody sitting on a cloud watching over us and anxious about how things are going on down here below. Did he take an interest in this world war? How many millions of prayers were uttered during the last world war for its cessation? What happened. Nothing—the war went on for long dreary years. Prayer after Prayer after Prayer asked God to stop the war. The bloodshed went on.

That is the way God is concerned about you (I'm taking the assumption that there is such a being); that is the way- he is interested in your lives. What would the Devil have done under the same circumstances? The situation offers, in that respect, a definite proof against the existence of a heavenly being interested in your welfare. He did not stop the war. You remember, for example, when England had a national day of prayer. (We had many prayer days, too). And I think it was on either the second or third day after that national day of prayer that the English people suffered one of the worst blitzkreigs in the whole war. That is the way their prayers were answered.

And then, you have such trivial stories put out by the religionists. You remember the Rickenbacker story. Rickenbacker and a few fellow survivors were on rafts. They were prayerful men. One of them had already died, and they had been several days at sea on open rafts. They kept on praying for food. They had con-

sumed, during the first two or three days, everything they had, which was next to nothing, and they prayed for food. Did God answer their prayer? He did. What did he send them? One sea gull! Sick men, dying men—he gives them a raw sea gull to eat. Is that an answer for food? He could have sent at least one sea gull apiece, and tied a keg of water on the neck of one of them, and had some sort of interest at heart in regard to these men. That is the way, if you look at things, God answers prayer. Yet that story of Rickenbacker was circulated throughout the United States as a great example of God's benevolence. What a burst of generosity it was to send raw sea gull meat to these poor men! Why, there isn't a doctor, or a nurse, or a dietician who would give raw sea gull meat to a sick and dying man. That's criminal. And there are plenty of sea gulls. God could have simply given his command and there would have been plenty of sea gulls. That is the way God answers prayer.

You people of Arkansas, I understand, are tremendously interested in the cotton crop. It is important to you. Yet how does God treat you in that respect? He sends you the boll weevil. Now, on which side is God, on your side or on the boll weevil's side? You plant your crops, you grow your cotton, and he sends the boll weevil to eat it up and cause you a lot of trouble and a loss of valuable produce. You have got to make up your mind whether Providence is on the side of the people of Arkansas or on the side of this insect.

One of the favorite, I might say one of the most popular appeals in regard to the belief in God, is that which is called the "design" argument. You look around you and think that everything is designed. I am going to examine the human body tonight, in a very summary way, and present a few of its features. The human organism, as examined by anatomists and physiologists, is, to put it in plain English, a mess—a physiological mess. Professor A. S. Romer, in His *Man and the Vertebrates*—it is a University of Chicago Press publication—says, and I'm quoting:

"Our bodies are not the result of a straightforward designing of the best possible machinery for our purposes, but in many respects seem to be such a patchwork that it sometimes seems a wonder that it functions at all."

Every physician knows that you wouldn't have hospitals, you wouldn't have so many sick people if the human body worked right. Take, for example, the way we are constructed. Is there anything more atrocious, anything more barbaric than the way

a woman has to give birth to a child? It's ridiculous, this whole set-up of carrying an infant for nine months. Why, it should be so arranged that a woman lays an egg and hatches the child outside of the body. That happens along the line of other animals.

And then think of the way the body is put together, so that you cannot get at the internal machinery. Now, suppose Henry Ford were to turn out a car in which you could not examine the engine. It was hermetically sealed so that you couldn't get at it. What happens in the case of the human body? If you want to fix it inside or take a look at it, the surgeon has to use the "can-opener" method, by cutting you open with a knife. That isn't an ideal arrangement. The human body should be made with a sort of zipper-like opening here in front, extending up and down, whereby you could get at the internal machinery without the patient's suffering. But according to theologians, according to Christians, according to everyone who believes in God, this is a perfect mechanism. Going through the human body from head to foot you find, for example (those who are young will not have experienced this so far)—that the average individual needs more than two sets of teeth. Two sets are not enough. If you doubt that, just go to grandma and you will find that she has lost her second pair of teeth and has artificial ones. Man, if we consider his average span of life, should have three sets of teeth.

Do you know that most of our eye troubles—I should say many of our eye troubles—are due to the fact of evolution? Now, I know you don't believe in evolution; you believe in Adam and Eve. But in regard to evolution, how many of you, I wonder, have seen a human embryo? The human embryo has eyes on the side of its head, as do most animals. But in the course of development these eyes come to the front, and it is due to the fact that we have not yet achieved, over the period of evolution, a complete frontal focus of the eyes that we have the troubles we do, many wearing glasses because they haven't the proper focus which is essential to perfect vision.

I could go on and on, if time permitted and offer evidence, from optometrists and others, showing the imperfections of the human eye. Helmholtz, one of the standard authorities on all things optical (you will find him in cross references and encyclopedias), said that if a human being were to offer him a mechanism such as the eye, he would return it and want his money back.

Now, that doesn't mean that we are going to throw away our eyes. We can't replace our eyes, poor as they are. But what we

do is something that God never did. We give ourselves better vision because we use optical science. We can see through the telescope, we can see through the microscope. These are human inventions, and even your spectacles, your eye glasses, are to make up for the deficiencies of the so-called act of God which gave you your eyes.

In making a human mechanism, why shouldn't our arteries be of such material that they would be elastic and pliable all the days of our life? I daresay our chemists could devise such a tubing that would work out satisfactorily. But hardening of the arteries is a commonplace. Go to your medical schools or to your hospitals and you will learn about hardening of the arteries. God has not made them elastic enough to last throughout the life time of the individual.

There's a young man down here in front who is going to help me out. You will take one end of this string and go up the aisle as far as the length will permit. I do this to have you visualize things. I could tell you the intestinal tract is twenty-five feet long—sometimes it runs to thirty. Now, that is the piece of junk you have inside you, that tube. That is the sewage system. It is a very poor mechanism. All physiologists will tell you so. It is due to the fact that this tube is so long and that things get glutted up inside, and is such a mess at the other end, that you have so much intestinal trouble. Metchnikoff was one of the first, if not the first, to call attention to this fact. And he recommended that the intestinal tract should be shortened. This structure is a hangover in evolution from an animal that could really use it. But we have not been able to get rid of this lengthy tube except by cutting it and shortening-it—and they are doing that nowadays.

The large intestine (that doesn't mean in length) is the lower intestine. It is about five feet long. The other intestine is twenty feet long, making in all twenty-five feet of tubing. Now, that is your intestinal tract. And to make matters worse, you have this botched up tube inside of you so that it is heaped up in layers like this. (Illustration) And the thing gets tangled, strangled, and messed up. I ask Dr. Bales, what are we going to do about it? It should have been corrected in the first place. Dr. Bales. This so-called Intelligence which you say looks after everything should have attended to these matters.

Then you have gallstones, those hardened particles which clog up the gall bladder. How many diseases are there? Those who study medical science have to spend seven years in order to get

even the beginnings of an understanding of what it is about. The human body is a terrible mix-up. You do the best you can with it, but just visit your hospitals and clinics in your cities and towns. I daresay that even among you good-looking and healthy-looking people, there are those who every once in a while go to their doctors because there is something wrong with their mechanisms. And another thing: think of a manufacturer, this God who makes a mechanism such as the human body and doesn't give you spare parts. You can't go to the drug store and order a new liver. You're through when your liver is gone. You can't get new eyes, you can't get anything new. An automobile manufacturer would provide new parts. If your tire wears out you buy a new tire; if the springs give out, you get new ones. No replacement! Fine planning by this Man in the skies!

We could dwell on the human mechanism, but our time is short. I want to call your attention to this figure on the blackboard. It's supposed to be a worm. I'm not an artist, but if you can visualize it from back there, it's a worm. If you sever this worm by cutting this section here (close to the head), it will grow a new head. But if you cut it in two a little behind the middle, what do you think grows? A tail! The animal then has a tail and a tail where a head should grow, and it dies of starvation. These things in biology are mechanical; they are not designed. Rightfully this worm should grow another head here. But it doesn't. Below the half mark, it grows a tail, and, as a two tailed animal without a head, it can't eat. Providence says "goodbye" to the worm and the worm disappears.

This diagram here is rather poorly executed. It represents a parasite. Do you know that it has been estimated that one-third of all animal life on this earth consists of parasites, animals living upon animals, or living forms feeding upon living forms? Now, can you conceive, in your most sane and sober moments, of an Intelligence sitting up nights, planning, blueprinting, so that one animal should live on another? Go through your biology books and you will see all kinds of parasites. But this particular one is interesting because it serves no purpose. It is called *Sacculina*. *Sacculina* consists of an empty bag. This is not an eye, it is a hole, an aperture through which water enters and flows out. It is a marine animal. Inside there is not the slightest indication of any organs. No eyes. Nothing suggestive of a useful life. But this animal attaches itself to the hermit crab and throws out these processes which penetrate the hermit crab's body and make it practically explode. Now, I don't know what God has against the

hermit crab. But why should this particular thing be so designed that the hermit crab has to suffer? It serves no purpose except for hatching eggs—thousands upon thousands of eggs to make new parasites to carry on this deadly work.

Do you think God designed the tape worm? Would *you* design a tapeworm? Ask yourself that question. Forget your theology, forget your Bible, forget your Providence, forget what you learned at your mother's knee. You're at *my* knee for tonight. Ask yourself this question: would I, if I had the power, make a tapeworm? That applies to human tapeworms, sheepworms, all kinds of worms that live in the interior of animals and get their nourishment inside.

"It is computed," says Harold Bastin, in his book on insects, "that 500,000 different kinds of insects are actually known and named, hundreds more are being classified every year; while it is safe to estimate the total number of existing species as at least a million." A million species of insects! There aren't that many species of men. Man is of one species; and there aren't many differences in men. So I ask you this question: Is God more interested in insects than he is in you?

If we come to the point of asking ourselves what kind of a habitation we have, what kind of a world, we can consider that question in this next ten minutes. I have drawn on the blackboard a globe which will have to pass for the earth and its various zones of temperature. You are familiar with them, of course: the two polar regions, the torrid belt, and our two so-called temperate zones. That is the layout of the way God made the earth for man's habitation and for all the animals. Now, what is the situation? What of God's heating plant? He freezes everybody up there, he freezes everybody down here, and he roasts them to death near the Equator.

And in the temperate zones, what have you? Ask yourselves what the temperate zones are like. You don't know whether to wear an overcoat or not. That is the way God planned our habitation. And it is actually known from checkups on geniuses that you do not get geniuses in the Equatorial belt. Mohammed was perhaps the only man of outstanding ability. I'm not pleading for Mohammedanism, but Mohammed, as a great man, is the only one on record as having been born within twenty-five degrees of the Equator. You cannot produce geniuses down in this hot climate.

Now, let us transfer the same thought to this diagram on the

blackboard. It represents a five story building, an apartment house. Suppose you were going to rent space in this apartment house and you go to the superintendent and say, "I want some rooms." "Well," he replies, "I'll tell you what I can do. I can freeze you up here on the top floor, I can freeze you in the basement, and I can roast you on the third floor. Maybe you can get by on these two other floors."

What would you think of a man who constructed a building in that matter? And yet, that is parallel to the way God made the earth. And how did he make it? More suitable for fish than **for** you—two-thirds **of** its surface covered by water. Why all the water—to help the steamboat companies? What's the idea? According to the theologians, this world was made for you, but what a glorious pipedream that is! It isn't made for you. Why, you could sit down over-night with a pencil in your hand and devise better ways of running the world. And you do it, too. Man has always tried to improve upon the things which he finds around him. You have a cattle show over in Little Rock, I understand. I'm going there tomorrow to take a look at it. What is man doing with that cattle? By breeding he is getting better stock than nature ever turned out in the rough. Why, there are hardly any animals of consequence, race horses, fine sheep, fine hogs, fine cows, even fine human beings that haven't been bred. You have to breed them; you can't get them by simply having them breed promiscuously the way God turned them out. You have to have selective breeding all along the line.

You have fine dogs, even fine canaries. Do you know that the original canary was not like the canary you see? That canary was a stunted little bird in its natural form; man has made the modern canary by fancy breeding. God did not give you the canary we have. God didn't give you the American Beauty Rose. That was developed from a small, very scrawny, five-petal flower—a little meadow flower. Man developed these things. Go to your flowers, and in some cases you will find beautiful natural growths, but in most cases man is improving on nature. Why? Because if nature represents what God turned out, man is not satisfied with it. That is something to think about.

I ask you once more to consider this diagram on the blackboard. We spoke about the temperatures of this world. What would you think of the lighting system if you, as a student, were looking for an apartment and the owner said:

"All right, I'll put you in here, but I can't give you any electric

lights." And you say, "Well, I'm a student at Harding College and I have to study the Bible every night, so what am I to do? I must have an electric light." And the owner replies, "I can't give you an electric light, but you can read by the light of the moon."

That is the way God lights the night, with the moon. Now, try to do your studies by moonlight. If it were not for the electric light, what kind of lighting system would you have on this earth? God turns out the earth and gives you the moon for nighttime illumination. And he doesn't give it to you every night. He is very negligible in handing out even that limited light for your studies. There's something wrong somewhere.

Take the question of floods, drouths, tornadoes, volcanoes, and hurricanes. Step to consider what a drouth means to persons who have been working hard for a season. Your poor farmers, poor peasants—it may threaten their very existence. And *you* wouldn't harm them. You wouldn't conceive of bringing hardship to so many people.

Why were we worried, in the last war, that our enemy might start a germ war when God has been conducting a germ war against the human race ever since it started? You have germs of every description—deadly disease germs. He is conducting a war of germs on you. Do you think he is worthy of your thanks, worthy of your gratitude, worthy of your worship? It all boils down to this: he is not worthy of anything, because he doesn't exist. Up in the skies there is nobody concerned about you. And Bible or no Bible, theologians or no theologians, think it over very carefully, and if some of these ideas will be thought over, I think you will find in time that you have come to the conclusion that there is nobody external to this world interested in you.

* * *

First Night-Bales' First Speech

It is a privilege and a responsibility to be before you tonight. I appreciate the responsibility even more than I do the privilege—although the privilege I do appreciate. I have some questions for my opponent. These do not, all bear on the speech which has just been made, but all of them sustain some relationship to various aspects of the issues which we are debating. Mr. Teller

may answer them at what he believes to be the appropriate place in the discussion.

T. QUESTIONS FOR MR. TELLER

(1) What reason is there to believe that spontaneous generation, that is the development of life from non-life, ever took place?

(2) Ought we to become atheists?

(3) Name one form of life which can begin and complete its life cycle without receiving anything directly or indirectly from some other living thing. In other words, name one form of life which is entirely dependent for its food, etc., on the inorganic environment.

(4) Does the term "free-thought" or "freethinkers" imply that thought is in any measure free?

(5) How did matter become intelligent enough to deny that the universe is governed by intelligence?

(6) How do you account for the order and intelligence which are manifested in such a being as man, if the universe is a product of non-intelligent forces? Of course, Mr. Teller has mentioned some things about that which we shall notice, if not tonight, at least later in the discussion.

(7) Is there any rational account as to why matter in motion should have worked out theism in my brain and atheism in yours?

II. THE THEIST CANNOT LOSE

Now, ladies and gentlemen, I would like to call to your attention that in this particular discussion I have nothing to lose, even if my friend is right. For if he is right and I am the accidental by-product of the workings of the laws of nature, I shall drop out of this life upon even scores with him. I cannot lose. I have lived this life in hope of a life to come. I have had joys that he cannot know. I have had a hope, that has sustained me in difficult times, that he cannot have; and finally I drop out of life on even scores with him, even if he is right. On the other hand, if he is wrong and I am right, he would admit that he is teaching a doctrine which is the most horrible doctrine that a man could teach: that would rob man of a hope and purpose for life; and when we drop out of this life it will not be on even scores. I do not say this to prove that I am right. I simply point out that I cannot lose, that I have everything to gain

and nothing to lose; and that he has everything to lose and nothing to gain.

III. THE MEANING OF THE PROPOSITION

With reference to the proposition—concerning the universe being governed by intelligence—I do not mean that we shall always be able to point out to prove that everything that we see is in order, and that we can see in every particular thing signs of intelligence. I do not say that such is included in the proposition. I shall come back to this point after a while. But I do assert and I do maintain that there is sufficient evidence of order and design in this universe that it cannot be accounted for by the working of non-intelligent forces. In this debate attention will be directed to some of these facts.

It is possible, of course, to find some disorder, and to magnify disorders so as to overlook the beautiful order and harmony that we see so much in life and that makes life possible. If in everything that we see we could see order, it would not be any more difficult to explain that order without God, than it is to account for the order that we actually see, without God. To illustrate, one automobile in a desert, in a wilderness, would have taken just as much intelligence to have produced it as it would take to produce a thousand automobiles and to eliminate the wilderness. There is, then, some order.

I would like to bring in another point, too; and these points all bear on the proposition. The point is that the power of a position is to be found not merely in its power of attack but also in its power to sustain its own doctrine. In other words, one should not fall into the "fallacy of objections" and believe that because he can find certain objections to the position of faith in God that therefore faith in God is not reasonable. There is no position that any man can take that does not have some difficulties. I talked with a man one time who brought arguments against the fact that I was there before him. He said that I was not there and that he was not there. Thus we conclude that just because there are objections which can be raised it does not mean that a position cannot be sustained. My opponent must not only raise objections, but he must also show that his position can account for the order that we see, and that the design, of which there is evident proof, is a product of non-intelligent forces.

IV. ATHEISM REFUTED BY THE BASIC ASSUMPTIONS WHICH

ARE ESSENTIAL TO DEBATING

The very fact that my opponent and I are engaged in this

discussion is ample proof that his doctrine of materialistic atheism is not true. This statement is provided by the following reasons; reasons without which a debate would be impossible. A debater must assume some of the following things, or it is utterly irrational to debate. In other words, there is no reason for one to debate unless certain things are true; unless certain things are assumed; unless certain things are granted.

(1) A debate grants that there is a realm in which intelligence operates. That men can be taught; that facts and arguments can be presented; that man can be influenced and changed by reason, by thought, and by argument. Materialism cannot account for this realm. My friend speaks of having to deny the existence of a "ghost"; well, we call his attention to the fact that the idea of a ghost in many people's mind is connected with something mystical, "twistical"; but we are talking about God in the sense of ghost only if you use the term in the sense of spirit. It could be said that tonight Mr. Teller used his mind. And yet we might say: "Well, that is just a myth, for the simple reason that you cannot taste his mind; you cannot smell his thoughts; you cannot weigh them; you cannot pick them up with forceps or anything like that." Shall we therefore conclude that there is no realm in which intelligence operates? My friend believes that thinking is mere vibration of the nervous system and the brain; vibrations which are set in motions from outside impulses and inside impulses.¹ According to that it is useless to come here and talk to people and use reason and logic. Why? Because the only thing that can be done is to get on certain wave lengths and vibrate. These vibrations would finally hit my brain and shake its atoms into certain patterns, just as my voice is bringing impressions to bear upon the record which is recording this speech. I am not reasoning with the record; it cannot help taking the words that it takes; since the conditions, materially speaking, are what they are. But the mind is not like that. We can reason with it. We can weigh things. Materialism cannot account for mind, and the realm of mind points to the realm of the divine mind as its source and its origin.

(2) A debate assumes a moral realm; a realm in which men have some freedom of choice. Two things are involved in this: a moral realm and a realm of freedom of choice. My friend will, I am sure, maintain that if he is right and -,we see that he is right, that we ought to accept it. Now, why should we? The "ought" comes in when we ask why we should accept it

even if we believe that he is right about it. Teller constantly appealed to a moral standard; in fact, he has tried to judge God by a moral standard. But atheism logically has no place for a moral standard. *Men do not apply moral standards to things, but to persons.* If you had a flat tire on the way here, you might be very peeved and upset about it, but you would not blame the physical tire, since conditions being what they were it could not help doing what it did. You might blame the man who put out shoddy material, and that sold you that sorry tire.

And so, there is a moral realm and my friend has appealed to it constantly, in trying to judge God and in saying that if there is a God that He has not done right by us. Why, friends, if materialism is true, there is no moral realm! But my opponent can not even open his mouth without denying the fundamental assumptions of atheistic materialism. For if there is no realm of human choice, no freedom of will at all, then how can we be responsible for believing what we do? I say again that, on the materialistic assumption, that matter worked out in my mind theism and it worked out in his mind atheism; and neither one of us is responsible for it, according to his doctrine. And one is just as true a product of the working of matter as is the other, according to his theory. But there is a realm of moral choice, there is a realm of freedom of will. My friend may deny it, and yet he will talk about a freethinker and free-thought. But if there is any free thought, there is a possibility of putting into action that thing which we have thought about. The determination to put into action this course rather than that course, after we have weighed both, indicates a choice. Thus there is a realm of freedom. But materialism has no place for a realm of freedom, for all is mere matter in motion. But there is some freedom and for that realm of freedom, and its source, we must look to something beyond matter. And thus away goes materialism and atheistic determinism, and in comes mind, the realm of moral choice, and freedom of will and decision.

My opponent has taken the irrational method of explaining the universe in the lowest terms possible. There is matter and there is the fact of mind, of intelligence and morality. He chooses to interpret everything in terms of the lowest; thereby indicating that atheism is irrational.

V. WHAT THE OPPOSITION MUST PROVE

Let us now point out what my friend must prove in order to sustain his position. Sometimes the impression is left upon people

that Christians and theists are the only believers; but it is a fact that the atheist believes. He believes not only without sufficient evidence but contrary to evidence. Teller's position is that the universe is not governed by intelligence. (In the term "governed" I embrace not merely what is taking place here and now, since I believe that many things are mechanically governed. But back of that mechanical arrangement is divine intelligence.) But in order to prove his proposition he must prove that God does not exist. He believes it, he cannot prove it.

Teller must also believe in the eternity of matter. Something has always been here, because something is here now. Out of nothing comes nothing. Thus since something is now here, something has always existed. My friend says that that something is matter. He can believe it, but he cannot prove that matter is self-existent and that it has existed from all eternity.

My friend also believes that matter gave birth to life.

He believes also that there is some order in this universe, and that this order is to be accounted for by disorder. Yes, order is a product of disorder!

My friend believes that consciousness arose out of a peculiar chance combination of atoms.

My friend believes that intelligence, and thus the ability to weigh and to mold matter, and even to argue, has come from non-intelligent forces.

My friend cannot consistently believe that man is anything other than a mere matter-machine without any power of choice; thus without any moral responsibility.

He believes that his thought is a mere wiggle of the nervous system, which wiggle is determined by physical conditions, and has no real power, within itself, at all. Thus, instead of having a debate and presenting arguments, we should take "Carter's Little Brain Pills" and regulate the brain just like we take Carter's Little Liver Pills to help when something goes wrong with the liver!

My opponent believes a creed which has no hope; which tells man that he came from the slime rather than the sublime, and that man will end in the slime with all his hopes and aspirations crushed.

VI. ARE MOST SCIENTISTS ATHEISTS?

My opponent has brought up a number of arguments which

in reality cluster around only a few points. First of all, he argues that scientists are unbelievers. The fact is that there are thousands of scientists in the United States alone who are devout believers in God, although I have not counted all of them. Of all the scientists whom I have known in different universities in Canada and in the United States, the majority of them were believers in God. It is the atheists who are few in number.

In 1923 a statement was drawn up and signed by thirty five prominent Americans, among the fifteen eminent scientists, including such men as Campbell, Conklin, who stated that they believed in God.² Mr. C. L. Drawbridge conducted a survey in England the results of which was published.⁸ There was a ratio of nine who believed in a spiritual domain to one who did not.

Twenty four to one they repudiated determinism. One hundred and forty three said that there was no incompatibility between belief in evolution and belief in a creator; while six said that there was. Thus it was twenty three to one in this case. Twenty six thought that science negated the idea of a personal God *as taught by Jesus*, while one hundred and three disagreed with them. Thus it was four to one in favor of belief not just in God but in God as revealed through Christ. Seventy four said that science does favor religion, and twenty seven said no. Of course, of the twenty seven some of them took the position that science was neutral.⁴

With reference to the survey by Professor Leuba, I call to your attention the fact that the question which he asked scientists was not the type that all believers in God, among the scientists, would want to answer yes or no. He stated it thus: "Now I believe in a God in intellectual and effective communication with man. I mean a God to whom one may pray in the expectation of receiving an answer. By answer I do not mean the subjective, psychological effect of prayer . . ." ⁵ Many scientists who believed in God would not like his definition of God and his conception of God. And so it was certainly unscientific for him, from a survey which contained such questions, to announce that the majority of them did not believe in God. Many might believe in God who do not believe that God answers prayer in the way that it was stated by Leuba. But even with that type of question there were a little over forty one per cent who believed that God is.

Sir James Jeans,⁶ pointed out that scientists were heading toward a non-mechanical and non-material conception of the uni-

verse; toward a spiritual explanation of the universe. Friends, you will find a few *noisy* scientists who are atheists. But you will find that the overwhelming majority of them are believers in God. And even if they were not it would not prove anything except the fact that men who concentrate on matter and its relationship are apt to forget that something besides matter and its relationships exist. Just as men who concentrate on crime reporting may become overbalanced by that type of thing and conclude that nobody is good. If you read the newspapers and drew your conclusions just from them, you would think that there is no goodness and happiness in the world. And so people who concentrate on matter and its relationship, *and* who do not think much about God nor the existence of God, may say that there is no God. But even the majority of men of the type who deal with matter do not fall into the category in which my friend tries to place them.

VII. THE PROBLEM OF PAIN

With reference to design, I call to your attention that there is abundant evidence of design. I shall try to deal tonight with the eye. Some of the other things I shall briefly mention. But I shall have to come back to them later because most of what he has said clusters around one point and that is the existence of evil and of pain.

Well, friends, that is not even on the issue. As surprising as it may seem to my opponent, that (the problem of evil) has nothing to do with the issue. We are not debating the character of God, the kind of God, but the existence of God. Teller might get some of his points and say: "God does not care for us in the way and at the times that I think He ought to; that He does not baby us along like I would like for Him to do; that He does not keep us from reaping what we sow, like I would like for Him to do." But that has nothing to do with the question of the existence of God. The problem of evil deals with the character of God and not with the existence of God. Teller is entirely off the issue.

With reference to war, why do wars come? My friend will recognize that they come because of the greed of man, the selfishness and sinfulness of man (Teller can not explain how there could be any such thing as sin in the type of world that his doctrine pictures). Do you think that God is going to stand between men and the fruits of their own folly and thus not allow them to see, if they are willing to open their eyes, that

it is blind stupidity to go on contrary to God? Because many that profess to believe in Him have left Him in many instances out of their lives, and have let selfishness, greed, lust, hate, jealousy and anger in (and all these things are contrary to the will of God), they have been led into difficulties. Now Teller wants God to step in and keep men from reaping what they have sown.

With reference to prayer: I believe in prayer, why certainly so. But sometimes God answers yes; sometimes He says no; and sometimes He says wait awhile.

Furthermore, God is more interested in our spiritual welfare and character than in the mere preservation of our body. This is indicated by the fact that God does permit suffering to come into this world.

VIII. THE HUMAN BODY

With reference to the human body being a mess, it is really such an' amazing thing that most scientists stand back in amazement and awe before the human body. Dr. Walter B. Cannon, I believe he is of Harvard University, has a book⁷ in which he shows some amazing things which could not have been the product of non-intelligent forces working in matter. Dr. Arthur I. Brown also has a book⁸ which my friend should read.

The body meets the purpose for which God gave it. It does not meet all the purposes that Teller thinks it should, but he should not try to tell God what purposes it should meet.

I also call your attention to the fact that we are dealing with a cursed earth. I shall not go into this point at length but theists believe that there has been a departure from God, and the plan that He had for human life, through man's misuse of his freedom. Thus to point out some things here which have gone wrong does not prove at all that God does not exist.

As for laying eggs and being hatched out of eggs, maybe one of the reasons that God did not fix it that way was that God did not want people, who may have lost all faith in him and respect for even their offspring, to lay eggs and go off and leave them. God wanted us to have real mothers and fathers, Furthermore, the believer in God believes that the pain and woe of child bearing came into the earth after, not before, it was cursed. Some of the mothers whom I have heard express themselves, as one did in a recent article, pointed out that carrying a child close to their heart for about nine months was not the

terrible thing that Teller talks about but was a wonderful experience.

As for teeth, part of them fall out because of the way we live in violation of certain of God's laws.

Let me call your attention to a fact (and much of what he has said can be answered by just this one point) : God did not make our bodies to live forever in a world that is in rebellion to Him. This meets all these objections and arguments. Yes, from dust you are and to dust finally you will return; although the spirit will return to God. In fixing it that way God has impressed on man the brevity of life. If He gave us a body with which nothing could go wrong, then sinners would never die and we would live in a world in which sin continued to develop over countless generations without sinners being able to pass away; arid without anybody being impressed with the fact that he needs to depend on God. Yes, God wants us to remember that we are but as dust.

As to the eye, I shall try to get to that in just a few moments. The quotation from Helmholtz does not give the full background.

With reference to the better vision that we give ourselves, I call your attention to the fact that it takes intelligence to help us when there is something wrong with one's vision. Whence did that intelligence come? My friend says that it evolved out of that which has no intelligence and thus it is regarded as having come by a non-intelligent process.

I wonder, since Teller is a Darwinian who holds to the "survival of the fittest," how Teller can explain that the body has survived at all, if it is in the terrible shape that he says it is in; and if it thus shows no intelligence at all behind its construction.

I have not said that intelligence is interested in making things permanent for us here, or in keeping us back from the consequences of our violations of the laws of God. Certainly intelligence has not done that.

IX. PARASITES

My friend seems to be bothered with worms tonight, for he has mentioned them a number of times. Let me suggest, concerning all parasites, that there is no proof that the parasites in their proper place do not perform a good function. I grant that some things have gone wrong, and that they are out of their place. There are some things, however, that we know to

be good when in their places; yet bad when out of their place. This takes care of the parasites: they are simply things that are out of place in a world in which some things have gone wrong.

X. DESIGN IN THE UNIVERSE

As to the apartment house, since some people like it cold, we shall put them (such as the Eskimos) on the cold floor. Some like it hot, we shall put them in the upper story; and if Grandma likes it in-between we shall put her there. Such arguments as Teller made concerning the heat and cold, do not do away with the fact that we do find design and order in this earth.

The very fact that we are here tonight, and not flying off in space away from the earth, is an indication of design. Do you recognize that we can move in six directions at once? Walk south on a train going north; while the earth is turning on its axis. The earth is at the same time moving in an orbit around the sun. The sun is pulled northward and, with the nearby stars, is plunging through space. We, along with the Milky Way, are also revolving and plunging through space. It seems reasonable to me that there had to be design behind that to even keep us on the earth.

Design is evident in our solar system. Professor H. N. Russell, Head of the Princeton Observatory, wrote that "the solar system is clearly no accidental aggregation of bodies . . . the planetary system presents numerous regularities of arrangement, for which the mind demands an explanation, and which are not, like Kepler's laws, necessary consequences of gravitation."⁹

The very size of the earth itself shows design. If things had been just a little different—either larger or smaller—it would have been impossible for life to have existed on earth.

With reference to water, my friend fails to recognize that, as Dr. Robert E. D. Clark (a physicist of Cambridge University) pointed out,¹⁰ if there was not just about as much water as there is, in proportion to the land, life would be impossible.

Furthermore, the very temperature that we do have on this earth, which makes life possible, had to be within a very narrow limit for life could not have survived if it had been too hot or too cold.

XI. THE EYE AS AN EXAMPLE OF DESIGN

Let us now consider the eye. It was by the use of the intelligence of man, and the use of the eye, that man constructed the

telescope. But the eye is remarkable beyond any comparison with a telescope, which after all is a product of intelligence. The eye is a growth, but not in the sense that the telescope is, since the eye is an organ and not a material machine. The mind behind the eye translates the impressions which we receive into vision. Thus we see things, not vibrations, Nothing would be seen with the telescope if the eye, with a mind behind it, was not looking through the telescope. The eye can change from a microscope, so to speak, into a telescope several times within a minute without our being conscious of the adjustment of the mechanism. It has a self-acting mechanism which enables it to clean itself. It has a mechanism for constant repair, up to a certain point, of course.

There are many other wonderful things about the eye. But with reference to the quotation from Professor Helmholtz, I have the following statement from him which is found in Dr. Carpenter's book.¹¹ "The following are the salient points of Professor Helmholtz's explanation:—If I am asked why I have spent so much time in explaining the imperfection of the eye, I answer that I have not done so in order to depreciate the performances of this wonderful organ, or to diminish our admiration of its construction. It was my object to make my reader understand that it was not any mechanical perfection of the organs of our senses, which secures for us such wonderfully true and exact impressions of the outer world. The perfection of the eye is practical, not absolute—i.e., adaptation to the wants of the organism; the defects of the eye as an optical instrument being all so counteracted, that the inexactness of the image which results from their presence very little exceeds under ordinary conditions of illumination the limits which are set to the delicacy of sensation by the dimensions of the retinal cones."¹² I would like for my opponent to explain to you tonight how by non-intelligent forces even one eye could have originated.

Arnold Lunn¹³ wrote that it is inconceivable that so complex an optical instrument (it is more than that, of course) as the eye could be created or improved by pure chance. Mr. Noyes¹⁴ quotes a Savilian professor of astronomy on this subject. "Suppose, for instance, one of the surfaces of the crystalline lens of the eye to be accidentally altered, then I say that unless the form of the other surface is simultaneously altered in one only way out of millions of possible ways, the eye would not be optically improved." Berg, a Soviet scientist remarked that "the probability that all useful variations will simultaneously occur is probability of a miracle."

Let not my friend find some imperfections in the eye which he thinks are there or show that it was not adapted to just the purpose that he thinks the eye ought to be. If we let him find all these faults, we still ask him to find the explanation for the order that we do see. As Helmholtz himself said, for all practical purposes it is perfect. And it is a fact that men do see with their eyes!

XII. MY OPPONENT'S FAULTY APPROACH

My opponent sees the "one or two things" that are wrong in the world which has rebelled against God and has been afflicted by a curse. He sees a few things wrong and overlooks the beautiful things that are in the world; and the order and design that are evident. Let me again call his attention to the fact that to explain the order that we do see; also the intelligence and life that are here; will take his time, without his trying to find some few things that are wrong. It takes as much intelligence to explain the creation of these cases of order as it would take to explain things if he could not find a single flaw with the world.

In conclusion let us recall that my opponent must prove a number of things: That life came from non-life; that intelligence came from that which has no intelligence; how in debating we can appeal to an intellectual realm, to a moral realm, to a realm of truth and of value. Yet according to his materialism all that is matter in motion, and instead of reasoning with us he should simply set up some sort of vibrations in the air that will affect our brains like what I say is affecting the record that is taking down this speech. But no, Teller cannot really follow materialism and conduct a debate.

1Woolsey Teller, *The Atheism of Astronomy*, pp. 10-11.

2 H. F. Osborn, *Evolution and Religion in Education*, pp. 87-88.

3 *The Religion of Scientists* (1932).

4 *The Religion of Scientists*, pp. 133-139.

5Dr. Howard A. Johnston, *We Can Surely Believe*, pp. 20-21.

6*The Mysterious Universe*.

7*The Wisdom of the Body*.

8*God's Masterpiece—Man's Body*.

9Henry Norris Russell, Raymond Smith Dugan, John Quincy Stewart, *Astronomy: A Revision of Young's Manual of Astronomy*, Vol. I, p. 461.

10*The Universe and God*, p.pp. 116-119.

11*Nature and Man*.

12p. 423, quoted by C. A. Row, *Christian Theism*, pp. 145-146.

13*Preface to Is Evolution Proved?*

14*The Unknown God*.

First Night—Teller's Second Speech

Well, my friends, I guess we'll have to return to the human eye. I am very glad my opponent touched on that topic, because I am loaded with material on the eye. I have here a quotation from a textbook on physiology written by Dr. Arthur P. Brubaker—you can look up his record. This is what he says:

"From a purely physical point of view, the eye is not a perfect optical instrument . . . In addition to (other) defects . . . there is yet another, an imperfect centering of the refracting surface. In first-class optic instruments (in *first class*, he says), the lenses are centered, that is, their optic centers are situated on the same axis. In viewing an object through such a system, the visual line corresponds with the axis of the lens system. This is not the case with the refracting system of the eye."

I have here a statement by Dr. Eugene G. Wiseman, chairman of the American Academy of Optometry, concerning the eye. It reads:

"We have found that a great proportion of cases of myopia are caused by the fact that the eye naturally diverges to the right and to the left instead of looking straight ahead. The inner muscles of the eye, in trying to correct and restore this parallelism of view of the two eyes, are subjected to a strain which produces near-sightedness."

That's what you get in near-sightedness. And it is because of this beautiful instrument which Dr. Bales is so enthusiastic about, that you have so many difficulties with your sight.

Now, back to Helmholtz: I have here his exact words. No, I'm sorry; I just can't locate them; we'll pass them up. However, the human eye can be considered from different angles. Imagine what an advantage it would be, if you like symmetry of patterns and a proper arrangements of things, to have two eyes in the back of the head? Policemen, traffic men could use them. You could see what was going on behind you. These are factors that would go into an intelligent arrangement.

Again, if you go to textbooks of biology and evolution—which, of course, you don't because you are more or less committed to the idea that the eye was turned out by a ghost—you will find that the evolution of the eye has extended over a long period, a tremendously long period, in which that organ's development is actually traced. You find it in the animal world. All animals do

not have color vision. Color vision is a distinctive development of a later period. Some persons have imperfect Color vision. You have color blindness and many other imperfections of the eye.

Now, let us pass to the question raised by Dr. Bales as to the mind. He said that I spoke of God as a "ghost," and he said, "Well, Mr. Teller speaks of the mind." These are not his exact words, but he implies that that, too, is a "ghost." "You can't weigh the mind; you can't see it; you can't feel it," says Dr. Bales. Of course you can't, because he has missed the point that the word "mind" is an abstraction. The mind is only a blanket term used to cover all the activities which go on within the brain cells. You might as well say I can't weigh "personality." We speak of a man as having a good personality, or a poor personality. You don't weigh personality. There is a difference between a concrete thing and an abstraction. Personality is an abstraction. You can't feel it and you can't weigh it. I'm surprised that Dr. Bales should make an issue of the fact that you cannot weigh the mind. Of course you cannot weigh the mind. You can't weigh a headache, because the headache is a condition caused by the material substratum that gives rise to what we call a headache. We simply use these abstract terms. Now, the brain can be subjected to a great many changes. As you know, our opponents are always talking about the mind as if it were a spirit. Yet it is the easiest thing in the world to show that this so-called spirit, which is supposed to survive death, which is said to continue after the body is destroyed, can't even live, can't even survive throughout the lifetime of the individual. When you go to bed and have a sound sleep, what happens? You are completely unconscious. Your mind, your "spirit," as the theologians call it, is dead; it has gone out of existence. Why? Because the brain has ceased to function along certain lines. A blow on the head, a fainting spell, a little prussic acid, a sunstroke will obliterate your mentality so that you have no mind even during a part of your life time. And many sleep-walkers have no minds even when they are walking around. There are any number of derangements of the mind. If the "spirit" were what Dr. Bales says it is, something higher than the body, independent of it and simply using the body for its wishes, you would have the finest of worlds. But go to your insane asylums, go to your clinics where people are in a mental jumble. Why? Because certain physical conditions underlie the reasons why they behave the way they do. Take cretinism. In the mountains of Italy it used to be quite common to see individuals who were deformed, horribly distorted, and repulsive to look at. They had goiter and they were mental

misfits in life, and it was all due to the fact that they did not have enough iodine in their systems. The iodine treatment was applied and cretinism has been eradicated by the use of this medicine, showing that there is an action of the body on the mind. Your whole mind is nothing more than what happens in your brain. Why is it, for example, that in anger your disposition is determined by the circumstances around you? So are your pleasant thoughts. These, too, are determined by physical factors. Your mind isn't something that is free.

Now, Dr. Bales has raised the question of "free" thought and free-thinking. There are distinctions to be made between free-thinking and freedom of the will. A freethinker is one who does his thinking individually, independent of the orthodox faith. In other words, he is not bound by any religious creed. He examines evidence as it is presented to him, and that makes him a free-thinker. It doesn't mean that his thoughts are "free." Your thoughts are determined by all the factors that govern your lives. Here is an audience of perhaps 400 individuals, and I dare say that if all of you had been born in a Mohammedan country, instead of saying "Hurrah for the Bible" you would be saying "Hun ah for the Koran." Isn't it true that you are governed by your early training? How many of you have absorbed Christianity at your mother's knee? You are what you are because of the environmental influences that have come to bear upon your lives.

Now, I don't know that this freedom of the will has anything to do with the existence of God, but my opponent has brought it up and we will consider it here. Freedom of the will you can test out for yourself. Let's suppose you are a man. You say "I love my wife; I know I love my wife; I am fond of my wife," and it is a sincere statement. Can you, by the exercise of the "freedom" of your will, *hate* your wife? You cannot. You try, but since you really love your wife, care for her deeply, you cannot hate her. If you had freedom of the will, you could alternate between love and hate and say: "I love her, I hate her, I love her, I hate her." You can't do it. My opponent talks about freedom of the will. Why, the very fact that you are here tonight is determined. Maybe the picture show in town wasn't so good and you said "I'll take a chance and listen to the Atheist." You are here. Maybe if there were something better going on (this is pretty good entertainment, but suppose there were something better going on), you wouldn't be here with us. It isn't freedom of the will; you do the thing that is strongest, that appeals most to your particular personality. If you had preferred, for example, to play

a game of pool, you'd be at the pool parlor tonight instead of taking a chance here. You don't care too much for pool, so you come and listen to Dr. Bales and me. You are determined by all these factors.

Why is it, that you think you have freedom of the will? Well, I'm thinking in terms of the city, thinking of the automat. You go into the automat, and you don't know whether to take the lemon pie or the pumpkin pie. Well, of course, you deceive yourself : you really believe that you make a free choice in the matter. But there are unknown factors which govern your selection. Maybe the last time you were there, the one pie wasn't as tasty as you think the other one is now (and there's that thought), and you select the kind of pie that you haven't tried. Instead of taking the one, you take the other. All these are factors in determining what you do in life. Freedom of the will is simply an impossibility, because if you had freedom of the will, you would be able to accomplish all the things you desire in life.

How many of you here, for example, have had the desire to be great musicians? Men? Women? You wanted to be good piano players. Maybe some of you are. But how many have banged at the piano, banged and banged away, while your freedom of will, believed in by Dr. Bales, got you nowhere? Freedom of will is tied up to the question of your wanting to do things, but accomplishment depends upon your aptitudes. Are you qualified to be a musician, a painter or a sculptor? These attainments are all determined by your physical make-up. They have tests today whereby you can find out, more or less, what vocation you are best suitable for. They have tests by which you can determine whether you will be a good musician. The first thing they do is to make a test to see whether your ear is of the type that will register delicacy of tones. You can't be a fine musician unless your ear structure is correct for that particular work. How are you going to be a great artist, unless your eyes are so constructed that you can detect the finest variations of tints? Some of us can, some of us can't. In my earlier days, I was an art student and I studied for several years, but I was a failure. I wanted to be an illustrator or a cartoonist, but, according to many, I turned out something worse—I'm an atheist.

Let's return to this question of the mind. There is no doubt in scientific circles that the brain and the mind have been a development, a gradual development. Go to any of our great museums, the American Museum of Natural History in New York, the

Smithsonian in Washington, the Field Museum in Chicago, or to any others in your great cities, and there isn't one of them that doesn't teach evolution. Every museum in the world teaches it. It is only down here in Arkansas, or in Tennessee, that they are skittish of this thing called evolution. They have a law in this state that you cannot leach man's monkey descent. Maybe you don't like to be descended from monkeys, but isn't it just as good to be descended from a monkey, a high grade monkey, and develop into something higher, as to be developed from a rib? Isn't one ancestor just as good as another? But all these institutions teach evolution. Now, my friend Dr. Bales got us into this question of the mind and the brain. Just consult sometime, when you go to your nearby library, Judson Herrick, one of the outstanding men in physiology, who wrote *The Thinking Machine*. That is the name of his book. He calls the brain the "thinking machine." He is a high authority on the workings of that organ, and he writes:

"Mental processes are biological functions of the body in general and of the brain in particular, in just the same sense that circulation of the blood is a function of the heart or breathing a function of the lungs. The evidence for this is biological evidence."

In other words, there is nothing inside your skull, floating around, such as a spirit. Your mind consists of the activity of the brain, and you see its unfoldment in the development of the child—from the infant up. The child comes into the world a mental blank. Why, God should send it off with some Intelligence, with at least enough intelligence not to put pins, into its mouth. You know what happens to a child; it will swallow anything, just as some Fundamentalists do. Finally its brain develops and you see the child develop. It has new experiences, new impressions coming to the brain. "Just as consciousness," says Metchinkoff, "comes out of nothing in the first months, or years of our life, so it will pass into nothing at the end of our life."

Now, there were several questions which my friend raised. Let's see. He is very much concerned about the question of order in the universe. Why, my friends, that's the easiest thing to understand. When there are two things in existence they have to bear a relationship to each other. No matter what that relationship is, it will constitute the order. If you introduce a third object the three will bear a relation to one another. That is the "order." So whatever may be the conditions we find in the universe at any time of our coming into existence, they would constitute the order. That's the whole of the story.

Now, as to this order. Let us suppose that instead of the earth going around the sun, the sun went around the earth. Dr. Bales would then tell me, "See, that's the order." He wouldn't think in terms that things could be just the opposite. Anything that you see constitutes order. Now, as far as "purpose" goes, the fact that things serve a purpose does not mean that they were "designed." The greyhound has long legs. The dachshund has short legs. It wasn't made that way so that it couldn't run fast. We do what we can with what we have. The same with the human eye—and everything else in our bodily system. Everything which we utilize functionally is the best we have, and we make the most of it. Take, for example, a man who has lost his sight. He gets an awareness of objects near him. If you talk with blind men you will find that they develop a sense of nearness to certain objects. It is due to a sort of back pressure of the waves of air they feel against the body. That's how they found out how the bat flies in total darkness. For a long time it was a mystery. I shall go into that later, especially concerning the question of instincts. I like to discuss instincts. But they are all mechanical. Everything we do is mechanical. Every act, every habit is nothing but a response to accumulated experience, and you go through life very much in a pattern which time develops, and you haven't the "free will" to do the things which you would like to do.

Now in closing this part: I don't know just what Dr. Bales means but he said something about moral standards—atheism and moral standards. Well, read the history of Christianity and then talk to me about moral standards. I am simply in a haze here, because the history of Christianity shows that religion to have been one of the most barbaric, the most bloody, the most cruel experiences of all time. Christianity gave us the Spanish Inquisition; it gave us the Kirk of Scotland and one of the most degrading periods in the history of the world; it gave us the witchcraft epidemic at Salem; it gave us the Crusades; it gave us Puritan bigotry; and it gave us anti-evolution laws in Arkansas.

* * *

First Night-Bales' Second Speech

I. THE POINT IN THE ARGUMENT FROM MORALITY

Of course, if my friend understood what Christianity is, he would recognize that the things he has pointed to are not the products of Christianity but due to a lack of it. My opponent,

however, has missed the point entirely. I was not talking about the moral standards involved in doing this, that, or the other. I was talking about a moral standard in general. If all that exists is matter in motion, how can anyone say that anything is good or that anything is bad? It is the concept of goodness and badness that I am arguing from. The point is: *How could there be a moral realm?* Teller is appealing to one when he argues that if there is a God that He has not been very interested in us and has treated us unjustly. He thus appeals to a moral standard; now, what I want to know is where an atheist can get out of matter a moral standard—that is the point, that is the issue.

According to atheism it was not Christianity that produced those things, but it was atheism. This is not to say that these professed Christians believed in atheism; they did not believe in real Christianity for that matter. But it is to say that if they were but machines and could not help doing what they did (and they were if all things are produced by matter in motion), and thus it is really his doctrine that he should blame, because matter did it all! It does not matter anyhow, though, according to his doctrine. And if it does not make any difference it should not have been brought up at all.

II. MACHINES CREATED BY INTELLIGENCE

My opponent has argued that the world is a machine and that we are machines. Well, what if we are just machines, and what if all had been determined away back there in what he may call the nebulous mist; what if it had been determined that at this time and this place and this moment that these very words should be coming out of my mouth and that nothing could have interfered and have stopped it. Yes, what if we are but machines. Do we get rid of intelligence when we get back to machines? Why certainly not. We may not find the intelligence in the machine itself, but we see the machine as a product of intelligence. What if I asked who cut the grass. A mowing machine, you answer. All right, I thought somebody intended to do it and I thought that some purpose and intelligence were used, but now I see that they were not—it was a machine that was involved! Friends, the more one talks about machines, the more one has to demand the existence of intelligence to design the machine.

III. IS JUST ANY RELATIONSHIP ORDER?

My opponent argues that what we call order has to be because things exist and they must bear some relationship to one another, and that we call it order. Let me call your attention to this fact:

what my friend is assuming is that there can be no disorder. Just the relationship it happens to sustain to something else is order. This assumes that universal order and order alone is possible. But what I am arguing from is not a mere relationship in time and space. It is true, of course, that even intelligence can leave things in disorder, just as Mr. Teller left this string on the floor in disorder; but that does not prove that my friend is without intelligence. I certainly do not draw the conclusion that he does not have any.

But what we are dealing with is not the disorder of a junk pile—although even there intelligence placed the junk. We are not dealing just with things set in time and space which bear relationship to one another only in time and space. We are not dealing with the order of a junk pile but with the beautiful order of an automobile. And I want to know how that order—regardless if there are junk piles existing—how that order was possible. Dr. Henderson, a materialist, in his book on the fitness of the environment, and the one on the order of nature, emphasized that in nature (including the inorganic environment) we find such a delicately balanced intricate system of things that order is manifested. He concluded that one might as well try to explain away matter as to try to explain away that order. This is what I am arguing from, but Mr. Teller argues as if it were all just a mere relationship in time and space. When, as a matter of fact, we are faced not with the order of a junk pile (although there is some order even there), but with the order of a car—to use an illustration. Let me also point out that one car would be just as difficult to account for by non-intelligent forces (that it just happened to happen) as it would be to account for a thousand cars. And yet the man that will not account for an automobile or a telescope by saying that it just happened to happen, will say that the one (man) who designed the automobile and the telescope just happened to happen!

IV. MIND AND BODY

With reference to mind and body, of course all that he has proved is that there is a close relationship between the two. But mind and spirit are related as to the body as the violin player is to the violin. When strings are broken it does not mean that the player is no more.

V. FREEDOM OF WILL

My friend pointed out that if we lived where they taught Mo-

hammedanism some of us would believe in it. That does not prove his point, it proves mine. According to his materialistic doctrine we should be influenced only by matter in motion because that is all that exists. And yet he is now talking about teaching and ideas influencing people.

With reference to freedom of will, my friend says you cannot hate your wife just by deciding to do it. Why certainly not. He is here holding to the "either-or fallacy." Either you have unbounded, unlimited freedom or you do not have any freedom at all.

But friends, Teller could not even really love his wife if he felt that everything that she did was just prompted by her biological urges and external impulses, and that no real love was there—she would be doing what she was doing because she could not do anything else. I am sure that he loves his wife, but according to his doctrine she is just as much a machine as that machine-man that I saw at the World's Fair in New York City. I could not fall in love with one of those and neither could Teller. *But an atheist cannot even live, breathe and love without denying his atheism.*

Now friends, with reference to the picture show and not liking this or that, I still maintain that you are making a choice. You are not just a bunch of matter. Something did not give you a push and shove you here and you just could not do anything about it. Why certainly not.

Let us now consider the piano player illustration. I do not deny that there are limitations and that you cannot jump over your potentialities. But I do maintain that you can use your will power and your intelligence and thus develop your potentialities. I am not a piano player of any kind, and yet if I had wanted to be I could have played some. But I am not interested in taking the time for it. I have made a choice. If I wanted to, of course I could learn to play just to demonstrate that I could do it, but I am not going to take the time just to do that.

VI. EVOLUTION

Tomorrow night we will get to a discussion on evolution, I suppose. But tonight I want to read from a leading scientist. Paul Lemoine, one of the editors of the *French Encyclopedia* (1937), wrote: "It is the result of this expose that the theory of evolution is impossible. Moreover, in spite of appearances no one longer believes it . . ." (5-82-8). There are, of course, those

who have faith in it because they think creation is clearly incredible, but they do not believe it because the evidence demands it. I have countless quotations from men who say that they believe it although they cannot prove it. It is a faith with them. They do not like the idea of God and of creation, that is the reason they believe it. Lemoine continued by saying: "Evolution is a sort of dogma in which the priests no longer believe but that they maintain for their people." (5-82-8). "The idea of evolution is admissible for some limited groups; it is not for the masses of the animal and vegetable kingdom." (5-82-9). (Translated from the French by Constance Ford for James D. Bales.) Shelton, in his debate with Douglas Dewar, said that he regarded creation as too silly to even think about. No wonder he believes in evolution. He cannot believe in anything else if he rejects creation.

VII. THE EYE

The eye is not perfect for all the purposes that Teller might think about (and as I also pointed out, God does not mean for us to live forever on this earth. He does not want us to forget that we are frail and that we are not independent creatures). But Teller is judging the eye by something for which it was not made. I again call your attention to Helmholtz's statement that he thought that the eye was perfect for all practical purposes; that it was a wonderful organ, etc. The marvel of the eye is not done away with because the eye is not perfect for every purpose that Teller can think up. Let Teller explain how even this imperfect eye, as he calls it, came to be. Also how it is that the mind enables man to talk about and examine the eye. How did it originate from non-intelligent matter? That is what my friend has to prove.

VIII. THE PROBLEM OF EVIL

At this time your attention is briefly called to some things in connection with the problem of evil. First of all, the atheist will argue that much of that which is terrible in this world is due to the terribleness of man. If this is not true, and if the world in itself is an evil thing, then instead of trying to improve the health of people we ought to all become Hitlers and try to exterminate them. If the great evil of all evils is life, we ought to do away with all life. But atheists will admit, I think, that most of the evil that we suffer in the world is the result of the actions of man. Even much of the disorder in the physical realm comes from man's greed. A. R. Wallace, one of the co-discoverers

of the theory of evolution (that is, in modern times) stated that he thought that most of the evil in the world is due to man.¹

I must again call to your attention the fact that Teller is off the issue since the question under discussion is not the character of God, but the existence of God. It is merely assumed that God, if wise and good, would not have created the kind of world that He did, and then let it get into the shape that it has gotten into since man's rebellion against God. His argument, I must also repeat, undermines atheism for it uses a moral standard in saying that God would be *unjust* to allow these things. According to Teller's atheistic position nothing exists except matter in motion.

Suffering does bring us to a consciousness that we are not to be here forever; that we are frail; that we must be dependent on God; that we are not self-sufficient.

In addition to these things, friends, we shall show, in the last two nights in as much detail as time will allow, that there are positive reasons for faith in God. Thus a few objections that may be raised by "some matter in motion" does not undermine faith, does not undermine the evidence.

IX. MATERIALISM AND MIND

Let us now consider materialism and thought. If materialism is wrong, then of course Mr. Teller's entire case collapses. I appealed to mind and thought to show that even though you cannot weigh it or smell it, etc., that Teller still believes that there is something to it. This is evident because he has been trying to present some thoughts; whereas if he is right he ought to give us some "Carter's Little Brain Pills," or in some way vibrate so that our eardrums will vibrate and we cannot help vibrating like he vibrates. And I wonder what gave him "the idea that he could do it that way, anyhow, unless he has some power of choice about it.

Adolphus Huxley stated that if mind is merely the epiphenomenon (that is, a by-product) of matter; and if consciousness is completely determined by physical motion, we have absolutely no reason for supposing that any theory which is produced by this instrument can have universal validity. C. S. Lewis said that if we supposed that there is no intelligence, no creative mind, behind the universe it would follow that nobody designed my brain for the purpose of thinking. The atoms inside my skull simply happen, for physical or chemical reasons, to arrange

themselves in a certain way, and as a by-product this physical condition gives me the sensation called thought. But if that is so, how can I trust that my own thinking is true? It would be just like upsetting a bottle of milk and hoping that the splash would arrange itself so as to give a map of New York City.²

If we know that the only reason a man of great wealth argues for capitalism is because he is afraid that he would lose his money, but had no other convictions on the subject, we would say that his argument was due to irrational causes. In other words, he is not arguing rationally, and we would tend to discredit his arguments. This is merely an illustration and not an argument for or against capitalism. It illustrates that when we know that an argument proceeds from an irrational source, we discredit it. According to my friend all has come from an irrational source. Thought has no power. It is the result of the physical condition of the atoms in your brain. They arranged themselves so that you believe in God, and in Teller they arranged themselves so that he would believe in atheism. (He believes atheism, but he cannot prove it. He cannot prove that life came from non-life; that that which has intelligence came from that which has no intelligence. He believes it, but he cannot prove it. It is against the evidence.) But if that is what thought is, then you cannot trust thought. Thought 'itself is irrational for it is the product of irrational, non-thinking causes. Thus Teller cannot trust any conclusions which he has arrived at by a process of thought. And yet he has used some thoughts to try to disprove the existence of God.³

But materialism (the doctrine that matter in motion is the only thing that exists), friends, is merely an assumption. It assumes that matter is eternal, but Teller cannot prove it. It assumes that matter is all there is, and that consciousness, thought, intelligence, hate, love, and feeling are all just illusions. But if thought is a mere vibration in the brain, I want to know *how that vibration became conscious of itself?* My friend can have no explanation for that—none that is rational, reasonable.

If matter is all that is, and all that is is determined and the product of just the physical arrangements of things, why did that matter get into such a conflict that two animated lumps of it have come up on this stage and have argued about whether or not God exists? Why did matter work out that kind of a conflict?

It is also rather strange to us, ladies and gentlemen, that if

thought is just a vibration and has no reality within itself (not being even as real as the secretion of our glands which we can see), that he should appeal to thought. Furthermore, if thought is merely a vibration, instead of being a freethinker Mr. Teller is just a free vibrator.

There is another thing that I would like to know: How did Tell get free from the superstitions, as he calls them, which he thinks bind theists? Did matter just work itself around until it freed him from these "superstitions"? We still must remember that the same matter which gave him the ideas he has, is the matter which working in me gave me the ideas which I have. Thus he cannot say that mine is false and that his is true.

The fact that Teller is debating is a giveaway of his case. For a debate assumes that there is a moral realm and that we ought to accept truth. A debate assumes that ideas have power it assumes that we have some freedom to weigh arguments. But these assumptions are entirely out of harmony with materialism

There is another charge which we have brought against materialism: *It explains everything in terms of the lowest.* We know that there is consciousness; moral capacity; and thought Man is a thinking being, or even if a machine a thinking machine for we know that man does think; although sometimes people just rearrange their prejudices. Materialism explains all of these in terms of matter.

Materialism says that the order that we do see in the universe (and I guess that Mr. Teller thinks that he presented an orderly speech), that even that order is a product of non-intelligent, disorderly causes.

Materialism is inconsistent with its own theory of knowledge It says that all that we know has come to us through our senses I would like to know whether or not Mr. Teller's consciousness that he does know, and whether his consciousness that he does have ideas, came through that way?

Again, although Mr. Teller talks about atoms, and the materialist believes in atoms, he never saw one. But he still believes in them.

Mr. Teller's conception of life being just a machine does not work even with the lower forms of life. Dr. E. S. Russell, of Cambridge University, pointed out⁴ that even among animals there is a working as a whole; a working from within; a working to an end. And certainly that is true concerning mankind. My

friend purposed to come here and he did come. Thus in explaining everything" in terms of *mete matter in motion* Mr. Teller *has not touched the distinctive facts of mind, purpose, consciousness, and of intelligence*; which facts show us that more than matter is in existence. *Mr. Teller has left out everything that is distinctive of life*, and yet he could not be here debating if he was not a living creature.

Let us consider some other things concerning matter and mind. I pointed out that we all realize that there is a relationship in this life between body, mind, and spirit. Yet our friend cannot show us how we can have both the vibration and *the consciousness of the vibration*. He cannot show how we can have *the unity of consciousness*. How is it that when you wake up today that you are the same person that you were last night? There is unity there. Teller thinks that you died and was then more or less raised again. How then can you have the *unity of consciousness; personal identity; and self-consciousness?*

How is Teller going to explain the design and order that we do see in the human eye which makes it possible for us to see. How can, he explain the mind behind the eye which makes it possible for us to translate that which comes through the eye into actual vision. No, *my friend cannot explain the mental element* that we find in life. This mental element can have plans and purposes. It can know when it achieves those plans and purposes.

Materialism cannot explain the fact of life. It cannot explain the fact of consciousness or *how memory is possible*. Dr. Louis More,⁶ (in which he points out that evolution is a faith), said that when memory is aroused by an external stimulus some things seem to be stored up and then given out again at a subsequent time. Let us illustrate with a pencil my friend's doctrine. I see a pencil. Light rays reflecting from it hit my mind and change physically the atoms in there. Now we know that when we use energy it is dissipated. Let us say that we have something filled with heat. We take out some; keep on taking it out; and finally it is all gone. So then if memory is just a physical thing, and a physical arrangement in the brain, the more we recall a thing, without seeing that thing; the more we use our memory -the fainter it should get. And yet it does not. We know that the more we use our memory the keener it becomes and the better we remember that thing. Yet according to my friend's doctrine that particular arrangement of matter should gradually be blurred

more and more as we use our memory: just that the heat goes out from that container of heat the more that we use it.⁶ Even T. H. Huxley, who was an agnostic and an evolutionist, said: "I have already hinted, it seems to me pretty plainly, that there is a third thing in the universe, to-wit, consciousness, which, in the hardness of my heart or head, I cannot see to be matter, or force . . ."⁷

Let me remind you friends that in order to sustain his position Mr. Teller has to prove that matter is the only thing that has existed from all eternity and that matter is all that exists now. He must explain how that which had no life gave birth to life; how that which cannot see gave birth to something that can see; how that which has no intelligence gave birth to something that has intelligence; how that which had no moral principles resulted in something that can have moral principles; how that which had no faith, hope, and love, could develop that which does have faith, hope, and love. He must prove these things.

Mr. Teller cannot explain the eye; he can but talk about a few disorders. He can do that but he cannot explain the order that there is. I urge him to come to the issue and explain how he is going to explain the order that we know exists in the universe. To explain just one bit of order would be as difficult to account for as a million cases. If I walked along the seashore and saw there spelled out with pebbles that "Man is immortal," I would believe that it took intelligence to do that just as surely as if I had seen it spelled out a million times. One case of order in the midst of all the disorder of the pebbles on the beach would convince me that intelligence was there. And even if I know that it was done by a machine it would convince me that it was intelligence that designed that machine. And I would not lose sight of intelligence until I lost sight of order. But there is order and one case of order, ladies and gentlemen, is as difficult for him to explain as if everything that he saw was order that he could understand.

1 James Marchant, Editor, Alfred Russell Wallace: Letters and Reminiscences, Vol. II, p. 148; quoted by R. E. D. Clark, Creation, p. 69.

2 Broadcast Talks, pp. 37-38.

3 C. S. Lewis, Miracles.

4 The Directiveness of Organic Activities (Cambridge University Press, 1945).

5 The Dogma of Evolution.

6 The Dogma of Evolution, pp. 268-269.

7 Evolution and Ethics, p. 130; quoted by More, pp. 266-267.

First Night-Teller's Third Speech

Dr. Bales' last remark was to the effect that if he walked along the seashore and found some pebbles arranged so that they spelled out the words "Man is immortal," he would come to the conclusion that the arrangement was the result of intelligence. Well, he would be perfectly right because the only time he would find such pebbles would be when someone had arranged them that way. Did you ever go along the sand and discover anything of that nature that was not done by man? The argument simply comes back to the point that the only one who could write that way would be an intelligent human being. You do not find such things in nature, his analogy is somewhat strained.

Now, there are two theories. Dr. Bales' and mine. He assails the materialists—which is fine. According to my theory—and it seems to be the generally accepted one—the universe of matter has always existed and undergone change. Dr. Bales asks us to prove that point. Well, you have to start with something; you have to start with an assumption. The scientist, the materialist starts with the idea that matter has always existed and always will exist and undergo change. My friend Dr. Bales and many theologians take the view that we should start with a ghost. Now, I ask him to prove that theory. Can he trot out this ghost, can he give us any evidence that his ghost exists? And how can you imagine a ghost pushing matter around? Something that has neither weight nor parts and no body pushing a planet! Can you imagine nothing pushing a planet? He starts with the assumption that my position is that things just happen to happen, but according to his theory, the theistic theory, God simply happened to happen. The deity happened to be around; and he stayed for an eternity wondering what to do with himself. He was lonesome in nothingness, and he said to himself, "What shall I do? I'll make a universe." He never had any experience in this matter, but he thought he would make a universe. I don't know how the idea came to him, what a universe would be like when he had lived so long in nothing, in a vacuous state. Nothing existed but God. so God brings matter into existence, and he says (this is the theistic idea), "I'll make numerous stars, and a few planets, and on one little planet I'll put some animal life." That's the creation story. Now, can you imagine an intelligent being sitting around for an eternity, not knowing what to do with himself, and then starting the ball rolling? That's the theory of theism.

We who are materialists start with matter. The indestructibility of matter is a definite axiom of science. Professor Eddington, who wrote a book called *Stars and Atoms* and who is often on the side of the metaphysicians, nevertheless claims (and I accept his viewpoint here) that there is no evidence for the annihilation of matter. The indestructibility of matter is taken for granted. Now, in matter we have changing forms, and you can go to the museums and see life in its unfoldment. But if you stay in one groove of thought you will never know what's going on in the world where science is operating. You can go to the American Museum of Natural History in New York, and that's only one of many. You can go to the Field Museum of Chicago and you will see there various exhibits of fossils and anatomical developments from lowly forms of life up to the highest—from fish to man. My friend, Dr. William K. Gregory of the American Museum of Natural History (he's one of the five outstanding anatomists, not of this country alone, but of the world), has arranged an exhibit, with the help of numerous assistants, showing the development of man's skull from the fish stage up to the present time. We are descended from animals. That's why we have so many rudimentary organs in our body. Do you know, for example (this enters into the whole discussion), that among the anthropoid apes, the gorilla, the chimpanzee, the orang-utan, you have monkeys that are tailless except for a small vertebrate extension? They have lost more of their tail than you have of yours. Anatomically you have an internal tail, and, like it or not, it's longer than that of any of the anthropoid apes. Before you were born each and every one of you had a tail. If you have seen a human embryo, you are aware that each of you once had a tail longer than your hind legs. Like it or not, and in spite of the anti-evolutionary laws in Arkansas, you all have animal characteristics in your bodies. Why is it that some men are born with several pairs of supernumerary teats? Why are some men tailed, with real external tails? Go to your anatomical books and see the photographs that have been taken from life. Don't live in a dream world of gods, ghost, demons, angels, and cherubim. Get down to science. That is the real instructor. Because of science we have gone ahead. That's why today we have the knowledge we have—because religion is going back into the dark ages where it belongs. Did you have any science when Christianity was at the top of the world? You did not. The scientists were exterminated as rapidly as the modern gangsters bump off those whom they do not like. You must go to science.

The question of morals we will treat for three minutes and then take up during some other part of the discussion. Do you know that good and bad are determined by your own way of thinking, and that your thinking is determined by certain factors. I'm old enough to remember when a woman (this is on the question of modesty) would consider it shocking to herself, immodest, embarrassing to wear a dress which showed above her ankles. That was her "conscience" speaking, that was her idea of modesty. I'm not saying whether she was right or wrong. I'm saying that was her state of mind. Look at the girls today! What don't you see? That's their modesty. Times change. People look at things differently. There's no certain pattern which God gave you for ideas of right or wrong. You will find that each idea you have on right and wrong is determined in many cases by self-interest. You don't want to be murdered; therefore you have a law against murder. And it's usually general. Do you know that head-hunting is actually a religious ritual among the head-hunters? It is based on the idea that you cannot be a good citizen, a worthy member of the tribe unless you have gone out and shown that you are really a courageous man, a good huntsman, and you can't marry unless you have taken a head. Did God give that idea to these men? No, these ideas have come about naturally. Good and bad are determined geographically and in point of time. There was a period not long ago, when it would have been impossible for me, as an atheist, to talk to a Christian gathering such as this. You are improving! I would have been lynched or hanged in the old days! They had witch-hunts and heresy trials back in Salem not long ago among Christian congregations. But you, Ladies and Gentlemen, have reached a higher level of intelligence, to the point of feeling that you can listen to a speaker even though you disagree with him. You are willing to listen. That is your "conscience" today, that is your attitude toward open discussion. But go back a little ways and you will find what happened to the free-thinker or the atheist. Many atheists are still under cover. I'm in the game professionally, and nobody can hurt me. They can hang me up, yes; but they can't injure me otherwise. There are men in business who socially, economically, and domestically are on the spot. There are some of them right here in this audience who dare not express their atheism because it will hurt their business, and because the tempo of the community is such that they have to be careful. That's all; the time-keeper's hand has been raised, and I thank you for the first night's courtesy.

First Night-Bales' Third Speech

Ladies and gentlemen, the courtesy which we have extended so far, and will continue to extend, has not come from any belief that there is no good or evil; that good or evil is just what you happen to think about them; but from Christian convictions.

I. GREGORY'S ARRANGEMENT OF SKULLS

As to Dr. Gregory's arrangement of skulls, we shall deal in detail with such things later. To arrange such a series does not prove the descent of one from another any more than to arrange a series of a log, a canoe, and a battleship prove that one evolved into the other without intelligent direction. But Gregory, due to his blind faith in evolution, one time drew the conclusion that a tooth found in Nebraska was a part of a missing link. As it turned out finally he himself had to admit that it was a pig's tooth.¹

II. THE QUESTIONS SUBMITTED TO MR. TELLER

I asked Mr. Teller some questions. (1) What reason is there to believe in the spontaneous generation of life from non-life? He has not noticed it. He may try to deal with it later on, but evolution cannot even get started, ladies and gentlemen. We are faced with life. All scientific experimentation shows that life comes from life. There is no exception to it. All admit that life was not on this earth at one time. There is life here now. How did it get here? Life comes from life, that is scientific. It is superstitious to believe otherwise. Well, life is here, how did it get here. Man could not have placed it on this planet for he could not have gotten to this globe. It took supernatural life to put it here.

Life comes from life and yet Teller believes the fable of spontaneous generation of life. But in this scientific age it has been shown that they have never been able to prove it, and that the evidence is against it. Not only does Teller believe without evidence, but he believes contrary to the evidence.

Life is here and it points to a source of life. We know life comes from life. Let Teller tackle the argument for the existence of God which is involved in the fact that it must have taken a supernatural power to place life on this earth, since life was not always here, and since life comes only from life. It must have taken something that is at least as great as life, and greater

than man, for that power would have had to have been supernatural to come here and place life here.

(2) Teller has not answered my question on: "Ought we to become atheists?" This brings in the moral capacity of man. I am not saying that people do not need to be taught. We believe that they do. If you accept the wrong teaching, it will lead you wrong. The point, however, is: All of the time you are acting in harmony with a moral capacity. You are doing what you believe to be right. You may be wrong about it, because you have the wrong teaching—just as my friend has the wrong teaching, but he believes that he is doing what is right. In other words, he is exercising moral effort. But in the world painted by materialism, there could be no moral capacity. But there is moral capacity. According to my friend, if we decided to shoot or lynch him tonight, there would not be anything wrong about it. It would simply be just what we happened to think about it. It would be a bit inconvenient for him, but there would not be anything morally wrong about it at all. *Mr. Teller cannot give me one moral reason why we should not lynch him while he is here.* We shall not do it. I give my voice against it! But he cannot give a moral reason. Yet he does not think that we *should*. Friends, there is a moral capacity of man which atheism cannot explain.

(3) Now for the term free-thought. Teller said that they were free with reference to the orthodox faith. I wonder how they got free if we are determined in all our actions by our glandular secretions, biological urges, and vibrational impulses. So how could they get even that free. Matter made you like it made you, and it made me like it made me; and one position is just as true and valid as the other. One is just as right an outcome of matter as the other, according to Teller's theory. Thus Teller's theory cannot even account for good or evil, or truth or falsehood.

(4) How did matter become intelligent enough to deny that the universe is governed by intelligence? In other words, where did this intelligence come from which you are trying to use to deny that the universe is governed by intelligence?

(5) How do you account for the order that is manifested in such a being as a man? How can he be the product of non-intelligent forces? With reference to order and design Mr. Teller picks out a few things that he can call flaws. (We again mention that this is off the issue, for it is the existence, not the character, of God which is under discussion. Not only so, but

realizing that this life is brief, and that we see things from such a small standpoint, we can rest assured that if God is—and I am confident that He is—that my friend would grant that God would be so much greater than we that some of His purposes and plans would go beyond us and we could not understand them. We could no more do this than a child can understand some of the things that the father does, even when the father is acting intelligently.) But we do find order, we do find design. How is my friend going to account for this design?

How is Teller going to account rationally for matter working out atheism in him and theism in me? Both of them, on his theory, are the results of irrational causes.

Mr. Teller granted that if he saw pebbles spelling out "Man is immortal" he would say that intelligence had been behind the arrangement. But would he see the intelligence and show it to you? No, he would not. He could show you a body walking about, but he could not show you intelligence. Teller's materialism commits him to the position that what you cannot put under a microscope or pick up with forceps does not exist. According to this he should pick up the 'points (ideas) which I am making in this debate with a pair of forceps; shake them together in a bottle; and get them properly arranged so that he can answer them! But he does not do it that way. Why? Because he recognizes that there is intelligence even though he cannot see it.

If all thinking is merely a vibration in the brain, or something like that, how did the vibration become conscious of itself; think about itself; and then get up here and deny that it is merely a vibration?

My opponent concedes that intelligence must have arranged the pebbles. He accounts for such a simple thing as that arrangement by appeal to intelligence; and yet he maintains that the man who did it, and who does so many wonderful things, is the product of non-intelligent causes and forces. This is the absurd position that Teller has taken, and yet he gets off on a tangent and talks about a few cases of disorder. He overlooks all the order.

III. TELLER STARTS WITH AN ASSUMPTION

Mr. Teller says that we cannot get started without assuming the eternal existence of matter. Let us remember, when he talks about folks being believers, that he has assumed matter to start with. That is not reasonable, because there is life here now and life comes from life, not just from matter.

IV. NOTHING PUSHING SOMETHING?

Mr Teller wants to know whether we can imagine nothing pushing something around. No, I. can not. And that is the reason that I cannot imagine matter, with nothing in it resembling life, giving birth to life. But friends, we do know this: *that the power of thought is a fact*. I can decide to move something and then move it. I use some instrument to do it—my hand—but still there is an exercise of thought-power. Certainly it is real, and Spirit, God, had power to do the things which we have attributed to him.

V. WHY DID GOD WAIT SO LONG TO CREATE LIFE?

Mr. Teller raises the question as to why God waited until now to create life. I do not know all the plans and purposes of God, but only what he has revealed to us concerning this earth. It seems to me that such a question is off the issue. However, since he said that matter had existed eternally, if he wants to struggle with the problem, we ask him why did matter wait until it did to create life? It had all eternity to do it. Why didn't it do it throughout the eternity which passed before life began? Why did it have to wait until a few years ago, comparatively speaking, to create life if matter existed eternally? So if there is any problem here it is a harder one for him than for me, for he cannot get life out of matter anyhow.

VI. MATTER ETERNAL BECAUSE NOT ANNIHILATED?

My opponent speaks about matter not being annihilated, but that would not prove that it had not been created.

VII. ARRANGEMENT OF SKULLS

As to the arrangement of skulls you can dig up some skulls from the graveyard and line them up. Here you have a grown person; here a middle aged; and here a babe. You could not then prove by those skeletons that one gave birth to another. Thus an orderly arrangement of a succession of skeletons would not prove anything except that they were arranged! It would not prove descent.

VIII. RUDIMENTARY ORGANS

Tomorrow night, when evolution is considered, we shall deal more with rudimentary organs. But tonight I call this fact to your attention: the evolutionists say (that is the learned ones among them; although even they take evolution by faith, of course) that the more we know about the human body, the smaller the list of rudimentary organs that we have. Yes, the list of so

called useless organs decreases as our knowledge increases. *This shows that they were arguing from their ignorance in the very beginning.* Friends, before Teller can prove that an organ in the human body is useless he must say (and when I point it out to him, I am sure that he will not say that he has this much knowledge) *that he knows everything about every organ of the human body at all stages of growth and development, from its first appearance to old age and death; that he knows everything that it can possibly do; and he knows that it is useless at all stages of growth and development.* That is what Teller is really affirming when he says that some of them are useless. He is arguing from his ignorance.

IX. SCIENCE AND CHRISTIANITY

Now as to science and Christianity, I am signed up to debate Mr. Schmidt of Teller's organization, on whether or not Christianity has contributed to civilization. If they are willing to go through with that discussion, we will discuss Christianity and science. But it is not the issue in this debate.

I have already noticed the statement about good and bad being just a matter of teaching. I know that we need to be taught right principles; but my point was that there is a real moral capacity and moral driving force.

X. BY WAY OF SUMMARY

In summarizing, in the time left to me, I want to point out that my friend did not establish his proposition. He has picked a few flaws, but he has not found any explanation for the order that we do see in the universe. He has not proved what he must prove—that matter is eternal. He has not proved what he must prove—that matter gave birth to life spontaneously. He has not proved what he must prove in order to establish his case—that consciousness came from that which never had consciousness, which is the same as saying that consciousness came from nothing. Oh, he says that it is a mere function, *but how did a function become conscious of itself?* How did a vibration become conscious of itself, ladies and gentlemen?

1 Evolution, p. 24.

Second Night-Teller's First Speech

Mr Chairman, Dr. Bales, Friends: I am presenting on the blackboard tonight, in diagrammatical form an outline of our solar system. Any comment on the God idea and design in nature would be incomplete if we failed to consider the arrangement of the planets in their relation to the sun, that is, their placements in point of distance, and what occurs because of (their positions. Now, if the universe was designed (and the universe includes our solar system), it was designed in a very peculiar way.

I direct your attention here. This half-circle on your extreme left is supposed to represent the sun, and we have the various planets placed in the order of their distances from the solar body. I call your attention to "M," which is Mercury, situated nearest to the sun. I am thinking now in terms of planets for human habitation. We are told by religionists that God made the world primarily for man. The animals were incidental—the cockroach, the bedbug, the rattlesnake are all incidental. The universe is man's universe, or at least the solar system is. And so we have to consider the solar system in this design argument.

Now, first of all, stars are gaseous globes. We cannot think of any life on the stars. Some of them are so rare, so lacking in density that there, is nothing to indicate that they could sustain life. But when we come to the planets we find more or less solidity of structure. That's the way a planet is constituted. Now, Mercury (the point marked "M" there) in its placement, in its distance from the sun, is almost smack up against it. And it has a temperature of 660° . If you can imagine anyone living in that temperature, you're welcome to do so. I understand you have 110° here in Arkansas, at times, and I assume it's warm. 110° is fairly hot. But how would you like to live at 660° ? Mercury presents only one face to the sun, and its sun-lit side is so intensely hot that lead will melt on it.

We next come to Venus, marked "V." That's the second planet. Now, let me state that there are only two other planets likely to sustain life. The earth, of course, is inhabited. Venus and Mars are problematical. There's the question of oxygen. They have been able to determine the amount as negligible on these two planets. Mars is nearest to the earth in having characteristics which might permit some form of life, but it would be vegetation. It wouldn't sustain human beings such as yourselves.

Now, these are what they call asteroids. The explanation of

astronomy is that they are the remains of a planet which got too close to another moving body and was smashed to bits. These collisions occur in the universe. We actually have eye-witness accounts in astronomical history to such smash-ups. And these asteroids are small bodies; there are hundreds of them, and they constitute a smashed mass.

Next, we come to Jupiter. It's getting colder as we move away from the sun. Here you have the reverse: 150° below zero. How is that for a cold place to live in? How would you like to live on that planet? Going out to Saturn you have approximately—it varies— 150° below zero. Uranus is 170° below zero and Neptune 220° below zero, centigrade. There is another little planet, far out in space, called Pluto. That's not the dog, the pup you are acquainted with. They don't know, they haven't been able to determine with accuracy how cold Pluto is.

Now, the point of *my* illustration is that if this solar set-up was made for habitation, it is a ridiculous lay-out. Some planets are too near the sun and are too hot; others are too far away and are too cold. And the fact of the matter is—there is nothing to worry about now as you won't be around when the calamity happens—the sun is losing weight and its grip on the earth. As the sun reduces in weight it loses its gravitational hold on the bodies revolving around it. And we can determine mathematically that the earth is leaving the sun spirally, as it revolves around the sun, so that every hundred years, every century, approximately it's three feet farther out in space. Now, that perhaps is slow motion to many of you, but in astronomical terms it's important. So the time will come eventually when our little earth will be too far out, too cold, and we will probably freeze. If there are any survivors then they will be wiped out by cold. We will eventually get to the positions where these other planets are now, moving away from the sun, and the earth will be someday where Mars is now. Out here we will be where Jupiter is today. These planets are all moving away from the sun as they revolve around it, because of its loss of weight—loss of weight due to its radiation. All of this must be considered in the question of God's layout of things.

I don't know exactly what science is taught at Harding College, but if you are taught Bible zoology you learn that a snake once talked to Eve and that a jackass once talked to Balaam. That's the zoology of the Bible. I'm not supposed to talk directly on the Bible tonight, but there is a conflict here. In Bible chemistry you are

taught that a woman was once turned into salt. That's Bible chemistry. And if you have Bible astronomy, you are expected to believe that a man once caused the sun to stand still. It's in the Bible. And if you have Bible biology, you have woman coming from a rib.

Now, science disregards these mythological, traditional explanations of things. The various sciences are engaged in a tremendous task of research. Everything interlocks and is interrelated. And I have to mention most emphatically that Arkansas will remain out of touch with culture so long as it has a statute on its books prohibiting the use of biological textbooks teaching our monkey descent. Man is descended from a long series of animals. This is taught in all the leading universities of the world. I defy my opponent to name an institution of higher learning that does not teach evolution. Some experts, of course, may quarrel over details of evolution, as doctors disagree in matters of medicine, but evolution has come to stay, and Arkansas will have to step up and accept evolution as the explanation of things. I have here: a statement issued not so very long ago by the Council of the American Association for the advancement of Science. This is the largest scientific organization in America and one of the most important in the world. It's comparable in some measure, although not in its membership makeup, to the British Association. So the Council went on record. They had heard about this monkey business down in Arkansas and Tennessee and they were a little dismayed by it, as by the Dayton trial, where William Jennings Bryan made a perfect monkey of himself. This is the declaration the Council of the American Association for the Advancement of Science:

"The Council of the Association affirms that, so far as the scientific evidences of the evolution of plants and animals and man are concerned, there is no ground for the assertion that these evidences constitute a mere guess. No scientific generalization is more strongly supported by thoroughly-tested evidences than is that of organic evolution. The Council of the Association affirms that the evidences in favor of the evolution of man are sufficient to convince every scientist (it doesn't say every theologian) of note in the world."

I'm giving you this as preliminary matter to some explanations of what happens in evolution, which show that we are not guided, that things have come about by gradual stages over long periods of time, through slight variations in organisms, so that what we see today is the culmination of a long series of events.

I must insist—my opponent will object to this, but I insist—that our nearest relative among the mammals (man is a mammal); that is, animal that suckles its young) is the monkey. Man belongs to the mammalian group, and his nearest relatives are the anthropoid apes. That does not mean that we are descended from the apes you see in the zoo, if ever you go to zoos and look at apes. There are the anthropoid apes, the man-like apes, which are practically tailless. I'll go into that matter a little later. Then there are the small monkeys. There has been an ascension in the evolution of the monkey, and man has evolved from primitive anthropoid apes. That has been so definitely established in our institutions of learning that there is no more question about it than there is about the law of gravitation.

I want to get this blackboard out of the way quickly, so I'll get right to this subject. I call your attention here. I don't know how many of you in the back of the hall can see these figures, but I'll call them off. In the evolution of some monkeys there has been a loss of the tail. There are long tailed monkeys. Evolution, let me impress upon your minds, is not always an advancement. It's change. It doesn't mean that all monkeys lose their tails. But there have been monkeys which all but lost their tails, and man is descended from those early apes. And, in the set-up of things, this is what we find: we discover that the chimpanzee of today has an internal tail, that is an extremity inside the body consisting of a certain number of vertebrae. Now the chimpanzee has a 3.3 tail; the gorilla a 3.1, that is, a three and a fraction tail; the orangutan, 2.8; the gibbon, 2.7; and man a 4.2 vertebrae tail. What I'm demonstrating here is that you and I and the rest of mankind have been slower in losing our tails than were the anthropoid apes of today.

Now, my opponent last night did not refer to this matter which I brought up about tails. It is important. If we come from animals we didn't come from Adam and Eve and we didn't come from a rib. We have the earmarks, the identification marks of our monkey origin. For example, I wonder how many of you are acquainted with the following incident. I'll relate it to you. The thumb-prints of man and ape are very much alike. Thumb-prints differ (no two individuals have the same thumb-prints). That's why they are used for police records. Now, this is quoted from Dr. Hornaday's book. Hornaday was a zoologist. I went over to your town library this morning and found a book of his on natural history. Read it; it has nothing to do with evolution. It's purely

descriptive of animal life. This is what Dr. Hornaday wrote in his *Mind and Manners of Wild Animals*:

"A group of fourteen experts in the New York City Department of Criminal Records were unable to recognize the thumb-print as anything else than that of a man."

"They had been given, unknown to themselves, the thumb-print of an anthropoid ape and they didn't know the difference between it and the thumb-print of a man."

We have the blood test, which is one of the most important ways of showing our close relationship to the living anthropoid apes. If you take ox blood and inject it into the blood stream, of a chimpanzee" or of an orang-utan or into some of the other anthropoid apes, it will cause a violent reaction. The bloods are different. This ox blood in the blood stream of an ape causes distress symptoms and even fever, indicating that it is not a suitable blood. If you take the blood of one of the smaller monkeys (when I say smaller monkeys, I mean the tailed monkeys) and inject it into the gorilla or the chimpanzee—this has been done to the chimpanzee—it will produce only a slight reaction, due to a closer affinity of blood. But if you inject man's blood into the blood stream of the chimpanzee, it will produce no reaction. The bloods are nearly alike, showing that there is a blood link between this animal and ourselves. We find in the ape, the anthropoid, many of the same diseases of man. It has colds, catarrh, and apoplexy. No other animal has apoplexy except the chimpanzees and the other anthropoid apes. They have cataract of the eye and consumption, and are the only animals which can be injected with syphilis. Now, consider that fact carefully. Syphilis is a human disease and the monkey can take it. Monkeys enjoy tobacco; they smoke; they love tea; they drink coffee; and what they dearly like is a good alcoholic drink. They get intoxicated; they love liquor as some men do. All these things sum up to our close relationship to the apes.

Let us next consider the rudimentary organs in men, of which there are many. Wiedersheim found 180 organs which once served along the line of our animal ancestry but which have ceased to serve at the present time. Do you know that man today is suffering from the acquired practice of walking on his hind legs? Our standing erect has thrown our body organs out of adjustment. Most of woman's troubles are due to sagging organs. When man walks on all fours, these organs are more or less suspended from the spinal column and hang down; but when he stands on

his hind legs, they crowd down on one another and cause pressure. There is a hearing down of all these organs. It has been demonstrated time and time again by physicians and anatomists, that man has not yet adapted himself to the upright position. Some of us, of course, are still hanging by our tails intellectually. But man has not yet gotten out of the stage where he is partly an animal which should be walking on all fours, and we have to conclude that there must have been one brave monkey of the inquisitive type who decided to come out of the trees and look around. He was the first freethinker. The others were swinging by their tails and were satisfied. They said: "Hanging by the tail was good enough for mother and it's good enough for us." But this other monkey decided that maybe there was something down below, so he looked around. Had that monkey not come out of the trees you and I would not be here now. It no doubt happened many years ago.

I am going to read to you an extract from Moon's *Biology for Beginners*. It concerns the penalty of the upright position and is by a man who has written extensively on biology:

"Placing the weight vertically on the hips instead of at right angles to them renders man more liable to hip, spinal, and foot diseases and deformities. The internal organs rest one upon another in a vertical pile instead of lying side by side, producing a tendency of pressure or displacement. When sick or tired we instinctively lie down to relieve this strain."

Now, in the evolution of man's body we have, naturally, the evolution of the brain. Go to any one of our leading institutions such as the American Museum of Natural History in New York, the Field Museum in Chicago, or the Medical Museum in Washington and you will find enough evidence to embarrass Dr. Bales. I don't know why he fights evolution, except from his conviction that he must defend Christianity. He has to defend the Bible, he's got to defend this creation story. And he knows very well that if evolution is accepted, Adam and Eve go out! That story, that Bible fable, is interesting mythology but it doesn't present the true picture of the origin of man. It's laughed at kindly, but laughed at unsparingly in intellectual circles. Man's brain has been evolved from an animal brain and we have all the indications. We see them in our behavior, in our patterns of thinking. Man is still very much of a brute. Can you think of any animals that have equalled him within the last few years by conducting a world war on such a stupendous scale? Christians fighting among them-

selves, Catholics killing Protestants, Protestants killing Catholics, Catholics killing Catholics, Protestants killing Protestants, everybody killing one another to settle an international dispute. Do you think we haven't come from the animal world? We improve regularly on our methods of destruction. And we are basically animalistic. In the secrecy of your thoughts, in the secrecy of your activities in the secrecy of your emotions, you will find traits that link you with the animal world. You are trying to lift yourself out of it. You are trying to slough off your animal origin, your descent from brutes.

I wish I could take you on a personally conducted tour through the Hall of the Age of Man in the American Museum of Natural History and show you the evidence concerning man's origin. Dr. William K. Gregory, who heads that institution in the anatomical division says:

"Thus in the course of litany millions of years the lowly head of the Devonian fish has been refashioned into the voluminous brain case and forward looking face of man."

Our brain has evolved from lower type brains. You can see them in their gradation, in an assembled series. This is the consensus of opinion of men who have made life-time studies of the subject. They are not bothering about what Luke said, or what Matthew said, or what the Book of Revelation teaches. They are employing science. The scientist is the man who keeps his feet on the ground and is close to nature. We have evidence from the geologists of the great age of the earth. We have the strata to show, and in them the fossils that are found in each particular layer. And here is evidence to prove that there has been an ascending scale of organisms from the simple to the complex.

My friend here is greatly concerned over spontaneous generation. He referred to it last night as though it offered a very disturbing argument. Now, if most of the universe is composed of inorganic matter and only an insignificant part of it is organic, is it difficult to conceive of a very low form of life arising spontaneously? I am speaking of life in its simplest forms and we have very low forms of life, microscopic and submicroscopic. Is it not reasonable to assume that inorganic matter could and did, at a particular time, under favorable conditions, turn out a simple form of life, from which higher forms developed under the environmental conditions that prevailed? We would have here the origin and development of life.

If you compare the total life span of all animal organisms to

the age of the earth, you will find that life has been here only a short time, and that man is a recent arrival. If you divide the time clock into, say, a sixty-minute dial, you will see that man has been here on the face of the earth less than a minute! And civilized man—I don't know whether he has really arrived or not—would be represented by a few seconds. Most of that biologic period, as we see by fossil evidence and the evidence from comparative anatomy, was consumed in producing reptiles. You don't find this in the Bible, but I'm giving you something better than the Bible—it's science. You will find there evidences to show that there were great biological periods. There was the Reptilian Age, consuming nearly one-third, if not more, of the total life span of animals on this earth. God, if there is a God, and there is one according to Dr. Bales, was tremendously interested in Dinosaurs. Now, you've seen pictures of them, if you have not seen reconstructions of them from their actual bones in museums. Gigantic creatures they were, and how beautifully constructed! I don't know what possessed God—I'm using the word now as my opponent would use it—to design a thirty-ton animal and then give it a feeble pound-and-a-half brain. Here is something for which you can take an aspirin. The animal had no thinking capacity, and it dominated the world. God must have been tremendously interested in reptiles. He hadn't thought about you; he was leaving you for later on. You were just an afterthought. God was fond of reptiles.

God turns out fish by the millions. Oysters he turns out by the tons—more than you can eat. For one oyster to survive thousands must perish. I used to know how many thousands of eggs a codfish must lay in order for one to come to maturity. The wastage, the time element involved, the long span of trying to reach an objective, show that nature was not planned.

Consider the evolution of a horse. It offers the most complete display of evidence that has ever been presented in regard to any one creature. I think you are familiar, I trust you are, with the evolution of the horse. This animal started as a four-toed little creature about the size of a fox. The evidence for this is definite. It took about three million years for God to produce our modern horse and turn these four toes into a hoof. Now, God ought to have been able to step things up if he wanted a hoof. Why couldn't he have waved a wand and produced a hoof instead of this 16rig series? If you look at the back of a horse's hoof, you'll find that it has a surviving toe. It's just above the hod. That back

projection you see is one of its toes, and the other three toes have been changed by slow graduation into the hoof.

God takes time in all things. My opponent claims that God has unlimited time. Well, if God wants to get things done, why should he consume so much time in reaching his objective? If a business man acted that way you would think there was something peculiar, something lacking in his mentality. If you want to go from here to Little Rock, you don't go first to New York, then up to Canada, then to Seattle, then to San Francisco, and then to Little Rock. You find a more direct route for reaching your objective. But these round-about ways, these winding excursions in evolution, show us conclusively that the universe is not governed by intelligence.

I wonder how many of you realize that we have certain types of animals today that are almost identical with earlier forms of life? One of these is our dear friend, the cockroach. The cockroach is a marvellously adjustable animal. It is well adapted to changing environment, and that's why it has a distinguished ancestry. It has survived in almost its original form and has been as it is for many millions of years. Its span of life through the upheavals of time is greater than that of any other insect. And I feel sure that the Daughters of the American Revolution and the Sons of the American Revolution would be very proud to have an ancestry like that? The cockroach is the aristocrat of time, while you yourselves are but recent arrivals. It is one of the most beautifully adapted animals. And why did God put it here? Let Dr. Rales answer. Dr. Bales, I ask you in closing, what good is a cockroach?

* * *

Second Night- Bales' First Speech

I am happy to be with you again tonight, and I trust that the discussion will continue on a friendly plane. I have no malice, but only good will toward all. The case for faith in God is not being presented these first two nights. Instead I am examining the case which my friend of the opposition is presenting in an effort to prove that the universe is the product of non-intelligent causes. Let us notice some things which were mentioned last night, and which also tie in with that which has been said tonight. Before doing this, however, my opponent's attention is

called to the questions which I submitted last night. The one question which he has dealt with I shall consider later.

I. ARGUMENT FROM IGNORANCE

In many cases my friend has made arguments from a lack of information. I used the term last night of "argument from ignorance." It was used in a technical sense. There are many things in the world that we do not know. And to presume that from our lack of knowledge that we can draw certain definite conclusions, especially conclusions which are in opposition to facts that we do know, is to argue from what we do not know to try to prove something which it cannot prove.

II, THE HUMAN BODY A FAULTY MACHINE?

Last night my opponent stated that the body is a mess. And yet the body does function, and under very adverse conditions at times. My friend has the obligation not of bringing up a few disorders which are the lot of man as the result of the fall of man, but rather to explain the marvelous order, the thousands of cases of order and unity that we do see.

Mr. Teller believes that man can make more perfect machines than is the body of man. *But where did man, the Maker of machines, come from?* My friend maintains that the machines that man makes are the product of intelligence. But he further maintains that man himself is the product of non-intelligent causes. And they call themselves rationalists! Teller must account for the origin of man himself.

Friends, the body is a more amazing bit of machinery (it is more than a mere machine, however) than anything that man can design. It has the power of growth. It has the power of self-improvement. It does not have to be traded in every year for a new model. It has the power of thought. It has the power of self-repair. When an engine block breaks another one has to be put in. In the case of man there is the power of self-repair. Furthermore, what engine can you take to the table; put in a lot of raw materials; have them digested; assorted; and then sent to different parts of the machine for repair work? And yet we find just such being done in the case of man's body. Man also has the power of spontaneous motion, he is self-moved. Man has the power of setting a goal and working toward that goal. The body also has a marvelous system to protect itself against invading disease germs.

III. THE LARGE INTESTINE

I now call attention to the twenty-five foot long tract, the intestine According to Dr. Kern Sears "In chemical industries we have two types of plants, the batch type and the continuous operation plant. The second is the more desirable where it can be made to work, for it is the more economical. The body is a continuous operation type of chemical plant. Sometimes in a chemical plant there will be miles of pipes through which the mixtures of substances pass. This is necessary to give the substances time to react, and it make it easy to control the conditions so that the reaction can take place. The intestines must be long enough to allow food time to be digested—about twenty four hours. The arrangement in space must be economical of space so that the plant will not be too big and the heating problem too great and expensive. Naturally the intestine is lapped back and forth like pipes in a chemical factory are—an economical arrangement. If a chemical plant, which in this way is copied from the human body, shows purpose and design behind the plan, surely the human body shows plan and intelligence behind the plan of the intestines."

IV. THE ZIPPER ARRANGEMENT

Now, with reference to the Zipper arrangement, I want to use the zipper suggestion as *one* illustration of man's wisdom vs. God's wisdom. My friend has proposed an improvement which shows what a wreck he would have made of man if he had been making man. Every boy in (own would become curious as to what makes him tick; would unzip the zipper; and would put in rocks to see if they would rattle! The very moment he unzipped the zipper germs would invade him. Grown people, with every little pain, would unzip themselves, and germs would get into them. If one caught the zipper on something as he got up to speak, out would come his intestinal fortitude!

Ladies and gentlemen, when man makes a machine that is as perfect as he can make it, he generally wants to sea! that machine so that every individual that might want to look into it and tinker with it cannot do so. This is done also to keep out outside objects. God has made the body and has sealed it. Even when it is penetrated there are things which rush to repel the invasion of germs. The body also lias the power of healing itself.

This is just one illustration but it gives us a sample of the wisdom of man" in contrast with God's wisdom.

V. THE WORM A MACHINE

With reference to the worm growing a head and then a tail, we grant that a mechanism is involved. When man can invent such a machine (that he can cut its head off and it will grow another; and when he cuts it off at some other place it will grow a tail) he will really have done something! It takes intelligence to account for that bit of mechanism, the worm. I do not deny that mechanism is there, but I do deny that the mechanism does not show that an intelligence designed it. Let my friend take some matter in motion and shake it as long as he wants to and put it into the form of a worm and then let him give, it the power that the worm has. Then we can talk about the intelligence of man! And even if man could do it, which he cannot, we would still say that that which gave man intelligence is at least intelligent.

VI. THE AMOUNT OF WATER AND LAND

Concerning the amount of water and land, geologists have shown us that there is design there. If there were a little more than there is, things would be too wet and we could not survive. A little less water than there is in proportion to the land, and things would be too dry.

Dr. Robert E. D. Clark, a physicist in Cambridge University, has pointed out that water has many peculiar characteristics which are absolutely essential for life.¹ Dr. L. M. Davies, a geologist of Edinburgh, Scotland, in "The Present Status of Teleology,"² has pointed out that A. R. Wallace, one of the co-discoverers of the modern theory of evolution, has indicated that if there had been ten per cent less ocean basin, or ten per cent more water, life on earth would be impossible.

In commenting on the arrangement of water and the land Dr. Clark wrote: "Such an arrangement is the very last thing we should expect in the case of a planet which has quietly cooled down from a molten state and then become covered with water. It suggests that the world is not as simple as we thought—that something has intervened."³

With reference to the deserts and the cold places on the earth it- may be pointed out, without going into detail, that they are necessary in order to air-condition parts of the earth. Without some such arrangements currents of air would not go out over the ocean; get water; and then finally bring it over the land.

VII. THE EXPLODED CRAB

Concerning the little creature that gets into the crab and explodes, it is only necessary to point out that: *first*, Mr. Teller cannot prove that that is its only function. *Second*, we know that many little creatures are of value to us. The little earthworm makes a great contribution in pulverizing the soil, as Darwin and others have pointed out.

Crabs evidently serve a purpose, although I do not know all of the purposes that they serve. However, their reproductive rate is such that if God had not made a system of checks and balances they might overrun things. I certainly would not want them in bed with me, so I thank God for His system of checks and balances that keeps them within bounds! The science of Ecology has shown that there is an intricate, wonderful balance in nature.

However, let my friend, just by taking matter and putting it into motion, construct something like that little creature which explodes the crab.

VII. NIGHT AND DAY

Night and day have several important functions, only one of which we shall be able to mention due to a lack of time, since so many things have been brought up. The processes of photosynthesis are necessary for our life. These processes go on more rapidly and more efficiently when there is darkness and light than when there is light alone.

IX. THE EYE

I have already explained that Mr. Teller cannot tell how we have the eyes which we do have. And if it were the type of optical instrument that Teller wants it to be, it would be fixed in one direction and every time you wanted to look a little to one side you would have to turn your head. But our eyes were not meant to be just optical instruments, and they are far more amazing than any optical instrument that man can make. And as for eyes in the front and back of our heads, why friends it is hard enough for some folks to tell whether they are coming or going without having eyes in the front and in the back!

X. BETTER BREEDS OF CATTLE

Now as to man making better types of cattle, etc., man can with his intelligence (and where did he get it) sort out pure lines. The potentialities are already there. My friend did not explain where they came from.

XI. EMBRYONIC TAIL

With reference to the tail in the embryo, I have a long quotation here which I do not have time to give in detail. You can read it in the library in Douglas Dewar's book on *Difficulties of the Evolution Theory*, and in *More Difficulties of the Evolution Theory*. Dewar was an evolutionist but he finally lost faith in it, and gave it up for he saw that it was anti-scientific. Dewar points out, first of all, that man does not have the type of tail that our friends seem to imply that he has. They call man's *os coccyx* a tail. "It may be noted that the *os coccyx* is situated much lower and is longer in man than in the anthropoid apes, being composed of four vertebrae in the former and three in the latter. Thus if man descended from an anthropoid ape, his *os coccyx* has increased in size."⁴ It looks like, even as some evolutionists have contended, that maybe the apes have descended from man! They make some good arguments along that line, that is, as good as some of the other arguments are which they make. "As I have pointed out,⁶ these differences correspond to profound differences between the organization of man and that of the anthropoid apes. The creationist view is that man has no tail and that the primordium that gives rise to the tail in tailed vertebrates gives rise to the *os coccyx* in man."⁶ Dewar then went on to point out that the particular thing which evolutionists have called a tail is a necessary thing in some phases of the development of the embryo.

Furthermore, "Of the vertebrae in the other part of the tail four usually continue to develop and fuse to form the *os coccyx*, which soon becomes bent forward and serves for the attachment of certain muscles. The fact that the tail is thus curved enables man to sit without suffering inconvenience and probably affords some of the additional support required by the viscera on account of man's upright posture. It is important to notice that in its earliest state the tail of man is as long as that of the embryo of the long-tailed animal. If man be descended from a long-tailed ancestor, which had gradually lost the greater part of its tail, it is reasonable to suppose that this organ would have gradually become shorter at its inception, but, as we have seen, this does not happen.

"If anyone asserts that the human embryo recapitulates the various stages' of its tailed ancestors, I should say to him 'You assert that the whale is descended from ancestors having well-developed hind legs, why does the whale embryo not exhibit,

at an early age, well developed legs which later shriveled up?

"He who asserts that the human embryonic tail is a relic of a tailed ancestor, must, if he be logical, assert that the post-anal gut is a relic of an ancestor that went through life having such a strange organ. Writers who dilate upon the human embryonic tail are usually silent regarding the post-anal gut. Is it fair to students to withhold this fact from them? Clearly both embryonic tail and post-anal gut appear because of the way in which embryos develop."⁷ Dewar continued with other comments on why they developed in that particular way. And⁸ Dewar pointed out some of the differences between the human coccyx and that of the ape—some very important differences which could not be explained by assuming that one evolved from the other.

I have taken more time on this one case than perhaps I should have spared for it, but it will serve as a sample of a lot of illustrations which Teller used. He used a great many, and I do not have time to examine thoroughly each one. He mentioned three or four different types of things in about two sentences. I certainly cannot, in two sentences, explain those things; any more than if I made ten accusations against him he could in ten sentences completely explain the fallacy in those accusations.

XII. THE SOLAR SYSTEM

Concerning the solar system, Mr. Teller started with a fallacious assumption. His whole argument is wrecked on the rock of the illogical assumption which no one who knows much about the Bible affirms. Teller assumed that we teach that the universe, including the solar system, was made primarily for man. We have not taught that. We teach that during this present time the earth is the pilgrimage place of man; that man does not stay here; he passes on.

I do not profess to know all the purposes and plans of God. My opponent certainly will acknowledge that if God is He is so much greater than we are, that He will have purposes and plans that far surpass us and that we cannot understand. This would certainly be much more true of God than of a father whose plans and purposes certainly are not all revealed unto his children. Thus the fact that we do not see the purpose of the entire universe is not any indication that it does not have any purpose. The thing for my opponent, and for every man to do, is to find out God's purpose for man. This is the important thing and we need not be concerned with these other things.

Concerning the vastness of the universe, one thing I see from it is that it took a great God to make it all. As I stand beneath the starry heavens I am filled with a feeling of awe. The astronomer Forest Ray Moulton, who so far as I know was not a believer in God, wrote: "Those individuals who have not had a soul-satisfying evening of solitude beneath the sparkling stars of a cloudless sky have missed one of the sublimest experiences a human being can enjoy."⁹

The vastness of the heavens also helps me to be humble. And that is a very good function that it serves for man. However, since we do not know all of the purposes and plans of God, my friend is urged to deal with the purposes and plans that we can see.

As for Mercury being unable to support life, we have no proof that God designed it to support life.

Mr. Teller speaks about the science that we teach in Harding College. My friend, we teach science here, but not science falsely so-called.

Teller is puzzled by the Biblical account of the talking jackass. Well, my friends, Teller, a materialist, has "dirt" talking; and I guess if dirt got so that we can talk, there wouldn't be much difficulty about a jackass talking.

Concerning Lot's wife turning into salt, my friend believes that we all sprang from mere matter; that we are all matter; and it does not matter much anyhow; so I do not see how it would be hard for him to believe that Mrs. Lot turned into salt.

The Bible does not say that the earth is the center of the universe. And even if it did my friend could not prove that it was wrong. The astronomers simply do not *know*; they may have some guesses.

Concerning astronomy, I call your attention to this fact (as I shall bring out more in detail tomorrow night in an argument for the existence of God) : that our universe is not a self-contained system; it cannot be explained by the laws which are now in operation in the universe. Thus something outside the system is necessary to account for the universe; and something outside of it would be something supernatural. But I shall leave this particular point for tomorrow night.

However, let me call your attention to another fact. My friend has assumed that the universe came into being as the result of

accidental process. But do you recognize that real astronomers today (although some may advance certain theories) say that they' do not know the source of the solar system. I now quote from the head of the Princeton Observatory, a well-known astronomer, Dr. H. N. Russell. He wrote:¹⁰ "It appears, indeed, that no orderly process of evolution under the action of internal forces could have produced the existing distribution of angular momentum; and it follows that the angular momentum of the planets must have been put into the system from outside. Here, therefore, it seems necessary, for once, to abandon the 'uniformitarian' hypothesis of gradual evolution and to adopt a 'catastrophic' hypothesis of sudden change."

In a quotation which he authorized me to use in this debate, Dr. Russell said: "No approximately acceptable physical theory of the origin of the planetary system is at present in existence. All the older theories meet fatal objections. The new theories of Weizsacker and Altren are so complicated that they have not yet been adequately tested mathematically. There is now conclusive observational evidence that dark bodies, larger than our planets, but of the same nature, revolve about a number of the nearest stars, but no one has yet suggested a satisfactory explanation of how they came into existence.

"The fact that science has not yet succeeded in solving some particular difficult problem is no argument against science, and still less an argument against religion."¹¹

I speak fast sometimes, since I just cannot hold Bales down! But one thing I am doing, I am packing everything into the book, which I believe will live, that I can pack into it.

My friend believes in some modification of La Place's theory of the origin of the solar system. But as one professor pointed out, Spitzer I believe was his name, any theory which tries to account for the origin of the planets from eruptions of materials from the sun meets with extremely grave physical difficulties. He has shown that the ejected material would be so hot that it would expand away into space and not condense into solid bodies. Dr. Harlow Shapley, world-famous director of Harvard Observatory, in spite of the fact that he had a theory concerning the origin of the sun, moon, and the earth, said: "The chief accomplishment of astronomical study during the past few years has been to reveal the inadequacy of all theories regarding the evolution of the universe and its component parts."¹²

As Dr. Harding, one time professor of Astronomy in the University of Arkansas, said: "We have several scientific theories with reference to the origin of the earth. No two of these theories with reference to creation agree. In fact, each theory contradicts every other theory."¹³

In his book¹⁴ Dr. Russell went on to say that "The final theory when it comes may be very different but if nothing should be set down here except what is firmly established, the subject of stellar evolution would not be discussed at all."

Dr. Reginald Daly, a well known scientist, in a lecture (February 8, 1940) at Louisiana State University, stated that "True we have a lot of nice theories (how the earth was formed, J.D.B.). But all of these have been proven false. Even the theory of Chamberlain (one of the world's greatest geologists) has fallen through."¹⁵ In a letter to me (Sept. 9, 1947), Dr. Daly confirmed the gist of the above statement and added that none of the theories should be dignified by the term "theory" but rather that they were just hypotheses.

I could continue with similar quotations. I could point out that La Place himself put forward his theory with the statement that he had not diligently checked it mathematically. Dr. Moulton has given some fatal objections to La Place's theory.¹⁶ Dr. Russell stated in volume one of his book,¹⁷ that "the solar system is clearly no aggregation of bodies . . . the planetary system presents numerous regularities of arrangement, for which the mind demands an explanation, and which are not, like Kepler's law, necessary consequences of gravitation." I could go on showing the fallacy of Mr. Teller's appeal to chance. And that is all that he is doing—appealing to chance—and he has no scientific theory, but only the speculations of men, to propose which will stand the test. Even scientists who do state some theories point out that the existing laws of the universe cannot account for the existence of our solar system. So then, ladies and gentlemen, there is no adequate physical theory of the origin of the universe, yet my friend assumes that it was all by chance. We shall bring out more tomorrow night on astronomy, but so much for it tonight.

XIII. EVOLUTION

As previously stated, I do not have time to mention every detail that Mr. Teller has mentioned, but I shall get to them in principle. Concerning evolution, I would like to point out, first

of all, that even if evolution were true it would not do away with God. The fact of the matter is, ladies and gentlemen, that most evolutionists believe in God. The book *Creation by Evolution*, edited by Francis Mason, contains statements from many leading scientists, in various fields, which point out that evolution does not put God out of the universe. Evolution would demand God in order to make it work, as surely as would direct creation. Last night I quoted Dr. Paul Lemoine, one of the scientists who contributed to the *French Encyclopedia*, that it results from this expose that the theory of evolution is impossible. Moreover, in spite of appearances no one longer believes it. Evolution, he continued, is a sort of a dogma in which the priests no longer believe but that they maintain for their people. The idea of evolution is admissible for certain limited groups, he pointed out, but not for the masses of the animal and vegetable kingdom.

Mr. Shelton in his debate with Douglas Dewar,¹⁸ said that he could not entertain the idea that the creationist's position was even a reasonable hypothesis. It was just silly, he said. Friends, that is the reason that they believe in evolution, they think that creation is silly. They have an anti-God bias, in many cases, which will not let them examine the facts. And so, as shall be pointed out tomorrow night, they take a theory which is against the facts. Why? Because it is the only theory that a person who rejects creation has to account for the universe. And it really does not account for it, even if it were true.

I shall call your attention to some other men who say **that** evolution is just a theory. All of these quotations are taken from *Evolution*,¹⁹ and the pamphlet contains references to the sources of the statements. Charles Darwin (he is the father of modern evolution. At least he is generally considered so, although he stole the thunder of some others—he can have the honor if he wants it!) said: "When we descend to details (and that is what we must do, J.D.B.) we can prove that no one species has changed . . . nor can we prove that the supposed changes are beneficial, which is the groundwork of the theory." Darwin also said that the geological record is imperfect. Yes) it is imperfect in so far as proving their theory is concerned. But he did not find that it was imperfect, and then conclude from that that his theory was imperfect. He got up his theory, thought that it had to be true, and when he could not find the facts in the geological records to support it, he said, oh, they are just missing. Surely, they are missing. They are still missing, too. Dr. Wm. Bateson, and

Dr. J. Arthur Thompson, both evolutionists, make something of the same acknowledgment; as does Professor Vernon Kellogg. Professor William E. Ritter wrote that "If one scans a bit thoughtfully the landscape of human life for the last few decades, he can hardly fail to see signs that the whole battle ground of evolution will have to be fought over again; this time not so much between scientists and theologians, as among scientists themselves." Yet they are all sure that evolution took place. Why? Because if it did not then God must have created things. And that seems silly to them. Thus they believe the theory of evolution without sufficient facts to support it. The reason they are all agreed on the idea that it did take place, is that they have the anti-God bias so far as creation is concerned.

With reference to man and the apes, friends, there are so many differences between them that it is hard to list them. Mr. Teller gets some minor, small, resemblances, and yet even he knows the difference between the two! I shall simply list a few. (1) The physical form of man is superior. (2) The blood: What doctor would think of giving you a blood transfusion from an ape? We know today that there is a difference between the red blood corpuscles of man and of apes, whereas there is an identity between different races of people. And as for some of the blood perhaps not killing someone, do you realise that some human blood from people in the same family would kill if administered to another member of the family? I guess that proves that some of them are not human! That is my friend's logic, not mine. (3) The constructiveness of man: his vast use of tools and inventions. (4) The progressiveness of man: his use of power, and other natural agencies for his comfort and benefits—such as electricity. (5) The assurance in mankind, and the yearning in mankind, that there is a home beyond this earth. (6) The potentialities of man. (7) The ethical aspect of man. (8) The religious aspect. (9) Yes, even consider the fact that men can debate. I do not believe that Teller has any record, at least, that apes debate whether or not they came from man. If you will read Douglas Dewar,²⁰ you will be impressed with the differences between man and the apes.

The theory of evolution suffers from many great defects. First of all it is just a faith which is contrary to the evidence. There are gaps which it cannot span. There is the gap between life and non-life. My friend thinks that you can imagine how non-life gave birth to life, but scientific proof is all against it. Life

comes from life. Why, friends, the facts are not even going to let Mr. Teller get started in his theory of evolution. Mr. Teller, I want you to really prove to us that it is a scientific fact that spontaneous generation is true. We are not going to let you even get up as high as the ape. We are not going to let you get up as far as the lowest living creatures.

The theory of evolution also demands impossible transformations; transformations the reality of which no one can even imagine how they were produced by evolution. Let my friend give proof that an amphibian was gradually changed into a reptile; let him give proof that there was a gradual transformation of the reptile into a bird; or of a reptile into a mammal; or of a land animal into a whale; or of a lower animal into a man. These things are treated in detail, and the difficulties brought out, by Douglas Dewar.²¹ Let Mr. Teller show us how there could be a transition between the invertebrates and the vertebrates. Many evolutionists admit that such transition between existing groups cannot be found.

So far as the fossil records are concerned, one can take a group of fossils and arrange them into any series that he wants to arrange them. These men who build up these fossil family trees build up different kinds of trees and from different sources. This shows that they are just speculating. Dr. Hooten said that they were just speculating, and that they were products of the imagination, or some statement similar to that.²² I call your attention to the fact that a similarity between the physical structure of man, and some animals, only proves that the creator adapted certain things for them in common because to a certain extent we live in the same general environment. Furthermore, succession does not prove descent. I suppose if my friend were reading in history books and they said that after Roosevelt (a long time after!) came Truman, that Teller would say: "Ah, ha, Roosevelt, Truman; therefore, Truman descended from Roosevelt. Succession proves descent." But it, does nothing of the kind. I could line up a little boat, a big boat, and a battleship, and say that one gave birth to the other. But not so, ladies and gentlemen, creative mind planned them for a similar environment. My friend has not proved a thing. He has not bridged all the innumerable gaps between the different fossils, which the Darwinian theory (and my friend is a Darwinian) demands. We cannot find these "fossils."

- 2 Transactions of the Victoria Institute, 1947
- 8 The Universe and God, pp. 119-120.
- 4 More Difficulties, p. 33.
- 6 Man: A Special Creation, p. 37.
- 6 More Difficulties, p. 33.
- 7 More Difficulties, pp. 35-36.
- 8 Man: A Special Creation, p. 37.
- 9 Consider the Heavens, p. I.
- 10 Astronomy (Vol. I. p. 463).
- 11 Personal letter to James D. Bales, August 11, 1947. The original is in possession of Dr. Bales.
- 12 Quoted by Theodore Graebner, God and the Cosmos, p. 229
- 13 Personal letter to the author.
- 14. Astronomy (Vol. II, p. 923).
- 15. The Daily Reveille, 2-8-40.
- 16 Consider the Heavens, pp. 132ff.
- 17 Astronomy (p. 461).
- 18 Is Evolution Proved, p. 115 of the printer's proof which Dewar loaned me.
- 19 Evolution (a pamphlet issued by the International Christian Crusade, 366 Bay St., Toronto 1, Ontario, Canada, price 20 cents).
- 20 Man: A Special Creation (Chapter III).
- 21 Difficulties of (he Evolution Theory (pp. 67ff).
- 22 Evolution, pp. 30-31.

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Second Night-Teller's Second Speech

First of all, in opening this rebuttal, I'm going to issue a challenge to Dr. Rales to name an astronomer, just one, who, in writing, has come out and said that the universe, the stellar universe, was created according to the Bible. Name one, Dr. Bales, and I will be satisfied. There isn't an astronomer who looks upon the Bible as a scientific presentation of anything pertaining to stellar origins. Some scientists may be religious; they conform for social reasons, and they go to church with their wives and children. They keep double-entry bookkeeping. Sometimes, for "respectability" in a town, a man may be a Methodist, or a Presbyterian, or an orthodox Jew, according to the locale. But I challenge Dr. Bales to name, a single astronomer who has publicly stated that the Bible gives us a true story of the origin of the universe.

Dr. Woodrow Wilson was not a scientific man, but he was an educated man, and I mention him here in the South because I suppose he is considered a good Democrat. He was scholarly and intelligent. Dr. Wilson once received a letter (I do not recall the details, but you will have to take my word for it), asking him

if he believed in evolution, and his reply was almost indignant. These are not his exact words, but they indicate the general tenor of his reply: "Of course I believe in evolution, as any intelligent man believes in evolution. Of course I accept it." Now, I'm not asking you to believe in evolution on the basis of Dr. Wilson's acceptance of it, but I'm simply citing the case of a well educated man not only endorsing evolution but almost resenting his being asked the question. It was like asking him, "Do you believe in the law of gravitation?" Of course he did, as an intelligent man.

Now, my friend Dr. Bales made some reference to my zipper arrangement. I'm very proud of that zipper idea, and when he questions it, I'm a bit touchy. He says that little boys might open the zipper and put marbles inside. Surely that might happen, but suppose a few youngsters did open this zipper arrangement put there in front in order that the doctor could get to your insides without cutting you open with a knife. Wouldn't it be better for a few boys to get marbles inside than to have so many thousands of individuals operated upon? Under the conditions which surgeons operate today, there is cutting of tissue and there are dangers involved. In putting his machinery inside a closed mechanism such as the human body, God has sealed it up so that we can't look inside. It cannot be examined without danger to the patient. So I submit, Dr. Bales, that my zipper plan is much better than anything God turned out in that direction. He should have consulted me at the creation.

Let me call your attention to another matter of importance. I don't know whether there are more males than females in the world, but it makes very little difference for the point of my argument. We'll split the world's population into half males and half females. Now, suppose a manufacturer were to turn out a mechanism which functioned like the mammary glands. You would think of him as being a pretty "bony" individual in the head. Something would be wrong in his sales approach: "I turn out a splendid product, but only fifty per cent of my machines work." Well, that is what God has done with the human nipple. The male nipple is absolutely useless. Ask yourselves, you men, why you have nipples? The mammary glands in the male do not function. Yes, there are exceptional cases where the male gives milk, but I'm not talking about these oddities. If I were to claim that a lamb has four legs I suppose most of you would agree with me. A lamb has four legs. But Dr. Bales is the type of debater who would rise and say, "No, I once visited a side-show and saw a five-legged lamb." He would destroy my argument by

pointing to exceptions. That's the kind of argument my friend Dr. Bales brings up.

Now, the question of mammary glands is most important, because these glands are often danger spots for tumors and cancerous growth.

My friend made some remark to the effect that the human body repairs itself. Yes, it does in some little ways, but if you lose a leg you don't grow another one. If you did, that would be real replacement. If you lose an arm, God doesn't see that you get another one. He is more interested in lizards. He'll grow a new tail on a lizard, but he won't grow a new arm for you. That's the way Providence works intelligently, according to Mr. Bales. God will grow new legs on a crab. He's interested in crabs, and if one of them loses a leg he is right on the job. "This poor crab hasn't a leg, so I'll give it to him," says God. He is right there with a new one. If you are in a railroad accident and have an amputation, you can pray from now to doomsday, Dr. Bales, and you can't get a new leg. God won't give it to you.

Speaking of machines: Dr. Bales had intimated that this mechanism of ours is a better machine than any that man can turn out. And he shouldn't expect us to take chemical ingredients and throw them into a test tube and make a man, because man has been evolving over a long period of time and we would have to have all the time factors involved. But if you look at the mechanisms that man has turned out, you will find that he makes better machines than God does; and I will show you, incidentally, where. According to the theological theory God gave wings to birds. Wings were evolved from forward extremities and were used for paddling. There are birds which have wings and are unable to fly. The ostrich has such small wings that it can't do much more than flap them. The chicken can just about get across the road. It, too, has wings. The mechanism of flight has gone wrong. But man can make a flying machine that far outspeeds the fastest bird. The hawk is a mere nothing in the presence of our high power flight mechanisms of today by which men travel through air. The airplane of today goes faster, dives better, is under better control, and can do things that God could not do with his bird wings. Why? Because they made tests in aviation to see whether the wing idea was preferable to any other and they found that the wing method doesn't work as well as the one that depends on the revolution of a propeller.

Do you know that in all nature there is not a single organism

that for the purpose of locomotion uses the principle of the wheel? We have legs ourselves and there are "hundred-legger" insects, but the wheel is the best speed device. God never thought of the wheel. He should have put us all on wheels instead of giving us legs. The wheel was the greatest invention in the early history of man and is important in most mechanisms. You have wheels in your watches and on your automobiles. The wheel gives you speed, and it gave us the propeller. The wheel is a man-conceived device whereby high speed is obtained. We have instruments, we have mechanisms made in our various factories, you have machines that tabulate, that count. Go to a newspaper plant and see what is done with fine printing presses. They work. They don't turn out fifty thousand newspapers that are readable and fifty thousand that are not readable. They don't work on a 50% basis as God's nipples on the human breast.

My friend challenges me to take a little matter and create life. Well, I challenge Dr. Bales to produce a ghost in our presence and let us see this ghost produce another universe. He asked me for the kind of evidence he wants, so I'm asking him for the kind I want. He expects me to take matter and create lower forms of life, when lower forms of life originated at a particular period in the evolution of the world. If simple forms of life were to come into existence today by spontaneous generation, they would not last very long, for the reason that existing organisms would destroy them. The earliest organic forms can survive only when there are no other organisms in existence. If it were possible for the elements to get together today and give rise to the smallest forms of life, there would be little chance for their survival. The simplest forms of life had to begin when there were no higher forms of life ready to kill them off. That is one of the reasons, perhaps, why we do not see any life today arising by spontaneous generation. But there are things that have happened in the past, Dr. Bales, that you don't see happening today. You don't see the burial and formation of great coal deposits. These are from ancient forests that were laid down, vegetation that through the centuries has been packed, and packed, and packed, until you have your anthracite coal.

We may know the ingredients that go into the making of a substance, but we may not be able to produce it synthetically because we haven't the time factor, we haven't the pressure means, and the other things that nature has in the raw. Take granite. As Dr. Steinmetz has pointed out, we know of what granite is composed, but we can't make granite artificially because we haven't

the means of duplicating the tremendous pressure exerted at the time the granite beds were laid down. Granite was formed by great pressure under the geological conditions prevailing at the time.

You don't see new rivers, like your wonderful Mississippi, coming out of nowhere suddenly. You know that the Mississippi is a matter of growth, that from its tributary streams, over a long period, it gradually developed into the mammoth river we see today. But my friend would hold that if J can't produce a Mississippi River or show him another Mississippi coming into existence today, therefore the Mississippi did not arise by natural means.

There's one point here I'd like to comment on. Doctor Bales says that the body repairs itself. Well, what about gangrene in the legs? I'm asking Dr. Bales to tell you what gangrene is. The body does not repair itself in the most essential matters. If it repaired itself it would offset—fight off—cancer. Cancer is in the news today; you hear it talked about all over the world; and you learn the rate at which men are dying. Now God, of course, if he wanted to, could stop cancer, but, in his benevolence, in his great kindness, he's not doing it. He wants to test your faith, and thinks that giving you cancer is a good way to test your faith. What type of god is he? What kind of a Father in Heaven would allow his afflicted children to suffer in this manner? Ask yourself a question—think it over, ponder it. When you get home tonight, ask yourself, "Would a benevolent being inflict cancer on a child or a mother, or infantile paralysis on a child, if he had the power?" According to the theologians, God is infinite and benevolent, yet he watches the suffering from cancer going on in the world today and makes no effort to abolish this evil. If there is a "purpose" behind cancer we shouldn't fight cancer. God intended us to have this disease, and you who go to the medical centers for cure are going against God's will. The physician every day is trying to correct the fumbings of nature, trying to undo the botchwork of God. trying to get the human body to function better than it does.

Now, in regard to turning out new types and variations of life, man has done more in breeding finer specimens of animals than God has done in all these millions of years. Within a short period of time we have developed—you who are stockmen are aware that you have the finest breeds of cows—distinctive types of cattle that didn't exist a hundred or a hundred and fifty years ago. Guernsey cows are among them. God didn't produce these fancy

breeds. It's man who, by selective breeding, is able to turn out these finer stocks.

Some day we may get around to breeding superior human beings. I'm hopeful of that day, but not too hopeful. A boy meets a pretty girl and that's the end—or beginning—for both of them. Nothing about family records or anything pertaining to the heredity factors that enter the making of a good mating team. But some day when the world gets wiser than it is today, it may take up selective breeding of human beings. In the meanwhile, I'll hang around hopefully, as long as time permits, and come back now to the animals where selective breeding is done.

I spoke last night of the canary, of the way God turned out the original canary bird. It's pathetic: a little animal with no bright color, no singing ability. Man has bred the canary bird. And there's the goldfish, too. Do you know that there were no goldfish until man went to work. In China they found a little fish that had a tiny gold spot. And from that fish with the little gold spot they developed the fish, you see today. God didn't turn out those pretty gold fish. Man did.

So, with your fine cattle, your superior stocks. You have better pigs today than God turned out; you have better draft-horses. When did God ever turn out a thoroughbred racehorse? No, it's man who is breeding these fine types. And so man has applied evolution, in such a way that he has brought about better stocks than has evolution working blindly for millions and millions of years.

And this dream of going back to a make-believe world, this Biblical world. Why, the Bible story of creation is not taken seriously today by the real scholarship of the world. I'm not going to discuss the Bible. I'd like to discuss it some other time with Dr. Bales. I spent seven years of my life—I should say wasted seven years—in studying this ridiculous book. Maybe it was profitable in the end, because I'm able to meet Fundamentalists when they care to debate, I should like to meet Dr. Bales on the question of the Bible, if it can be arranged some time. But it's out for tonight.

Animals make tools, animals employ tools. They crack nuts with stones; some can use a hammer. The monkey will use a stick for leverage. You see these early beginnings of culture along the animal line. So the tragedy in which we see Dr. Bales, an intelligent a man, with a good library, carrying on a preaching campaign against evolution merely to uphold a book that is dead in

the cultural world. The Bible is a curiosity. It's full of tradition, full of mythology, full of error, and without any science at all. It is destined for the museums.

* * *

Second Night- Bales' Second Speech

Brother man, you have a debate on your hands concerning the Bible! We can take some particular phase of the Bible, and I shall be glad to meet you in New York City on such a proposition. Yes, sir, as long as the providential over-ruling of God permits, and I have the strength, I am certainly willing to meet these men any time they are willing to step on the public platform. And we shall see who will "holler quit first."

I. THE BLOOD TEST

Concerning the blood. I want to include another reference." Judged on the basis of reaction to the injection of whole blood, it was found that bats are closely related to porpoises and goats to whales—although these species are widely separated in the "evolutionary scale." Again, the blood serum of a rabbit may be injected into a man without harm, while that of an ox would be very dangerous. Yet from an evolutionary point of view the ox is nearer to man in relationship in the evolutionary scale than is the rabbit. This type of argument is about as absurd to me as if my friend had argued that because a calf and a baby can live, on the same milk that it proves that they are brothers and sisters. Friends, it does prove something, yes it does. And if one guesses as the evolutionist guesses, one might as well guess it proves evolution! It might be used to prove that life comes from non-life. There is no end to what it proves if you use the logic of an evolutionist. *On* the question of the blood tests and relationships I recommend the pamphlet on the subject by Dr. Arthur T. Brown to those who are interested.

II. THE THEORY OF EVOLUTION

Now I want to give some more points to show that evolution is fundamentally off, and I shall start with some reasons given by some scientists in England as to why biologists over there will not debate evolution. The biologists over there are evidently not as confident as the American Association for the Advancement of Atheism, and so they run whenever a debate is suggested.

Mr. Joseph McCabe, however, did debate with Douglas Dewar, but he refused then to let his side be published; although it had been taken down by a reporter from the Rationalist Press Association.¹

First of all, men of science know that life comes from life. My opponent would like for you to guess that it could take place because we can see coal- and know that it was laid down sometime. Why sure there it is. Well, what is the analogy? No analogy at all. What is the relationship to the question of the origin of all? No relationship at all. What is the connection? No connection at all, no more connection than there is between dead matter and that which gives birth to life. The facts are that life comes from life. If we could see life coming from non-life, as we can see the coal there, then we would accept it without question.

Second, the theory of organic evolution has failed to stand the test of experimentation. Oh, they can produce some mutations and some sorting out of pure lines, etc. But still they do not cross certain lines. Besides all that they start with life. They start, for example, with a fruitfly and when they end up it is not with an elephant. Mr. Teller wants time. Dr. Bateson, an evolutionist, has said that we have not really crossed the species line—even though it is hard to define sometimes. He continued and said: "But that particular and essential bit of the theory of evolution which is concerned with the origin and nature of species remains utterly mysterious. We no longer feel, as we used to do, that the process of variation, now contemporaneously occurring, is the beginning of a work which needs merely the element of time for its completion; for even time cannot complete that which has not yet begun."² Ladies and gentlemen, time cannot complete that which has never started and never will start, if the past history of the world is any indication of what is going to happen in the future. For time cannot either give birth of life from non-life, or complete the process of evolution. It is not time that they need, it is facts and evidence. Time will not do what has not started.

Third, and these reasons are being taken from Douglas Dewar's pamphlet on why biologists will not debate evolution, there is a most serious palaeontological objection to the theory of evolution in the abruptness with which the fossils appear in the crust of the earth. According to the theory of Darwin, there should have been innumerable transitional forms in the fossils as well as

existing today; and yet Darwin said that there are clear-cut distinctions between the various forms. We do not see man shading off into the apes by degrees and apes into something. However, we do see a lot of shady men sometimes, and that proves something, and it might as well be evolution!

Fourth, another fatal palaeontological objection to the theory of evolution is the fact that the rocks have not yet revealed any of the intermediate fossils required by the theory to link the highly specialized animals.

Fifth, there is another serious objection in the absence of any organ in a nascent state; that is, just budding out, just starting; halfway to being an eye: halfway to being an arm or some organ whose fully developed state has not yet been attained. If evolution is true we ought to find such organs just budding out all over us.

Sixth, evolution involves impossible transformations, as we have already indicated. It would be necessary to show, for example, how the instincts of insects and spiders, etc., developed which enable them to do such complicated things. For example, the spicier that builds a diving bell. If it had evolved gradually all of the little spiders, and the big ones too, would have drowned before the necessary millions of years for their evolution had passed. They would never have evolved by stages this capacity to build their little water bell, their little home, under water.

There is another argument I would like to advance against evolution. It will be touched on again tomorrow, but let me point out tonight that scientists teach that things are in a process of going from order to disorder. The process of entropy, so far as science shows today, is not reversible in nature. Dr. Robert E. D. Clark has shown,³ in his essay on "Entropy and Evolution," that evolution assumes that there is in nature a self-ordering principle so that from the disorder of original matter there finally came an orderly arrangement of matter; and then from that the orderly arrangement of matter which has no life through a self-ordering principle has evolved into life; and then the self-ordering principle contained until man was produced. This is contrary to all the facts concerning the principle of entropy which is one of the most firmly established laws in the field of scientific research. My friend will not touch this argument. At least if he does mention it it will be merely to wave at it as he goes by rapidly; just like he has left unmentioned the fundamental objections which have been brought against his materialistic theory.

I have not dealt in little, minute things, as a general rule, but have brought out some big, fundamental things which according to his theory demand an explanation, but which have no explanation from his theory.

Concerning the vestigial organs, I must point out that such evolutionists as Keith and Goodrich admit that as our knowledge increases, the list of vestigial organs decreases. Goodrich stated that it was rather a dangerous thing to call any organ vestigial.⁴ Some of the things which were once called rudimentary are no longer labeled such. This shows that it was because of ignorance that they were so labeled in the first place. I am glad that the pituitary gland did not become insulted when they called it vestigial, and say: "Well, I shall just dry up and disappear." If it had done so, we would not be here tonight. According to my friend however, that might be a good thing, anyhow. Friends, the assumption concerning vestigial organs involves the idea that we are losing organs. That, if true, would not prove evolution; that would be devolution. To prove evolution we would have to have nascent organs. The evolutionist must show how we got organs in the first place. But my friend has been unable to explain that. He has assumed, and guessed, and jumped his conclusions. If we let him jump all the hard places, that he wants to jump, he can arrive at anything that he wants to arrive at. However, this is not the fault of the man, it is the fault of the position that he is trying to maintain. In order for Teller to prove that there are vestigial organs he would have to prove that he knew everything about every organ in the body at every period of growth and development, so that he knows that at no period of growth does the organ have any function. Neither Teller nor any other man on earth knows that much about it, and yet the argument from vestigial organs depends on just such an assumption.

Concerning the *teats* William King Gregory said: "From the presence of rudimentary breasts in male mammals (including man) people sometimes infer that the remote ancestral forms must have been hermaphrodites, but all available evidence indicates rather that in the ancestral mammals the sexes were just as distinct as they are today."⁶ I would like to know what Teller proves by these things. Dr. L. M. Davies, who believes in God and in creation, is of the opinion that before the fall of man and the curse, that man shared in the rearing of the young ("The Present Status of Teleology"). I ask Mr. Teller to explain how

man got them in the first place; which he cannot explain. So much for this.

The *fossil* scries we have noticed already. Dr. E. A. Hooton said some pretty hard things about some reconstructions of fossils. "These alleged restorations of ancient types of man have very little if any scientific value, and are likely only to mislead the public." So that is what Teller's trip to the meseum would do. I have been in the New York museum. "We have no knowledge of their hair form, hair distribution, pigmentation and the details of such features as i have mentioned. So put not your trust in reconstructions."⁶ That is what he tells me and Mr. Teller to do. I shall take his advice in this particular instance although I do not take him in all things—he is just too hard to take sometimes.

III. HOW MR. TELLER GETS OFF THE ISSUE

Concerning some of the other things, such as name one astronomer that believes in the creation account given in the Bible. I am confident that there are some, but friends this is not the issue. This issue is hurting Mr. Teller, since he will not face it. He has been off of it from the time that we started. It seems somewhat rude to say this, but I have no animosity toward him. I am just pointing out the facts. When you get to talking with people in error they usually get off the issue. I wish we would read the proposition again, for what does this have to do with the issue. We are not talking about the Bible. I pointed out (Teller did not deal with it, he gets off on something else. I do not blame him, it is better to get off than to have to face something you just cannot face and do anything with!) astronomers show that we have no satisfactory physical theory of the origin of the universe. Such great astronomers as H. N. Russell, who is well recognized in this field, have pointed out that we cannot explain the solar system in terms of the laws now operating it. Something must have been put into the system from without. Teller does not deal with these things, but merely assumes that it was all by chance. The theories which he accepts are those which astronomers say have fatal defects. He does not notice these defects, but wants to know about an astronomer and the Bible. I shall be happy, to devote some attention this when we debate the question of the Bible. Unless something drastic happens to one of us, we are going to have such a debate, are we not, Mr. Teller?

Teller did not mention the French scientist, Paul Lemoine.

who said in volume five of the *French Encyclopedia* (that volume, as well as a lot of other books for and against evolution, by scientists, is in our library) that evolution is impossible; that it is a superstition maintained by the priests for the sake of the people. Teller passed that by and said that intelligent men like Wilson believe in evolution, just like he believed in the law of gravitation. Now, I can prove that law. I can jump off here and hit the floor; but ladies and gentlemen let him prove evolution. There is no analogy between them.

Concerning the zipper, Mr. Teller has had a boy, and he knows that if you give a little boy a watch its innards will come out pretty soon, even though the watch does not have a zipper on it. How they get into it is sometimes a mystery. But we do know that everyone of them would unzip themselves the first thing one knew.

With reference to operations, I pointed out last night that we are dealing with an earth that has suffered a fall, and that man's body is not designed now, since sin has entered in, by God to live forever on this earth. And it is a good thing that God has not so designed it. What if evil men like Hitler went on living forever and ever on this earth. Even our friend the atheist would not be able to stay on this globe. Their doctrines, in fact, contribute to the rise of such things as Hitlerism. Darwinism has taught that we have arrived where we are through blood (natural selection and the survival of the fittest—that is, that which was the strongest or shrewdest) and lust (sexual selection). And so Hitler thinks, as all Darwinianisms should, that we shall make additional progress through blood and lust. Yes, let us breed human beings just like we breed cattle. Mr. Teller seems to regret that we have not arrived at that stage.⁷ He should have gone to Germany, since Hitler was trying that very type of thing. I am not accusing my friend of some of the things that Hitler did, but I do say that his doctrine cannot condemn what Hitler has done. For did Teller not maintain that good and evil are just what you happen to think about it? And that is what Hitler thought very emphatically. And so he was following some of the doctrines held by my friend when he did it. My friend just has not been consistent. He has been held back by religious backgrounds from going to the conclusions logically demanded by the abominable doctrines which he teaches.

Speaking of the religious backgrounds, I wonder why it" took

Teller seven years to find out what a foolish book the Bible is, if it is half as foolish as he thinks that it is.

To return to the zipper, and his statement that God should have consulted him, let Teller take a living man now and fix him with a zipper so that evolution can take over and enable the man's babies to be born with zippers. Let him try it. Why Teller cannot even make a man, much less one with a zipper on him! But it is still off the issue to talk about a few disorders, or to say that the decay and death of man proves that God does not exist. If God were a veritable devil (and I say this from Teller's viewpoint and not my own) it would not prove that He does not exist. If Teller found one car in a world of disorder that one car would demand intelligence to account for it as much as if there were a million cars there. So deal with the issue of order. And, as suggested, the issue is not whether God is treating us right. The blazing burning issue is evidently blinding him for he will not face it (I say it advisedly without any ill-feeling. I would feed him if he were hungry; I may invite him to a meal before he leaves here). He cannot face the issue, which is not the character of God, but the existence of God. He cannot account for the legs that we have, without considering the question as to why we do not get others. It just shows that God does not mean for us to live here forever. God has given man some work to do in using his own intelligence in dealing with some of the problems which have been brought by the fall of man. All this is off the subject, but that is simply because his issue cannot be proved.

IV. AIRPLANE

And now for the airplane.' An airplane is still just an airplane. No one has ever seen an assembly line where little airplanes are born. We have never seen a mother and father airplane. Mr. Teller, the more complicated bit of machinery that man makes the greater creature you have to postulate for man. The airplane did not just happen, and Mr. Teller does not so contend. It took intelligence to design an airplane, but Mr. Teller thinks that man just happened. Millions and trillions of accidents took place, and lo there was man. Man does not have to be accounted for by intelligence, but what man does has to be accounted for by intelligence.

V. WHEELS ON MAN

Concerning putting wheels on man, some day God is going to put the skids under some folks, but we are not concerned

with that at the moment. There is really grim truth in this, and I hate to think about the consequences of rebellion against God. But Teller's statement about putting wheels on man is ridiculous.

VI. PRODUCE A GHOST

As to our producing a ghost, we have always maintained that God is of the nature of spirit, and that He has created the universe. There is evidence to prove it; we shall go into that tomorrow night. But God is not going to come down here and create a universe just so Mr. Teller can see it. I am confident that Mr. Teller would try to explain it away anyhow; because he has explained away the marvelous universe that is before us; although he has no scientific explanation that will hold water or anything else. There is evidence for the existence of God and if we are not willing to be persuaded by it, we shall just have to go on without being persuaded.

VII. MAN BREEDING FINER SPECIES

With reference to man breeding finer species, the position which I take is that even nature has been affected by the curse. Furthermore, the breeder starts with a living creature. Evolution is supposed to have started with something that was not living. Furthermore, where did man come from who uses his intelligence to breed finer cattle. Breeders start with cattle and they do not end with men. As "the great geneticist Bateson said, time will not do what has not yet started.

VIII. RECAPITULATION

I would like to notice some things by way of recapitulation. Let us go back to the fossils. Those old fossils seem to bother someone. They are not skeletons in my closet, so they do not bother me. I have already used the illustration about the boats that show that an intelligent creator worked on plans which had some similarities because the things were to be operated in the same general environment. Furthermore, succession does not imply descent. Roosevelt is not Truman's father. The fossil series do not show the innumerable intermediate links that Darwinism demands. As Darwin himself said (and Mr. Teller is a disciple of Darwin. By the way, anytime I use he or him in speaking of Mr. Teller, I cast no reflection on him. Some people feel that if you do not use certain "dignified" titles that you are reflecting on someone. Not at all, and I am sure that my opponent does not think so) that when it comes right down to proving it that you cannot prove that a single species has evolved. And concerning

Darwin's book it reminds one that the way to be scientific in an evolutionist's sense, is to write a book without about 800 maybe's, perhaps, and guesses in it; and assume explanations of all the hard spots; and you will be acclaimed the leading intellect of England. Every time I read in the *Origin of Species*, and some of the other evolutionistic literature, I wonder how anyone could be led. off by it, except some who were trying to get God out of the universe.

The fossil series are worked up differently by different men. The reconstructions are works of the imagination as Hotten admitted in the pamphlet on *Evolution* (pp. 30,31). Paul Lemoine pointed out that the failure in the paleontological evidence shows that evolution has not occurred.⁸ Groups appear suddenly, as pointed out, and endure for long periods of time.

Another thing I would like to notice is that Dr. E. S. Russell, a Cambridge University scientist, pointed out that adaptation had to come before evolution. If the animals were not adapted from the very beginning, there could not have been any evolution.⁹ He also spoke of some fictions of the imagination that some people, reconstructed as some of their pre-historic ancestors.

In dealing with the facts of palaeontology, Paul Lemoine summarized the situation as follows: Palaeontology shows that there has not been evolution, at least in the sense of the evolution of the large groups. Groups appeared suddenly and endured for immense periods of time. "And here are, consequently, the very clear instructions of Palaeontolog' : (1) Evolution, very slow, about nil of certain lineage (elsewhere he pointed out that "The idea of evolution is admissible for some limited groups; it is not for the masses of the animal and vegetable kingdom."¹⁰ (2) Existence from the Cambrian of almost all types of animals and vegetable. (3) Necessity of moving back evolution in a fabulous and inaccessible past."¹¹ That reminds me of Mr. H. G. Wells. Let him get back billions of years ago, so to speak, beyond the records of history and he can write a lot better history than he can when he is dealing with the facts which are recorded.

Here are some of the *gaps that evolution does not bridge*. The laws which explain the motion and behavior of electrons are not the same as those which govern the atoms. There is thus a gap there that is not bridged by the laws which we now see operating. There is a gap between the living and the non-living; between the evolution of inorganic nature and of organic nature. Things in inorganic nature tend toward disintegration and finally

an equilibrium which is stationary. But animal life increases in its complexity; there is growth and development (not what he calls evolution, but within the species). There is a gap between the operation of intelligence and will and the operation of the laws of nature. There is a gap between that which has not consciousness and that which has consciousness. There is a gap between plants and animals. There is a gap between the moral and the non-moral.

In spite of these facts my opponent is willing to assume that evolution is true and that all scientists have adopted it. But Dr. Paul Lemoine and others admit that it is not proved. Any book on evolution, that is written by a real scientist, will admit that it has not been actually established. Read far enough in these books and you will find that they give their case away. But it *must* have all come by evolution. Why? Because if it did not, then God did it, and you know that God could not have done it! And yet, most of them admit the existence of God.

So then, ladies and gentlemen, I submit that all that Mr. Teller has done is to get off the issue; and to notice a few cases of disorder; while he leaves unexplained the marvelous order that we do see; and jumps all the hard spots and gaps which face him and his theory. And I thank you.

1 See D. Dewar, A Challenge to Evolutionists,

2 Evolution, quoted on p. 43.

5 Transactions of the Victoria Institute (1943 volume).

4 Evolution, p. 68; quoted by Davies, The Bible and Modern Science, pp. 80-81.

6 Quoted by H. F. Osborn, Evolution and Religion in Education, p. 286.

6 Evolution, quoted, pp. 30-31.

7 Essays of an Atheist, pp. 191,163,156,136.

8 French Encyclopedia, Vol. V, pp. 82-7.

9 The Directiveness of Organic Activities, 1945, pp. 188-190.

10 Vol. V, p. 82-9.

11 French Encyclopedia, Vol. V, 82-7.

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Second Night-Teller's Third Speech

Dr. Bales, in traditional preacher fashion, has thrown around rather recklessly tonight some scientific names with citations that would seem to suggest that these men are against evolution. Now, he quoted Dr. Bateson. I'm going to quote Dr. Bateson. And I

want to show you that Dr. Bateson is an evolutionist. Professor William Bateson wrote:

"Let us then proclaim in precise and unmistakable language that our faith in evolution is unshaken. Every available line of argument converges on this inevitable conclusion. The obscurantist (that's my friend) has nothing to suggest that is worth a moment's attention."

Dr. Bales quoted Dr. Hooton. Now, I know Hooton's position. I correspond with him, I have seen his charts. He's for the monkey descent of man. He has a "family tree" exhibit; I have seen it in Rochester, N. Y.; I've seen it in various cities. Dr. Gregory, too, has his evolutionary line of descent. There are slight variations, but on major points they are identical with the Darwinian layout, with the layout of Professor Ernst Haeckel of years ago, and they are in conformity with what is considered the evidence today in scientific circles.

Dr. Bales quoted Darwin. Incidentally, I went to your library today, and I hope I'm subject to correction. I looked hastily through the index files (not in the library here at the college, but in your town library), and I searched for Darwin's books. I didn't find any. I hope I'm wrong—does anybody know whether the *Descent of Man* and the *Origin of Species* are in the library of this little town? I don't know whether you people read these books.

Before I came from New York I wanted to learn something about the history of your State. Now, I'm going to read an item to you,—Please forgive me; it isn't offered as ill intended criticism. But this is in the Encyclopedia Britannica, under the article "Arkansas." The Encyclopedia Britannica is a work of reference, and it gives various data on what Arkansas produces, etc. So I looked up "Education." Now, this may be the answer to why some of you are the way you are. The Encyclopedia Britannica under "Arkansas" says:

"There are few libraries in Arkansas. In this matter her showing has long been among the very poorest in the Union, relative to her population. Daily papers are few in number."

That is Arkansas. I don't say it's that way, but this is in the Encyclopedia.

Now, is this the reason why so many of you do not know anything about the contents of Darwin's books? How are you to judge whether a thing is true or false if you hear only one side? That is the value of this discussion tonight. But unless you read

the works of Charles Darwin, *The Origin of Species* and *The Descent of Man*; unless you go to Thomas Henry Huxley, the great British zoologist, and read his *Man's Place in Nature*; unless you turn to John Tyndall, another British scientist; unless you read Sir Arthur Keith's works—he has quoted these men but has not told you they are all evolutionists—how can you appreciate evolution? Some of the men he mentioned I know personally, some of them I know by their works, some I know by correspondence; and they know what I am doing. Some are behind me in the sense that I am able to do what they are not able to do. I don't have to live in towns where I speak; I can talk and get out. I dare say many of you are thinking as I do—in part, perhaps, I venture to believe that on some points at least you agree with me; on others you disagree with me. But you couldn't, I don't ask you to, I don't expect you to speak out in the atmosphere that prevails. You can't always express your opinion out loud, for commercial, domestic or other reasons. I don't blame you; when you live in certain communities you have to conform—you can't be a "bull in a china closet." I don't pretend to be a "bull in a china closet." But I am unfolding some ideas which perhaps you may accept in the privacy of your thoughts, but which it wouldn't pay you to express openly. It is my business to talk.

Charles Darwin: You'd think by Dr. Bales' quoting from Charles Darwin, we know nothing about changes of species. Well, if there had been no changes of species these would be no books written about evolution. The literature on evolution is extensive, but you can't get it in libraries where these books are not available. Charles Darwin wrote:

"There can consequently hardly be a doubt that man is an offshoot of the old world Simian stem. The Simiadae then branched off into two great stems, the New World and the Old World monkeys; and from the later (that is, the Old World monkeys), at a remote period, Man, the wonder and glory of the universe, proceeded."

That's from Darwin. Now, I hope that if anything of value comes out of this discussion between Dr. Bales and me, it will be along the line of mental stimulation; it will be along the line of your putting your inquiry faculties to work, that you will look into this matter by going at it honestly with the sincere purpose of finding out what the evolutionary side, my side, has to say. In four nights I can give you only the very smallest outline of the tremendous amount of work that has been done in these fields

The literature on evolution is tremendous; get to work on it even if you have to leave Arkansas. Visit some museums.

I read recently—I think it's correctly reported—that they have been picking up snakes over in Tennessee, because in the Bible Jesus said something about believers being able to swallow poison and pick up deadly reptiles. That's taught in the New Testament. And these innocent Christians, these poor numbskulls were picking up rattlesnakes. Well, a few of them died. So they passed a law against it in Tennessee. Think of it, Tennessee is moving fast. It will get ahead of you if you don't look out. They passed a law that you can't handle these reptiles any more as they endanger human life—contrary to the teachings of Jesus. Jesus goes out the window, you see. They are making progress. That is the state where they had the "monkey trial" with Darrow and William Jennings Bryan.

I want to suggest to Dr. Bales that he read the works of the "liberal theologians." There are liberal theologians today who do not take the Bible literally the way Dr. Bales does. I think he believes it from cover to cover and believes even that the gum inside is inspired—the gum on the back of the book. This is a cover-to-cover belief, and I wonder how many of you have studied the Bible merely by opening it as you open a dictionary. But have you read it through, have you made a study of it, have you read commentaries on how these books were put into the Bible by vote? All right, we're getting on the Bible and we're going to get off. But here's the point and it's important. The Creation story is the thing that's tying us up and making this debate, because Dr. Bales does not want to let go of the Bible story of Creation. Now, this is what Stanley Arthur Cook, in his article on "Genesis" in the Encyclopedia Britannica, writes:

"That the records of the pre-historic ages in Genesis (1 to 11) are at complete variance with modern science and archaeological research is unquestionable . . . It is impossible to regard them any longer either as genuine history or as subjects for an allegorical interpretation."

Even religious scholars are dismissing these ideas. Now, I think my time is about up and I want to thank you, I'll be with you again. You don't know how much I appreciate the courtesy you have extended to me as your guest.

Second Night—Bales' Third Speech

Ladies and gentlemen, my opponent has stated that he does not have time in four nights to present all of the arguments for atheism, but he would have a lot more time for them if he would quit getting off the subject. I say this in all kindness: It is not time that he needs but material, facts, evidence. I hope that you will remember that there has been no personal feeling in this discussion. Sometimes things seem humorous to me and I say them.

Evidently I have not made my points clear to Mr. Teller or he is thinking about something else when I make them; this must be the reason that he proves something that I have already granted or was not trying to refute. For example, I did not quote some of these evolutionists to prove that they were not evolutionists, why certainly not. I have never implied that they were not evolutionists. I know that they were. But when you quote evolutionists who point out that evolution has not been sustained, that fact is doubly damaging because it is from a man who believes it, and who says that it is just a faith. Of course, I know that Darwin and Hooten are evolutionists. But I still insist that Hooten said put not your trust in reconstruction, even if he does it himself sometimes.

Concerning Darwin's work, we have them in the college library. I have the works of Tyndall, some of the works of Huxley, and a set of Spencer's. In fact, there is one library in Arkansas, anyhow, I have ten thousand volumes myself! But it is not books that are lacking but evidence.

As to the things Mr. Teller said about the Bible, I am not going into them. Some of the theologians have been misled by their faith in the theory of evolution and have tried to reconstruct the Bible, and they have only discredited it *by their approach*. But the Bible is not involved in the issue in debate, and by getting off on it Mr. Teller shows that the issue is hurting him.

But here is what Darwin said, that though he thought evolution was a fact that it could not be proved. Yes, we ought to accept it just because Darwin said so. But yet, he said that when we descended to details we cannot prove that any one species has changed.¹ He went on to say that we cannot prove that the supposed changes are beneficial which is the groundwork of the theory. That is what Darwin said.

Professor D. M. S. Watson wrote that "The only two 'theories of evolution' which have gained any general currency, those of Lamarck and of Darwin, rest on a most insecure basis; the validity of the assumptions on which they rest has seldom been seriously examined, and they do not interest most of the younger zoologists."²

I also have a statement from Dr. Goldschmidt, in *The Material Basis of Evolution*, in which he rejects Darwinism. He is an evolutionist, yes, but the evolutionists refute one another.

Let me give now *a summary of some of the things that have been noticed in the past two nights.*

Remember, ladies and gentlemen, that I have not been trying to debate issues in connection with the Bible. *The Bible is not the issue*, it is not embraced in the proposition.

I asked some questions. First, *what reason is there to believe in the spontaneous generation of life from non-life?* Teller gave no reasons. Of course, it is bound to have happened if his theory of evolution is true. But he cannot prove his theory and he cannot prove spontaneous generation. Last night we showed that all scientific facts show that life comes from life; that life has not always existed on this earth; therefore we must conclude that life must have been put here by some supernatural life. We shall return to this tomorrow.

Second, *ought we to become atheists.* He did not answer. He seems to imply that we ought to, because he said that we ought to be honest and find out what the other side has to say. This sounds almost like we have some freedom of will, and that there is a moral standard and code—that atheism has no room for. I told you last night that an atheist could not even argue without giving up his case.

Third, *how did matter become intelligent enough to deny that the universe is governed by intelligence?* Teller never noticed this question. I do not blame him, for he cannot have anything to say about it except "that is the way it is"; even though it is contrary to facts, for we know that intelligence must come from an intelligent being.

Teller did not account for one single bit of the *vast order* which we see in inorganic nature as well as in organic nature.

I also asked if there was *any rational account as to why matter and motion should have worked out theism in my brain and*

atheism in his brain. He never noticed it. I showed that according to the materialistic theory that theists cannot help thinking what they think, for thought is a mere vibration from external stimuli and so my thought of God was produced just as much by the physical antecedents in my brain, as his thought that there is no God. My thought is just as valid an outcome of matter as is his. Furthermore, Teller accepts a position which makes all thought irrational and which undermines everything including itself—thus showing that it is false.

The case for faith in God has not yet been presented.

The theist has nothing to lose if God does not exist. We have at least had a hop.;, which has sustained and elevated us and which has furnished a firm basis for moral principles. When the end comes we drop out and that is all. We shall never know that we were wrong. Teller can never say: "I told you so." But if Teller is wrong there are not only serious consequences in the life to come, but life here has not been a very happy thing. My friend said, in his book *The Atheism of Astronomy*, (pp. 63-64), that if you really thought on what is going to happen that you would lose the nerve to live (this is not an exact quotation, but it is the idea he presented).

I also pointed out *what a debate implies.* A debate implies that there is a realm of *intelligence*. This, of course, is contrary to materialism. We can weigh and examine arguments. A debate implies *moral standards*—that we ought to be honest and accept atheistic arguments if they are sound. But matter in motion has no basis for a moral standard. I also showed that a debate implied *that ideas have force and power and reality*; although you cannot see, smell, or taste them they are nevertheless real. My friend did not prove me wrong. And when he was arguing that ideas and thoughts are powerless, and merely the product of vibrations in the brain, he was refuting his own arguments—for he was thinking and trying to influence us by thought. Again we repeat: atheists cannot debate without giving up the fundamental principles of atheism. One cannot even live as if materialism's true; thus indicating that it is evidently false.

Then I panted out *those things which Teller had to prove in order to establish his proposition.* He would have to prove that *there is no God.* He did not prove it, he just believes that there is no God. To prove it he would have to know everything and be everywhere at the same time, for what he did not know and the place he was not in might be that which contained the

evidence that God is. Teller must prove that *matter is eternal* in its existence. He did not prove it, he merely assumed it. He would have to prove that *life came from non-life; intelligence from non-intelligence; consciousness from that which had no consciousness; thought from that which has no thought; that which is rational from that which has no rationality; the orderly from the disorderly*. He has to prove all of that; but, ladies and gentlemen, he has miserably failed to prove these things. He did not even try to prove most of it. He also has to prove that that which has *moral capacity came from that which has no moral capacity* and that is mere matter in motion. He has not proved those things that he had to prove if his case was to be established.

Teller's fundamental fallacies are as follows: (1) He has taken a few cases of disorder and overlooked the millions of cases of order which demanded intelligence to account for them. (2) He has based many of his arguments on a lack of information and knowledge. We have shown that the cases of disorder which he has offered have generally turned out, on closer examination, to be very fine order. Teller's arguments concerning vestigial organs was based on his failure to understand their function, and on the assumption that he knows all (or at least that evolutionists do) that there is to know about them and that he knows thus that they have no function. But no man knows that much.

Mr. Teller has failed. He has failed to explain how evolution would have to eliminate God. He has failed to show how life comes from non-life. He has failed to show that there is not a conflict between the principle of entropy and the principle of evolution which he advocates. He has failed to bridge the gap between the invertebrates and the vertebrates; or from animals to man. He has failed to prove that evolutionism is not a mere faith begotten by an anti-theistic bias. He has failed to show that evolution is supported by genetics — since the geneticists start with life and end with life, and there is a limit to the changes which they are able to bring about.

I showed that *materialism is false*; that man' purposes and plans and realizes those purposes and plans—and knows that they have been attained. It was pointed out that there is a difference between a vibration and a consciousness of that vibration; between thought and consciousness of thought. I know that I know. The materialist makes all thought irrational. It was also pointed out that I have a knowledge of myself which did not come through my five senses; it is similar also with my con-

sciousness that I know. Now, just which of my five senses did these things come through so that I can learn them? Teller did not show that they did so come. I also used an argument on memory last night and showed that memory was not merely an organization of material things within the brain—and Teller did not touch the argument. He did not even look at it; or notice it in any way.

I submit, ladies and gentlemen, that my opponent has utterly and completely failed to prove his proposition. It was not time that he lacked, as he clearly showed when he brought in irrelevant issues for, as I would estimate, at least a fourth of the time. Furthermore, the examples and illustrations that he used could have been classified under one or two main arguments, and one or two illustrations given under each, and then he could have moved on to other arguments. All can see that the case he presented cannot stand up under investigation. No man has the information or the knowledge to enable him to prove the proposition that the universe is not governed by intelligence in the sense that intelligence created it; gave certain mechanisms to regulate the things in it; and gave man certain freedom of will—power of choice; consciousness of life; moral capacity and intelligence. The very fact that we make arguments and appeal to your intelligence shows that Teller's position is wrong. I thank you.

1 Quoted in *Evolution*, p. 42, from C. Darwin, **Life and Letters**, D. Appleton and Co., 1898, Vol. II, p. 210.

2 Quoted in **Evolution**, p. 47.

BALES - TELLER DEBATE

SECOND PROPOSITION

Resolved: God Is.

JAMES D. BALES in the affirmative.

WOOLSEY TELLER in the negative.

Third Night-Bales' First Speech

I am grateful to be before you tonight. I trust that you will remember that there is no personal feeling on my part toward my opponent. No remark that is made, or point that is driven home, is to be construed as a personal affront. If anyone so construes it they do so because they want to construe it that way. It is not in my heart. If any word sometimes may sound like it, it certainly was not uttered for that purpose.

I. WE CANNOT LOSE

As I have stated from night to night, if theists are wrong they stand to lose nothing. We live this life with a happiness, hope, and a firm conviction of moral principles that a person cannot have who does not believe in God. If "we are wrong we drop out of this life on even score with the atheist. If we, on the other hand, are right then not only has the atheist lived without hope in this world, but he does not drop out of this world on even score with us.

II. WHAT THE ISSUE IS

The proposition is clear: God is. I do not mean by this that I can put God under the microscope. As stated the first night—in the refutation of materialism—there is a reality known as mind and as Spirit. God is of the nature of mind—non-material. It is also well to notice that my opponent will grant that if God does exist that He is so superior to man that some of God's purposes and plans will be entirely beyond our comprehension. So I do not mean that I can understand all of His plans. I am

not under an obligation either *to* explain why God has done this, that, or the other. If we can find some few clear reasons that point to the fact of God, and that it is irrational to point to anything else, then the case stands.

Just *to* illustrate what I mean by the fact that I do not have to understand all of God's plans, I shall consider a challenge uttered by my opponent last night. He wanted to know why God made the cockroach. Since I do not know all of God's purposes one should not be surprised that I do not know all about the cockroach. Whatever may have been its place in the original plan and purpose of God, today in a world that is fallen, it may get out of its place. But can my friend show that God should not have made it when it stays within the place originally designed for it? The 1947 issue of the *Encyclopaedia Britannica*, although it did not think too highly of the cockroach, stated that *it* did perform a very useful function as a scavenger. It went out to point out that it was quite useful for the beginning scientific study of insects. And, furthermore, the cockroach is an amazing bit of mechanism. While my opponent, last night, was in the affirmative, he should have proved why and how matter worked out such a delicate, intricate mechanism as the cockroach, instead of asking me about it, but he made no such effort. Furthermore, my opponent admitted last night that the cockroach had gone—according to his theory of evolution—on without any fundamental change through millions of years. This shows that the cockroach was excellently adapted to its environment. Since it was so well adapted to its environment, it is amazing that evolution did not stop at the cockroach stage.

Although I may be spending too much time on the cockroach. I am illustrating that the point is not why God has done what He has done, but whether or not God exists. To continue, my opponent should not have had to come to Arkansas to find that the boys in Arkansas use cockroaches for fish-bait. As one fifteen year old said: "Bream like them." Another young man stated: "They are the best fish bait I ever saw." My opponent should try them on his next fishing trip. I might suggest (since Teller gave us the illustration of what he conceived to be wisdom in the design of man to give man a zipper arrangement so his organs could be removed and replaced when worn out) that if he got the zipper caught, on that fishing trip, and it unzipped a bit, a few cockroaches might run inside of him. There would then be two possibilities; either they would tickle him to death, or if he did not *get* them out they would reproduce so rapidly

that there would soon not be enough room for both of them under his skin—that is for Teller and the cockroaches. But let us come to the issue. I am illustrating what is off the issue, and I want my opponent to get on the issue with me. I am confident that he will do it tonight.

III. MY CASE ESTABLISHED BY DEFAULT

First of all, my case has already been established by the failure of his case. Sometimes if two people argue they may both be wrong, and to refute one of them does not automatically establish the other's case. But where there are only two possibilities — where it is either in the beginning God or in the beginning matter —when one is refuted the other is established. My opponent was utterly unable, and made very little effort, to sustain his position that non-intelligent forces are the cause of all that we see. Then by default, so to speak, my case stands.

IV. IT CANNOT BE PROVED THAT GOD DOES NOT EXIST

Let me remind you that to prove that there is no God my opponent would have to be God himself, for he would have to know everything. If he did not, then the very thing that he did not know might be the bit of evidence that shows that God is. He would have to be everywhere at the same time, and have knowledge of everything taking place everywhere, for the very place he was not in might be the place which contained the information which pointed to God. But one who had all knowledge, and who was omni-present, would be God himself and so after all there would be a God.

Some might think that this argument could be reversed, and that we could not know that God is unless we had these characteristics. But this argument cannot be reversed. If I told you that Herbert Spencer said so and so, and you said that he did not, you would have to search through all of his writings to prove that he did not. If you did not read the very last page you could not prove that he did not say it, for it might be on that page. So you would have to know all of Spencer's writings to deny my quotation. On the other hand, the only thing I would have to do is to show you the one sentence or paragraph out of the thousands of pages that Spencer wrote, in order to prove my point. Mr. Teller can believe, contrary to the evidence, that God is not, but he cannot prove it.

V. WHAT HAS EXISTED ETERNALLY?

Something has existed eternally. In refutation of materialism

it was shown that matter could not have been the cause of all that we see. It would be contrary to the facts to believe that life came from non-life; intelligence from the non-intelligent; the moral from the non-moral; the conscious from the unconscious; order, from disorder. This forces us to the position that in the beginning it must have been mind or spirit which can mold or form matter, but which is not formed by matter. Man, an intelligent being, makes cars; cars do not make men. However, if we get in the way they can help sever the relationship now existing beyond body and mind. Thus we see that there are only two possibilities: In the beginning God, Mind, Life, from which came all; or in the beginning matter. It is certainly irrational, in face of the fact that spontaneous generation has never been established—that experiment after experiment has failed to prove it but has discredited it—to maintain that it was matter in the beginning.

VI. FAITH IN GOD IS UNIVERSAL

Faith in God is universal. The atheist is a very rare individual in that very few people are atheists. *It is a strange thing that, if all that exists is matter in motion, that matter should have universally worked out belief in God.* An atheist must account for the origin of the idea of God. That idea demands explanation. My opponent maintains the doctrine that all ideas come from experience. Of course, he does not show how that from experience and from the senses comes the consciousness that I exist and that I know; but at any rate he concludes that we have no power to form a conception of God for all ideas come through experience, he says. But man universally has the idea of God. Sometimes men have had a more or less debased conception of God; but man universally has believed in a supreme being. It follows, from the doctrine of empiricism, held by Teller, that man has either experienced God; or enough of His handiwork and revelation to know that God exists.

Even if Teller could explain how the idea of God originated, he would still have to prove that the idea was false. Merely to show how an idea originates does not show within itself that the idea is false.

VII. EVOLUTION COULD NOT DISPROVE GOD

There are some who immediately discount the idea of God for they say that evolution shows that God does not exist. This is not true. *First* of all, evolution itself would demand an explanation. *Second*, most evolutionists believe in God. For example,

W. H. Turton, in *The Truth of Christianity*, although he is an evolutionist established that even evolution would demand God for its explanation. Lecomte du Nouy, in *Human Destiny*, is also an evolutionist but he shows that it could not work without an overruling power, God. Even those evolutionists who do not affirm that God is, as a general rule do not affirm that He is not. They say that they just do not know. Darwin, for example, wavered between theism and agnosticism. He was not an atheist. In the 6th edition, not merely in the first, in London of the *Origin of Species* (p. 504), he still had the statement concerning the creator breathing life into a few forms, or into one, at the beginning. In other places and at other times he referred to himself as an agnostic, but he was not an agnostic.

T. H. Huxley, to again illustrate, maintained that consciousness was not mere matter or force.¹ Huxley also stated that evolution does not destroy the argument from design for the existence of God.²

John Tyndall stated that he could neither reject mind or identify it with the molecular processes of motion in the brain.³ "The passage," he wrote, "from the physics of the brain to the corresponding facts of consciousness in unthinkable."⁴ He also knew that spontaneous generation had not been proved.⁵ And then, like Kant, he was "filled with awe by the starry heavens above and by a sense of man's moral responsibility."⁶ He also granted that evolution could not be proved by experimental demonstration.⁷ He was an evolutionist, of course, but he was not an atheist. F. W. H. Petrie, in the *Transactions of the Victoria Institute*, quoted Tyndall as follows: "Again, Professor Tyndall, at Manchester, stated, 'I have, not sometimes, but often, in the spring-time . . . observed the general joy of opening life in nature; and I have asked myself the question, Can it be that there is no being in nature that knows more about these things than I do? Do I, in my ignorance, represent the highest knowledge of these things existing in the universe? Ladies and gentlemen, the man that puts that question fairly to himself, if he be not a shallow man, if he be a man capable of being penetrated by profound thought, will never answer the question by professing that creed of atheism which has been so lightly attributed to me.'"⁸

Darwin said that when we descend to details we can prove that no one species has changed; and that we could not prove that the supposed changes are beneficial—which is the groundwork of the theory.⁹

Now, ladies and gentlemen, the men whom I have just quoted—with the exception of Turton and Lecomte du Nouy—are some of the authors whom our opponent urged us last night to get and read. We have them in the college library or in my personal library. These men whom he recommended do not profess the atheism which my friend professes. Haeckel, of course, was an atheist, but he went to the ridiculous extent that he said that the atoms possess consciousness; that they love and hate. Of course, that is the only logical deduction from atheism, for they say that matter has produced all that is, and thus mind, love, and hate ought to be potential, at least, within matter. But if every little atom had its consciousness, and materialism is right, then how could there be the unity of personality, the unity of consciousness. Instead I would have ten billion million—I do not know how many trillion—centers of consciousness within my very being, and not just one unity of consciousness.

VIII. CHANCE CANNOT EXPLAIN THE TOTALITY OF THINGS

The people who believe in atheism must ascribe all to matter, motion, and chance. Let me read from some scientists who have studied the universe and nature. First we shall consider A. C. Morrison, past President of the New York Academy of Science, Fellow the American Museum of Natural History, etc., in *Man Does Not Stand Alone*. "We have found that the world is in the right place, that the crust is adjusted to within ten feet, and that if the ocean were a few feet deeper we would have no oxygen or vegetation. We have found that the earth rotates in twenty-four hours and that were this revolution delayed, life would be impossible. If the speed of the earth around the sun were increased or decreased materially, the history of life, if any, would be entirely different. We find that the sun is the one among thousands which could make our sort of life possible on earth, its size, density, temperature and the character of its rays all must be right, and are right. We find that the gases of the atmosphere are adjusted to each other and that a very slight change would be fatal. These are but a few of the physical factors which have been brought to the attention of the reader.

"Considering the bulk of the earth, its place in space and the nicety of the adjustments, the chances of some of these adjustments occurring is in the order of one to a million and the chances of all of them occurring cannot be calculated even in the billions. The existence of these facts cannot, therefore, be reconciled with any of the laws of chance. It is impossible, then, to

escape the conclusion that the adjustments of nature to man are far more amazing than the adjustments of man to nature. A review of the wonders of nature demonstrates beyond question that there are design and purpose in it all."¹⁰

Dr. Robert E. D. Clark, a physicist of Cambridge University, stated that "There is nothing at all to suggest that we live in a small oasis in a desert of disordered space, such as we should expect to be the case if a random fluctuation had occurred."

"Then again, the order of energy is not the only order of the world. What is to be said of all the other evidences of apparent design which are to be seen on every hand? Are they also due to chance? Are we doomed to go on believing that chance can accomplish more and more wonders without end, as science unravels new complexities of nature one after another? Does chance produce arrangements, the very complexity of which baffles generations of scientists?

"Such a viewpoint as this has certainly been suggested many times in recent years, even by a few well-known scientists. A perusal of their writings makes it hard to think that any of them have ever thought seriously about its consequences. Indeed, it is noticeable that those who advocate it are always careful to confine their attention to *one* particular kind of order, in the hope that the coincidence theory will not look so unlikely if it is applied to one case instead of to all.

"The truth is that, as Eddington has pointed out, the chance theory undermines the grounds of science itself. If we are forced to suppose that we live in a minute fraction of infinite time in which the ordinary statistical laws of the uniformity of nature have suddenly become untrue, then surely we can have no confidence that the measurements and observations which we observe in laboratories are in any way representative of natural phenomena. In the same way, no one could get a very good idea of how the cogs of a car function by watching their behaviour within a fraction of a second of the complete wreckage of the car. Science depends on the assumption that nature offers us a 'fair sample' of herself to study and the idea that we are living at a moment during infinite time when a chance fluctuation has set the normal course of events into topsy-turvydom, undermines scientific law and order at its foundations."¹¹

". . . it is also very easy to overlook the extraordinary freakishness of the whole situation. On every hand we see arrange-

ments which are vital to living organisms. Experience in the laboratory shows how extraordinarily difficult it is to arrange a number of different factors to converge to bring about a desired result. Scientists find themselves frustrated at every turn when they try to imitate some of the things which nature accomplishes so easily."¹²

"When only eleven planets were known, De Morgan showed that the odds against their moving in one direction round the sun with a slight inclination of the planes of their orbits—had chance determined the movement—would have been 20,000,000,000 to one. And this movement of the planets is but a single item, a tiny detail, an infinitesimal fraction, in a universe which—in spite of all arguments to the contrary—still appears to be pervaded through and through with purpose . . ."¹³

To produce just one single protein molecule by chance, Dr. du Nouy said that "if we suppose 500 trillion shakings per second (5×10^{14}), which corresponds to the order of magnitude of light frequencies . . . the time needed to form, on an average, one such molecule (degree of dissymmetry 0.9) in a material volume equal that of our terrestrial globe is about 10^{243} billions of years (1 followed by 243 zero?)." And it would take not one, but hundreds of millions of identical ones, before life itself could become possible."¹⁴ To say that chance has done it all is so staggering that it seems impossible for one to really believe it.

A materialist, a biochemist by the name of Dr. Henderson, in *The Fitness of the Environment*, has shown that the order in our environment is amazing. He illustrated the order with reference to carbon, and two or three other things. He stated that "There is, in truth, not one chance in countless millions of millions that the many unique properties of carbon, hydrogen, and oxygen, and especially of their stable compounds water and carbonic acid, which chiefly make up the atmosphere of a new planet, should simultaneously occur in the three elements otherwise than through the operation of a natural law which somehow connects them together. There is no greater probability that these unique properties should be without due (i.e., relevant) cause uniquely favorable to the organic mechanism. These are no mere accidents; an explanation is to seek. It must be admitted, however, that no explanation is at hand."¹⁵ Henderson says that he is an agnostic; that there is order here: that you cannot deny it or get rid of it; you cannot get around it; but I just do not know the explanation. Well, he simply refused to draw the

only logical conclusion. *Order is an indication of the work of intelligence.*

It chance did it all — and chance means disorder and the absence of design—we should expect to find total disorder in the universe, without any adaptation of means to ends; a total absence of either means or ends; and we would not be here to tell it or not to tell it. If an individual can believe that chance produced it all there is simply no limit to what that individual can believe. And I say that advisedly.

The planetary motions themselves are so clearly indicative of a creator that La Place said concerning them that "it is infinity to unity, that this is not the effect of chance."¹⁶ And as pointed out last night, Professor H. N. Russell, head of the observatory, Princeton University, stated that science today has no adequate physical explanation of the cause of the universe; that the present laws are not sufficient to explain it; and that there is order introduced into it from without. So we conclude that the appeal to chance and to evolution (of the atheistic kind) is irrational.

IX. THE LIFE ARGUMENT

Now let me advance an argument which has already been advanced in previous sessions of this debate, which has not and cannot be touched. It may be referred to but it can not really be touched. I call the audience's attention to the argument and ask them to watch and see if there is anything in it that is contrary to known facts, or unscientific in its nature.

First, we find that something has always existed, for we have some now; and out of nothing comes nothing.

Second, the atheist admits that life has not always been on this earth.

Third, the atheist must admit that all scientific experimentation has shown that life comes only from life. Now you may believe, contrary to facts, in spontaneous generation of life, if you want to—but you are not being scientific. You are believing without evidence and contrary to the evidence.

Fourth, life is here. How did it get here? Man could not have placed it here. Life comes from life. Life is here. It must have been some supernatural life that brought life to this place. This source of life must have always existed for life comes only from life.

And so, ladies and gentlemen, this is an argument that is

scientific throughout. It is an argument that you cannot cite facts which are contrary to it. It is an argument which is brief, simple, clear, and easy to understand.

X. PRESENT LAWS DO NOT EXPLAIN THE UNIVERSE

The whole atheistic theory assumes that the universe is a self-contained, self-explanatory system, which can be explained by the laws now operating. Let me read a statement from Dr. Robert E. D. Clark in his book *Creation*. He said (I shall have to abbreviate some of it) that Sir Isaac Newton and others have pointed out that if you put a hot body and a cold body close together, sooner or later they reach an even temperature. The sun has been pouring forth its heat on this cold body the earth. If this had gone on throughout eternity they would have both reached an even temperature before now. Again, we notice that clusters of stars in the skies are interacting one upon the other. Now if they had done this forever they would have by now shared each other's energy equally. They have not done so and thus we know that they have not existed eternally. "It is the same with the birth and death of stars. Astronomers have found that a large star will shine very brightly and shrink with extreme rapidity. This at once sets an age limit on the stars because if we work backwards in time we find that at a certain period the stars must have been gigantic; a little further back and each one of them would have more than filled the entire universe. This is absurd. Obviously they must have come into existence at some point in time before that could have happened."

Clark made the same argument with reference to radio-active substances. In a certain period of time they lose half their mass. If we reason backwards in a certain length of time they were twice as big as they are now. And so on *ad infinitum* and you finally get back to the place where—if they existed eternally and under the domination of the same laws—that *each* radio-active mass was infinitely large and able to fill all space. This shows that the present laws are not sufficient to explain the things which we see taking place today.

Dr. Clark then illustrated the general argument as follows: If you entered a room and found a pendulum bob swinging back and forth you could, if informed in these matters, calculate its swing so that you could predict that at such and such a time it would be in such and such a position. You would point out that due to the friction with the air the pendulum bob was being slowed down. Now let us reason backwards. It is slowing down

now but the farther back in time we get the faster and faster it must have swung. "At first the results are sensible but, by and by, the mathematics produces a ludicrous result. It tells us that the pendulum bob must have been swinging so violently as to be hitting the ceiling twice at each swing. Go back a little further—and the plaster ought to have come down with the violence of the blows. But the plaster is still intact. . . . Only one conclusion can be drawn. Something other than the laws which now determine the swinging of the pendulum bob must once have pushed the bob. That, says Silberstein, is exactly the situation we find in the universe."¹⁷ We must conclude that at some time some outside force, other than the laws which now operate, gave the initial "shove." We are driven to the conclusion that the present laws of the universe are not sufficient to explain the universe.

XI. THE ARGUMENT FROM ENTROPY

An argument somewhat related to some phases of the above argument is that one based on the principle of entropy. Dr. Joseph Pryor stated the principle as follows: "The first law of thermo-dynamics states: the total energy of a system and its surroundings remains constant although conversion of energy from one form into another may take place." The "second law of thermo-dynamics states: an increase in entropy accompanies every irreversible process and all natural or spontaneous processes are irreversible processes, natural processes being those processes that occur without external interference." ". . . an increase in the disorder or chaos of the system accompanies natural or spontaneous processes. Hence, entropy is a measure of the degradation of a system." There will still be the same total amount of energy but it tends toward an equal distribution throughout all space. Jeans, Eddington, and others could be quoted on this law. If this universe had existed eternally this process would have been going on throughout all eternity, and it would have already reached this equal distribution of energy (heat death as the Germans called it) and reactions would not now be taking place which are now taking place.¹⁸ Now what are the conclusions? *First*, the universe has not existed from all eternity for if it had it would have already reached that uniform stage. For an eternity is long enough for matter to have passed through every conceivable and possible stage. Therefore, the universe and solar system had a beginning in time at a point not infinitely remote. *Second*, what is more important is that the universe is not self-contained; it is not self-sufficient; it is not a closed self-explana-

tory system. This shows that materialism is false, for materialism explains all things in terms of matter and motion and the laws that operate in governing matter and motion. *Third*, thus we have shown that some power or force external to the universe must have originally set it in operation; a power which is not like the universe itself nor based in it. Such a power is not matter, for we have shown that the universe cannot be accounted for by mere-matter in motion. It is a supernatural power, for it is beyond nature. It is God, eternal Spirit, eternal Mind. We do know that mind does have power, for look what man's body is able to do when directed by mind.

Thus the principle of entropy establishes that the universe is not a self-contained¹ system, that it cannot be explained (as we said that the pendulum bob and its swing cannot be explained) by the laws that now govern it. Something from outside must have wound the universe up; something different from and superior to nature. And furthermore, since there is now a tendency toward disorganization, some power or force must have given it its order for it is not self-ordering. As Sir James Jeans pointed out the universe is like a clock that is running down. It has not run down yet, so it has not always been running. Thus it must have been wound up at some time in the past. It is not a self-winding clock, so the power or force that wound it up must be a power or force different from, external to, the clock.

¹ Evolution and Ethics, p. 130.

² Quoted by A. M. Fairbairn, *Studies in the Philosophy of History and Religion*, p. 76. He referred to Huxley's Glasgow address.

³ *Fragments of Science*, Vol. II, p. 22.

⁴ Vol. II, p. 234.

⁵ Vol. II, "Essay on Spontaneous Generation."

⁶ Vol. II, p. 229.

⁷ Vol. II, p. 194.

⁸ Vol. XXIII, p. 135.

⁹ *Life and Letters of Darwin*, 1898 Appleton Edition, Vol. II, p. 210.

¹⁰ Revised Edition, 1944, pp. 94-95.

¹¹ *The Universe and God*, pp. 180-182.

¹² *The Universe and God*, p. 112.

¹³ A. W. Momerie, *Belief in God*, p. 68; quoted by F. Ballard, *The Miracles of Unbelief*, p. 318.

¹⁴ *Human Destiny*, pp. 34-35.

¹⁵ pp. 27G.

¹⁶ W. Cooke, *The Deity*, p. 135.

¹⁷ *Creation*, pp. 9-11.

¹⁸ If you want to read more on this see Bettex, **Science and Christianity**; Sir James Jeans, *The Mysterious Universe*; A. Fleming, in *The Mysterious Universe*, W. B. Dawson, **The Bible Confirmed by Science**; Francis Mason, Editor, *The Great Design*; Dr. Thomson, *The Outline of Science*, Vol. I, p. 286; Dr. Clark, **The Universe and God**, index on "Entropy."

Third Night-Teller's First Speech

Mr. Chairman, Dr. Bales, Friends: I hardly thought that Dr. Bales, in opening his plea for the existence of God, would turn back to the little cockroach. But he started in almost from that point, and so we'll 'begin there, too. He says that the cockroach has a proper place in the scheme of things. In other words, the Almighty, in his beneficence and Divine Providence, conceived the idea of creating this insect. I don't know how long it took to invent this pest. I remarked during the previous evening' that it is well adapted to changing environment through lone geological periods. And it stayed "put"; it has been here a long, long time. Now, my opponent is insistent that this creature has a place in God's plan. That being the case, I ask him, I ask you, why do you kill it? The answer is, of course, that you feel that the creature is obnoxious. You put your foot on it. But if you stop to think and are a good God-believer according to Dr. Bales' interpretation, you should not destroy it. You see, you may have a philosophy in the theological world that says that the insect is a part of God's design. But you disregard Divine Providence by stepping on the cockroach.

He told us that it is a very useful animal; that little boys around here use it for catching fish. Now, if God thought this out years and years ago, that little boys in Searcy would be needing fish bait, then millions of years ago he designed the cockroach so that these youngsters could go fishing, and because he knew that they would consider it the best bait to use. But, then, isn't that a little hard on the cockroach and the fish? After all, animals have feelings, and if you use this cockroach for bait in order to hook the fish, and you are doing them both an injury. God should be kind even to a cockroach. He's the Father of all of us, according to Christian doctrine. He should be considerate by not causing pain to any of his creatures.

Now, my opponent ran through a great deal of matter. He's a fast talker, and he gets in a lot of questions, and it would take a lot of time to consider each question fully, but I'll have to link up with him now at this particular point. He handed me a paper the other night. He must not think I've disregarded it. "Questions for Mr. Teller." They are typewritten, and I'm going to take them up one by one, Dr. Bales, and proceed through the list. The first question is this: "What reason is there to believe in the spontaneous generation of life from non-life?"

Now, that is the point that seems to bother him. What do we find here? We find, first of all, a universe which, as far as its totality extends within our range of our telescope, is mostly gaseous. Most of the matter, most of the material comprising the universe is inorganic matter. And when we come down to one little spot, a speck of dust, our earth, and find some organic matter, he goes into a trance. "It must have been a God that did it! It couldn't have come about naturally." Now, science does not deal in ghosts. It is not interested in theology and spookology. It accepts the basic idea that if a thing occurs it occurs naturally. It is inconceivable that this gigantic batter of inorganic matter came from the organic. If you think so, just try to figure it out. How could all this inorganic matter have come from the organic? Yet both are here. It is a rational assumption that living forms arose spontaneously out of the inorganic world. We have to assume certain things. My opponent has been assuming a lot of things all through this discussion.

So, seeing that we have mostly inorganic matter, a tremendous amount of inorganic matter, and that only an infinitesimal part of all matter is organic, it is a natural assumption that organic matter arose spontaneously at a particular time when the conditions were favorable. We don't see matter proceed from the inorganic world to a very complex state of life. It must have done so by degrees—that is where evolution comes in. The first forms of life must have been very simple structures.' And we find that confirmed in our study of geology. We find in the various strata of the earth a gradual unfoldment of life, and if you go down into the earlier layers you will find always the lower forms of life present; you never find the higher. For example, in these lower layers you find the clams and other molluscs, that is, their fossils. If the anti-evolutionist were able to show down in these lower strata where life began in its simple forms, a mammals in structure, if he were able to show, for example, an elephant's tusk, he would upset the apple cart of evolution. But he hasn't done so—and can't. So life has been a slow unfoldment, a gradual evolution from the simple to the complex.

There is nothing extraordinary, therefore, in drawing the conclusion that during some early period organic matter came from the inorganic. We find additional evidence in the field of synthetic chemistry. In synthetic chemistry we are able today to make certain compounds by figuring out chemical formulas; we duplicate things that formerly were turned out only by the living world. I'm referring to the living word of plants. At one time we used

to get all our indigo dye from the indigo plant. And a whole industry was upset due to our chemical success in turning out artificial indigo. We are able to do in the laboratory what the plant does. In other words, organic life is turning out particular compounds which we are able to duplicate.

You have the rubber tree. The rubber tree has life; it is different from anything in the inorganic world. It turns out the milky juice from which crude rubber is derived. We are now able to produce artificial rubber out of inorganic matter. Those of you who are taking chemical courses need no reminders along this line. The vast amount of work done in this field is indicative of the fact that we are able, when we discover the proper formulas to do certain things that organic nature does.

The next question is a "honey." After fifty-seven years of life I have ceased to be amazed at anything the human race does or says. But this one makes me raise my eyebrows. My opponent asks, "Ought we to become atheists?" My dear Doctor, what do you suppose I have been doing for the last two nights of this discussion other than plead for atheism? And you ask me now, are we to become atheists? What do you think I have been up to all this time?

The next question: "Name one form of life which can begin and complete its life cycle without receiving anything directly or indirectly from some other living thing. In other words, name one form of life which is entirely parasitic on the inorganic environment." Now, I think he is somewhat muddled in that last sentence, and I have tried to discover its meaning by pondering over it. I think I gather what he means. In a fumbling way, he wants to tell me that life comes only from life; is that the correct interpretation, Doctor? ("Oh, no.") Well, would you please explain it in more simple language?—I'm a very simple minded individual. "Name one form of life which can begin and complete its life cycle without receiving anything directly or indirectly from some other living thing." Well, when he introduced the word "parasite," I think it was about the last thing he should have done, because in the life of the parasite, we find always one living form feeding upon another. It would be very advantageous if parasite's lived on things other than organic forms. Wouldn't it be nicer, Dr. Bales, to have the mosquito, instead of sucking your blood or my blood, eating dust, or nipping off chunks of rock, or living on other forms of inorganic matter? But all parasites live entirely on other forms of life, which is hardly complimentary to the Beneficent Being, whom Dr. Bales admires.

I touched upon this matter before and I'm almost free to pass over it now: "Does the term 'free thought' or 'freethinker' imply that thought is in any measure free?" Now, free thought is one thing and freethinker is another. For the benefit of those who are here for the first time in this series, permit me to say that the term "freethinker" designates a man who is not bound in his thinking by any definite doctrine or creed in advance. That is, he does not become a Presbyterian on faith, sign up and say, "I believe in this, and this, and this." He does his thinking independently, basing his conclusions on the evidence presented to him. That is a freethinker. Some freethinkers may even believe in God; some accept deism. But they are not tied down to any systematic doctrines of a church. And free will or free thought is something else. Dr. Bales is referring to free will. I stated the other evening that man's will is not free. You cannot always do as you like, you cannot do what you want; all your plans and intentions, if you had free will, could be followed through. If you wanted to become a great musician you could become one merely by tapping the keys of a piano. But can you? Many of you can't, because there are potentialities or lack of potentialities in your organism that make either for success or failure in any particular line of endeavor. Accomplishment depends upon many factors.

"How did matter become intelligent enough to deny that the universe is governed by intelligence?" It does not necessarily imply that because a man possesses intelligence he has the correct viewpoint of things. A man can be very intelligent and still be wrong. He can be intelligent and also be right. There is no reflection on a man's intelligence because he holds wrong ideas; he may be very intelligent and still have erroneous opinions. That may be due to either of two things. First of all, he may have the correct premise and proceed logically from that premise to wrong conclusions. You observe it both ways. You must first have your correct premise and then advance by logical sequence, that is, according to the laws of reason.

"How do you account for the order and intelligence which is manifested in such a being as man, if the universe is the product of non-intelligent forces?" Well, I think I dealt substantially with this question by showing you the botch work of man's body. If we were not in such a messy condition, we would not need physicians and surgeons. They would not have to remove parts which had gone wrong. We would not need physicians to prescribe the chemicals we lack. We would not have to go through all the discomforts we do when we go to the medical clinic and have parts

taken out, parts which cannot be replaced. The body, I insist, is a horrible mess, and there is no question that if God turned it out he should have taken more time and made things function properly.

Have any of you ever visited an insane asylum? I'm not thinking now of theological seminaries. If you go to the insane asylums, you will find many men there turned out by God who can't function intelligently. Now, the atheist, the materialist has an explanation, in part, for mental behavior. But where does the theologian come in with his explanation? The lunatic has a "soul." What goes wrong with his "soul," Doctor? Why should a man have an insane soul, an idiotic personality? There are material causes. When, for example, you have softening of the brain or a breakdown in the white-matter cells, there is a complete derangement of the mechanism by which thinking occurs normally. There is an entire breakdown, for which there are physical causes. Do you think that people are governed entirely in their behavior by their wishes in the matter? It has been shown for example, that glands themselves regulate personality. The unbalanced over-sexed individual may easily become a rapist. We're talking in plain language. You have certain types of neurosis. All have their physical causes, and the behaviorism we observe is not because of a mysterious something called the "soul" which, as the "spiritual" part of us, is supposed to be a chip off the old block or from God.

The last question is: "Is there any rational account as to why matter in motion should have worked out theism in my brain and atheism in his?" Well, I ask the Doctor to show that thinking is due to anything other than vibrating brain cells. There are vibrations "going on which actually register when people are dreaming. Tests and recordings are made whereby it can be shown that there are higher vibrations when people are dreaming than when they are dreamless or totally unconscious. These activities are physical. The brain is the organ of the mind, and when we use the word "mind" we are not using it to designate an entity, or something you can take out of your head, and put on scales and weigh or look at and examine. It is simply the word "mind" as used by the psychologists—it is nothing more than a blanket term to cover all the manifestations of the brain.

If this "soul" which the doctor talks about were an entity independent of the brain, it would not go out of existence. It is going to last forever, according to his theory; after we are dead we are to have this consciousness continue and our personality extinguished again and again. If anybody wants a demonstration,

he can take a hammer and hit himself on the head and see how quickly his soul, his consciousness, vanishes. In sunstroke you are totally unconscious. When you sleep a very deep, sound sleep, your "soul," or your spirit, or your intelligence or your consciousness is extinguished; and if certain circumstances do not occur, it won't "come back" again. In other words, this soul, this spirit, this intellectual activity going on within us is a manifestation of the brain. When the brain is injured, or interfered with, when a man, for example, takes too much alcoholic liquor, what do you see happen? The alcohol works on his system and he becomes "crazy. He talks nonsense and he gets into the muddled-minded condition which intoxicants produce. It is not a question of "sinning." He is saturated with alcohol, and this alcohol, having a damaging effect on his brain, makes him talk silly.

Now how did I become the way I am and how did Dr. Bales get the way he is, through vibrations of matter? Well, I assume we both have brains. I have to make that assumption. These two brains, no doubt, have not been subject to the same environment, the same training, the same schooling. The doctor has read certain books, and so have I. My life has been shaped by environmental influences that bring my cerebral centers to draw certain conclusions, and his vibrating centers to arrive at other and even opposite conclusions. That is why he and I are here tonight. If we agreed, we wouldn't be discussing these items. My brain vibrations are different from yours, doctor. And maybe it's just as well for our mutual interests in life that we have these different vibrations.

Ingersoll tells a story of a man quite prominent in life who was called on by a rather lowly type of individual and they engaged in conversation. The distinguished man found his visitor fairly intelligent, but to everything the big man said, the other responded by saying, yes, yes, yes. And the distinguished man said, "For God's sake, man, once in a while say 'no,' so there will be two of us."

It is a good thing in life that we do disagree. I think it makes life interesting. After all, suppose there is Somebody up in the sky; suppose the doctor is right. Do you think his deity is troubled about this debate clown here tonight? Do you think he's looking on and listening in, to see who has the best points in the argument? Imagine God saying: "Well, I'm glad the doctor said that for my existence; that was a nasty crack of Teller's," and so on. Do you think he is interested in this debate? Why, you can't draw

God into any matters of importance. You have drouths, and he won't even bother with you. You have diseases, and you pray for relief. Maybe you get well and maybe you don't. But does he care? What good is this being? Suppose he exists, suppose there is this spook which the doctor so energetically presents for your consideration? All life to Dr. Bales seems to be centered in the idea that you must believe in this spook, or things won't go right with you. It seems to be a very unusual demand to put so much stress on this ghost idea.

Now the doctor, I think, is very much in the position I would be in, in a parallel case, if I were to come to you tonight with this proposition: Suppose—just forget for a moment everything that has been said, please—suppose I were to come to you and say, "Ladies and Gentlemen, in the next room there is a Boo-boo." You'd look at me and wonder, "What do you mean by Boo-boo?" "Well, there is a Boo-ooo there." "Well, let us see him." "Oh, no, you mustn't see him, you can't see him, oh, no, no, no. But he's there." "How do you know he's there?" Well, the very fact that I can't see him shows me he is there." "Can you trot him out?" "Oh, no, we can't see this Boo-boo; he has never been seen by anybody except a man named Moses, who once saw his hind-parts." Then I go on, and you ask me the question, "How does this Boo-boo function; what does he do?" "Oh, he can do everything; he can knock over, houses and he can hit you on the head, and do many other things." "Well, let us see him give us a demonstration." And I say, "No, he does not like to do tricks." I continue along that vein of thought, and you ask, "Well, does your Boo-boo think?" "Yes, he thinks." "Has he a brain?" "No, he thinks without a brain." "Does he walk?" "Oh yes, he can walk, he can fly, he can be everywhere at once or he can be at a particular place and still be everywhere else." "Well, what do you mean, can't you give us some tangible evidence?"

That is Dr. Bales' big Boo-boo. He has a Boo-boo. And it isn't really important. Do you know—as a little digression and it's only momentary—when I came from Kensett on my way here to Searcy I was the only passenger in the bus? The driver, I suppose, noticing I was a stranger in town, started to talk to me. Now, what do you think he said? Did he say?: "You're lucky, arriving in town; there's to be a big debate tonight; they're going to discuss the existence of a ghost over at the college. The whole town is going to turn out, so you better get a ticket early." Did he say that? He did not. What did he talk about. He talked about the World Series. That man was practical.

I don't know why we are up here now debating about a ghost. Suppose there is one; what good is he? Keep him, doctor; he is yours to talk to. Did you ever get an answer back? Praying to God is a one-way telephone conversation. You never get your party. Did you ever hear of God answering anybody? Oh, yes; you talk to yourself and say, God told me this and God told me that; and you go to your holy book and find that God, according to the Jews, said this and that. Those sources of proving God's existence are entirely out of the picture.

Now, I want to move along quickly. I'm a little touchy on the particular point he next brings up. He says that atheists are few. Now, how does he know? Here's my comment. They ought to be few, because the Christians for centuries have been such persecutors. When they couldn't send men to the rack and the stake for being freethinkers, things progressed down to the present time when it is possible to hold a meeting like this without lynching me; though, erf course, it isn't over yet. But look through religious history and you will find that there has been improvement along that line. Freethinkers have been few and are still few openly.

I would like to know the thoughts of some of you people gathered here tonight. I will never know them, and it's a good thing for you that you have your private opinions. Maybe there are some who agree with me in part. But is it going to be convenient for you to make too much noise about it? Not if you are in business, not if you are in the professions. There was a man here the other evening, a man of distinction from another town. I can't mention him by name because he's under cover. He said, "I agree with you, but don't let anybody know it." From a nearby town, too. Now, that is the situation, that is why atheists are rarely in the open. But they are not so scarce as my opponent thinks. First of all, the records show—and these are religious records—that only half the people of the United States are members of any church. Now, of course, a God-believer can be out of the church; I'm not denying that. But it is very evident that new thoughts and interests have come into the lives of many millions of people.

When a man sincerely believes in God, believes in the Bible, he follows the course of conduct which they prescribe. But today what does Sunday consist of? You are supposed to keep the Christian Sabbath. Yet look about you. The ball games, the billiard parlors, all these Sunday activities are serving as practical mediums for amusement and recreation. In other words, you are getting sensible. Fifty per cent of our population have broken with

the church. They are either critical of or in many cases antagonistic to the doctrines of the church. Your religion is slipping, doctor. People are breaking away gradually and coming down to earth. They are not bothering themselves about your big Boo-boo.

I want to return momentarily to an important point. It's important to my opponent and therefore it should be spoken of here—this question of the origin of life. The chemists, as I mentioned, are in a position to know that there is no great barrier separating the organic and inorganic worlds. All we need are the formulas to produce things synthetically. The time element is a retarding factor; we may never be able to duplicate certain things because of this time element. According to the theory of my opponent, it took God a very short time to bring the universe into existence by means of creation. Dr. Bales accepts the creation idea. He has been talking about evolution without endorsing it, but if evolution is true there is a long time period involved.

Professor A. E. Shaffer, President of the British Association remarks:

"Nothing stands between chemical elements and the phenomenon called life but the knowledge of exactly how to combine the elements."

Now we are progressing slowly. We are learning, as I said, and many of the things that formerly happened only in the organic world are being duplicated in the chemical laboratory. We are making headway. You must remember that science itself is very young. Theology was in the saddle for many centuries, and when it was in the saddle it rode the world. Theology was responsible for your Dark Ages and the cruelties of the Spanish Inquisition. Of course your particular denomination, your church has nothing to do with the Inquisition. But there are millions of Catholics in this country who think that theirs is the real Christianity, and today if you go to their own sources of references you will find that they make no apology for the Inquisition; the heretic, the disbeliever, should be exterminated as an enemy of God. Science is young, and when we come to the question of understanding the human brain we must realize that it was relatively only yesterday that any attempt was made to conduct anatomical research into the nature and function of the brain. My opponent seems to think that in order to refute atheism he must throw the whole universe at me, that I must furnish all the answers and all the explanations. It would be simply idiotic for any individual, or any group of individuals' to feel, with science still so young, that we have all the answers.

Third Night—Bales' Second Speech

I am not asking Mr. Teller to give the answer to everything. I am simply asking him to bring his position into line with the known facts instead of basing a position on things that are contrary to the known facts.

Arguments that I have made tonight need not to be repeated unless I have some extra time because they have not been touched. I will not say it was a vision, it was just a little idea of my own that vibrated in my brain, but some of my arguments said to me: "Why, Bales, we are offended." I said, "Well, why?" "Why, Mr. Teller will not even 'speak to us when he passes by." I said, "Well, do not feel offended. He may not even know you are there. And besides he does not even talk about you when he gets away." He just entirely ignored the arguments. There is no need to repeat them, ladies and gentlemen, because the arguments have not been even referred to in the main; except one thing concerning spontaneous generation.

Of course, my opponent can use many irrelevant terms. It will not help his case here nor any place else where people recognize that one ought to deal with the issue.

I. THE COCKROACH AND THE FISH

Concerning the cockroach, I am not too concerned with the cockroach. I used it simply as an illustration to show he was off the issue. I am not here tonight to explain why God has done everything that he has done or why he has not done some things that he has not done. That is not on the issue. The issue is the existence of God. I was showing that was off the issue by showing the type of thing I was not trying to establish or prove. Of course, I kill the cockroach when it gets out of its place, and it is evidently out of its place when it gets in my kitchen; in which it is not supposed to be running around because I can take care of the scavenger job there.

Then, with reference to the fish. Is it rather hard on the fish? No it is not. I almost feel like the boy who told his girl friend, when she said: "It is kind of hard to hook that fish." He said, "No, he likes it. Look how he waggles his tail." The only reason Teller attributes such pain and distress to the animal world is because he thinks that there is not much difference between us and the animals; and thus he reads our feelings into theirs. Many people who have dwelt close to nature say that it is a very

difficult question as to whether all the animals actually have all the pain that we attribute to them. Some insects have been known to eat part of themselves indicating that it was a mechanism—but it took an intelligence to design the mechanism. So it shows that they did not suffer the pain that he talks about. Now, God did not put the fish on the earth, I am sure, just for our benefit. And yet, one of the things that it does serve and God has made it evidently for man today, is man's good.

II. SPONTANEOUS GENERATION

Concerning spontaneous generation, he says it seemed to bother me; it does not bother me. I am pointing out that it is something in the way of an atheistic explanation of the universe which can not be gotten over by just jumping it and saying, "Oh well, if we could do it, we could do it. If we just knew the formulas, etc. Why of course, we could do it." Yes, if we could do it, we could do it. But, evidently they do not do it. And something more is lacking than the assertions that are made by my opponent or anyone else. I repeat my life argument. The facts are (and he did not point out a scientific established fact out of harmony with it) that life comes from life; that life has not always been on the earth; that it is here now; that it must have taken a supernatural source of life for man could not have brought it here. This is in harmony with the scientific fact that life comes from life. Men have never established, though there has been innumerable experiments, the doctrine of spontaneous generation. Thus I say that he does not believe in it because of facts or a lack of facts, but contrary to the facts, for all the facts are contrary to it.

III. LITTLE LIFE IN THE UNIVERSE

Now, about there being little life in the universe. We are not concerned with the universe as a whole. I proved that he could not explain it according to the laws that 'now regulate it. I stated the other night that if we had one car in a wilderness of disorder it would take as much intelligence to account for the one car as for a thousand cars. The argument is not dependent upon the amount of life in the universe. It is the fact that life is here and that it takes life to account for it. Teller has to explain life's origin instead of talking about the lack of life in some other places.

I stated that I do not know all the plans and purposes of God but I do know that order is here and I do know that life comes from life. Now science, he says, says that all things occur

naturally. Well, that is one of their theories. And yet we find that really every act of man is an intervention into the natural course of things. And if man just did not operate in nature and use intelligence that God gave him to exercise dominion over the earth, even though it has been affected by the fall, certain things that are coming to pass would not come to pass. And so then we find that there is in a sense, something super-nature—man himself. Now science has the theory that all things can be explained naturally, but that is while she is experimenting in the lab. Of course, most scientists believe that for the ultimate explanation of nature it involves a supernatural explanation. And the arguments I have presented tonight show that it demands it. But my friend did not touch it. He will not deal with the scientific argument of entropy and some of the other arguments that I made.

IV. WHY MEN GET OFF THE ISSUE

I do not blame him from one standpoint for avoiding the issue. I started to say tonight that I advise him to just leave this argument alone, and that argument alone, because it would be embarrassing to try to deal with them, because they can not be dealt with. The issue is hurting the man when he will not get on it and stay with it; instead he gets off on side issues that are utterly irrelevant to the proposition under discussion.

When a man evades the issue (I say this in all kindness, and Teller can classify himself), it is either because he has not read the proposition and thus does not know what it is; or he has read it and does not understand it; or he understands it but does not have the courage to defend it; or he has the courage but he has more information and knowledge and intelligence than to try to defend such a proposition. Whatever it is, I wish that my friend would come to the proposition. I am not classifying him; let me remind you of that, but I am calling your attention to the fact that he is off the issue most of the time.

Now with reference to succession and fossils, successions does not prove descent. I proved that last night. When the book comes out, you can get it and read it.

V. SYNTHETIC CHEMISTRY

Well, what does that prove for his argument? First, that intelligence finally duplicates nature. But it did not take any intelligence to account for nature's marvelous complexity and order. But friends he says that intelligence can duplicate nature in some cases but that nature and man are the product of non-intelligent

forces. That is his position. Now, his illustration proved that intelligence can make certain products. But that does not prove that man makes life. And even if it did, it would not prove that intelligence was necessary to do it. Let him make of some of the artificial substances a seed, and put it into the earth and let it grow; and he will at least begin to get close to the argument, But he is not even on the argument.

VI. OUGHT WE TO BECOME ATHEISTS?

I asked: "Ought we to become atheists?" If you will go back to the introductory remarks made in the first speech Monday night you will find that I pointed out that if we ought to become atheists that there is a moral law, a moral realm, and that here is something that we ought to do. "Ought" implies that we do not have to do it; but if all that exists is matter in motion and we can not help vibrating like we vibrate, then we do what we have to do and there is no "ought" involved. What is he doing up here these two nights? Once he said that it was kind of absurd for him to be here. Well, that is not a reflection on me, ladies and gentlemen, because I believe that the issue is vitally important; he does not, he thinks it is insignificant. Yet he came from New York to discuss it. He may be like Mr. Smith, who told Brother Oliphant something like the following: "Well, a fellow has to do something."

"Ought we to become atheists." If he says we ought not, he admits that he should not be here. And if he says we ought, he appeals to a realm beyond the realm of matter and motion. We will make an argument on that perhaps tomorrow night in detail. Ladies and gentlemen, when he answers the question he gives up atheism. He did not realize it, because he had not thought the thing through. You know man can be intelligent and still not think things through. And so he has not thought the thing through because if he did then he would see that there is no realm of "ought." We just do what we do when we are shoved around like we are shoved around by matter—We are just pushed this way and that.

- Teller again talks about being regulated by the glands. The sensible thing then for him to do would be to give us "Carter's Little Brain Pills" or perhaps it should be "Carter's Little Glandular Extracts" so he could change us from theists into atheists. However, if it is just the vibrations, then he needs to get on a different wave length in order that we might vibrate like he vibrates. But no, he has been trying to present arguments. He

is appealing to a realm of intelligence. He assumes that men can weigh arguments. He also implies that we have some freedom of thought, otherwise what is the *use* in being here? And so then to even debate atheism assumes a realm of ideas, that ideas are not mere by-products which have no power in themselves, that there is a realm in which we can have some freedom of thought. Some of them say that we think it is unlimited, and try to make an absurdity out of it. But we do not, we say that there are certain bounds, but that within certain bounds there is freedom of choice. A debate implies that we have some power to think and *to* weigh. Also, that if we see that it is right, we ought to accept it. There is an appeal to a moral realm.

VII. PARASITES

Teller said that I should not have mentioned parasites. Parasites are not necessarily bad. We carry some around in the intestinal tract that we referred to the other day and some of them are quite helpful to us. Some of them can get out of their place and out of their functions in an earth that has fallen; that is all true. But, ladies and gentleman, I mentioned those parasites for this reason: in order to bridge the gap between the living and the non-living, he has to find in spontaneous generation some first form of life that derives its sustenance entirely from inorganic environment; but no such form of life is yet known *to* science; it may be at some time but even that would not prove that it was spontaneously generated. As far as knowledge goes now, according *to* Dr. F. W. Jones, in writing about certain viruses (and many of the scientists say that they are alive) said that all the viruses that are so far known are dependent for their life fulfillment on some other and higher form of life. It is impossible that a form of life parasitic upon higher forms can represent the most primitive stage in the evolution of life. The first development of life must have been parasitic upon its inorganic environment."¹ A rationalist in England, in *The Chemistry of Life*, J. S. D. Bacon, said that "to regard them (the viruses, J.D.B.) as the first step in the evolution of life would almost certainly be a mistake because as they exist today they depend upon the existence of comparatively highly organized forms of life."² That is my point: that since the lowest forms of life that we do know are dependent upon the higher forms on the fulfillment of their life cycle; then the higher forms would have to be there or the lower could not exist. And thus we could not come up that ladder from a lower to a higher and so forth,

because we find those lower forms are dependent also on the higher forms, at least some higher forms.

Now as to getting into the fossil record, I am not going farther into that. You will find something more in Douglas Dewar's books, and some of the others that you will find in the library, but I will point out that they date those things simply by the type of fossil remains that they find in them. And even though from other ways of dating it it might seem that it was much later, yet because they say that this type of thing must be found in this age rock then it must have been that age rock.

VIII. ATHEISM HAS NO EXPLANATION OF ERROR

Mr. Teller said that you can think and be intelligent and still come to the wrong conclusion. I want to say, ladies and gentlemen, that this is another thing that is inconsistent with atheism. According to atheism we vibrate, and one vibration can not be said to be a wrong conclusion anymore than a flavor can be said to be life-like. If thought is a mere vibration, it is a true vibration in every case. Why? Because it is produced by certain physical antecedents. It had to do what it did. It is not a false vibration. And so when he admits the possibility of error he admits that atheism does not hold true. He holds that error occurs and indeed is extremely common inasmuch that so many people have not become convinced naturalists. But he does not tell us how error is possible, how error can be detected, or even what error is. Certainly, there is no valid appeal to logical principles. For thought, we must remember, is an impotent epiphenomenon; a by-product; just a vibration; it is nothing but the contractions of the voice muscles as one man put it. "In either case the erroneous conclusion is as much necessitated as the correct one. A conclusion cannot help being in accordance with the physical facts because it is nothing but a link in a chain of physical facts."³ In other words, it could not be a false vibration. It is in harmony with the physical antecedents and so the very possibility of error which Teller admits is a refutation of atheism.

IX. PRAYER

Now with reference to the insane, of course that is off the issue, the issue is the existence of God. It is not whether God answers prayer. I believe that he does; sometimes "yes," sometimes "no," sometimes "wait a while." But that prayer has to be in harmony with the will of God. And we do not know all of God's plans and purposes.

Let me use an illustration of a violin and a violin player. The violin player can not make the music when the strings break, but the violin player still exists. And so it is that something can go wrong with this body on this earth. As there is a close relationship here between the body and the mind, when something goes wrong with the body, it can interfere with the expressions of mind or spirit. But I proved Monday night (and when the debate is published you can go back and read that proof), that thought is not a mere by-product of vibration of matter and that consciousness is not a mere by-product of matter. Besides the question is not of the character of God, but the existence of God. That is all of the issue. Huxley who was an agnostic said that it seemed to him "pretty plain that there is a third thing in the universe, to wit, consciousness, which in the hardness of my head or heart, I can not see to be matter or force, or any conceivable modifications of either." This is true regardless of how intimately the manifestations of the phenomena of consciousness may be connected with the phenomena known as matter and force; and, of course, there is the phenomenon of intelligence. Dr. More says "It is a serious charge to make that after reading and weighing the evidence which biologists present to prove that biological and psychological phenomena are not irreconcilable with physical phenomena, I can after a life spent in investigation of phenomena and laws of physics find no meaning in their statements."⁴ I quoted from John Tyndall (Teller advised us to read in Tyndall, I had already read some and have read some more on his advice, and here is what his advice led me to) : Tyndall brought out in *Fragments of Science* (Vol.,11, page 222) that "he could neither reject mind or identify it with the molecular motions within the brain." And in Vol. II, page 234, the "passage from physics of the brain to the corresponding facts of consciousness is unthinkable." Now, ladies and gentlemen, he is one of the men that Teller referred me to.

If what they say thinking is mere vibration, then when we see something, and remember it later, the amount *pi* energy and the order of those atoms which conveyed that impression and held it in mind, is decreased. Every time we recall it, it should get weaker. Just like we take heat out of something, in which we have stored heat, the more we take out, the less there is in it. And so the more you remember a thing, the less vivid should be the memory of it. But that is not the case. The more we remember it the more vivid the memory.⁶

And by the way, on thought being irrational and intellectual

error being impossible, you might read C. S. Lewis' book on *Miracles*. He has an excellent chapter on that.

Concerning making the soul go away, we have always believed that the soul is of the nature of mind and not of matter. And as James stated in James 2:26 "The body apart from the spirit is dead" but Teller has not proved that the soul is dead when apart from the spirit. Also when we sleep the soul has not died. I thank God for the fact of sleep. But at any rate if what Teller says is true, you would never know who you are when you got up the next morning. Even if you wrote it down you could not be sure that somebody had not slipped in there during the night when you were sleeping and changed it. So how would you know who you were?

Concerning vibrations, it may be after he says something, or I say one thing, that causes one vibration, so that other vibration disappears and you can not remember it because of the different construction of the molecules in the brain. This may be the reason that he can not get on the issue. I am not sure about it!

X. THE PROBLEM OF EVIL

Now with reference to the general problem of evil, I noticed some things in speeches in nights passed. I may notice it in detail tomorrow night, I am not sure. But again I say, that is not the issue, ladies and gentlemen. Sickness and death do show that we are on an earth that has fallen; that God does not mean for us to live forever on this earth; and that is a very good thing too. What if evil men lived forever and men like Hitler that follow the doctrines of atheism, of progress through blood and lust (that is, through a survival of the fittest, those most physically strong, and what he calls sexual selection). If those men lived forever, then things would be pretty bad, sure enough.

Sickness, etc., shatters man's illusion of self-sufficiency, and in many cases has helped man to think upon his dependency upon God and has brought him back to God. I pray that finally something will bring Mr. Teller back to God.

XI. FREETHINKERS, ETC.

And now for the term free-thought or free thinkers: he says that they are not bound by certain dogmas. Why, you are bound by matter in motion, according to materialism. How did matter shake you loose from those dogmas, is one of the things I want to know.

And then he begins to talk about the world series and practical things. Well, now, he came here to do a very impractical thing! That is not a reflection on me.

And again he said atheists are not really few. Well, they certainly are, ladies and gentlemen. And even the few, he admits, are under cover. In other words, he is saying, ladies and gentlemen, there are atheists here, but you are hypocrites and so will not admit it. Why, I would not let him say that about me. You are under cover, so he admits that most atheists are cowards. I have not said it, I am pointing you to what he said. Most of them are under cover agents, hypocrites.

And now about Christians persecuting — Christians do not persecute when they are following the Lord Jesus Christ. Vol. VIII, *The Catholic Encyclopedia* admits that the New Testament does not teach it ("Inquisition"). Time's up—wish I had another second.

1Professor F. W. Jones, Prof. of Anatomy, University of Manchester in England, *Design and Purpose*, 1942, page 66.

2p. 101, book published in 1944, quotation sent to me in a letter by my friend Douglas Dewar, Sept. 16, 1947.

3Dr. Trueblood, *The Logic of Belief*, pp. 109,110.

4The Dogma of Evolution, page 269.

5You will see that fully expressed, *The Dogma of Evolution*, pages 286-269.

* * *

Third Night-Teller's Second Speech

Well, friends, after that tornado of words, let's try to get down to some sober thinking.

If the Doctor were to visit a chemical laboratory and see a demonstration of water being made, he would think there was a ghost behind the experiment. If you combine two atoms of hydrogen with one of oxygen, you obtain water. Now, what is hydrogen and what is oxygen? Both are gases; both are colorless and tasteless. One of them is highly inflammable—that's hydrogen. These two gases have no resemblance to what they turn out, but when combined form the liquid we call water. It looks like a miracle, doesn't it? Hydrogen and oxygen handled as gases (you can look through them, but you can't see them)—these two gases produce water. Now, if my friend were around and saw the result he would say, "There's a miracle!" It isn't a miracle; it's the

way it happens. You can obtain some very remarkable results in nature.

You must remember that there are twenty-six letters in the alphabet, and by the combination of those twenty-six letters, you can form enough words to fill a dictionary this thick (the unabridged English edition). And you can use the same characters in foreign languages and compile other dictionaries. In brief, the combination of twenty-six letters gives you a tremendous number of words.

When we are dealing with the ninety-odd elements (we don't usually deal with all of them because they are not all common) we get the phenomena we see around us. There isn't a scientist in the world, Doctor, who will contradict the statement that everything we observe in the universe is composed of these atoms in different combinations, and that matter in motion is all there is. We don't see anything of your spiritual world, Doctor. It's a religious pipedream.

When primitive man appeared on earth and was in a low state of intelligence, what were his reactions in regard to the phenomena he observed? If his hut blew down, he naturally attributed it to the activities of an invisible personality. He projected himself. He thought that there was an angry being behind all this, knocking down his house. And as he couldn't see his enemy, he concluded that the best thing to do was to try to get on the right side of this unseen being.

Thus arose the God idea which Dr. Bales is preaching today. And the best way to get on the right side of this unseen being is to give him something. Primitive man tried it. He would give God some animal that he had killed or some of his food stock to this ghost, and that is a part of religion. All the Doctor is doing, in a refined and cultured manner (though it is still as basically unsound), is trying to cultivate the good will of this unseen being. He somehow fears that if he doesn't play up to this ghost, evil things will happen. He has read in a holy book that if -you don't do as the book says you are going to Hell. Now, some people are frightened by that teaching. Burning in Hell isn't a pretty picture; yet even a Heavenly Father should be considerate. There isn't a mother in this audience tonight, I think Lean safely say, who would take her child's hand and deliberately hold it in the fire- Is there? Raise your hand. There's not, I'll assume. Yet, Dr. Bales believes—it's part of his God picture and he can't escape from it—that this benevolent being, this all-wise, omnipotent God is

going to torture some of you young ladies because maybe you flirted with the boys. He's going to burn you forever. That's the beautiful doctrine behind Christianity. Dr. Bales is trying to save this ghost, and I'm telling you that his ghost doesn't exist. There is nothing to be frightened about. There are no spooks in the dark or in the light, and he's simply asking you to live in a medieval world.

And do you know, it's he who is out of step. All his contentions are that Mr. Teller didn't prove this, Mr. Teller didn't prove that. Why, when we go into real cultural circles and see how evolution is endorsed by ninety-nine per cent of the great thinkers of the world, Dr. Bales gets up and quotes some incidental statement concerning some little detail. He uses that as a base for believing that evolution is discredited. Dr. Bales, there's only one hope for you, and that is, you're young. You're 31, I understand, and you probably have a long life ahead of you. Let us hope that your studies will be deep and broad.

You have quoted recklessly from books. I could quote, too; I've taken notes for the past twenty-seven years. He touches on astronomy. Now, I happen to be (this is personal) one of the few Americans, one of the few individuals in this country, elected to membership in the British Astronomical Association. Take it for what it is worth. I think I know a little about astronomy—just a little. But the way he throws these names around to impress you is typical of the ministerial way. I don't know why he talks so fast; he's a speed demon for talk. I sometimes have to stop and wonder, "What does he mean?" He rattles it off. He's been through his material, he's been over it, but he usually skims the surface.

Dr. Bales is entirely out of step with the scientific world, and I wouldn't be here tonight except for the fact that I take a certain pleasure in trying, in my small humble way, to bring new thoughts, or thoughts maybe that will start you thinking along different lines or perhaps suggest a little different type of analysis from what you have employed before. That's all. There's no purpose in my coming over a thousand miles to talk to an audience unless I can inject into the meeting some stimuli that will bring you to a point of better understanding. Let us see if any good comes out of it. Arkansas will be at the tail-end of culture if it does not wake up and adopt evolution. From the north and other points, they are pointing down here to the hill-billy country, to a bunch of hill-billies—which, of course, you're not. I have been charmed by the South. I have found it courteous and kind. And

I'm not saying that as a compliment, because I can be a bit rough when it comes to commenting on other things I don't admire.

I went to Little Rock today, primarily to see the prison in which they put my partner "in crime" a number of years ago, for having taught atheism and advocated the teaching of evolution in the schools. He was locked up in Little Rock, and I wanted to see that particular jail. I searched for it. I found out they have a new building now. Those are not the same walls; he hadn't been in that jail. In prison, he went on a hunger strike. That's what a man will do for what he considers the truth. And that man is Charles Smith. And I'm proud to say he was born in Arkansas. Arkansas produced the man who, with two others (I happen to be one of them), founded the American Association for the Advancement of Atheism. So you have to thank a native of Arkansas for being behind the organization for which I am speaking tonight. Good for Arkansas! You turned out at least one good atheist.

I am, I must say, never amazed when I glance at the history of the world. Anything can happen. People have the craziest ideas. Your particular group is only one cult in a barrelful. If you study comparative religion and take stock of the various ideas held by the religionists of the world you will find they battle over the most inconsequential, the most trivial matters. Christians discuss whether you shall be baptized one way or another, whether you shall be sprinkled or dunked. They have bitter quarrels over these doctrines. In the Christian world you don't get the harmony you think you would. Dr. Bales asked what makes differences of opinion. It's the way you are trained. If you were brought up a Baptist, you most likely believe in baptism. You're then ducked under water, ducked good and proper, and even one hair can't be out or you're not properly baptized. Think of a God who is desperately concerned over whether or not you get your hair wet. What kind of a being is Dr. Bales presenting for your intelligent consideration?

Dr. Bales tells us that there are intestinal worms that do good. I ask him to name one intestinal worm that is beneficial to man. Would he himself have made the tapeworm? Have you seen tapeworms? They are twenty-five to thirty feet long and they live in the intestinal tract. All they do is absorb the nutriment which comes down from the digestive organs. How long do you think it took a benevolent being to design that parasite? And if God is intelligent, where are his morals? What is left for the Devil to do, if God creates all the evils of this world? He turns out cancer;

he makes all the disease germs. You have ticks, for example. He isn't even nice to the animal world. Dr. Bales says that the animal world doesn't feel. Well, maybe way down the line the fish is not susceptible to pain; it's not a red-blooded animal. But among the higher forms of life, animals feel pain. You who have live stock know how animals can suffer. And God sends ticks to eat on the eyes of chickens. He sends fleas for dogs. Well, you go on naming them—the list is exhaustless. And he's trying to tell us that the being who is responsible for everything is all-wise, all-beneficent, and should be worshipped. Now, listen to what Winwood Reade said in his remarkable work, *The Martyrdom of Man*:

"If indeed there were a judgment day, it would be for man to appear at the bar, not as a criminal, but as an accuser."

That's true. We've got a case against God, Doctor, and I'd like to be the one to hand him the indictment.

On the question of morals Dr. Bales is more than a little fuzzy. He introduced this subject. If you have atheism, you have no morals, or at least, you can't deal with the moral question properly. Now, what about morals? On the question of morals, I have here the statistics of Sing Sing prison, and I could cite others from various parts of the country; they're very similar. In Sing Sing Catholics furnish the largest number of inmates. Of course you're not Catholics, but Catholics consider themselves Christians; and don't think that they haven't preserved the teachings of the early fathers. In Sing Sing in 1932, there were 855 Catholics registered at that hotel. Protestants numbered 518; Jews, 177; Christian Scientists, 20 (I may remark in passing that they only *thought* they were there); Buddhists, 1; Mohammedans, 2; and here are the "bad boys"—8 non-religionists. Now, you may think that these figures are in proportion to the population, but they're not. You will find that religionists furnish relatively more than their denominational totals; they furnish more inmates in proportion to their total population.

Now, let us suppose that the reverse of this were true, and that there were 855 Atheists in Sing Sing. What would my opponent say? He would say: "There you are, Mr. Teller, that shows what materialism, atheism, and non-belief lead to. Look at your atheist in jail." Now, the atheists may be clever enough to keep out . . . but they're not there.

If you investigate the lives of leading atheists, you will find that they are no better or no worse than the high types of other groups. A man can be religious and a first-rate citizen; he can

be religious and end up in jail. There are both types. Your conduct is determined, first by your biological set-up and then by your training. Your "right" or "wrong" ideas are determined mainly by the society in which you live. If you had been reared in a Mohammedan country, you wouldn't be celebrating the Sabbath on Sunday, and if you were Jews instead of Christians you would be celebrating your holy day on Saturday. You see, they don't know yet which is God's day. And you could go through the week and find that each religion has a different day. It depends on where you were born and how you were trained. And now, just for the novelty of it, I appeal to some of you, to the more venturesome ones, both men and women, to be a little different and apart from the common herd. Get up on your hind legs and tell your friends what you think, if you do think differently. If you don't care to go to church, don't go. If you want to go to church, keep on going. But don't be a conformist merely to be "popular."

There's something in intellectual integrity that gives one a tremendous satisfaction. I am personally situated so that I can, within reason, travel about a little and advocate ideas that are not always conventional, not acceptable to the many. I enjoy it. If you people here have derived as much pleasure out of these past three night as I have, you have enjoyed yourselves. I have enjoyed them immensely, and I'm proud to have been able to talk over these matters with you.

Now, in regard to Darwin. My opponent made a point in stating that Darwin called himself an "agnostic"; that he wasn't an atheist. I wonder if he knows, the meaning of the word "agnostic"? It was invented as a polite term for atheism. Thomas Henry Huxley knew the tremendous pressure of religious history, and that the word "atheist" was conventionally "horrible." When you are an atheist, you know, you are socially marked. So he, being temperamentally of that type, thought he would get from under by inventing a word. The word "gnostic" was used to designate a group of people who knew everything about God, or knew a great deal about God. So he prefixed an "a," which means "without," and coined the word "agnostic." He was without any knowledge of God. It was an escape from the terrible label of "atheist." Darwin, too, at the time, fell for the milder form, but the religionists didn't spare him; the term "agnostic" was just as objectionable to them as the word "atheist." So there's no "reason for setting Darwin apart by calling him an agnostic; he was virtually an atheist.

Darwin has given us significant illustrations of his disbelief: his very purpose is to show that, in natural selection, things were not "designed." That's the whole import of *The Origin of Species*. Organisms were not "designed." And so, at this particular point, I make a plea to my opponent, and it's sincere: read more thoroughly, read deeper and not so much on the surface. I noticed in his rambling through quotations that he relies on religious books which are definitely against evolution, and which have used certain extracts from scientists dealing with some specific case of which they do not know all the details. The other night he quoted Bateson. Bateson is an evolutionist. In his books he is always an evolutionist; but you would think from the quotation that Bateson was doubtful of evolution. There are difficulties in science. Everything has not been solved. But theology has really done nothing to further knowledge.

Now, in conclusion, I issue a challenge. I challenge my opponent, who claims that God *is*, who says that God moves mountains, that he makes the grass grow, that he can do this, that he can do that, that he does everything—I ask my opponent (and this is a good opportunity)—to put God to work. I hold a pencil here. I ask my opponent to ask God to take this pencil from my hand and give it to Dr. Bales. Will God do it? Will Dr. Bales call on God to perform a miracle for all of you Christians here tonight? Maybe even I might be convinced. Will God take this pencil from me, and hand it to Dr. Bales? . . . No answer! The God idea is hopeless. You're wasting your time on a ghost—and there are no ghosts.

* * *

Third Night-Bales' Third Speech

Why should God move the pencil, when he has given us intelligence to move it, and intelligence to enable us to stay on the issue. Besides, faith has a moral aspect to it and God is not going to take a man's freedom of will away from him, when he is unwilling to face the facts of the issue and weigh them, and make a believer out of him. Because that would be simply making man a machine and not really a believer in God.

You will notice that my friend has been off the issue much of the time. Later on in New York City when we debate some questions concerning the Bible, we can deal with these other

issues. Remember the reasons that people get off the issues. You can decide for yourself why he has gotten off. He has not told us. But ladies and gentlemen, he has not debated the issue, he is unwilling to debate the issue, he has merely brought up a number of things. If I followed him in all those things I would not get to deal with the issue. I could make ten personal accusations against his character tonight, and it would take him weeks to prove that they were not true. Well, that would show that without any evidence at all I could put him to weeks of work to prove that they were not true. And so then, let us get on the issue and stay on the issue.

He has already admitted that atheists are in the minority. If they were in the majority they would come out from under cover.

Then Teller shows his lack of information concerning the Bible; the Bible never calls the Lord's day the Sabbath. However, atheists do owe the off-day they have on Sunday, to religious people.

My friend regretted, in a conversation that I had with him Monday, that atheists and others in New York City could not be interested in discussions, like this, of serious problems. No, they want to be out "at the beach or in the show." Well, according to his doctrine, why should not they be there. You have got to get your happiness here and now!

Now, about the twenty-six letters. Ladies and gentlemen, if his theory is right, those things were just finally shaken together by vibrations without any intelligence; and it kept on shaking, shaking, shaking, until it just finally shook into the dictionary with all those words. That is his explanation. My explanation says that man took them and made the dictionary. Yes, that is right, and furthermore, Teller has to account for the twenty-six letters being there in the first place.

I pointed out that there is a realm of mind and that we can not explain mind in terms of matter. Mind can purpose and plan and realize those plans and purposes with the use of the body; and then it can know that it has reached those things toward which it worked. There is also consciousness. There is a vast difference between a vibration and the consciousness of the vibration. Neither can materialism explain the fact of unity of consciousness; or the consciousness that I am a person; and not just fingers, toes, etc. The personal identity that extends throughout life, materialism can not account for; neither for the self-

activity; and the moral capacity of man. So then there is a mental element. If you will go to previous pages in the book you will find these arguments elaborated upon. (That is one reason for the torrent of words. I want these things to go down on record. Then you can study these things more. But I generally go over these things often enough so if you do not get it the first time the torrent rushes by why then you will get it the second! Evidently it takes more than that for some of us to do it though, but be that as it may.)

Now for Teller's explanation of the idea of God. He has given a theoretical one without any proof for it at all. And even if he proved it came that way, it would not prove that God really did not exist.

With reference to the question of the punishment for sin, he is off the issue again. We know this is true though: if the child in spite of the efforts of the mother to get it to do right, goes off into a life of prodigality; and if that child, because of sin and strife, lives a miserable life (and sinners are not happy even though sometimes they may sear their consciences) and is unhappy; and if he stays in that condition and stays in it eternally, then, indeed, you would have a terrible situation. But why? Because he has abused his freedom of will. My opponent said that God should not have made us like that. But we are dealing with the fact that God has made us like that. And any man that has brought children into the world, who will grow up and make decisions for themselves can not say anything about God for having made man in the first place. My opponent is the father of children.

Now with reference to the evolution question, if you will go and check the reference I gave you, and the quotations, you will find that I am representing them accurately. Now, I quoted from Paul Lemoine which was in the book of *French Encyclopedia*, (Vol. V, pp. 82-8, 82-9) written by a number of scientists. He said, in some general conclusions, that "the idea of evolution is admissible for limited groups. It is not for the masses of animal and vegetable kingdoms." "It results from this expose that the theory of evolution is impossible. Moreover in spite of appearances no one any longer believes it . . . Evolution is a sort of dogma in which the priests no longer believe but that they maintain for their people." Why did not Teller disprove the quotation from Darwin and others. Darwin said when it came down to details, and that is what scientists are supposed to deal with,

we can not prove a single species has changed. You will find the quotation with the references where they come from in this pamphlet on *Evolution* on page forty two and thereafter. Now, so much for that.

As for astronomy, I quoted from one of the leading astronomers of America. You can get it also in the book. He said that science today has no adequate physical explanation of the origin of the earth. In the book on *Astronomy*, (Vol. II, p. 923) by Russell, Dugan, and Stewart, it is said that if nothing should be set down here except what is firmly established the subject of stellar astronomy could not be discussed at all. I quoted from Dr. R. A. Daly of Harvard University to the effect that there was no theory that really stood the test concerning the origin of the earth. I pointed out again from Dr. Russell's book on astronomy that we can not explain the universe in terms of existing laws.

With reference to what he said, about Smith going to jail, in order to show what a man will do for truth. That proves my point again, ladies and gentlemen; if there is a realm of truth then things are different from mere matter in motion. I want you to remember that.

And then again with reference to worms I said that there are certain bacteria that evidently get out of place. In a fallen world we do things wrong sometimes, and sometimes get out of place. We find also that God does shatter our illusions of self-sufficiency.

Now about atheism having no morality. My friend just admitted it. He said that it is just what you are taught; just whether you think it is right or not. Thus he admitted, the other day that if we thought we ought to lynch him there would not be anything morally wrong with it. I believe he admitted that. At least that is what I gathered from the way he seemed to do when I made that statement the other day. Notice! Darwinism teaches that things have progressed through natural selection and sexual selection, among other things, in other words physical force in crushing out the others. And then he went on to say something about scientific breeding, too. Well, I pointed out that Hitler believed in that doctrine and Hitler believed in a plan of breeding human beings. Teller could not find, from an atheistic standpoint, one moral condemnation of Hitler.

With reference to prison, of course we find some people who

profess religion, who were hypocrites; others were not living up to it. I found some believers in San Quentin but they admitted that they were not following Christ when they got into that trouble. Teller can not prove that such people properly understood what Jesus taught or properly applied it. With reference to the Roman Catholics in prison, of course, if you are born in that family, they will call you a Roman Catholic, you may never acknowledge it because you are personally convicted of it, but they call you that because you were born into it. There are more religionists than non-religionists, (that is, more who believe in God) thus, of course, you find a greater number in prison.

Another thing about atheistic morality, Teller just got through explaining that Huxley invented a word to deceive the people. "Yes sir; call myself an agnostic, and deceive the people; and I'm really an atheist." But Huxley did not mean that. Huxley meant "I do not know whether God exists or whether he does not." Huxley- did not mean, "I'm an atheist." But according to my friend's interpretation Huxley just invented a word to deceive the people with. And my friend will not have one word of condemnation to offer against such. A materialist can not from a moral standpoint; "and yet Teller talks about men suffering in jail for the truth.

About being conformists—ladies and gentlemen, according to his doctrine, all of us are conformists: conforming to matter in motion.

Now let me review my argument that he has not touched: that there is a realm of mind; that chance can not explain things here; that life comes from life, (the evidence is that way), and that the principle of entropy shows that something outside of the natural system must have wound it up, must have placed order in it; that the laws that now explain the universe, (remember the pendulum bob), cannot explain its start and we must look for something supernature, supernatural, to explain that. The present laws do not explain it therefore it is a foregone conclusion that we cannot avoid, that atheism and materialism are false; for the simple reason that they seek for the explanation of the universe within the universe itself. It is not a question of a few minor details that they cannot work out. It is a question of fundamental gaps they can not bridge. They can not bridge that gap between mind and not-mind; between consciousness and that which has no consciousness; between order and disorder, they can not explain it by chance; between morality and that which

has no morality, between the principle of entropy and the beginning of order in the first place. He gets order out of disorder. He can not explain things in terms of the laws that are now operating. Now, of course, he may introduce something new in the last ten minutes that I do not have time to reply to tonight. But I call your attention to the fact that during the time that I had opportunity to reply tonight, Teller refused to get on the issue. He talks about the problem of evil when our issue is the existence of God. He talks about the Bible when our issue is the existence of God. He talks about evolution even when our issue is the existence of God. And most evolutionists will admit that it does not put God out of the universe and they say that God is necessary to explain it. I thank you.

* * *

Third Night-Teller's Third Speech

In New York City I happen to be a blue ribbon juror for service in murder trials. It's not a pleasant job, but one thing I've learned from the assignment is the value of evidence. When a man's life is at stake it is the plea of the court that, before he can be convicted, the evidence against him must be so overwhelming that there is no loophole for reasonable doubt. You always give the defendant in a murder trial every leeway that's possible, even leaning backwards to render a fair verdict. That's the story that is behind the juror who judges in murder cases.

Now, I introduced that remark because to me it's most important that the presentation of evidence shall be conclusive. Dr. Bales is the affirmative tonight, and the duty of an affirmative, of the one who affirms, is to prove his case. My opponent says that God *is*. What has he done to prove to us that God exists? He keeps repeating that a deity exists, and that because spontaneous generation cannot occur, according to him, there must be a God. God exists, and he keeps driving that home: God exists, God exists, God exists. It's the same old exhortation that you find in sermons of long ago. Now, if I believed in God, I think I would try to make some effort to prove his existence by his works, by his alleged activities. Dr. Bales wants to rule that out.

Whenever I show that God through his works gives us terrible diseases, gives us intestinal worms, my opponent says that I am away from the subject matter. He is continually drumming on

the point that I don't meet the issue. *He* is the one who has not met the issue tonight. He hasn't given us any good reasons why we should believe in this unseen being. Of course he can't trot God out. I made an honest-to-goodness appeal; it was not dramatic, it was not a circus. I held up a pencil. Now, if there is a God, here was a fair chance for him to show his hand. He's been doing miracles all through the ages, according to the Catholic Church. Read the books on the miracles of the Saints. The Protestant churches have their miracles, too. And here I simply ask of one who can move mountains, who can hurl planets through space, to move a little lead pencil, and my opponent shuns the idea. He thinks it's out of order. Well, I repeat it was a perfectly proper thing to do. Here is a gathering of individuals interested in the issue of whether God exists or not. And if God went out of his way to perform all the astounding miracles that are said to have happened long ago, he could at least do something for us tonight by way of a little demonstration. It isn't much effort for God to move a pencil, is it?

He isn't there, my friends. There's nobody home. This father-in-the-sky business is just a grown-up Santa Claus idea. You want something paternalistic. Human beings do not take to self-reliance (I mean, they preach self-reliance, but they do not like to practice it). They prefer to lean on something. Many persons are so disposed that they like to think that there is somebody in the clouds looking after them. Maybe it is a pleasant conviction, if you can get it into your head, that there is such a being and that he is doing something for you. All right. But how many times, when major disasters occur, is God on the scene? They have epidemics in India and in China; you have your drouths, your floods, your cyclones, and God is never around to give you help. Why plead with him, why pray to that which does not exist according to your experience?

I refer now to this question of being on the safe side (I think that's the term' my opponent used, that we should "be on the safe side"). The argument runs something like this: If he is right, he is going to enjoy an eternity with God. Somebody is going to hand him a harp, he's going to be given a halo, and he'll have one fine time somewhere beyond the clouds. Now, what's going to happen to me? Well, I don't lose any sleep over it. If he is right, he has the benefit of it, but if I'm wrong, I'm out of luck. But suppose he's wrong: look at what he's lost, look at the good time he's misled. Life is here, so enjoy it within reason. Kill time pleasantly; You're here for only a short time, so kill time with

enjoyment. Now, there are all kinds of enjoyment. I'm not telling - you to go out and run wild. But obtain your happiness here. Enjoy yourself while you can, enjoy yourself while you're young, because when you're old, God won't take care of you and you'll be pushed around in a wheelchair and looking like a wreck, and feeling like a wreck, and you'll be all through. Now, what are you going to do about it? As a materialist, my last plea to you is to be rational in your enjoyments and to get the best out of life. Obtain the best "cultural values you can. Read good scientific books, books by recognized authorities in their particular fields. Enjoy music, art, sculpture, and science. Do those things. Don't bother about this book the Jews handed down years ago when they were semi-barbarians. Thank you . . . Oh, three minutes more. What'll I do with them?

I told you to kill time, so I'm going to kill time now. Well, I could give you quotations; you know I have some data, too. I could give you quotation after quotation bearing on our monkey origin. In fact, I was instrumental sometime ago in compiling a list of quotations from eminent men of England and of the United States prominent in the field of anatomy: G. Elliott Smith and Sir Arthur Keith, and others in this country, like Gregory and Matthew, who maintain, after their life-time investigations, that man is of monkey descent. Now, whether you like the idea or not, what does it matter. Suppose I could prove to you, I mean to your complete satisfaction, that you are descended from monkeys, what difference would it make? You're a long way from that early monkey and maybe it's just as well. What is the difference whether you descended from a monkey or a rib? You're still whatever you are. You are going to be today what you are, independent of what ancestor you think you came from. Certainly you will acknowledge that you came up from savages, that is to say, that your early ancestors were savages. Is that a disgrace? Why is it a disgrace to come from a lowly animal?

Read up on the monkeys. Mother monkeys possess the maternal instinct. Apes show kindness in many ways. And they don't do some of the vicious things that men do. In fact, they don't have the herd mind of destruction common in man. And, if I wished to select an ancestor of whom to be proud, I would choose a high grade monkey rather than a low grade man. And I would rather think that I came from an anthropoid ape than that I was a descendant of Torquemada of the Inquisition, or of Jonathan Edwards, who wrote that fiendish book on Infant Damnation, or of some of our religious persecutionists and tyrants who have made

the world a place of misery. Much evil has come out of religion: religious wars, crusades, imbecilic ideas. The world has been wacky on religion. It still is wacky. Wacky, I tell you.

Suppose a Christian doctor were sitting in his office and a young woman came in. She tells him she is with child, and she says "I got this child by a ghost." Would the doctor believe her? He would not; he would call up the nearest insane asylum. But Christians today believe the Bible story of years ago. That's the inconsistency of blind faith.

* * *

Fourth Night-Bales' First Speech

I am grateful to be before you tonight and to have this privilege to continue this discussion. I have only unbounded good will toward my opponent and those of like persuasion. I would do him only good and no harm. I continue tonight to prove that God is and that it is irrational to maintain that God is not.

I. THE GIST OF PRECEDING ARGUMENTS

I pointed out last night that for one to prove that there is no God he would have to be God himself, to know everything, and to be omnipresent. Otherwise the thing he did not know and the place where he was not might be the place and the thing that would prove that God is. Also I showed that my proposition stands by default, since my opponent in the first two nights of discussion, was utterly unable to prove that the universe, and all that is therein contained, including man, is the product of non-intelligent forces. It has to be in the beginning either God, mind, spirit, or else in the beginning matter, that gave birth to all that is. Since it could not be proved, and is contrary to the facts as we know them, that it was matter, we must conclude that it was indeed God.

We showed last night the staggering things that one must believe in order to believe that all of this had taken place by chance. We quoted from a number of scientists, such as du Nouy. Le-comte du Nouy in *Human Destiny*, pages 34 and 35, pointed out that it would take more than 10^{243} (1 followed by 243 zeros) billions of years at the rate of 500 trillion shakings per second to make by chance one molecule of protein. And to make life possible there would have to be millions of identical molecules

and even then you would not have life. I went on to point out that my opponent could not prove that life comes from non-life. I made the argument that life comes from life; that all scientific experiment shows that that is true; that it is contrary to the facts to maintain, as he did, that at one time that which had no life gave birth to life.

I pointed out that all the living things which we know of are dependent, for the fulfillment of their life cycle, upon some higher forms of life; and that unless all those forms of life could come together, or at least a sufficient number of them, there would have been no lower forms even on this earth because they could not exist independently of the higher forms. In order for an organism to live entirely on inorganic material, as the first living form would have had to have done after non-life had given birth to life, it would be necessary for it to have a much more complicated enzyme system than any men have. And to say that all happened by chance, and that it was enabled to gather its life food from the inorganic environment, is contrary to the facts and too staggering for one to believe even if he is credulous.

I also pointed out last night that if matter in motion is all that exists then it is inconceivable that matter should have evolved man; and that matter should have kept on vibrating and pushed Mr. Teller from New York City to this platform and brought Mr. Bales to this platform and determined that at this time I should be uttering these very words; and that matter should have gone so far as to produce a man who would deny that matter in motion is the only thing that exists. And yet that is the proposition my friend teaches. He teaches we are all conformists to nature; that is we can not do other than we do, for we have no power or freedom of choice, since there is nothing that exists but matter in motion. Therefore everything is under the domination of and must conform to the laws that work in matter.

I pointed out last night that the laws which govern the universe today can not explain the origin of the universe or the origin of the laws which govern the universe, and the things we see taking place. I made an argument from entropy. This "term is unfamiliar to many, but if you will read on it you will find that it indicates that there is continual tendency toward disorder in the universe. Since we have not reached the place of total disorder it follows that at one time in the past there must have been an injection of order into the system by some being or power

from outside the system. I argued that radioactive substances are decreasing in size. To use an illustration (it does not take place, anything like this fast, but this is to get the idea before you) let us say that a radioactive substance loses half its mass, or energy each day. Today we find it is this size (pointing to blackboard), yesterday it was twice that size, the day before it was so much bigger; then so much the bigger than that the other days; and so forth. We have here another radioactive substance, since there is more than one radioactive mass. Each day as we work back it gets bigger. We finally get to the place that if these two (and there are many others) had existed from all eternity, governed by the present laws; then each one of these would have once been so large that it by itself would have filled infinite space. This is ridiculous. And so there must have been a creation since this state could not have gone forever.

Sir James Jean said that at a time not infinitely remote that somebody had wound up this great clock, so to speak, and since it has not run down yet it must have been wound at some time in the past. If it had existed from all eternity it would have already run down since an eternity is time enough to do anything. So then we find first that it must have started at some point in time; and, second, that it must have been started by some laws other than the laws which now regulate the radioactive substances. Thus some force or power outside the natural force now operating must have put into the material universe the present order. This fact completely breaks down the case of the materialist who must maintain that all that is can be explained in the terms of laws that are now working.

Now I continue with additional arguments.

II. THE ARGUMENT FROM THE FIRST CAUSE

Herbert Spencer, an agnostic, in *First Principles*, 1897 edition, page 38, pointed out that we are driven back to a first cause, that it is a necessity of thought. Ladies and gentlemen, a cause to be a cause must be adequate to bring about its results or effects. You and I and the world that we see around about us, we are the effects, we are the results of that first cause. My friend will admit that there was a first cause. And since all have to admit that out of nothing comes nothing then behind everything that we see now, we must see something that was at least as great as it. I do not say that it exactly resembles it, but it must have been at least as great as that which we see

in the result. To illustrate, the cause must at least have something-similar to and as great as consciousness for it must be that consciousness came from something that has consciousness; otherwise you would be getting something out of nothing. And it must have something equal to intelligence; it must have a moral capacity; it must have something at least equal to personality; it must have something at least equal to some freedom of choice and will. The first cause must have been adequate; but matter is not adequate as a first cause because for matter to have produced life and consciousness and mind, so distinct from matter, it would have been the same as getting something out of nothing; for these things are not found in matter.

III. THE MORAL ARGUMENT

Now, I advance a moral argument for the existence of God. It is related to the first cause argument. My opponent throughout the three nights past has failed to see my argument from morality. It has either been my fault in that I failed to make it clear; or perhaps it was because he was thinking of something else at the time I made the argument. My position is not that all men know exactly what is right and what is wrong. I know that they need to be taught. That is the reason we are trying to teach now. But, ladies and gentlemen, men to be taught the difference between right and wrong must have a capacity for being so taught. They must have a sensitivity to right and wrong. We do not think of teaching a rock or a tree. We do not think that we can appeal to it from the standpoint of morality; but we can so appeal to man. And so then I say that men have this moral capacity that is not found in matter; we must therefore conclude that it came from something superior to matter. All men move from some moral impulse although it may be wrongly directed because their knowledge is wrong. For example, *all men try to convince themselves that they are doing the right thing*. I am confident that my friend is moved by this very principle. (He does not know what is right with reference to this question. I cast no personal reflection. But if I thought that he was right about it I would not be debating him, of course.) And so he is trying to do what he believes to be right. There is a moral impulse.

All men also want the approval of their own conscience. All men thus want to feel that they are making *some good contribution* to civilization and they (atheists) believe they can do this through destroying religion.

All men have some *sense of justice and fairness* and keenly resent unfairness. For example, Mr. Teller would' not think it fair for us to quote from his books and to attribute his ideas to some other person.

My point, furthermore, was not that an atheist does not have any moral principles. They do, thank God. They get it usually from their general religious training. Most of them I have met were brought up in religious homes and although they now deny the faith they were brought up on yet the moral principles continue to shape their conduct because they have already become habit patterns with them. Some of them get it from a general environmental background that has been influenced by faith in God. And so all of them have also some moral capacity and some development of consciousness. In fact, they are bound to have it *because they are men and men have this moral endowment*, this moral capacity. Ladies and gentlemen, *my point was that if atheism is true and there is nothing but matter in motion* there is no reason to talk of morality. But since we do refer to moral standards (and my friend will continually do it; we all do) it is evident that there is morality; and this moral capacity points to something beyond matter. That which is beyond matter can have no other source than that source which is God, something supernatural.

I said that my friend appealed to moral standards. Last night he appealed to one when he pointed out that he had rather have a monkey for his ancestor than one of the Spanish prosecutors. My friends, if anything is said to be good and something bad; if there is something better and something worse, then a moral standard has been introduced. Now I raise this question (and when you think upon it you are well on your way to this argument) : What must be the nature of the universe which gives birth to a being, Man, tormented by a sense of obligation?¹

There is another striking thing about man: he also has certain spiritual capacities and longings which point to some other source than matter. *Man is incurably religious*. Our atheistic friends are religious. Atheism has become a religion to them. Some call it the "religion of humanity." They organize missionary societies and send out missionaries, (one is here tonight), in order to propagate their doctrine. Why? Because man is not mere matter, he has spiritual longings within his soul whether he be a believer in God, or believer in matter; and these spiritual longings seek

for some sort of spiritual satisfaction. This capacity of man can not be explained in terms of or by matter.

Men appeal to this moral capacity and spiritual yearning when trying to lift men. And thus we find that the *Alcoholics Anonymous*, in their book of the same name, pages 35 and 36, point out that when they are trying to cure alcoholics one of the first things they have to do is to get them to trust in some being higher than themselves. Yes, *faith in God works*, for it brings into life meaning, purpose, and hope as well as satisfies the deep spiritual longings of man's heart; longings that man does not get away from just because he becomes a believer in the all-sufficiency of matter in motion,

IV. THE ARGUMENT FROM ORDER

Now let us turn our attention to an argument from order. We know, ladies and gentlemen, that order is a mark of intelligence. If I walked by the seashore and found there some pebbles which spelled out "Man is immortal" I would conclude that some intelligent being had done it. If I found that the sea waves as they came in had been the mechanism that spelled out "Man is immortal" what would I conclude? I would not conclude, because I had found mechanism, that there was no intelligence behind it. I would conclude that the mechanism had been constructed by intelligence. But if I find the stones just scattered about by the waves, I see no order, in such a case I do not postulate intelligence.

We know that order is a mark of the presence of intelligence somewhere. And there is order in the universe. Dr. Frederick Woods Jones, Professor of Anatomy in the University of Manchester, in *Design and Purpose*, 1942, stated that scientists, in dealing with this particle and that particle and specializing, have often forgotten that the cosmos is an ordered entity (p. 13). Dr. L. J. Henderson, Professor of Biological Chemistry in Harvard University, in his book *The Order of Nature*, showed that chance cannot explain the wonderful order that exists which makes life possible.

Man can understand some things concerning nature only because there is order. Man can find something intelligible in nature and understand it because intelligence put it there. A man that knew all the languages of the earth would find it impossible to translate from chicken tracks a message of intelligence like we translate from man's writings. Why? Because intelligence did

not put the marks there. Hieroglyphics on a stone can be understood by intelligence. But it took intelligence first to put a message before it could be translated and understood. The universe is intelligible because intelligence ordered it.

There is order in the vast universe. One can take his boy out under the starry heavens, and as Kant, Moulton, and Tyndall have said we are filled with the sense of awe. The starry heavens move with such regularity, our solar system does at least, that men can predict eclipses, etc., and work out formulas which express the laws of motion. It takes intelligence to work this out, and yet our opponent's position says that it was all ordered by that which had no intelligence. And that intelligence did not even work out the mathematical statements of these laws. For his position is that mere matter and motion is all that is and that thinking is a mere by-product, a vibration, in the brains, which is a result of physical causes.

I pointed out last night that Dr. H. N. Russell in his book on astronomy gave at least ten reasons why, we can not explain the solar system as a chance conglomeration of bodies. I also quoted from other astronomers to show that they have no satisfactory physical theory for the origin of the earth. I also showed that the earth is just the right size; the proportion of the water to the land is just right; we are the right distance from the sun; the earth has just the right atmosphere, and just the right combination of things in the atmosphere which make life possible. But my opponent must attribute all this to chance.

When we go into the chemical world the chemist is impressed with the order that exists there. The electrons for example arrange themselves around a nucleus in definite ways. Each element produces definite unique spectroscopy patterns. The isotopes of the elements, that is the atoms of the same element with different atomic weights are found, we find that these isotopes are so thoroughly distributed that the average atomic weight of a given element found in nature is always the same regardless of where on the earth or in what condition it is found. Nature shouts order. Again I say that nature has its order. Nature has written all over it that its order and design is proof of the existence Of God.

Man sometimes goes to nature to find out from her how to do certain things. For example the continuous production type of chemical plant with its system of overlapping pipes, is comparable

to man's intestinal system. Some men have studied the structure of the human skeleton in order to learn more about how to deal with stress and strain in structures. Men study the soil for they are finding that in it God has placed a system of checks and balances of microscopic creatures. When one of these gets out of its place, and in this fallen earth attack man, we find in the soil in many cases the natural enemy of it that God placed there as a check. Nature taught man something about flying. I wish I had time to give the complete information, but you will find the substance of it on the *Evolution of the Flying Machine*, pages 76-87, by Harry Harper; and also in Werners *Encyclopedia*, Vol. IX. John J. Montgomery, in San Diego, California, studied the sea gull. He weighed their bodies, he studied their wings, and then finally constructed a machine. It was a glider which was based upon the knowledge which he received from the wings and the body that had been designed by the Creator for the sea gull to fly. Mr. Teller's remarks that man built the present day airplane, and seemingly did not learn much from nature about it, do not fit in with the facts.

Everyone of us presents ample evidence of order and thus of an intelligent creator. (I take much of this from Dr. Brown's book on *God's Masterpiece—Man's Body*.) Take your body, for example, with the millions and millions of cells that are in it. See the marvelous functions your skin performs. It forms a protective jacket, sometimes adding thickness to certain areas to protect itself. "It is a first-class germ repeller and killer of germs." "It is a combined umbrella and sunshade." "The skin is a combined thermometer and thermostat, registering and to a certain degree controlling temperature." "It provides a very good set of heat insulators for the body . . ." "It is a sort of stock-room for several things—water and chemicals of various kinds." "It is the chief organ of touch because thousands of nerve endings are found therein." "And it is also self-repairing." (pp. 39-41).

Man's nervous system is amazing. For example take the spine of man. It possesses the firmness to hold up our bodies and the necessary flexibility to enable us to turn. It has the greatest firmness where there is the least need for movement and the greatest flexibility where there is the greatest need for movement. In order to provide safe passage for the spinal marrow, a hole goes through the spinal column. In order that we might bend and move about there are vertebrae. There are certain cartilages in between that so when we bend forward the joints

do not gap out. There are enough vertebrates so that we do not pinch the spinal column when we bend. The "spine affords convenient holes or openings, through which a supply of nerves is sent out from the medullary canal to different parts of the body." "It also forms a basis for the insertion of muscles, and a support for the ends of the ribs."² It has many other functions also.

Let us now consider the blood. It is an amazing thing within itself. The white cells, or leucocytes, are living bits of protoplasm possessing essential nucleons. The red cell does not grow, nor feed, nor breathe, but these white cells require food. They breathe oxygen and have the power of independent movement even against the stream in which they find themselves. They carry certain nutrients. They are also scavengers of dead tissues able to secrete a digestive fluid which breaks down such debris and dissolves it; and they possess a, marvelous power of attacking bacteria by literally engulfing them. In speaking of the lymph, Dr. Brown wrote, "the lymphatic of the small intestines, the lateals, do not differ in structure from the ordinary lymphatics. They contain chyle, a fluid, white and opaque, like milk, which holds much of the digested fat that has been absorbed from the intestine.

"The filtering system designed to eliminate bacteria, waste material, and toxins of all kinds and to prevent them from being emptied into the blood stream, constitutes another astonishing evidence of design. If these impurities were not removed, the results would be disastrous. And so we find millions of lymph nodes, scattered throughout the body, little balls of cells in a framework of connective tissue and muscle fibres. The entire wall of the intestinal canal is filled with them, like a frontier occupied by guards. Each of them is an effective filtering apparatus. When the lymph passes through, the muscles contract, holding back the poisonous materials and squeezing fluids and cells out of the balls. So the fluid is filtered many times before it gets to the blood. On their way to the heart the lymph vessels pass through several larger groups of lymph nodes called the lymph glands, the structure of which is sure that the lymph oozes slowly through a maze of tissue as thorough as the pores of a sponge. Each lymph gland is a laboratory and quarantine station treating the lymph chemically and bacteriologically, controlling its composition, and above all removing dangerous particles. These glands are actually police stations arresting dangerous invaders and protecting the body from all disease."³ And then

Brown discussed four or five factors that enter into the blood pressure which are closely co-ordinated. Then he went on with some of the marvelous glands of the body. For example the ductless glands. We find that one of them for example, the adrenal, secretes a very powerful poison which must be diluted down to one to two billion parts in the body. If it just did too much or too little it would have a bad effect on the body.

I recognize that the earth is cursed and that God does not mean for man to live here forever and that sometimes a thing fails to function. But I call to your attention that we are asked to explain the order that exists and not just deal with a few minor cases of where some things do fail to function. If a machine fails to function we do not say that it did not have an intelligent creator.

Now take a marvelous scene, ladies and gentlemen. If I see the rays that come down« from the sun and then it gives me some poetic thought concerning the universe and concerning the sun and so forth and so on, what do we have? We have those waves, those reflections. They hit a physical object the eye. Of course it is not just a lump of matter but it is an organism of the body. But I have poetic thoughts aroused which are not identical with the stimulus which the eye and brain received. These rays which come from the sun are something entirely different. As Sir James Jeans pointed out in *The Mysterious Universe*, page 124, the two are entirely dissimilar in nature.

In man's ears we have a telephone system that is indeed complex and in its complexity puts to shame the complex telephone systems that men build today.

We find also that, Dr. Brown pointed out, the nose performs many functions—cleaning the air, a vacuum cleaner to remove much dust from the air that we breathe, and so forth. If my opponent could even begin to make a machine nearly as perfect as man, why he would think that something had really been accomplished and it would, but it would all be attributed to the intelligence. Shall we say that the man who has such intelligence is the product of non-intelligent forces?

Let us give some other things, from the realm of nature, which shows that we are not dealing with chance, that we are not dealing with disorder. For example, we find that "the cicada killer makes a nest in the ground and provisions it with cicadas that it *paralyzes or kills* by stinging in three places only. These places are

on nerve centers. The wasp must force the cicada's head back in order to sting one place. Yet the wasp has never studied cicada's anatomy. How does it 'know' to sting in just those places? Evolution (or atheism) cannot explain it satisfactorily." Teller may say it is hard on the cicada. But I pointed out that God has a system of checks and balances, and that a great deal of the lower world that we see around about us is necessary even for man to live.

There is a diving beetle that lives "in the water and under the water." It has "air tubes open to the outside under the hard wing covers. Air is carried under the water trapped under the hard wing covers. Had the spiracles (air tubes) been in the position normal for the insect world, these beetles would have drowned. It is remarkable that the mechanism for carrying air under the water and then for using it there is so well coordinated."

"The honey bee is a marvelous creation. The queen bee lays both fertile and infertile eggs. The fertile eggs produce the worker bees and the infertile eggs the males or drones. The colony is dependent upon the queen and if she dies or is killed it would die out except for a very wonderful mechanism. The worker bees start to work at once on several of the cells containing very young worker bee larvae. They add to the front of the cell and then build it up vertically. The young larvae is then floated out into the new, larger cell and fed on bee milk. When she is fully matured she emerges from the cell a young queen."⁴

Then there is the marvelous thing about the kangaroo. When the little kangaroo is born it is so little that it can not suckle. At that time it would starve to death if it had to wait for evolution to evolve another mechanism in its mother. At that particular time, however, we find that the mother is able to squirt milk into the mouth of that little kangaroo. It has a special apparatus at that time which keeps that from choking it. How can we explain that by mere chance? The more I study God's world the more I can hardly see how anyone, when everything shouts out "God is," can say that "God is not."

Then we notice, ladies and gentlemen, that the "birds have hollow bones filled with air sacs. They have no teeth but only a very light bill or beak. All of this to save weight. Since they have no hands they have long necks so they can with their bills reach all parts of their body. They are wonderfully adapted for flight. When you or I run or work hard it becomes difficult for us to breathe, but when the bird is in flight it has a special bellows mechanism that actually makes the movement of the wings

pump air into the lungs so that it breathes best when in active flight."

Then there is the little spider which makes its nest in a little shell found on the seashore. First it weaves a net around the shell then going to a limb above it attaches a thin web, dropping it down to the shell. Then it weaves another thin web and attaches it to it. Again and again it works until there is a strong web or line of spider web fibers connecting the shell and the limb of the tree, it is wet but upon drying it shrinks in length and brings the shell up off the sand and leaves it hanging to the limb far from all danger and harm. How did the spider learn to do that? Oh, you say it is instinct! Or do you call it a mechanism. That does not do away with intelligence, or design in the mechanism. I do not say that the first spider, the grand-father spider sat down and figured this thing out and then passed it on to the other spiders. That is somewhat the way through some chance variation, that evolution would explain it. No, it is instinct placed there by God Almighty. Shall we say then that it takes intelligence to design some of the machines that man designs and yet it does not take intelligence to design man himself, the designer, and that all these wonderful things in nature are not put there by a wise creator?

There is some disorder, but as I pointed out in my first speech on Tuesday night, many things that my opponent thought were disorder on close investigation turned out to be marvelous order. What we have to do, friends, is not to account for a few cases of disorder in a world which has fallen but account for the multiplicity and millions of cases of order that we see. If I find one car in a junk pile or in a wilderness of disorder it takes just as much intelligence to account for it as if there were not a wilderness of disorder.

And so then there is order in the universe which is an indication of intelligence. The universe could not have operated always by the laws that now govern it. It is not self-contained. Furthermore, there is also a difference between mind and matter. Then, too, for a man to prove that there is no God, he would have to be God himself. For a man to believe that God did not design the world would be to say that life came from non-life; that the conscious came from the unconscious; that that which has moral capacity comes from that which does not have it; that that which can actually have vision and turn vibrations into seeing things comes from something that has no vision and is merely subject

to vibration. Yes, ladies and gentlemen, God is! I have not said that many times tonight, but I emphasize, on the basis of facts, that it is perfectly irrational to deny the existence of God. How can we explain it all out without God, without an intelligent being? I do not say that He is identical with the universe. Certainly not, he could not then be its cause.

1 Dr. Trueblood, *The Logic of Belief*, page 163.

2 Samuel Wakefield, *Christian Theology*, p. 137.

3 God's Masterpiece—Man's Body, pp. 83-84.

4 Dr. Jack Wood Sears.

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Fourth Night-Teller's First Speech

Dr. Benson, my Opponent, Friends: A rather amusing incident occurred this morning bearing on our subject, I believe. I had an opportunity to attend my opponent's class in psychology, and though Dr. Bales was absent, one of the boys showed me the textbook they use. And it's a very good textbook called *Psychology and Life*. I know the volume and I was pleased to see it is being studied, because Dr. Carlson, the chief contributor to the book, is an atheist. It shows that Harding College can't get along without the atheists. Even here they have to consult authorities who are atheists. That's a sign of the way things are going.

Now, if you wish to proceed further into this subject, just read Dr. Carlson. You'll have to check up as I haven't the particular reference at hand, but he published an article a year or two ago in the *Scientific Monthly*. That is the official organ of the American Association for the Advancement of Science, of which Dr. Carlson was formerly president. Now, Dr. Carlson, in that article, has said virtually everything I have maintained in my plea for materialism. He is one of the outstanding physiologists of the country, and I am glad to learn that you have turned to a good atheist for information.

My friend reminds me very much of another individual who was impressed by the "fitness" of things in nature. He observed, for example, how well man's legs are made because they are just long enough to reach the ground. He was delighted with that thought. He believed there must be "design," too' because the river fits the river-bed and the ocean fits the shore-line. He saw fitness in these things, and he became jubilant over his discovery

that there is "fitness" in nature. Now, of course there is fitness in nature. Things fit. For example, there is the peanut. The peanut, as you know, has a nice little "tissue paper" wrapper around it. Do you imagine that peanuts were designed that way, that there is a peanut factory in Heaven and that they wrap them up in these little pieces of "paper" and pack them into the shells? Is it done by intelligence? Well, there's no more cause for astonishment in the fact that this "skin" fits the peanut than that our own skin fits our bodies. Is it at all remarkable that our skin adheres to our bodies and fits under the circumstances? If you look around you, you will find plenty of fitness and it's because things in their natural relationship have to jive. If you divide a circle in parts, the parts will fit. If you cut a flat layer of wood into sections, as for a jig-saw puzzle, you can eventually put those parts together again. In any "design" you cut, you will find a relationship of parts and you can reassemble those parts. That's "fitness." And it's not "design" you see when parts fit the whole. You can shut your eyes and cut a piece of paper into any number of parts and these parts will fit together again. Remarkable, isn't it? There must be a God behind it!

I had occasion some years ago, in a discussion similar to this, to debate a clergyman, and, in touching the design argument, he brought forth this important point. He was trying to show that snow-flakes are "designed." Now, as you probably know, snow-flakes under the microscope show very pretty "designs." There are supposed to be no two alike. We haven't seen all snow-flakes; maybe there are some alike. But in general there is a great variation of pattern. And my opponent was bringing forth the argument that because of this diversification of pattern there must be a God. There must be a designer, he held, because only an intelligent being could turn out so many different patterns. So I said, "All right, suppose all snow-flakes were alike?" and he replied, "That also would prove a God, because only an intelligent being could make them alike." So you see, the theologians have you coming and going.

My friend made some passing reference to the sun and became poetical. Well, I thought it was the moon that made people romantic. Your sentiments, your emotions are touched in beholding a beautiful sunset, a beautiful picture, or a beautiful woman. You get very stimulating reactions in life from things which are enjoyable to you. But what have" these emotions to do with the existence of God? Dr. Bales has complained all through this debate that I've been talking off the subject, and, now he brings in

the sun and poetry to prove there is a God. I fail to see the connection.

Dr. Bales talked about instincts. Have you ever seen a moth flying around a light bulb? Now, God has so arranged the mechanism of this little animal that the creature will burn itself in a candle. The protective machinery is so miserably "contrived" that if you have a lighted candle, an open flame, a moth will fly into it. That's because the mechanism is so arranged that this animal can fly only toward the light. And it kills itself. That's a fine instinct, isn't it?

You have other instincts, for example, that are fatal instincts. Darwin has shown in regard to birds, migrating birds, birds that fly south for the winter that they make false starts; they leave before the weather is right, and thousands of birds desert their nests and their young and are destroyed because the timing is not right. God gives them a false steer. How many of your own instincts are bad? We have many examples of bad instincts. Man is sometimes instinctively bad in his conduct. According to his glandular layout, he will commit criminal acts that a normal individual would not do.

Dr. Bales spoke a while ago about the "anatomical" wasp. I know this story; it has been flashed around in religious circles so long that it has become a classical argument that God made a certain wasp and that wasp had to leave living animal food in the nest for its young and it knew anatomy so well that it knew just where to sting the prey that was to be put into the nest. And God gave this wasp the instinct to strike so that it wouldn't kill its victim, but would merely paralyze it. Now, all of that sounds beautiful until you examine it. It's like a lot of other fables that go the rounds. Scientists examined it, they made tests, and they found the stinging was a hit or miss proposition. Many of the wasps did not paralyze their victims as was stated, but killed them. And the young wasps in the nest could live just as well on the dead bodies brought to them. So this anatomical wasp goes out with other myths that have been invented.

Now, in regard to the machinery of the human body—I like to talk about that. I maintain that man makes better machines, machines which work more accurately and are more dependable than those found in the human body. We have machines today that print, bind, count, weave, sew—the list is extensive. Go to any great industrial city and you will find mechanisms that can be depended on; they don't turn out things half-right and half-

wrong. They are perfect. You can see bottling machinery where there is never a miss. Those are man-made machines. And when we examine the human body we find it rather remarkable that our friend should tell us that the skin is a protective jacket. Well, did you ever get into some poison ivy? I wonder if you have touched poison ivy and see what your 'skin protection' is like. There is no "protection" there. "It repels germs"; it does not. It doesn't repel smallpox. Did you ever see a smallpox victim or a picture of smallpox patients? The skin isn't the wonderful thing Dr. Bales says it is.

About the blood; have you ever heard of high blood pressure? People get it after a certain age and it shows itself when they get excited in debates. We have anemic conditions of the blood. Your doctor, or even your pre-medical students here will tell you what they find on these points—that anemia is a very common occurrence in the human mechanism. It's a break-down of the blood. And you have' many maladies occurring in the human body that are not "protective," not in any way beneficial to the organism.

We spoke, either on the first night or the second night, of the intestinal tract. I told you that it's twenty-five feet long. Matchin-koff made some elaborate tests in regard to the lower intestine, that is, the big intestine, not the long intestine. It's the big intestine that is at the base, at the end of the line. This intestinal tract accumulates a great amount of bacteria. It's harmful bacteria, and experiments show that if we eliminate this tube, as has been done in cases of surgery, the patient is better off. This accumulation in the big intestine is a nasty arrangement. Why should there be all this cluttering up of bacteria in the lower tract? We make sewage systems today that are better than the one we have in the human body. They don't clog up the way the intestinal tract does. You don't have to use cathartics in order to make them function. Many persons resort to medicine because the intestinal tract is jammed.

Coming back to wings, Dr. Bales seems to think that wings are wonderful instruments of flight. Now, I pointed out, I believe, in the, earlier part of my talks, that the wing is a poor instrument for flight compared to the plane and the propeller. You don't see flying machines of today built with flapping wings. Wings don't work out; they have been tried. Scientists studied the birds, and they found that another method is superior to God's. So they put a propeller in front of the aeroplane and planes on each side, and we make better speed than the birds. And we can dive better and

do many things that the birds cannot do with their machinery. We make machines that travel on wheels faster than any legged animal; there's no running animal that can keep up with a speeding automobile. We do many things better than nature, because nature has worked blindly over long periods of time while man, in a relatively short space of time, has applied intelligence to his work

We have proof in the matter which he brings up concerning "order," that "order" is natural. I can give you perhaps the best illustration of this by referring you to the stars in their orbits. Now, to the uninitiated it seems astonishing, it seems amazing that stars revolve in their orbits without any collisions. It looks beautiful, it looks like a "planned" order of motion. This star goes here, and this one goes there, and there must have been a guiding intelligence to arrange it that way, as otherwise these bodies would collide. Now, what do we learn by looking into the matter a little further. There *are* collisions. There are not so many now as there used to be because where two stars did have overlapping orbits, the result was fatal to their existence. The two bodies collided and were put out of commission, and they no longer exist. So, by constant elimination we have reached a point where most orbits are what they call "fixed." They are in the range of distances where they do not touch one another. Bodies that did touch each other by moving in intersecting orbits have been eliminated. So we have relative stability today in the stellar world where there are no overlapping orbits. You see, it doesn't require a God to direct the stars. If stars bump each other off by colliding, they are wiped out of the picture, and we see the results of this age-long elimination in the present order. That is a typical example of how "order" comes into the motions of the stars.

Now, I ask my opponent, what can he find in the universe besides matter in motion? That's all there is. Search where you may, you'll discover nothing but matter in motion. There isn't a physiologist, there isn't an astronomer, there isn't anyone in any department of science who finds anything other than matter in motion. Of course, the theologians come along and inject into man what they call a spirit. We have a soul, they say, and it's very important that this soul be saved. And of course, it can be saved only by accepting the particular religion that the clergyman is interested in. If you don't believe in his creed, things are going to be bad for you. You're "sinful" and wrong, and God is going to take care of you hereafter in ways which you won't like.

Now, as to the idea that there is going to be a judgment day,

let us ask: why should God be so particularly interested in the way you conduct yourself? I mean, of course, within reason. Is it so important to him, is he so inflated with egotism and vanity, that he must look down from his celestial abode above (I'm drawing the picture as it is presented by theology) to see who is worshipping him? Must he look down through millions of light years to a speck called earth on which are millions of other little specks called men and ponder the question: "I wonder if Jones went to church today?" "Why should he be bothered? Why should the one who is running the universe, according to the way my opponent believes, be worried over these trivial matters? Or whether a Jew wears a hat in church or whether he takes it off, or whether you yourselves are baptized or not? What does he care whether or not you get sprinkled with water? Yet some believe that you have to show the spiritual watermark before you can enter Heaven.

Now, my opponent, as affirmative in this debate, says that God *is*. Before we can settle that God *is*, we've got to settle *what* is God. What does the deity look like? You tell me there is a God. Now, what *is* this God? You say he talks. He talked in the Garden of Eden, didn't he? Didn't he converse with Eve? Has he a mouth? How do you talk without a mouth? All our experience teaches us that we must have a mouth in order to have speech. Is he anthropomorphic—is he manlike? He sees. How does he see? Has he eyes? Has he a nose? Does he smell? He must, because they burn incense in the Catholic church. To enjoy it, he must have a nose in order to get the incense into his nostrils. Imagine the creator of this big universe, according to their rituals, smelling incense or bothering about such things.

What does God look like? You tell me he is a "spirit." You know, it's up to the affirmative to give us something which appears tangible, even if it isn't tangible. God is a spirit which you can't see, and therefore you've got to believe it. God is about the nearest thing I can think of to a complete vacuum. According to their own description, he has no bodily parts, he has no form. He's a ghost. The advocates of "spookology" (that's a good word for all theology, "spookology") simply believe in a glorified spook, and maintain that this thing, which has no bodily parts, can push the planets around. Where's the point of contact between a material object and that which has nothing material about it? How can nothing push a ball, much less a planet or a star? Who does the pushing? In former times, you know, they used to believe that the angels did it. The scientist Kepler, in the early days,

had one of these half slants, partly scientific and partly religious, and he believed that the planets were pushed around by the angels. That's why angels have wings; they have to flap these wings in order to push the planets. These are the ideas that theology and religion have given to the world.

The only way we can judge whether there is a God is to have some evidence. Is it shown in natural phenomena? My opponent says that an eternity is enough for anything. Well, God has an eternity. According to his theory, God has an eternity and he's taking a long time. He always takes a long time to arrive at an objective. Now, an intelligent process involves a more or less direct movement to the objective sought. I've told you that if you plan to go to a certain place you don't take a long detour unless the roads are bad. If I want to go to Little Rock, and it's possible for me to go in a straight line or in nearly a straight line, I'm certainly not going to New York first, then up to Detroit, then to Seattle, then to San Francisco, then to Little Rock. That's the way God works. His is a long, round-about way. And even with an eternity you would think he could jazz things up. If God, according to the way we see things occur, can send a stroke of lightning and kill a man, it ought not to take him three million years to turn a four-toed horse's extremity into a hoof. Three million years it took him to do that. Delayed motion . . . there's something wrong. That's not intelligence, from the point of view of getting results.

Then look at the long, dreary descent of man. I must insist on the doctrine of evolution. If you consider the evolution of the human brain, you will find that there were ages and ages before any convolutions appeared in the animal brain. You get slight convolutions, or the beginnings of convolutions in the tailed monkeys. But it is only when you reach the anthropoid apes, that is, the man-like apes, the big fellows like the chimpanzee, the orangutan, the gorilla, and the gibbon, that you find the beginnings of man's brain. There are convolutions. And in primitive and recessive types of brains you find very small, imperfect convolutions. Now, convolutions are important to high-grade intelligence. God has taken millions of years to make these convolved brains according to the "design" process. Why not a direct attempt? Instead of fumbling around with all these primitive types of men, why didn't he turn out, well, the president of your college instead? Start with somebody of a high caliber. That is the way an intelligent being would operate. But look at all the trash God turns out—look at the human race. There are millions of people who,

under the circumstances, can't do any better, and they are walking around in dream-worlds. They can't think, they can't do anything but go through the bodily exercises of the physical processes, and they are really vegetative.

Now, if God were interested in mankind, he would have given all of us good convolutions. We have in the records of biology the so-called Jukes family. Jukes is not the real family name; they wanted to protect succeeding generations from the stigma of being Jukes. This family has come down the line of tabulated generations, and here is a brief summary. The Jukes family has nothing for which to thank God. In this family, six generations numbering 1,200 persons including the following: seven murderers, 130 convicted criminals, sixty thieves, 310 professional paupers, and 440 immoral or syphilitic persons. "Every grade of viciousness and idiocy," says Moon's *Biology for Beginners*, "was represented in the descendants." Now, I ask my opponent, why did God turn out that family? And being omnipotent, if he did turn it out, why did he turn it out when he could have made a good family? He could have made the Jukes a good family, like the Gregory's of England, in which there have been four or five generations of distinguished scientists. He could have turned out more families like the Huxleys, leaving out Aldous, of course, who is a little too mystical. If there is an intelligence behind the universe, why do we not see good men and good women everywhere? These people are not governed by free will. They are not the way they are, this Jukes family, because they choose to be. It's because of their physiology, because of their biological make-up, which according to my opponent was designed, that they behave as they do. God could just as well (eternity allows for everything) have done much better. He has an eternity, he has all power, and yet he produces this wretched family.

Now, man is not the all-important being that most theologians think he is. After all, he is rather inconsequential, he represents an inconsequential group in this world. Nature takes no more account of a man than it does of a lion or a tiger. Lightning will strike him, or a flood will drown him just as quickly as it will destroy rats or mice. The Providential idea is so ridiculous that I hardly dare touch it, because you can see all around you instances where Providence is not concerned about you. You have all kinds of epidemics, you have floods, you have tornadoes, you have all the insects that are destructive. Let me ask you to think this over. Suppose a certain individual were able to loose the Mississippi river in such a way that, by breaking down the levees,

he flooded the land. He would be tried as a criminal, wouldn't he? This water goes over and destroys crops and maybe drowns people, and there is vast destruction. He would be held on criminal charges. But God lets rivers overflow, he sends drouths, he ruins your cotton crops, he sends boll weevils and intestinal worms. Now, what is God doing with his eternity, if he has brains and he has thought?

Dr. Bales talks about the marvelous things God is able to do. Well, God should really do better than he does. But nature has done fairly well in turning out women. Women, of course, are not perfect, but they are pretty good. I had occasion to go to Little Rock the other day and I discovered—I'm new in the South—that Little Rock is quite a civilized community: the girls there paint their toenails and may, as far as I know, still have a tremendous interest in "spiritual values." But the best products that nature turns out are the women. I challenge my opponent to deny my statement. He can't; he's married.

Speaking of conscience: Now, conscience is a variable thing. It differs in different ages, even in different communities. I've seen things done down here that are a little different from the way they are done in other parts of the country. And you'll see differences everywhere. In other words, certain standards are established in certain communities for social conduct. Now, what is right and what is wrong? I may have to take this up later because my time is short. But just let me say in passing that the head-hunter does his killing as a religious act. He is obliged to take a head in order to get a wife. He can't prove himself a good citizen until he has taken a human head, of another tribe, of course. And when he has brought this head to the chief of the tribe he is able to show that he is a real warrior and worthy of selecting a wife. Now, you think his conduct is deplorable. Who implanted that "conscience" in the head-hunter? Is it God-implanted? God, if he has a conscience, should give us a uniform conscience; he should give everybody a clear understanding of what is "right" and what is "wrong." But we have various ideas of right and wrong, which shows that conscience is not a static code. It is not stable, as I say; it changes in time, it changes in place, and therefore is not God-implanted. Our theologians seem to think that everybody knows "right" from "wrong." My ideas of right or wrong may be a little different from yours; on basic things we might agree. But ideas of right and wrong are not God-implanted or they would be universal. There is no indication that conscience is uniform. There are men who believe it is a religious duty, in

India, to swing by hooks, or to put sharp needles into their bodies to torment the flesh. God will be pleased by watching them. Well, they are no more barbaric, I suppose, than the Christian God who is going to burn unbelievers. I understand that most of the students here at Harding believe in hell fire, and some of them have been trying to convert me. And I tell them to go home and sleep it off, that I'll be all right.

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Fourth Night-Bales' Second Speech

My opponent seems to think that he can disprove the existence of God by making demands upon God or laying down conditions that he says God ought to meet; "and then because God does not meet *his* condition it proves that God does not exist! It really proves only two things, first, that he cannot bend God to his will and that he was not consulted; and second, it certainly proves the patience of God and the long-suffering of God with those who, in spite of the fact that the heavens declare the glory of God and that everything shouts God, close their eyes to Him anyhow.

I. THE "MORAL ARGUMENT"

I have not yet been able to make the moral argument clear to him. It may be my fault or his. I do not say that people do not need teaching; that is the reason we teach them. What I want to know is where did man get his teachableness, morally speaking; his moral potentialities.

Mr. Teller said that we could agree on some basic things. Well, according to his doctrine the only basic things are matter in motion and they are the only things there are; and we are not agreed on that.

Now for the head-hunter; he is not driven by a different moral impulse but his moral impulse is misguided and mis-applied because of the lack of right information. He is driven by the belief that he has to measure up to manhood. And one ought to. That "ought to" always drives one. But he has been mis-taught. He does not know what real manhood is. And so then the thing we need to do is to find the correct standards of manhood. Yes, there is freedom of will involved. And for that reason he can be taught better and has been taught better. But I have never

heard of an atheist going to head—hunters and endeavoring to convert them from head-hunting by telling them that matter in motion is all that there is, and that you can not help doing what you do because you have no freedom of will. They just do not go there. They leave head-hunters alone; they do not try to convert them. We find that people who believe in God and Christ do go there and have converted multitudes of them.

II. THE PROBLEM OF EVIL

Now, the only argument which my friend has advanced throughout the entire discussion is the argument from the problem of evil and suffering. Perhaps his idea has been that by dwelling on it he can so becloud some minds that they will see nothing but the problem of evil and thus lose sight of the good and of the reasons for faith in God. One can take a little smoke and spread it out over much beautiful scenery and many obvious facts. But when we allow it to loom so large upon the horizon of our lives that one bit of smoke or smudge blots out everything else, we have become unbalanced in that respect. Because Teller does this our comments must be directed toward the problem of evil but they must be brief of necessity.

First of all, evil and disorder do not prove that God does not exist. For the issue is not whether God is interested in us, but the existence of God; not His character, but His existence. Teller has not dealt with the abundance of order and good that we do see in life. If you find a wilderness of disorder but some order or a car there, it takes just as much intelligence to account for that car as if you saw cars everywhere.

Next, we find that we have a distorted view of evil and the problem of pain because we view it from a limited standpoint both in time and with reference to seeing the outcome of certain events.

Third, there is much happiness in the world that my opponent has entirely overlooked. In fact there is more for most of us, I think for all there is more happiness (at least, for all who continue to live) than there is evil. If it were not so men would not go on. If everything is evil then life itself would not go on. If there were more disorder than order in the world life could not be possible.

Much of the evil in the world is due to man's sinfulness and his selfishness. Take the Mississippi River: One of the reasons it overflows is because selfish men denuded the earth of trees

which helped to form watersheds for the taking care of some of that water which now, when it rains, pours into the Mississippi and makes it overflow.

I do not say that God comes down here and orders directly every little thing. He set certain things to work by mechanism. But although in an earth that is fallen mechanism sometimes go wrong we must still explain the mechanism itself, and the times that it does work—which are in the majority. Because a car can go wrong you do not immediately conclude that there is no creator of the car.

It is assumed, not proved, that a good God would not create a world, such as we find today, with man's possibility of falling and the world getting into the shape that it is in. We are dealing with an earth that has been cursed by sin. God does not want man to live forever here. That is one reason that troubles come upon him. They shatter his illusion of self-sufficiency that he may come back to God. They let him know that his frame is mortal and that his frame shall return to the dust, though his spirit returns to the Creator who gave it. Man does not find himself in a paradise of ease, due to sin. The world has the aspect of a battleground in which character is developed. God is not interested in men just having a good time but he is interested rather in character and th?t character is developed through overcoming the difficulties and obstacles and patiently bearing the pain that we face. Faith in God gives us a hope and a reason to overcome difficulties, pain, and sorrow; whereas my friend admits in his book on *The Atheism of Astronomy* (p. 63) that if one really thought upon the end of life he would not have the nerve to go on living.

The unbeliever fails to ask himself this question: If the world is as disorderly as I assume it is, how could we even be here in the first place? The order we see is not just an order in time and space like we find things in a junk pile. The order we see is in the majority of cases the order of the beautiful machine going down the road. If there were not such order man would not be here to criticize it or to praise it.

If the world is as disorderly as Teller seems to think it is, we would not be here. If it is as evil as he seems to think it is, where did men ever get the idea that a good God created it? If the world is as black as Teller says it is, why would men ever argue from black (evil) to white (a good God)? Teller has to account for the fact that men have attributed the world, in the

main, to the presence of God, and a *good* God. Now the unbeliever must face the problem of good. How did so much good get into a world that is mere matter and motion? And so much order?

When Teller raises the problem of evil and suffering he raises a moral standard; because if there is no moral standard then he could not say: "If God is, He is unjust to us." And when he appeals to a moral standard it is to something above and beyond matter and motion. It can not be found in mere matter and motion. Thus when Teller brings up a moral standard atheism goes out the door. I said the other night atheists could not even debate without acting upon certain convictions which are inconsistent with their atheistic convictions.

The Christian, of course, does not represent a religion which is a result of a philosophical debate but which is founded upon historical facts. Thus the theist does not believe that he can offer explanation for all the plans and purposes of God, or that he can understand everything. He does not believe that. But he maintains that the evidence that there is shouts that God is.' And the only argument my opponent has brought against this throughout the debate is that there are a few cases of disorder and of suffering.

Men have been given some freedom of evil and they often abuse it. But we no more criticize God for thus making man than we criticize Teller for bringing children into the world because they have the possibility of becoming saints or of becoming criminals. Shall we hold him responsible and say that everything they do after they reach the age of accountability is his fault and that he is to be blamed for it? Why certainly not.

In a world in which there is some freedom of will it is impossible, ladies and gentlemen, for a man to abuse his freedom without hurting someone else in many instances. If you eliminate the possibility of this type of suffering and evil you eliminate life itself.

Furthermore, God has created many mechanisms. Man can get in the way of some of these mechanisms. One may call that an evil but that still does not account for the mechanism itself; even a mechanism that may go wrong in a world that has fallen.

Concerning punishment: Of course that is not really in the issue (at least the Bible is not), but at any rate we shall briefly notice it. First of all, we find that salvation involves a change

of character, among other things, and even if a reprobate were to get into heaven, he would not be happy there! Why? I have found that people who are morally corrupt are uncomfortable sooner or later in the presence of good people. They do not have enough in common with them. (I did not call, and no one should conclude that I did, Mr. Teller a moral reprobate. I did not say it and if you think that I said it, it is just because you want to think evil, and not because I said it. I know nothing about his life and I could not and would not pass judgment upon him in that sense anyhow.) My point is that salvation is not merely a question of being transported from one place to another. It involves transformation of character.

Furthermore, God in order to be faithful to His promise to the faithful ones must keep sin out of heaven. If sin and sinners are kept out of heaven they must be kept together. This world would be a pretty good picture, of what things will finally be like for sinners if all the good were withdrawn from the world. If God did not keep sin and sinners-out of heaven, sinners would turn Heaven into a Hell and do to it what sin has done to this earth.

We also believe that God is just though, thank God, He has tempered His justice with mercy. Yet there are those who continue in rebellion to God, who refuse his pardon, who refuse to accept his mercy, who refuse to transform their characters. What else can be done with them but leave them to the fatal consequences of their choice?

There is a law of spiritual sowing and reaping. Now, notice, ladies and gentlemen, that my opponent believes in one sense in this very principle of sowing and reaping. He believes in capital punishment, for example, and so he believes in a principle of sowing and reaping. And in this particular case it would not be tempered by mercy. But let me say something terrible about his position: the criminal he condemns, while on the jury, he does not believe is responsible for what he has done. He does not believe the criminal has one bit of moral responsibility. He believes that we are mere matter in motion and that we cannot help doing what we do. Whatever we do is really the only thing we can do. Thus he does not really believe that the criminal has any responsibility for a thing he does, and yet he condemns him and holds him responsible for that crime.

Of course a great deal more could be said with reference to punishment, and the God of the Bible. But the exact *nature* of

God is not the issue. This issue is the *existence* of *God*. It is the only issue that is supposed to be debated here.

III. THE BODY OF MAN, ETC.

My friend has spoken about the body of man. He has called it a blotch, a mess. Man can makes better machines, he says. But man can *not* make anything like man. He can make things that can do many things; but we do not make any living, functioning, self-reproducing, self-repairing, growing being such as is man.

Ladies and gentlemen, the more perfect the machine that man can make, the greater demand for intelligence upon the part of man and the greater the proof of intelligence behind that machine. But my friend, Teller, takes the irrational position that intelligent man, who can make such wonderful machines, is a product of non-intelligent forces. The better the machine which man makes, the greater the cause you have to find for that great intelligence of man which can make that machine. In fact, my friend does not even believe that intelligence made the machine because ideas and thoughts are mere vibrations, the by-products of physical causes, and they do not have any real power. We are merely machines.

Machines, too, can go wrong but does that prove intelligence did not make them?

With reference to psychology, it is off the issue. I am willing to learn anything that an atheist can teach. I can learn things from them wherein they have really studied.

I did not use the illustration about legs reaching the ground. I used some things entirely different.

About the peanut: Dr. Carver, with supreme faith that God had something good in the peanut, has helped change the economy of the south and has gotten a multitude of things out of peanuts. I do not believe that there is a peanut factory in heaven. But I *do not* think that you are going to account for peanuts by mere matter in motion.

As to the argument that things just fit together, that you can take some paper and then clip it up and fit it back together. First of all *he* cut it. Second, intelligence rearranged it. But Teller's analogy to be anywhere like my argument would have to be as follows: To prove his point he would have to have a cyclone tear it into a thousand pieces and the next week another

cyclone to blow it all back together so that you could not tell it had been torn apart in the first place. So even his illustration, ladies and gentlemen, does not prove his argument.

With reference to the snow flake. I did not mention the snowflake one way or the other. It would be a lot better if he would debate me, rather than that opponent who seems to be haunting him from times past. If matter in motion is the only thing that exists I do not see how he can remember that debate, because every time one remembers he draws upon that particular arrangement of atoms in his brain and the more he remembers the fainter it would become! That is it should if materialism is right. But the more you remember the clearer it becomes.

Then Teller spoke about beauty in poetry. Well, the sense of beauty cannot be accounted for by materialism.

As for poetry and looking at the sun, I did not prove God's existence just from that. I proved that there is something different from a mere material stimulation; something mental that is not like this material thing. Then from mind I argued back to a supreme mind.

And now about the moth and the light: evidently some mechanisms can get out of their place. But even the moth serves a function. I do not know what it is. I do not know all about God's creation and God's purpose. Especially in a sin-cursed earth some things have gone wrong.

About the wasp: we see that Teller did not settle how the wasp got here in the first place. Or how it worked so many times the mechanism that is there. To say that it sometimes goes wrong is not to explain how it can go right; or how it could be there at all.

Concerning the intestine: some of the bacteria in it do good, some may get out of their place. As for purgatives, most people do not need as many as they take. Furthermore, men do call in the plumber.

About the airplane wings: according to Werner's *Ency.*, Vol. 9, the flying machine of the future, there can be no doubt, will be constructed on the plan of the flying animal, the insects, birds, or bats. As there are active and passive surfaces in the flying animal so there are or should be active and passive surfaces in the flying machine. Art should follow nature in this matter. In many things men are going to nature to study her to find out how to do things. Shall we say then that both the intelligence evident in the creation of nature and in man himself came from non-rational causes.

IV. TELLER'S MAN

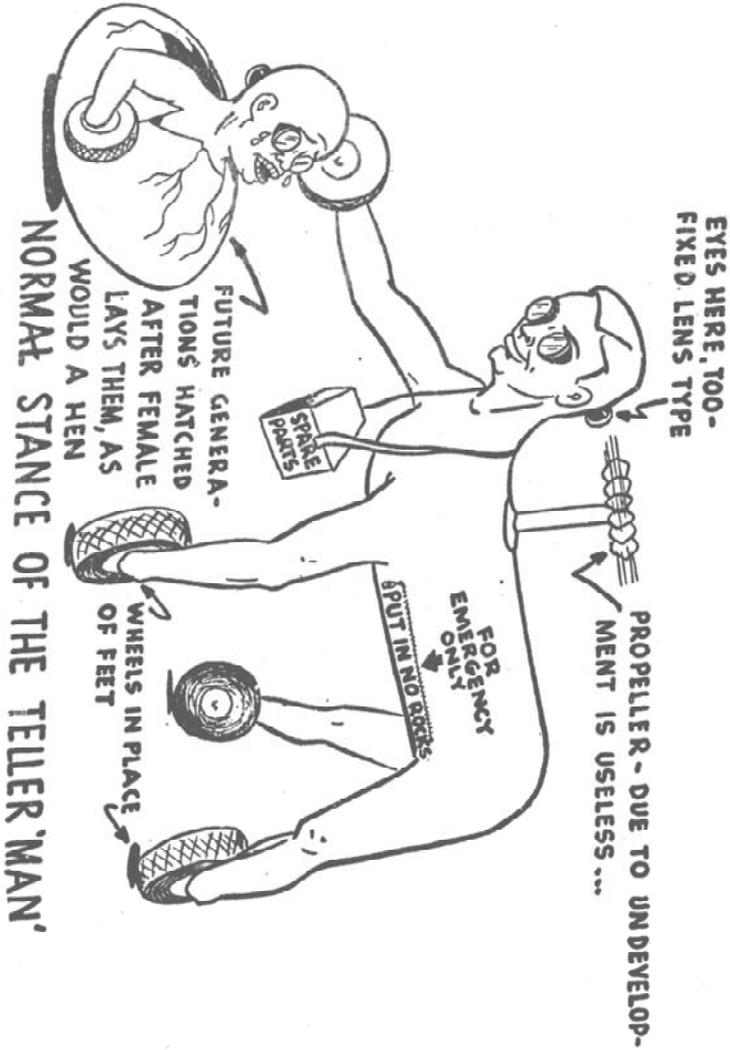
My opponent has suggested from time to time that God should have consulted him and he would have made some improvements in man. Now, I am taking some of the very improvements that he suggested and we shall see God's wisdom versus man's wisdom. First of all he would have people hatch out of eggs. Of course it might be that if mothers knew some of the things that were going to hatch out they might run off and leave some eggs!

Teller said we should be "hatched" with a full set of teeth. But a wonderful provision is made whereby unless something very abnormal takes place the child does not come into the world with a set of teeth. It is a good thing that a child does not come into life with a full set of teeth. If he did, every time you gave him a bottle he would bite the nipple off. It might be hard on him. Since his full set of teeth is there (in Teller's scheme), but the rest of his system is not constructed to digest a steak, he might eat one and it would be still harder on him!

Teller said that he would put man on all fours. He said that the upright position was not best. I am not going into the anatomy of the body but the spinal column, the neck and the pelvic bones, etc., all show that man was not made to go on all fours. But Teller would put wheels on man; of course that would take away from him his hands. He would be on all fours on wheels. Then he said he would put a zipper on man, but what hand would be there to open that zipper? He also said he would shorten the intestine tract; it is too long. It would follow that Teller's man would have a lean, hungry, pale look on his face because he can not keep his food long enough to get much from it. Teller would give man optical instruments, for eyes, that are perfectly set. Thus he would always have to turn his head from one side to the other to see things which were not directly ahead of him. He would put some in the back of man's head also.

Of course the creature Teller would make could not think, nor have consciousness, nor feel. He could neither love nor hate because he would be driven on by glandular secretions. Yes, ladies and gentlemen, it would have come from the slime, have a perfect right to live a slimy life, and be destined to the slime. As the poet put it, "If from the muck and slime came we, And to the muck and slime we must return, If then conquered we should be, Why then struggle, strive, and yearn?"

Ladies and gentlemen, a picture of man's wisdom versus God's. (Unveiling the drawing.) What a blotch Teller would make of the body! Here we have a propeller. Teller spoke of flying.



If man has evolved to this point we might as well evolve on like we want to. The propeller is not any good yet, of course, because it has not evolved to the place to where it can be useful. Man is on all fours and his eyes are fixed in his head. Of course, it is quite a strain on his neck because one change in the body of man would necessitate changes throughout the entire body to balance it. But Teller made no such provisions. And here we find he has some spare parts, but he is on wheels and when he needs his spare parts he can not unzip the pack. Also there is no one else with hands to put the spare parts on. This is to be the normal stance of man; on all fours, on wheels. The man that drew this for me, from the suggestions given us by Mr. Teller for improving man, said "that in view of the fact that this arrangement proves revolting I refrain from acknowledging any connection with the same." And yet ladies and gentlemen, these are some of Teller's definite changes. I am not misrepresenting him. He even went so far as to say that God should have consulted him. Yes, put on a zipper, and do this, that, and the other. So here is a picture of his improvement. And even when he gets it fixed up, it cannot think, act, feel. Why? Because it does not have any consciousness, it does not have any thought processes, it is mere matter in motion. But even this queer looking creature, if we actually found it, would demand some sort of creator, in order to account for it. It would involve some sort of intelligence to contrive it and put it together. But I am not saying that it is the same type of body that we find in the wonderful body of man. Let Teller account for the wonderful order that we do see there.

I know that this looks ridiculous. It is, ladies and gentlemen, but I can not examine his point without it being made ridiculous because it *is* ridiculous. I am not poking fun at him, I am just showing you what man's wisdom will do. His calling this wonderful body that we have a blotch! Why, ladies and gentlemen, the wonderful mechanism that Teller has had (the heart beating and the other functions taking place) for about 57 years; *and he uses it to blaspheme the name of the Creator who gave him that body.* He has intelligence and he can think and yet he is using it in order to try and suggest improvements in the body that God made. Even in the situation we find ourselves today (in an earth that has been cursed by sin; in which God is determined that we will not live forever; and that our illusion of self-sufficiency will be shattered); even in such a world and in such a condition we still find that the body is mechanism wonderful beyond all comparison.

And the most wonderful thing about it all is that we live and breathe and think, that we are conscious. We not only have ideas but we are aware that we have ideas.

There is no way, ladies and gentlemen, by any stretch of the imagination that you can get consciousness out of the mere vibration of matter; for the consciousness and the vibration are entirely different. There is no way that you can get an idea and thought out of mere matter, for matter is one thing and the thought is another. Unless we have consciousness and thought, unless we have intelligence and purpose and design within this body of ours, then this body can not do a single solitary thing, for a corpse (where the body has been severed from the spirit or from the soul) does not fulfill these functions. It obeys the universal law of entropy concerning material things, and it decays. Thank you.

* * *

Fourth Night-Teller's Second Speech

(Much Laughter)

Ladies and Gentlemen: I always pictured Dr. Bales as being a good revivalist, but I didn't know he had gone into vaudeville. I was invited to attend some sort of student burlesque show here at the college at 6:00 o'clock, but I missed seeing it.¹ I'll wager ours is a better performance.

Now, let us get down to serious matters. I haven't looked at the drawing closely, but I see it's a caricature.. We've all had a good laugh and I enjoy good humor. Without examining the picture now, we'll return to the human body. Dr. Bales thinks it's a wonderful mechanism. Let me tell you that almost from the beginning our machinery starts to run down. It isn't long after passing the period of youth that our hair begins to fall out, our skin wrinkles! You've all admired beautiful skins, haven't you? God should have an aesthetic side to Him. If He must make people ugly. He should start them that way and make them beautiful in the end. But how often is the process reversed. We start in reverse and arrive at wrinkled old age. Is there anything more pathetic than decrepit old age, with teeth falling out, bent back, and rheumatism? That's God's contribution to man. That's the wonderful machine that Dr. Bales talks about. And what do you

¹ There was a student performance but not, of course, any sore of burlesque show!

see in the store windows? Observe for yourselves. Every woman is looking around for "uplifts, face-lifts, permanent waves, hair dyes, and other artificial means to make her look more attractive. Women have to beautify themselves to conceal the defects of the human body.

Dr. Bales brought up the question of memory. Now, memory begins to fail us after a certain age. The average elderly individual is not so good, in his memory; that's why student days are more productive of learning to advantage, because the youthful student has a good memory. He retains what he learns to a greater extent than do persons in later life. Memory, like everything else in the body, goes down hill. You never find the body improving with age.

In a systematic layout, under intelligent guidance, the body should get better and finer, and it doesn't. Age acts in reverse by making the body worse in every way. Your bones become brittle, you get rheumatism, you get a bent back, your eye-sight goes back on you, and you have an ear-trumpet. That's God's method, that's God machine. Now, if that's the way an intelligent being turns us out—and it took millions of years to do it—he really should learn from me. Why, even that machine of mine shown in the drawing is better than the one that God is said to have created- Those wheels are all right; they are for rapid locomotion. I accept them. The spare parts, too. When your liver goes bad, you use a "spare." I don't know why the artist didn't put arms on this figure; I didn't say it couldn't have hands. There's nothing against a man's having hands. The eyesight—he could have telescopic eyes, why not? I congratulate my opponent for expressing so well pictorially the way I would have man. (Much laughter.)

This "For emergency only"—I don't quite see its significance. I suppose it can mean almost anything. The propeller idea is fine; you could get a lift out of that, you could go sailing through the air. And you could get around in faster time.

This feature is fantastic. I didn't suggest it;- I wasn't consulted on this particular item. But it's quite all right; I accept it. I think it's unique on the part of my opponent to picture my mechanical man more or less along the lines I suggested. It certainly would be useful to be speedier than we are. It would be splendid, too, if women did not have to give birth to children by carrying a child nine months and going through the sufferings of childbirth which, incidentally, is supposed to be for the "sin" of somebody committed years and years ago. Why should a woman have to undergo pain because a distant ancestor of hers

did something wrong—ate of the tree of knowledge. Is that fair? Eve, we are told, ate of the tree of knowledge. Incidentally, did you ever see knowledge growing on a tree? Well, you ought to have plenty of knowledge around here, because there are plenty of trees on the campus. But I don't think anybody is plucking knowledge from trees, and I don't believe anybody ever did.

My friend here talks about curing alcoholics by giving them the "God-punch," filling them up with the concept of God. Give them this God idea and they'll be free of alcoholism. Now, you cannot cure this addiction that way, because the cure is basically different than by appealing "spiritually" to the individual. It can't be done; and, if one knows anything about alcoholism, it's not curable by prayer or by appealing to the drunkard to accept God.

Not so many years ago Billy Sunday started his soul-saving campaigns. He was a nice specimen of a Christian, an abusive gutter-snipe, who went around the country because some of the church leaders thought that he would be useful for revival services. Every town has its drunkards, or "sinful" types addicted to over-drinking and gambling, and they thought Billy Sunday would correct things and set men straight by having them march down the ' sawdust trail." Billy Sunday, therefore, went through the country giving them sermons on hell-fire and damnation, and he stood oh chairs, and shouted, and he acted the monkey and the clown. Everybody had a good time under the tent.

What was the net result? Here are the church's own findings. It was a temporary emotionalism that induced these people to "hit the sawdust trail," and they were off liquor and off women and off everything else until Billy Sunday had gone, when they relapsed into their old ways of behavior because the "cure" was not fundamental. It was one of those fictitious "lifts." He took them on a spiritual spree; he got them religiously drunk. Did you know that you can be drunk on religion? Religion can intoxicate people just as much as alcohol.

If you ever visit New York for the purpose of looking up religion as a subject for study go to Father Divine's meetings. Father Divine is not fooling around. He's not a "representative" of God; he's God himself. He's a Negro, and he's conducting a big show there, with white people and Negroes flocking to his place. You should see some of the emotional types there. After a magnificent dinner, they go into all kinds of fantastic dances, and rollings, and shakings, and they throw napkins into the air.

They become hysterical. That is the way Dr. Bales expects to save you, by an appeal to emotionalism.

I noticed tonight a characteristic of my opponent's delivery. All through this discussion he has been pleading as a debater, but there is a tendency on his part, when he gets in fast motion, to become a revivalist. He would like to impress you with the idea that you are all sinners, that there is an angry God, and that you better come across and live the Christian life. He introduced the word "sin." What is "sinning"? According to the theologians, it's doing something that God does not like. Well, isn't God doing a lot of things that we don't like? Dr. Bales says that God has great patience. I'm sure that some of us haven't very much 'patience with God. We think that he should do things different than he does. And there are reasons why your patience is becoming exhausted.

I have here a statement from Dr. Steinmetz, one of the world's greatest inventors, and this is his opinion on the God idea:

"In the realm of science, all attempts to find any evidence of supernatural beings, of metaphysical conceptions, as God, immortality, infinite, etc., thus have failed and if we are honest we must confess that in science there exists no God, no immortality, no soul or mind as distinct from the body, but scientifically God and immortality are illogical conceptions. That is, science has inevitably to become atheistic."

My opponent, in affirming that there is a God, has failed miserably, I think, to give us a clear concept of what he means by God. He says there *is* a God. God *is*, he keeps repeating; God *is*, God *is!* I want to know *what* God is. I can get an idea of a deity only if you give me a picture of him, or trot him out and let me look at him. I'd like to see this fellow who is doing all the work. He is supposed to be material at times, because Moses saw him. You have a reference in the Bible which says that no man has seen God at any time, yet Moses saw his hind-parts. So, God has hind-parts. I won't bother about those, but I'd like to see from the *front*. I'd like to have direct evidence of this God by meeting him face to face.

If there is any argument for the non-existence of God, it's found in human history: if, as my opponent represents, there is a being of infinite goodness, of infinite power, and of eternal existence, what would be his reactions to the panoramic scene which we see unfolded in history? All its misery, all its tragedy, all its wars, all its horrors, all its cruelties, all its crimes! Wouldn't

he descend from the clouds and say "Listen, boys, wait a minute I started you going, but this is too much." Wouldn't he talk to us, wouldn't he do something? If he could chat with old Israelites, if he could instruct the ancient Jews, why can't he talk to us today? Why doesn't he come out of the stratosphere and say something?

We are told that Jesus is coming again. Well, he is a long time coming. Does he have to wait for things to get any worse before he shows up? What's holding him up? Is it the traffic? Hasn't he the green light? He knows the world is in trouble; why doesn't he return? He went up like a toy balloon. Why can't he come back the same way he went, and, in his descent, visit the earth and adjust things?

Believing in a beneficent being is on the same level as belief in Jack Frost. My opponent, if he were to see the pretty floral patterns of frost on a window pane, would probably tell us that God designed them. But some other individual could just as well say that Jack Frost did it. In fact, that's the common belief: Jack Frost paints the window panes. I'd like to debate you, Doctor, on the question of Jack Frost. It would be just as good as this discussion. Why not debate: "Does Jack Frost exist?" There's just as much evidence that window pane drawings are made by Jack Frost as that they are designed by God.

Now, I must still press home to my opponent the necessity of giving me a clear understanding of what he means by God. What does God look like? Has he a brain? All our thinking is associated with brains. We never experience thinking unless it's identifies with a brain and a nervous system. We never get thought without a brain. Now, God has brains; or has he? I don't know. Is God brainless? I want a conception of this deity before you ask us, Doctor, to accept God's existence. Has God a mouth? Can he talk? Has he teeth? Can he chew? How does he get around—or does he stay in one place? Is he everywhere at once? They say God is within us. In that case, he is in our intestinal tract. It's not a nice place for God to be, but he is there.

That's the pantheistic idea. They used to say, "There isn't an external God; God lives within us and is everywhere." That was the Spinoza theory.

I said that history offers the most dramatic, the most colorful argument against the existence of God. If we survey history we find human slavery practiced in recent times. I know I'm not supposed to speak of this in the South, but I sometimes do things I'm

not supposed to do. I'm going to refer to human slavery. I don't care whether I'm in the South or in the North, I consider slavery an outrage. Slavery is taught in the Bible; it's upheld in the Old Testament. God witnessed human bondage for centuries and he did nothing to stop it. He was up there in the sky, endorsing this infamy. He saw the black man endure misery as mere chattel. Finally, humane men came along and slavery was abolished. And who were the leaders in the abolition movement? Very largely the freethinkers. Free-thinkers were in the war against slavery. And who were on the side of slavery? The Bible believers who were quoting texts that the Negro was private property.

Almost every social improvement has been brought about by the rationalists. The cruel treatment of the insane, which resulted from the Christian idea that these victims were possessed by demons, was done away with by two men, both freethinkers. Read the biographies of Pinel and Diderot. One of them was the scholar who contributed liberally to the French Encyclopedia. Both were atheists, and they did much to abolish the barbaric methods employed in insane asylums such as Bedlam in England. You will find that progress has been made in spite of the church, in spite of religion.

If you really want something into which to put your teeth, I'll refer you to a book. It's a rather difficult work to get, but if you want a summary of ideas concerning the tremendous struggle between religion and science, you must read it. God is involved in this matter; you can't get away from it. It relates to the existence of God because the fight is around religion. Read the *History of the Warfare of Science with Theology in Christendom*, by Dr. Andrew Dixon White. It's in two volumes. Cornell University, as you know, was established by Ezra Cornell, a freethinker. Dr. Andrew Dixon White, a man of distinction, was for nearly twenty years president of Cornell University. He was a diplomat from this country to Germany and Russia. He occupied a high scholastic position. In his book you will find documentary evidence of the terrible conflict between science and religion, in which you have science on the one side and Harding College theology on the other. You have the conflict between scientists and those who are teaching conventional Christianity, Bible believing, spirituality, and similar things.

The real improvements have been made by the materialist. The materialists, seeing things as they are, have gone to work and tried to make this a better world. The world will be, better only

when we ourselves make it so. Give up the thought that you are going to get help from the skies. That's pipe-dreaming, mere day-dreaming. There's nothing up there to give you help. If you want to help humanity, help the unfortunate, help build a better civilization and a finer culture, you've got to do it yourselves, ladies and gentlemen, and don't depend upon a ghost!

* * *

Fourth Night-Bales' Third Speech

This is my closing speech. I shall not have opportunity to notice everything that he has mentioned in the last speech. In fact, most of my time will be taken up by a summary. Of course in his final speech Teller will introduce no new material, abiding by the laws of honorable debate.

With reference to Christianity and improvement: The very idea of improvement involves a moral standard for which atheism does not have room. My opponent cannot debate without setting forth principles inconsistent with atheism. If Mr. Schmidt of his organization is willing to go through with the proposition that they have submitted to me we shall have a debate on: Resolved that Christianity has not made a contribution to civilization. I am anxiously awaiting that debate.

We held no burlesque show here, of course.

Teller said that I made a caricature of his man. Then he turned right around and said that that was just the way he wanted it; the way he ordered it; the way he would have it; that I did it just right. This is proof that his man is a caricature of man. He admits it himself!

Now with reference to curing alcoholics: The *Alcoholics Anonymous* find that faith in God is not the only thing; but that it is one of the important things.

"Give us a picture of God." Well, ladies and gentlemen, I ask him to give me a picture of consciousness. Is he unconscious because he cannot produce a picture of consciousness? Give me a picture of an idea; he never had one, according to this "reasoning," because he can not give me a picture of it. Give me a picture of life; he can not give me a picture, therefore it does not exist. Give me a picture of mind or intelligence: he can not do it therefore it does not exist. These illustrations

show that we can not use the instruments of natural science and things that discern matter to discern that which is not material. And God is of the nature of spirit and not of matter.

I am perfectly willing to debate that Jack Frost exists as soon as Jack Frost produces the results that we see in this world; when he puts a living, breathing, thinking man in that window and creates a world. Then I shall affirm that Jack Frost exists.

Ladies and gentlemen, I do not like to say this, and I am saying it with all the kindness that I can. I say it because I believe I must. Monday afternoon my opponent agreed that the Bible did not properly enter into this discussion of the existence of God and he promised to leave it out. Yet, he has constantly brought it in either in an effort to get me off the issue or in order to shock someone in the audience by saying a large multitude of things which I have the information to answer, but which I do not have the time to answer, and which do not enter into the discussion. This may be a cultured and honorable thing (he has talked about that a lot and wondered about Arkansas having it. His opinion of Arkansas has improved) according to atheistic standards, but not according to any moral standards that I know of. And yet a fourth of his time, and I am generous in underestimating, has been spent upon the Bible.

Teller complained about Billy Sunday and judged him by moral standards and called him a gutter snipe. According to Teller's determinism he could not help being what he was.

I never claimed to be a debater. I almost said I do not have to be. It is not necessary. I did not claim to be one and I am not saying that I am, but I am willing to defend with the power God has given me God's truth.

I. TELLER'S FUNDAMENTAL ERRORS

Listen to the fundamental errors into which my opponent has fallen. *First*, he is off the real issue most of the time. The real issue is the existence of God and not the character of God. The real issue in this debate is not even whether God cares for us, but whether He exists, whether there is a Creator behind it all. The problem of evil is not the real issue in this debate.

My friend talks about things not being the product of intelligence. But ladies and gentlemen, a car that can go wrong still demands intelligence in order to account for it.

Teller spends much time in proving that man is mortal on this earth in so far as the body is concerned. But we believe that.

Teller now says that we must reject God because we can not get a definition of him. I have shown him that the first cause must be adequate to the effect, to the consequences, and he has not disproved it. I can not give a perfect definition of God, certainly not. I can not give a perfect definition of anything and neither can my opponent, for a perfect definition demands perfect knowledge. If I had perfect knowledge of life I could define it. If I had perfect knowledge of an idea, I could completely define it. If I had perfect knowledge of God I could define Him. But if I had a perfect understanding of God I would be as great as God, and I am not.

The issue is not the Bible, as I have already mentioned.

The issue is not whether God made everything as Teller would have done it; or whether or not God was always thinking about Teller's comfort or my comfort. The issue is: Is the ascribed cause adequate to the effect? It must be, in order to be a cause.

Teller concentrates on a few cases of disorder and overlooks the vast order round about us—if order did not exist man would not be upon this earth. I used many cases of order. I will go back to one case. How could an accident in evolution have produced simultaneously in the mother kangaroo that muscle which can squirt milk into the little kangaroo's mouth when it is not old enough to suckle, and at that time in the little kangaroo a muscle arrangement, so that when milk is put there like that it does not choke him. How could evolution get both of them there at the same time? If it developed gradually in each one they would have all died before the first kangaroo would have been able to raise any young. There are many cases of order. Many of his cases of disorder, turned out, when examined, to be cases of order. Teller attributes all to chance motions of matter. He gets order from disorder contrary to the principle of entropy.

Teller fails to bridge great gaps which we find. For example, the great gaps between the laws which explain the behavior of electrons and those which govern the atom. The gulf between the living and the non-living. The gap between the evolution of inorganic nature and the evolution of organic nature, even according to his own theory. The gap between the operation of intelligence and will and the operation of the laws of nature. The gap between that which has no consciousness and that which has consciousness. The gap between plants and animals. The gap between the non-moral and the moral.

Scientists, dealing with matter and its relationships, sometimes overlook the fact that something else exists. But if something else did not exist (namely mind, order, and consciousness,) you could not have a scientist, and you could not have anyone debating whether or not there was good or evil.

Teller points to the wonderful things that man can do and thinks that that shows that man is greater than whatever created man. And yet, ladies and gentlemen, the more you show man to be intelligent, the more you must demand an intelligent cause for man. If the machine is not produced without the intelligence of man how then can man be the product of non-intelligent causes?

Even a machine does not explain itself. If you find a machine working out certain orderly prescribed results you say that it takes intelligence to account for the machine. Thus you have not banished intelligence when you point to a machine.

The fact that my opponent is debating is inconsistent with his atheism. First of all a debate assumes that an audience has intelligence and has some freedom of thought. Otherwise why present arguments? A debate implies that people have some moral responsibility to accent the truth when they see it. Matter and motion can not have such. Materialism does not explain mind which plans purposes and reaches goals.

My friend did not answer the fact that he would have to be God to prove that God does not exist.

Teller could not prove that the universe is the result of disorderly causes; he therefore must by default acknowledge my position

Evolution does not get rid of God. It is merely a faith but it still would not get rid of God.

Life comes only from life. He did not meet' this argument.

I also proved that the universe was not created by the present laws. He did not touch it and he can not touch it in his closing speech, because he would have to bring in new materials in order to answer it. The principle of entropy says that things are going toward disorder. It cannot account for the present order. It took something supernatural, outside, of nature, to put that order in.

I also argued back to a first cause which must at least be adequate to such effects as consciousness; some freedom; the power of thought; life; moral capacity; spiritual capacity. There is also overwhelming order in nature. Without it we would not

be here. Order, ladies and gentlemen, is an indication of intelligence.

The same process of reasoning that my friend of the opposition takes in order to get away from the idea of God, Eternal Mind, Eternal Life, Eternal Spirit, that same approach will rule out all mind, all life, all consciousness, and all thought.

It is ridiculous, beyond any power of *rational thought*, that one should say that matter should have pushed Teller down here; put certain vibrations in his brain; pushed me up here with contrary vibrations in mine; and led me to affirm theism and him to affirm atheism. The fact that he is debating shows that he believes that ideas are not mere by-products—vibrations which are the result of the pushing around of matter in the brain. He believes that ideas have power; that they are not merely an illusion; but that they are powerful things. Otherwise why does he try to present ideas?

Teller says that we ought to become atheists. Thus he appeals to a moral standard. But if matter and motion are all that exists there is no moral standard.

He presented arguments. He asks us to weigh them. He asks us to *think*. But if we can think and weigh them, there is some freedom of will—and again atheism is gone.

Teller said do not be conformists. Yet he teaches that we can not do other than conform to nature for all is mere matter in motion. Ladies and gentlemen, when you stop and think it through, (get the debate and read back through where I have elaborated on these arguments) you will find the very fact that my opponent is debating; using his mind and consciousness; that he planned to come; that he devised means to do so; that he thought up arguments and that he presented arguments: these very facts prove that something besides matter exists. They prove that materialism is wrong. They call for something that is at least as great as mind, life, and consciousness to produce man.

And so then I submit, that my case is proved by the array of arguments that I have offered (most of which he did not even touch; did not even mention; his only argument being that we find some disorder and some evil; but most of them he utterly ignored, and cannot now examine because it would be contrary to the rules of honorable debating). What did he say about having to prove that there is no God by actually being a God? Why, nothing. What did he prove about life coming from non-life? Nothing!

Fourth Night-Teller's Third Speech

Well, I hope you are all happy. We are on the last lap of this discussion. We have had four nights and I would hate to think what might happen if it went on and on. You'd probably hear the broken record; it would get a little monotonous. Both sides have been heard, each side has presented its case. I think of you as the jury. The Doctor has submitted his material, I have submitted mine. Go home and think it over. Don't form any quick judgment. I'm not going to take my last ten minutes, as I've already submitted my material. I simply have this parting word.

First, I want to thank you all for your very courteous treatment of me while I have been in Searcy. I have enjoyed myself tremendously. This has been a holiday away from the office, and I feel very grateful to all of you. I'm going to tell you to go home after this and forget for a while all you've heard tonight. During the days and weeks to come think over the various points that have been raised. Use your logic, your intelligence; see where one side was weak, one side was strong. And I appeal to you: take it slowly. Increase your reading, go into studies that probably have been suggested here. Try to read really good books, such as *Psychology and Life*, and you'll make head-way.

We all have to keep on improving, and the best improvement is through the human brain. If we can cultivate understanding we can set aside all those worries that the revivalists, the evangelists, and the ministers try to inject into our life-blood. You have nothing to worry about; you have my assurance that you are not going to burn forever. That's a guarantee. You're laughing and I'm glad you're laughing, because I think none of you wants to burn forever. So with my assurance that you're not going to suffer everlastingly in spite of what the Bible says is the punishment for being bad, you ought to sleep better tonight. So I thank you all, and goodbye for some little time.

Atheism Versus Theism

"I was asked something about the economic problem of Communism. I answered, citing Dostoevsky: 'The problem of Communism is not an economic problem. The problem of Communism is the problem of atheism!'"¹

Man, as a being who knows, is aware of his own existence and of the existence of the universe. He seeks for an answer concerning his origin and that of the universe. The possible answers are not many. There are but two possibilities: It is either God or matter. There is no other alternative explanation. The agnostic's position is not an alternative explanation. It is but a denial that there is sufficient evidence on which to decide between these two alternatives.

THE ATHEISM OF COMMUNISM

The communist's position concerning origins is atheistic. He denies the existence of God and affirms instead the eternal existence of matter. He maintains that it is reasonable to believe that matter created life and that life's manifold forms, including man, have evolved without the operation of any force or forces beyond those which we see working in matter today.

Karl Marx was an atheist before he developed the philosophy of communism.² In 1841 in the preface to his doctor's dissertation on *The Difference between the Democritean and Epicurean Philosophies of Nature*, he cited "Hume and two biting Texts from the *Prometheus Bound* of Aeschylus, his life-long favorite:

'In simple words, I hate the pack of gods.'
Be sure of this, I would not change mv

¹ *Witness Whittaker Chambers*, New York: Random House, 1952, pp. 711-712.

² Otto Ruble, *Karl Marx*, New York: The Viking Press, 1928, pp. 26-33. John Spargo, *Karl Marx*, pp. 54-57. Franz Mehring, *Karl Marx*, New York: Humanities Press, Inc., pp. 43-59.

State of evil fortune for your servitude.
 Better to be the servant of this rock
 Than to be faithful boy to Father Zeus."³

Marx made atheism such an essential part of Marxism that it "cannot be conceived without atheism."⁴ In 1948 the Ten Commandments of communism were published for the Young Communist League. The league was told: "If you are not a convinced atheist, you cannot be a good Communist or a real Soviet citizen. Atheism is indissolubly bound to Communism. These two ideals are the pillars of the Soviet power."⁵ Chou En-lai said at the Bandung Conference in April 1955: "We Communists are atheists. . . ."⁶ The *Great Soviet Encyclopedia* contends that "atheism is the ideological weapon which enabled the 'progressive Social classes' to put an end to the social, economic and political conditions which had 'hindered the evolution of productive powers, science and culture.'"⁷

One must not conclude, however, that atheism has always been placed openly in the foreground,⁸ or that atheism has been a formal requirement for Party membership. William Z. Foster, the national chairman of the Communist Party in America, testified before the Fish Committee that atheism "is not laid down as a formal requirement for membership." But, Foster added, "a worker who will join the Communist Party, who understands the elementary principles of the Communist Party, must necessarily be in the process of liquidating his religious beliefs and, if he still has any lingerings when he joins the Party, he will soon get rid of them."⁹ When they are in power, so says the Party: "It is

³ Henry F. Mins, "Marx's Doctoral Dissertation," *Science and Society*, Winter 1948, p. 167.

⁴ Introduction to Lenin, *Religion*, New York: International Publishers, p. 6.

⁵ Quoted in Pedro Vazquez Lopez, *et. al.*, *A Christian's Handbook on Communism*, Revised Edition, New York: National Council of Churches, Apr. 1955, p. 31. A report from East Germany on Jan. 10, 1955, included a reference to the spreading of atheism as a part of the Party's Program. It was to be made the basis of public education.

⁶ *The Christian Century*, May 11, 1955, p. 573.

⁷ *Ibid.*, Jan. 18, 1956, p. 85.

⁸ Lenin, *Religion*, p. 10.

Quoted in *Investigation of Un-American Activities and Propaganda*, House Resolution 282, Joint Calendar No. 2, House Report No. 2, 1939, p. 18. See also Stalin, "Interview with American Labor Delegation," *Leninism Moscow: Co-operative Publishing Society of Foreign Workers in the U.S.S.R.*, 1934, Vol. I, pp. 386-387.

not to be tolerated that even the smallest manifestation of religiousness should be observed among Communists."¹⁰

God, to the communist, is the symbol of man's self-abnegation. God is also a reflection of man's enslavement to the economic system. Faith in God is therefore viewed as incompatible with the emancipation of humanity. Thus, the communists believe that the annihilation of religious consciousness is essential to man's complete mastery of the world. "On the basis of the inherent atheism of earthly self-reliance, Marx undertook his radical criticism of the existing order with the purpose of changing it."¹¹

This idea was first advanced in Marx's essay on "The Jewish Question." As summarized by Ruhle: "Man is for man the highest being, and as such—as individual and as a member of the species rolled into one—has to mount the throne of human history.

"The gods have been dethroned. Their existence has been shown to be the outcome of men's attempts to find compensation for their own defects and weaknesses. Ideas are but reflexions of the soul's anxiety."

"Mankind will only be able to pursue its emancipatory ascent successfully, when it becomes competent to make every individual willing and able to bring his subjective scheme of life into harmony with the objective evolutionary scheme of society—when the private individual is wholly merged in the member of the species.

"Only the objectively socialized and subjectively communalized human being will be able to effect the emancipation of mankind, thus becoming master of his own fate."¹²

This is an expression of the ancient desire of man to be the *solus* architect of his own fate, the undisputed master of his own life. The communist leader, however, does not explain that instead of submitting to God man must submit to the Gospel According to Karl Marx, surrender his individuality, become a

¹⁰ Zarya Vostoka, *Dawn of the East*, Jan. 27-28, 1949. Quoted in *Notes: Soviet Affairs*, March 28, 1956, p. 3.

¹¹ Karl Lowith, *Meaning in History*, Chicago: University of Chicago Press, p. 47. See Chang Meng-Chen, "Freedom of Religious Belief in China," *Peking Review*, July 21, 1959, p. 6.

¹² Otto Ruhle, *Karl Marx: His Life and Works*, pp. 66-67. See the "Jewish Question" in *Karl Marx, Selected Essays*, New York: International Publishers, 1926. It is not in later editions. The concept of freedom in the above quotation is identical with the Nazi concept of freedom.

communalized member of the beehive and let the Communist Party become the master of his fate!

Of course, not all atheists are communists, but all indoctrinated communists are atheists, interested in the spread of atheism,¹³ since only when people's hearts have been voided of faith in God is it possible to instill faith in Marxism. As before pointed out, Karl Marx was an atheist before he developed and accepted the communist philosophy of life. In his teens William Z. Foster said that his religious faith was shattered, and "all I needed for a completely materialist outlook on life were the works of Marx and Engels, which I was to read some years later."¹⁴ Some ex-communists, who have told of their conversion to communism, have testified that atheism prepared the way for their acceptance of communism. Charles David Blodgett told the House Un-American Activities Committee: "If young people don't have a firm foundation in God and church, they are Communist material. Once I didn't believe in God. I was an atheist . . . and the Communists got me, the way they get people who don't believe . . . who don't have faith."¹⁵

Since atheism is so essential to communism, Whittaker Chambers believed that the "crisis of the Western world exists to the degree in which it is indifferent to God."¹⁶

THE BELIEFS OF ATHEISM

The communist endeavors to discredit faith in God by insisting that in our scientific age we must walk by sight. This overlooks the fact that atheism involves faith. To deny the existence of God is not to be left without any beliefs. A system of denials often implies a system of affirmations. He who denies the existence of God is affirming that matter created our present world order and all life—including man and all his beliefs, both theistic and atheistic.

Atheism involves a number of articles of faith. These articles of faith are not only without adequate evidence but some of

¹³Lenin, *Religion*, p. 10.

¹⁴*The Twilight of World Capitalism*, New York: International Publishers, p. 158.

¹⁵Quoted in the *National Republic*, Jan. 1954, p. 27. This is similar to the testimony of Elizabeth Bentley, Professor Louis Budenz and Mrs. Budenz. Personal interviews.

¹⁶*Witness Whittaker Chambers*, p. 17. Notice that he said indifferent, and not just atheistic.

them are contrary to the available evidence. What does the communist have to believe in order to be an atheist?

(1) The Communist believes that *God does not exist*. To be sure, he cannot prove it. To *know* that God does not exist one would have to know everything and to be everywhere, for the thing which he did not know might prove God's existence. And the place where he was not might contain evidence of God's existence. He would have to know all the causes which have ever operated, for the one cause he did not know might be God. The person who possessed such characteristics would be a God himself! The atheist cannot reverse this argument and say that one must know all in order to have sufficient reason to believe in God. Several lines of evidence show that it is rational to accept God and irrational to reject God. We need to know at least some of the evidence, but we do not need to know everything.

Atheists sometimes find their own creed difficult to believe. Thus there are times when some communists are faced with doubts concerning their atheism. Some of them, after they have abandoned communism and atheism, have told us of these doubts.

(2) In fact, the communist finds atheism and materialism so hard to believe that he *has created his own god* and called it dialectical materialism. He regards Diamat¹⁷ as controlling history and directing the course of history to a predetermined and certain end. To Diamat he offers his service. Diamat will finally bring the leap from the world of necessity into the communist world of freedom. This god works incessantly and inevitably for freedom. There is a power, then, which works for the triumph of truth, justice and good will. The communist has taken matter and idealized it into a Creator who is *benevolent* and *irresistible*. He believes that there is a force or power at work in human history which is irresistibly working for the emancipation of humanity. The ideal society of communism, where each will work for the greatest advancement of others, will come because Diamat cannot be defeated. Diamat works for the advancement of man stage by stage in dialectical progress until the state of peace and plenty has been reached.

However, Diamat is an idol, a creation of man. As Reinhold

¹⁷ A contraction of Dialectical Materialism. Since, as applied to human history, it is called historical materialism, this god may also be called Hismat.

Niebuhr said of communism, "Its ostensible atheism is less significant than its idolatry. It worships a god who is the unqualified ally of one group in human society against all others."¹⁸

(3) The Communist scoffs at the idea of the Eternal God, but he must believe in *the eternal existence of matter*. Something has always existed for something now exists. If in the beginning there was nothing, there would not be anything now since out of nothing comes nothing. Therefore, everyone must accept the fact that something has always existed. The only issue is whether it is reasonable to believe that God (Spirit) created matter, life, and mind; or whether matter created mind, consciousness, and intelligence.

(4) The communists must believe in *the spontaneous generation of life from non-life*. Scientists agree that this earth could not always have supported life. Therefore life has not forever existed on this earth. But life is now here. If atheism is true, life must have come into existence by a natural process. And yet, the scientific study of nature has shown that life comes from life. The creation of life, by the non-living and from the non-living, would be a greater miracle than a creation by a living Creator. The communist believes in a Creator, but he accepts the idea of a dead Creator, matter, instead of the living Creator—God.

Communists live in the hope that scientists will some day create life. Even if this were done, it would not prove that the non-living created life in the remote past. All that it would prove is that an intelligent being, in this case man, can create life.

(5) The communist must believe that *the order found in nature and in man is the result of chance or of something labeled fate or law*, which is non-intelligent and non-conscious. Atheists usually concede that there is at least "apparent design" and order in nature. The atheist must attribute it to a cause which is less than intelligent. This is extremely difficult to believe when an individual really faces the issue; so the communists crowd it out of their minds. Whittaker Chambers has pointed out that the

¹⁸ *Faith and History*, New York: Charles Scribner's Sons, 1949, p. 211. See also his, *The Irony of American History*, New York: Charles Scribner's Sons, p. 173. Charles Lowry called communism "a new religion" in *Communism and Christ*. See also House Committee on Un-American Activities, *The Ideology of Freedom vs. The Ideology of Communism*, Washington, D. C.: Government Printing Office, 1958. Consultation with Charles Wesley Lowry, p. 9. Also his letter in the *New Leader*, Oct. 22, 1956, p. 30. Martin D'Arcy viewed it as a "faith," *Communism and Christianity*, Penguin Books, 1956.

first crack in his communist armor came when, as he was looking at his little daughter in her high chair, he thought of her "intricate, perfect ears." "The thought passed through my mind: 'No, those ears were not created by any chance coming together of atoms in nature [the communist view]. They would have been created only by immense design.'" He crowded the thought out of his mind, although he never completely forgot it, for if he had completed the thought he would have concluded: "Design pre-supposes God."¹⁹

(6) The communist must believe that *consciousness arose out of a peculiar combination of non-conscious matter*. The creator of consciousness was non-conscious.

(7) The communist must believe that *man is a matter-machine without any power of choice*, and thus *without any real responsibility* for his conduct. How could matter, regardless of how refined it might be, decide between alternatives and be responsible for that decision? This doctrine of non-responsibility is further implied in the communist doctrines of economic determinism, class and ideology. The verdict we pass on morons, that they are not responsible, is passed by the communist on all mankind, including themselves. And yet, they write and act as if men have some responsibility, and thus accountability, for their conduct.

(8) The communist must believe that *non-moral matter created man with a moral sensitivity*—a. sense of obligation or duty.

(9) The communist must believe that *mind and the power of rational thought were created by the non-rational, by that which is mindless*.

(10) The atheist must believe, in order to be consistent, that *all thought is irrational*, for it is all assumed to be *the inevitable by-product of irrational causes*. According to atheism, mental processes are wholly determined by the physical movement of atoms in the brain. As Woolsey Teller, a non-communist atheist, put it: Thought is "a form of vibration and sensation in the nerve fibers of the brain and of the nervous system . . . thought is matter in motion."—Marx said that matter thinks. This movement of matter is physically determined; there is nothing rational about it because physical forces cannot make rational decisions

¹⁸ Witness Whittaker Chambers, p. 16.

¹⁹ *The Atheism of Astronomy*, pp. 10-11.

between alternatives. One thinks he way that he does because matter makes matter move in a certain way in his brain. The self-styled "freethinker" is not really a free thinker, for all is determined, and nothing is free. There is, therefore, nothing rational about the arguments of the atheist against the believing in God. They are just the result of the inevitable vibrations of his brain! How strange it is that those who claim the name "rationalist" and maintain that theists are not rational, should end up with a position which implies that all thought is irrational.²¹ To say "I think" no more implies rationality than to say "I itch." Both terms, according to materialism, describe physical sensations, since only the physical exists.

If this is the whole story about reasoning and thought, there is no way of knowing whether our thoughts actually represent reality. We cannot know whether or not they are true. Thus the communists could never know that Marxism is true, since Marxism is a system of thought arrived at by physical vibrations caused by internal and external material pressures. This is disastrous to their philosophy for, as Bradley put it, "no theory can be true which is inconsistent with the possibility of our knowing it to be true."²²

(11) In order to be consistent the communists must believe that *their own philosophy is but the reflection of an irrational world*. For they maintain with Marx that the process of thinking is "nothing else than the material world reflected by the human mind, and translated into forms of thought."²³ In the "material world" Marx included the economic system as a basic element. This economic system he regarded as irrational since it supposedly had socialization of production without socialization of ownership. If the economic system is decisive²⁴ in shaping man's

²¹ C. S. Lewis, *Miracles: A Preliminary Inquiry*, chapters on "Naturalism."

²² As quoted in James B. Pratt, *Matter and Spirit*, p. 21.

²³ *Capital*, New York: Modern Library, p. 25.

²⁴ *Ibid.*, pp. 12-15. "But don't wrangle with us so long as you apply, to our intended abolition of bourgeois property, the standard of your bourgeois notions of freedom, culture, law, etc. Your very ideas are but the outgrowth of the conditions of your bourgeois production and bourgeois property just as your jurisprudence is but the will of your class made into a law for all, a will, whose essential character and direction are determined by the economical conditions of existence of your class" (House Committee on Un-American Activities, *The Communist Conspiracy*, Part I, Section A, P. 60). The quotation is from their reprint of the *Communist Manifesto*. This quotation is on pages 78-79 of *Manifesto of the Communist Party*,

thinking, it follows that the forms of thought, which are but the reflection and translation of an irrational economic world, are irrational forms of thought. This means that Marx's own philosophy which includes the dialectic, atheistic, economic determinism and his vision of future communism are all an irrational reflection of an irrational world. For, according to his position, he lived in an irrational society. The communist position is therefore so contradictory that he must deny his basic position concerning thought in order to maintain that his own thoughts, his own condemnation of the existing order and his own justification of the coming order, are true. *Reality is such that when man sets out to deny God, man ends up accepting concepts which deny man's own rationality.* His own logic demands that he deny that his own arguments are rational.

The communist cannot reply that his thoughts, in contrast with the capitalistic thoughts, are not a reflection of the irrational world, but a reflection of the better world to come, i.e. the future world of communism. *For how can his thoughts, which are but a reflection of the material world which surrounds him, transcend this material world and reflect a world which does not yet exist?* Since the communist world order is not in existence, it could not be reflected in anyone's mind today, nor could it have been reflected in Karl Marx's mind in his day.

It must also be kept in mind that the thoughts of Marx and of Engels could not have been created by the class interests of the working class for they were brought up in a capitalistic environment. Engel's father was a wealthy industrialist. Karl Marx did not earn his living with the toiling masses of the world. He was a writer who usually was supported by others, chiefly by Engels. How, then, could their minds have reflected a system of thought contrary to the interest of their class!

So the communist is faced with a dilemma. If he maintains that Marx and Engels, and others, could have forms of thought which were not the reflection of the material world, he has denied the Marxist interpretation of thought. If he maintains that their interpretation of thought is correct, he is forced to deny the validity of their own philosophy and the arguments which are used to support it. For he has no grounds on which to maintain that his thinking is exempt from his characterization of the nature of thought itself.

(12) The communist also believes that *he and the Party are the agents which have been ordained by Diamat to be the bearers of the great hope of mankind.* The communists are the tools

of history, and their toil and sacrifices will help usher in the glorious age!

(13) Communists believe that *the Party is the official spokesman for Diamat*, and that its voice is the voice of "truth," the "truth" for the times.

These, then, are some of the articles of faith in the creed of the atheistic communists. It is amazing what they believe while they refuse to believe in God. It is strange how those who hold to such articles of faith can accuse the theists of being credulous.²⁵

It is as unreasonable to believe in Marxism as it is to believe in atheism, for the communists agree that "Marxism cannot be conceived without atheism."²⁶

The communist cannot deny that faith in God exists. How, then, do communists account for the origin of the idea of God?

ORIGIN OF THE IDEA OF GOD AND RELIGION

In writing on the question of the origin of faith in God, Engels took the position, common to his day, that it resulted from fallacious reasoning on natural phenomena. Said he, "the first gods arose through the personification of natural forces . . . out of the many more or less limited and mutually limiting gods there arose in the minds of men the idea of the one exclusive god of the monotheistic religions."²⁷ This concept of the origin of religion is still held by communists.²⁸

It may even be said that Engels did not think that fallacious reasoning led man to believe in the supernatural, but that belief in God was simply a reflection in the mind of men. "All religion, however, is nothing but the fantastic reflection in men's minds of those external forces which control their daily life, a

²⁵ For a further discussion of atheism and of some of its fruits see James D. Bales, *Atheism's Faith and Fruits*, Boston, Mass.: W. A. Wilde Company, 1951.

²⁶ Introduction to Lenin, *Religion*, p. 6.

²⁷ *Ludwig Feuerbach*, New York: International Publishers, 1941, p. 20. Pages 30-31 in the earlier edition. This is the book concerning which Engels said: "About religion I have said the most necessary things in the last section of Feuerbach" (*Selected Correspondence*, New York: International Publishers, 1936, p. 484).

²⁸ Marcel Cachin, *Science and Religion*, New York: International Publishers, 1946, p. 18. Chang Meng-Chen, "Freedom of Religious Belief in China," *Peking Review*, July 21, 1959, p. 6.

reflection in which the terrestrial forces assume the form of supernatural forces. In the beginning of history it was the forces of nature which were at first so reflected."²⁹

If this is the correct explanation of the origin of religion, its origin can not be explained by the economic system. Therefore, the economic interpretation of history can not account for religion which has been one of the most powerful forces in history. To this Engels agreed: "It would surely be pedantic to try and find economic causes for all this primitive nonsense."³⁰ It was not until after religion had arisen as a reflection of natural forces in men's mind, that "side by side with the forces of Nature, social forces begin to be active; forces which present themselves to man as equally extraneous and at first equally inexplicable, dominating them with the same apparent necessity as the forces of Nature themselves."³¹

This assumes, of course, that man could not really reason, but was just a dumb brute who had no understanding of nature or of his economic system. One can assume this if he so desires, but a mere assumption is a long way from proof.

After religion arose, so the communist believes, it changed with the changing economic systems since it is supposed to reflect the economic system.

This does not fit in with the facts. There was, for example, no economic revolution preceding the appearance of Christianity. Furthermore, the evidence shows that "the same form of production is associated with different types of religion, the same type of religion is associated with different forms of production, and that a change in religion can occur without benefit of an antecedent change in the productive order."³²

Engels believed that religion originated as the result of two related concepts: (1) the doctrine of *uniformity* which demanded that everything must have a natural explanation, and (2) the doctrine of *evolution* which included the natural explanation and also maintained that the lowest form of religion came first, and the highest form last. Therefore, since the origin of the idea of God *had* to be explained naturally, the grossest forms

²⁹Herr Eugen Dühring's *Revolution in Science (Anti-Dühring)*, New York: International Publishers, n.d., p. 353. Printed in the USSR.

³⁰ Dona Torr, Translator, *Marx-Engels Selected Correspondence*, p. 482.

³¹ *Anti-Dühring*, pp. 353-354.

³² M. M. Bober, *Karl Marx's Interpretation of History*, Cambridge: Harvard University Press, 1948, pp. 355-356.

of religion must have come first, and the highest form, faith in one God, must have come last. Having assumed these things, an individual can find all manner of religious beliefs which he can arbitrarily arrange in an evolutionary order, beginning with the lowest form and proceeding to the highest form. One can assign a belief to a late or to an early period according to where he thinks that it should fit in the evolutionary framework. But it would be just as simple to take the highest form and place it first and arrange the others in descending order, as it is to arrange them in an ascending order. And, unless one is willing to go by the evidence, one is as justified in doing the one arbitrarily as he is the other. The question is: *Which order is favored by the evidence.*³³

In a study of the origin and history of religion one must distinguish between a possible psychological explanation as to how an idea may have arisen, and the historical evidence as to the actual origin and history of the idea.³⁴

Some have claimed that the animism which exists among some "primitive" people today is the oldest form of religion. But a belief in a Supreme Being is found among animists.³⁵ Warneck said: "how could these religions, which represent the initial state of development, derive any nourishment in that initial stage from the idea of a Supreme God, who should be the last member of a long series of acquisitions, laboriously won? Why does the Indonesian, when in great distress, flee to God, of whom, according to that hypothesis, he should have no knowledge whatever? How is it that, in taking an oath, the Animist

³³ After speaking of the nature-mythologist view of the origin and history of religion, the anthropologist Schmidt, said: "All the other theories, however, came into being after the outbreak of Materialism and Darwinism, and their work was all done on the lines of Evolutionist natural science. This puts all that is low and simple at the beginning, all that is higher and of worth being regarded only as the product of a longer or shorter process of development. This they found easier to do, because the principal objects of their study were savages who had not yet made the acquaintance of any sort of writing on which to date the monuments of their culture. Hence the question of earlier and later, of the chronological sequence of religions and forms of religion, which must be settled before the causal interaction of the facts can be exactly determined, could be answered only by help of the Evolutionist method, which is really no method at all, as we shall see later" (Wilhelm Schmidt, *Origin and Growth of Religion*, pp. 13-14).

³⁴ *Ibid.*, p. 5.

³⁵ For example, the Miao tribe in Northern Thailand.

appeals to God? That is forestalling his development indeed. It is a fact that he has the idea of God: but the fact that this idea is but dimly apprehended proves that we are not dealing with a new idea, victoriously opening up new paths. . . . The Animism of today gives us the impression of a religion that carries the marks of a fall, of a worship no longer understood, and become an empty ceremony."³⁶

According to the Apostle Paul devolution, not spontaneous evolution, has marked the religious history of mankind whenever men turned from a knowledge of the Creator. Sir William M. Ramsay, an archaeologist who started out as a devotee of the hypothesis of evolution in religion, asked: "Who is right, Paul or the moderns? For my own part, I confess that my experience and reading show nothing to confirm the modern assumptions in religious history, and a great deal to confirm Paul. Wherever evidence exists, with the rarest exceptions, the history of religion among men is a history of degeneration; and the development of a few Western nations in invention and in civilization during recent centuries should not blind us to the fact that among the vast majority of the nations the history of manners and civilization is a story of degeneration."³⁷

The tendency in a religion is not toward automatic purification and refinement from within, but in the direction of falling from a higher standard to a lower. The history of Israel, as set forth in the Old Testament, embraces numerous apostasies.

Most critics of Christianity will at least acknowledge that Christianity in its purest form existed in the beginning of Christianity. Much of the criticism of the faults found in Christianity is in reality criticism of departures from Christianity. The simplicity of the worship and life of the early Christians became corrupted as time went on. In the case of Christianity the highest and purest form came first, not last.

"The very fact that all other nations (besides the Jews) have travelled along a line leading to polytheism, and that all have failed to get beyond it, constitutes a presumption that monotheism is not to be reached by the route that leads to polytheism. If it is possible to reach monotheism via polytheism, it is at

³⁶ J. Warneck, *The Living Forces of the Gospel*. London: Oliphant, Anderson and Ferrier, 1909, p. 99. Quoted by J. N. D. Anderson, *The World's Religions*, London: The Inter-Varsity Fellowship, 1950, p. 23.

³⁷ *The Cities of St. Paul*, Grand Rapids, Michigan: Baker Book House, 1949, p. 17. See also Romans, Chapter 1.

least a remarkable fact that of all the peoples of the World, no single one is known to have done so."³⁸

Where is the example of a people spontaneously, without an influence from outside of their culture, laying aside polytheism for monotheism?³⁹

When men are not hypnotized by the hypothesis of evolution, which demands that the historical facts be arranged in such a way as to fit the hypothesis, they realize that the further back into any culture they go the fewer gods that culture has. In his *The Religion of Ancient Egypt*, William W. F. Petrie wrote: "What we actually find is the contrary of this, monotheism is the first state traceable in theology. . . . Wherever we can trace back polytheism to its earliest stages we find that it results from combinations of monotheism. In Egypt even Osiris, Isis, and Horus (so familiar as a triad) are found at first as separate units in different places. . . ." ⁴⁰ Professor Stephen Langdon set forth the evidence from the sources which convinced him that in the Semitic and Sumerian religion "monotheism preceded polytheism and belief in good and evil spirits."⁴¹

Modern research has been such that a recent Gifford Lecturer can speak of the utter demolition of "the simple evolutionary theory of Comte and Tylor." With but a few exceptions, the evidences show that "the most primitive levels of human life which we can reach by the soundest ethnological methods reveal a belief in one supreme deity or High God. . . ." ⁴²

After examination of some of the evidence, J. R. Swanton, then of the Bureau of American Ethnology of the Smithsonian Institution, wrote: "My conclusions . . . are, in brief, (a) that the deduction of religious concepts or emotions from natural phenomena, however closely it may be found associated, is unproved and improbable; (b) that the history of religion has probably consisted in the differentiation of various elements

³⁸ Frank Byron Jevons, *An Introduction to the History of Religion*, London: Methuen and Company, 1902, p. 388.

³⁹ Sir William Dawson, *Modern Science in Bible Lands*, pp. 31-32.

⁴⁰ *The Religion of Ancient Egypt*, London: Archibald Constable and Company, Ltd., 1906, pp. 3-4.

⁴¹ *Semitic Mythology*, Boston: Marshall Jones Company, 1931, pp. xviii, 91, 93. See also his article on "Monotheism as the Predecessor of Polytheism in Sumerian Religion," reprinted in Sir Charles Marston, *The Bible Comes Alive*, pp. 295 ff.

⁴² Herbert H. Farmer, *Revelation and Religion*, New York: Harper and Brothers, 1954, p. 106.

from an original complex and the varying stress placed upon these elements rather than the successive introduction of new elements."⁴³

Let us now consider some of the reasons for faith in the existence of the Supreme Being.

IS FAITH IN GOD REASONABLE?

It is realized, of course, that God's existence cannot be proved as one can prove a proposition in mathematics. However, one cannot prove mathematically the reality of ideas. And surely the communists have never mathematically established the truth of communism.

The existence of God cannot be demonstrated as can a truth in the realm of physical science. One cannot go into the laboratory, perform an experiment, and prove God's existence; but the same is true of many facts of reality. What laboratory experiment can prove a fact of history? How could one demonstrate, either mathematically, or scientifically by an experiment, the fact that Marx once lived? Or that he wrote the book called *Capital*? The communists have not attempted to give us a laboratory demonstration of the truth or historical materialism, nor has it been scientifically established that communism will ultimately be achieved. The truth of falsity of these things must be established by some other method of approach than by the mathematical or laboratory approach.

The fact that we cannot pick up ideas with forceps is not an

⁴³ "Three Factors in Primitive Religion," *American Anthropologist*, Vol. XXVI, p. 365. Quoted in Charles J. McFadden, *The Philosophy of Communism*, New York: Benziger Bros., Inc., 1939, p. 278. For additional material see Andrews Lang, *The Making of Religion*, New York: Longmans, Green and Company, 1898. Wilhelm Schmidt, *High Gods in North America*. Samuel M. Zwemer, "The Origin of Religion By Evolution or by Revelation," *Transactions of the Victoria Institute*, 1935. Also his book on *The Origin of Religion*, Nashville, Tennessee: Cokesbury Press, 1935. Professor Fairbairn, *Studies in the Philosophy of Religion*, p. 22. James Orr, *The Problem of the Old Testament*, p. 496. P. Schebesta, *Revisiting My Pygmy Hosts*, London, 1933. R. P. Trilles, *Les Pygmées de la forêt Equatoriale*, Paris, 1932. M. Vanoverbergh, "Negritos of Northern Luzon," *Anthropos*, Vol. XX, 1925, p. 436; Vol. XXV, 1930, pp. 550-551. Wilhelm Schmidt, *Der Ursprung der Gottesidee*, Munster, 6 Vols., 1925-1935. G. Murdock, *Our Primitive Contemporaries*, 1934, pp. 103, 185-256, 269. R. Lowie, *Primitive Religion*, 1924. W. F. Albright, *The Archaeology of Palestine*, p. 19.

argument against their reality or power. The fact that God cannot be placed under a microscope or seen through a telescope might be an argument against His materiality, but not against the reality of His existence as Spirit.

Faith is involved, but in light of the evidence, which we shall briefly outline, are we not justified in believing in God? The reader, of course, must make his own decision. We do not live in a mechanical or completely material world; therefore decisions cannot be forced on a person.

If God exists, Marxism is false, for then "a spiritual and not only an economic power" exists.¹⁴ The ancient warrior wished that all his enemies had but one neck, since with one blow all of them could be dispatched. Communism is such an enemy. Once atheism, the neck of communism, is severed, communism as we know it today, expires. To this agree the communists—that without atheism there is no genuine Marxism.

We are faced with the existence of mind and of matter. Is it reasonable to explain all in terms of matter? Man, with his marvelous characteristics, is surely a better key to ultimate reality than is an atom. Why explain the highest (man) simply in terms of the lowest (matter)?

As has been stated, there are only two alternatives—either God or matter is the creator. Agnosticism is not an alternative explanation, but rather a denial that man can decide between the alternatives. Agnosticism would be defensible only if the atheistic explanation were as reasonable as the theistic explanation. But it has been shown that to accept atheism one must accept articles of faith, some of which are without evidence and some of which are contrary to evidence. On the other hand, a reasonable case can be made for theism.

FAITH IN GOD IS NATURAL

Faith in some Supreme Being is natural to man. This is shown by several lines of evidence.

First, faith in some Supreme Being or a supernatural being is universal both geographically and historically.⁴⁵

⁴⁴ Berdyaev as quoted in Matthew Spinka, *Nicholas Berdyaev: Captive of Freedom*, Philadelphia: The Westminster Press, 1950, p. 18.

⁴⁵ J. N. D. Anderson, *The World's Religions*, Grand Rapids: William B. Eerdmans; Wilhelm Schmidt, *The Origin and Growth of Religion*; S. M. Zwemer, *The Origin of Religion*.

Second, it is natural for children to believe in God; as seen even in some cases in which there has been an effort to rear children without faith in God. Piaget and Clavier, as a result of their studies of children, concluded that the child inherently gives the facts of the world a theistic interpretation. When given a chance the child will naturally and almost inevitably arrive at a conception of God. Selbie in his *Psychology of Religion*, James Pratt, Jung and others have also set forth evidence which in one way or another helps sustain this position.⁴⁶

The communists have discovered that even in the generation which they have reared in atheism, there are still millions who have faith in God.

Third, the experience of men who face danger and solitude helps show how natural faith in God is. On such occasions some men who did not normally give much thought to matters of religion seem, nevertheless, to have become aware of spiritual realities. This, for example, has been the experience of some of the polar explorers.⁴⁷ It has also been said, "There are no atheists in the foxholes of Bataan."

Fourth, it is so natural for man to believe in God, that when he denies the existence of the true God, he creates false gods. Diamat is one of the communist's gods. Then, too, the communists now admit, there were some who deified Stalin. In his speech before the Twentieth Party Congress in Moscow, February 25, 1956, Khrushchev said that for years the belief had been cultivated among them that Stalin was "a superman possessing supernatural characteristics akin to those of a god."⁴⁸

Ekaterina Furtseva, one of the eight secretaries of the Central Committee of the Communist Party of the Soviet Union, thought that during the war the "deification of Stalin was understandable because Soviet soldiers went into battle with words for the Fatherland and for Stalin. This inspired their valor but raised the personality of Stalin too high. After the war, conditions were very hard and the deification of Stalin then, too, may have helped to inspire people."⁴⁹

⁴⁶ Thomas Hywel Hughes, *Psychology and Religious Origins*, New York: Charles Scribner's Sons, 1937, pp. 118-148.

⁴⁷ James D. Bales, *The Thinking Christian*, Vol. I, No. 1, p. 36. Robert E. D. Clark, *Science and Religion*; James D. Bales, "Alone in the Antarctic," *Science and Religion*, 1949, p. 68.

⁴⁸ *U.S. News and World Report*, June 15, 1956, p. 34.

⁴⁹ Tabitha Petran, "High Soviet Official in Frank Interview: Denies

This illustrates man's need for something beyond himself in which to believe. It shows that he can find inspiration by looking to something above him, or that which he conceives to be above him. This need of man is not eliminated by the affirmation of atheism. Man is so incurably religious that when he loses faith in the true God he turns to false gods. *Man is theotropic*. This characteristic of man, when reflected on, indicates something about man which cannot be explained by materialism. Man's religious and spiritual needs point to something in his nature which is beyond the material.

The deification of Stalin also helps us to see that religious needs are not eliminated by a change in an economic system. The communists claim to have established socialism in Russia, and yet their "new men" included communists, who, although nurtured in the communist philosophy, still needed faith in some kind of god.

The communist has not squarely faced the issues which are raised by the question: *How is it possible for man, with his hunger for a god, to be wholly material and economic?* They have refused to think deeply on the question.

What must be the nature of the universe which has so overwhelmingly led men to believe in some god? Can it be that a universe which is wholly material, and utterly devoid of God and the spiritual, has continually and persistently worked out in the mind of man faith in some kind of supreme Being?

THE FIRST CAUSE

Some of the arguments for the existence of God are based on the concept of a First Cause. Said Herbert Spencer, "We cannot think at all about the impressions which the external world produces on us, without thinking of them as caused; and we cannot carry out an inquiry concerning their causation, without inevitably committing ourselves to the hypothesis of a First Cause."⁵⁰ "Every science except the purely mathematical sciences, affirms the truth of the law of causation. Every student of

Jewish Curbs," *National Guardian*, June 25, 1956, p. 4. This is a pro-Communist paper.

⁵⁰ *First Principles*, New York: D. Appleton and Co., 1897, p. 38. It should be kept in mind that Spencer was an agnostic. This makes his admission all the more significant. See page 51 of the edition published by the De Witt Revolving Fund, Inc., New York, 1958.

logic knows that this is the ultimate canon of the sciences."⁵¹ To deny the reality of the law of causation is to deny the possibility of science, for science endeavors to trace cause and effect. For example, the science of medicine would be impossible if there were no causes of ill health.

Scientists today are more and more coming to the concept of a First Cause, a beginning, a prime cause, as a result of a study of some of the facts of astronomy and physics which point to an origin of the universe which represents "a discontinuity in, perhaps a beginning of, the action of the laws of nature as we know them."⁵² This will be considered later in connection with the fact of entropy.

But why must one postulate a First Uncaused Causer "As Aristotle pointed out in his *Metaphysics* (Book II, Chapter 2), 'If there is no first cause, there is not a cause at all.' If there is no first cause, then all things are effects [intermediates], but this denies the law of causation which is the basis of science. Or if there is no first cause, all things form an endless series; but this only multiplies the difficulty, and is contrary to both science and philosophy. Aristotle well said: 'the cause of things are neither an infinite series nor indefinitely various in kind'... in the realm of existence we must not be condemned forever to the mere treadmill exercise of an indefinite regress; but must come ultimately to the reality that is there, so to speak, in its own right, the conception of which does not need the conception of something else upon which it is dependent."⁵³

The first Cause in order to be the First Cause had to be adequate to bring about the results or effects which we see. Experience teaches that a thing or power does not give rise to something of which there is no trace or cause in the originating power. Life comes from life; energy from something that possesses energy at least potentially. Energy is not spontaneously generated from nothing. How, then, can it be considered scientific to believe that man arose from matter, which had no trace of consciousness, intelligence or morality?

⁵¹W. T. Stace, *Critical History of Greek Philosophy*, New York: St. Martin's Press, Inc., p. 6.

⁵²Henry Magenau, "Is There Purpose in the Universe," *American Scientist*, Vol. 38, No. 1 Jan. 1950, p. 172. See also the July 1949 article *Numerology*.

⁵³G. D. Hicks, *The Philosophical Basis of Theism*, p. 165. Quoted from a manuscript of Dr. Pat Hardeman.

The First Cause by definition must have been an originating cause. This cause must have been capable of initiating action without first being acted on by some outside force. Our own experience shows that a living creature can be an originating cause. Man with his power of rational thought can originate action without waiting until he is acted upon by some physical force. *We know of no originating cause which is inanimate.* Why, then, should one consider it scientific to believe that the First Cause, the originating Cause, was impersonal and inanimate.⁵⁴

Let us now look at some of the realities in life which indicate that it is unreasonable to view matter as the First Cause.

LIFE FROM LIFE

Scientists agree that life has not always existed on this earth. The condition of earth was once such that life was impossible. Life, however, is now here. How did it originate?

It has been suggested by some that life came to this earth from another planet on a speck of dust or on a meteor. This supposition does not solve the question of the origin of life; it simply places the problem on some other planet.⁵⁵

Concerning the origin of life, there are only two possibilities. Life was created by a supernatural power or by a natural power. The only question is: Who is the creator of life, the living God or dead matter?

In spite of all the technical words which may be used to describe an hypothesis of the origin of life in natural terms, all the naturalistic explanations boil down to one form or another of the spontaneous generation of life from the non-living and by the non-living. The communists answer "yes" to the question; "Is living substance created and maintained as a result of the unaided action of matter on matter?"⁵⁶ The communist can-

⁵⁴ Ambrose Fleming, *The Origin of Mankind*, London: Marshall, Morgan and Scott, Ltd., p. 3. He was president of the Television Society, and Professor Emeritus, of Electrical Engineering in the University of London.

⁵⁸ Robert W. Hegner, *College Zoology*, New York: Macmillan Company, p. 722. There are creationists who believe that God utilized natural processes, which we may someday discover, in creating life. Walter R. Hearn, "The Creation of Life," *Gordon Review*, Winter, 1958, pp. 156-165, Gordon Faculties, Beverly Farms, Mass.

⁵⁶Professor Kapp asks this question in the *Journal of the Transactions of the Victoria Institute*, Vol. 81, p. 80. Kapp's answer is "no."

not answer otherwise since he believes that matter in motion is the sole reality. He is committed to the assumption that life had a natural, rather than a supernatural, origin. A theist can consider the possibility that God used natural forces to create life, but the atheist rules out the possibility that God created life.

Since the doctrine of spontaneous generation is essential to the philosophy of communism, communists have been very interested in trying to prove it.⁵⁷ After attending an international symposium on the origin of life in Moscow, Professor Melvin Calvin said that the communists seem to have been ordered to a crash program on the subject.⁵⁸ And yet, the communists themselves admit that they have not yet proved it. A. I. Oparin, a member of the USSR Academy of Science writes: ". . . We have every reason to *believe* that sooner or later we shall be able practically to demonstrate that life is nothing else but a special form of existence of matter. The successes scored recently by Soviet biology hold out the *promise* that the artificial creation of the simplest living beings is not only possible, but that it will be achieved in the not too distant future."⁵⁹ The communists evidently considered this book to be a worthy contribution to the subject of the origin of life or they would not have published it in English for circulation throughout the English speaking world. Thus their latest publication on the subject in English admits that they have not proved that life has come from the non-living.

O. B. Lepeshinskaya was a Stalin Prize Winner and a member of the Academy of Medical Sciences of the U.S.S.R. Her work on *The Origin of Cells from Living Substance* was published in Moscow in 1954 by the Foreign Languages Publishing House. She also admitted that the spontaneous generation of life has not been proved.⁶⁰ It must be true, she maintained, for it is taught by dialectical materialism.⁶¹ Although claiming to be scientific, the communists reveal that they are blind believers in the antiquated theories of Marx and Engels. As she said:

⁵⁷ *Report of the Central Committee, CPSU to the 20th Congress*, New York: New Century Publishers, 1956, p. 87. The claim is here made that Communists are more interested in science than anyone else.

⁵⁸ AP Dispatch, *Montgomery Advertiser*, Aug. 25, 1957, pp. 8, 13.

⁵⁹ *The Origin of Life*, Moscow: Foreign Languages Publishing House, 1955, p. 101. Italics by J. D. B.

⁶⁰ pp. 39-40.

⁶¹ *Ibid.*, pp. 38-39.

"Soviet biology, armed with the advanced theory of Marx-Engels-Lenin and Stalin, is distinguished. by its creative, transforming spirit."⁶² And Oparin wrote: ". . . Engels also determined the further channels of scientific investigations in this field, the roads along which Soviet biology is now successfully traveling."⁶³ This is an acknowledgment that the doctrine of the spontaneous generation of life is not a scientific doctrine, but a doctrine to which they hold, not only without scientific evidence, but contrary to scientific evidence. They try to dodge this by saying that since Marxism is scientific, therefore, the doctrine of spontaneous generation is scientific, for it is embraced in Marxism. We remind them that this is not a question for verbal argument, but for scientific demonstration, and this demonstration is the very thing which they cannot give.

It has been established by everyday observation and by countless scientific experimentations that life comes from life. All *scientific evidence* is against the assumption that life comes from the non-living. "It may now be stated definitely that all known living organisms arise from pre-existing living organisms."⁶⁴ Already in his day Pasteur challenged the world to prove spontaneous generation. "The world has been trying to do so ever since on a colossal scale, for instance, through the fermented-liquor industries of the united world. But Pasteur's negative stands unshaken."⁶⁵

In spite of this, one of the most firmly established of all laws in science, the communists agree with the assertion of Erasmus Darwin:

"Without parents by spontaneous birth
Rise the first specks of animated earth."

⁶² *Ibid.*, p. 80.

⁶³ *The Origin of Life*, p. 14.

⁶⁴ *The Encyclopedia Britannica*, 1956, Vol. I, p. 48. See also: Sir Charles Sherrington, *Man on His Nature*, pp. 139, 142; Douglas Dewar, "Current Theories of the Origin of Living Organisms," *Journal of the Transactions of the Victoria Institute*, Vol. LXXXVI, pp. 53-93; R. J. C. Harris, "The Origin of Life," *Journal of the Transactions of the Victoria Institute*, Vol. LXXXI, pp. 58-84. For a discussion of some of the hypotheses held by those who try to give a naturalistic explanation see, M. L. Johnson, Editor, *New Biology*, No. 16, London: Penguin Books, April 1954; *New Biology*, No. 12, 1952; Arnold Lunn, *The Flight From Reason*, pp. XXXVIII-IX.

⁶⁵ Sir Charles Sherrington, *Man on His Nature*, New York: Doubleday Anchor Books, 1953, p. 96.

EVALUATING THE CONTENTIONS

Some maintain that things were different in the beginning, and that under those different conditions, life was created by the non-living, although it is not being done now. This is just an assertion. Furthermore, it represents an abandonment of a fundamental concept in atheism, i.e. that all must be explained in terms of the laws of nature which now operate. In addition to this, it is an admission that the doctrine of the spontaneous generation of life is not a subject of scientific investigation and confirmation. How can scientific confirmation be made of a phenomenon which is not now taking place, but which is supposed to have taken place under conditions which are entirely different from the conditions which now exist and the processes which now work?

Many who believe in the creation of the living by the non-living and from the non-living are not aware of the vast assumptions which they are making; assumptions for which they have no real evidence. They are postulating tremendous miracles with inanimate matter as the miracle worker. The following discussion shows something of the complicated nature of the problem and thus how difficult it is to believe that it all came about as a result of the blind working of non-intelligent forces of nature.

Scientists are not agreed on *the nature of the original environment* in which life is supposed to have arisen.⁶⁸ Of the diversity of ideas on this subject, N. W. Pirie observed: "All these, and many other views, are held by astronomers and physicists all of whom have an air of authority. We have, therefore, a plethora of miscellaneous information but as little knowledge of the environment in which life may have originated as Tyndall and Huxley had. The sceptical biochemist may be excused for thinking that dogmatism is not yet justified. In the last forty years the only significant new idea that has been contributed to the problem is Haldane's suggestion that the primitive atmosphere contained ammonia and hydrocarbons, and that, in the period before living systems had evolved which could destroy them, a varied group of organic substances would accumulate as a result of the ultraviolet light' from the sun acting on this gas

⁶⁸ "Unfortunately, the geochemists can't agree on whether the atmosphere of the earth was an oxidized one or a reduced one, or some intermediate stage between" 'Melvin Calvin, "Chemical Evolution and the Origin of Life," *American Scientist*, July 1956, p. 249).

mixture and on the gas coming from volcanoes. Wisely he did not go into details; it will be time enough to try to draw detailed pictures of the origin of life when the experts have remained unanimous for ten years about at least the outlines of a picture of the environment. Physics is as fickle a science as any other and our picture is unlikely to be satisfactory if we rely much on the 'Stop Press' news. Until we know for certain whether the original atmosphere contained significant amounts of oxygen and whether there were carbon compounds beside CO_2 , hypothesis will be indistinguishable from speculation."⁶⁷

The new hypothesis about the origin of the earth brings new ideas about the nature of the primitive atmosphere. Unless there is scientific evidence as to the nature of the atmosphere one cannot arrive at a satisfactory hypothesis concerning the nature of the prebiotic condition of the surface of the earth. ". . . the factors that lead to different conclusions about the atmosphere lead also to different conclusions about the surface."⁶⁸

Complex substances, involving complicated chains of atoms would be necessary for life to exist. And yet, apart from living organisms, and a few cases in the laboratory, complex substances cannot be built up from simple ones.⁶⁹

Protein molecules are necessary for the existence of life. Lecomte du Nouy has estimated that the probability for a single protein "molecule of high dissymmetry to be formed by the action of chance and normal thermic agitation remains practically nil. Indeed, if we suppose 500 trillion shakings per second

⁶⁷ N. W. Pirie, "Vital Blarney," *New Biology*, No. 12, p. 109. Pirie's contribution to the discussion, an editorial introduction in *New Biology*, No. 18, said: "Pirie furthermore will never allow us to forget that our body of knowledge is much more provisional than, in the intellectual excitement, we sometimes *like to admit*" (p. 9). J. D. Bernal, a Marxist, also admits that the discussions on the origin of life involve "much speculation" (p. 28). As Pirie observed, "The framer of a hypothesis, or speculation, about the origin of life labours under the difficulty, not only that he does not know what raw material he has to work with, but also that he does not know what types of substance he must arrange to have synthesized" (No. 12, p. 109). For such reason as these, J. B. S. Haldane mentioned "how little we can afford to be dogmatic about the physico-chemical situation at the time when life originated" (No. 16, p. 23).

⁶⁸ N. W. Pirie, "On Making and Recognizing Life," *New Biology*, No. 16, p. 45.

⁶⁹ Melvin Calvin, "Chemical Evolution and the Origin of Life," *American Scientist*, July 1956, p. 251.

(5×10^{14}), which corresponds to the order of magnitude of light frequencies (wave lengths comprised between 0.4 and 0.8 microns), we find that the time needed to form, on an average, one such molecule (degree of dissymmetry 0.9) in a material volume equal to that of our terrestrial globe is about 10^{243} billions of years (1 followed by 243 zeroes).

"But we must not forget that the earth has only existed for two billion years and that life appeared about one billion years ago, as soon as the earth had cooled (1×10^8 years)."⁷⁰

Professor Jan Lever also raised the questions as to what "is the probability that from the free interplay of amino-acid molecules there originates a protein built up of 1000 amino acids in a definite arrangement as they always occur in normal proteins? It appears that by considering a great number of simplifications this probability amounts to 10^{-1360} if for instance 1000 kg. of amino acids gets the chance for this reaction during a billion years. This means thus a decimal fraction with 1359 zeros after the decimal point."⁷¹

Of course, it might be maintained that by chance it did happen right at the first. One case, however, would not be sufficient, for hundreds of millions of identical molecules would be necessary. Then, too, we are speaking here only of the origin of protein molecules necessary to life and not of life itself. If it is maintained that by chance hundreds of millions of molecules of protein were formed, one would be forced to conclude that it was not a game of chance after all, but that the dice had been loaded! We would then be faced with the question as to what power loaded the dice!

Of the organic molecules, which would be essential prerequisite for the creation of life, George Wald wrote: ". . . we must first of all explain how such complicated molecules could come into being. And that is only the beginning. To make an organism requires not only a tremendous variety of these substances, in adequate amounts and proper proportions, but also

⁷⁰ *Human Destiny*, New York: Longmans, Green and Company, 1948, p. 34. Regardless of how scientists differ on the age of the earth, they never postulate an infinite existence. Dr. Hans Gaffron of the University of Chicago, said that it took nature three billion years to create life, *Science News Letter*, Dec. 5, 1959, p. 380.

⁷¹ *Creation and Evolution*, Grand Rapids, Michigan: Kregel's, 1958, p. 47. These calculations are those of Mr. Schultz as cited by Troll, *Das Virusproblem in ontologischer Sicht*, Wiesbaden, 1951.

just the right arrangement of them. Structure here is as important as composition—and what a complication of structure! The most complex machine man has devised—for example, an electronic brain—is child's play compared with the simplest of living organisms. The especially trying thing is that complexity here involves such small dimensions. It is on the molecular level; it consists of a detailed fitting of molecule to molecule such as no chemist can attempt."⁷²

Not only did the right raw materials have to be present, but they also had to exist in just the right proportions,⁷³ and enter into the right arrangements.⁷⁴ "To form an organism, molecules must enter into intricate designs and connections; they must eventually form a self-repairing, self-constructing dynamic machine."⁷⁶

In addition to the fact that the right materials would have to exist in the right proportions at the right time, they would also have to have been out of the reach of anti-vitamins which are potent poisons. Even if the molecules necessary to life were formed by nature, what right have we to maintain that anti-vitamins would not have been formed also? "We must not forget that a biological system of great complexity is easily put out of gear by a very few molecules of the wrong kind—a million combinations that are right and workable become useless if one happens to be of the wrong kind. And, of course, with the first living organisms, there would have been no time for the evolution of immuno-chemical and toxicological mechanisms to prevent harmful molecules from destroying life as soon as it came into existence."⁷⁶

To complicate the problem still more, one is faced with the fact of spontaneous dissolution. As Wald admitted, "spontaneous dissolution is much more probable, and hence proceeds much more rapidly, than spontaneous synthesis."⁷⁷ Many of the compounds necessary to life, especially the co-enzymes, "are exceedingly unstable and, once formed, would have disappeared

⁷² "The Origin of Life," *Scientific American*, Aug. 1954, p. 47.

⁷³ Herbert H. Farmer, *Towards Belief in God*, New York: Macmillan Company, 1943, p. 204.

⁷⁴ George Wald, "The Origin of Life," *Scientific American*, Aug. 1964, p. 46.

⁷⁶ *Ibid.*, p. 50.

⁷⁶ Robert E. D. Clark, *The Universe: Plan or Accident?* London: The Paternoster Press, 1949, pp. 101-102.

⁷⁷ George Wald, *op. cit.*, p. 49.

in half an hour. So it will not do to suggest that they might be formed one by one by chance—with long periods in between. Chance must produce all the molecules that are required concentrated together in a cell, within a matter of at most an hour or so."⁷⁸

Furthermore, a living system must have a supply of energy. The first form of life would have to have a system of obtaining and delivering energy when it was needed and where it was needed. This mechanism is of great complexity whether in simple or complex organisms. Many different kinds of molecules are involved, and no single stage of the mechanism could be missing without rendering the entire thing useless. Besides, in order to obtain energy the cell first must have some energy. "The living cell, in fact, presents us with a stage of affairs which Malcolm Dixon, one of the greatest living authorities on enzymes, has compared to a factory designed to produce machine tools. Without machine tools the factory cannot even start production of machine tools—no matter how perfect its organization."⁷⁹

It does not help matters to assume that the first form of life was so simple that its creation by matter is not difficult to believe. There is no *simple* form of life. The simple cell carries on highly complicated processes. A cell is a "coordination of complexity," and not a "chaotic complexity of a mixture of gases."⁸⁰ It is not a static but a dynamic system. "It is energy-cycles, suites of oxidation and reduction, concatenated fermentations. It is like a magic hive, the walls of whose chambered sponge-work are shifting veils of ordered molecules, and rend and renew as operations rise and cease. A world of surfaces and streams. We seem to watch battalions of specific catalysts, like Maxwell's 'demons,' lined up, each waiting, stop-watch in hand, for its moment to play the part assigned to it."⁸¹

The cell must carry on such fundamental reactions as protein synthesis—a "highly complex" process,⁸² nitrogen fixation and photosynthesis.⁸³ . . . the first form of living material must

⁷⁸ Robert E. D. Clark, *op. cit.*, p. 104.

⁷⁹*Ibid.*, pp. 103-104.

⁸⁰ Lecomte du Nouy, *Human Destiny*, p. 37.

⁸¹ Sir Charles Sherrington, *Man on His Nature*, 2nd Edition, p. 80.

⁸² Ernest F. Gale, "Experiments in Protein Synthesis," *Scientific American*, March 1956, p. 46.

⁸³ R. J. C. Harris, "The Origin of Life," *Transaction of the Victoria Institute*, Vol. 81, p. 77.

have been a functional unit, and not merely a structural unit. Hence; it follows that those who try to account for the origin of life solely in terms of physicochemical phenomena must be prepared to explain the origin, not merely of a mass of unspecialized protoplasm, nor of 'the simplest living cell,' but of a complete organism."⁸⁴

The first form of life would have to be exceedingly complicated because it would have had to subsist entirely on an inorganic environment.⁸⁵ It would not have had any other form of life on which to depend or with which to cooperate. This would have necessitated a much more complicated enzyme system than man has, since it would have had to make all necessary organic substances.

Such primitive forms of life would have to utilize whatever kind of materials might be at hand. "This puts a premium on biochemical efficiency and adaptability. An organism such as that needs the unspecialized genius of a successful Robinson Crusoe."⁸⁶

The difficulty of the situation would be complicated by the fact that "almost every one of the great classes of chemical entities which we, quoting Dr. Needham, cited as together essential for the organized system of living substance was a something unknown to earth before life came."⁸⁷

Not only would non-living matter have to create the first form of life, but it would have to create a form of life with the power to reproduce itself in some way. "That is to say, we should insist on the ability to reproduce as an essential quality in an eobiont."⁸⁸

Some have suggested that the virus is the link between the living and the non-living. Several observations are in order here. *First*, the "proof of the origin of any virus is lacking."⁸⁹ Thus, here we do not find any scientific proof as to how life originated.

⁸⁴ G. E. Barnes, *Transactions of the Victoria Institute*, Vol. 81, p. 81.

⁸⁵ Frederic Wood-Jones, *Design and Purpose*, London: Kagan Paul, Trench, Trubner and Company, Ltd., 1942, p. 66.

⁸⁶ N. W. Pirie, "Some Assumptions Underlying Discussion on the Origins of Life," *Annals of the New York Academy of Sciences*, Aug. 30, 1957, p. 375.

⁸⁷ Sir. Charles Sherrington, *Man on His Nature*, p. 139.

⁸⁸ N. W. Pirie, "On Making and Recognizing Life," *New Biology*, No. 16, p. 51.

⁸⁹ Thomas M. Rivers, *Viral and Rickettsial Infections of Man*, 2nd Edition, New York: J. B. Lippincott, Company, 1952, p. 5.

Second, the authorities are not agreed on whether or not the virus is a living or a non-living system. *Third*, a virus "can live only in living cells. . . . It is a parasite."⁹⁰ It must have a living host, in order to multiply.⁹¹ That which can function only in connection with a living host cannot be the *first* form of life.

Fourth, scientists, who believe in the spontaneous generation of life, are not agreed on whether the virus is an early form of life or whether it is a degenerate form, "the end stage of a long evolutionary development,"⁹²—or rather devolution.

Fifth, Drs. Fraenkel-Conrat and Williams have put together "inert fragments of tobacco mosaic virus to produce disease-producing viruses." This is a case of tearing down and rebuilding a virus, but to what extent one can be torn down and rebuilt is another matter. "It is not claimed that this is an example of spontaneous generation despite the apparent mixing of two lifeless materials to produce a living virus."⁹³ It should be borne in mind that they started with a virus, and we cannot be positive as to the extent to which damage was done when they divided this virus into the nucleic acid and the enveloping protein.

In view of these facts, it is not scientifically established that the virus is the first form of life.

The hypotheses which are framed to explain life's origin must also take into consideration that scientists do not believe that the earth, nor conditions on it favorable to the existence of life, has existed forever. So whatever hypothesis they frame must

⁹⁰ Anton J. Carlson and Victor Johnson, *The Machinery of the Body*, Chicago: The University of Chicago Press, 1953, p. 14.

⁹¹ Thomas M. Rivers, *Viral and Rickettsial Infections of Man*, p. 3; Garrett Hardin, *Biology, Its Human Implications*, San Francisco: W. H. Freeman and Co., 1953, p. 638; Alexander, *General Biology*, New York: T. Y. Crowell, 1956, pp. 30-33.

⁹² Anton J. Carlson and Victor Johnson, *The Machinery of the Body*, 4th Edition, p. 4; Cited in R. J. C. Harris, "The Origin of Life," *Journal of the Transaction of the Victoria Institute*, Vol. 81, p. 75.

Referred to in Hideo Moriyama, *The Nature of Viruses and the Origin of Life*, Tokyo: Publishers, Shonan Hygiene Institute, Kamakura: Japan, 1955, p. 141. The book itself is often highly speculative. Outstanding Soviet authorities on viruses view them as being alive, but authorities such as A. I. Oparin view them as "a product of regression." See the quotations in Gustav A. Wetter, *Dialectical Materialism*, pp. 448-449. See his entire discussion.

⁹³ I. W. Knobloch, "Biology," *Journal of the American Scientific Affiliation*, p. 18. Referring to an article in the *California Monthly* for Jan. 1956.

take into consideration that they have *a limited amount of time in which to work*.

It would be a mistake, however, to assume that with enough time anything and everything can well happen. This mistake was made by George Wald. He wrote: "Time is in fact the hero of the plot Given so much time, the 'impossible' becomes the possible, the possible probable, and the probable virtually certain. One has only to wait: time itself performs the miracles."⁹⁴ With this logic, one can prove that immortality is certain. Given enough time everyone will be resurrected. The author believes in the resurrection, but he does not believe that it is proved by this kind of logic.

Time performs no miracles. Time cannot finish what time cannot start. Things may begin and end in time. But *they are not caused by time*.

"It certainly cannot mean that given enough time, something which is patently impossible becomes possible. For instance, how long would it take to convert an irrational number into a rational one? It just cannot happen; this is completely impossible. The square root of two can never be expressed in terms of a whole number in spite of the fact that there are an infinite amount of numbers to choose from."⁹⁵

Who wants to affirm that given enough time a monkey pounding on a typewriter would pound out all the books in the Library of Congress? Who will calculate this probability? Shall we say that with enough time it is certain to take place? Can a person with "enough time" take the square root of a sonnet?

THE COMMUNISTS ARGUE AGAINST THEMSELVES

The communists' own logic can be turned against them on the question of the spontaneous generation of life. The communists criticize religion because it was in existence before the age of science, and therefore it must be the reflection of nature in man's mind before man had understood that nature is under the reign of law.⁹⁶ If the fact that religion existed before the age

⁹⁴ "The Origin of Life," *Scientific American*, Aug. 1954, p. 48.

⁹⁵ Robert Helsten, Personal Communication. Compare Edward Kasner and James Newman, *Mathematics and the Imagination*, New York: Simon and Schuster, 1950, pp. 234-242.

⁹⁶ *Capital*, p. 25. Chou En-lai as quoted in C. S. Braden, *War, Communism and the Religions of China*, New York: Harper and Brothers, 1953,

of science discredits religion, the doctrine of the spontaneous generation of life from non-life is discredited for the same reason. Aristotle held to such a doctrine.⁹⁷ Lucretius said: "the clear facts, which are known for all to see . . . constrain us to believe that living things are begotten of insensible things. Why, we may see worms come forth alive from noisome dung, when the soaked earth has gotten muddy from immoderate rains."⁹⁸ In a note on a similar passage Cyril Bailey said: "A close parallel to this description is found in Empedocles (who died in Sicily about 433 B.C.). . . . The theory that animals, like the plants, were produced from the earth is attributed with certain variations to Anaximander, Anaxagoras, and Democritus."⁹⁹

The communists' own argument is thus turned against them. On their logic the doctrine of spontaneous generation of life cannot be true since the doctrine arose in the pre-scientific age when men had a superstitious view of nature! Thus the communists must either give up the doctrine, or cease to use such an argument in their effort to discredit religion.

The communist, to be consistent, must explain life's origin by an appeal to the dialectic. Matter called forth its opposite—life. This, of course, attributes to matter a power which cannot be proved to have ever resided in matter. However, to assume that the origin of life must be explained dialectically, does not help the communist but rather leads him to a position which is destructive of his assertion that death ends all. If matter, the thesis, called forth its antithesis, life, then out of the clash between the two *a synthesis, higher than matter and higher than mortal life, must finally arise*. And what could be higher than matter and earth-life? An eternal and heavenly life. Matter is the thesis. Mortality is the antithesis. Immortality is the synthesis!

Some have tried to avoid the problem of the origin of life, by assuming that the physical and chemical elements are alive,

p. 66. Frank Wilson Price, "Communist China," *Religion in Life*, Autumn, 1956, p. 515.

⁹⁷ *Encyclopedia Britannica*, 1956, Vol. I, p. 48.

⁹⁸ Lines 2,870 ff, in *Titi Lucreti Cari De Rerum Natura Libra Sex*, edited with prolegomena, critical apparatus, translation and commentary by Cyril Bailey, Oxford: Clarendon Press, 1947.

⁹⁹ Cyril Bailey's comments on lines 783-820. Citations furnished the author by Dr. W. M. Green, University of California, Berkeley. See also Cyril Bailey, Translator, *Lucretius on the Nature of Things*, Oxford: Clarendon Press, 1929, pp. 211-212.

and thus life has always existed. This is not only without scientific evidence, but it enlarges the word "life" so much that it becomes a meaningless term, without boundaries of any kind.¹⁰⁰ How can these individuals find it easy to believe in an *eternal living matter*, and think that it is unreasonable to believe in the *eternal living God*.

THE ATHEIST HAS NOT PROVED HIS POINT

The confirmed atheist lives in the hope that some day man will create life, and that then we shall have positive proof that all can be explained naturally. This, however, would not prove his case. First, it is still a matter of hope with him and not a matter of scientific evidence. *Second*, he must believe that "natural forces in the past did with inorganic matter, what modern chemists, with all their apparatus, knowledge, chemicals X- and other rays, have failed to do even with organic compounds." *Third*, if man creates life in the future all that would be proved is that an *intelligent being* can create life. It would not prove that life was spontaneously generated by matter.¹⁰¹ *Fourth*, even if nature has the power to create life it could be argued that it had been endowed by God with this power.

Faith in God as the creator of life is in harmony with the evidence which we have concerning life. All the evidence shows that life comes from life. There is no evidence that life comes from non-life. There is also no evidence that human beings brought life to this planet. Since life's origin cannot be found in a natural or a human source, why is it unreasonable to look for it in a superhuman and supernatural source—the living God?

MIND

We are confronted with the fact of mind and with the fact of matter. The realm of mind includes ideas, memories, and the power of reasoning. If it were not for the fact of mind, we would know nothing about the reality of matter. In fact, we would react to matter, but we would be unaware of this reac-

100 Yervant H. Krikorian, *Naturalism and the Human Spirit*, New York: Columbia University Press, p. 247.

¹⁰¹ Dr. Hans Gaffron, of the University of Chicago, predicted that man would create life in the next 1,000 years, *Science News Letter*, Dec. 5, 1959, p. 380.

tion and of it we would *know* nothing. If one must doubt the reality of one or the other, why doubt the reality of mind without the existence of which the question of the nature of reality would never have been raised. But it is not sensible to deny either.

The communist, however, views mind as but matter in motion. And yet, such a view is without scientific confirmation. However intimately mind may function in connection with matter in man, it is impossible to reduce mind to matter. This is the testimony of common sense and of scientific investigation.

Although he was an agnostic, Sir Charles Sherrington, Nobel Laureate, sometimes President of the Royal Society in Britain, and at the time of his death one of the world's outstanding physiologists, wrote as follows after having spent well over half a century in physiological studies: "Mind, for anything perception can compass, goes therefore in our spatial world more ghostly than a ghost. Invisible, intangible, it is a thing not even of outline; it is not a 'thing.' It remains without sensual confirmation and remains without it forever."¹⁰² Although Sherrington leaned toward viewing mind as a form of energy, he admitted that it is impossible thus to identify it. Furthermore, in this matter science today has not advanced beyond Aristotle. Says Sherrington, "Aristotle, 2,000 years ago, was asking' how is the mind attached to the body. We are asking that question still."¹⁰³

Another great physiologist, Dr. E. D. Adrian, Professor of Physiology at Cambridge University, has pointed out that "The part of our picture of the brain which may always be missing is, of course, the part which deals with the mind; the part which ought to explain how a particular pattern of nerve impulses can produce an idea; or the other way round, how a thought can decide which nerve cells are to come into action."¹⁰⁴ Cortical stimulation may produce reflex action but it cannot touch the will of man.

"What is the real relationship of this, mechanism to the mind? Can we visualize a spiritual element of different essence capable of controlling this mechanism? When a patient is asked about the movement which he carries out as a result of cortical stimu-

i«2 *Man on His Nature*, 2nd Edition, p. 256.

103 Sir Charles Sherrington in Peter Laslett, Editor, *The Physical Basis of Mind*. Oxford: Basil Blackwell, 1950, pp. 3-4.

i«E. D. Adrian, O.M., M.D., F.R.S., Nobel Laureate, Professor of Physiology, Cambridge University, in *The Physical Basis of Mind*, p. 5.

lation he never is in any doubt about it. He knows he did not will the action. He knows there is a difference between automatic action and voluntary action. He would agree that something else finds its dwelling-place between the sensory complex and the motor mechanism, that there is a switchboard operator as well as a switchboard."¹⁰⁵

If mind and will be but reactions to physical conditions, why did not the individual imagine that he willed the action?

Let us repeat something which we have previously stated. If the communist view of man is correct, mind and reasoning cannot at all be trustworthy, for they are but reactions to material, economic and class conditions. In fact, their own theories and our theories about mind "could only be nervous disturbances, or perhaps diseases of the liver."¹⁰⁶

Well did C. S. Lewis say: "Supposing there was no intelligence behind the universe, no creative mind. In that case nobody designed my brain for the purpose of thinking. It is merely that when the atoms inside my skull happen for physical or chemical reasons to arrange themselves, in a certain way, this gives me, as a by-product, the sensation I call thought. But if so, how can I trust my own thinking to be true? It's like upsetting a milk jug and hoping that the way the splash arranges itself will give you a map of London. But if I can't trust my own thinking, of course I can't trust the arguments leading to atheism, and therefore have no reason to be an atheist, or anything else. Unless I believe in God, I can't believe in thought; so I can never use thought to disbelieve in God."¹⁰⁷

Since, however, we are faced with the reality of mind, is it not reasonable to conclude that mind has its source in mind and not in matter? Since man has not existed forever, is it not reasonable to conclude that the fact of mind points to the Divine Mind as its cause?

THE MORAL ARGUMENT

Every individual realizes that there is right and that there is wrong. Men, sooner or later, try to convince themselves that

¹⁰⁵ Wilder Penfield, neurosurgeon, and Director of the Neurological Institute, Montreal, in *The Physical Basis of Mind*, p. 64.

¹⁰⁶ William Henry Vincent Reade, *Christian Challenge to Philosophy*,

¹⁰⁷ C. S. Lewis, *Broadcast Talks*, London: Geoffrey Bles. Ltd., 1946, pp. 37-38.

they are doing the right thing, and not the wrong thing. They want the approval of their own conscience. All want to feel that they are making some contribution to civilization. Even atheists say that they do this in destroying faith in God. All men have some sense of justice and fairness, and they resent unfairness. Due to ignorance men may not always "draw the line" in the same place. But as A. E. Taylor wrote: "They may draw the line between right and wrong in a different place, but at least they all agree that there is such a line to be drawn."¹⁰⁸

Men cannot get away from the idea of obligation or duty. In other words, we "cannot escape the fact of conscience." It is a part of man's nature. "Indeed, since the idea of 'ought' has arrived in the mind, it is impossible to escape it, except by using it. For if conscience is invalid, we ought not to be governed by it; that is, we appeal to the 'ought' to overcome the 'ought.'"¹⁰⁹

If *communism* is right, man is not a being with moral sensitivity, but simply a material being. Thus to say: "I ought" is no more *morally* significant (for there is no such realm as that of the moral) than to say: "I itch." Both simply express a feeling in man-matter. And yet, the communists themselves speak of duty and maintain that they are on a higher moral level than other people. When they speak of injustice, they are invoking a moral, not a material, concept. When Karl Marx, in *Capital*, implied that capitalism is immoral and unjust, he was admitting the reality of the realm of morality and thus unconsciously admitting the falsity of the materialistic view of man. Some communists become morally indignant when one points out that they continually make judgments and evaluations which imply the existence of a moral realm! They think you are unfairly accusing them!

If there is a moral realm there must also be a realm of freedom. "The moral law is invalid unless man is *free*. As Kant puts it, 'I ought, therefore I can'! If duty is required, freedom is required."¹¹⁰ if _{man} has no freedom there is no realm of morality, for why "ought" I do something which I cannot do? If man has no freedom we cannot do otherwise than we do; thus it

¹⁰⁸ *Does God Exist*, New York: The Macmillan Company, 1947, p. 83. See his Gifford Lectures, *The Faith of a Moralist*. Macmillan and Company, Ltd., 1931, 2 Vols.

¹⁰⁹ W. E. Hocking, *Types of Philosophy*, New York: Charles Scribner's Sons, p. 147-148.

¹¹⁰ *Ibid.*, p. 149.

could never be said that we *ought* to have acted otherwise than we did.

Furthermore, in this life following the "ought" may result in the loss of friends, fortune, pleasure, happiness, and even of life. But if this is the end of the matter, "no one could quite regard the universe as *just*. If conscience is rooted in reality, and not in illusion, then reality must be a moral order: and it must therefore bring about an agreement between morality and happiness. But the only power capable of doing this would be a power controlling the whole course of experience in this world and the next. That power is what men call God."

In brief Kant argues, "if I accept conscience as a genuine call of the universe to my individual self, and duty begins in this acknowledgment of duty—I must also accept the beliefs in God, freedom, and immortality."¹¹¹ Otherwise, one must maintain that the "ought" is an illusion, and that no one is under any kind of obligation to do anything or to refrain from doing anything. Either there is a non-material realm or there is no *moral* realm. But there is a moral realm. No fact is more emphatically borne in on our conscience, or testified to by the actions of men, even of atheists.

Man's moral sensitivity cannot be explained away on the grounds that men differ in their judgment as to whether or not certain actions are right or wrong. This does not do away with the fact that man is *morally sensitive*. Furthermore, the basic moral sense is the same among all men, i.e. all believe that men are obligated to do the right—whatever the right may be. No people believe that they are morally obligated to do the evil and to oppose the good. To be morally binding, the action must contribute to the good. Even the so-called primitive man "does not regard anything as obligatory which is not a part of, or a contribution to, what he believes to be good. The only self-evident intuition which he seems to recognize is that of a necessary connection between value and obligation, between what is on the whole good and what he ought to do; and the only intrinsic good which he seems to recognize is that of doing what he believes to be right or obligatory."¹¹²

Being confronted with the fact of the concept of duty, with man's moral sensitivity, how are we to explain its origin? Is it

¹¹¹ *Ibid.*, p. 150.

¹¹² A. Macbeath, *Experiments in Living*, London: Macmillan and Company, 1952, p. 421. The Gifford Lectures for 1948-1949.

reasonable to conclude that non-moral matter finally created man with his moral sensitivity? Is it more in line with what we know—that it takes a moral being today to produce a moral being—to conclude that moral man's source must be sought in some moral being, God, rather than in non-moral matter?

THE EXISTENCE OF ORDER

In our own experience, order and meaningfulness are marks of intelligence. When we meet with order, even though we do not see the cause of that order, we postulate the existence of an intelligent being as the cause. If we walked by the seaside and found some pebbles on the beach which spelled out the sentence, "man is immortal," we would conclude that an intelligent being was behind the orderly arrangement of the stones.

Regardless of the aspect of reality which we examine, there is order. The fact that there is some disorder does not prove that there is no order. If there were no order at all, disorder could not be recognized as disorder. If disorder were universal, there would be no orderly mind of man in existence to recognize the presence of disorder.

The communists themselves postulate the existence of order both in the material world and in the world of humanity. They accept the fact of order in the material world when they maintain that scientific investigation is possible. If there were no order, it would be impossible to state the relationships in the realm of matter in the form of laws. Communists accept the idea of some order in human history and human life today when they maintain that there is a law at work—the dialectic—which inevitably carries humanity to higher and better forms of social order. While we do not agree with their philosophy of dialectical materialism, we point out that they themselves are in this very philosophy assuming the existence of order and a force making for greater and greater order.

In the material realm, there is much evidence of order. Lawrence J. Henderson, a Professor of Biological Chemistry in Harvard University, observed that "the teleological appearance of nature and the forms of life is a universal fact of human experience. Hence it has been quite impossible for natural science or philosophy permanently to ignore the problem of teleology. Merely to explain away the order of nature is no more satisfactory than to explain away matter itself. We may argue against such ideas ever so ingeniously, but the experiences of daily life

steadily oppose the arguments, and gradually overwhelm them. Thus men must always inquire into cause and significance of the teleological appearance of things."¹¹³

The presence of order is so clear that even agnostics continually find themselves forced to use the language of purpose and design in describing this order. Said the agnostic Sherrington, "We all drop into this mode of thought; we adopt it as we dissect."¹¹⁴

It is only when we allow ourselves to be lost in isolated details that we lose sight of the fact that "the cosmos is an ordered entity."¹¹⁵ Professor Henry Norris Russell, head of the Princeton Observatory, has stated that there are at least ten features of the arrangement of the solar system, which are not the necessary consequences of the law of gravitation and which thus show that "the solar system is clearly no accidental aggregation of bodies."¹¹⁶

If there were material differences in the distance of the earth from the sun, the size of the earth, the depth of the ocean, the rotation of the earth or the gases of the atmosphere, life would be impossible. How could it be that these things are the result of the non-directed, non-intelligent motions of matter.¹¹⁷

The marvels of order in the animal and insect world are many.¹¹⁸

Man is surely as good a sample of reality, as excellent a key

¹¹³ *The Order of Nature*, Cambridge: Harvard University Press, 1925, pp. 182-183. Compare p. 193.

¹¹⁴ *Man on His Nature*, p. 107. See also S. D. Vavilov, *The Eye and the Sun*, Moscow: Foreign Languages Publishing House, 1955, p. 88.

¹¹⁵ Frederic Wood-Jones, *Design and Purpose*, p. 13. He was Professor of Anatomy in the University of Manchester. That evolution has not destroyed the argument from the existence of order has been admitted by evolutionists from Darwin to our day. T. H. Huxley and Francis Darwin, *Life and Letters of Charles Darwin*, Vol. 1, pp. 554-556, Frances Mason, Editor, *The Great Design: Order and Intelligence in Nature*, New York: The Macmillan Company, 1955. H. F. Osborn, *Evolution and Religion in Education*, pp. 12-13, 61-62. Frederic Wood-Jones maintained that "William Paley's *Natural Theology* is one of the greatest expositions of the ordering of Nature that has ever been written," *Design and Purpose*, pp. 36-37.

¹¹⁶ See *Astronomy: A Revision of Young's Manual of Astronomy*, New York: Ginn and Company, 1926, Vol. 1, pp. 461-462.

¹¹⁷ A. C. Morrison, *Man Does Not Stand Alone*, New York: Fleming H. Revell Company, 1944, pp. 94-96.

¹¹⁸ For a popular account of the marvels of the bird, see Alan Devoe, "The Miracle of Birds," *Reader's Digest*, Oct. 1953, pp. 67-70.

to reality, as is an atom.¹¹⁹ Why is it reasonable to explain everything, including man, in terms of a material atom, instead of looking at something higher than an atom—man—and looking for the ultimate reality in terms of the highest that we see in the universe.

Man is indeed fearfully and wonderfully made. This is impressed on us when we study the various systems which make up his body and also when we see how these systems are integrated into one working system, i.e. the human body.

That something can go wrong with the wonderful mechanism of man's body is no argument against man being fearfully and wonderfully made. It does prove that man is not made to live forever on this earth, but it does not prove that it is reasonable to believe that man is the non-purposed result of the blind motions of matter.

The body is a machine, but it is so much more than a machine that Dr. Walter B. Cannon, then Professor of Physiology in Harvard Medical School, wrote a book entitled *The Wisdom of the Body*.

Complicated processes are carried on within the body. As Professor E. C. Dobbs, of the University of London, wrote: "It is rather a terrifying thought that the whole of the protein in the human body is replaced in roughly 160 days, and at the present time we can only speculate on the mechanism controlling this elaborate re-synthesis, where even a single amino acid must not be out of place if the hormone is to have its activity or the antibody its potency."¹²⁰ This is only one illustration of what a complicated organism man is.

The heart is a marvelous mechanism which pumps some five thousand gallons of blood a day, supplies some 12,000 miles of circulatory system and which may beat over two and a half billion times in a lifetime. It can beat twice as fast, put forth twice as much blood per beat, against an increased arterial pressure of up to 30 or 40 per cent at a moment's notice.¹²¹

The unity of the body and of man also passes understanding. Although man is made up of around thirty million million cells,

¹¹⁹ Ralph S. Lillie, *General Biology and Philosophy of Organism*, Chicago: University of Chicago Press, 1945, pp. 194-195.

¹²⁰ *British Medical Journal*, Dec. 2, 1950, p. 1242.

¹²¹ W. B. Cannon, *The Wisdom of the Body*, New York: W. W. Norton and Company, Inc., 1932, p. 233. See also A. R. Short, *Wonderfully Made*, London: Paternoster Press, 1951, p. 43.

and several different systems, the body functions as a unit. What is more significant is that man is conscious of himself as one individual and not as an isolated aggregation of cells and systems.

The skin is a protective jacket; it repels and kills some germs; it is an umbrella and sun shade; it is a thermostat and a stock-room. It is self-repairing¹²² and contains a complex alarm system. Although full of holes it can close them up with oil glands to keep out the water and it provides a complicated apparatus for each hair.¹²³

The eye is such a marvelous mechanism that it gave Darwin cold shudders and he agreed that it did seem "absurd in the highest degree" that it should have arisen by chance and evolution—though he thought that it did.¹²⁴

The wonder of wonder, however, is the *seeing* itself. We do not see the electrical storm, so to speak, which is set up in the nerve fibers and the brain; electrical charges which do not contain brightness, shadow, distance, right-side-upness, etc., but we see things possessing these qualities. Although physics and chemistry can tell us much about the eye and the brain, they offer us not a word concerning the *seeing* itself.¹²⁵

¹²² A. I. Brown, *God's Masterpiece Man's Body*, pp. 39-41.

¹²³ Susan Voight, "Amazing Facts about Your Skin," *Coronet*, Feb. 1952, pp. 153-154.

¹²⁴ *Origin of Species*, New York: A. L. Burt, From Sixth London Edition, pp. 170-171; *Life and Letters of Charles Darwin*, Vol. II, New York: Basic Books, Inc., p. 67. See also Sir Charles Lyell in the *Life of Sir Charles Lyell*, Vol. II, p. 448.

¹²⁵ Sir Charles Sherrington, *Man on His Nature*, 2nd Edition, pp. 114-117, 119, 121-122. There are those who criticize some features of the eye. For example, Professor Helmholtz, criticized it from the standpoint that it was not a perfect optical instrument. Of course, no man made optical instruments *see*. But Professor Helmholtz did not intend to deprecate the eye, but to show that its perfection is not a mechanical one, but one which was adapted to the needs of the organism. See the quotation in C. A. Row, *Christian Theism*, 2nd Edition, London: Hodder and Stoughton, 1890, pp. 144-147. Helmholtz made a criticism on the basis that "the lens system of the eye is uncorrected for colour," but he did not know, as we know now, that the eye does correct for color through a nervous reflex rather than through an optical method. Robert E. D. Clark, *Science and Religion*, 1948, Vol. I, p. 121. H. Hartridge, *Nature*, Vol. 156, 1945, p. 666. See also G. H. Best and N. B. Taylor, *The Human Body and Its Functions*, 1932, p. 305; and Gordon Lynn Wallas, *The Vertebrate Eye and Its Adaptive Radiation*, 1942, p. iv. S. Vavilov said that although the "image on the retina is far from perfectly corrected. . . . It must be noted, however, that so-called spherical aberration is quite well corrected in the

We could also think of the nervous system, the skeletal system, the blood, the process of reproduction, etc. Whatever we study about the human body, or about any system or part of a system, furnishes more material than men can learn in a lifetime. When we think of this we are impressed anew with the conviction that he who can believe that the body was the result of blind force moving matter should find it easy to believe all the fables and fictions ever told. How can he accuse the theist of being unreasonable, when he himself attributes to dead matter such creative power?

Although it is not reasonable to believe that all these evidences of order are the product of the blind workings of the forces of nature, it is reasonable to believe that this order points to an intelligent Creator as the cause and creator of this order. In drawing this conclusion we are acting in line with the evidence which we have, i.e. that order is a mark of intelligence.

THE UNIVERSE IS NOT A SELF-CONTAINED, SELF-EXPLAINED SYSTEM

If atheism is true, the universe must be a self-contained and self-explained system. It must be explained in terms of present day processes. An atheist cannot look beyond the system of nature today in order to explain things, for such would involve a non-natural explanation. However, scientists are more and more coming to the conclusion that the present laws of nature do not explain the universe. Thus they are contending that our present order of things had a beginning at a time not infinitely remote.

One of the best established laws in science is the second law of thermodynamics. This law tells us that the amount of energy available for energizing processes of the world is ever growing less."¹²⁶ This is called the law of entropy.

human eye. This is mainly due to the fact that the inside layers of the crystalline lens are of greater density than the outside layers." *The Eye and the Sun* (p. 92).

¹²⁰ J. A. McWilliams, *Cosmology*, New York: Macmillan Company, 1933, p. 42 as quoted by Elton Trueblood, *The Logic of Belief*, p. 155. For a further discussion of the scientific foundation of this line of thought, see Georges Lemaitre, *The Primeval Atom*, New York: D. Van Nostrand Company, Inc., 1950, pp. 17-18; J. W. N. Sullivan, *Limitations of Science*, New York: New American Library, p. 32; an outstanding British mathe-

In other words, the universe is running down; it is going from a more perfect state of organization to a less perfect state of organization.

This must point back to a beginning at some time in the past not infinitely remote. For if the universe had been running down from all eternity, it would have already run down since eternity is time enough to do anything. But it has not run down as yet; it has not reached a state of complete disorganization—of the equal distribution of energy throughout the universe.

Furthermore, since there is no self-winding system in nature whereby natural processes—those occurring without external interferences—carry energy from a less to a higher state of organization, this highly organized state of energy in the beginning could not have been the result of a process of naturalistic evolution. Some power or force external to the universe itself, some force which was not the result of the laws which now operate, must have originally set the universe in operation in a high state of organization. Such a power could not be matter, for matter has no such self-organizing power. It must have been a supernatural, and superhuman power.

In this connection, Sir James Jeans used the illustration of a clock. The universe is like a clock which is running down. It has not yet run down, so it has not always been running. It is not self-winding, thus it must have been wound up at some time in the past by some power external to the clock. Thus the running clock is not a self-contained, self-explained system.

There are in nature radioactive clocks, so to speak, such as thorium and uranium. One half of each mass of these materials decomposes every so many years, and one half of that in so many more years, and so on. But such radioactive elements still exist, and are still disintegrating. So they have not been disintegrating forever since in an eternity they would have already decomposed. Furthermore, if we trace this backward then so many years ago a particular amount of radioactive material possessed twice the mass that it did before, and so many years before that it possessed twice that much more. And if one reasoned back to infinity each of these would have possessed infinite mass; but this is absurd. So something happened in the

matician and physicist, Sir Edmund Whittaker, *Space and Spirit*, Chicago: Henry Regnery Company, 1948; A. S. Eddington, *The Nature of the Physical World*, Cambridge, 1930, p. 84.

distant past which is not now happening. Thus the present laws of nature do not present us with a self-contained, self-explained system.¹²⁷

The philosophy of the dialectic is in direct opposition to the fact of entropy. If the realm of the material is the only realm, the second law of thermodynamics holds good in all of the manifestations of matter, including matter-man. Thus the course of human history should be downward instead of upward. And yet, the dialectic assumes that there is a power at work in matter and in human history which inevitably carries society onward and upward to higher and to better forms of order. In this the communist contradicts the fact of entropy.

The law of entropy forces us to look beyond nature for an explanation of nature. A supernatural, not a natural, explanation is essential. The present processes of nature do not explain themselves. It is necessary to postulate the existence of the Supreme Being in order to account for the order and organization which exists in the universe.

In view of all these considerations, why should it be thought unreasonable to conclude that God, not matter, is the creator? How, then, can communism be true, since it assumes the doctrine of atheism to be scientifically demonstrable?

Of course, in affirming the existence of God, the Christian is not denying the reality of the material, nor the self-evident fact that man must eat. He who affirms the need for air is not at the same time denying the need for food. He who affirms the reality of God does not deny the fact that various forces, such as the economic, have worked in history.¹²⁸ We are affirming, however, that the philosophy of life which leaves out God is leaving out an essential aspect of reality, and strips man of his true humanity.

The communists, however, are not only atheistic materialists, but they are dialectical materialists. This aspect of communism will now be considered.

¹²⁷ Robert E. D. Clark, *Creation*, London: The Tyndale Press, 1946, pp. 8-11.

¹²⁸ Compare Alexander Miller, *The Christian Significance of Karl Marx*, New York: Macmillan Company, p. 77.

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