

# The Origin of the World

By R. McMillan.

## CHAPTER XII.

### PRIMITIVE FORMS.

If you were to see an atlantosaurus now, you would get a shock of terror, for it was almost a hundred feet long, a vast creature unlike anything you ever saw in your life. But the atlantosaurus has passed away, with nearly all his giant relatives, so you will never see him except as I saw him, a monster skeleton in a museum. But he was not a "primitive." Oh, no; he was a giant, who lived a few million years ago. The primitives were very lowly, very simple, and very, very small. If ever you have a friend with a microscope and a love for biology (the science of life), ask him to show you an amoeba.

The amoeba is one of the primitives, but it is not the first by any means. The first living thing is lost in the mists of the world's dawn, and no man can tell you what it was like. An amoeba was one of the very early forms, and it exists even unto this day. I think it is just the same today as it was ages and ages ago, when it developed from other simpler jelly forms in the steaming seas of the infant world. The amoeba is a speck of jelly composed of the gases oxygen, hydrogen, nitrogen, and carbon. But it is not gas now; it is no more an "element," but it is a combination of elements, and it lives. It grows. It is so small that the human eye cannot see it, and I have hunted for it for hours together in the muddy water at the bottom of my aquarium. I would take a glass tube (called a pipette), and stir up the mud, and then remove my fingers from the top of the tube, and allow the mud and water to rush into the tube. I replaced my finger on the end of the tube and lifted it out on the water, and there were the mud and water, and I hoped amoebae, from the bottom.

Then I got my microscope, and put the mud from the pipette on a glass slide, and placed that under the microscope and watched for the living amoeba. It is a slow process, but he who would understand the origin of the world must be in no hurry. When I saw the jelly speck at last, I was as much interested in it as if it had been an atlantosaurus—more so, maybe, for it was one of the world's first children. I watched the speck of life for hours, and the longer I watched it the more mysterious it grew. I watched till I forgot how small it was—till it seemed like some vast amorphous (formless) living thing that was struggling in conscious agony underneath the merciless eye of the microscope.

That jelly speck was really alive! Yet it was formless. It had no mouth, no arms, no legs, no nerves, as far as I could discern, and yet it was alive. If I dropped a speck of nitric acid near it, I could see it retract, as if it felt pain and had feelings just as a man has. It drew back from the acid as a man would withdraw his finger from a red-hot plate. And the movement in each case was the same—a movement which the scientists call "reflex action." When a man gets burnt he does not stop to think why he withdraws from what burns him; it is done by automatic stimulus, by reflex action. So in this jelly speck, invisible to the naked eye, there becomes visible a something which links it to humanity—the power of reflex action.

When the amoeba is hungry it moves; and so does a hungry man. The amoeba has no feet, no legs, and yet it moves. It projects a part of its jelly mass in one direction, and moves after it. When it comes across a speck of food—of what we call organic matter—it pulls itself over the speck and absorbs it. It has no mouth; it is all mouth. It has no stomach; it is all stomach. It has no legs; it is all legs. It is a miracle!

But how does it reproduce itself? All living

things must reproduce themselves, and how can the amoeba do it? It cannot lay an egg as a hen does. It cannot produce an acorn as an oak tree does; but still it reproduces. But how? There is the mystery. Life is all a mystery, and yet it is very simple. When the amoeba is well fed and ready for reproducing its kind, it shrinks in the middle and breaks into two, and so you have two amoebae where there was but one before. And these two divide and make four, and the four make eight, and so on through all human time. The amoeba in my aquarium today is the direct descendant of the one that was born in the grey dawn of life in the world. Is it not wonderful? The amoeba was born in the warm mud of ancient seas, by the combination of gases, driven by electricity. I wonder what gas is, and what electricity is. A friend of mine affirms that electricity is life, and I never contradict him, for I do not know what life is. Ions and electrons are names given to electrical manifestations, and Sir Oliver Lodge says: "It is a fascinating guess that they constitute the fundamental substratum of which all matter is composed." I wonder what ions are, and what life is.

May I assume that you think you understand what an amoeba is? Mind you, an amoeba is not a real primitive, any more than one of our blackfellows is a primitive human being. A blackfellow is a very high form of human life, even though some people say that he is one of the very lowest of human beings. It is all a matter of relativity. There are, and there were, very much earlier things that "lived" before the amoeba did, and the reason why I say so is simply that there must have been.

An amoeba, even though but a speck of jelly, is really very high in the scale of life, and nothing ever came into existence full-fledged and ready for the fight, as Minerva is said to have done from the head of her father Jupiter. Everything had to develop from the simplest beginnings, and an amoeba is not the simplest of all things; so there must have been a simpler. But you can see that the amoeba was one of the very early living things. And it developed. It was born in the sea, and in some cases it clothed itself in a shell of lime, with the jelly protruding through tiny holes. I have towed my silken net in tropic seas, and have captured, this shelly amoeba in millions, so that my net was slimy with them, although they were invisible to the naked eye.

These foraminifera, as they are called, exist in countless numbers in the sea today. To them we owe the chalk hills of old England, which are really composed of what they call "Globigerina Ooze." Think of all the time it must have taken to deposit the "white cliffs of Albion" under the sea, from the shells of these invisible amoebae. What a change it was to make English land out of what used to be the sea bottom! Think of the time! Think of the miracle! Think of the glory of it all in this "sad old world" we live in. It is a miracle world, once your eyes have been opened!

Next Lesson: THE WORLD'S ROCKS.

## ECONOMIC CAUSES OF WAR

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## HUMAN NATURE

(Continued from page 1)

The same cause that drove man to his mate, through change of time has diversified its satisfaction. And the same force that urged the haunted man of the wild in quest of physical and social satisfaction compels a continual modification in the conquest of desire, i.e., its attainment.

But precisely the same principle that carried man from the primitive commune to servitude is steadily impelling him from servitude into the higher commune of the social commonwealth. The same necessity that harnessed natural passion with political monogamy is now breaking its long slavery and driving on to the purification of mutual communion. And the same spirit of invention and research which modified the first social industry is again facing man with the need of further centralization of socialized effort. Coming face to face with this necessity, the mind shall see a new light; the beast find a new nature. In the grim hour of necessity we shall discover the regenerating ideal; shall awaken to the conceptual union of matter and spirit; and shall scourge the money changers from the temple courts of humanity. For in the social administration of life's necessities there will be no place for greed, for the ethic of gain shall have disappeared. There can be no burden of privilege, and consequently none of its sordid excess. And the mystery of false desire shall lose its unimaginative forwardness, in the wonder and beauty of natural satisfaction.

Let us have a society where the fear of authority and the spectre of "artificial famine" are not; and the human nature of capitalist exploitation will shed its character of degradation, "as the fig tree sheddeth her leaves." Let us have a society where political devices no longer blight and darken human aspirations and efforts, and man shall reap a new nature as surely as a change of climate induces a new flora. Let us have a society where class and privilege cannot enter; and that society shall be as wholesome like a fertile land. Let us have a society economically free, and the natural passions of humanity shall be ennobled with the new beauty of understanding. Let us have a society whose birth-right is knowledge, and the human mind shall be garlanded and its craven happiness have vanished away; and man shall go, mated with the sweetest happiness. Let us have a world where truth is the final test of things, and the human nature of that world must be fashioned in the image of its creator. R.

## HERE AND NOW

It will have been demonstrated to all and sundry who have given any consideration whatever to the bone-dry results of our Here and Now dissertations recently, that the "Clarion" circulates among those who, one of these fine days, shall inherit the earth, but who in the meantime are not corpulent with wealth and who, in fine, give ample evidence that they at any rate will never be able to buy the capitalist out.

We have ample evidence on hand that these registrations of the "Clarion's" financial pulse are looked for and noted in many places, and we are not a bit displeased at the manifestation of interest in the "Clarion's" welfare. But we need more interest to be taken in it and more effort, where it can be made, towards sales and subs.

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