

# The Origin of the World

By R. McMillan.

## CHAPTER III.

### THE SPEED OF THE EARTH.

A SHORT time ago I received a letter from a bush girl who was very keen to "travel." She told me that life was so dull and grey at home, where "nothing ever happened," that she was "sick to death" of the monotony of existence. There are thousands of people who are like that, because they never ask what sort of a place the world is, or how the world began. They never take the trouble to study things.

If that girl knew it, she could lie down on some secluded bank in the country, quite close to home, and look up at the stars and realize the stupendous fact that she was travelling at an enormous speed and seeing all the wonders of the heavens on her journey.

When you lean on a fence at night and watch the stars, they appear to be very still, do they not? And this old world is as quiet as the Seven Sleepers, giving no sound of life or movement. You can almost hear your own heart beating, the stillness grows so deep. You would think that this world or ours, this great earth, was anchored solidly in the universe; and if you believed your senses alone, they would tell you that the world is solid and immovable. But you can never believe your senses by themselves, and that is why the world of human beings is always in trouble. People believe things that are not true, and they always have done so.

This great solid world that we think so much of, and love so well, is flying through space so fast that you cannot even imagine how fast it goes. You never saw a cannon-ball flying, did you? There are no big guns in the bush where you live,\* so of course you have never seen one.

A modern 16-inch cannon fires a shot, weighing a ton, with a velocity of 2,000 feet a second. That is so fast that your eye could scarcely see it fly. I have watched the passage of big cannon-balls that came dangerously near to me, and I watched them in deadly interest; but I could hardly ever see them, till they struck the water and went ricocheting along the surface as if the water was solid iron. Yet some of my fellows could see them, maybe because they had quicker eyes, or perhaps because they had a more vivid imagination than I had.

When a cannon-shot leaves the muzzle of the gun at the rate of 2,000 feet a second, it is too fast for us to see it. Well, this great big solid earth has about seven different motions, and one of them is the motion of revolution. When you see the sun at its highest point to-day, at twelve o'clock, you say it is noon. And at twelve o'clock to-morrow it will be noon again. Do you understand what brings "noon"? Perhaps I ought to tell you.

The sun is standing still (in a sense, but nothing in the universe is really still), and the earth turns round. Your part of the world is nearest the sun at twelve o'clock to-day. Very well, the earth revolves on its axis, so as to bring you round to the same place to-morrow. But if the earth is 25,000 miles round, and the world takes twenty-four hours to turn round, like that, then it must be turning at the rate of more than a thousand miles an hour! A thousand miles an hour means 1,500 feet a second. That is nearly as fast as the cannon-ball which we could not see.

Do you believe that? It does not sound reasonable, does it? And you can lean on the gate of the homestead and think that the world is quite still. But it is not. It is revolving at the rate of 1,500 feet, or say a quarter of a mile, between two beats of your pulse. It travels at the rate of seventeen miles

a minute to bring noon-time to your home. How long will it take you to realize that, I wonder!

You ask how the world began, but you have first got to understand something about it as it is; and that is not so easy, for our senses have betrayed us, and we have got to learn the difficult lesson that we cannot believe our eyes.

When you have tried an experiment with a ball of worsted and a lamp, you will begin to understand what I am saying. Get a ball of worsted and stick a knitting-needle through it to make the "pole," then hold it somewhere near the lamp and turn the ball round, and you will have a fair picture of the revolving earth. When you have learned that the ball must be inclined at an angle of twenty-degrees, to represent the position of the poles properly, you will understand how difficult the subject is; but you will understand it, all the same.

You will see how the earth has to turn round at the rate of a thousand miles an hour to bring dinner-time each day; to bring day and night, and week-days and Sundays. But it would never bring Christmas Day if it only turned round like that; so it has another motion. It goes round the sun as well. It revolves on its axis to bring day and night, but it also revolves round the sun to bring Christmas Day and the changes of the year. Suppose you take the ball of worsted that you have been holding on the knitting-needle, and walk round the lamp with it, still keeping it revolving! There you have the motion which brings Christmas Day.

The sun is, as I told you, about 93,000,000 miles from the earth, and this solid, quiet, motionless, beautiful world has to travel right round the sun to bring New Year's Day and Christmas Day, and the seasons in their turn.

Now here is a sum for you to do. If the sun is 93,000,000 miles from the earth, how far has the earth got to travel to make a circuit? If you work it out, you will remember it; but if I tell you, it is safe to say that you will forget it. The sun is, say, a million miles across, and the earth is 93,000,000 miles distant, and the earth has to travel all round a circle to get back to where it was a year ago. How far has it to go, and how fast must it travel to get there in time. I told you that it revolved at the rate of more than a thousand miles an hour to bring noon-time to the earth! In order to bring seed-time and harvest on its journey round the sun it has to travel more than—now listen—more than a thousand miles a minute! There are sixty minutes in an hour, and this solid, steady old world has to travel at the rate of 68,000 miles an hour!!!

Can you realize it? I cannot. It is too great, too awful, too wonderful. The weight of the earth is six thousand million billion tons, and it is flying through space at the rate of 100,000 feet a second. It travels at the rate of nineteen miles a second.

It is too awful to think about, is it not? And yet that girl in the bush tells me that she wants to travel, for the dull grey monotony of life is killing her. And all the while she is travelling at the rate of 1,500 feet a second in one direction, and 100,000 feet a second in another direction, and yet she is not satisfied! Is not this a miracle of a world? The longer I live the more wonderful it seems. If I live much longer, I shall not want to die at all; but I hope I shall not object to going when my time is fulfilled, for death comes in time to men and beasts, to suns and worlds, and to everything in the universe. Nothing endures; all is fleeting.

How wonderful to watch the sky on a starry night and sing—if you can—with Essex Evans:—

I marked Orion's armour glitter cold,  
Where o'er white bars the milk-white river  
runs;

I marked great Sirius flood the heavens with  
gold,

The sovran of the suns.

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## A PROPAGANDA CAMPAIGN

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my holding meetings as I experienced before. Also, my treasury was depleted, and so I proceeded on my way back west. I might say here that of all the labor party leaders in the Maritime provinces, the best I met, were Forman Way and Jim McLaughlan. Way is an M.P.P.

I wrote all the main points in Northern Ontario, with the object of having a series of meetings on my return trip, but the only reply I received (from Cobalt) informed me that the movement was in such a state there that the local O.B.U. were unable to buy coal for the heater in the headquarters, and that only a few could be found in the town with interest enough to come around. The burden of financing me fell most heavily upon the comrades of St. John, N. B., about a dozen of them raised \$160 amongst them. I arrived in Calgary on the fourth of February. To sum up, my impressions are these: in the cities of Western Canada, where S. P. of C. propaganda has been carried on for years, there are several thousands who understand the class struggle, and are therefore, class conscious. Also, in other places, where there are ex-members of the S. P. of C. who have received a training in the west, and who are active in their respective localities, there is found the nucleus of a real organization, as in Halifax and Cape Breton. The great mass of the workers, however, know nothing at all about the class struggle, are not thinking of revolution, and the conflicts within the different organizations hold no interest for them. This much I found though, that those who can be induced to come to meetings, pay much more attention to Socialist propaganda now, than was the case some years ago. Despite the revolutionary "jag" which most of us had following the proletarian coup d'etat in Petrograd in Nov., 1917, from which we, in our enthusiasm, judged the revolution to be at our door-step, the spade work is still to be done. Where we now distribute pamphlets, and books by the thousands, they should be gotten out by the millions, where now we have half a dozen speakers, we should have hundreds. It may not be necessary for the majority of the working class to understand Marx, but this oft reiterated fact remains: whilst the working-class continues to support capitalism, the only function of the revolutionist is to make more revolutionists. This cannot be done by individuals who spend their time with conventions taking the leading part in forming an organization one day, and on the day after convening once more for the purpose of killing the organization they had formerly been instrumental in bringing into being.

Nor can revolutions be brought about by the tactics of the "whispering hopes" of the "Workers Party", who make up the "secret fives" in some of the cities. The "secrecy" of these "militants" provides us with considerable amusement. They remind one of the ostrich with its head buried in the sand. The S. P. of C. in Calgary is given till the 15th of this month to live, but somehow the S. P. of C. just refuses to die, despite the ominous threats of the two or three silent actionists we smile at here; we are stronger in Calgary now than we have been for years. Bob Russell's report of the Toronto convention has startled even some of the most ardent of the "secret" gentlemen, and some honest men who had fallen for the new "tactics" of the self-appointed leaders of the "poor working class" have experienced a feeling of revulsion, which spells ruin to the hopes of the self-confessed liars of the east. When the organizers of the Workers' Party were in Calgary they told the comrades here that Bob Russell had joined with them. Local representatives whispered that the whole Calgary local, including myself, and with the exception of Comrades Tree and Lewin, had agreed to join with them. They offered one of our comrades here the position of Editor of their paper. They jingled the money bag, but he did not respond, although he has been out of work for about six months and is broke.

Now, after having tried to bribe and coax our members to join their party, and threatening to

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\*The reader should bear in mind, now and later, that the author is addressing a resident in Australia, where he also lives.