seconds the lofty tower of Limehouse Church would pass beneath us. Eleven seconds more, and the Tower of London would reach us, the Bank and Cannon Street railway station would pass in the four next seconds, and two more beats of the pendulum would bring us St. Paul's. Another three beats and it is the Courts of Justice and Temple Bar which meet us, seven seconds later and we cross Regent Street, by the thirty-ninth second from our start we should find we were over Hyde Park and the Marble Arch, and before the minute had expired we should have passed Hammersmith.

But if, instead of being carried along with the earth in its journey round the sun, we had stood aside altogether, and remaining perfectly at rest had watched the planet's giant bulk as it rushed past us, we should have witnessed a vastly greater speed, for its rapidity of movement forward in its orbit is one hundred times greater than its rapidity of movement on its axis, for any place in the latitude of London.

Let us in imagination take such a stand in advance of the earth and wait for its coming. If our station be some 900,000 miles away, we shall see our earthly home shining in the distance and of about the same apparent size as the full moon appears to us now. But ere long we should notice that it was growing larger and larger as it hurried forward. In six hours it would have nearly doubled its diameter; and in three hours more it would have doubled it again. And now its size would increase with the most obvious rapidity, and we should see the familiar outlines of our continents and islands with ever increasing distinctness. Still it would advance, and we should see that by this time it would be presenting to us an entirely different side to that which we saw at first. If the American continent had been presented to us at first, it would now have passed out of sight, and the Eastern Hemisphere would be before us. Soon the whole heaven would be filled by the advancing globe, and some thirteen hours after we saw it first, then nine hundred thousand miles away, no larger than the moon, it would rush past us. We should not now have to wait for more than a minute whilst London and its spreading suburbs were passing by; if one instant Barking were before us, then, ere the pendulum had completed its swing, the mighty city, with its myriads of houses, and its five millions of human beings, would have dashed past, mingled into one undistinguishable blot by the swiftness of its passage, and we should look down on Brentford.

But what imagination can help us when we try to call up before us the almost lightning speed of Arcturus? Even our earth seems to crawl at a snail's pace in comparison. For Arcturus the journey of a single second of time would be no such trivial distance as separates Barking from Brentford. London to Dundee measures the stride it takes during one beat of the clock!

And this great world of ours, what is it in comparison with the giant star? Like a pebble to a mountain. For though only four or five stars in the entire heavens seem to shine more brightly, it is almost the most distant of all the leaders of the heavenly host, far more distant than Sirius or than Vega. If a powerful telescope be turned upon Arcturus a tiny companion star can be seen in its near neighbourhood, a star that sends us but one part in twenty thousand of the light its great superior transmits. Our sun would appear but little brighter than that infinitesimal speck if it were placed as far away.

We cannot tell how much larger Arcturus is than our sun, for every