ceivable direction—like the clouds of home-returning swallows in the dusk of a summer evening. These particles of cosmical matters—these clouds of cosmic dust intervene between us and the sun, and must shut out a large proportion of the solar light and heat. We are told by Professor J. P. Langley that not more than half the sun's radiant force reaches the earth. They tell us the remainder is "absorbed" by the atmosphere and the dust which floats there; but much of the absorption must be accomplished by the cosmic matter which exists beyond the atmosphere. The absorption thus effected would be still greater to the inhabitants of Venus and Mercury, if inhabited; since cosmic matter must be more accumulated in the nearer neighborhood of the sun. Thus the temperature on those planets would be lower than their proximity to the sun would lead us to suppose. On the same principle, the solar emanations at Mars or Saturn would be greater than their distances from the sun would lead us to suppose. Who can tell how far these adaptations may go in compensating to other planets for losses due to different distances from the sun?

We have seen the meteor ignited in the upper air. We have seen its bright streak vanish while we gazed. The little body was melted—it was vaporized. While passing through the space measured by its line, it changed from a cold stone to shining dust, and then a darkened dust left floating in the upper strata of the atmosphere. But though unseen, the meteoric dust still exists. It now belongs to the earth. It will be wafted to and fro by the winds; it will come down, after some months, and contribute some new material to the earth. Some of these atoms will fall on the ocean; most of them will fall there; and after other months they will settle to the bottom and mingle with the ooze which is there accumulating. You will remember our walk under the sea (Talk X), and the comet-dust which we found. It is an impressive thought. This black particle now resting through an eternity on the midnight-shrouded ocean-bed, shone lately in a star. There are greater changes of fortune than any suffered by us.

The point which we have reached reveals the boundless