

THE RIDDLE OF THE UNIVERSE

VIII. The possibility of our ever entering into direct communication with such inhabitants of other planets seems to be excluded by the immense distance of our earth from the other heavenly bodies, and the absence of the requisite atmosphere in the intervening space, which contains only ether.

But while many of the stars are probably in a similar stage of biogenetic development to that of our earth (for the last one hundred million years at least), others have advanced far beyond this stage, and, in their planetary old age, are hastening towards their end—the same end that inevitably awaits our own globe. The radiation of heat into space gradually lowers the temperature until all the water is turned into ice; that is the end of all organic life. The substance of the rotating mass contracts more and more; the rapidity of its motion gradually falls off. The orbits of the planets and of their moons grow narrower. At length the moons fall upon the planets, and the planets are drawn into the sun that gave them birth. The collision again produces an enormous quantity of heat. The pulverized mass of the colliding bodies is distributed freely through infinite space, and the eternal drama of sun-birth begins afresh.

The sublime picture which modern astrophysics thus unveils before the mind's eye shows us an eternal birth and death of countless heavenly bodies, a periodic change from one to the other of the different cosmogenetic conditions, which we observe side by side in the universe. While the embryo of a new world is being formed from a nebula in one corner of the vast stage of the universe, another has already condensed into a rotating sphere of liquid fire in some far distant spot; a third has already cast off rings at its equator,