

## SOLUTION OF THE WORLD-PROBLEMS

nal basic "substance" (*vide* p. 229) is not yet divided into ponderable and imponderable matter. In other parts of space we find stars that have cooled down into glowing fluid, and yet others that are cold and rigid; we can tell their stage of evolution approximately by their color. We find stars that are surrounded with rings and moons like Saturn; and we recognize in the luminous ring of the nebula the embryo of a new moon, which has detached itself from the mother-planet, just as the planet was released from the sun.

Many of the stars, the light of which has taken thousands of years to reach us, are certainly suns like our own mother-sun, and are girt about with planets and moons, just as in our own solar system. We are justified in supposing that thousands of these planets are in a similar stage of development to that of our earth—that is, they have arrived at a period when the temperature at the surface lies between the freezing and boiling point of water, and so permits the existence of water in its liquid condition. That makes it possible that carbon has entered into the same complex combinations on those planets as it has done on our earth, and that from its nitrogenous compounds protoplasm has been evolved—that wonderful substance which alone, as far as our knowledge goes, is the possessor of organic life. The monera (for instance, chromacea and bacteria), which consist only of this primitive protoplasm, and which arise by spontaneous generation from these inorganic nitrocarbonates, may thus have entered upon the same course of evolution on many other planets as on our own; first of all, living cells of the simplest character would be formed from their homogeneous protoplasmic body by the separation of an inner nucleus from the outer cell body (cytostoma). Further,