

portant fact that the egg of all animals, from those of sponges and worms up to those of the ant and man, is a simple cell.

Thirdly, from the "single-cell" state arose the *simplest multicellular state*, namely, a heap or a small community of simple, equiformal, and equivalent cells. Even at the present day, in the ontogenetic development of every animal egg-cell, there first arises a globular heap of equiformal naked cells, by the repeated self-division of the primary cell. (Compare vol. i. p. 190 and the Frontispiece, Fig. 3.) We called this accumulation of cells the *mulberry state* (Morula), because it resembles a mulberry or blackberry. This Morula-body occurs in the same simple form in all the different tribes of animals, and on account of this most important circumstance we may infer—according to the biogenetic principle—that the *most ancient, many-celled, primary form of the animal kingdom* resembled a Morula like this, and was in fact a simple heap of Amœba-like primæval cells, one similar to the other. We shall call this most ancient community of Amœbæ—this most simple accumulation of animal cells—which is recapitulated in individual development by the Morula—the *Synamœba*.

Out of the Synamœbæ, in the early Laurentian period, there afterwards developed a fourth primary form of the animal kingdom, which we shall call the ciliated germ (Planæa). This arose out of the Synamœba by the outer cells on the surface of the cellular community beginning to extend vibrating fringes called cilia, and becoming "ciliated cells," and thus differentiating from the inner and unchanged cells. The Synamœbæ consisted of completely equiformed and naked cells, and crept about slowly, at the bottom of the Laurentian primæval ocean, by means