

proof of the earlier existence of this most ancient ancestral stage, based upon the fundamental law of biogeny, is possibly still furnished by the circumstance that, according to the assertions of many investigators, in the beginning of the development of the egg, the cell-kernel, or nucleus, disappears, and the egg-cell thus relapses to the lower stage of the cytod (Monerula, p. 124; *relapse* of the nucleated plastid into a non-nucleated condition). The assumption of this first stage is necessary for most important general reasons.

SECOND STAGE: Amœbæ.

The second ancestral stage of Man, as of all the higher animals and plants, is formed by *a simple cell*, that is, a little piece of protoplasm enclosing a kernel. There still exist large numbers of similar "single-celled organisms." Among them the common, simple Amœbæ (vol. i. p. 188, Fig. 2) cannot have been essentially different from these progenitors. The *form value* of every Amœba is essentially the same as that still possessed by the egg of Man, and by the egg of all other animals. (Vol. i. p. 189, Fig. 3.) The naked egg-cells of Sponges, which creep about exactly like Amœbæ, cannot be distinguished from them. The egg-cell of Man, which like that of most other animals is surrounded by a membrane, resembles an enclosed Amœba. The first single-celled animals of this kind arose out of Monera by the differentiation of the inner kernel and the external protoplasm; they lived in the earlier Primordial period. An irrefutable proof that such single-celled primæval animals really existed as the direct ancestors of Man, is furnished according to the fundamental law of biogeny (vol. i. p. 309)