

exceedingly important compounds which we have become acquainted with as the first and most indispensable substratum of all vital phenomena, the albuminous combinations, or albuminous bodies (protean matter). Of these, again, the most important are the plasson-body or plasma combinations (karyoplasm and protoplasm).

We have before this (p. 191) become acquainted with the simplest of all species of organisms in the Monera, whose entire bodies when completely developed consist of nothing but a bit of plasson, or a semi-fluid albuminous lump of plasma. These simplest of organisms are of the utmost importance for the theory of the first origin of life. But most other organisms, also, at a certain period of their existence—at least, in the first period of their life—in the shape of egg-cells or germ-cells, are essentially nothing but simple little lumps of such albuminous formative matter, known as cell-slime or protoplasma. They then differ from the Monera only by the fact that in the interior of the albuminous corpuscle the cell-kernel or nucleus has separated itself from the surrounding cell-substance (cyto-plasma). As we have already pointed out, the cells, with their simple attributes, are so many citizens, who by co-operation and differentiation build up the body of even the most perfect organism; this being, as it were, a cell republic. The fully developed form and the vital phenomena of such an organism are determined solely by the activities of these small albuminous plastids.

It may be considered as one of the greatest triumphs of recent biology, especially of the theory of tissues, that we are now able to trace the wonder of the phenomena of life to these substances, and that we can demonstrate the