

action with its material, of producing the most various forms. Now, we need only change the expression "original slime" (Urschleim) into *Protoplasm*, or *cell-substance*, in order to arrive at one of the grandest results which we owe to microscopic investigations during the last twenty years, more especially to those of Max Schultze. By these investigations it has been shown that in all living bodies, without exception, there exists a certain quantity of mucilaginous albuminous matter, in a semi-fluid condition; and that this nitrogen-holding carbon-compound is exclusively the original seat and agent of all the phenomena of life, and of all production of organic forms. All other substances which appear in the organism are either formed by this active matter of life, or have been introduced from without. The organic egg, the original cell out of which every animal and plant is first developed, consists essentially only of one round little lump of such albuminous matter. Even the yolk of an egg is nothing but albumen, mixed with granules of fat. Oken was therefore right when, more divining than knowing, he made the assertion—"Every organic thing has arisen out of slime, and is nothing but slime in different forms. This primitive slime originated in the sea, from inorganic matter in the course of planetary evolution."

Another equally grand idea of the same philosopher is closely connected with his theory of primitive slime, which coincides with the extremely important *Protoplasm theory*. For Oken, as early as 1809, asserted that the primitive slime produced in the sea by spontaneous generation, at once assumed the form of microscopically small bladders, which he called "*Mile*," or "*Infusoria*." "Organic nature has for its basis an infinity of such vesicles." These little