

and Euglypha, representatives of the Lobose and Filose Protoplasts, the endosarc becomes resolved into nucleated cells, which are of the nature of ova, while the nucleus is resolved into granuliferous non-nucleated cells, finally breaking up into their constituent granules, which are of the nature of spermatozoids.

AMCEBA.

Greek, *amoibos*, changing.

Volvox: Linnæus, 1760. *Chaos*: Linnæus, 1767. *Proteus*: Müller, 1786. *Vibrio*: Gmelin, 1788. *Amaba*: Bory, 1824. *Amaba*: Ehrenberg, 1831.

Animal, when at rest, a spherical or oval mass of soft, hyaline, colorless, homogeneous, pale granular protoplasm, possessing extensile and contractile power, and in the active condition devoid of an investing membrane, or any kind of covering. In motion, mostly of exceedingly variable and ever-changing form, and with no absolute distinction of parts, though frequently exhibiting more or less disposition to differentiation into an anterior and a posterior region. Ectosarc hyaline, crystal-clear, but, with high magnifying power, exhibiting more or less of an infinitely fine granular constitution. Endosarc continuous with the former, finely and coarsely granular, mingled with corpuscles of intrinsic and varied character, together with various ingesta, consisting of food, water-drops, sand, etc. Containing also a nucleus and a contractile or pulsating vesicle, or sometimes more than one of either or both of these constituents.

Body with no external appendages of a fixed or permanent character. Pseudopods digitate, simple or branching, cylindroid and blunt, or more or less tapering and pointed, or short and broadly lobate, consisting of extensions of the ectosarc with variable proportions of the endosarc, or of the former alone.

Animal in the quiescent state, purged of food and other ingested matters, globular in form, and invested with a structureless membrane, apparently produced by coagulation of a portion of the ectosarc.

AMCEBA PROTEUS.

PLATES I, figs. 1-8; II, figs. 1-13; IV, figs. 22-25; VII, figs. 13-19; VIII, figs. 17-30.

Der kleine Proteus. Rüssel: Insecten Belustigung, 1755, iii, 621, tab. ci.

Volvox Chaos. Linnæus: Systema Naturæ, ed. x, 1760, i, 821.

Volvox Proteus. Pallas: Elenchus Zoophytorum, 1766, 417.

Chaos Proteus. Linnæus: Systema Naturæ, ed. 12 et 13, 1767, i, 1326.

Volvox Sphærule. Müller: Verm. Terres. Fluvial. 1773, 31.