

form of the central capsule is always monaxon (with a vertical allopolar main axis) and generally spheroidal; that of the skeleton is very varied.

10. *Synopsis of the Subclasses and Legions* :—

| FIRST SUBCLASS.  |  | SECOND SUBCLASS.   |   |
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| <p><b>PORULOSA</b> vel <b>HOLOTRYPASTA.</b><br/>Central capsule originally spherical, without osculum or principal opening, with innumerable fine pores.</p>   |  | <p><b>OSCULOSA</b> vel <b>MEROTRYPASTA.</b><br/>Central capsule originally monaxon, with an osculum at the basal pole of the vertical main axis.</p>   |   |
| <p><b>Legion I.</b><br/><b>Spumellaria.</b><br/>(PERIPYLEA).</p>   | <p><b>Legion II.</b><br/><b>Acantharia.</b><br/>(ACTIPYLEA).</p>   | <p><b>Legion III.</b><br/><b>Nassellaria.</b><br/>(MONOPYLEA).</p>   | <p><b>Legion IV.</b><br/><b>Phæodaria.</b><br/>(CANNOPYLEA).</p>  |
| <p><i>Central capsule</i> originally spherical, homaxon.</p> <p><i>Capsule-membrane</i> single, pores innumerable, distributed all over.</p> <p><i>Nucleus</i> central, originally spherical (usually dividing late).</p> <p><i>Skeleton</i> absent or siliceous, never centrogenous.</p> <p><i>Calymma</i> always without phæodium.</p> | <p><i>Central capsule</i> originally spherical, homaxon.</p> <p><i>Capsule-membrane</i> single, pores numerous, regularly distributed.</p> <p><i>Nucleus</i> excentric, (usually dividing early).</p> <p><i>Skeleton</i> always of acanthin, always centrogenous.</p> <p><i>Calymma</i> always without phæodium.</p> | <p><i>Central capsule</i> originally ovoid, monaxon.</p> <p><i>Capsule-membrane</i> single, a porous area (porochora) at the oral pole of the main axis.</p> <p><i>Nucleus</i> excentric, near the aboral pole (dividing late).</p> <p><i>Skeleton</i> siliceous, usually monaxon, extracapsular.</p> <p><i>Calymma</i> always without phæodium.</p> | <p><i>Central capsule</i> always spheroidal, monaxon.</p> <p><i>Capsule-membrane</i> always double, an astropyle (with radiate operculum) at the oral pole of the main axis.</p> <p><i>Nucleus</i> always spheroidal, in the main axis (dividing late).</p> <p><i>Skeleton</i> of a silicate, always extracapsular.</p> <p><i>Calymma</i> always with phæodium.</p> |

11. *Individuality of the Radiolaria.*—Like other Protozoa the Radiolaria are unicellular organisms, the whole fully developed organisation of which falls under the category of a single cell, both morphologically and physiologically. Since this view is based upon the composition of the individual body out of two different morphological elements, nucleus and protoplasm, it is at once justified in the case of the majority of Radiolaria, in which the plasmatic body encloses only a single nucleus (the so-called "Binnen-Bläschen"); such is the case in all the SPUMELLARIA monozoa, NASSELLARIA and PHÆODARIA. This aspect of the case might appear doubtful in those Radiolaria in which the simple primary cell-nucleus divides early into numerous small secondary nuclei, as is the case in the SPUMELLARIA polyzoa and most ACANTHARIA. Strictly speaking, the multinucleate central capsule should in such cases be regarded as a syncytium; but since the individual unity of the unicellular organism is as clearly defined in these precocious multinuclear Radiolaria as in the ordinary serotinous forms, the former must be considered unicellular Rhizopods just as are the latter. This mode of regarding