

axis of growth) and broad; curved or irregular in outline; subdivided more or less completely by numerous secondary septa. Walls rough externally, interior surface smooth. Aperture porous. Diameter of the adherent patches $\frac{1}{8}$ th inch (4 mm.) or more.

Bdelloidina aggregata is generally met with in the form of little, grey, sandy, spreading patches, growing on fragments of shell or coral, usually selecting some hollow or cranny, where it is protected by its position from external injury. Under the microscope it is found to consist of a more or less complicated mass of segments, arranged in somewhat irregular, broad, either simple or divided lines, often a good deal crowded together.

The segments are long and very narrow, and are placed side by side, so that their length lies transversely to the axis of growth. Owing to the nature of the bottom in the localities which the organism affects, the test is usually constructed of calcareous rather than siliceous sand. The exterior is rough, and the sutural lines distinct and slightly excavated.

The cavities of the chambers are irregularly divided by transverse partitions, as shown in fig. 6; but the subdivisions of the adjacent chambers do not correspond in size or position, nor are they indicated in any way on the exterior of the test. The interior surface is smooth, and is marked by punctations which have the appearance of large pores. A very similar condition is presented by the inner surface of the shell of *Trochammina trullissata* (Pl. XL. fig. 16). In that species it can be easily demonstrated that the test is not really perforated, and that the markings only represent a very early or rudimentary condition of the cancellated structure which finds its fullest development amongst recent types in the genus *Cyclammina*; and as no pores are visible externally in the test of *Bdelloidina*, it is probable that in *Bdelloidina* also the puncta on the internal surface are mere superficial depressions.

The general aperture of the test is very distinctive: following the common rule of labyrinthic Foraminifera, it is cribrate or porous, and takes the form of a single row of round orifices on the outer face of the terminal chamber, as shown in figs. 4 and 5.

Bdelloidina aggregata is manifestly a rare species. The Challenger specimens, which are few in number, were all obtained from two or three dredgings in shallow water near the Admiralty Islands, on the north coast of Papua, and they are generally adherent to fragments of molluscan shells. Mr. Carter gives no locality for those which form the subject of his paper, but states that they were found "in excavations on the surface of a large globular mass of *Siderastræa*."

Prof. Rupert Jones has for many years had in his possession a characteristic drawing of this species, taken from a fine specimen adherent to a Cretaceous Ammonite in Mr. Matthew Wright's cabinet. Probably the examination of the surface of Mesozoic fossils would bring to our knowledge other examples of this sort.