

being perfectly free, and at liberty to wander anywhere along the chambers or externally through the apertures. In some cases they are packed closely together in the cavity, probably from external causes acting after immersion in spirit; for thin partitions, bridges, and pillars of the semitransparent cœnœcium often separate the individuals. The cavities are generally clean, though occasionally a little mud containing sponge and other spicules, including peculiar reticulated fragments apparently of Radiolarians, occurs. This would seem to show that currents of sea-water sweep through these chambers very freely, probably assisted by the active movements of the cilia covering the tentacular plumes. Moreover, in dissecting out the latter, an operation performed with ease, owing to the friability of the cœnœcium, at first sight it may almost be supposed that an ovigerous envelope containing embryos is before us, so remarkable is the profusion of eggs and animals, and apparently so active is the reproductive function. The aspect of the adults and their terminal buds, the proportionally large size of the ova, and other features, however, negative such a supposition.

Each adult polypide (and they are somewhat uniform in size) measures, from the extremity of the cephalic plumes to the tip of the pedicle, about two millimetres (woodcut, fig. 2); and of this length the body-proper—that is from the buccal disk to the posterior bulbous region above the pedicle,—is rather more than one millimetre. The body in most is bean- or kidney-shaped (Pl. II. fig. 1), generally more rounded and bulbous posteriorly, since there is a tendency to a forward curve behind the pedicle. The dorsal surface is smooth and convex, a distinct constriction, however, being usually evident just behind the anterior region bearing the brownish-red pigment-spots. The latter region is generally bulbous and prominent, and in many a slightly elevated median ridge leading to the anus is present. So far as the spirit-preparations go, therefore, the external differentiation of the anterior region, called "thoracic" by Lankester in *Rhabdopleura*, is indistinct in *Cephalodiscus*, but internally the collar body-cavities are diagnostic. As the pedicle is often curved forward or projected outward at a small angle to the body, the ventral surface is thus rendered comparatively short (Pl. III. fig. 2); indeed, in those which are much bent, the base of the pedicle touches the buccal disk. This contour of the body is interesting in relation to the oblique direction of the cup-like body of *Loxosoma*. When



FIG. 2.—Ventral view of *Cephalodiscus dodecalophus*, M'Intosh.