

*Distaplia rosea*, and may be regarded as occupying a position between them. In general shape and pigmentation it agrees with *Distaplia magnilarva*, while it differs from that species and agrees with *Distaplia rosea* in having comparatively small Ascidiozooids and larvæ. The peduncle is rather larger than in either of Della Valle's species.

If a *Distaplia* were discovered which was related to *Distaplia magnilarva* and to *Distaplia rosea* in the reverse way to that found in the case of *Distaplia vallii*, that is, if it agreed in shape and colour with *Distaplia rosea* but possessed the large Ascidiozooids and larvæ of *Distaplia magnilarva*, then, unless it had some sufficiently important characters peculiar to itself, it would be necessary to unite the four species, and consider them merely as varieties showing all the possible combinations (AC, AD, BC, BD) of the four characters:—A, large Ascidiozooids and larvæ, B, small Ascidiozooids and larvæ, C, dark pigmentation, and D, red pigmentation. Of course such a combination as AB or CD would be impossible. The formulæ for the three known species would be *Distaplia magnilarva*, AC, *Distaplia rosea*, BD, *Distaplia vallii*, BC, and the imaginary fourth form would be AD.

#### *Genus doubtful.*

————— (?) *clava*, n. sp. (Pl. XXVII. figs. 1, 2).

A specimen found at Station 75,<sup>1</sup> off the Azores, cannot with certainty be referred to its proper position, as it shows no traces of Ascidiozooids. It is an elongated curved mass about 4 cm. in length and 1 cm. in average thickness, and was evidently attached by the lower end. The opposite extremity is slightly swollen and convex, and thus forms a rounded knob on the summit of a thick peduncle (Pl. XXVII. fig. 1), but the entire mass is composed of test.

The surface is rather rough, and the colour is a dark dull grey, having lighter and darker patches on the upper end (Pl. XXVII. fig. 1). It is tough and cartilaginous, and is seen on section to have the same colour and structure all through.

The test matrix appears structureless, but is densely crowded with test cells (Pl. XXVII. fig. 2, *t.c.*). These are rather large, and are mostly of more or less rounded form. They are not granular, but are usually clear, homogeneous, highly refracting, and of a yellow colour. A few fusiform and stellate cells are also present.

In some parts of the test, especially in the knob-like upper end of the specimen, large numbers of pigment corpuscles are found. They are all spherical, ovate, or ellipsoidal in shape, and are of large size (Pl. XXVII. fig. 2, *pig.*). The pigment granules, which are opaque white, are usually confined to one half of the cell. The lighter patches on the upper end of the specimen are due to the presence of very large numbers of these

<sup>1</sup> Station 75, July 2, 1873; lat. 38° 38' 0" N., long. 28° 28' 30" W.; depth, 450 fathoms; bottom, volcanic mud.