

*Amaroucium variable*, n. sp. (Pl. XXIX. figs. 7-12).

*The Colony* consists of one or more masses of an irregularly ovate or pyriform shape attached by short peduncles. The upper end is broad and generally more or less convex. There may be slight lateral compression. The surface is generally rather uneven and not smooth. The colour is usually yellowish-grey, but may be darker.

The length is 2.5 cm., of which 5 mm. is formed by the peduncle; the greatest breadth is 1.7 cm., and the thickness is about 1 cm.

*The Ascidiozooids* are numerous and of large size. They are distinctly visible on the outside of the colony. They are usually about 6 mm. in antero-posterior length, and are placed with considerable regularity at right angles to the upper surface of the colony. The division of the body into regions is not distinct.

*The Test* is firm and cartilaginous. It is of a yellowish-grey colour and is semi-transparent. The matrix is clear and structureless, but it is crowded with minute test cells of various shapes. There are no bladder cells, and no vessels are present.

*The Mantle* is fairly strong. The musculature consists mainly of a series of longitudinally running bands of fibres placed at equal distances.

*The Branchial Sac* is well developed. The transverse vessels are fairly wide and have muscle fibres. The stigmata are numerous, but small and inconspicuous.

*The Alimentary Canal* forms a long narrow loop. The stomach is rather cylindrical in shape, and its wall is longitudinally folded.

*The Post-Abdomen* is usually of large size.

*Localities.*—(a) Kerguelen Island, 10 to 60 fathoms; (b) Kerguelen Island, 10 to 100 fathoms; (c) Kerguelen Island, 28 fathoms; (d) Royal Sound, Kerguelen, January 19, 1874, 20 to 60 fathoms.

I unite under this species a large number of specimens, collected in the neighbourhood of Kerguelen Island, which present great variations in form, size, colour, and some other particulars. They are, however, all closely related to one another, and although it might be possible to break them up into two or three species, I believe that the differences between the extreme forms are sufficiently bridged over by intermediate conditions to warrant one in regarding them as composing a single species only. They form an extremely interesting series on account of the way in which they illustrate individual variation.

The shape may vary from almost spherical through ovate, ellipsoidal, discoid, and pyriform, to fusiform or wedge-shaped or even quite irregularly elongated forms. The woodcuts (fig. 9, *a* to *l*) show a few of the most striking forms assumed by the species. There are upwards of thirty colonies altogether in the collection, and no two of them have the same shape. In most cases the colony consists of one mass only, and is attached by a longer or shorter peduncle (fig. 9, *b*, *c*, *g*); sometimes the peduncle is prolonged