

of the species must necessarily be retained instead of Semper's new name, and as they are of the same age I retain the term *stokesi* as least likely to lead to error.

We dredged abundant specimens of this coral in the Arafura Sea, very variable in form, and bearing out Professor Semper's conclusions in every way.

Station 188. Arafura Sea. 28 fathoms.

Station 190. Arafura Sea. 49 fathoms.

Flabellum australe, n. sp. (Pl. VII. figs. 4, a, 5, a, b).

The adult corallum is very large, dense, and heavy. It is in the form of a compressed wedge, triangular in outline. The lateral costæ make with one another an angle of from 70° to 90° . The surfaces of the faces are smooth and glistening, of a brownish colour, marked with evenly curved transverse accretion lines, sometimes with numerous very fine costal markings all over, sometimes with only a few obscure primary and secondary ridges near the base. There is a distinct short cylindrical pedicle. The lateral costæ are sharp and rough-edged, somewhat jagged. They usually cease towards the margin of the calicle where the angles of the corallum are evenly rounded off. The form of the mouth of the calicle is extremely elongate and narrow, the ratio of the two axes being about as 100 to 40. The summits of the shorter axis of the calicle are somewhat higher than those of the longer axis, and the upper borders of the faces are evenly curved, with smooth edges. The septa are white, contrasting in colour with the brown wall of the calicle. They are stout, and straight, and covered with fine pointed granules on their faces. All the septa are very low near the margin of the calicle, to which they do not quite extend, a narrow zone of bare calicular margin being present all round the mouth of the calicle. It appears as if their free borders were so to speak cut away close to the calicular margin. The curved free edges of the principal septa bend over and descend nearly vertically to bound the fossa, which is extremely narrow, deep, and long. There are in one adult specimen, that figured, 48 complete septa sensibly equal to one another, and 144 incomplete septa of two different sizes—192 in all. In one specimen, there are 96 septa on one side, and 92 on the other. In another, 80 on one side, and 85 on the other. Another, 92 on one side, 94 on the other, and 28 of these complete on each side. A young one has 17 complete on each side, and 82 on each side in all. In all the specimens the septa are of three dimensions. The columella lies so deep in the fossa as to be almost invisible.

This species is well distinguished by its large size, its shape, and the peculiar cutting away, as it were, of the septal borders close to the margin of the calicle. The very young specimens are closely like those of *Flabellum patens* and *Flabellum stokesi*, though the adults are extremely different. *Flabellum distinctum*, Milne-Edwards and Haime, is also in its young stages very like the present species, but differs in having a wider mouth to its calicle. In *Flabellum australe* this is characteristically narrow.