

ribbed. Colour chestnut-brown, finely and irregularly rayed with lighter brown.

Hab. Sandwich Islands.

The above species was fished up from twenty fathoms, attached to coral. The only species of this form known to live at our islands.

11. DESCRIPTIONS OF TWO CORALS FROM MADEIRA, BELONGING TO THE GENERA PRIMNOA AND MOPSEA. BY JAMES YATE JOHNSON, COR. MEM. Z.S.

(Plate XXXI.)

Fam. GORGONIIDÆ, M.-Edw.

Subfam. GORGONIINÆ, M.-Edw.

Sect. PRIMNOACEÆ, M.-Edw.

PRIMNOA IMBRICATA, sp. n.

White, having a tendency to branch dichotomously in one plane; the branches slender, flexible, not plume-like, and not anastomosing. Axis pale brownish yellow, spineless, obscurely striated, effervescing in hydrochloric acid, coated with small white scales composed of carbonate of lime. Over the lower coating of scales there is another coating of larger scales, with a wide space between the two. The outer coat, which is easily removed, appears to be attached to the peduncles of the cells. These peduncles are in closely-set whorls of three or four, each of which expands into a cup-like cell, having its mouth closed in the dead coral with eight scales that have their apices in contact. The peduncles project at right angles from the stem, and are also clothed with scales.

This is a much more delicate form than *Primnoa lepadifera*, in which species the pedunculated cells appear to be arranged spirally on the branch.

Two specimens of this elegant *Primnoa* have been obtained, the larger of which has a height of $8\frac{1}{2}$ inches, with a width of 11 inches. It was attached to a piece of *Lophohelia* (*Oculina*) *prolifera*. The whorls of the pedunculated cells are about three-twentieths of an inch apart, and the peduncles about the same in height. The principal branch, near the base, has a diameter of one-fifth of an inch. The smaller example has been deposited in the British Museum.

Subfam. ISIDINÆ, M.-Edw.

MOPSEA ARBUSCULUM, sp. n.

The whole coral is coated with a thin brown skin. When this skin has been removed from the lower calcareous joints, they are found to be stony, white, subcylindrical, but rather narrower at the middle than at either end. They are finely striate longitudinally, and the striæ are parallel and straight. The interjoints do not

nearly equal the joints in length, being little more than discs, and are somewhat less in diameter. They are striate, and from them spring the branches. These branches are very numerous, diverging in all directions subdichotomously, and making a tolerably thick bush. They are much thinner than the main stem, and they become gradually more slender upwards, the calcareous joints at the same time becoming longer. Occasionally two of the ultimate branchlets come into contact and are soldered together. Each branchlet bears at its apex a cell of a shape between campanulate and infundibuliform, the margin of which bears eight pairs of long, upright, spine-like spicula. There are also sessile cells at the sides of the ultimate branchlets, one at each interjoint. All the cells are of a pale brown colour. The pellicle covering the branchlets contains long spicula, which are for the most part large and fusiform, whilst the smaller ones are cylindrical, and all are brown and minutely tuberculated.

A single example of this Coral was obtained from a fisherman at Cama de Lobos, Madeira, and it is now in the British Museum. Its length, without the base, which is wanting, is 13 inches, and it is 7 inches across. The lower part of the main stem has a diameter of three-tenths of an inch, and its calcareous joints are about three-eighths of an inch in length. The branches are broken away from this part of the stem; but there are remains to show that some of the interjoints bore four branches, others only one. A cell, with its marginal spines, measures the fifth of an inch.

This coral seems to be nearly related to *Mopsea dichotoma*; but M. Milne-Edwards gives the Indian Ocean (with a mark of doubt) as the habitat of that species. Strange to say, that writer, in his work on Corals ('Histoire Naturelle des Coralliaires,' forming one of the 'Nouvelles Suites à Buffon'), is altogether silent as to the cells of *Mopsea*. Lamouroux says that the polypi (? cells) of *M. dichotoma* are mammiform on the higher, tuberculous on the middle, and superficial on the lower branches. This would ill accord with the Madeiran specimen. Little agreement can be made out between that specimen and the figures of Esper, "Pflanzenhiere," Isis, pl. 5, figs. 1-5.

November 25, 1862.

E. W. H. Holdsworth, Esq., F.Z.S., in the Chair.

The following extracts were read from a letter addressed to the Secretary by Dr. G. Bennett, F.Z.S., dated Sydney.

"For the last six months I have been making every effort to procure specimens of the *Didunculus*, alive or dead. It has been reported (which I cannot credit) that they are nearly extinct; but if, as has been mentioned, the Samoan Islanders keep them as pets, as