into a sort of lip overhanging the orifice. Surface very closely and finely punctured. Zoœcia about $0''\cdot025$ to $\cdot03$ wide. Orifice $0''\cdot015$. Operculum semicircular $0''01 \times \cdot008$. Habitat.—Off Honoruru, Sandwich Islands, 20 to 40 fathoms.

From its size, colour, and conformation this form is one of the most magnificent of the Polyzoa. Although of such large dimensions, it is covered with an extremely thin and fugitive epitheca of a deep purplish-brown hue, (of a much deeper tint than that of *Mucronella castanea*), but the colour is in great part due to that of the polypides themselves. Amongst its most striking and conspicuous characters is the occium, of a beautiful pearly aspect and sculptured all over, except the lip-like prolongation inferiorly, and furnished with minute hexagonal pores. The marginal spines are represented, in the specimens observed, only by what appears to be the basal joint; they are probably when present of large size. From the figure it might be supposed that the lateral projections, at the lower part of the orifice, were internal articular denticles, but in reality they as well as the central broad mucro are, *ab origine*, processes of the thin peristome itself.

(c) Adnate (lepralian).

(9) Mucronella (Phylactella?) canalifera, n. sp. (Pl. XXII. fig. 2).

Lepralia mangnevilla, Bk., Zoophyt., Quart. Journ. Micr. Sci., N. S., vol. xiii. p. 284, pl. xxxi. fig. 5 (nec Audouin).

Character.—Zoœcia erect, very distinct, ventricose, surface varnished and very finely punctate or frosted. Orifice suborbicular; peristome produced in front into a wide spout-like process; six long, tapering, oral spines above and on the sides. Oœcia small, recumbent, not punctured.

Habitat.—Station 75, lat. 38° 38′ N., long. 28° 28′ W., 450 fathoms, sand. [Madeira, J. Y. J].

This form differs from Lepralia (Phylactella) labrosa in the absence of an internal denticle, and from Lepralia (Phylactella) collaris in the presence of the oral spines and the absence of puncturation on the occium.

(10) Mucronella tricuspis, Hincks (Pl. XXII. fig. 3).

Mucronella tricuspis, Hincks, Ann. and Mag. Nat. Hist., ser. 5, vol. viii., 1881, p. 125, pl. iii. fig. 1.

Character.—Zoarium adnate. Zoœcia disposed quincuncially but more or less in linear series, running in different directions; deeply immersed, except at the growing edge, with the oral portion produced. Primary orifice transversely elliptical,