

becomes very much elevated on the sides, forming a wide spout-like subtubular projection. Occasionally a small avicularium on one side at the upper part of the front with an acute triangular mandible pointing upwards and inwards. The fertile cells about half the size of the sterile ones, and seated on the front of the larger cells; the oecium, of small size and globular in form, is recumbent, and leans over to one side, so as not to interfere with the orifice of the supporting zoecium; its surface is finely punctured, and the anterior lip of the opening much thickened and projecting.

*Habitat.*—Off Honoruru, Sandwich Islands, 20 to 40 fathoms. Station 313, lat. 52° 20' S., long. 67° 39' W., 55 fathoms, sand.

The peculiar situation of the fertile cells on the front of one of the sterile kind is a very remarkable feature; the mouth of these smaller zoecia is formed exactly in the same way as in the others.

(4) *Smittia transversa* (Pl. XVIII. fig. 7).

*Character.*—Zoarium expanded, foliaceous. Zoecia elongated, pyriform, truncate below, rather flattened in front. Surface finely granular, a row of pores round the entire border. Mouth orbicular, a small internal median denticle, and on the lower border in front a small immersed avicularium of an oval form and placed transversely. Dorsal surface entire, porcellanous, wall thick. Interzoecial pores, 10 to 12, very minute.

*Habitat.*—Station 163A, off Twofold Bay, 150 fathoms, green mud.

Bears some resemblance to *Lepralia reticulata* in one or other of its varieties; and in the transverse position of the suboral avicularium is like *Smittia affinis*, Hincks.

(5) *Smittia marionensis*, Busk (Pl. XVIII. fig. 6).

*Lepralia marionensis*, Bk., Brit. Mus. Cat. p. 67, pl. xcvi. figs. 1 and 2.

*Character.*—Zoarium foliaceous, expanded, flexuose, unattached. Zoecia ovate, ventricose, no septal ridges; wall thin, punctured, punctures wide apart. Primary orifice suborbicular, with a small almost circular median avicularium on the lower border, and a conical much reclined internal denticle; peristome thickened and elevated; afterwards forming an elevated lip on each side, which is continued around a large suboral avicularium with a duck-bill shaped obtuse mandible pointing vertically downwards. Oecium distinct, hemispherical, surface smooth, with several more or less triangular converging pores on the front; each pore surrounded with a thickened border. Posterior surface entire, opaque, almost porcellanous.

*Habitat.*—Prince Edward Island, 80 to 150 fathoms. Station 149D, Royal Sound, Kerguelen Island, 28 fathoms, volcanic mud.