

Habitat.—Station 147, lat. 46° 16' S., long. 48° 27' E., 1600 fathoms, Diatom ooze. Station 156, lat. 62° 26' S., long. 95° 44' E., 1975 fathoms, Diatom ooze.

The trumpet-shaped avicularia are but rarely developed; they differ from those on *Bicellaria spatulata* in their much smaller size and the more oblique truncation of the terminal surface; all the avicularia have a peculiar vertical posture. The specimens from Station 156 differ in some respects from the others; they are extremely soft and flaccid, containing apparently but very little calcareous matter; and the zoecia are usually without any spines or with a very short and blunt one behind; the angularity, moreover, of the outer border of the aperture is more marked, and the dorsal avicularia rather larger. This may be regarded as a variety, *flaccida*. The size of the zoecia is much greater in the var. *flaccida*, in which they appear to attain the greatest dimensions as yet noticed in the genus ($0''\cdot06 \times \cdot02$), the former dimension being the length of the tubular portion between the two joints, and the latter being the width of the body.

(4) *Bicellaria bella*, n. sp. (Pl. VI. fig. 3).

Character.—Zoarium about $1\frac{1}{2}$ to 2 inches high; branches irregularly forked, with short lateral feathered secondary branches. Zoecia tubular, very long, and slender below, suddenly widely expanding above with an oblique, irregularly angular aperture, which is prolonged a short way at the outer angle into a digitiform process which projects in front and supports usually six very long curved spines; and on the back of the zoecium is a row of six to eight also very long spines curving forwards. A small infundibuliform, shortly pedunculate, erect, avicularium (fig. 3*b*) is articulated close below the inner border of the aperture in front; sometimes a second avicularium of the same kind is found on the front of the same zoecium, and occasionally one of rather smaller size may be seen attached to the side of the digitiform process near its point.

Habitat.—Station 196, lat. 0° 48' S., long. 126° 58' E., 825 fathoms, hard ground.

(5) *Bicellaria moluccensis*, n. sp. (Pl. VI. fig. 4).

Character.—Zoarium 3 or 4 inches high, branches long, straight, forked at an acute angle, feathered. Zoecia tubular, length between the nodes about $0''\cdot03$; body of zoecia about $0''\cdot02 \times \cdot01$ to $\cdot015$. Aperture ovate, expanded towards the upper part; upper border wavy. A digital process projecting rather in front, supporting four or five long, curved spines. A long articulated spine behind towards the outer end of the zoecium, and a small, upright one near the inner end. A large, circular cup or disc in the middle of the dorsum, from which springs, with a much contracted base, a long tubiform avicularium, of nearly equal calibre throughout, and with the wall very faintly ringed.