Prof. Smitt, and am strongly inclined to think that his Cellepora albirostris is identical with my Cellepora bispinata. Unfortunately I have no specimen of the latter to compare, and the figure and description in the Brit. Mus. Cat. are hardly sufficient to determine the point. Under these circumstances I have thought it best to retain Prof. Smitt's appellation. I would remark, however, that the term "very minute," as applied to the usual kind of rostral avicularium, quite accords with that of Cellepora albirostris; the large rostral avicularia are only occasional.

With respect to Prof. Smitt's supposition that Cellepora albirostris and my Cellepora mamillata may be connected, I would observe, if I understand him correctly, that there can be no doubt of their complete distinctness. Nor can I see any reason for regarding the form described by Prof. Smitt under the name of Cellepora (Discopora) pusilla as merely a variety of his Cellepora albirostris; the two seem to me quite distinct, and how their close relation is "incontestably proved by the very same form of their zoœcial aperture," seems to me to be by no means clear, seeing that the form of aperture in question is one of very common occurrence.

(4) Cellepora aspera, n. sp. (Pl. XXVIII. fig. 6).

Character.—Zoarium erect, cylindrical, irregularly branched, branches expanded at the end. Zoœcia immersed and ventricose below, produced or subtubular upwards, with a single row of punctures round the base, surface smooth, wall thick and porcellanous. Orifice suborbicular, with a wide sinus within which is an avicularium with a semicircular mandible; peristome thick, even. A few interspersed vicarious avicularia with short spatulate mandible. Oœcia? Operculum transversely elliptical, with a nearly straight lower border, 0":0055 ×:004.

Habitat.—Station 122, 9° 5′ S., 34° 50′ W.; 350 fathoms, red mud.

The single specimen of this species is old and partially dead.

(5) Cellepora columnaris, n. sp. (Pl. XXIX. fig. 11, and Pl. XXXV. fig. 16).

Character.—Zoarium expanded, thick, irregular in form and extent. Zoœcia deeply immersed, ventricose, but with the outlines very obscure; substance of wall solid, porcellanous; surface finely granular; orifice semicircular, lower lip straight and entire. A long, solid, tapering, columnar process springs from the back of the zoœcium close to the mouth, and rather to one side. In many zoœcia there is a small tubercular avicularian process in front below the orifice, which also sometimes rises in a columnar form; mandible triangular.

Habitat.—Station 162, off East Moncœur Island, Bass Strait, 38 fathoms, sand and shells.