Sub-section II. JUNCIFORMES. Family 1. Kophobelemnonidæ. Kophobelemnon, Absjörnsen.

1. Kophobelemnon ferrugineum, n. sp. (Pl. XI. fig. 43).

Rachis longer than the stalk, cylindrical and pointed at the upper end, of a clear brown colour. Polyps short with broad base, retractile, at the oral side of the tentacles brown, and dark brown in their inner cavities. Zooids large, numerous, of the form of pointed warts or short spines, all obliquely directed upwards. Stalk with an end-bulb, externally of a pale grey or greenish colour, internally brown. Calcareous bodies in every part of the structure, in the form of shorter or longer slender needles, with warts and tubercles at the ends and also in the middle. Those of the stalk shorter, thicker, and more warty and spiny.

The different species of Kophobelemnon are not easily distinguishable so long as their structure is not thoroughly known; nevertheless, I think myself justified in separating this form from those hitherto described. Fig. 43 is sufficient to show the external form and the size of the species, and I have only to add that the longest calcareous needles of the rachis and the polyps measure 0.57 to 0.71 mm. in length and 0.052 in breadth, and the shortest on the stalk 0.09 to 0.10 mm. in length and 0.027 to 0.037 in breadth.

Habitat.—Station 232, south of Yeddo, Japan. One specimen. Lat. 35° 0′ N., long. 139° 28′ E. Depth, 345 fathoms. Bottom temperature, 5° C. Sandy mud. May 12, 1875.

2. Kophobelemnon, sp. (Pl. XI. fig. 44).

A young Kophobelemnon, with only one polyp, and a pointed end to the rachis. It resembles, by the occurrence of needles 0.54 mm. long and 0.070 mm. broad in the tentacles, my K. stelliferum, var. durum.

Zooids not numerous, in two rows on the ventral side of the rachis.

Habitat.—Station 169, north-east of New Zealand, lat. 37° 34′ S., long. 179° 22′ E. Depth, 700 fathoms. Bottom temperature, 4°·2 C. Grey ooze.

3. Kophobelemnon burgeri, Herkl. (Pl. XI. fig. 45).

The Challenger brought home two specimens of this rare species, which I thought right to represent in fig. 45, as their form is in some respects different from that described and figured by Herklots.

Habitat.—Station 209, Zebu, Philippines, lat. 10° 10′ N., long. 123° 55′ S. Depth, 95 to 100 fathoms. Bottom temperature, 21° F. C. Mud. January 22, 1875.

Family 2. Umbellulidæ.

Umbellula, Cuv.

1. Umbellula durissima, n. sp. (Pl. VIII. figs. 32, 33).
Calcareous needles very numerous in every part of the cutis. Principal needles of