Station 295. November 5, 1875. Lat. 38° 7' S., long. 94° 4' W. Depth, 1500 fathoms; bottom temperature, 1.4° C.; red clay. One specimen.

The body has an almost cylindrical form or tapers slightly backwards, and its foremost part is very much depressed and thin. The ventral surface is flat or inconsiderably convex, while the dorsal one is strongly so. The oral aperture is 25 to 30 mm. distant from the anterior extremity of the body. The ventral tentacles are a little smaller than the others. As is usual in this family the pedicels or processes round the sides of the body have a conical form, and reach greater dimensions than the minute cylindrical ones, which belong to the odd ambulacrum. The pedicels round the body may be estimated at about one hundred and forty or two hundred, while the number of those on the odd ambulacrum seems to be from seventy to a hundred. Immediately behind the ventral tentacles a transverse row of small papilla-like prominences is to be seen. The dorsal surface possesses a great many minute completely retractile prominences or processes, which closely resemble pedicels, and are scattered along the ambulacra as well as on the lateral interambulacra, while few or none are to be found on the odd interambulacrum (Pl. XLII. fig. 6). These processes are visible to the naked eye as small dark specks. The integument is rather thin and soft, and as its calcareous deposits are completely dissolved, I have not been able to distinguish their form.

The Polian vesicle presents a cylindrical form, and reaches a length of 35 mm. (Pl. XL. fig. 5). The madreporic canal does not seem to open exteriorly, but terminates in a madreporic plate or tubercle, which is attached to the inside of the body-wall, consequently the ambulacral system communicates with the peritoneal cavity; once I thought I could observe that the madreporic canal gave off a fine branch piercing the perisoma, but I am by no means sure of it. The calcareous matter being entirely dissolved, no traces of deposits are to be found in the walls of the water-vascular system. The cloaca is not very greatly developed. The intestine gives off a large, cæcal prolongation or diverticulum (Pl. XL. fig. 4), 15 mm. long, which communicates with the interior of the alimentary canal, and is situated at a distance of about 170 mm. from the anal aperture. All the individuals obtained are males; their reproductive organ is often very long, about 180 mm., and consists of two fascicles, each made up of a long wide tube which carries numerous small bundles of oval or round, more or less inconsiderable, cæca. The common duct of the genital organ opens by a pore situated about 50 mm. behind the anterior extremity of the body.

Benthodytes sanguinolenta, var. marginata, n. (Pl. XXV. fig. 2).

Habitat.—Station 158. March 7, 1874. Lat. 50° 1′ S., long. 123° 4′ E. Depth, 1800 fathoms; bottom temperature, 0·3° C.; globigerina ooze. One specimen. Station 160. March 13, 1874. Lat. 42° 42′ S., long. 134° 10′ E. Depth, 2600 fathoms; bottom temperature 0·2° C; red clay. Four specimens.