

the top; those spicula are sometimes spinose, sometimes almost smooth, and attain a length of about 0.44 mm. The pedicels of the odd ambulacrum are strengthened by more curved and transversely directed spicula. No other forms of deposit have been observed.

The calcareous ring consists of a fragile network, without any distinct radial and interradial pieces. The madreporic canal does not communicate with the exterior, but terminates in a large, almost globular, madreporic plate or tubercle, made up of a strong network, and which is intimately attached to the inside of the perisoma close to the reproductive pore. The walls of the madreporic canal are supported by rather straight and spinose spicula. The reproductive organ is composed of two smaller fascicles 35 mm. long, each made up of small bundles of dichotomous, elongated, minute cæca; the organ opens 20 to 30 mm. behind the anterior extremity of the body.

The specimens obtained at Station 184 are very macerated and in such an incomplete state as to render examination impossible. In one example I thought I could distinguish some small dorsal processes anteriorly, and in another specimen there were only nineteen tentacles to be found. The four individuals dredged at Station 271 do not quite agree with the typical forms; their body is of a sea-green colour, which inclines to red on the ventral surface; the inside of the body-wall is, on the contrary, of a dark reddish violet; the shape of their body is broader and considerably higher than in the typical forms; all deposits are destroyed.

*Benthodytes typica*, n. sp. (Pl. XXVII. fig. 7).

Body more or less depressed, oval, from once and a half to twice as long as broad; its brim very broad. Tentacles twenty, retractile; some of them being slightly smaller than the others; their dilated terminal part provided with small retractile processes round its edge. Each of the dorsal ambulacra with a few, about eight, very minute, completely retractile processes. Integument rather thick, soft, and transparent, with scattered, more or less curved, unbranched, and spinose calcareous spicula.

Colour in alcohol light bluish, the ventral surface blood-red or purple; the five yellow muscular bands, the deep red ambulacral vessels, and the purple circular muscular layer are conspicuous through the integument; the canals, which belong to the minute pedicels situated round the brim, present the aspect of deep reddish bands which radiate towards the circumference of the body; the ends of the tentacles are yellowish-brown. Length, about 80 mm. Breadth, about 45 mm.

*Habitat*.—Station V. January 28, 1873. Lat. 35° 47' N., long. 8° 23' W. Depth, 1090 fathoms; bottom temperature, 3.1° C.; mud. Numerous more or less macerated individuals.

The body is of an oval form decreasing evenly towards each of its rounded extremities. As will be seen from the above measurements, its greatest breadth almost approaches half of its length, but from the drawings which have been taken of fresh animals