appendage situated 30 to 40 mm. from the posterior extremity of the body. Integument with numerous crowded calcareous deposits of almost the same cruciform shape as those of the preceding species.

Colour in alcohol, dark violet; the ventral surface darker; tentacles light. Length, about 130 to 140 mm. Breadth, about 35 mm.

Habitat.—Station 101. August 19, 1873. Lat. 5° 48′ N., long. 14° 20′ W. Depth, 2500 fathoms; bottom temperature, 1.7° C.; mud. One rather incomplete specimen. Station 133. October 11, 1873. Lat. 35° 41′ S., long. 20° 55′ W. Depth, 1900 fathoms; bottom temperature, 1.3° C.; globigerina ooze. One specimen.

As far as regards the shape of the body this species seems to bear the strongest resemblance to the preceding ones which are characterised by having a large dorsal azygous appendage. As the specimens are rather incomplete, a more detailed examination is impossible. The mouth is as usually placed on the ventral surface, about 15 mm. behind its anterior extremity, and the anus is situated from 10 to 12 mm. in front of the posterior end. The sixteen tentacles are almost of an equal size, the ventral ones slightly smaller, and their large, discoidal, terminal part is furnished with some minute retractile processes which are present especially round the edge. Each of the dorsal ambulacra sends out three minute processes, 3 mm. long, which are arranged in pairs, the first of which is situated about 40 mm., the second about 45 mm., and the third about 70 mm. from the anterior extremity of the body. The large transverse dorsal appendage has its free end rounded, and arises 30 to 40 mm. in front of the posterior extremity of the body, thus being situated at a greater distance from that extremity than is the case in other forms of this genus. The deposits (Pl. XXXIV. fig. 10) of the integument are rather irregular and are composed of four, rarely three or five, arms; they vary considerably in size, some having their arms 0.16 mm. long, others only 0.06 mm. The top of the central process of those deposits is sometimes simple, sometimes bipartite or tripartite. The deposits of the ventral surface (Pl. XXXIV. fig. 11) consist of simple spicula or irregular three- or four-armed spinose bodies. The tentacles are supported by numerous, small, simple, curved or straight spinose spicula.

The polian vesicle has a cylindrical form and reaches a length of 25 to 30 mm. The madreporic canal opens externally by three pores, far distant from one another, and situated a little in front of the genital aperture, which lies at a distance of 35 mm. behind the anterior extremity of the body. The madreporic canal is strengthened by numerous three- or four-armed spinose deposits, resembling those of the integument though more irregular. The reproductive organ consists of two wide tubes, 35 to 40 mm. long, the posterior half of which is strongly dilated, sacciform, with a diameter of about 12 mm., and provided with a great many tuberculose protuberances or rather cæca; consequently the organ bears a strong resemblance to that of *Euphronides depressa*.