

body in my specimens do not bulge outwards, as is shown in Traustedt's figure,<sup>1</sup> but are straight and parallel, and in this respect are more like Traustedt's figures<sup>2</sup> of the solitary form.

The Challenger specimen of the aggregated form from Station 320, in the South Atlantic, is precisely like those collected by the "Knight-Errant" in the North Atlantic, and has the pointed posterior end turned very much to the right side.

One of the specimens from the Straits of Magellan is the largest in the collection. It is nearly 6 cm. in length, and has the posterior projection over 1 cm. in length. In the specimen obtained in the Pacific, on April 3, 1875, the posterior projection is relatively very long, and the muscle bands in the mantle are narrow. In one of the specimens obtained in the North Atlantic, on April 28, 1876, the posterior projection is also very long; while, on the other hand, the specimens from Station 311, in the Straits of Magellan, have their posterior ends very blunt, there being almost no process. The specimen from Station 236, off the coast of Japan, is rather more slender than usual, and has the posterior projection long and pointed. It measures 7 mm. in length, the length of the whole body being 3.2 cm.

The three specimens collected in the South Atlantic, on March 9, 1876, have embryos, occupying the exact position figured by Traustedt. A part of one of these specimens is shown on Plate VII. fig. 5, with three embryos lying between the 5th and 6th muscle bands. Figures 6-9 on Plate VII. illustrate some points in the histology of the aggregated forms collected on March 9, 1876. Figure 6 shows the nervous system, dorsal tubercle, and neighbouring parts. The muscle fibres in these specimens are very distinctly nucleated and cross-striated. Figure 7 shows a part of the edge of the dorsal tubercle, and figure 8 some of the ciliated cells more highly magnified. The large nucleated cells forming the lateral appendages of the nerve ganglion are shown in fig. 9.

The three processes of the mantle, shown running into the test at the anterior end of the body in Traustedt's figure, are not always present in the Challenger specimens. In some there are two processes, in some only one, and in some none of them are present.

*Salpa cylindrica*, Cuvier (Pl. VII. fig. 10).

*Salpa cylindrica*, Cuvier, Ann. du Mus., tom. iv. p. 381, 1804.

*Iasis cylindrica*, Savigny, Mém., p. 124, 1816.

*Salpa cylindrica*, Traustedt, loc. cit., p. 277, which see for further synonymy.

Both solitary and aggregated forms of this species are represented in the Challenger collection. The following is a list of the localities at which the specimens were obtained:—

- (1.) December 27, 1873; Station 145A; lat. 46° 41' 0" S., long. 38° 10' 0" E.; off

<sup>1</sup> Loc. cit., tab. i. fig. 21.

<sup>2</sup> Loc. cit., tab. i. figs. 18 and 19.