

angular appearance produced by the longitudinal ridges as described above. The appearance of these specimens is very different from that of the typical form, and they might be regarded as a distinct variety. In one of the specimens collected on April 26, 1876, however, the one end of the body was bifurcated while the other was pointed. One of the specimens also collected at Station 222, in the Pacific, on March 16, 1875, has the posterior end of the body bifurcated; and of those collected in the North Atlantic, on May 7, 1876, at night, a few have bifurcated ends, while the rest are pointed. They are all rather prismatic in form.

The very large specimen obtained in the South Pacific, on November 6, 1875, has the posterior process of the body prismatic, and provided with slightly serrated ridges, while the anterior process is plain. The equally large specimen obtained in the South Pacific, on October 20, 1875, has the serrated ridges continued all along the body, but they become more marked towards the posterior end.

In other cases, again, the posterior process may be much reduced. In some of the specimens collected in the South Atlantic, on March 10, 1876, the posterior process may be said to be absent, and the body is rounded off close behind the nucleus; while in others from the same locality the posterior end of the body is well developed.

The muscular system of the mantle is also liable to a certain amount of variation, not in regard to the number and arrangement of the muscle bands, which seem to be very constant, but in regard to the width of the bands and their distinctness. In some cases, however, the musculature differs from that of the specimen figured by Traustedt. Fig. 7 on Pl. VI. shows a specimen obtained on November 6, 1875, in which the muscle bands are relatively wide and distinct, and in which the first muscle band (1) does not reach so far forwards as usual, while the branchial muscle band (*br. m.*) extends farther back.

In fig. 12 on the same plate a more important variation is shown. It represents part of the musculature of a specimen obtained in the South Atlantic, on February 12, 1876, in which the fourth and fifth muscle bands not only touch at the sides of the body, but actually join and anastomose, some of the fibres being traceable from the fourth into the fifth, and others from the fifth into the fourth, so as to form a decussation. In the same figure (Pl. VI. fig. 12) *emb.* shows the position of the embryo.

The dorsal lamina ("gill") and dorsal tubercle of this species are shown about twice the natural size in Pl. VI. fig. 7, and more highly magnified in fig. 11. The dorsal lamina increases gradually in width, and is simply marked with oblique bands. The dorsal tubercle is of an elongated elliptical shape, with a narrow slit running along the centre of its length. There is scarcely any projection, only the anterior end being raised to form a slight hood (Pl. VI. fig. 11).

The nerve ganglion is small and rounded. It is placed immediately behind the posterior end of the dorsal tubercle (Pl. VI. fig. 11, *n.g.*)

The solitary form does not show so wide a variation as the aggregated form in this species, judging from the Challenger specimens. The largest complete specimen of the