as to form a distinct margin. The atrial aperture has no bounding margin except the spinose processes which terminate the longitudinal ridges posteriorly.

The measurements given above are taken from the specimen obtained on November 5, 1875. The two specimens collected on October 21, 1875, are larger, and measure 5.5 cm. and 4.2 cm. in length. The two specimens from Station 314, January 21, 1876, measure 3.7 cm. and 5 cm. in length. The remaining specimen, collected on April 12, 1876, is 3 cm. in length.

The muscle bands in the mantle are rather narrow, and are all of much the same size. There is no musculature on the ventral surface, as all the bands end on the sides of the body (Pl. V. fig. 2). The musculature of the dorsal surface (Pl. V. fig. 1) is somewhat like that of the solitary forms of Salpa runcinata-fusiformis and of Salpa cylindrica, but differs from both. In Salpa runcinata the eighth and ninth bands approach and meet dorsally, and in Salpa cylindrica the fourth band joins with the first, second, and third dorsally; while in the present species the fourth, eighth, and ninth bands are quite distinct and independent of their neighbours. Figure 7 shows the junction of the first, second, and third bands dorsally.

The conspicuous endostyle (Pl. V. figs. 3 and 9, en.) is of a slightly yellow colour. In the specimen collected on November 5, 1875, it is 3 cm. in length, and extends from close to the anterior end of the body (1 mm. in front of the peripharyngeal band) to the anterior part of the visceral mass. The peripharyngeal bands bend posteriorly on the sides of the body and on the dorsal surface (Pl. V. fig. 9, p.p.), so that the dorsal tubercle comes to be placed posterior to the anterior extremity of the endostyle.

The nerve ganglion is small and of rounded form. The dorsal lamina is fairly large. The transverse ridges on it are rather wide, closely placed, and arranged with great regularity (Pl. V. fig. 8). Their course is almost straight. The dorsal tubercle has a curved free margin (Pl. V. fig. 9, d.t.), with rounded anterior and posterior ends. The languet is not well marked.

The visceral mass is formed of two parts, of which one is globular in shape, and is composed of the alimentary and reproductive viscera; while the other is of curved or irregularly crescentic shape, and is probably the remains of the elæoblast (Pl. V. figs. 3, 4, and 10). Figure 4 also shows, placed more anteriorly in the median ventral line, a spherical dark-coloured mass, which may be what is left of the "placenta" of the embryo. In that case the specimen figured is of course a solitary form, although it shows no trace of a developing chain.

Salpa mollis, n. sp. (Pl. V. figs. 11-15).

External Appearance.—The shape is elongated, and sub-cylindrical. The anterior and posterior ends are moderately wide, and the sides are nearly parallel. The