looking. The head varies in its thickness from 1 cm. a short distance above the peduncle to 0·5 cm. at the upper end. One surface of the head is much more convex than the other, but this is probably an individual variation.

The peduncle is strong, and is almost circular in section. It is narrowest a little below the base of the head, and then expands slightly towards its lower end (Pl. XVII. fig. 1). The actual point of attachment is not present in the specimen figured, but must have been immediately below the torn end. The peduncle is entire in the other specimen, and is somewhat irregular in form at the point of attachment.

The general colour of the colony is a light grey, but the head has a slight but warm yellowish tinge, except at the very base, at the upper end, and along a series of lines which run vertically between the rows of Ascidiozooids. At these points the colour is still grey, or even in places white, and is seen on a close examination to be due to a large number of small rounded masses of opaque white pigment imbedded in the test. This pigment is most abundant at certain points between the rows of Ascidiozooids, and at the top of the colony (Pl. XVII. fig. 2), and is present in much greater quantity in one of the specimens than in the other, thus making a considerable difference in the external appearance of the two colonies. The surface is not perfectly smooth, but appears to be very finely roughened (Pl. XVII. fig. 8).

The Ascidiozooids are clearly visible on the surface of the colony (Pl. XVII. fig. 1). They show as opaque yellowish-grey areas about 1 mm. in diameter. They are smallest at the base of the head, and increase in size as they are traced upwards. They are arranged with great regularity in vertical lines, and these rows are placed in pairs, each pair being separated from its neighbours by ridges of test from 1 mm. to 1·5 mm. in width. It is in these areas that the vertical bands of white pigment are developed (Pl. XVII. figs. 2, 8). In each pair of rows the Ascidiozooids are placed alternately so as to form a zigzag line (Pl. XVII. figs. 1, 2). The longest row of Ascidiozooids is 2·2 cm. from base to top. The bodies of the Ascidiozooids extend inwards nearly at right angles to the surface, but only occupy a zone about 1·5 mm. in width. The remainder of the head is formed by a spongy mass of test, penetrated in all directions by the vascular appendages of the Ascidiozooids. In a vertical section the lower part of the head and the peduncle are seen to be marked by delicate longitudinally running fibres. This appearance is due to the vascular appendages. The thoracic region of the Ascidiozooid is larger than the abdominal (Pl. XVII. fig. 9). It is nearly as broad as it is long, while the alimentary and reproductive viscera form a rather narrow mass elongated antero-posteriorly.

As a whole the test is firmer than usual in this species. The outer layer of the head forms a strong but thin transparent membrane, in certain parts of which aggregations of white pigment are formed between the anterior ends of the Ascidiozooids (Pl. XVII. fig. 4, *p.c.*). The test of the inside of the head is more tough and spongy in its nature, and is rather opaque. The peduncle, although very much vacuolated, is firm