

resemblance in shape and general appearance to the Challenger specimens, but differs from them in several details. While comparing the two it will be convenient to regard the colony as composed of two parts: the "head" or the terminal enlarged part in which the Ascidiozooids are imbedded, and the "stalk" or elongated peduncle, which bears the head at its upper extremity. The lower end of the stalk is attached to some foreign body.

The general shape of the head and its size relatively to the stalk are the same in the figure and in the Challenger specimens, the only point in which they are not absolutely identical being that in the "Astrolabe" specimen the head evidently did not contract quite so much at its lower end as is the case in those from the Challenger; this, however, is unimportant, as in some specimens it is easy to distort the shape of the head by allowing it to lie in an abnormal position.

The colour of the head in the figure is bluish-grey, while that of the Challenger specimens is more of a yellowish-grey.

In the figure the Ascidiozooids are arranged in vertical lines which run distinctly in pairs; further, the Ascidiozooids in a pair of lines are placed alternately so that each has, as its neighbours above and below, Ascidiozooids belonging, not to its own vertical line, but to the adjacent one. The result of this arrangement is that besides vertical lines the Ascidiozooids form spirals more or less perfect, especially in the middle part of the head.

In the Challenger specimens this arrangement, though probably present, is not nearly so well marked (see Pl. V. figs. 1, 2, 3). The pairing off of the lines can be made out in some heads or in parts of them, but in many places is not at all distinct, and in all cases the Ascidiozooids seem to be closer together. Much the same may be said as to the alternate position of the Ascidiozooids in the lines; in some places it is evident (Pl. V. fig. 3), in others it is not very distinctly seen (Pl. V. fig. 2). Still the spiral lines are visible here and there. On the whole, the arrangement of the Ascidiozooids in the Challenger specimens seems to be more irregular than in the figure of the "Astrolabe" specimens, though following the same plan.

In shape the stalks are identical in both forms. In colour, however, they differ. In the figure the upper third is light indigo-blue, of a darker shade than the head, and the lower two-thirds are yellow. In the Challenger specimens the colour varies from pale yellow to light reddish-brown, but in none is any part blue; in some, however, at the point of junction with the head, there is a collar of a darker shade of yellow or brown.

In the other figure (*loc. cit.*, pl. xcii. fig. 19) three apertures are represented and seem to be intended for a branchial and two atrials. Both kinds are distinctly six-lobed. In the Challenger specimens it is exceedingly difficult to make out the condition of the apertures, on account of their contracted state; they are, however, six-lobed, but not nearly so distinctly so as in the figure. Turning now to the short description in the text, it is found to give less information than the figures did. Quoy and Gaimard's specific diagnosis is as follows:—"Aplidium, ovatum, griseo-violaceum, longe pediculatum;