Habitat.—(*a*) Station 311, January 11, 1876; depth, 245 fathoms. Three specimens. (*b*) Station 320, February 14, 1876; depth, 600 fathoms. One specimen.

Dimensions.—Length of the contracted animal, 2·5–3·2 cm.; breadth, 2·5–3·5.

At first I was inclined to refer the three specimens from Station 311, which were seated on Molluscan shells, and the single specimen from Station 320, to *Phellia pectinata;* for they possessed the characteristic appearance of the body-wall, resembling the tunic of *Cynthiæ*, while the upper indrawn part of the wall presented the ridged surface which has been already figured. I was, however, persuaded to a closer study by observing some points of divergence in the structure of the peripheral region of the body-wall. The transverse and longitudinal ridges are wanting, instead of which occur knobs, resembling those of *Cereus spinosus;* these start with a broad base, and terminate in a slightly truncated tip; they are distinguished from the body-wall, which is nearly white, by a brownish tint, and may amount to 200 in number, distributed more abundantly on the upper than on the lower regions of the body-wall. The upper knobs are as much as 0·25 cm. long, and are more strongly developed than the rest; they become gradually smaller below, and finally appear only as fine grains. Such an arrangement of the knobs in series, as exists in *Bunodes*, does not occur.

The mesoglœa of the body-wall is so extraordinarily stiff as to cause some trouble, before good sections of the sphincter can be effected. The latter is essentially constituted as in *Phellia pectinata*, so that reference to the description given under that species is sufficient. In position it is considerably nearer to the ectoderm than to the endoderm.

The oral disc and stomatodæum are of a brownish violet (partially altered in the alcohol), the former lighter in tint than the latter. On the stomatodæum the two siphonoglyphes, which are not pigmented, and are consequently of a whitish yellow, strike the eye on opening the animal as two broad, sharply-marked, stripes. They are only distinguished from their surroundings by this difference of colour, since they are flush with the rest of the stomatodæum. They are crossed by transverse folds regularly arranged, which are continuous over the rest of the stomatodæum. Further, the stomatodæal cone is hardly expressed at all, and the longitudinal furrows, which so commonly run parallel to the siphonoglyphes between the mesenterial insertions, are wanting.

For the characterisation of the species the condition of the musculature of the oral disc is also of importance; it exhibits two methods of formation. In the one case it is purely ectodermal and markedly pleated, the pleats running parallel to one another, and only slightly arborescent (Pl. II. fig. 9). At other points (fig. 8) the arborescence is very considerable, the individual branches anastomosing with one another; the musculature thus becomes partly mesoglœal, and a very obvious and stout muscle-layer arises. The muscle-fibres are here, as in the sphincter and the powerfully developed laminæ of the retractors, of exceptional thickness.