structure (Pl. VI. figs. 14 and 15) are made from the Challenger specimen; Professor Giard's specimen showed the same conformation except that the papilla in it was less voluminous.

The base of the conical papilla is formed by a lenticular body of fibrous tissue (Pl. VI. fig. 14, *l*) presenting nuclei among the fibres (Pl. VI. fig. 16). A layer of bright glassy-looking substance (Pl. VI. figs. 14 and 15, *m*), resembling the elastic tissue of Vertebrates, covers the aboral surface of the lenticular body, and extends over the whole central mass of the papilla, which it thus bounds; this layer appears to become thin near the summit of the papilla, but it must be remembered that in the two individuals studied this summit was very much damaged.

Finally, a layer of fibres, very probably muscular, radiates, in front of the lenticular body, from the centre to the periphery (Pl. VI. figs. 14 and 15, *r*).

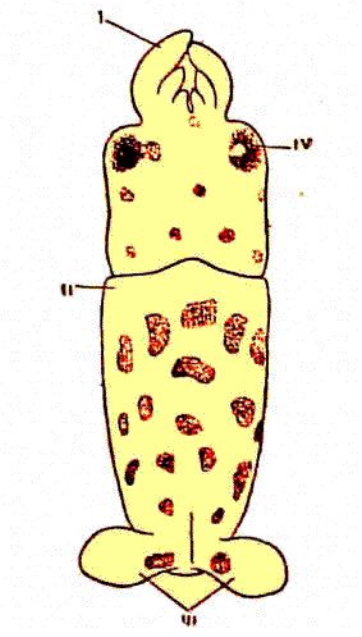

FIG. G.—Embryo of *Loligo*, dorsal view; magnified. i, arms; ii, mantle; iii, fins; iv, eye.

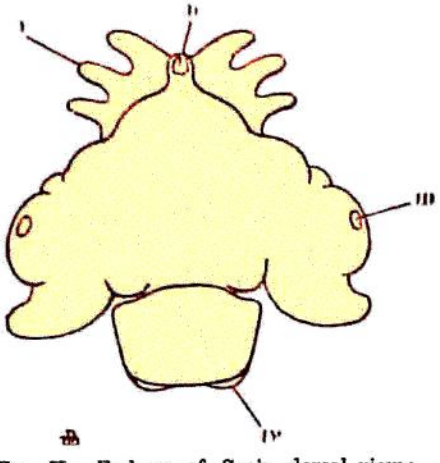

FIG. H.—Embryo of *Sepia*, dorsal view; magnified. i, arms; ii, mouth; iii, eye; iv, fin.

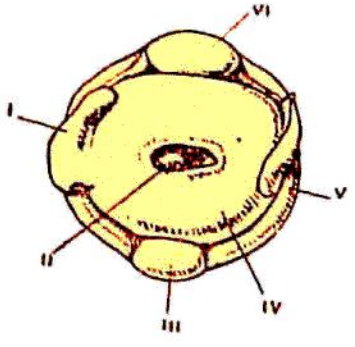

FIG. I.—Aboral view of *Spirula reticulata*; ×2. i, left fin; ii, aboral fossa; iii, ventral external part of the shell; iv, terminal disk; v, mantle; vi, dorsal external part of the shell.

Function of the Fossa.—The conformation of this organ has remained unknown up to this time, though various authors have expressed the opinion that it is an adhesive apparatus, founded on a supposed observation of Rumphius, according to whom "*Spirula* attaches itself to rocks *by its terminal disk*." Now Rumphius makes no mention of the terminal disk nor of the fossa (*op. cit.*, p. 68), nor indeed of any other external part of *Spirula*. It is certain, as I have already pointed out, that if he saw any parts they were only very unimportant fragments. According to his obscure text one must conclude that he believed that *Spirula* fixed itself to rocks by the mouth; he knew the siphuncle and the immediately adjacent parts, contained in the last chamber of the shell, and he supposed that the siphuncle traversed the whole animal, which fixed itself by the oral extremity