

circular foramen. Ventral valve convex, of moderate depth, hinge-line straight, area small. Beak very slightly incurved, foramen situated under its angular extremity, margined by narrow deltidial plates. Surface smooth, marked with concentric lines of growth. In the interior of the dorsal valve the loop is small, and not reflected; but the converging principal branches are first attached to hinge, and again to the upper extremity of a small vertical medium septum. Peduncle very short; animal possessed of sigmoid labial appendages. Length 4, breadth 5, depth 2 mm.

*Habitat*.—Two examples were dredged by the Challenger Expedition, attached to two examples of *Waldheimia kerguelensis*, off Marion Island, on December 26, 1873, in 100 fathoms. Five likewise off Prince Edward's Island, close to Marion Island, on December 26, 1873. It was also dredged in the Mediterranean by Professor E. Forbes at a depth of 91 fathoms, and by Mr W. S. Kent off the Portugal coast, near the mouth of the Tagus.

*Platydia anomioides* occurs fossil in the Pliocene deposits of Sicily.

*Observations*.—The animal of this interesting and well-marked genus has not yet been sufficiently anatomically studied. The arrangements of the labial appendages are very remarkable. They were briefly described and figured by Signor Costa in 1843, and by myself in 1852, but more particularly in 1864 by Mr E. Deslongchamps, in his valuable memoir, *Recherches sur l'Organisation du Manteau chez les Brachiopodes articulés*. His observations were, however, like my own, unfortunately founded on dried specimens. He states that the brachial appendages are much more simple than in other genera of the Brachiopoda, and that the two principal branches which lie close to each other at their origin, and towards the centre of the shell, deviate by a curve, and having made almost a complete circle, return close to their origin, without forming a spiral. But his most important observations relate to the mantle which he states to be so thickly coated with spiculæ that it is impossible to separate it from the brachial appendages without injuring them; that they are small, but exceedingly numerous, and get so blended together that it becomes at last very difficult to define their shape; that they appear to be a white spongy mass formed of an innumerable number of short lamellæ crossing each other in every direction. In his paper *Sur les Brachiopodes des Côtes Oceaniques de la France* (*Journal de Conchyliologie*, 3d series, vol. xii. p. 160, pl. vi. figs. 3-9, 1872), Mr P. Fischer describes at great length *Platydia anomioides* and the characters that distinguish it from *Platydia davidsoni*. He gives an enlarged sketch of the brachial appendages which he likewise states to be extremely simple. "De chaque côté de la bouche part une portion horizontale qui se coude ensuite et forme une première anse ou boucle buccale. Elle est continuée de chaque côté par la portion courante dirigée du crochet de la valve vers le bord frontal et en rapport avec la valve inférieure ou dorsale: cette portion courante se soude, décrit un cercle complet et revient au-dessus de la portion courante en étant en rapport avec la valve dorsale: elle se termine enfin par une sinuosité dirigée vers la bouche. C'est là le rudiment de la portion spirale,