The single specimen upon which the genus and species under discussion are based was in a most unsatisfactory condition; the head was separated from the body and the latter was completely gutted, only the integuments remaining. Under these circumstances its relationships to other forms can only be incompletely made out. It seems, however, to be connected in some way or other with all the principal groups of Myopsida.

With Sepiola and Rossia it agrees in the form of the body and fins (although these are situated much farther back, and even extend beyond the posterior extremity of the body) as also in the spherical form of the suckers. It resembles the latter genus in that the mantle fold seems to have been continuous across the dorsum.

From both these genera it differs in the small size of the head, which is considerably less in diameter than the body, and also in the covering of the eye, the integument passing directly over this without any reduplication to form a lower eyelid; in the last point it resembles *Loligos* as also in the presence of the pre-ocular pore, but whether it also agrees with that genus in the presence of an auricular crest cannot now be determined. A relationship to *Sepia* is indicated by the form of the mantle-connective, which consists of an almond-shaped depression at the hinder angle of the siphon, and not of an elongated groove, as in the other genera just mentioned.

Finally, the similarity between the tentacles and the arms, alluded to above, may perhaps be a primitive character; it has also been observed in *Taonius suhmi* (see p. 192).

Family VIII. SEPIARII, Steenstrup.

Subfamily Idioseph, Steenstrup.

Spirula, Lamarck.

Spirula peronii, Lamarck.

1822. Spirula peronii, Lmk., Anim. s. Vert., t. vii. p. 601.

Habitat.—Station 194A, off Banda, September 29, 1874; lat. 4° 31′ S., long. 129° 57′ 20″ E.; 360 fathoms; volcanic mud. One specimen, with soft parts.

North Atlantic, April 29, 1876, surface. Dead shells.

Raine Island, Torres Strait. Dead shells from the shore.

Station 216A, north of Papua, February 16, 1875; lat. 2° 56' N., long. 134° 11' E.; 2000 fathoms; Globigerina ooze. One dead shell with a Cirriped attached (almost certainly from the surface).

February 22, 1875; 70 miles north-east of Fort D'Urville, Papua. Dead shell.

Since Professor Huxley is preparing a Report on this genus, I have merely recorded the localities at which its occurrence was observed during the Expedition.