

however, the opinion that *Spirula* is a Myopsid,<sup>1</sup> and this view is generally adopted in the treatises on Conchology.

The facts presented above relative to the organisation of the genus show that it has nothing at all to do with the Myopsids, but that, according to the following characters, it is certainly an Œgopsid:—Eye with cornea (false cornea) widely open; central nervous system very elongated; short junction of the two visceral nerves to the back of the anus; “anterior” salivary glands well developed; liver not traversed by œsophagus, aorta, &c.; posterior aorta with recurrent branch (genital); renal orifices sessile; tentacular arms incompletely retractile. This conclusion that *Spirula* (whose archaic character is incontestable<sup>2</sup>) is an Œgopsid agrees with the fact that the Œgopsids are certainly the most archaic of the Dibranchiates.

If we wish now to seek for the origin of *Spirula* we must evidently acknowledge that it separated very early from the stock of the Œgopsids, before the acquisition of the rostrum characteristic of all the testaceous Dibranchiates, and before the phragmocone (corresponding to the shell of the Molluscs) had become internal and had been reduced (it is already more so in the Belemnites than in *Spirula*). This conclusion agrees with the fact that *Spirula*, in the direction it has followed, has undergone some specialisations, which are not observed in the generality of Œgopsids, for instance the loss of the right oviduct (of which there have not been found any distinct traces); and the acquisition of accessory nidamental glands.

In short, we may say that *Spirula* must have come from a Belemnite-like form, still without rostrum (as *Belemnoteuthis*), the right phragmocone of which, still external (at least in part), is rolled up in an inverse sense to that of *Nautilus*.<sup>3</sup>

<sup>1</sup> Steenstrup, *op. cit.*, p. 237: “Non seulement parmi les Myopsides, mais aussi dans la division des Sépiens.”

<sup>2</sup> Especially on account of the following characters: shell still partially external; anus without valvules, as in *Nautilus*; kidneys still without communication with each other.

<sup>3</sup> It appears most probable that *Spirula* comes from a straight ancestor and not from a rolled form in the inverse sense (as *Nautilus*), for there is nothing in its organisation which shows that it has been unrolled and then re-rolled in the inverse sense.