

exceptional specimens may be found in which the straight and indented front-line is present, but is more often seen in the North Atlantic type. The young shells of both seem undistinguishable. I have examined specimens from 1 mm. in length up to 27 mm. Up to about 5 mm. and even more, the ribs are very few in number, prominent, and radiate from the extremity of the beak to the margin, and are crossed by strongly indented concentric lines which give the striæ the so-termed tuberculated appearance described by conchologists as well as by palæontologists, for the same character seems to be prevalent not only in the recent species of the genus, but also in those that occur fossil both in the Cretaceous and Tertiary formations. As the shell grows the ribs become more delicate and more numerous from repeated interpolations of shorter ribs, and the concentric lines become very much finer. The loop varies also considerably at different stages of the shell's growth. When quite young it forms a simple semicircular curve after having become attached to the hinge-plate, but as the shell grows the anterior portion of the lamella is slightly bent upwards and the crural processes much so as in the form of a ring.

There seems to me to exist more varietal difference between the form of *Terebratulina caput-serpentis* that occurs in the Mediterranean, and especially the North African coast of that sea, than between *Terebratulina caput-serpentis* of the North Atlantic and the North American variety *septentrionalis*. Dr Gwyn Jeffreys has proposed to me to apply to the Mediterranean form the varietal designation of *mediterranea*. It is much more depressed than the typical *Terebratulina caput-serpentis*, and often a strong longitudinal depression or sinus is seen in both valves, and the front is usually deeply indented. In the North Atlantic, *Terebratulina caput-serpentis* and American var. *septentrionalis*, the dorsal valve is generally uniformly convex, and when a depression exists it is much less defined than in the Mediterranean variety.

*Terebratulina caput-serpentis* and its var. *mediterranea* are found fossil in the upper tertiary deposits of many countries.

*Terebratulina*, sp. (?) (Pl. II. fig. 10).

A single specimen of a *Terebratulina*, apparently closely allied to *Ter. caput-serpentis*, was also dredged by the Challenger Expedition on October 26, 1874, in lat. 7° 3' N., long. 121° 48' E. of Mindanao, one of the Philippine group of islands, in 82 fathoms. The ribs are a little coarser, and the interspaces between them a little wider than in the larger number of specimens of the variety *septentrionalis*, but from the inspection of a single half-grown specimen it would not be safe to consider these details of sufficient importance to warrant referring it to a separate species. I submitted the specimen to the inspection of Mr Dall, who believes it to be specifically distinct from *Ter. caput-serpentis* and its variety *septentrionalis*.