

spiral commencement, the later chambers subquadrate and arranged alternately." They further state that it "may be regarded as an arrested form of *Textularia annectens*.

Spiroplecta biformis is distinguished from its allies by its small size and invariably arenaceous test, its nearly uniform width and rounded lateral edges. In the recent condition, at any rate, it is far removed from *Spiroplecta annectens*, and there seems no reason to regard it as an arrested form in any ordinary sense of the term.

Under the name *Spiroplecta rosula*,¹ Ehrenberg has figured a Cretaceous species closely resembling that under notice in general contour, but with a hyaline and perforate shell; and this also is occasionally met with in the living condition.²

Amongst the Challenger gatherings *Spiroplecta biformis* is exceedingly scarce, having only been observed at two localities, namely:—Station 323, South Atlantic, east of Buenos Ayres, 1900 fathoms; and Station 285, South Pacific, mid-ocean, 2375 fathoms. It has been found by Wright and Balkwill in shallow water on the coast of Ireland. But it is as an arctic species that it is best known, indeed until recently its distribution was supposed to be confined to high latitudes. The following are some of the northern localities from which specimens have been obtained:—Franz-Josef Land, lat. 79° to 80° N., 113 to 145 fathoms; west coast of Novaya Zemlya, 55 to 70 fathoms; Baffin's Bay and Smith Sound, 27 to 80 fathoms; and the Hunde Islands, Davis Strait, 60 to 70 fathoms.

As a fossil it occurs in the Gault and Chalk (Parker and Jones), and in the Post-tertiary beds of the north-east of Ireland (Wright).

Gaudryina, d'Orbigny.

Gaudryina, d'Orbigny [1840], Reuss, Parker and Jones, Karrer, Stache, Schwager, Gümbel, Hantken, Brady, Wright, Norman, Marsson, Mártonfi, &c.

Sagrina, pars, d'Orbigny [1840].

Heterostomella, Reuss [1865].

Plectina, Marsson [1878].

The genus *Gaudryina* embraces a group of dimorphous *Textularinæ* which have the earlier segments arranged in a more or less regular triserial spire, and the later ones in two alternating series; in other words, those forms which are Verneuline at the commencement, and subsequently Textularian in their mode of growth.

Von Reuss has attempted to confine the use of the term to the species that preserve the typical Textularian or marginal aperture, and places such as have a terminal orifice in a separate genus, *Heterostomella*. In dimorphous forms, generally speaking, the pseudopodial orifice is an even more variable feature than in the types from which they are derived, and that the genus *Gaudryina* is no exception to this rule may be seen by

¹ Mikrogeologie, pl. xxxii. II. fig. 26.

² Found on the north-east coast of England, and described under the name *Textularia complexa*, Brady, *Nat. Hist. Trans. Northd. and Durham*, 1865, vol. i. p. 101, pl. xii. fig. 6, a. b. A similar form from the Philippine Seas was subsequently figured by Ehrenberg, with the name *Spiroplecta demersa* (*Abhandl. d. k. Ak. Berlin*, for 1872, pl. vii. fig. 26).