

from the Mediterranean, 90 fathoms to 250 fathoms, and in shore-sand from the Adriatic (Parker and Jones); and in shallow-water dredgings from the British seas (Williamson, Balkwill and Wright).

As a fossil, it has been recorded from the Lias of the west of England (Brady), the Chalk of Kent (Rupert Jones) and of Ireland (Wright), and the later Tertiary deposits of Italy (Soldani, Parker and Jones, Seguenza).

*Lingulina carinata*, var. *seminuda*, Hantken (Pl. LXV. figs. 14, 15).

*Lingulina costata*, var. *seminuda*,<sup>1</sup> Hantken, 1875, Mittheil. Jahrb. d. k. ungar. geol. Anstalt, vol. iv. p. 41, pl. iv. fig. 8, *a. b.*

The large *Lingulinae*, not uncommon in certain areas of the North Atlantic, are seldom really carinate, but the lateral edges of the test are slightly rounded, and each margin is ornamented with a few delicate longitudinal ribs. With this exception the lateral faces are smooth.

Fossil specimens similarly characterised are described by von Hantken as constituting a variety of *Lingulina costata*; but as that species is unknown in the recent condition, and as broad unornamented modifications of *Lingulina carinata* (*Lingulina glabra*, Hantken) are found in the same formations, it is more probable that their relationship is with the typical form. Living examples of *Lingulina carinata*, var. *seminuda*, often attain large dimensions, sometimes as much as  $\frac{1}{8}$ th to  $\frac{1}{4}$ th inch (4 to 6 mm.) in length.

This variety has been observed at six Stations in the North Atlantic, at depths between 390 fathoms and 862 fathoms; at two in the South Atlantic, not far from Pernambuco, 350 fathoms and 675 fathoms respectively; and in the Mediterranean, 1200 fathoms. The finest Challenger specimens are those from Station 24, off Culebra Island, West Indies, 390 fathoms, and Station 75, off the Azores, 450 fathoms.

Von Hantken records its occurrence in the Upper and Lower *Clavulina-szabó*i formations of Ofen (Buda), Hungary, and in the "Priabona-Schichten" of Italy.

### *Frondicularia*, DeFrance.

*Nautilus* (*Orthoceras*), pars, Batsch [1791].

*Orthoceras*, pars, Soldani [1798].

*Frondicularia*, DeFrance [1824], Blainville, d'Orbigny, Bronn, Hagenow, Reuss, Bornemann, Williamson, Terquem, Parker and Jones, Carpenter, Neugeboren, Karrer, &c.

*Renulina*, pars, Blainville [1825].

*Planularia*, Nilsson [1827], Hisinger, Münster.

*Frondiculina* (Münster), Römer [1838].

*Textularia*, pars, Potiez and Michaud [1838].

The genus *Frondicularia* bears the same morphological relation to *Lingulina* that *Glandulina* bears to *Nodosaria* proper, and the boundary-line in the former case is

<sup>1</sup> In the explanation of plate iv. of Hantken's memoir, the name is written *Lingulina costata*, var. *subglabra*.