

extends to only four Challenger Stations. The finest specimens, amongst them those from which figs. 5 and 6 have been drawn, are from Station 168, east of New Zealand, 1100 fathoms. The remaining localities are Station 46, off the North American coast, in about the latitude of New York, 1350 fathoms; off Kandavu, Fiji Islands, 210 fathoms; and off the west coast of Patagonia, 400 fathoms.

Ammodiscus gordialis, Jones and Parker, sp. (Pl. XXXVIII. figs. 7-9).

- Trochammina squamata gordialis*, Jones and Parker, 1860, Quart. Journ. Geol. Soc., vol. xvi. p. 304.
- „ *gordialis*, Carpenter, 1862, Introd. Foram., p. 141, pl. xi. fig. 4.
- „ *squamata*, var. *gordialis*, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 408, pl. xv. fig. 32.
- „ *proteus* (pars), Karrer, 1866, Sitzungsber. d. k. Ak. Wiss. Wien, vol. liii. p. 494, pl. i. figs. 1-3.
- Cornuspira variabilis* (pars), Kübler and Zwingli, 1870, Foram. d. Schweiz. Jura, p. 33, pl. iv. fig. 4, b.
- Trochammina gordialis*, Brady, 1876, Monogr. Carb. and Perm. Foram., p. 77, pl. iii. figs. 1-3.
- Ammodiscus gordialis*, Siddall, 1879, Catal. Brit. Rec. For., p. 5.
- „ *gaultinus*, Berthelin, 1880, Mém. Soc. géol. France, sér. 3, vol. i. Mém. 5, p. 19, pl. i. fig. 3, a, b.
- Trochammina gordialis*, Haeusler, 1882, Ann. and Mag. Nat. Hist., ser. 5, vol. x. p. 55, pls. iii., iv. figs. 8-20.

Test convoluted, rounded, asymmetrical; composed of a tube of nearly even diameter coiled upon itself in an irregular manner, and in varying directions. The tube (in transverse section) variable in shape; sometimes twisted or even contracted at irregular intervals; aperture formed by the open end, sometimes slightly constricted, occasionally furnished with a thickened lip. Colour and shell-texture as in *Ammodiscus incertus*. Diameter, $\frac{1}{100}$ th to $\frac{3}{10}$ th inch (0.25 to 0.84 mm.) or more.

This species was designed by Parker and Jones to include the group of somewhat anomalous forms that, morphologically speaking, occupy the ground between the symmetrically constructed complanate type, *Ammodiscus incertus*, and the subglobular *Ammodiscus charoides*. The test is of intermediate size, and the tube is generally of nearly even diameter throughout. It is neither coiled on one plane nor in vertical tiers, but irregularly, a few convolutions in one direction and then a few in another, apparently without rule, the resulting test assuming either a rounded or compressed form.

Ammodiscus gordialis has been collected in the Arctic Sea as far north as the shores of Franz-Josef Land, lat. 79° to 80° N., at depths of 113 to 145 fathoms; off Novaya Zemlya, 55 to 219 fathoms; and off the Hunde Islands, Baffin's Bay, 60 to 70 fathoms. Its geographical distribution, apart from this northern area, and its geological range, are analogous to those of the closely allied *Ammodiscus incertus*. The furthest