

d. Stout crosier-shaped specimens, circular in section, Pl. XIII. figs. 20, 21.

Type—*Peneroplis cylindraceus*, Lamarck, sp.

*Nautilus (Litius) arietinus* (pars), Batsch, 1791, Conch. des Seesandes, p. 4, pl. vi. fig. 15, d.e.f.

*Spirolina (Spirolinites) cylindracea*, Lamarck, 1804, Ann. du Muséum, vol. v. p. 245, No. 2.

*Spirula cylindracea*, Blainville, 1824, Dict. Sci. Nat., vol. xxxii. p. 190,—Malacol., p. 382, pl. v. fig. 1.

*Spirolina cylindracea*, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 286, No. 1;—Modèle, No. 24.

„ *(Spirolinites) cylindracea*, Defrance, 1827, Dict. Sci. Nat., vol. i. p. 298, pl. xiii. fig. 1.

„ *clavata*, Crouch, 1827, Illust. Introd. Lam. Conch., p. 40, pl. xx. fig. 8.

*Coscinospira hemprichii*, Ehrenberg, 1839, Abhandl. d. k. Akad. Wiss. Berlin for 1838, pl. ii. fig. 2, a.b., &c.

*Spirolina austriaca*, d'Orbigny, 1846, For. Foss. Vien., p. 137, pl. vii. figs. 7–9.

„ *hemprichii*, Parker, Jones, and Brady, 1865, Ann. and Mag. Nat. Hist., ser. 3, vol. xv. p. 230.

„ *lituus*, Id. Ibid. vol. xvi. p. 35, pl. i. fig. 19.

e. Long, delicate, crosier-shaped specimens, Pl. XIII figs. 24, 25 (?)

Type—*Peneroplis lituus*, Gmelin, sp.

*Nautilus lituus*, Linné and Gmelin, 1788, Syst. Nat., 13 ed., p. 3372, No. 13.

„ *(Litius) acicularis*, Batsch, 1791, Conch. des Seesandes, p. 4, pl. vi. fig. 16, a.b.

*Spirolina longissima*, Costa, 1856, Atti dell' Accad. Pontan., vol. vii. p. 225, pl. xx. fig. 11.

*Peneroplis laubei*, Karrer, 1868, Sitz. d. k. Akad. Wiss. Wien, vol. lviii. p. 154, pl. iii. fig. 8.

f. Stout nautiloid form, often with limbate sutures and without surface striation, Pl. XIII. fig. 14.

Type—*Peneroplis carinatus*, d'Orbigny.

*Peneroplis carinatus*, d'Orbigny, 1839, Foram. Amér. Mérid., p. 33, pl. iii. figs. 7, 8.

„ *dubius*, Id. 1839, Foram. Cuba, p. 79, pl. vi. figs. 21, 22.

g. Broad complanate variety, thin-shelled and without superficial striæ, Pl. XIII. figs. 12, 13.

Type—*Peneroplis lœvigatus*, Karrer.

*Peneroplis planatus*, var. *lœvigata*, Karrer, 1868, Sitzungsb. d. k. Akad. Wiss. Wien, vol. lviii. p. 153, pl. iii. fig. 7.

Some of the earlier authors appear to have appreciated more fully than many who have written in later times the wide variation of form that must be embraced within the specific limits of *Peneroplis pertusus*. Batsch, amongst the earliest, recognised that between the broad ear-shaped shells and those of stout crosier-like contour, the whole interval was filled by gradational forms, so closely following each other that no line could be drawn that could be supposed to indicate a zoological division. There are other generic series of Foraminifera, concerning which the same sort of observation might be