

AN INDEX

TO THE

GENERA AND SPECIES

OF THE

FORAMINIFERA

BY

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PART II.      NON TO Z

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## INTRODUCTION.

WHEN studying any group of animals from a systematic point of view, the first fact that forces itself on the notice of the student is that certain forms, identical one with another, have been described under different and even many names by different observers. This, in most cases, has been caused by the describer being ignorant or regardless of the writings of those who have gone before. In no group, perhaps, is this lamentable state of things presented more forcibly than with the Foraminifera; and it was in order to leave no excuse for those who came after me, that I prepared a Bibliography of the subject in 1888, and in 1890 compiled an index to the contents of all publications on this special group known to me as issued up to December, 1889, which Index the Smithsonian Institution has done me the honor to publish. It is now, therefore, quite an easy matter to arrive at the number and names of species of any genus, and, with this help, to examine and compare those forms previously figured and described with the form supposed to be new; for even in the absence of the literature, friends can always supply tracings of the figures described.

It is chiefly to the efforts of William Kitchen Parker, Thomas Rupert Jones, and Henry Bowman Brady, that we owe the clearing up and ordering of the nomenclature of the older authors. Professor Rupert Jones, the prime mover in the work, is happily still with us. So long ago as 1859, the two first-named of these microscopists commenced a series of papers "On the Nomenclature of the Foraminifera" in the "Annals and Magazine of Natural History," and these were continued, as a series, for about fifteen years. Almost all the old authors were reviewed in their turn, and the result was a considerable simplification of specific nomenclature. Brady, whose acquaintance with recent forms is attested by the "Challenger" Report, did still more in this direction; and of later years Axel Goës, of Kisa, Sweden, has tabulated recent and fossil forms around well-marked varieties. This method, previously adopted by Parker and Jones, tends to support the idea of the impossibility of defining a "species" in a group where every individual may be regarded as a "variety."

In the compilation of this Index many references have been given to forms described but not figured: the existence of such names necessarily leads to an incomplete index; it is an easy matter to overlook a name if not accompanied by a figure. As it is, moreover, practically useless to describe a form as new, without a figure, in a group so variable in itself, the great majority of these

names have passed into a deserved oblivion. This is also applicable to many of Ehrenberg's "species," most of which were drawn and figured as preserved in Canada-balsam. In studying this author it must be remembered that, at the time Parker and Jones wrote their paper upon Ehrenberg's "Mikrogeologie," they were perfectly familiar with Foraminifera, both in the free and in the mounted state with both reflected and transmitted lights. Hence their determinations of Ehrenberg's figures may be safely taken as correct. At the same time it must be pointed out that a correction of nomenclature made to one of the figures in the Mikrogeologie does not necessarily refer to any other species of Ehrenberg's bearing the same binominal appellation.

In the cataloguing of Soldani's numerous figures, I had availed myself of Jones and Parker's observations on the subject, when referring the old figures to modern interpretations. Since the completion of my manuscript, Fornasini has published a detailed memoir on Soldani, and to this I must refer the student for further particulars when dealing with any special form.

With regard to the method of reference employed, it will be noted that the name of the original author of a species invariably accompanies that species, or is expressed by its equivalent ——, whenever that species is referred to subsequently to its first appearance. The practice of quotation often adopted in lists, *e. g.*,

*Cristellaria cultrata*, Brady, Report Challenger, etc.,  
when really

*Cristellaria cultrata* (Montfort). Brady, Report Challenger, etc.,  
is meant, is not only troublesome but misleading.

The letter *v.* is used indiscriminately for *vide* or *varietas*; but, from the position of the letter, the meaning should be easily apparent.

In the compilation of such a book as this we can scarcely hope to approach perfection; and, with this in mind, I gladly availed myself of the offer by my friend Fortescue William Millett, of Marazion, to look over the proofs with a view to *corrigenda* and *additamenta*. The result of the kind offices of Millett and others is presented in a list arranged alphabetically under genera. It remains for me to express my thanks to the Board of Regents of the Smithsonian Institution for publishing my manuscript; to thank especially Professor Rupert Jones, who kindly placed at my disposal the whole of his manuscript notes made while considering the nomenclature question with Parker and Brady; and to thank those friends who have from time to time favored me with their papers and assistance. My thanks are also gratefully tendered to Dr. S. H. Scudder for his kindly interest, and to the "reader" of the Smithsonian Institution, and the printers, to whose patience and acumen in dealing with a difficult manuscript, I am considerably indebted.

C. DAVIES SHERBORN.

- NONIONINA crassula** (W. & J.) [d'Orb.]. Jones, Microgr. Dict. ed. 4, 1883, 544, xxiv, 18a, b.
- ? —— **crisiæ**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 285.
- —— —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), iii, 8.
- ? —— **crystallina**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 285.
- —— —— Ehr., in Koldewey, Zweite Deutsche Nordpolarfahrt, 1874, ii, n. d., i, 4.
- **dense-punctata**, Egger. Neues Jahrbuch, 1857, 299, xiv, 22 and 23.
- **depressa** (d'Orbigny). Reuss in Geinitz, Grundr. Verstein. 1845–46, 666, xxiv, 34 [= *Heterostegina*, 1826].
- **depressula** (Walker & Jacob). Anon, Science Gossip, 1870, 12, f. 29 [*Nautilus*, 1798].
- —— —— Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxiii, 1880, 218, iv, 77.
- —— —— Brady, Report Challenger, 1884, 725, cix, 6 and 7.
- —— —— Brady, Parker & Jones, Trans. Zool. Soc. XII, (7), 1888, 229, xlivi, 25.
- —— —— Terrigi, Mem. R. Acc. Lincei, (4), vi, 1889, 119, x, 4.
- —— —— see *Polystom. crispa* (Linn.).
- **elegans**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 294, No. 10.
- **elegans**, Williamson. Recent British Foram. 1858, 35, iii, 74 and 75 [= *Opercul. ammonoides*, Gron.].
- (cfr.) —— —— Tate & Blake, Yorkshire Lias, 1876, 473, xvii, 39.
- **elongata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 294, No. 18.
- **elyptica**, d'Orbigny. Ibid. VII, 1826, 294, No. 16.
- **erythræa**. Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 132.
- **escheri**, Kaufmann. In Heer, Urwelt Schweiz, 1865, 198, f. 110; and transl. 1876, 208, f. 110 [= *Globig. cretacea*].
- **excavata**, Seguenza. Atti Accad. Giœnia Sci. Nat. [2], XVIII, 1862, 98, i, 4, 4n.
- **exponens**, Brady, Parker & Jones. Trans. Zool. Soc. XII, (7), 1888, 230, xlivi, 16.
- **faba** (Fichtel & Moll). Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXV, 1883, 204, iv, 50 [= *Nautilus*, 1798].
- —— —— see *Chrysolus*.
- —— —— see *Polystom. crispa* (Linn.).
- **falx**, Czjzek. Haidinger's Nat. Abh. II, 1848, 142, xii, 30 and 31 [v. *Pullenia*].
- **floridana**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), v, 1.
- **flustrella**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 286.
- **formosa**, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 63, vii, 6.
- **fraasana**, Gümbel. Jahresh. ver. vat. Nat. Württ. XVIII, 1862, 233, iv, 5a, b.
- **fusca**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 23.
- **germanica**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1839, 133, ii, Ia-g; Transl. Taylor's Scientific Memoirs, III, 1843, 357, vi, Ia-g [= *N. umbilicatula* (Montagu)].
- —— —— Mantell, Wonders Geol. 1848, 6th ed., 323, f. 59.
- —— —— (—) Joly & Leymerie, Mém. Ac. Sci. Toulouse, [3], iv, 1848, 215, i, 19–21.
- —— —— Hartwig, Magt van het Kleine, 1849, 111, f. 3, and 1866, 102, f. 41; German by Dr. A. Schwartzkopf, 1851, 81.
- —— —— Hartwig, Verh. I. Kl. Koninkl.-Nederland Inst. 3 r. IV, 1852, 115, ii, 4 and 5.
- —— —— Mantell, Medals Creation, ed. 2, 1854, 350, f. 113.
- **glabra**, Roemer. Neues Jahrbuch, 1838, 392, iii, 66.
- **globolus**, Eichwald. Lethæa Rossica, I, 1860, 350, xxii, 17a, b, c [v. also *Endothryra*].
- **globosa**, v. Hagenow. Neues Jahrb. f. min. 1842, 574 [v. *Discorbina*; *Totalia*].

- NONIONINA** *globulosa*, Ehrenberg. Heer, Urwelt Schweiz, 1865, 198, f. 111; and transl. 1876, 208, f. 111 [= *Planorb. ammonoides* and *Pl. ariminensis*, var.].
- *græca*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 23.
- *granifera*, Terquem. Mém. Soc. Géol. France, [3], II, 1882, 42, ii (x), 8a, b; 9a, b.
- *granosa*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 294, No. 8.
- — — D'Orbigny, Foram. Fossiles Vienne, 1846, 110, v, 19 and 20.
- — — Terquem, Mém. Soc. Géol. France, [3], II, 1882, 43, ii (x), 10a, b.
- — — Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXV, 1883, 206, iv, 54.
- *grateloupi*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 294, No. 19.
- — — De la Sagra, Hist. Phisiq. etc., Cuba, 1839, "Foraminifères," 46, vi, 6 and 7; also in Spanish, 1840, 67, same pl. and fig. [*N. gradeloupi* on plate].
- *gravinensis*, Nicolucci. Nuovi Ann. Sci. Nat. Bologna, [2], VI, 1846, 200.
- *helicina*, Costa. Mem. Acc. Sci. Napoli, II, 1855 (1857), 123, i, 18 A, B, C.
- ? — ? — — Costa, Atti Accad. Pontaniana, VII, (2), 1856, not descr., xiv, 13.
- *hemprichii*, Ehrenberg. Mikrogeologie, 1854, xxiii, 37 [very close to *N. scapha*].
- — — *Ibid.* 1854, xxiii, 46 [= *Rotalia beccarii*, v. *ammoniformis*].
- *heteropora*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1847, 485.
- *heteropora*, Egger. Neues Jahrbuch, 1857, 300, xiv, 19–21.
- *hyalina*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 286.
- — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), iv, 4.
- *incrassata* (Fichtel & Moll.), v. *Nutilus*.
- — — Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXV, 1883, 205, iv, 52.
- — — Gümbel, Geol. Bayern, (1), II, 1885, f. 266, 24.
- *infilata*, Alth. Haidinger's Naturw. Abh. III, (2), 1850, 266, xiii, 22.
- *integra*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 427.
- *jaccardi*, de Loriol. Mém. Soc. Phys. Hist. Nat. Genève, XVIII, (1), 1865, 106, iii, 19.
- *jeffreysii*, Williamson. Recent British Foram. 1858, 34, iii, 72 and 73 [= *Haplophrag. canariensis*, d'Orb.].
- — — Terquem, Ess. Anim. Plage Dunkerque, (2), 1876, 71, vii, 22 (and Mém. Soc. Dunkerquoise).
- — — var. *Ibid.* (3), 1881, 118, xiii, 25 (and Mém. Soc. Dunkerquoise).
- [*jeffreysii*] — Schlumberger, F. Jeun. Nat., Feb., 1882, ii, 6 and 7.
- *koldeweyi*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 286.
- — — Ehr., in Koldewey, Zweite Deutsche Nordpolarfahrt, 1874, ii, n. d., i, 6.
- *labradorica*, Dawson. Canad. Nat. v, 1860, 191, f. 4 [see *N. scapha*].
- — — J., P. & B., Crag Foram., Pal. Soc. XIX, 1866, n. d., ii, 44 and 45.
- *laevigata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 293, No. 3.
- — — Guérin-Ménville's Cuvier Iconographie, Mollusques, 1829–43, 9, ii, 7.
- — — Cuvier, Animal Kingdom, Henderson's ed., III, 1834 (pls. 1837), 17, iii, 7.
- *laevis*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 294, No. 11.
- — — D'Orbigny, Modèles, No. 46, 1826.
- — — P., J. & B. [d'O., Modèles 46], Ann. Mag. Nat. Hist. [3], XVI, 1865, 26, iii, 97 [= *N. incrassata*, F. & M.].
- — — Terquem, Mém. Soc. Géol. France, [3], II, 1882, 44, ii (x), 12–14.

- NONIONINA** *lævis*, d'Orbigny. Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 163, fig.
- *lamarckii*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 294, No. 18.
- *latescens*, Schwager. Palæontographica, xxx, 1883, Pal. Theil, 137, xxvi (3), 4a-c.
- *latidorsata*, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 339, xvi, 4 [v. *Haplophragmium*].
- *leo*, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, (1), 1868, 190, v, 8.
- *limba*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 294, No. 14.
- — — — D'Orb., Modèles, No. 11, 1826.
- — — — P., J. & B. [d'O., Modèles 11], Ann. Mag. Nat. Hist. [3], xvi, 1865, 20, iii, 99.
- — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (85), 163, fig.
- *maeromphalus*, Gümbel. Jahresh. Ver. vat. Nat. Württ. XVIII, 1862, 232, iv, 4a, b.
- *magdeburgica*, Philippi. Palæontographica, I, 1851, 81, xa, 21a [v. also *Robulina*].
- *melo*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 293, No. 4.
- — — — = *N. pompilioides* (F. & M.), see *Nautilus melo*.
- *millepora*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 427, iii, vii, 50.
- *nautiloidea*, Costa. Atti Accad. Pontaniana, VII, (2), 1856, not descr., xx, 1.
- *neglecta*, Michelotti. Nat. Verh. Holland. Maatsch. Wetensch. Haarlem, [2], III (2), 1847, 15, not figured.
- *nodulosa*, Terquem. Cinquième Mém. Foram. Oolithique, 1883, 367, xli, 11a, b.
- — — — Terquem, Mém. Soc. Géol. France, [3], IV, 1886, 47, v, 4 and 5.
- *nympharum*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 286.
- *obliqua*, Costa. Atti Accad. Pontaniana, VII, (2), 1856, 204, xvii, 17A, B.
- *oblonga*, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 21, ii, Macrocephalus-oolith 14 [= a *Planorbulina*].
- ? *ocellata*, Ehrenberg. Mikrogeologie, 1864, xxvii, 37 [= *Crist. cultrata*].
- *orbicularis*, Brady. Ann. Mag. Nat. Hist. [5], VIII, 1881, 415, xxi, 5a, b,
- — — — Brady, Denkschr. k. Ak. Wiss. Wien, XI.III, (2), 1882 [1881], 105, ii, 5a, b.
- — — — Brady, Report Challenger, 1884, 727, cix, 20 and 21.
- *ornata*, Costa. Atti Accad. Pontaniana, VII, (2), 1856, 203, xvii, ii, A, B, C [error for 17], xix, 8.
- *pauper*, Egger. Neues Jahrbuch, 1857, 300, xiv, 26 and 27.
- *pauperata*, Balkwill & Wright. Trans. R. Irish Ac. XXVIII (Sci.), 1885, 353, xiii, 25 and 26.
- *pelagica*, d'Orbigny. Voyage Amér. Mérid. 1839, v, (5), "Foraminifères," 27, iii, 1 and 2 [error for 13 and 14].
- *perforata*, d'Orbigny. Foram. Fossiles Vienne, 1846, 110, v, 17 and 18.
- — — — Hoernes. Elem. Palæont. 1884, 25, f. 12; French ed., 1886, same fig.
- *placenta*, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 72, v, 33 [v. *Haplophragmium*].
- *polystoma*, Costa. Atti Accad. Pontaniana, VII, (2), 1856, 206, xiv, 10a, A, B.
- *politæ*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 294, No. 12.
- *pompilioides* (Fichtel & Moll). P., J. & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 246, xii, 158 [v. *N. melo*, d'O.] [v. *Nautilus*, 1798].
- — — — Terrigi, Atti Acc. Nuovi Lincei, XXXV, 1883, 204, iv, 49.
- — — — Brady, Report Challenger, 1884, 727, cix, 10 and 11.
- — — — see *Melonis*.
- — — — see *Nautili cum ammoniis admixti*.
- *punctata*, d'Orbigny. Foram. Fossiles Vienne, 1846, 111, v, 21 and 22.
- — — — Terquem, Ess. Anim. Plage Dunkerque, (2), 1876, 71, viii, 1a, b (and Mém. Soc. Dunkerquoise).

- NONIONINA**, punctata, d'Orbigny. Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxv, 1883, 206, iv, 53.
- punctulata, d'Orbigny. Voyage Amér. Mérid. v, 1839, (5), "Foraminifères", 28, v, 21 and 22 [*N. punctata* on plate].
- punctulata, Costa. Atti Accad. Pontaniana, vii, (2), 1856, not descr., xix, 9.
- quaternaria, Reuss. Haidinger's Naturw. Abh. iv, (1), 1851, 34, ii, 13.
- — — Hitchcock, Elem. Geology, 30th ed., 1860, 141, f. 97.
- — — quadriloba, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, "errata-corrigé," xvii, 15.
- — — quinqueloba, Reuss. Zeitschr. deutsch. geol. Ges. iii, 1851, 71, v, 31 [v. also *Pullenia*].
- — — rotula, Eichwald. Lethæa Rossica, i, 1860, 349, xxii, 18a, b, c [probably *Endothyra*, q. v.].
- — — rufa, Costa. Atti Accad. Pontaniana, vii, (2), 1856, 205, xx, 2A, B.
- — — rugosa, d'Orbigny. Ann. Sci. Nat. vii, 1826, 294, No. 17.
- — — seapha (Fichtel & Moll), v. *Nautilus*, 1798.
- — — — — J., P. & B., Crag Foram., Pal. Soc. xix, 1866, n. d., ii, 36 and 37.
- — — — — Brady, Nat. Hist. Trans. Northumb. i, 1865-67 (1867), 106, xii, 10a, b.
- — — — — v. labradorica. Dawson, Canad. Nat. n. s., v, 1870, 177, f. 5.
- — — — — v. labradorica. Dawson, Amer. Journ. Sci. [3], i, 1871, 206, f. 5; and Annals Mag. Nat. Hist. [4], vii, 1871, 86, f. 5.
- — — — — v. labradorica. Dawson, Canad. Nat. vi, 1872, 255, iii, 4.
- — — — — Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxv, 1883, 202, iv, 47.
- — — — — Brady, Report Challenger, 1884, 730, cix, 14, 15 and 16?
- — — — — v. labradorica. Dawson, Handbook Zoology, ed. 3, 1886, 46, f. 38.
- — — — — Brady, Parker & Jones, Trans. Zool. Soc. xii, (7), 1888, 280, xlili, 20.
- — — — — Terrigi, Mem. R. Acc. Lincei, (4), vi, 1889, 120, x, 7.
- — — — — see *Polystom. crispa* (Linn.).
- — — semistriata, d'Orbigny. Ann. Sci. Nat. vii, 1826, 294, No. 9.
- — — silicea, Schultze. Müller's Archiv, 1856, 171, viB, 4-7.
- — — simplex, Karrer. Novara-Exped., Geol. (1), 1864, 83, xvi, 17.
- — — sloanii, d'Orbigny. De la Sagra, Hist. Phisiq. etc., Cuba, 1839, "Foraminifères," 46, vi, 18 and 18bis; also in Spanish, 1840, 68, same pl. and fig.
- — — soldanii, d'Orbigny. Foram. Fossiles Vienne, 1846, 109, v, 15 and 16.
- — — — — Costa, Atti Accad. Pontaniana, vii, (2), 1856, 201, xvii, 11A, B.
- — — — — see *Nautilus melo*.
- — — solida, Terquem. Mém. Soc. Géol. France, [3], iv, 1886, 48, v, 7a, b.
- — — sphæroides, d'Orbigny. Ann. Sci. Nat. vii, 1826, 293, No. 1 [= *Pullenia*, q. v.].
- — — — — D'Orbigny, Modèles, No. 43, 1826.
- — — — — P., J. & B. [d'O., Modèles 43], Ann. Mag. Nat. Hist. [3], xvi, 1865, 26, ii, 57.
- — — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (85), 163, fig.
- — — sphærica, Kübler & Zwingli. Neujahrsblatt Burgersbibl. Winterthur, 1866, 15, iii, 1 [? a *Globigerina*].
- ? — — — spira, Ehrenberg. Mikrogeologie, 1854, xxx, 32 [= ?*Cristallaria*].
- — — spirillina, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 286.
- — — splendida, Boll. Geogn. deutsch. Ostseeländer, 1846, 177, ii, 15.
- — — stellata, Terquem. Mém. Soc. Géol. France, [3], ii, 1882, 48, ii (x), 11a, b.
- — — stelligera, d'Orbigny. Barker-Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, ii, (2), "Foraminifères," 128, iii, 12 [error for 1 and 2] [*N. stellifera* on plate].
- — — — — Brady, Trans. Linnean Soc. xxiv, 1864, 471, xlviii, 19.

- NONIONINA stelligera**, d'Orbigny. Anon, Science Gossip, 1870, 12, f. 30.  
 ——— Terquem, Ess. Anim. Plage Dunkerque, (1), 1875, 24, i, 16  
 (and Mém. Soc. Dunkerquoise).  
 ——— Brady, Report Challenger, 1884, 728, cix, 3-5.  
 ——— see *Polystom. crispa* (Linn.).  
 ——— **striato-punctata** (F. & M.). Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 25, pl. 15 [*Nautilus*, 1798].  
 ——— **striatula**, Niccolucci. Nuovi Ann. Sci. Nat. Bologna, [2], vi, 1846, 200.  
 ——— **striolata**, Costa. Atti Accad. Pontaniana, VII, (2), 1856, 203, xvii, 12A, B.  
 ——— **subangulosa**, Terquem. Cinquième Mém. Foram. Oolithique, 1883, 367, xli, 15a, b.  
 ——— ——— Terquem, Mém. Soc. Géol. France, [3], iv, 1886, 48, v, 6a, b.  
 ——— **subcarinata**, d'Orbigny. Voyage Amér. Mérid. 1839, v, (5), "Foraminifères," 28, v, 23 and 24.  
 ——— **subcarinata**, Seguenza. Atti Accad. Giœnia Sci. Nat. (2), XVIII, 1862, 98, i, 3, 3a.  
 ——— **subgranosa**, Egger. Neues Jahrbuch, 1857, 299, xiv, 16-18.  
 ——— **tuberculata**, d'Orbigny. Foram. Fossiles Vienne, 1846, 108, v, 13 and 14.  
 ——— ——— Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXV, 1883, 207, iv, 55.  
 ——— **turgida** (Williamson). Anon, Science Gossip, 1870, 12, f. 28 [*Rotalina*, 1858].  
 ——— ——— Morris, Lecture Geol. Croydon [1876], 8, f. 2<sup>o</sup>.  
 ——— ——— Brady, Report Challenger, 1884, 731, cix, 17-19.  
 ——— ——— Terquem, Bull. Soc. Zool. Fr. xi, 1886, 331, xi, 7 and 8.  
 ——— ——— see *Polystom. crispa* (Linn.).  
 ——— **umbilicata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 293, No. 5, xv, 10-12  
 [v. *Planorbulina*].  
 ——— ——— D'Orbigny, Modèles, No. 86, 1826.  
 ——— ——— Smedley, Ency. Metrop. 1845, undescr. pl. "Mollusca?" 11  
 and 12.  
 ——— ——— Reuss in Geinitz, Grundr. Verstein. 1845-46, 666, xxiv, 33.  
 ——— ——— P., J. & B. [d'O., Modèles 86], Ann. Mag. Nat. Hist. [3], XVI, 1865, 32, iii, 98 [= *N. pompilioides*, F. & M.].  
 ——— ——— see *Polystom. crispa* (Linn.).  
 ——— ——— = *Planorb.*, see *Nautilus*.  
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 ——— ? ——— Carter, Journ. Bombay Br. R. Asiatic Soc. V, (18), (1853), ii, 19 and 20.  
 ——— [**garansensis**] ——— D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 101, iii, 6a, 7a-g, and II, 1854, 344.  
 ——— [**garansensis**] ——— Pictet, Traité de Paléont. 2 ed., IV, 1857, 501, cix, 20.  
 ——— [**garansensis**] ——— Carter, Geol. Papers Western India, 1857, 544, xxiii, 19 and 20.  
 ——— [**garanensis**] ——— Medlicott & Blanford, Geol. of India, 1879, 460, etc., xv, 10.  
 ——— [**garansensis**] ——— Bütschli in Bronn, Klassen, etc., Thier-Reichs, 1880, 213, xii, 7.

- NUMMULITES** gizehensis, Ehrenberg. v. *Nautilus* [v. *Nummulina gyzenesis*].  
 For full synonymy see de la Harpe, Mém. Soc. paléont. Suisse, VII, 1881, 117.
- [gizehensis] — D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 94, II, 6a-f, 7a, 8 [*gyzenensis* on plate].
  - — — Zittel, Handbuch Paléont. (1), 1876, 99, f. 39<sup>1</sup> a, b, c.
  - — — De la Harpe, Mém. Soc. paléont. Suisse, VII, 1881, 91, etc., i and ii, 1-4.
  - — — [—] [d'Arch.]. Schlumberger, F. Jeun. nat., Feb. 1882, II, 11 (section).
  - — — cailliaudi, d'Arch. De la Harpe, Palaeontographica, XXX, 1883, Pal. Theil, 197, xxxiv (5), 34-41 [v. *N. cailliaudi*].
  - — — champollioni, de la Harpe. *Ibid.* XXX, 1883, Pal. Theil, 193, xxxiii (4), 11-13.
  - — — ehrenbergi, de la Harpe. *Ibid.* XXX, 1883, Pal. Theil, 190, xxxii (3), 16-25; xxxiii (4), 1, 2.
  - — — lyelli, d'Arch. *Ibid.* XXX, 1883, Pal. Theil, 192, xxxiii (4), 3-10 [v. *N. lyelli*].
  - — — mariettei, de la Harpe. *Ibid.* XXX, 1883, Pal. Theil, 196, xxxiv (5), 25-33.
  - — — pachoi, de la Harpe. *Ibid.* XXX, 1883, Pal. Theil, 193, xxxiii (4), 14-18; xxxiv (5), 1-5.
  - — — visquesneli, d'Arch. *Ibid.* XXX, 1883, Pal. Theil, 195, xxxiv (5), 15-24 [see *N. visquesneli*].
  - — — zitteli, de la Harpe. *Ibid.* XXX, 1883, Pal. Theil, 194, xxxiv (5), 6-14.
  - — — [gyzchensis] — Quenstedt, Handbuch Petref. ed. 3, (5), (1885), 1055, lxxxvi, 34.
  - — — [gyzchensis] — *Ibid.* (5), (1885), 1055, f. 396.
  - — — globularia, Lamarck. Ann. Mus. V, 1804, 241, No. 2; and Anim. sans Vert. VII, 1822, 629, No. 2.
  - — — ? — Pilla, Distinz. terr. Etrurio, 1846, 104, I, 10 and 11.
  - — — globulina, Michelotti. Mem. Soc. Ital. Sci. xxii, 1841, 297, III, 6 [*Nummulina* on p. 302, q. v.].
  - — — globulus, Leymerie. Mém. Soc. Géol. France, [2], I, 1844, 359, XIII, 14a-d [v. also *Nummulina*].
  - — — granulosa, d'Archiac. D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 151, X, 11a, b, c, 12a, 13, 14a, b, 15a, b, 16-19a-d [fig. 1 by error on plate] [also pl. IV, f. 17] [*Nummulina*, 1847].
  - — — — Pictet, Traité de Paléont. 2 ed., IV, 1857, 501, cix, 18.
  - — — — Medlicott & Blanford, Geol. of India, 1879, 458, xv, 14.
  - — — — Bütschli in Brönn, Klassen, etc., Thier-Reichs, 1880, 213, XII, 4.
  - — — — Abich, Geol. Forsch. Kaukas. Ländern, 1882, 248, IX, 5 and 5a.
  - — — granulosa — Mallada, Bol. Com. Mapa geol. Espan. XI, 1884, n. d., XXX, 31-35.
  - — — guettardi, d'Archiac & Haime. Descr. Anim. groupe nummulitique Inde, I, 1853, 130, VII, 18a-c, 19a, b; and II, 1854, 345.
  - — — — Lartet, Ann. Sci. Géol. III, 1872, Art. 5, 89, IX, 25 and 26.
  - — — — Lartet, Bibl. Ecole Haute Etudes, VII, 1873, No. 2, 89, IX, 25 and 26.
  - — — — var. plicata, de la Harpe. Bull. Soc. Géol. France, [3], V, 1877, 825, XVII, 10a, b.
  - — — — var. striolata, de la Harpe. *Ibid.* [3], V, 1877, 825, XVII, 9a, b.
  - — — — var. plicata, de la Harpe. Bull. Soc. Vaud. Sci. Nat. [2], XVI, 1879, 210, X, 10a, b.
  - — — — var. striolata, de la Harpe. *Ibid.* [2], XVI, 1879, 210, X, 9a, b.
  - — — — De la Harpe, Palaeontographica, XXX, 1883, Pal. Theil, 171, XXX (1), 29-42.
  - — — guttula, Schafhärtl. Sud-Bayerns Lethaea Geogn. 1863, 96, XIII, 8a-d; XIV, a-c, e.

- NUMMULITES heberti**, d'Archiac & Haime. Descr. Anim. groupe nummulitique Inde, I, 1853, 147, ix, 14 *a-g*, 15*a*.  
 ——— ——— De la Harpe, Palæontographica, xxx, 1883, Pal. Theil, 178, xxxi (2), 26 and 27.  
 ——— ——— Vutskits, Orvos termesz. Tars. Ertesitö, 1883, [56], iii, 5*a, b, c*.  
 ——— heeri, de la Harpe. Mém. Soc. paléont. Suisse, x, 1883, 152, iv, 9-15.  
 ——— helprini, Hantken. Földt. Közl. xvi, 1886, 154 and 188, i, 2*a, b, c*.  
 ——— hungarica, Hantken & Madarasz. Jegyz. az 1873 vilagtarl. kiall. numm. 1873, 8 and 9.  
 ——— inflatus, Riss. Hist. Nat. Europe, IV, 1826, 24.  
 ——— intermedia, d'Archiac. Mém. Soc. Géol. France, [2], II, 1846, 199 [v. also *Nummulina*].  
 ——— ——— D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 99, iii, 3*a-d*; 4*a-f*.  
 ——— ——— Michelotti, Nat. Verh. Holland Maat. Wet. Haarlem, 2, xv, 1861, 18, i, 5-7.  
 ——— ——— De la Harpe, Bull. Soc. Borda, IV, 1879, 149, i, v, 1-7.  
 ——— ——— De la Harpe, Palæontographica, xxx, 1883, Pal. Theil, 210, xxxv (6), 15-22.  
 ——— ——— Tellini, Boll. Soc. geol. Ital. VII, 1888, 53, viii, 15, 16.  
 ——— ——— v. *bormiensis*, Tellini. Ibid. VII, 1888, 55, viii, 14, 17.  
 ——— irregularis, Deshayes. Mém. Soc. Géol. France, [1], III, 1838, 67, v, 15 and 16. For full synonymy see de la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 154.  
 ——— ——— De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 154, iv, 16-34, and v, 1, 2. [This is divided into var. *formosa*, iv, 16; var. *pratti*, iv, 33, 34; v, 1 and 2; var. *regulata*, iv, 24; var. *depressa*, iv, 21-23].  
 ——— ——— D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 138, viii, 16-19, 19*a*.  
 ——— ——— Schlumberger, Compt. Rend. Assoc. Franç. 1883 (1884), 520, f. 78 and 79.  
 ——— irregularis, Michelotti. Mem. Soc. Ital. Sci. xxii, 1841, 296, iii, 5 [*Nummulina* on p. 302, q. v.].  
 ——— jūrassica, Gümbel. Neues Jahrbuch, 1872, 254, vi, 1-9.  
 ——— kelatensis, Carter. Annals Mag. Nat. Hist. [3], VIII, 1861, 376, xv, 6; Journ. Bombay, Branch R. Asiatic Soc. VI, 1861 (1862), 66.  
 ——— kochi, Vutskits. Orvos termesz. Tars. Ertesitö, 1883, [49], iii, 4*a, b, c*.  
 ——— kovacsienensis, Hantken & Madarasz. Jegyz. az 1873 vilagtarl. kiall. numm. 1873, 11.  
 ——— laceratus, Quenstedt. Handbuch Petref. ed. 3, (5), (1885), 1055, lxxxvi, 38.  
 ——— lœvigata, Lamarck. Syst. Anim. s. Vert. 1801, 101, and Ann. Mus. V, 1804, 241, No. 1, and f. 10*a, b*, pl. 62, viii, 1806 [v. also *Nummulina* and *Camerina*].  
 ——— ——— Parkinson, Organ. Rem. former World, III, 1811, 152, x, 13-16, 18 and 19.  
 ——— ——— Lamarck, Coq. Foss. Paris, 1823, 14, xiv, 10*a, b*.  
 ——— ——— Brönn, Syst. urweltl. Conchyl. 1824, 7, i, 10*a, b*.  
 ——— ——— Blainville, Manuel Malac. et Conch. 1825 (pls., 1827), 372, iv, 2.  
 ——— ——— Deshayes, Descr. Coq. Charact. 1831, 251, iii, 11 and 12.  
 ——— ——— Cuvier, Animal Kingdom, Henderson's ed., III, 1834 (pls., 1837), 17, viii, 9.  
 ——— ——— Pilla, Distinz. terr. Etrurio, 1846, 105, i, 20 [17-20].  
 ——— ——— Joly & Leymerie, Mém. Ac. Sci. Toulouse, [3], IV, 1848, 182, etc., ii, 5 and 6.  
 ——— lœvigata [Sow.]. Brown, Illustr. Fossil Conch. Great Britain, 1849, 37, xxvi, 5-7 [error for [6-9?].  
 ——— ——— D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 103, iv, 1*a-g*, 2*a, 3, 4a, 5a, b, 6* and 7.  
 ——— ——— Pictet, Traité de Paléont. ed. 2, IV, 1857, 502, cix, 21.  
 ——— [lœvigatus] ——— Zittel, Handbuch Palæont. (I), 1876, 99, f. 392*a, b*.

- NUMMULITES** *lævigata*, Lamarck. Hantken, Ertezek. Termesz. Köröböl, ix, No. 12, 1879, 2 pls.; and Literar. Ber. Ungarn, III, 1879, 714, i and ii [25 figs.]
- — — — — Büttschli, in Brönn, Klassen, etc., Thier-Reichs, 1880, 213, xii, 8–10.
- — — — — De la Harpe, Mém. Soc. Paléont. Suisse, VII, 1881, 65, f. 10.
- — — — — De la Harpe, Bull. Soc. Vaud. Sci. Nat. [2], XVII, 1881, 435.
- — — — — De la Harpe, Bull. Soc. géol. France, [3], IX, 1881, 173, f. 1.
- — — — — Abich, Geol. Forsch. Kaukas. Ländern, 1882, 244, ix, 3–4, f. 42.
- — — [*lævigatus*] — — — Mallada, Boll. Com. Mapa geol. Espaň. XI, 1884, n. d., xxviii, 1–4.
- — — [*lævigatus*] — — — Quenstedt, Handbuch Petref. ed. 5, (5), (1885), 1054, lxxxvi, 27, 32, and 33, and f. 395.
- — — v. *auquitanica*, Benoist. Bull. Soc. Borda à Dax, XIV, 1889, 20, i, 1, 2; ii, 6, 7.
- — — [*lævigatus*] — — — Credner, Elem. Geologie, 1883, 674, f.
- — — — — Fritel, Foss. Caract. terr. sedim. tert. 1886, vii, 47–49.
- — — [*lævigatus*] — — — Prestwich, Geology, 1888, II, 367, f. 184a, b.
- — — *lamarckii*, d'Archiac & Haime. Descr. Anim. groupe nummulitique Inde, (1), 1853, 109, iv, 14a–d, 15, 16.
- — — — — De la Harpe, Bull. Soc. géol. France, [3], IX, 1881, 173, f. 2.
- — — — — De la Harpe, Bull. Soc. Vaud. Sci. Nat. [2], XVII, 1881, 435, fig.
- — — — — De la Harpe, Mém. Soc. Paléont. Suisse, VII, 1881, 65, f. 9.
- — — v. *girondica*, Benoist. Bull. Soc. Borda à Dax, XIV, 1889, 22, ii, 1–5.
- — — *lamarmoræ*, Meneghini. Paléont. Ile Sardaigne, 1857, 545H, 8a–c.
- — — *latispira*, Menegh. D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, (1), 1853, 93, i, 6a. [*Nummulina*, 1851.]
- — — *lea*, Kissó. Hist. Nat. Europe, IV, 1826, 23.
- — — *lenticularis*, de Blainville. Malacol. 1825, iv, 2. [v. *Lycophrys*.]
- — — — — Defrance, Dict. Sci. Nat. (in index to Atlas); Atlas, Conch. 1827, xi, 2.
- — — *lenticularis* (Fichtel & Moll), v. *Nautilus*, 1798.
- — — — — Lamarck, Ency. Method. "Vers," III, (1832), 638, 471, f. 1 (pls., 1827), (P. & J. quote "pt. 23," 1816).
- — — — — Cuvier, Animal Kingdom, Henderson's ed. III, 1834 (pls., 1837), 17, iv. ter., 1.
- — — — — Anon., Penny Cycloped. x, 1838, 348, f.
- — — — — Sowerby, Conch. Manual, 1839, 72, f. 472 and 473, ed. 2, 1842, 205, figg. 472 and 473.
- — — — — Hartwig, The Sea, ed. 3, 1866, 381, f. d.
- — — — — Greene, Man. Protozoa, 1871, 15, f. 3d.
- — — *leymeriei*, d'Archiac & Haime. Descr. Anim. groupe nummulitique Inde, (1), 1853, 153, xi, 9a, b, c, 10a–e, 11, 12; and (2), 1854, 345.
- — — — — Medlicott & Blanford, Geol. of India, 1879, 458, xv, 15.
- — — — — Mallada, Boll. Com. Mapa geol. Espaň. XI, 1884, n. d., xxx, 39–44.
- — — *liassicus*, Jones. In Brodie, Ann. Mag. Nat. Hist. [2], XII, 1853, 275. [v. *Involutina*.]
- — — *lilium*, Schafhäutl. Süd-Bayerns Lethaea Geogn. 1863, 99, lxv, b, 22a, b.
- — — *lorioli*, de la Harpe. Mém. Soc. paléont. Suisse, X, 1883, n. d., iii, 15–17.
- — — *lucasana*, Defrance. D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde (1), 1853, 124, vii, 5a–c, 6, 7a, 8a, 9a, b, 10a, 11a, 12. [*Nummulina*, 1850.]
- — — — — Hantken, A magy. kir. földt. int. évkönyve, I, 1871, 134, ii, 4a, b, c; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, 141, same pl. and fig.

- NUMMULITES** (efr.) [*lucasanus*], Defr. Zittel, Handbuch Palæont. Abth. I., 1876, 65, f. "3;" 97, f. 37 and 40 [structural].
- — — — — Lartet, Explor. Géol. Mer Morte [1877], [157], xii, 32.
- — — — — var. *granulata*, de la Harpe. Bull. Soc. géol. France, [3], v, 1877, 823, xvii, 7a-b.
- — — — — var. *mentonensis*, de la Harpe. *Ibid.* [3], v, 1877, 823, xvii, 6a-c.
- — — — — var. *obsoleta*, de la Harpe. *Ibid.* [3], v, 1877, 823, xvii, 8a, b.
- — — — — Hantken, Kohlenflötze, etc. ungar. Krone, 1878 (transl. from Magyar), 219, f. 34.
- — — — — var. *granulata*, de la Harpe. Bull. Soc. Vaud. Sci. Nat. [2], xvi, 1879, 205, x, 7a, b.
- — — — — var. *mentonensis*, de la Harpe. *Ibid.* [2], xvi, 1879, 206, x, 6a-c.
- — — — — var. *obsoleta*, de la Harpe. *Ibid.* [2], xvi, 1879, 205, x, 8a, b.
- — — [*lucasanus?*] — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 213, xii, 6.
- — — [*lucasiiana*] — — — Abich, Geol. Forsch. Kaukas. Ländern, 1882, 245, xi, 6, 6a.
- — — — — *obsoleta*, de la Harpe. Palæontographica, xxx, 1883, Pal. Theil, 208, xxxv (6), 11-14.
- — — — — Mallada, Bol. Com. Mapa Geol. Espan. xi, 1884, n. d. xxviii, 14-19.
- — — — — Gümbel, Geol. Bayern, Th. 1, Lief. II, 1885, f. 266, 27.
- — — lyelli, d'Archiac & Haime. Descr. Anim. groupe nummulitique Inde, I, 1853, 95, ii, 9a-c; 10a-b; iii, 1a, b, 2.
- — — — — Pictet, Traité de Paléont. ed. 2, IV, 1857, 502, cix, 22.
- — — — — Schafhätl, Süd-Bayerns Lethaea Geogn. 1863, 104, xiii, 2a, b.
- — — — — Lartet, Ann. Sci. Géol. III, 1872, Art. 5, 89, ix, 23 and 24.
- — — — — Lartet, Bibl. Ecole Haute Etudes, VII, 1873, No. 2, 89, ix, 23 and 24.
- — — — — Lartet, Explor. Géol. Mer Morte [1877], [157], xii, 33.
- — — — — De la Harpe, Mém. Soc. paléont. Suisse, VII, 1881, 91, etc., ii, 5-11.
- — — madaraszzi, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 75, xvi, 7a, b, c; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 86, same pl. and fig.
- — — makullænsis, Carter. Annals Mag. Nat. Hist. [3], VIII, 1861, 375, xv, 4; Journ. Bombay Branch R. Asiatic Soc. VI, 1861 (1862), 66.
- — — mamma, Kutorga. Trudy mineral Obshtsch. (St. Petersburg), II, (1834), (11), xv, 4.
- — — mammilla (F. & M.). Lamarck, Ency. Method. "Vers," III, (1832), 638, (pls., 1827), 471, 2 (P. & J. quote "pt. 23," 1816). [*Nutilus*, 1798.]
- — — [Lam.]. Bronn, Syst. urweltl. Conchyl. 1824, 7, i, 16a, b.
- — — mammillata, d'Archiac. D'Archiac & Haime, Deser. Anim. groupe nummulitique Inde, (I), 1853, 154, xi, 6a, b, c, 7a, b, 8a-e. [*Nummulina*, 1847.]
- — — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 213, xii, 5.
- — — — — Vutskits, Orvos termesz. tars. Ertesítő, 1883, [69], iv, 10a, b, c, and 11a, b, c.
- — — [mammillatus] — — — Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1055, lxxxvi, 37.
- — — mantelli, Morton. Amer. Journ. Sci. XXIII, 1833, 291, v. 9. [v. *Hymenocyclus*; *Orbitoides*; and *Orbitalites*.]
- — — — — Morton, Synopsis Org. Rem. Cretac. Group, 1834, 45, v. 9.
- — — — — Lyell, Quart. Journ. Geol. Soc. IV, 1848, 11.

- NUMMULITES marginata**, Michelotti. Mem. Soc. Ital. Sci. xxii, 1841, 297, iii, 4. [*Nummulina* on p. 302; q. v.]
- **maxima**, Catullo. Ann. Fisica (Zantedeschi's), 1849–50, p. 251.
- **meneghinii**, d'Archiac & Haime. Descr. Anim. groupe nummulitique Inde, I, 1853, 120, v, 7a, b, c.
- — — Bützschli, in Bronn, Klassen, etc., Thier-Reichs, 1880, 213, xii, 2.
- **mille-caput**, Boubée. Bull. Soc. Géol. France, II, 1832, p. 444, no fig. [v. also *Nummulina*.]
- — — Mag. de Zool. (1), Classe v, Mollusques (14 Juillet, 1832), pl. 15, f. 1–4.
- — — Joly & Leymerie, Mém. Ac. Sci. Toulouse, [3], IV, 1848, 187, etc. i, 1–3.
- — ? Carter, Geol. Papers Western India, 1857, 541, xxiii, 11 and 12.
- **miocontorta**, Tellini. Boll. Soc. geol. Ital. VII, 1888, 19, viii, 4.
- — — v. *exilis*, Tell. Ibid. VII, 1888, 21, viii, 5.
- **miscella**, d'Archiac & Haime. Descr. Anim. Foss. groupe nummulitique Inde, II, 1854, 345, xxxv, 4a, b, c.
- **modiolus**, Schafhärtl. Süd-Bayerns Lethaea Geogn. 1863, 99, lxv<sup>b</sup>, 20a, b, c.
- **molli**, d'Archiac. D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 102, iv, 13a, b, c. [*Nummulina*, 1850.]
- **moneta**, Riss. Hist. Nat. Europe, IV, 1826, 24.
- **montana**, Riss. Hist. Nat. Europe, IV, 1826, 24.
- **murchisoni**, Brunner. D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 138, viii, 20–24. [*Nummulina*, 1850.]
- — — Ehrenberg, Abhandl. k. Ak. Wiss. Berlin, 1855, 170, v, ix, x. [*Glauc.*] Schafhärtl, Süd-Bayerns Lethaea Geogn. 1863, 104, xiii, 1a–c.
- — — De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 150, iv, 3–8. This is divided into v. *major*, iv, 3 and 4; v. *minor*, iv, 5–8.
- **nummiformis**, Cailliard. Voyage à Méroé, 1827, IV, 267; atlas, pl. lxv, 3–5.
- **nummularia**, d'Orbigny, 1847. D'Orb., Prodr. de Paléont. II, 1850, 335, No. 676. [*Camerina*, Brugière, 1791, q. v.; v. also *Nummulina*.]
- — — D'Orbigny, Cours élém. Paléont. I, 1849, 197, fig. 323; II, fas. 2, 1852, 735, fig. 574.
- **[nummularius]** Credner, Elem. d. geol. 1883, p. 678, fig.
- **obesa**, Leym. (MSS.). D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 134, viii, 7a–e. [v. also *Nummulina*.]
- — — Abich, Geol. Forsch. Kaukas. Ländern, 1882, 249, xi, 5a.
- — — Mallada, Bol. Com. Mapa Geol. Españ. XI, 1884, n. d. xxix, 25–27.
- **obtusa**, Joly & Leymerie. Mém. Ac. Sci. Toulouse, [3], IV, 1848, 170, etc. i, 13, 14; ii, 3 and 4.
- **obtusa**, J. de C. Sowerby. D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 122, vi, 13a, b, c. [*Nummularia*, 1837.]
- — — Carter, Geol. Papers Western India, 1857, 542, xxiii, 13 and 14.
- — — Medlicott & Blanford, Geol. of India, 1879, 458, xv, 13.
- **oculus**, Schafhärtl. Süd-Bayerns Lethaea Geogn. 1863, not descr. ii, 14a–c.
- **onycomorphia**, Catullo. Ann. Fisica (Zantedeschi's), 1849–50, p. 250.
- **oosteri**, de la Harpe. Bull. Soc. Vaud. Sci. Nat. [2], XVII, 1880, 38, iii, II, 1–6.
- **operculiniformis**, Tellini. Boll. Soc. geol. Ital. VII, 1888, 40, viii, 10, 11.

- NUMMULITES orbicularis**, Kutorga. Trudy Mineral Obshtsch. (St. Petersburg), II, (1834), (9), xv, 3.
- **orbiculatus**, Schafhäutl. Süd-Bayerns Lethaea Geogn. 1863, 101, v, 11; vi, 3; vii, 5; xii, 4a-f; xiii, 1st fig. left, without number, and f and g.
- **orbignyi** (Galeoti). De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 168, vi, 42-51. [*Operculina*, 1837.]
- **orsinii**, Meneghini (MS., apparently described for first time here). De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 161, v, 22.
- **papyracea**, Boubée. Bull. Soc. Géol. France, II, 1832, p. 445, no fig. [v. *Hymenocyclus* & *Orbitoides*.]
- **parabolicus**, Schafhäutl. Süd-Bayerns Lethaea Geogn. 1863, 91, vii, 6.
- **patellaris**, Brunner. Mitth. nat. Ges. Bern, 1848, p. 16, no fig.
- **partschi**, de la Harpe. Bull. Soc. Vaud. Sci. Nat. [2], XVII, 1880, 37, iii, I, 1-17.
- **pengaronensis**, Verbeek. Neues Jahrbuch, 1871, 3, i, 1a-k.
- **—** Verbeek, Jaarb. Mijn. Ned. Oost-Ind. 1874, vol. 2, 145, ii, 1-9.
- **perforata** (Montfort). See *Egeon*, 1808.
- **—** D'Orbigny, Ann. Sci. Nat. VII, 1826, 296, No. 7.
- **—** [d'Orbigny]. D'Archiac & Haime, Deser. Anim. groupe nummulitique Inde, I, 1853, 115, vi, 1a-g, 2, 3, 4, 5a, 6a, 7a, 8a, 9a, b, 10a, b, c, 11a, 12 [with varr. and subvarr.]
- **—** [d'Orb.] v. A, *aturensis*, d'Archiac & Haime. D'Archiac & Haime, Deser. Anim. groupe nummulitique Inde, I, 1853, 120, vi, 5-8 [with subvarr.]
- **—** [d'Orb.] v. B, *columbresensis*, d'Archiac & Haime. D'Archiac & Haime, Deser. Anim. groupe nummulitique Inde, I, 1853, 120, vi, 9 and 10 [with subvarr.]
- **—** [d'Orb.] v. C, d'Archiac & Haime. D'Archiac & Haime, Deser. Anim. groupe nummulitique Inde, I, 1853, 119, vi, 11 and 12.
- **—** [d'Arch.]. Abich, Mém. Ac. Imp. Sci. [Math. Phys.] St. Pétersbourg, [6], VII, 1859, 528, iii, 12a, b.
- **—** [d'Orb.]. Michelotti, Nat. Verh. Holland. Maat. Wet. Haarlem, 2, xv, 1861, 18, i, 3 and 4.
- **—** [d'Orb.]. D'Archiac, in Tchihatcheff, Asie Mineure, Palaeontologie, 1866, 206, ix, 4a, s-var. 5.
- **—** [d'Orb.]. Hantken, A magy. kir. földt. int. évkönyve, I, 1871, 134, ii, 3, 3a; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, p. 141, same pl. & fig.
- **—** [d'Orb.] var. *umbonata*, de la Harpe. Bull. Soc. géol. France, [3], v, 1877, 822, xvii, 4a, b; and Bull. Soc. Vaud. Sci. Nat. [2], XVI, 1879, 205, x, 4a, b.
- **—** [d'Orb.]. Hantken, Kohlenflötze, etc. ungar Krone, 1878, (transl. from Magyar), 219, fig. 33.
- **—** [d'Orb.]. De la Harpe, Mém. Soc. paléont. Suisse, VII, 1881, 34, fig. 2.
- **—** [d'Orb.]. Abich, Geol. Forsch. Kaukas. Ländern, 1882, 247, ix, 7; xi, 9.
- **—** [d'Orb.]. De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, pl. iii. 1-6. This is divided into v. *uranensis*, iii, 1-3; v. *obesa*, iii, 4; v. *umbonata*, iii, 5; v. *subglobosa*, iii, 6.
- **—** [d'Orb.]. Mallada, Boll. Com. Mapa Geol. Espan. XI, 1884, n. d. xxix, 1-12.
- **—** [d'Orb.]. Fritel, Foss. Caract. terr. sedim. tert. 1886, pl. vii, 43 and 44.
- **perforata-obesa**, Leym. De la Harpe, Palaeontographica, XXX, 1883, Pal. Theil, 206, xxxv (6), 1-10.

- NUMMULITES** perriblanci. Jones, Cat. Foss. Foram. Brit. Mus. 1882, 30, No. P 715.
- **placentula**, Deshayes. Mém. Soc. géol. France, [1], III, 1838, vi, 8 and 9. [v. also *Nummulina*.]
- **planulata**, Lamarck (& d'Orbigny). For full synonymy see De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, p. 171. [v. *Lenticulites*; *Nummulina*.]
- D'Orbigny, Cours élém. Paléont. etc. I, 1849, 196, fig. 322, II, fas. 2, 1852, 736, fig. 575. [The middle (vol. 1) and right hand (vol. 2) figures are probably a *Planorbulina*.]
- [d'Orb.]. D'Archiaac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 142, ix, 5a, 6a, b, c, 7a-h, 8a-d, 9a, b, 10a, b, c.
- ? [d'Orb.]. Abich, Mém. Ac. Imp. Sci. [Math. Phys.] St. Pétersbourg, [6], VII, 1859, 527, iii, 11a, b.
- **[planulatus]**, [d'Orb.]. Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 25, pl. 20.
- [d'Orb.]. Abich, Geol. Forsch. Kaukas. Ländern, 1882, 249, ix, 1, 1a.
- [Lam.]. De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 171, vii, 1-11. [10 and 11 are given as v. *incrassata*.]
- — — Mallada, Boll. Com. Mapa Geol. Espan. XI, 1884, n. d. xxx, 8-10, 13, 14.
- [d'Orb.]. Fritel, Foss. Caract. terr. sediment. tert. 1886, pl. ii, 17-19.
- — — v. *elegans*. Fritel, Foss. Caract. terr. sediment. tert. 1886, pl. ii, 15 and 16.
- **[planulatus]** [Lam.]. Prestwich, Geology, 1888, ii, 357, fig. 181.
- **polygyrus**, Deshayes. Mém. Soc. géol. France, [1], III, 1838, v, 17-19. [v. also *Nummulina*.]
- **[polygiratus]** — Rousseau, in Demidoff, Voyage Russie mérid. II, 1842, 787; atlas, mollusca, ii, 1a-d [error for 4a-d].
- **portisi**, Tellini. Boll. Soc. geol. Ital. VII, 1888, 27, no fig.
- **pratti**, d'Archiaac & Haime. Descr. Anim. groupe nummulitique Inde, I, 1853, 137, viii, 15.
- **prestwichiana**. See *N. elegans*.
- **pseudolævigata**, Berthelin in litt. Jones, Cat. Foss. Foram. B. M. 1882, 33.
- **pulchella**, Hantken, MS. De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 160, v. 15-21.
- cfr. — Hantk. & Mad. Vutskits, Orvos termesz. tars. Ertesitö, 1883 [66], iv, 9a, b, c.
- **puschi**, d'Archiaac. D'Archiaac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 90, i, 5a, b, c. [*Nummulina*, 1850.]
- — — Pictet, Traité de Paléont. 2 ed. IV, 1857, 501, cix, 19.
- — — De la Harpe, Bull. Soc. géol. France, [3], v, 1877, 821, xvii, 1-3b.
- **radiatus** (Fichtel & Moll.). Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 212, viii, 11. [*Nautilus*, 1798.]
- **radiata** [Montf.]. Jones, in Microgr. Dict. ed. 4, 1883, 549, xxiv, 21a, b. [*Rotalites*, 1808.]
- **ramondi**, Defrance. Dict. Sci. Nat. XXXV, 1825, p. 224. [v. also *Nummulina*.]
- — — D'Archiaac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 128, vii, 13a-d, 14a, 15a, 16a, 17a, b.
- — — Carter, Journ. Bombay Br. R. Asiat. Soc. v, No. xx, 1857, 624, no fig.
- — — Carter, Annals Mag. Nat. Hist. [3], VIII, 1861, 374, xv, 5, xvii, 15; Journ. Bombay Branch R. Asiatic Soc. VI, 1861 (1862), 65.
- — — Zittel, Handbuch Palaeont. Abth. I, 1876, 99, fig. 39a.

- NUMMULITES** ramondi, Defrancee. Medlicott & Blanford, Geol. of India, 1879, 458, xv, 12.  
 ——— ——— Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 213, xii, 3.  
 ——— ——— De la Harpe, Palaeontographica, xxx, 1883, Pal. Theil, 173, xxxi (2), 5-12.  
 ——— ——— Mallada, Bol. Com. Mapa Geol. Espan. xi, 1884, n. d. xxviii, 20-25.  
 ——— renevieri, de la Harpe. Mém. Soc. paléont. Suisse, x, 1883, pl. iii, 8-14.  
 ——— reticulatus, Schafhäutl. Süd-Bayerns Lethaea Geogn., 1863, 98, v, 6 ; vii, 7a-e and 10 ; ix, 1, 2, and 6 ; x, 1, 2 ; xiv, 2.  
 ——— ——— Haeckel, Das Protistenreich, 1878, 33, fig. 18a-f.  
 ——— reticulatus, Tellini. Boll. Soc. geol. Ital. vii, 1888, 60, viii, 13.  
 ——— rosai, Tellini. Boll. Soc. geol. Ital. vii, 1888, 22, viii, 1-3.  
 ——— rota, Schafhäutl. Süd-Bayerns Lethaea Geogn. 1863, 92, x, 4a-e.  
 ——— rotula, Grataloupe, MS. D'Orbigny, Prodrome de Paléont., II, 1850, 336, No. 681.  
 ——— rotularius, Deshayes. Mém. Soc. géol. France, [1], III, 1838, vi, 10, 11. [v. also *Nummulina*.]  
 ——— rouaulti, d'Archiac & Haime. Descr. Anim. groupe nummulitique Inde, I, 1853, 121, vi, 14a-d.  
 ——— ——— Figuier, Ocean World, London, [1873], p. 81, f. 12.  
 ——— rovasendai, Tellini. Boll. Soc. geol. Ital. vii, 1888, 25, viii, 6.  
 ——— rutimeyeri, d'Archiac. In Tchihatcheff, Asie Mineure, Palaeontologie, 1866, 212, ix, 5a, b, c.  
 ——— rutimeyeri, de la Harpe. Palaeontographica, xxx, 1883, 162, xxx (1), 9-11.  
 ——— saccoi, Tellini. Boll. Soc. geol. Ital. vii, 1888, 49, viii, 12.  
 ——— scabra, Lamarck. Ann. Mus. v, 1804, p. 2. 41, No. 3 ; Hist. Anim. s. Vert. vii, 1822, p. 629, and ed. 2, xi, 1845, p. 306.  
 ——— ——— Kutorga, Trudy mineral Obshtsch. (St. Petersburg), II, (1834), [10], xv, 5.  
 ——— ——— D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 107, iv, 9a-d, 10a, 11a, 12a.  
 ——— ——— Carter, Geol. Papers Western India, 1857, 543, xxiii, 21 and 22.  
 ——— [scaber] ——— Schafhäutl, Süd-Bayerns Lethaea Geogn. 1863, n. d. xii, 2.  
 ——— ——— Mallada, Bol. Com. Mapa Geol. Espan. xi, 1884, n. d. xxviii, 5-10.  
 ——— ——— Quenstedt, Handbuch Petref. Abth. v, 1885, 1054, fig. 394.  
 ——— semicostata (Kaufm.). Uhlig, Jahrb. k. k. geol. Reichsanstalt, xxxvi, 1886, 267, fig. 13 ; ii, 9, 11-13. [Amphistegina, 1867.]  
 ——— sigillum, Kutorga. Trudy mineral Obshtsch. (St. Petersburg), II, (1834), [11], xv, 2.  
 ——— sinuosus, Riss. Hist. Nat. Europe, IV, 1826, 24.  
 ——— sismondai, d'Archiac & Haime. Descr. Anim. groupe nummulitique Inde, I, 1853, 124, vii, 4a-d.  
 ——— ——— var. subglobosa. De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, pl. iii, 7.  
 ——— solitaria, De la Harpe. Palaeontographica, xxx, 1883, 176 ; xxxi (2), 18 and 19.  
 ——— spira, de Roissy. Hist. Nat. de Mollusques (Sonnini's Buffon), v, 1805, p. 57. [v. also *Nummulina*.]  
 ——— ——— D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 155, xi, 1a, b, c, 2a, 3a, 4a, b, 5.  
 ——— ——— Mallada, Bol. Com. Mapa Geol. Espan. xi, 1884, n. d. xxx, 36-38.

- NUMMULITES** staista, d'Orb. Hantken, Földt. Közlöny, 1880, p. 44 to be (foot-note); said taken from "Bull. Soc. Borda, 1879, p. 79."\*
- striata [d'Orb., 1847]. D'Orbigny, Prodrome de Paléont. II, 1850, 406, No. 1303. [*Camerina*, Brugière, 1791, q. v.]
- — — D'Archiae & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 135, viii, 9a—e, 10a, 11a, 12a, b, 13a, b, 14a.
- — — Michelotti, Nat. Verh. Holland. máat. Wet. Haarlem, 2, xv, 1861, 19, i, 8 and 9.
- — — var. f. Verbeek, Neues Jahrbuch, 1871, 9, iii, 2a—g.
- — — Hantken, A magy. kir. földt. int. évkönnyve, I, 1871, 135, ii, 5a, b, c, d, e; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, p. 142, same pl. and fig.
- — — Verbeek, Jaarh. Mijn. Ned. Oost-Ind. 1874, vol. 2, 157, ii, 34—40.
- — — Hantken, A magy. kir. földt. int. évkönnyve, IV, 1875 (1876), 74, xii, 5; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), p. 85, same pl. and fig.
- — — var. obesa, De la Harpe. Bull. Soc. géol. France, [3], v, 1877, 825, xvii, 5a, b; and Bull. Soc. Vaud. Sci. Nat. [2], xvi, 1879, 209, x, 5a, b.
- — — Hantken, Kohlenflöze, etc. ungar. Krone, 1878, (transl. from Magyar), 221, fig. 35.
- — — Mallada, Bol. Com. Mapa Geol. Espaň. XI, 1884, n. d. xxx, 1—7.
- — — Ehrenb., Abh. k. preuss. Ak. Wiss. Berlin, 1855, 170, [Glauc.] v, i—viii. [Stand except vii, which is *N. planulata*, Lam.]
- sub-beaumonti, de la Harpe. Palaeontographica, XXX, 1888, Pal. Theil, 182, xxxi (2), 48—56.
- sub-brongniarti, Verbeek. Neues Jahrbuch, 1871, 6, i, 2a, b; ii, 1a—r.
- — — Verbeek, Jaarh. Mijn. Ned. Oost-Ind. 1874, vol. 2, 152, ii, 10—27.
- — — v. Fritsch, Palaeontographica, Supp. III, Lief. 1, 1878, 141, xviii, 18. [Structure.]
- subdiscorbina, de la Harpe. Palaeontographica, XXX, 1883, Pal. Theil, 185, xxii (3), 8—15.
- subellipticus, Schafhäutl. Süd-Bayerns Lethaea Geogn. 1863, 93, v, 5a; xi, 1; xii, 3; xiii, 5, 6, and 7; xiv, 3.
- subirregularis, de la Harpe. Mém. Soc. paléont. Suisse, X, 1883, 158, v. 3—14. [Fig. 14 is given as var. *subvariabilis*.]
- sublaevigata, d'Archiae & Haime. Descr. Anim. groupe nummulitique Inde, I, 1853, 106, iv, 8a, b.
- — — Medlicott & Blanford, Geol. of India, 1879, 460, xv, 11.
- subplanulata, Hantken & Madarasz. Jegyz. az 1873 vilagtarl. kiáll. numm. 1873, p. 13.
- subpulchella, de la Harpe. Mém. Soc. paléont. Suisse, X, 1883, pl. vii, 60—66.
- subramondi, de la Harpe. Palaeontographica, XXX, 1883, Pal. Theil, 175, xxxi (2), 13—17.
- supracretaceus, Eichwald. Bemerk. Halbinsel Mangischlak und aleutisch. Inseln, 1871, 84, v, 11—14.
- suprajurensis, Alth. Pamietnik akad. Umiej. Krakowie, VI, 1881, 132, xii, 26.
- — — Alth., Mojsisovics und Neumayr's Beiträge Pal. Oest-Ungarn, I, 1882, 314, xxix, 26.
- tchihatcheffi, d'Archiae. D'Archiae & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 98, i, 9a—e. [v. *Nummulina*.]

\* Hantken's quotation is incorrect. I have not been able to trace d'Orbigny's original reference.

- NUMMULITES tchihatcheffi**, d'Archiac. Uhlig, Jahrb. k. k. geol. Reichsanstalt, xxxvi, 1886, 204, fig. 11.  
 ——— Hantken, A magy. kir. földt. int. évkönyve, I, 1871, 133, ii, 2a, b, c, d; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, p. 140, same pl. and fig.  
 ——— Hantken, Kohlenfötze, etc. ungar. Krone, 1878 (transl. from Magyar), 226, fig. 41.  
 ——— Vutskits, Orvos termesz. tars. Ertesitö, 1883 [42], iv, 12a, b, c.  
**teruncius**, Schafhärtl. Süd-Bayerns Lethaea Geogn. 1863, 93, v, 3a; x, 3; xiv, 2 links.  
**tournoueri**, de la Harpe. Bull. Soc. Borda à Dax, IV, 1879, 143, i, ii, 1-7.  
 ——— De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 166, vi, 12-21. [18 and 19 are given as *v. laxispira*.]  
 ——— Vutskits, Orvos termesz. tars. Ertesitö, 1883 [62], iii, 1a, b, c. [Described as *N. bouillei*, De la Harpe, in text.]  
 ——— Hantken, Földt. Közl. xvi, 1886, 154 and 188, i, 3.  
 ——— ? Tellini, Boll. Soc. geol. Ital. VII, 1888, 42, viii, 8 and 9.  
**variabilis**, Tellini. Boll. Soc. geol. Ital. VII, 1888, 38, viii, 7.  
**variolaria** [Lamarche], [d'Orb.], 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 427, no. 1673. [*Lenticulites*, 1804.]  
 ——— [Sowerby \*]. Brown, Illustr. Fossil. Conch. Great Britain, 1849, 37, xxvi, 3-5. [& ? 10 and 11.] [*Nummulina*, 1820.]  
 ——— [Sow.]. D'Archiac & Haime, Descr. Anim. groupe nummulistique Inde, I, 1853, 146, ix, 13a-g.  
 ——— [Sow.]. var. **prima**, Fraas. Württemberg nat. Jahresh. 1867, p. 226, no fig.  
 ——— [Sow.]. var. **minor**, de la Harpe. Bull. Soc. géol. France, [3], v, 1877, 825, xvii, 11a-d.  
 ——— [Sow.]. var. **minima**, de la Harpe. Bull. Soc. Vaud. Sci. Nat. [2], XVI, 1879, 210, x, 11a-d.  
 ——— De la Harpe, Palaeontographica, XXX, 1883, Pal. Theil, 179, xxxi, (2), 28 and 29.  
 ——— [Sow.]. Vutskits, Orvos termesz. tars. Ertesitö, 1883, [56], iii, 6a, b, c.  
 ——— [Sow.]. Mallada, Bol. Com. Mapa Geol. Espan. XI, 1884, n. d. XXX, 19-23.  
 ——— [Sow.]. Fritel, Foss. caract. terr. sedim. tert. 1886, pl. vii, 50-52.  
 ——— Jones, Quart. Journ. Geol. Soc. XLIII, 1887, 145, xi, 10-14.  
 ——— Prestwich, Geology, 1888, ii, 370, fig. 187g, h.  
**vasca**, Joly & Leymerie. Mém. Ac. Sci. Toulouse, [3], IV, 1848, 171, etc. i, 15-18; ii, 7.  
 ——— D'Archiac & Haime, Descr. Anim. groupe nummulistique Inde, I, 1853, 145, ix, 11a-d, 12.  
 ——— De la Harpe, Bull. Soc. Borda à Dax, IV, 1879, 145, i, iii, 1-3.  
 ——— De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 177, vii, 24-32 [v. *incrassata*, 27 and 28; v. *tenuispina*, 29-32].  
**verneuili**, D'Archiac & Haime. Descr. Anim. groupe nummulistique Inde, I, 1853, 123, vii, 1a-d, 2, 3.  
 ——— Mallada, Bol. Com. Mapa Geol. Espan. XI, 1884, n. d. XXIX, 21-24.  
**vicaryi**, D'Archiac & Haime. Descr. Anim. groupe nummulistique Inde, I, 1853, 139, ix, 1a, b, c.  
**vicensensis**, Hantkin & Madarasz. Jegyz. az 1873 vilagtarl. Kiall. Numm. 1873, p. 5.

\* Lamarck's species, *Lenticulites variolaria*, is given as the synonym.

- NUMMULITES** viquesneli, D'Archiae & Haime. Descr. Anim. groupe nummulitique Inde, I, 1853, 141, ix, 4a, b, c.
- wemmelensis, de la Harpe & Vanden Broeck. De la Harpe, Mém. Soc. paléont. Suisse, x, 1883, 169, vi, 52–70 [v. *plicata*, 58–60, v. *granulata*, 61–64, v. *prestwichi*, 65–70].
- — — Mallada, Bol. Com. Mapa Geol. Espan. xi, 1884, n. d. xxx, 19–23.
- willcoxi, Heilprin. Proc. Ac. Nat. Sci. Philad. 1882, pt. 2, 1882, 191, figures 1 and 2. [v. also *Nummulina*.]
- [wilcoxi] — — — Heilprin, Proc. Ac. Nat. Sci. Philad. 1884, pt. 3 (1885), 322, figure.
- — — Hantken, Földt. Közl. xvi, 1886, 153, i, 1.
- zitteli, de la Harpe. Mém. Soc. paléont. Suisse, vii, 1881, 91, etc., ii, 12–15.
- sp. nova, de la Harpe. Vutskits, Orvos termesz. tars. Ertesitö, 1883, [64], iii, 2.
- Targioni, Relaz. d' alc. viaggi, iv, 1770, xii and xvi, see *Nautilo & Corno*, i, figs. 2, 9, 10, 11, 12, 13, 14, 15, 23, 24.
- De Montfort, in Buffon, Hist. Nat. Mollusq., Sonnini's ed. v, 1805, 49, li, 9.
- Parkinson, Organ. Rem. former World, iii, 1811, 148, etc., x, 17, 20, 22–26.
- Bowdich, Elem. Conch. Part 1, 1822, 15, i, 3 and 4.
- Parkinson, Introd. Study foss. Organ. Rem. 1822, 165, vi, 5.
- Ure, New System Geology, 1829, pl. iii, fig.
- Bakewell, Introd. Geology, 4th ed. 1833, p. xxxiii, pl. viii, 13.
- Lyell, Elem. Geol. 1838, 341, fig. 180.
- Moxon, Illustr. Charact. Foss. 1841, pt. 1, pl. vii, 1 and 2. [*N. laevigata*.]
- Ansted, Geology, 1844, ii, 63, fig. a.
- Prevost, Bull. Soc. géol. France, [2], II, 1845, 27, i, “no. 2.”
- Pilla, Trattato di geol. pt. 1, 1847, 460, fig. 78.
- Joly & Leymerie, Mém. Ac. Sci. Toulouse, [3], IV, 1848, 169, ii, 1 and 2. [Structural.]
- Mantell, Wonders Geol. 1848, 6th ed. 248, figure 41.
- Cornalia & Chiozza, Giorn. I. R. Ist. Lombardo, n. s., III, 1851, 38, iii, 4, 5, and 6.
- Brocklesby, Views microscop. world, 1851, 59, fig. 96.
- Costa, Atti Accad. Pontaniana, VII, fas. 1 (1853), ix, 8.
- Beudant, Géologie, ed. 8, 1858, 239, fig. 321, later eds. same fig.
- Hitchcock, Elem. Geology, 1860, 30th ed. 140, fig. 92.
- Schafhärtl, Süd-Bayerns Lethaea Geogn. 1863, 57, 75, etc., v, vi, viii. [Development & structure.]
- Semper, Zeitsch. f. wiss. Zool. XIII, 1863, 562, xxxviii, 1a–d. [Embryology.]
- Carpenter, Ency. Brit. 9th ed. IX, 1879, Foraminifera, 381, figs. 23–27. [Structure.]
- De la Harpe, Mém. Soc. paléont. Suisse, VII, 1880, 30, fig. 1. [Structural.]
- Hahn, Die Meteorite, 1880, 56, xxxii, 3.
- Abich, Geol. Forsch. Kaukas. Ländern, III, 1887, pts. i and ii. [Permo-carboniferous.]
- Malagoli, Atti Soc. Nat. Modena, 3, VII, 1888, 114; iv, 3 and 4; v, 1.
- Neumayr, Stämme d. Thierreiches, I, 1889 (8), 194, fig. 33.
- ? See Ammonites, etc., *Lapis calcareus*, etc.
- Knorr, see *Helicites*.
- see *Helicites*.
- see *Lenticula diversi generis*, etc.
- see *Rotalites*.
- NUMMULO** Brattenburgensi, Stobaeus. Act. Litt. Suec. for 1731, p. 19; and Dis. epist. ad W. Grothaus, 1732. [= *Nummulites*.]
- — — Bromell, Act. Litt. Suec. II (1729), p. 50. [= *Nummulites*.]

**NUMULITES** denarius, Montfort. Conch. syst. I, 1808, 155, 39th genre.  
[=*Nummulina laevigata*.]

**NUMULLINA**, Amer. M. Micro. Journ. 1883, misprint for *Nummulina*.

**NUMULUS** luteus vulgaris exiguum est *Lapis orbiculubatus*, ad Col-  
lem Cockerley-Hill dictum in Comitatu Glocestriæ, vulgatissimus. Luid.,  
Lithop. Brit. Ichnogr. 1699 (ed. 2, 1760), p. 90, no fig.

**Nuovo genere?** Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr.  
xvii, 19, = *Crist. rotulata*; xxii, 9 = *Polymorph.*; xxii, 12, = ? a *Foram.*;   
xxiii, 3, = ? *Lingulina*; xxiii, 18, = *Textularia*.

**OBLIQUINA**, Seguenza.

— acuticosata, Seguenza. Foram. monotal. miocen. Messina, 1862, 75,  
ii, 65-67. [v. *Lagena ovoides*, Sherborn & Chapman; Referred to  
*Chilostomella*, 1889.]

**OCULINA**, Kübler & Zwingli. Neujahrsblatt Burgersbibl. Winterthur, 1866,  
p. 11.

— carinata, Kübler & Zwingli. Neujahrsblatt Burgersbibl. Winterthur,  
1866, 14, ii, 19.

— cretacea, Kübler & Zwingli. Neujahrsblatt Burgersbibl. Winterthur,  
1866, 19, iii, 20. [= *Miliolina*.]

— liasica, Kübler & Zwingli. Neujahrsblatt Burgersbibl. Winterthur,  
1866, 11, i, 24. [= a *Miliolina*.]

— nucleus, Kübler & Zwingli. Neujahrsblatt Burgersbibl. Winterthur,  
1866, 14, ii, 20.

— porosa, Kübler & Zwingli. Neujahrsblatt Burgersbibl. Winterthur,  
1866, 12, ii, 6. [= *Miliolina*.]

“Œufs d’autres mollusques.” Cornuel, Mem. Soc. géol. France, [2], III,  
1848, 259; ii, 36 and 37. [= *Placopsilina* and *Webbina*, q. v.]

“Œufs de mollusques.” Cornuel. [v. *Placopsilina cornueliana*, d’Orb.]

**OLIGOSTEGINA** laevigata, Kaufmann. In Heer, Urwelt Schweiz, 1865, 197,  
fig. 108; transl. London, 1876, 206, fig. 108. [“Early chambers of  
*Planorbulina* or *Textularia*,” T. R. Jones.]

**OMPHALOCYCLUS**, Brönn, 1851-52. Brönn, Lethaea Geognostica, ed. 3,  
II, 1851-52, p. 95.

— macroporus (Lam.). Brönn, Lethaea Geognostica, ed. 3, II, 1851-52,  
95, xxix, 9a, b, c. [*Orbulites*, 1816.]

**OMPHALOPHACUS** hemprichii, Ehrenberg. Abhandl. k. Ak. Wiss. Ber-  
lin, 1838, 132.

— ? tenellus, Ehrenberg. Mikrogeologie, 1854, xxxii, ii, 34. [= *Pulvin.*  
*menardii*, d’O.]

**ONCOBOTRYS**, Ehrenberg, 1855. Abhandl. k. Ak. Wiss. Berlin, 1855, 161.  
[*Glauc.*]

— buccinum, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1855, 161, ii, vi.  
[= ? *Polymorphina* vel *Bulimina*.] [*Glauc.*]

**OOLINA**, d’Orbigny, 1839. Voyage Amér. Mérid. 1839, v, pt. 5, “Foraminifères,”  
p. 18.

— acicularis, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 586, i, 3a-c.  
[v. also *Lagena*.]

— apiculata, Reuss. Haidingers Naturw. Abh. IV, Abth. I, 1851, 22, i, 1.  
[v. also *Lagena* and *Fissurina*.]

— caudata, d’Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, “Forami-  
nifères,” 19, v. 6. [v. also *Lagena*.]

— clavata, d’Orbigny. Foram. Fossiles Vienne, 1846, 24, i, 2 and 3. [v.  
also *Lagena*.]

— — — — — Brönn, Lethaea Geognostica, ed. 3, III, 1853-56, 242,  
xxxv? 2, 5a, b.

— — — — — Pictet, Traité Paléont. 2d ed. IV, 1857, 483, cix, 2.

— compressa, d’Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, “Forami-  
nifères,” 18, v, 1 and 2. [= *Lagena marginata*, W. & B.]

— — — — — D’Orbigny, Foram. Fossiles Vienne, 1846, 23, xxi, 1 and 2.

- OOLINA** costata, Egger. Neues Jahrbuch, 1857, 269, v, 9–11.  
 —— ellipsoïdes, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 119, xi, 15 and 25a A. [*Ellipsoïdes* in descript. to plate.]  
 —— fasciata, Egger. Neues Jahrbuch, 1857, 270, v, 12–15. [v. *Lagena*.]  
 —— fusiformis, Terquem. Mém. Ac. Imp. Metz, XLIV, 1863, 377, vii, 1a, b.  
 —— haidingeri, Czjzek. Haidinger's Nat. Abh. II, 1848, 138, xii, 1 and 2. [v. also *Lagena*.]  
 —— inornata, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 21, v, 13. [v. *Lagena*.]  
 —— isabella, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 20, v, 7 and 8. [*O. isabellana* on plate.] [v. *Lagena*.]  
 —— lavigata, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 19, v, 3.  
 —— lagenalis, Terquem. Mém. Ac. Imp. Metz, XLII, 1862, 429, v, 1a, b.  
 —— lanceolata, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 586, i, 1a, b.  
 —— liasica, Kübler & Zwingli. Neujahrsblatt Burgersbibl. Winterthur, 1866, 7, i, 15.  
 —— melo, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 20, v, 9. [v. also *Lagena*.]  
 —— ovata, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 586, i, 2a–c. [v. also *Lagena*.]  
 —— Terquem, Mém. Ac. Imp. Metz, XLII, 1862, 430, v, 3a, b, c.  
 —— pentagona, Terq. & Piette. Terquem, Mém. Ac. Imp. Metz, XLII, 1862, 452, vi, 12a, b.  
 —— punctata, Egger. Neues Jahrbuch, 1857, 268, v, 1 and 2.  
 —— raricosta, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 20, v, 10 and 11.  
 —— salentina, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 118, xi, 13 and 14.  
 —— sicula, Ehrenberg. Mikrogeologie, 1854, xxvi, 1. [= *Lag. sulcata*.]  
 —— simplex, Reuss. Haidinger's Naturw. Abh. IV, Abth. I, 1851, 22, i, 2. [v. also *Lagena*.]  
 —— simplex, Terquem. Mém. Ac. Imp. Metz, XLII, 1862, 430, v, 2a, b. [v. also *Lagena*.]  
 —— striata, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 21, v, 12. [v. also *Lagena* and *Lagenulina*.]  
 —— striaticollis, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 21, v, 14. [v. also *Lagena*.]  
 —— striatula, Egger. Neues Jahrbuch, 1857, 269, v, 3–8.  
 —— vilardeboana, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 19, v, 4 and 5. [v. also *Lagena*.]  
 —— virgula, Terquem. Mém. Ac. Imp. Metz, XLII, 1862, 431, figures a, b.  
 —— Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, xxvii, 2–5.
- OPERCULINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, p. 281. Brady, Report Challenger, 1884, p. 742.  
 —— ammonitiformis, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 209, xvii, 16a, A, B. [= *Cornuspira foliacea*.]  
 —— ammonea, Leymerie. Mém. Soc. géol. France, [2], I, 1844, 359, xiii, 11a, b.  
 —— —— —— Bronn, Lethaea Geogostica, ed. 3, III, 1853–56, 209, xxxv<sup>2</sup>, 8a, b.  
 —— —— —— Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 70, xii, 1 and 2; and Mitt. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), p. 80, same pl. and fig.  
 —— —— —— Fritel, Foss. caract. terr. sedim. tert. 1886, pl. vii, 53–55.  
 —— ammonoides (Gronovius). Vine, Science Gossip, XIV, 1878, 52, fig. 31. [*Nautilus*, 1781.]  
 —— —— —— Brady, Report Challenger, 1884, 745, cxii, 1 and 2.  
 —— —— —— See *Numm. perforata* (Montf.).

- OPERCULINA angigyra**, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 370, xlvii, 19.
- — — — — Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1052, lxxxvi, 21.
- — — arabica, Carter. Annals and Mag. Nat. Hist. [2], x, 1852, 161, iv, 1-9. [v. also *Orbitolites*.]
- — — — — Carter, Journ. Bombay Br. R. Asiat. Soc. iv, 1853, 430, plate.
- — — — — Jones, in Microgr. Dict. ed. 4, 1883, 555, xxiv, 23-26. See *Orbitolites*.
- — — biconcava, Schafhäutl. Süd-Bayerns Lethaea Geogn. 1863, 105, xiv, 4a, b, and d.
- — — boissyi, d'Archiae. Mém. Soc. géol. France, [2], III, 1848, 417, ix, 26.
- — — — — Schauroth, Sitz. k. Ak. Wiss. Wien, xvii, 1855, 545, iii, 7.
- — — canalifera, d'Archiae. Hist. Prog. Géol. III, 1850, p. 245.
- — — — — D'Archiac & Haime, Descr. Anim. groupe nummulitique Inde, I, 1853, 182, xii, 1a, b, c; and II, 1854, 346, xxxv, 5a; xxxvi, 15a, 16a.
- — — — — Gümbel, Abb. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 664, ii, 112.
- — — (cf.) — — — Schwager, Palaeontographica, xxx, 1883, Pal. Theil, 144, xxix (6), 3a, b.
- — — carinata, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 209, xvii, 1, A, B [error for 15]. [v. *Cornuspira*.]
- — — complanata (Defrance). Quoted as Basterot's by d'Orbigny in error. [*Lenticulites*, 1822.]
- — — [Basterot]. D'Orbigny, Ann. Sci. Nat. VII, 1826, 281, No. 1, xiv, [iv in text, by error], 7-10.
- — — — — D'Orbigny, Modèles, No. 80, 1826.
- — — — — Michelotti, Mem. Soc. Ital. Sci. xxii, 1841, 285, ii, 1.
- — — — — [d'Orb.]. Reuss, in Geinitz, Grundr. Verstein. 1845-46, 665, xxiv, 41.
- — — — — Rütimeyer, Nouv. Mém. Soc. Helvet. Sci. Nat. xi, 1850, Mém. 2, iv, 56.
- — — — — [Bast.]. Bronn, Lethaea Geognostica, ed. 3, III, 1853-56, 208, xxxv<sup>2</sup>, 7a-d.
- — — — — T. Wright, Ann. Mag. Nat. Hist. 2, xv, 1855, 75, vii, 4a, b.
- — — — — [Bast.]. Parker & Jones, Ann. Mag. Nat. Hist. 2, xix, 1857, 285, xi, 3 and 4.
- — — — — [d'Orb.]. Michelotti, Nat. Verh. Holland. Maat. Wet. Haarlem, 2, xv, 1861, 20, i, 14 and 15.
- — — — — P. J. & B. [d'O., Modèles, 80], Ann. Mag. Nat. Hist. [3], XVI, 1865, 32, iii, 93.
- — — — — [Bast.]. Zittel, Handbuch Palaeont. Abth. I, 1876, 96, fig. 36.
- — — — — [Bast.]. Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 25, pl. 22.
- — — — — [d'Orb.]. Locard, Ann. Soc. Agric. Hist. Nat. Lyon, 4, ix, 1877, 231, vi [error for v], 6 and 7.
- — — — — Brady, Report Challenger, 1884, 743, cxii, 3, 4, 5, and 8.
- — — — — v. granulosa, Leymerie. Brady, Report Challenger, 1884, 743, cxii, 6, 7, 9, and 10. [v. *Operc. granulosa*.]
- — — — — [Bast.]. Basset, Ann. Soc. Sci. Charente-Inf., 1884 (1885), 162, fig.
- — — — — Woodward & Thomas, 13 Ann. Rep. Geol. N. H. Survey Minnesota for 1884 (1885), 175, iv, 35.
- — — — — v. granulosa, Leym. Woodward & Thomas, 13 Ann. Rep. Geol. N. H. Survey Minnesota for 1884 (1885), 164, ii [error for iv], 36.

- OPERCULINA** complanata (Defr.). GÜMBEL, Geol. Bayern, Th. I., Lief. 2, 1885, fig. 266, 28.
- costata, d'ORBIGNY. Ann. Sci. Nat. VII, 1826, p. 281, No. 2.
- crenato-costata, Schauroth. Sitz. k. Ak. Wiss. Wien, XVII, 1855, 545, iii, 8.
- cretacea, REUSS. Verstein. Böhm. Kreide, 1845-46, I, 35, xiii, 64 and 65.
- — — V. D. MARCK, Verh. nat. Ver. preuss. Rheinl. XV, 1858, 54, I, 6.
- — — REUSS, Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 309, II, 1a, b.
- — — STEINMANN, Elem. Paléont. I, 1888, 33, figs. 18 and 19.
- cruciensis, Pictet & RENEVIER. Mat. paléont. Suisse, [1], Mém. I, 1858, 167, xxiii, 4a, b, c.
- discoidea, SCHWAGER. Palaeontographica, XXX, 1883, Pal. Theil, 145, xxix (6), 5a-d.
- gaimardi, d'ORBIGNY. Ann. Sci. Nat. VII, 1826, p. 281, No. 5.
- gigantea, MAYER. Beitr. geol. Karte Schweiz, XIV, Abth. 2, 1877, 23, I, 4 and 5.
- granosa, HANTKEN. A magy. kir. földt. int. évkönyve, I, 1871, 131, II, 6a, b, c; & MITTH. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, p. 137, same pl. and fig. [v. *O. granulata*, Leym.]
- granulata, LEYMERIE. GÜMBEL, Ábh. m.-ph. Cl. k.-bayer. Ak. Wiss. X, 1868 (1870), 663, II, IIIa, b. [? error for *granulosa*.]
- — — HANTKEN, A magy. kir. földt. int. évkönyve, I, 1871, 131, II, 6a, b, c; & MITTH. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, p. 137, same pl. and fig. [*O. granosa*, Hantk., in descr. of plate; ? error for *granulosa*.]
- — — QUENSTEDT, Handbuch Petref. ed. 3, Abth. 5 (1885), 1052, lxxxvi, 22.
- granulosa, MICHELOTTI. Mém. Soc. Ital. Sci. XXII, 1841, 286, II, 2.
- — — MICHELOTTI, NAT. Verh. Holland. Maatsch. Wetensch. Haarlem, II verzam., 3 dl., 2 stk., 1847, 17, I, 6.
- — — LEYMERIE, Mém. Soc. géol. France, [2], I, 1844, 359; XIII, 12a, b, c.
- — — BRADY, Géol. Mag. dec. 2, vol. II, 1875, 532, XIII, 1a, b, c.
- — — BRADY, JAARB. Mijn. Ned. Oost-Indie, VII, 2, 1878, 158, I, 1a, b, c.
- hardiei, d'ARCHIAC & HAIME. Descr. Anim. Foss. groupe nummulitique Inde, II, 1854, 346, XXXV, 6a, b, c.
- heberti, MUNIER-CHALMAS. HéBERT, Bull. Soc. géol. France, [3], X, 1882, 619, fig. 30, 1, 2.
- hungarica, HANTKEN. Kohlenflötze, etc. ungar. Krone, 1878 (transl. from Magyar), 218, fig. 31.
- inaequilateralis, CARTER. Ann. Mag. Nat. Hist. [2], XI, 1853, 167, VII, 1 and 2 (3 and 4?).
- — — CARTER, Journ. Bombay Br. R. Asiat. Soc. V, pt. XVIII (1853), 130, II, 1 and 2.
- — — CARTER, Geol. Papers Western India, 1857, 539, XIII, 1 and 2.
- incerta, d'ORBIGNY. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "F. raminifères," 49, VI, 16 and 17; also in Spanish, 1840, p. 71, same pl. and fig. [v. *Trochammina*.]
- involvens, REUSS. Denkschr. k. Ak. Wiss. Wien, I, 1850, 370, xlvi, 30. [v. *Cornuspira*.]
- irregularis, CORNUEL. Mém. Soc. géol. France, [2], III, 1848, 256, II, 20-22.

- OPERCULINA irregularis**, Reuss. Denkschr. k. Ak. Wiss. Wien, xxiii, 1864, 10, i, 17.
- *libyca*, Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 142, xxix (6), 2a-g. (Type is *O. ammonea*, Leym.)
  - *madagascariensis*, d'Orbigny. Ann. Sci. Nat. vii, 1826, p. 281, No. 4.
  - *marginata*, Kaufmann. Beitr. geol. Karte Schweiz, v, 1867, 152, ix, 4.
  - *murchisoni*, Brunner, MS. Jones, Cat. Foss. Foram. Brit. Mus. 1882, 31.
  - *orbignii*, Galeotti. Mém. Couronnés Acad. R. Bruxelles, xii, 1837, Mém. iii, 141, iii, 13.
  - [ ] (fide Nyst). Potiez et Michaud, Galerie des Mollusques Mus. Douai, Paris, i, 1838, 34, x, 1 and 2.
  - *perforata*, Costa. Atti Accad. Pontaniana, vii, 2, 1856, 210, xvii, 4, A, B. [Error for 14.]
  - *plicata*, Czjzek. Haidinger's Nat. Abh. ii, 1848, 146, xiii, 12 and 13. [= *Cornuspira foliacea*.]
  - Pictet, Traité de Paléont. 2 ed. iv, 1857, 504, cix, 23.
  - *punctata*, Reuss. Denkschr. k. Ak. Wiss. Wien, i, 1850, 370, xlvi, 21.
  - *pyramidum*, Ehrenberg. Schwager, Palaeontographica, xxx, 1883, Pal. Theil, 143, xxix (6), 4a-g. [= *Planulina pyramidum*, Ehrenberg, Abk. k. Wiss. Berlin, 1803, p. 115.] [? pl. iv, 7.]
  - *rosacea*, Kaufmann. Beitr. geol. Karte Schweiz, v, 1867, 153, ix, 5.
  - *rotella* (Conrad). Heilprin, Journ. Ac. Nat. Sci. Philad. [2], ix, 137, no fig. ["The species is not impossibly identical with *O. complanata*," A. H.] [= *Cristellaria*.]
  - *semistriata*, Schrauth. Sitz. k. Ak. Wiss. Wien, xvii, 1855, 545, iii, 9.
  - *simplex*, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 46, ii (x), 23a, b.
  - *striata*, Czjzek. Haidinger's Nat. Abh. ii, 1848, 146, xiii, 10 and 11. [= *Cornuspira foliacea*.]
  - *studeri*, Kaufmann. Beitr. geol. Karte Schweiz, v, 1867, 151, ix, 1 and 2.
  - *sublaevis*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 665, ii, 113a, b, c.
  - *sulcata*, Kaufmann. Beitr. geol. Karte Schweiz, v, 1867, 152, ix, 3.
  - *tattaensis*, d'Archia & Haime. Descr. Anim. Foss. groupe nummulitique Inde, ii, 1854, 347, no figure, based on *Operculina* —?, Carter, Journ. Bombay Br. R. Asiatic Soc. v, 1853, 131, ii, 3 and 4.
  - Carter, Geol. Papers Western India, 1857, 539, xxiii, 3 and 4.
  - *taurinensis*, Michelotti. Nat. Verh. Holland. Maatsch. Wetensch. Haarlem, ii verzam. 3 dl. 2 stk. 1847, 17, i, 4. [= *taurina* in plate.]
  - *thouini*, d'Orbigny. Ann. Sci. Nat. vii, 1826, 281, No. 3.
  - *thracensis*, d'Archiac. In Tchihatcheff's Asie Mineure, Palaeontologie, 1866, 224, ix, 6a, b.
  - Lyell, Elem. Geol. 1838, 55, fig. 21. [= *Crist. cultrata*.]
  - Ansted, Geology, 1844, ii, 63, fig. f.
  - Pictet, Traité de Paléont. iv, 1846, 229, xii, 10. [= *Cornuspira*.]
  - Pilla, Trattato di geol. pt. i, 1847, 461, fig. 80. [= *Cristellaria*.]
  - ? sp. Carter, Journ. Bombay Br. R. Asiatic Soc. v, pt. xviii (1853), 131, ii, 3 and 4. [See *O. tattaensis*.]
  - Maedonald, Ann. Mag. Nat. Hist. [2], xx, 1857, 193, vi, 31 and 33. [= *Calc. spengleri*.]
  - Carpenter, Phil. Trans. 1859, 12, pls. iii, iv, v, vi, and woodeuts in text iv, v, vi, vii, viii.
  - Carpenter, Parker & Jones, Introd. Foram. 1862, 57, fig. ix ; 58, fig. x ; 247, pl. xvii ; figs. xxxix-xliv in text. [Structure.]

- OPERCULINA** sp. (after Carpenter). Reuss' Models, No. 100, 1865. (Catal. No. 98, 1861.)
- Kölleker, Icones Histologicae, 1864, 31. [Structural.]
  - Williamson, Pop. Sci. Rev. IV, 1865, 173, viii, 14. [Section of shell-wall showing pseudopodial tubes.]
  - Figuer, Ocean World [1873], p. 84, fig. 19.
  - Carpenter, Ency. Brit. 9th ed. IX, 1879, Foraminifera, 381, fig. 22. [Structure.]
  - Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 212, x, 4.
- OPERCULUM** minimum Littoris Arimenensis durissimum depressum, Cornu Hammonis quodammodo referens. Plancus, De Couch. Min. 1739, also 1760, p. 18, pl. iii, A, B, C; and pl. iii, f. 2 E, D, C. [= ? *Biloculina*.]
- see *Umbiliculum*.
- OPHIDIONELLA**, De Folin, 1881. Bull. Soc. N. H. Toulouse, xv, 1881, p. 140, n. d. 1 sp. proposed.
- OPHTHALMIDIUM**, Zwingli & Kübler, 1870. Foram. Schweiz. Jura, 1870, p. 46, etc.; Brady, Report Challenger, 1884, p. 188.
- *auris*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 31, iii, 49. [= *Quinqueloculina*.]
  - *birmenstorffensis*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 31, iii, 46. [= *Spiroloculina*.]
  - *carinatum*, Balkwill & Wright. Trans. R. Irish Ac. xxviii (Sci.), 1885, 326, xii, 13–16.
  - — — Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 22, ii, Ornamentthon, 6; 16, ii, Blagdeni-schichten, 11 and 12.
  - — — Haeusler, Neues Jahrb. 1887, i, 194, vii, 39, 40, 43–45, 47–51.
  - *cornuspiroides*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 31, iii, 50.
  - *gracile*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 31, iii, 47.
  - *inconstans*, Brady. Report Challenger, 1884, 189, xii, 5, 7 and 8. [*Hauerina*, 1879.]
  - — — Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 216, xl, 12, 13.
  - *lasicum*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, ii, i, Jurensismergel, ii.
  - *medium*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 31, iii, 48.
  - *multiplex*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 22, ii, Ornamentthon, 7.
  - *nubeculariformis*, Haeusler. Neues Jahrb. 1887, i, 193, vii, 52, 53, 55, and 56.
  - *okeni*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 18, ii, Parkinsonton, 10, 11.
  - *orbiculare*, Burbach. Zeitschr. naturw. Halle, LIX, 1886, 499, v, 3–6.
  - *ovale*, Burbach. Zeitschr. naturw. Halle, LIX, 1886, 499, v, 7–12.
  - *porosum*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 14, ii, Opalinuston, 7.
  - *superbum*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 47 iv, Anhang 5. [= *Quinqueloculina*.]
  - *tongricum*, Zwingli & Kübler. Foraminif. Schweiz. Jura, 1870, 47, iv, Anhang 3, 4. [= *Spiroloculina*.]
  - *tumidulum*, Brady. Report Challenger, 1884, 189, xii, 6.
  - *walfordi*, Haeusler. Neues Jahrb. 1887, i, 192, vi, 7–11.
  - Wallieh, North Atlantic Sea-bed, pt. I, 1862, n. d. v, 13.
  - Haeusler, Neues Jahrb. 1887, i, 190, vi and vii.
  - Neumayr, Stämme d. Thierreiches, I, 1889 (1888), 177, fig. 19.
- ORBICULA** depressa, Reeve. Conch. System. II, 1842, 289, cccxvii, 3. [*Heterostegina depressa*, d'O. = *Heterosteg*.]

- ORBICULINA**, Lamarck, 1816. Ency. Méthod., "Vers," III (1832), 669 (P. & J. quote pt. 23, 1816); Brady, Report Challenger, 1884, p. 208.
- adunca (Fichtel & Moll). Lamarck, Ency. Méthod., "Vers," III (1832), 669 (pls. 1827) (P. & J. quote pt. 23, 1816), 468, f. 2. [*Nautilus*, 1798.]
- [Lam.]. D'Orbigny, in De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 64, viii, 8-16; also in Spanish, 1840, p. 81, same pl. & fig.
- — — Williamson, Trans. R. Mier. Soc. III, 1849, 115, xviii, 15-18. [Structure.]
- — — Carpenter, Phil. Trans. 1856, 547-552, xxviii, 1-22 (17 = *Orbitolites malabaricus*, Carter); xxix, 1-3.
- — — Bronn, Klassen Ordn. Thier-Reichs, I, 1859, 71, vii, 2 A-E. [Structural.]
- — — Carpenter, Parker & Jones, Introd. Foram. 1862, 93, viii, 1-12. [Structural.]
- — — Kölliker, Icones HistioLOGICAE, 1864, 31. [Structural.]
- — — J., P. & B., Crag Foram., Pal. Soc. xix, 1866, 20, iii, 44.
- — — [d'Orb.]. Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 27, pl., 110.
- — — Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 118, ix, 304-307.
- — — Jones, in Microgr. Dict. ed. 4, 1883, 557, xxiii, 19.
- — — Brady, Report Challenger, 1884, 209, xiv, 1-13.
- — — Agassiz, Three Cruises "Blake," II, 1888, 160, fig. 486, 487.
- — — See *Archias*; *Helenis*; and *Ilotes*.
- angulata, Lamarck. Hist. Anim. s. Vert. VII, 1822, p. 609, No. 2.
- — — Ency. Méthod., "Vers," III (1832), 669 (pls. 1827), (P. & J. quote pt. 23, 1816), 468, f. 3.
- — — Brown, Elem. Foss. Conch. 1843, n. d. iii, 5 and 6.
- (Orbitolites) complanata (Lam.). Williamson, Trans. R. Mier. Soc. III, 1849, 115, xvii, 8; xviii, 9-14. [*Orbitolites*, 1801.] [Structure.]
- compressa, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, 1839, "Foraminifères," 66, viii, 4-7; also in Spanish, 1840, p. 83, same pl. & fig.
- — — J., P. & B., Crag Foram., Pal. Soc. xix, 1866, 21, iii, 43.
- concava (Lamarck). Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 26, pl., 96. [*Orbulites*, 1816.]
- malabarica, Carter. Ann. Mag. Nat. Hist. [3], VIII, 1861, 462; Journ. Bombay Branch R. Asiatic Soc. VI, 1861 (1862), 88. [*Orbitolites*, 1853.]
- nummata, Lamarck. Ency. Méthod., "Vers," III (1832), 669 (pls. 1827) (P. & J. quote pt. 23, 1816), 468, f. 1.
- — — (*numismalis*), Lam. Blainville, Malacol. 1825, 373, vii, 4. [= *Naut. orbiculus*, F. & M. = *Orbic. adunca* (F. & M.).]
- numismalis, Lamarck. Hist. Anim. s. Vert. VII, 1822, p. 609, No. 1.
- — — Defrance, Dict. Sci. Nat. XXXII, 1824, 180; XXXVI, 1825, 291; Atlas, Conch. XV, 4. [= *Naut. orbiculus*, F. & M. = *Orbic. adunca* (F. & M.).]
- — — Blainville, Manuel Malac. et Conch. 1825 (pls. 1838), 373, vii, 4.
- — — D'Orbigny, Ann. Sci. Nat. VII, 1826, 305, No. 1, xvii, 8-10.
- — — D'Orbigny, Modèles, No. 20, 1826.
- — — Cuvier, Animal Kingdom, Henderson's ed. III, 1834, (pls. 1837), 18, ivbis, 4.
- — — Cuvier, Règne Animal, 1836-46, IX (pls. x), 35, xiv, 1.

- ORBICULINA** *numismalis*, Lam. Ehrenberg, Abhandl. k. Ak. Wiss. Berlin, 1838, 143, iii, i. [= *O. adunca* and var. *orbiculus* (F. & M.).]  
 ——— ——— Reeve, Conch. system. II, 1842, 289, ccevii, 2.  
 ——— ——— Beudant, Géologie, ed. 8, 1858, 117, fig. 106; later eds. same fig.  
 ——— ——— P., J. & B. [D'O., Modèles, 20], Ann. Mag. Nat. Hist. [3], XVI, 1865, 22, i, 21. [= *O. adunca*, F. & M.]  
 ——— ——— [*nummismalis*, d'Orb.]. Zittel, Handbuch Palaeont. Abth. I, 1876, 79, fig. 13<sup>8</sup>.  
 ——— ——— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 164, fig.  
 ——— ——— Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1057, lxxxvi, 47.  
 ——— ——— **rotella**, d'Orbigny. Foram. Fossiles Vienne, 1846, 142, vii, 13 and 14. [v. *Alveolina*.]  
 ——— ——— Brönn, Lethaea Geognostica, ed. 3, III, 1853-56, 199, xxxv<sup>2</sup>, 3a, b.  
 ——— ——— Pictet, Traité de Paléont. 2 ed. IV, 1857, 506, cix, 26.  
 ——— ——— **uncinata**, Lamarck. Hist. Anim. s. Vert. VII, 1822, p. 609, No. 3. [= *O. adunca* (F. & M.).]  
 ——— ——— Crouch, Introd. Lamarck, 1827, 40, xx, 10.  
 ——— ——— Brown, Conch. Text-book, 1839, 62, x. 19.  
 ——— ——— Brown, Elem. Foss. Conch. 1843, 24, ii, 31.  
 ——— ——— **universa**, d'Orb. Reeve, Conch. system. II, 1842, 288, ccevii, 1. [Misprint for *Orbulina*.]  
 ——— ——— Philippi, Neues Jahrb. 1843, p. 569. [Misprint for *Orbulina*.]  
 ——— n. sp. Williamson, Trans. Micros. Soc. London, III, 1852, 117, xviii, 11-14. [Williamson described this form from Tonga, without, however, giving it a specific name. Carpenter, in Challenger Report, Orbitolites, 1883, p. 29, quotes it as "Orbiculina tonga, Williamson," and refers it to *Orbitolites complanata*, Lam.]  
 ——— Carpenter, Ency. Brit. 9th ed. IX, 1879, Foraminifera, 374, 1, 6-8.  
 ——— Bütschli, in Brönn, Klassen, etc. Thier-Reichs, 1880, 192, vi, 2, A-E.  
 ——— Carpenter, Journ. Quekett Microsc. Club, [2], II, 1885, 95, fig. 7. [Structural.]  
 ——— see *Nautilus*.
- ORBICULITES** *lenticulata* (Lam.). Defrance, Dict. Sci. Nat., Atlas, Zooph. 1816-30, li, 5; and Blainville, Actinol. 1834, lxxii, 2. [v. *Orbitolites*.]
- ORBIGNYNA**, v. Hagenow. Neues Jahrbuch, 1842, p. 573.
- ovata, v. Hagenow. Neues Jahrbuch, 1842, 573, ix, 26. [v. also *Lituola*; *Haplophragmium*.]  
 ——— ——— Reuss, in Geinitz, Grundr. Verstein. 1845-46, 665, xxiv, 32.  
 ——— ——— Brönn, Lethaea Geognostica, ed. 3, II, 1851-52, 84, xxix<sup>1</sup>, 11.
- ORBIS** *foliaceus*, Philippi. Enum. Mollusc. Siciliae, II, 1844, 147, xxiv, 25, [error for 26]. [v. *Cornuspira* and *Spirillina*.]
- infimus, Strickland. Quart. Journ. Geol. Soc. II, 1846, 30, fig. a. [v. *Ammodiscus* and *Cornuspira*.]  
 — Lea. A genus of *Gasteropoda*.
- ORBITOIDES**, d'Orbigny, 1847. Prodrome de Paléont. II, 1850, 334.
- alpina, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 406, No. 1297.  
 — (Discocyclina) *appplanata*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. X, 1868 (1870), 700, iii, 17, 18, 35-37.  
 ——— ——— Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 71, xi, 2; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), p. 82, same pl. and fig.

- ORBITOIDES** (*Discocyclina*) *appplanata*, Gümbel. Jennings, Geol. Mag. dec. 3, v, 1888, 581, xiv, 3a, b, c, d.  
 ——— (*Discocyclina*) *aspera*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 698, iii, 13, 14, 32-34.  
 ——— ——— Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 72, xi, 4; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), p. 82, same pl. and fig.  
 ——— ——— Schwager, Boll. R. Com. geol. Ital. viii, 1877, 26, pl., 77.  
 ——— *asterifera*, Carter. Ann. Mag. Nat. Hist. [3], viii, 1861, 451, xvii, 3; Journ. Bombay Branch R. Asiatic Soc. vi, 1861 (1862), 78.  
 ——— *asteriscus*, Michelotti. Nat. Verh. Holland. Maat. Wet. Haarlem, 2, xv, 1861, 17, i, 1 and 2.  
 ——— ——— Kaufmann, Beitr. geol. Karte Schweiz, Lief. v, 1867, 155, ix, 11-16.  
 ——— (*Lepidocyclina*) *burdigalensis*, Gümbel. Abh. k. bay. Ak. Wiss. x, 1868 (1870), p. 719.  
 ——— *carteri*, Martin. Junghuhn, Tertiärsch. Java, 1879-80, 161, xxviii, 2.  
 ——— ——— K. Martin, Niederländ. Arch. Zoöl. v, Heft 2, 1880, xiv, 2.  
 ——— *crassula*, Mayer. Beitr. geol. Karte Schweiz, xiv, 2 Abth., 1877, 23, i, 2.  
 ——— *decipiens*, v. Fritsch. Palaeontographica, Supp. III, Lief. 1, 1878, 143, xviii, 12; xix, 4.  
 ——— *dilabida*, Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 140, xxix (62), 7a-e.  
 ——— *dilatata*, Michelotti. Nat. Verh. Holland. Maat. Wet. Haarlem, 2, xv, 1861, 17, i, 1 and 2.  
 ——— (*Lepidocyclina*) ——— ——— Gümbel, Abh. m.-ph. Cl. k. bayer. Ak. Wiss. x, 1868 (1870), 717, iv, 45a, b, 46, 47.  
 ——— *discus* (Rütim.) (charact. addit.). Kaufmann, Beitr. geol. Karte Schweiz, Lief. v, 1867, 160, x, 11-16. [v. *Orbitolites*.]  
 ——— *dispansa* (Sow.). Carter, Ann. Mag. Nat. Hist. [3], viii, 1861, 447, xvi, 1, xvii, 1; Journ. Bombay Branch R. Asiatic Soc. vi, 1861 (1862), 73. [*Lycophris*, 1837.]  
 ——— (*Discocyclina*) ——— ——— Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 701, iii, 40-47.  
 ——— ——— Hantken, A magy. kir. földt. int. évkönyve, i, 1871, 132, ii, 10a, b; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, i, 1871, p. 138, same pl. and fig.  
 ——— ——— Brady, Geol. Mag. dec. 2, vol. ii, 1875, 536, xiv, 2a, b, c.  
 ——— ——— Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 72, xi, 3; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), p. 82, same pl. and fig.  
 ——— ——— v. Fritsch, Palaeontographica, Supp. III, Lief. 1, 1878, 142, xviii, 10; xix, 8.  
 ——— ——— Brady, Jaarb. Mijn. Ned. Oost-Indie, vii, 2, 1878, 164, ii, 2a, b, c.  
 ——— ——— Medlicott & Blanford, Geol. of India, 1879, 340 and 459, xv, 8.  
 ——— (*Discocyclina*) ——— ——— Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 215, xii, 16.  
 ——— ——— Martin, Samml. geol. Reichsmus. Leiden, [1], vol. i, Heft 2, 1881, 112, vi, 1, 2, and 3.  
 ——— ——— v. nov. Abich, Geol. Forsch. Kaukas. Ländern, ii, 1882, 229, ii, 9; x, 1-4, 8; xi, 1-3.  
 ——— (*Discocyclina*) ——— ——— Jennings, Geol. Mag. dec. 3, v, 1888, 530, xiv, 6.

- ORBITOIDES** *eocana*, Hantken. Kohlenflötze, etc. ungar. Krone, 1878  
 (transl. from Magyar), 218, fig. 32.
- (Discocyclina) *ephippium* (Schloth.). Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 696, iii, 15, 16, 38, and 39. [*Lenticulites*, 1820.]  
 — — — v. Fritsch, Palaeontographica, Supp. III, Lief. 1, 1878, 141, xviii, 11; xix, 6.  
 — — — *ephippium* (Sow.). Zittel, Handbuch Palaeont. Abth. I, 1876, 103, fig. 43<sup>6</sup>. [*Lycophris*, 1837.]  
 — — — (Discocyclina) — — — Jennings, Geol. Mag. dec. 3, v, 1888, 530, xiv, 4a, b.  
 — — — *faujasii* (Defr.). Reuss, Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 309, iv, 7-9; v, 1-5. [v. *Lycophris*.]  
 — — — J., P. & B., Crag Foram., Pal. Soc. XIX, 1866, n. d. iii, 25.  
 — — — Stoliczka, Palaeontologia Indica, Cret. Fauna S. India, iv, 4, 1873, p. 61, xii, 3-5.  
 — — — *fortisii*, d'Arch. Carpenter, Parker & Jones, Introd. Foram. 1862, 300, xx, 1-4, 7, 10-16, and a cast, 298, xxii, 2 and 3. [*Orbitolites*, 1848.]  
 — — — Carpenter, The Microscope, ed. 6, 1881, 585, fig. 339, 340, 341, 342. [Structural.]  
 — — — *gigantea*, Martin. Junghuhn, Tertiärsch. Java, 1879-80, 162, xxviii, 3.  
 — — — Martin, Niederländ. Arch. Zoöl. v, Heft 2, 1880, xiv, 3.  
 — — — *gumbellii*, Seguenza. Atti R. Accad. Lincei, [3], vi, 1880, 45, iv, 9a, b, c.  
 — — — *inflata*, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 125, xiii (xxi), 6a, b.  
 — — — *javanicus*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1855, 168, iv, viii-x.  
 [Same as *O. prattii*.] [Glauc.]  
 — — — Carpenter, Parker & Jones, Introd. Foram. 1862, xxii, 4 and 5. [Cast.]  
 — — (Rhipidocyclina) *karakaiensis* (d'Archiac). Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 706, iv, 42-44. [*Orbitolites*, 1850.]  
 — — — *lucifera*, Kaufmann. Beitr. geol. Karte Schweiz, Lief. v, 1867, 157, ix, 17-21.  
 — — — *mantelli* (Morton). D'Orbigny, in Lyell, Quart. Journ. Geol. Soc. IV, 1847 (1848), 11, no fig. [*Nummulites*, 1833.]  
 — — — [(d'Orb.) 1847]. D'Orbiguy, Prodrome de Paléont. II, 1850, 406, No. 1296.  
 — — — Carpenter, Parker, & Jones, Introd. Foram. 1862, 298 and 300, xx, 5, 6, 8, 11\*.  
 — — (Lepidocyclina) — — — Gümbel, Abh. k. bay. Ak. Wiss. x, 1868 (1870), p. 718.  
 — — — Bütschli, in Brönn, Klassen, etc. Thier-Reichs, 1880, 215, xii, 22.  
 — — — [Sow.]. Steinmann, Elem. Paléont. I, 1888, 36, fig. K.  
 — — — *media*, d'Orb. Cours élém. Paléont. etc. I, 1849, 193, fig. 316; II, fas. 2, 1852, 689, fig. 557.  
 — — — Prestwich, Geology, II, 1888, 290, 151, i.  
 — — — *microthalma*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1855, 167 iv, xi. [Same as *O. prattii*.] [Glauc.]  
 — — (Rhipidocyclina) *multiplicata*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 704, iv, 20-24.  
 — — — Steinmann, Elem. Paléont. I, 1888, 36, fig. G.  
 — — — *nudimargo*, Schwager. Palaeontographica, XXX, 1883, Pal. Theil, 139, xxix (6), 8a-e.  
 — — (Rhipidocyclina) *nummulitica*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 702, iv, 1-3, 16-18.

- ORBITOIDES nummulitica**, Gümbel. Steinmann, Elem. Paléont. I, 1888, 36, fig. 23, C.
- **nupera**, Conrad. Amer. Journ. Sci. XLIII, 1867, p. 31. [Cf. *Orbitolites supera*.]
- **omphalus**, v. Fritsch. Palaeontographica, Supp. III, Lief. 1, 1878, 142, xviii, 13; xix, 5.
- **orakeiensis**, Karrer. Novara-Exped., Geol. Theil, I, 1864, 86, xvi, 21.
- (*Discocyclina*) **papyracea** (Boubée). Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 690, iii, 3-12, 19-29. [v. *Nummulites*.]
- — — — — Hantken, A magy. kir. földt. int. évkönnyve, I, 1871, 132, ii, 9a, b; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, p. 138, same pl. and fig.
- — — — — Hantken, A magy. kir. földt. int. évkönnyve, IV, 1875 (1876), 71, xi, 1; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), p. 81, same pl. and fig. [*O. papyracea*, in deser. of plate.]
- — — — — Brady, Geol. Mag. dec. 2, II, 1875, 535, xiv, 1a, b, c, d.
- — — — — Zittel, Handbuch Palaeont. Abth. I, 1876, 103, fig. 43<sup>1, 2, 3</sup>.
- — — — — Brady, Jaarb. Mijn. Ned. Oost-Indie, VII, 2, 1878, 163, ii, 1a, b, c, d.
- — — — — v. Fritsch, Palaeontographica, Supp. III, Lief. 1, 1878, 140, xviii, 14. [Structure.]
- — — — — Hantken, Kohlenflötzte, etc. ungar. Krone, 1878 (transl. from Magyar), 225, fig. 38.
- — — — — Medlicott & Blanford, Geol. of India, 1879, 461, xv, 7.
- — — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 215, xii, 20 and 21.
- — — — — Abich, Geol. Forsch. Kaukas. Ländern, 1882, 242, ix, 2, 2a, b.
- — — — — Terquem, Mém. Soc. géol. France, [3], II, 1882, 126, xiii (xxi), 7a, b.
- — — — — Steinmann, Elem. Paléont. I, 1888, 36, fig. 23, A, B, F, H, I.
- — (*Discocyclina*) — — — Jennings, Geol. Mag. dec. 3, V, 1888, 530, xiv, 5.
- — (*Aktinocyclus*) **patellaris** (Schlotheim). Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 711, iv, 29-32. [*Asteriacites*, 1822.]
- — — — — Hantken, A magy. kir. földt. int. évkönnyve, I, 1871, 132, ii, 31a, b [error for 11a, b]; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, p. 139, same pl. and fig.
- — — — — Hantken, A magy. kir. földt. int. évkönnyve, IV, 1875 (1876), 72, xi, 6; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), p. 83, same pl. and fig.
- — **prattii**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1855, 167, iv, ii, etc. [See also *O. microthalma* and *O. javanicus*.] [Glauc.]
- — (*Asterocyclus*) **priabonensis**, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 715, iv, 3b, a, b, 41 [40].
- — (*Asterocyclus*) — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 215, xii, 17.
- — (*Aktinocyclus*) **radians** (d'Arch.). Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 707, ii, 116a-d; iv, 11-15 [14 = v. *furcata*]. [*Orbitolites*, 1848.]
- — — — (?) var. **scarantana**, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), iv, 41a, b.
- — — — — Hantken, A magy. kir. földt. int. évkönnyve, I, 1871, 132, ii, 7; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, p. 139, same pl. and fig.
- — — — — Hantken, A magy. kir. földt. int. évkönnyve, IV, 1875 (1876), 72, xi, 5; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), p. 83, same pl. and fig.
- — — — — Steinmann, Elem. Paléont. I, 1888, 36, fig. 23, D.

- ORBITOIDES radiata**, Martin. Junghuhn, Tertiärsch. Java, 1879-80, 163, xxviii, 4.
- Martin, Niederländ. Arch. Zool. v, Heft 2, 1880, xiv, 4.
- (*Asterocyclusina*) *stella*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 716, ii, 117a, b, c; iv, 8-10, 19.
- Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 73, xi, 10; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), p. 84, same pl. and fig.
- (*Asterocyclusina*) — Bützschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 215, xii, 18.
- (*Asterocyclusina*) *stellata* (d'Archiac). Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 713, ü, 115a-e; iv, 4-7. [*Calcarina*, 1846.]
- Hantken, A magy. kir. földt. int. évkönyve, i, 1871, 133, ii, 8a, b, c; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, i, 1871, p. 139, same pl. and fig.
- Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 73, xi, 9; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), p. 84, same pl. and fig.
- Hantken, Kohlenflötze, etc. ungar. Krone, 1878 (transl. from Magyar), 226, fig. 40.
- (*Asterocyclusina*) — Bützschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 215, xiii, 1.
- Steinmann, Elem. Paléont. i, 1888, 36, fig. 23, E.
- (*Asterocyclusina*) — [Gümb.]. Jennings, Geol. Mag. dec. 3, v, 1888, 531, xiv, 7.
- Howchin, Trans. R. Soc. Austral. xii, 1889, 17, i, 9-11.
- (*Rhipidocyclina*) *strophiolata*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 705, iv, 25-28.
- sumatrensis*, Brady. Geol. Mag. dec. 2, ii, 1875, 536, xiv, 3a, b, c.
- Brady, Jaarb. Mijn. Ned. Oost-Indie, vii, 2, 1878, 165, ii, 3a, b, c.
- (*Discocyclina*) *tenella*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 698, iii, 1, 2, 30 and 31.
- Zittel, Handbuch Palaeont. Abth. i, 1876, 103, fig. 43<sup>a</sup>.
- (*Aktinocyclina*) *tenuicostata*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 709, ii, 114a, b, c; iv, 35.
- Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 73, xi, 7 and 8; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), p. 83, same pl. and fig.
- varians*, Kaufmann. Beitr. geol. Karte Schweiz. Lief. v, 1867, 158, x, 1-10.
- (*Aktinocyclina*) *variecostata*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 710, iv, 33a, b, 34.
- Zittel, Handbuch Palaeont. Abth. i, 1876, 103, fig. 43<sup>b</sup>.
- (*Actinocyclina*) — Bützschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 215, xii, 19.
- [—] Targiona, Relaz. d'ale. viaggi, iv, 1770, p. viii, pl. i, figs. 3-5. See *Corpi marini*.
- Carpenter, Parker & Jones, Introd. Foram. 1862, 298, xx.
- ? sp. v. Fritsch, Palaeontographica, Supp. III, Lief. 1, 1878, 145, xviii, 17.
- Carpenter, Ency. Brit. 9th ed. ix, 1879, Foraminifera, 382, fig. 30-32.
- Martin, Jaarb. Mijn. Nederland. Oost-Indië, xi, 1882, 80, 82, 90, iii, 1-4. [Structural.]
- ind.* Abich, Geol. Forsch. Kaukas. Ländern, ii, 1882, 235, x, 5.
- Carter, Ann. Mag. Nat. Hist. [6], ii, 1888, 439. [Notes on Genus.]
- Malagoli, Atti Soc. Nat. Modena, [3], vii, 1888, 115, v, 2.
- see *Aktinocyclina*; *Asterocyclusina*; *Discocyclina*; *Lepidocyclina*; and *Rhipidocyclina*.

- ORBITOLINA**, d'Orbigny, 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 143.
- *annularis*, P. & J. Ann. Mag. Nat. Hist. [3], vi, 1860, 31.
  - *concava*, P. & J. Lyell, Antiq. of Man, ed. 4, 1873, p. 64, fig. 22. [= *Porosphaera*.]
  - — — Martin, Jaarb. Mijn. N. I. xviii, 1889, 88, xxiv and xxv.
  - — — Lamarck. v. *Orbulites*.
  - *conica*, d'Arch. Mém. Soc. géol. France, II, 1837, 178.
  - *conoidea*, Gras. Catal. Corps Org. Foss. Isère, 1852, 34, 37, 52, i, 4–6.
  - *discoidea*, Gras. Catal. Corps Org. Foss. Isère, 1852, 37 and 52, i, 7–9.
  - *gigantea*, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 279, No. 1350.
  - *globularis* (d'Orb.). Jones, Geologist, 1862, 336. [= var. of *O. concava* (Lam.)] [= *Porosphaera*.]
  - *lævis*, P. & J. Ann. Mag. Nat. Hist. [3], vi, 1860, 32. [v. *Tinoporus*.]
  - *lenticularis*, Lam. Carter, Ann. Mag. Nat. Hist. [3], VIII, 1861, 458, xvii, 5; Journ. Bombay Branch R. Asiatic Soc. VI, 1861 (1862), 84. [v. *Orbulites*, 1816.]
  - *lenticularis* (Blumenbach). Pietet & Renevier, Mat. paléont. Suisse, [1], Mém. 1, 1858, 166, xxiii, 3a–f. [*Madreporites*, 1805.]
  - — — Heer, Urwelt Schweiz, 1865, 203, fig. 115; and transl. London, 1876, 213, fig. 115.
  - *lenticulata* (Lamarck), (d'Orb.), 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 143, No. 342. [See *Orbitolites*, Lamarck and Lamouroux, and *Orbulites*, 1816.]
  - — — Pictet, Traité de Paléont. 2 ed. iv, 1857, 486, cix, 7.
  - *mamillata*, d'Arch. Mém. Soc. géol. France, II, 1837, 178.
  - *media*, d'Arch. Mém. Soc. géol. France, II, 1837, 178.
  - *patula*, Carter. Geol. Papers Western India, 1857, 549, not fig'd.
  - *plana*, d'Arch. Mém. Soc. géol. France, II, 1837, 178.
  - *radiata*, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 280, No. 1351.
  - *semiannularis*, P. & J. Ann. Mag. Nat. Hist. [3], vi, 1860, 30.
  - *simplex*, P. & J. Ann. Mag. Nat. Hist. [3], vi, 1860, 29.
  - *sphærulata*, P. & J. Ann. Mag. Nat. Hist. [3], 1860, 34.
  - *sphærulolineata*, P. & J. Ann. Mag. Nat. Hist. [3], vi, 1860, 34.
  - *vesicularis*, P. & J. Ann. Mag. Nat. Hist. [3], vi, 1860, p. 31, No. 5; and var. *congesta*, No. 6. [v. also *Gypsina* and *Tinoporus*.]
  - — ? Carter, Ann. Mag. Nat. Hist. [3], VIII, 1861, 459, xvii, 6–9; Journ. Bombay Branch R. Asiatic Soc. VI, 1861 (1862), 85.
- ORBITOLITES**, Lamarck, 1801. Syst. Anim. sans Vert. 1801, p. 376; Brady, Report Challenger, 1884, p. 210, fig. 6.
- *arabica*, Carter. Ann. Mag. Nat. Hist. [3], VIII, 1861, 463, xvii, 10–14; Journ. Bombay Branch R. Asiatic Soc. VI, 1861 (1862), 90. [*Operculina* in description to plates, q. v.]
  - *complanata*, Lamarck. Syst. Anim. sans Vert. 1801, p. 376. [v. *Orbiculina* and *Orbitolites*.]
  - — — Defrance, Dict. Sci. Nat. XXXVI, 1825, 294; Atlas, Zooph. xvii, 2.
  - — — Blainville, Actinologie, 1834, lxxii, 2.
  - — — Galeotti, Mém. Couronnés Ac. R. Bruxelles, XII, 1837, Mém. iii, 164, iv, 5.
  - — — Michelin, Icon. Zoophytol. 1840–47, 167, xlvi, 4a, b.
  - *[complanatus]* — Harting, Magt van het Kleine, 1866, 103, fig. 45.
  - — — Greene, Man. Protozoa, London, 1871, 19, fig. 4.
  - — — Zittel, Handbuch Palaeont. Abth. I, 1876, 79, fig. 13<sup>4</sup>, and fig. 16.

- ORBITOLITES** *complanata*, Lam. Möbius, Beitr. Meeresfauna Insel Mauritius, etc. 1880, 81, iv [numbered iii, by error], 4 and 5 ; v, 1-5. [Structural.]
- [ *complanatus*] — Carpenter, The Microscope, ed. 6, 1881, 553, fig. 316, 317, and 319.
- — — Terquem, Mém. Soc. géol. France, [3], II, 1882, 125, xiii (xxi), 5.
- — — Carpenter, Phil. Trans. 1883, 562, etc. figs. iii and iv. [Structural.]
- — — Carpenter, Report Challenger, "Orbitolites," 1883, 29, v, 11-18 ; vi, vii, and viii.
- — — Carpenter, Report Challenger, "Orbitolites," 1883, 13, fig. 3. [Structural.]
- — — [ *v. laciniata* ]. Carpenter, Report Challenger, "Orbitolites," 1883, 36, vii.
- — — [ *complanatus*] — Jones, in Microgr. Dict. ed. 4, 1883, 557, xxiii, 17a, b.
- — — Brady, Report Challenger, 1884, 218, xvi, 1-6, and xvii, 1-6. [ *O. laciniatus*, 1881.]
- — — *v. laciniata*. Brady, Report Challenger, 1884, 220, xvi, 8-11.
- — — Carpenter, Journ. Quekett Microsc. Club, [2], II, 1885, 91, fig. 4 and 10.
- — — Bütschli, Morph. Jahrb. XI, 1886, 80, vii, 1-5.
- — — Fritel, Foss. caract. terr. sedim. tert. 1886, pl. vii, 58 and 59.
- — — *v. laciniata*. Brady, Journ. R. Microsc. Soc. 1888, 693, x, 1-14.
- — — *concava*, Lamarck. Syst. Nat. Anim. s. Vert. 1801, p. 376.
- — — Michelin, Icon. Zoophytol. 180, 1840-1847, 28, vii, 9.
- — — *crassa*, Fischer. Fond de la Mer, I, chap. xvii (1870), p. 253, not figured.
- — — [ *Cyclolina*] *cretacea*, d'Orbigny. Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 192, viii, 16. [ *Cyclolina*, 1846.]
- — — *discoidea*, Lea. Contrib. to Geology, 1833, 192, vi, 205. [= ?]
- — — *disculus*, Leymerie. Mém. Soc. géol. France, [2], IV, 1851, 190, ix, 1a-d.
- — — *discus*, Rüttimeyer. Nouv. Mém. Soc. Helvet. Sci. Nat. XI, 1850, Mém. 2, 116, v, 70, 71 (78, 80), 81.
- — — *duplex*, Carpenter. Phil. Trans. CLXXIV, 1883, 561, etc., figs. ii and v.
- — — Carpenter, Report Challenger, "Orbitolites," 1883, 25, iii, 8-14 ; iv, 6-10 ; v, 1-10 ; p. 28, fig. 4.
- — — [ *hemprichii*, Ehr. sp. ?]. Brady, Report Challenger, 1884, 216, xvi, 7 ; and fig. 7, p. 217. [ *Amphisorus*, 1838.]
- — — Carpenter, Journ. Quekett Microsc. Club, [2], II, 1885, 97, fig. 9. [Structural.]
- — — *elliptica*, Michelin. Icon. Zoophytol. 1840-1847, 277, lxi, 11a, b.
- — — *fortisii*, d'Archiac. Mém. Soc. géol. France, [2], III, 1848, 404, viii, 10a, 11a, 12a. [ *v. Orbitoides*.]
- — — *v. A*, Rouault. Mém. Soc. géol. France, [2], III, 1848, 463, xiv, 6a.
- — — *furcata*, Rüttimeyer. Nouv. Mém. Soc. Helvet. Sci. Nat. XI, 1850, Mém. 2, 118, v, 75 (79).
- — — *gensacica*, Leymerie, *v. \**, *gigantea*. Mém. Soc. géol. France, [2], IV, 1851, 190, ix, 2a-d.
- — — *v. B*, *concava*. Mém. Soc. géol. France, [2], IV, 1851, 190, ix, 3a-d.
- — — *interstitia*, Lea. Contrib. to Geology, 1833, 191, vi, 204. [= ?]
- — — *italica* (Costa). Brady, Ann. Mag. Nat. Hist. [5], XVI, 1886, p. 191. [ *Pavonina*, 1856.]

- ORBITOLITES karakaiensis**, d'Archiac. Hist. Progrès Géol. III, 1850, p. 231. [v. also *Orbitoides*.]
- **laciniatus**, Brady. Quart. Journ. Micr. Soc. XXI, 1881, p. 47. [v. *O. complanata*, var. *laciniata*.]
- **lenticulata**, Lamarck. Defrance, Dict. Sci. Nat. XXXVI, 1825, 295; Atlas, Zool. II, 5. [*Orbulites lenticulata*, 1816.]
- Cuvier & Brongniart, in Cuvier, Ossem. fossiles, ed. 2, II (2), 333 and 613, pl. ix, f. 4A, B, C.
- [Al. Brongn.]. Bronn, Syst. urweltl. Pflanzenthiere, 1825, 23, vi, 18.
- **macropora**, Lamarck. Reuss' Models, No. 90, 1865 [Catal. No. 30, 1861]. [v. *Orbulites*.]
- **malabarica**, Carter. Ann. Mag. Nat. Hist. [2], XI, 1853, 425, XVI, B, 1-4.
- **malabaricus**, Carter. [v. *Orbiculina adunca*.]
- **mammillaris**, Savi & Meneghini. Consid. Geol. Toscana, 1851, 144, no. fig.
- **mantelli**, Carter. Journ. Bombay Br. R. Asiatic Soc. V, pt. XVIII (1853), 138, ii, 30-39. [This is *Nummulites mantelli*, Morton.]
- Carter, Ann. Mag. Nat. Hist. [2], XI, 1853, 174, vii, 30-39 (40, 41?).
- Carter, Geol. Papers Western India, 1857, 547, xxiii, 30-39.
- Carter, Ann. Mag. Nat. Hist. [3], VIII, 1861, 452, XVI, 2, xvii, 2; Journ. Bombay Branch R. Asiatic Soc. VI, 1861 (1862), 79.
- v. **theobaldi**, Carter. Ann. Mag. Nat. Hist. [6], II, 1888, 342.
- **marginalis**, Lamarck. Carpenter, Phil. Trans. 174, 1883, 560, fig. i. [*Orbulites*, 1816.]
- Carpenter, Report Challenger, "Orbitolites," 1883, 20, iii, 1-7; iv, 1-5.
- Brady, Report Challenger, 1884, p. 214, xv, 1-5.
- Carpenter, Journ. Quekett Microsc. Club, [2], II, 1885, 96, fig. 8. [Structural.]
- **marginata**, Savi & Meneghini. Consid. Geol. Toscana, 1851, 144, no fig.
- **orbiculus** (Förskal). J., P., & B., Crag Foram., Pal. Soc. XIX, 1866, 23, iii, 45-47. [*Nautilus*, 1775.]
- **papillosa**, Savi & Meneghini. Consid. Geol. Toscana, 1851, 144, no fig.
- **papyracea**, d'Archiac. Mém. Soc. géol. France, [2], III, 1848, 405, viii, 13a.
- **parmula**, Rütimeyer. Nouv. Mém. Soc. Helvet. Sci. Nat. XI, 1850, Mém. 2, 117, v. 72 and 73.
- **patellaris**, Rütimeyer. Nouv. Mém. Soc. Helvet. Sci. Nat. XI, 1850, Mém. 2, 119, v, 76 and 77 (79).
- **pedunculata**, Carter. Ann. Mag. Nat. Hist. [3], VIII, 1861, 463; Journ. Bombay Branch R. Asiatic Soc. VI, 1861 (1862), 89. [*Cyclolina*, 1853.]
- **pratti**, Michelin. Icon. Zoöphytol., 1840-47, 278, lxiii, 14. [v. also *Orbitulites*.]
- **radians**, d'Archiac. Mém. Soc. géol. France, [2], III, 1848, 405, viii, 15a.
- **secans**, Leymerie. Mém. Soc. géol. France, [2], IV, 1851, 191, ix, 4a, b.
- **sella**, d'Archiac. Mém. Soc. géol. France, [2], III, 1848, 405, viii, 16a.
- **socialis**, Leymerie. Mém. Soc. géol. France, [2], IV, 1851, 191, ix, 5a, b, c.
- **stellaris**, Brunner [MS.]. Rütimeyer, Nouv. Mém. Soc. Helvet. Sci. Nat. XI, 1850, Mém. 2, 118, v, 74 (78).

- ORBITOLITES** *stellata*, d'Archiac. Mém. Soc. géol. France, [2], III, 1848, 405, viii, 14. [*Calcarina*, 1846.]
- *submedia*, d'Archiac. Mém. Soc. géol. France, [2], II, 1846, 184, vi, p. 6.
- — — — — Fritel, Foss. caract. terr. sedim. tert. 1886, pl. vii, 60 and 61.
- *supera*, Conrad. Proc. Ac. Nat. Sci. Philad. No. 2, 1865, p. 74. "Smaller than the preceding [*O. mantelli*] and comparatively thicker, without the raised central point. Diameter 13-20 inch. This species is readily distinguished by the convex centre, and is limited to the oligocene strata." [Cf. *Orbitoides nupera*.]
- — — *tenuissima*, Carpenter [MSS., 1870]. Thomson, Depths Sea, 1873, 91, fig. 10. [= *O. italica*, q. v.]
- — — [*tenuissimus*] — Carpenter, The Microscope, ed. 6, 1881, 556, fig. 318.
- — — — — Schlumberger, F. Jeune Nat., Mar. 1882, iii, 1.
- — — — — Folin, Congrès Scient. Dax, 1882 (1883), 314, pl. f. 5. [Sarcode body.]
- — — — — Carpenter, Phil. Trans. 174, 1883, 553, xxxvii and xxxviii.
- — — — — Carpenter, Report Challenger, "Orbitolites," 1883, 16, i. and ii.
- — — — — [*italica* (Costa) ?]. Brady, Report Challenger, 1884, 212, xv, 6a-d, and 7. [v. *O. italica*.]
- — — — — Verworn, Zeitschr. Wiss. Zoöl. (Siebold's) XLVI, 1888, 466, fig. K; and Ann. Mag. Nat. Hist. [6], II, 1888, p. 165.
- — — — — Neumayr, Stainme d. Thierreiches, I, 1889 (8), 180, fig. 22.
- [— — —] Costa, Fauna Regno Napoli, 1838, Foraminiferi, not described, ii, 7 and 8.
- — — Carter, Journ. Bombay Branch R. Asiatic Soc. III, 1849, 168, viii, 1a-c.
- — — Rütimeyer, Nouv. Mém. Soc. Helvet. Sci. Nat. XI, 1850, Mém. 2, v, 67-69.
- — — Mantell, Pictorial Atlas Foss. Rem. 1850, 142, lxi, 17.
- — — Carpenter, Quart. Journ. Geol. Soc. VI, 1850, 30, plates iii to viii. [Minute structure.]
- — — Carter, Journ. Bombay Br. R. Asiatic Soc. V, pt. XVIII (1853), 139, ii, 40 and 41.
- — — Carpenter, Phil. Trans. 1856, 181, pl. iv. [The animal, or sarcode body.]
- — — Carpenter, Phil. Trans. 1856, 181, pls. v, vi, vii, viii, and ix [pl. v, f. 2 and 3, referred by Brady to *O. complanata*, v. *laciniata*]; pl. v, fig. 10, and pl. ix, f. 10, "Orbitolites, duplex type," belong to *Orbitolites duplex*, 1883. [The shell.]
- — — Carter, Geol. Papers Western India, 1857, 548, xxiii, 40 and 41.
- — — Carpenter, Parker, & Jones, Introd. Foram. 1862, 105, iv and ix; fig. ix; fig. xxiv, in text. [Structural.]
- — — Williamson, Pop. Sci. Rev. IV, 1865, 174, viii, 10.
- — — Carpenter, Encyc. Brit. 9th ed. IX, 1879, Foraminifera, 377, figs. 11-13. [Structure.]
- — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 192, v, 3 and 4. [Fig. 4, "complicirte Varietät," is referred by Brady to *O. complanata*, v. *laciniata*.]
- — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 192, vi, 1A-E.
- — — Carpenter, Report Challenger, "Orbitolites," 1883, 10, fig. 1; 11, fig. 2; p. 41, fig. 5. [Structural.]
- — — Carpenter, Journ. Quekett Microsc. Club, [2], II, 1885, 93, figs. 5, 6, 7, 11, and 12. [Structural.]
- — — see *Aeolides*; *Discolites*; *Operculum*; and *Umbiliculum*.
- ORBITULINA**, Bronn, 1851-52. [Quoted for *Orbitolina*, d'Orbigny, 1847.] Lethaea Geognostica, ed. 3, II, 1851-52, p. 93.

- ORBITULINA cretacea**, Schafhäutl. Süd-Bayerns Lethaea Geogn. 1863, not descr. xv, 1a, b.
- **lenticularis** (Lam.). Bronn, Lethaea Geognostica, ed. 3, II, 1851–52, 93, xxix<sup>2</sup>, 22a–c. [*Orbulites*, 1816.]
  - **venezuelana**, Karsten. Géol. Colomb. bolivarienne, etc. 1886, 62, vi, 6a, b, c, d, e. [*Orbitulites lenticularis*, ?, K, 1856.]
- ORBITULITES**,\* Bronn, 1837. Lethaea Geognostica, ed. 2, I, 1837, p. 596.
- **africanus**, J. E. Gray. Spicil. Zool. 1828, 8. [*nom. nud.*? Foraminifer.]
  - **angulata**, Catullo. Dei Terreni sed. sup. Venezia, 1857, 27, i, 11.
  - **apertus**, Ermann. Zeitschr. deutsch. geol. Ges. VI, 1854, 603, xxiv [error for xxiii], 1–3.
  - **cassianicus**, Schauroth. Sitz. k. Ak. Wiss. Wien, XVII, 1855, 527, ii, 13.
  - **circumvulvata**, Gümbel. Neues Jahrbuch, 1872, 259, vii, 11–18.
  - **complanata** (Lamarck). [v. *Orbitolites*.]
  - **[complanatus]**, Lam. Bronn, Lethaea Geognostica, ed. 3, III, 1853–56, 254, xxxv, 22a, b.
  - ? — Catullo, Dei Terreni sed. sup. Venezia, 1857, 26, i, 10.
  - cf. — Schwager, Palaeontographica, XXX, 1883, Pal. Theil, 90, xxiv (1), 10a–d.
  - **concava** (Lamarck). [*Orbulites*, 1816.]
  - — [Defrance]. Gümbel, Anleit. Geol. Beob. Alpenreisen, Zeitschr. D. & O. Alpenver., Beilage, 1878, 132, fig. 45, 5.
  - **convexo-convexa**, Catullo. Dei Terreni sed. sup. Venezia, 1857, 25, i, 7.
  - **creplini**, Hagenow. N. Jahrb. 1839, 289. [= *Myriopora*, *fide* Bronn, Index Pal. 1848, 768.]
  - **incertus**, Karrer. Novara-Exped., Geol. Theil, I, 1864, 79, xvi, 10.
  - **lenticularis**, sp. nov.?, Karsten. Amtlicher Ber. 32 Vers. deutsche Nat. Aerzte, Wien, 1856, (1858), 114, vi, 6a, b, c, d, e. [v. *Orbitulina venezuelana*.]
  - **lenticulata** (Lamarck). Gümbel, Anleit. geol. Beob. Alpenreisen, Zeitschr. D. & O. Alpenver., Beilage, 1878, 131, fig. 43, 10. [*Orbulites*, 1816.]
  - **macropora** (Lamarck). Goldfuss, Petrif. German. I, 1826–33, 41, XII, 8. [*Orbulites*, 1816.]
  - — — Reuss, in Geinitz, Grundr. Verstein. 1845–1846, 626, xxiii, 51.
  - — — Hagenow, Bryozoen Maestrichter Kreide, 1850, 103, XII, 17a–c.
  - **marginatus**, Lam. Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 27, pl. iii. [*Orbulites marginalis*, 1816.]
  - **nummuliformis**, Catullo. Dei Terreni sed. sup. Venezia, 1857, 27, i, 12. [*Stromatopora* of Lonsdale, fig'd by Pictet, Traité de Pal. IV, 1846, 321, XVI, 14.]
  - **pharaonum**, Schwager. Palaeontographica, XXX, 1883, Pal. Theil, 91, xxiv (1), 9a bis, d.
  - **praecursor**, Gümbel. Neues Jahrbuch, 1872, 256, vii, 1–10.
  - **pratii**, Michelin. Catullo, Dei Terreni sed. sup. Venezia, 1857, 26, i, 9. [Prattii on pl.]. [*Orbitolites*, 1840.]
  - **roncana**, Catullo. Dei Terreni sed. sup. Venezia, 1857, 25, i, 8.
  - **tenuissimus**, Carpenter. Abich, Geol. Forsch. Kaukas. Ländern, 1882, 243, fig. 41. [v. *Orbitolites*.]
  - **texanus**, Roemer. Kreidebild. Texas, 1852, 86, X, 7a, b, c, d.
  - Faujas de St. Fond, Hist. Nat. Mont. St. Pierre Maestricht, 1799, 186, xxxiv, 1–4.

\* This term was first used by Faujas de St. Fond, Hist. Nat. Mont. St. Pierre Maestricht, 1799, pp. 186, 187. He quotes *Orbitolites*, Lamarck, Syst. 1801, p. 376, and we can only presume that he was favored by Lamarck's opinion on his specimens.

- ORBITULITES**, Brönn, Klassen Ordn. Thier-Reichs, I, 1859, 72, vii, 1A-E.  
 [Structural.]
- Steinmann, Elem. Paléont. I, 1888, 24, fig. 5.
- ? Schauroth, see under *Nummulina polygyrata*, Rüt.
- ORBITULOIDES reticulata**, Owen. Rep. Mineral Lands, Niagara Group, 1840. [Referred by S. A. Miller, Catal. Amer. Pal. Foss. 1877, to *Receptaculites*.]
- ORBULINA**, d'Orbigny, 1839. De la Sagra, Hist. Phys. etc. Cuba, 1839, II (2), "Foraminifères," p. 3; Brady, Report Challenger, 1884, p. 606.
- **aterrima**, Costa. Fauna Regno Napoli, 1838,\* Foraminiferi, 4, iii, 7. [=? *Lagena*.]
- **costata**, Kübler & Zwingli, Neujahrsblatt Burgersbibl. Winterthur, 1866, 10, ii, 25. [= holothuroid spicule.]
- **faveolata**, Seguenza. See *O. foveolata*.
- **foveolata**, Seguenza. Foram. monotal. miocen. Messina, 1862, 37, i, 1 and 2.
- **granulata**, Costa. Atti Accad. Pontaniana, VII, fas. 2 (1856), 116, xi, 2-4; xv, 8 [error for 14].
- — — v. *a*, *atra*, 117, xi, 2.
- — — v. *b*, *impressa*, 117, xi, 4 [3 in error on plate].
- — — v. *c*, *areolata*, 117, xi, 3 [4 in error on plate].
- **irregularis**, Terquem, Cinquième Mém. Foram. Oolithique, 1883, 343, xxxviii, 1.
- — — — — Terquem, Mém. Soc. géol. France, [3], IV, 1886, 5, i, 1.
- **liaatica**, Terq. Mem. Ac. Imp. Metz, XLII, 1862, 432, v, 4.
- **macropora**, Terquem. Bull. Soc. géol. France, [3], IV, 1876, 481, xv, 1. [= Foraminiferal.]
- — — — — Terquem, Cinquième Mém. Foram. Oolithique, 1883, 344, xxxviii, 3.
- **micropora**, Terquem. Mém. Soc. géol. France, [3], IV, 1886, 5, i, 3.
- **millepora**, Terquem, Cinquième Mém. Foram. Oolithique, 1883, 344, xxxviii, 2. [v. *O. sparsipora*.]
- **neojurensis**, Karrer. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 368, iii, 10. [v. *Globigerina*.]
- — — Uhlig, Jahrb. k. k. geol. Reichs, XXXIII, 1883, 760, ix, 20.
- **nitida**, Terquem. Bull. Soc. Zool. France, XI, 1886, 330, xi, 1.
- **petraea**, Giebel. Deutschl. Petref. 1852, p. 255, no descr. or fig.
- **porosa** (Terq.). Brady, Report Challenger, 1884, 611, lxxxii, 27. [*Globulina*, 1858.]
- **punctata**, Terq. Mem. Ac. Imp. Metz, XLII, 1862, 432, v, 5.
- — — — — Terq. & Berth., Mém. Soc. géol. France, [2], X, 1875, ii, i (xi), 1.
- **rugosa**, Terq. Mem. Ac. Imp. Metz, XLIV, 1863, 377, vii, 3.
- **sparsipora**, Terquem. Mém. Soc. géol. France, [3], IV, 1886, 5, i, 2. [T. gives reference to "Mém. Foram. Oolithique, p. 344." This is erroneous; v. *O. millepora*.]
- **tuberculata**, Costa. Fauna Regno Napoli, Naples, 1838,\* Foraminiferi, 4, i, 8a, A. [v. *Globigerina*.]
- — — — — Costa, Atti Accad. Pontaniana, VII (2), 1886, 116, xi, 1a, A.
- **universa**, d'Orbigny. Barker-Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, ii, pt. 2, "Foraminifères," 123, i, 1. [v. *Globigerina*; and *Orbiculina*.]
- — — — — D'Orb., in de la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 3, i, 1; also in Spanish, 1840, p. 35, same pl. and fig.
- — — — — Costa, Fauna Regno Napoli, 1838,\* Foraminiferi, 3, i, 9a, A, and Prod. Paléont. iii, p. 190 [= Atti Acc. Pontan. 1856, q. v.]

\* See Sherborn, Bibl. Foram. 1888, p. 32.

- ORBULINA universa**, d'Orbigny. Pietet, Traité de Paléont. iv, 1846, 218, xii, 1; and 2d ed. 1857, 483, cix, 2.  
 —————— D'Orbigny, Foram. Fossiles Vienne, 1846, 22, i, 1.  
 —————— D'Orbigny, Cours élém. Paléont. etc. I, 1849, 192, fig. 315; II, fas. 2, 1852, 815, fig. 621.  
 —————— Harting, Magt van het Kleine, 1849, iii, fig. 1; and 1866, 100, fig. 36; German by Dr. A. Schwartzkoff, 1851, 81.  
 —————— Bailey, Smithsonian Contrib. II, 1851, 9, pl., 1.  
 —————— Costa, Atti Accad. Pontaniana, VII, fas. 2 (1856), 114, xi, 5a, A, B.  
 —————— Dawson, Canad. Nat. II, 1857, 422, vii, 21. [= *Lag. globosa*, W. & J.]  
 —————— Williamson, Recent British Foram. 1858, 2, i, 4.  
 —————— Mackie, Recreative Science, I, 1859, 147, fig. 8.  
 —————— Carpenter, Parker, & Jones, Introd. Foram. 1862, 176, xii, 8.  
 —————— Mangin, Mystères Océan, 1864, 177, fig. 10.  
 —————— Parker & Jones, Phil. Trans. 1865, 364, xvi, 13 and 14.  
 —————— Reuss' Models, No. 74, 1865. (Catal., No. 92, 1861.)  
 —————— Mackie, Science Gossip, 1867, 129, fig. 104.  
 —————— Figuer, Ocean World, [1873], p. 84, fig. 17.  
 —————— Wy. Thomson, Depths of Sea, 1873, 23, fig. 3.  
 —————— Toulou, Mittb. geogr. Ges. Wien, XVIII, 1875, 165, pl., 12.  
 —————— Wy. Thomson, Proc. Roy. Soc. XXIII, 1875, 35, ii.  
 —————— Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 67, \* vii, 1; (and Mém. Soc. Dunkerquoise).  
 —————— Anon., Amer. Journ. Micros. I, 1876, 128, figs. 2 and 3.  
 —————— Zittel, Handbuch Palaeont. I, 1876, 88, fig. 24<sup>1</sup>.  
 —————— Tate & Blake, Yorkshire Lias, 1876, 472, xviii, 32.  
 —————— Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 26, pl., 45.  
 —————— Wy. Thomson, Voyage Challenger, 1877, II, 215, fig. 47.  
 —————— Hopkins, Execut. Doc. 45 Congress, Sess. 3, IV, Rpt. pt. 2, App. W, 1878-79, 885, ii, 73.  
 —————— Nicholson, Manual Palaeont. 1879, i, 100, fig. 14.  
 —————— Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 201, vii, 30.  
 —————— Abich, Geol. Forsch. Kaukas. Ländern, 1882, 241, fig. 40.  
 —————— Terquem, Mém. Soc. géol. France, [3], II, 1882, 24, 1 (ix), 1.  
 —————— Schlumberger, F. Jeun. Nat., Jany. 1882, i, 1.  
 —————— Jones, in Microgr. Diet. ed. 4, 1883, 557, xxiv, 1.  
 —————— Schlumberger, Comptes Rendus, XCVIII, 1884, 1002, figs. 1 and 2; and Ann. Mag. Nat. Hist. [5], XIV, 1884, 69.  
 —————— Brady, Report Challenger, 1884, 608, lxxviii; lxxx, 8-26; lxxxii, 1-3; double specimens, lxxxii, 20 and 21; lxxxii, 2 and 3.  
 —————— Woodward & Thomas, 13 Ann. Rep. Geol. N. H. Survey Minnesota, for 1884 (1885), 174, IV, 25-31.  
 —————— Gümbel, Geol. Bayern, Th. I, Lief. 2, 1885, fig. 266, 14.  
 —————— Quenstedt, Handbuch Petref. ed. 3, Abth. V (1885), 1049, lxxxvi, 1.  
 —————— Sherborn & Chapman, Journ. R. Mier. Soc. [2], VI, 1886, 756, xvi, 9.  
 —————— Hogg, Microscope, 1886, 384, iii, 75, 76, and 78.  
 —————— Malagoli, Boll. Soc. geol. Ital. VI, 1887, 522, xiii, 9.  
 —————— Agassiz, Three Cruises "Blake," II, 1888, 166, fig. 510 and 512.  
 —————— Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 225, xlvi, 7, 8, 14.  
 —————— D'Orbigny. See *Sphaerulae vitrae*.

- ?ORBICULINA**, Ledermüller, Mikrosk. Gemüths. 1763, 8, iv, *n*, *m*.  
 —— Wallich, North Atlantic Sea-bed, pt. I, 1862, no descr. vi, 10, 13–15.  
 [Structural.]  
 —— Alcock, Mem. Lit. Phil. Soc. Manchester, [3], III, 1868, iv, 1 and 2.  
 —— Chimmo, Bed of Atlantic, [1870], 25, ix, 3.  
 —— Wallich, Deep Sea Researches, Biol. Globigerina, 1876, 1, etc. plate, 10, 13–15. [Structural.]  
**?—** Terquem, Bull. Soc. géol. France, [3], VIII, 1880, 417, xi, 6a–c. [Spinous spheres.]  
 —— showing within a small prickly *Globigerina*. Schacko, Arch. f. Naturgesch. (Wiegmann's), 1883 (49th Jahrg.), i, 429 etc. xiii, 1.  
 —— Neumayr, Stämme d. Thierreiches, I, 1889 (8), 187, fig. 28b.  
 —— (*hispida* varr.) see *Sphaerula hispidae*.  
 —— v. *Miliola*.
- "**Orbuline lituola**." Carpenter, The Microscope, 5th ed. 1875, 533, fig. 273a, b.  
 [= *Thurammina papillata*, q. v.]
- ORBULITES**, Lamarck, 1812. Extrait Cours Zoöl. 1812, p. 26; and Syst. Anim. s. Vert. II, 1816, p. 196. [Non 1801. See Bronn, Index Pal. 1848, p. 850.]
- **complanata**, Lamarck. Syst. Anim. s. Vert. II, 1816, p. 196. [*Orbitolites*, 1801.]  
 —— —— —— Schweigger, Beob. Naturh. Reisen, 1819 [131], vi, 59.  
 —— —— —— Lamouroux, Exposit. méthod. Ordre Polypiers, 1821, 45, lxxii, 13–16.  
 —— **concava**, Lamarck. Syst. Anim. s. Vert. II, 1816, p. 197. [*Orbitolites*, 1801.]  
 —— **lenticulata**, Lamarck. Syst. Anim. s. Vert. II, 1816, p. 197.  
 —— —— —— Lamouroux, Exposit. méthod. Ordre Polypiers, 1821, 45, lxxii, 13–16.  
 —— **macropora**, Lamarck. Syst. Anim. s. Vert. II, 1816, 197, No. 5.  
 —— **marginalis**, Lamarck. Syst. Anim. s. Vert. II, 1816, p. 196, No. 1.  
 —— **planulatus**, Blainville. Dict. Sci. Nat. xxxvi, 1825, 295; Atlas, Zooph. xlvi, 2. [= *Orbitolites complanata*.]  
 —— —— Blainville, Actinologie, 1834, lxxii, 2.  
 —— see *Orbitalina*; *Orbiculina*; *Orbitolites*; *Orbitalites*; *Orbiculites*; *Orbitalina*.
- OREAS**, Montfort, 1808. Conch. Syst. I, 1808, p. 95.  
 —— **auricularis**, Blainville. Dict. Sci. Nat. xxxii, 1824, 188; xxxvi, 1825, 155; Atlas, Conch. xix, 4. [= *Crist. acutauricularis* (F. & M.).]  
 —— —— Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 384, x, 4.  
 —— **subulatus**, Montfort. Conch. Syst. I, 1808, 95, 24th genre. [= *Crist. acutauricularis*.]
- OROBIAS**, Eichwald, 1860. Lethaea Rossica, I, 1860, 352. [= *Nummulina*.]  
 —— **aequalis**, Eichwald. Lethaea Rossica, I, 1860, 353, xxii, 16. [See *Fusulina*.]  
 —— **antiquior** (Rouiller & Vosinsky). Eichwald, Lethaea Rossica, I, 1860, 353, no fig. [= *Nummulina*, 1849.]
- ORTHOCERA**, Lamarck, 1801. Syst. Anim. s. Vert. 1801, p. 103.  
 —— **acicula**, Lamarck. Hist. Anim. s. Vert. VII, 1822, p. 594, No. 5. [v. also *Nodosaria* and *Dentalina*.]  
 —— **costata** [Montagu]. Brown, Illustr. Conch. Gt. Brit. 1827, fly-leaf, lii, 17 and 24. [= *Nautilus*, 1803.]  
 —— —— —— Brown, Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 2, i, 17.  
 —— **fascia** (Linn.). Lamarck, Hist. Anim. s. Vert. VII, 1822, p. 594. [= *Nautilus*, 1758.]

- ORTHOCEERA jugosa** [Montagu]. Brown, Illustr. Conch. Gt. Brit. 1827, fly-leaf, lii, 13. [*Nautilus*, 1803.]  
 ——— ——— ——— Brown, Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 2, i, 13.  
 ——— ——— ——— legumen [Linn.]. Lamarck, Ency. Méthod., "Vers," n. d. (pls. 1827), 465, f. 3. (P. & J. quote pt. 23, 1816.) [*Nautilus*, 1758.]  
 ——— ——— ——— Lamarck, Hist. Anim. s. Vert. VII, 1822, p. 595. [*Nautilus*, 1758.]  
 ——— ——— ——— Brown, Illustr. Conch. Gt. Brit. 1827, fly-leaf, lii, 21 and 23.  
 ——— ——— ——— linearis [Montagu]. Brown, Illustr. Conch. Gt. Brit. 1827, fly-leaf, lii, 14 and 15. [*Nautilus*, 1808.]  
 ——— ——— ——— Brown, Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 2, i, 14 and 15.  
 ——— ——— ——— obliqua (Linn.). Lamarck, Hist. Anim. s. Vert. VII, 1822, p. 594. [*Nautilus*, 1758.]  
 ——— ——— ——— radicula [Linn.]. Brown, Illustr. Conch. Gt. Brit. 1827, fly-leaf, lii, 28 and 25. [*Nautilus*, 1758.]  
 ——— ——— ——— raphanistrum (Linn.). Lamarck, Hist. Anim. s. Vert. VII, 1822, p. 594. [*Nautilus*, 1758.]  
 ——— ——— ——— raphanoïdes, Lamarck. Syst. Anim. s. Vert. 1801, p. 103. [v. *O. raphanus*.]  
 ——— ——— ——— raphanus [Linn.]. Lamarck, Ency. Méthod., "Vers," n. d. (pls. 1827), 465, f. 2. (P. & J. quote pt. 23, 1816.) [*Nautilus*, 1758.]  
 ——— ——— ——— [Lam.]. Brönn, Syst. urweltl. Conchyl. 1824, 9, i, 2 [error for 1].  
 ——— ——— ——— Crouch, Introd. Lamarck, 1827, 39, xx, 5.  
 ——— ——— ——— Brown, Conch. Text-book, 1839, 65, x, 28.  
 ——— ——— ——— recta [Montagu]. Brown, Illustr. Conch. Gt. Brit. 1827, fly-leaf, lii, 16, 19, 20. [*Nautilus*, 1803.]  
 ——— ——— ——— Brown, Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 2, i, 16, 19, 20.  
 ——— ——— ——— septemcostata, Brown. Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 2, i, 24. [= Montagu, pl. 19, f. 2.]  
 ——— ——— ——— spinulosa [Montagu]. Brown, Illustr. Conch. Gt. Brit. 1827, fly-leaf, lii, 26. [*Nautilus*, 1808.]  
 ——— ——— ——— subarcuata, Brown. Illustr. Conch. Gt. Brit. 1827, fly-leaf, lii, 18. [v. also *Nodosaria*.]  
 ——— ——— ——— Woodward, Outline Geology Norfolk, 1833 [60], vi, 24. [Flint cast of interior of a *Nodosaria*.]

**ORTHOCEERAS, auct.**

- auris, Soldani. Testac. I, pt. 2, 1791, p. 98, pl. 104A. [*Planularia auris*, Defr. D'Orb., Ann. Sci. Nat. VII, 1826, p. 260, 6.] [= *Cristellaria*, q. v.]  
 ——— ——— ——— baculus, Sold. Testac. II, 1798, p. 16, pl. 2v, x. [*Nod. glabra*, d'O. Ann. Sci. Nat. VII, 1826, p. 253, no. 12.]  
 ——— ——— ——— corniculum, Sold. Testac. I, pt. 2, 1791, p. 98, pl. 105K. [*Nod. (Dent.) cornicula* [error for *corniculum*, Jones MS.], d'O. Ann. Sci. Nat. VII, 1826, p. 255, 47.]  
 ——— ——— ——— cuspis, Sold. Testac. II, 1798, 34, pl. 9P. [*Frondic. digitata*, d'O. Ann. Sci. Nat. VII, 1826, p. 256, 6.]  
 ——— ——— ——— Testac. II, 1798, 34, pl. 9Q, R. [*Frondic. striata*, d'O. Ann. Sci. Nat. VII, 1826, p. 256, 3.]  
 ——— ——— ——— Testac. II, 1798, 34, pl. 9S. [*Frondic. pupa*, d'O. Ann. Sci. Nat. VII, 1826, p. 256, 4.]  
 ——— ——— ——— Testac. I, pt. 2, 1791, p. 98, pl. 105L. [*Nod. (Dent.) aciculata*, d'O. Ann. Sci. Nat. VII, 1826, p. 255, 41.]  
 ——— ——— ——— decussata, Perry. Conchology, 1811, pl. lii, fig. 2.  
 ——— ——— ——— farcimen, Sold. Testac. II, 1798, 35, pl. 10h-m. [*Nodos. ovicula*, d'O. Ann. Sci. Nat. VII, 1826, 252, 6.]

- OETHOCERAS** *farcimen*, Soldani. Testac. I, pt. 2, 1791, p. 98, pl. 105*O.*  
 [ *Nod. (Dent.) communis*, d'O. Ann. Sci. Nat. VII, 1826, p. 254, 35.]
- *foeniculum*, Sold. Testac. I, pt. 2, 1791, p. 91, pl. 94*Z.* [ *Nodos. affinis*, d'O. For. Foss. Vienne, 1846, p. 39, i, 36-39.]
- *gazelllicorne*, Spalowsky. Testac. 1795, 10, i, 10.
- *intortum*, Sold. Testac. I, pt. 2, 1791, p. 98, pl. 105*V.* [ *Nod. (Dent.) obliqua*, d'O. Ann. Sci. Nat. VII, 1826, p. 254, 36.]
- *mammillare*, Sold. Testac. I, pt. 2, 1791, p. 92, pl. 97*ee.*  
 [ *Nod. (Dent.) arcuata*, d'O. Ann. Sci. Nat. VII, 1826, p. 254, 38.]
- *marinum verissimum et quidem species ejus quattuor*.  
 Breyn, in Giuliani's Mem. sopra Fis. Ist. Nat. Valent. 1743, p. 185, plate, fig. D. [Reproduced by Klein, Vers. Abh. Nat. Ges. Dantzig, Th. 2, 1754, pl. i, the 3d fig. from the right.]
- *minimum*, etc. [4 varieties described; 2 referred to *Plancus*, and one to Breyn.] = “ *N. raphanus* [Linn.], 1164; *N. obliquus* [Linn.], 1163; *N. fascia* [Linn.], 1164; *N. legumen* [Linn.], 1164; *N. siphunculus* [Linn.], 1164; MS. note in Brit. Mus. Copy.” Gualteri, Index Test. Conchyl. 1742, tab. xix, L to S.
- *monile*, Sold. Testac. II, 1798, 35, pl. 10*b*, c. [ *Nod. pyrula*, d'O. Ann. Sci. Nat. VII, 1826, p. 253, 13.] [v. *Nodosarina*.]
- *obliquum*, Sold. Testac. I, pt. 2, 1791, p. 98, pl. 105*N.* [ *Nod. (Dent.) carinata*, d'O. Ann. Sci. Nat. VII, 1826, p. 255, 39.]
- *pupa*, Sold. Testac. I, pt. 2, 1791, p. 99, pl. 108*E, F.* [ *Lingul. soldanii*, d'O. Ann. Sci. Nat. VII, 1826, p. 257, 3. = *Vulvulina capreolus*, D'O. The whole plate (108) is devoted to this species.]
- *quasi ex globulis compositum*. Breyn, in Giuliani's Mem. sopra Fis. Ist. Nat. Valent. 1743, p. 184, etc. plate, figures A and B. [Reproduced by Klein, Vers. Abh. Nat. Ges. Dantzig, Th. 2, 1754, pl. i, the 2 figs. on right side.]
- *varietas raphani vel raphanistri*, Sold. Testac. I, pt. 2, 1791, p. 97, pl. 103*I.* [ *Nod. (Dent.) curvieri*, d'O. Ann. Sci. Nat. VII, 1826, p. 255, 45.]
- *rapistrum* (num *raphani vel raphanistri species?*), Sold. Testac. I, pt. 2, 1791, p. 98, pl. 104*i* (*I*). [ *Nodos. soldanii*, d'O. Ann. Sci. Nat. VII, 1826, p. 254, 10.]
- *scalaria*, Perry. Conchology, 1811, pl. lli, fig. 1.
- *serrula*, Sold. Testac. I, pt. 2, 1791, p. 99, pl. 106*aa, bb.* [ *Marginulina lituus*, d'O. Ann. Sci. Nat. VII, 1826, p. 259, 11.]
- *sublituus*, Sold. Testac. I, pt. 2, 1791, p. 98, pl. 104*F, G.* [ *Marginulina sublituus*, d'O. Ann. Sci. Nat. VII, 1826, p. 259, 9.]
- *tuberosum*, Sold. Testac. I, pt. 2, 1791, p. 99, pl. 106*gg.* [ *Dimorphina tuberosa*, d'O. Ann. Sci. Nat. VII, 1826, p. 264, 1.]
- *turbinatum et striatum exiguum*. Breyn, in Giuliani's Mem. sopra Fis. Ist. Nat. Valent. 1743, p. 185, plate, fig. C. [Reproduced by Klein, Vers. Abh. Nat. Ges. Dantzig, Th. 2, 1754, pl. i, the 4th fig. from the right.]
- *vaginulæ species*, Sold. Testac. I, pt. 2, 1791, p. 97, pl. 103*M.* [ *Vaginulina marginata*, d'O. Ann. Sci. Nat. VII, 1826, p. 258, 7.]
- Sold., Testac. I, pt. 2, 1791, 92, pl. 96*T.* [ *Nod. semistriata*, d'O. Ann. Sci. Nat. VII, 1826, 252, 9.]
- ? Sold., Testac. I, pt. 3, 1795, p. 239, pl. 162*K.* [ *Nod. (Dent.) scorpiurus*, Montf. D'Orb., Ann. Sci. Nat. VII, 1826, p. 255, 40.] [ *Lituola scorpiurus*.]
- Sold., Testac. I, pt. 2, 1791, p. 91, pl. 94*S.* [ *Nod. (Dent.) substriata*, d'O. Ann. Sci. Nat. VII, 1826, p. 255, 46.]
- ORTHOCHERATA** [? Soldani, 1780].
- *brevisima in longum striata, globulosa, conica, nec tamen perfecte acuminata*, Soldani. Sagg. Oritt. 1780, 107, v, 40X.  
 [= *Nodos. bacillum*.]

- ORTHOCHERATA** conico-cylindroidea, Soldani. Sagg. Oritt. 1780, 107, v, 37P. [= *Dentalina*.]
- crystallina, seu vere arundinea, Soldani. Sagg. Oritt. 1780, 107, vi, 42E. [= *Dentalina*.]
- perfecte conica in acutum apicem definitia, circum nodosa striata, etc., Soldani. Sagg. Oritt. 1780, 107, v, 37Q. [= *Nod. bacillum*.]
- perfecte globularia, quorum alia vitrea, lævis, . . . vel costata costis distantibus, lucidissima, . . . vel minima et microscopica . . ., Soldani. Sagg. Oritt. 1780, 108, vi, 43F-L. [43F, G, K, L, = *Nodos. radicula*; H = *Nodos. bacillum*; I = *Dentalina*.]
- seu tubuli concamerati, recti, longitudinaliter striati, cylindroidei, Soldani. Sagg. Oritt. 1780, 106, v, 37M, N, O. [= *Nodos. bacillum*.] [N = *D. obliquistriata*.]
- unilocularia, vel multilocularia, lævia, lucida . . ., Soldani. Sagg. Oritt. 1780, 108, vi, 45O-S; vii, 45T-Z and A. [45O = *Gland. laevigata*; P, R = *Polymorphina*; Q = *Sphaer. bulloides*; S = *Biloculina*; T, Y = Q; V = *Polymorph. communis*; X = *Polymorph. gutta*; Z = *Nodos. radicula*; A = *Polymorph. globularis*.]
- vaginulam gladii referentia, Soldani. Sagg. Oritt. 1780, 108, vi, 44M, N. [= *Vagin. legumen*.]
- ORTHOCHERATIA**, Soldani, 1780.
- anthocenæ, Soldani. Testaceographia, II, 1798, 15, pl. 2N. [= *Nodos. glabra*.]
- — — Sold., Testac. II, 1798, 15, pl. 2O. [*Nodos. nitida*, d'O. Ann. Sci. Nat. VII, 1826, 254, 33.]
- baculi, Sold. Testac. I, 2, 1791, 96, pl. 102B. [*Nod. interrupta*, d'O. Ann. Sci. Nat. VII, 1826, 252, 11.]
- — — Sold., Testac. I, pt. 2, 1791, 96, pl. 103D. [*Bigenerina laevigata*, d'O. Ann. Sci. Nat. VII, 1826, 261, 3.]
- conico-cylindroidea, Sold. Sagg. Oritt. 1780, 107, pl. 5, 37m, M. [= *Nodos. affinis*, d'O.]
- filiformia, Sold. Testac. II, 1798, 35, pl. 10d. [*Nodos. flexuosa*, d'O. Ann. Sci. Nat. VII, 1826, 254, 32.]
- filiformia aut capillaria, Sold. Testac. II, 1798, 35, pl. 10f, g. [*Nodos. nodosa*, d'O. Ann. Sci. Nat. VII, 1826, 254, 31.]
- — — Sold., Testac. II, 1798, 35, pl. 10e. [*Nod. filiformis*, d'O. Ann. Sci. Nat. VII, 1826, 253, 14.]
- flosculi, Sold. Testac. I, pt. 2, 1791, 91, pl. 95A. [*Nodos. cancellata*, d'O. Ann. Sci. Nat. VII, 1826, 254, 29].
- — — Sold., Testac. II, 1798, 34, pl. 9L. [*Dentalina floscula*, d'O. For. Foss. Vienne, 1846, 50, pl. 2, 16, 17.]
- — — Sold., Testac. I, pt. 2, 1791, 91, pl. 95B-M. [*Nodos. longicauda*, d'O. Ann. Sci. Nat. VII, 1826, 254, 28.]
- hispida, Sold. Testac. II, 1798, 36, pl. 11n-z, A and B. [*Nod. hirsuta*, d'Orb.]
- lævia, etc., Sold. Testac. I, pt. 2, 1791, 92, pl. 97bb [?]. [*Dentalina inornata*, d'O. For. Foss. Vienne, 1846, 44, i, 50, 51. D'Orbigny's reference is wrong.]
- lituitata, Sold. Testac. I, pt. 2, 1791, 95, pl. 100bb, cc. [*Marginulina laevigata*, d'O. Ann. Sci. Nat. VII, 1826, 259, 10.]
- pupa, Sold. Testac. I, pt. 2, 1791, 99, pl. 108D. [*Vulvulina elegans*, d'O. Ann. Sci. Nat. VII, 1826, 264, 3.]
- — — Sold., Testac. I, pt. 2, 1791, 99, pl. 108vv, xx. [*Vulvulina pupa*, d'O. Ann. Sci. Nat. VII, 1826, 264, 2.]
- quasi hispida, Sold. Testac. II, 1798, 15, pl. 2P. [*Nod. hirsuta*, d'O. Ann. Sci. Nat. VII, 1826, 252, 7.]

- ORTHOCHERATIA** *raphanus*, *raphanistrum*, et *rapistrum*, Sold. Testac. I, pt. 2, 1791, 91, pl. 94*N*, *P*, *Q*, *R*, *X*, *Y*. [*N* = true *N. raphanus*; *R* = true *N. obliqua*.] [*Marginulina raphanus* (Linu.). D'Orb., Ann. Sci. Nat. VII, 1826, 258, 1.]
- *tuberosa*, Sold. Testac. I, pt. 2, 1791, 99, pl. 107*nn*. [*Polymorphina soldanii*, d'O. Ann. Sci. Nat. VII, 1826, 265, 12.]
- — — *Sold.* Testac. I, pt. 2, 1791, 99, pl. 107*kk*. [*Polymorphina tuberosa*, d'O. Ann. Sci. Nat. VII, 1826, 265, 6.]
- *vaginula*, Sold. Testac. II, 1798, 14, pl. 1*F*, *G*. [*Vaginulina caudata*, d'O. Ann. Sci. Nat. VII, 1826, 258, 8.]
- *villosa seu rudia*, Sold. Testac. I, pt. 2, 1791, 96, pl. 101*ll-oo*. [*Marginulina hirsuta*, d'O. Ann. Sci. Nat. VII, 1826, 259, 5.]
- *vitrea in longum striata, pellucida, minuscula*, Soldani. Sagg. Oritt. 1780, 107, v, 41*Z*, *Y*, *A*, *B*, *C*, *D*. [41*Y* = *Dent.*; *Z*, *A*, *B*, *C* = *Nodos*; *D* = *Dentalina*.]
- *zoophytica elongata*, Sold. Testac. I, pt. 2, 1791, 92, pl. 97*hh*, *mm*. [*Marginulina carinata*, d'O. Ann. Sci. Nat. VII, 1826, 259, 8.]
- — — *minuscula*, Sold. Testac. I, pt. 2, 1791, 93, pl. 98*A*. [*Nodos. dubia*, d'O. Ann. Sci. Nat. VII, 1826, 252, 10.]
- — — *subcordiformia*, Sold. Testac. I, pt. 2, 1791, 94, pl. 99*N*. [*Lingul. alata*, d'O. Ann. Sci. Nat. VII, 1826, 257, 2.]
- — — *Sold.* Testac. I, pt. 2, 1791, 91, pl. 94*T*. [*Nod. rapa*, Lam. D'Orb., Ann. Sci. Nat. VII, 1826, 253, 27. = *Nodos. raphanistrum* (Linn.).]
- — — *Sold.*, Testac. I, pt. 2, 1791, 91, pl. 94*V*. [*Nod. scalaris*, d'O. Ann. Sci. Nat. VII, 1826, 253, 18.]
- ORTHOCHERATITE**, Parkinson. Org. Rem. III, 1811, 117, viii, figs. 16 and 17. [= *Nodos. bacillum*.]
- ORTHOCHERATITEN**, Martini. Neues Syst. Conchyl. I, 1769, 4, pl. i, *A* to *I*, in text.
- ORTHOCHERINA**,\* d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 255; "Foram." in De la Sagra, Hist. etc. Cuba, 1839, 47.
- *clavulus* (Lamarck). See *Nodosaria*.
- — — D'Orbigny, Ann. Sci. Nat. VII, 1826, 255, No. 48; and Modèles, No. 2, 1826.
- — — Reuss, in Geinitz, Grundr. Verstein. 1845-46, 652, xxiv, 26.
- — — Mantell, Pictorial Atlas Foss. Rem. 1850, 143, lxii, 10.
- — — Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1050, lxxxvi, 8.
- *ewaldi*, Karsten. Amtlicher Ber. 32 Vers. deutsch. Nat. Aerzte, 1856 (1858), 114, vi, 3*a*, *b*, *c*; and Géol. Colomb. bolivarienne, 1886, 62, vi, 3*a*, *b*, *c*. [Compare *Nodosaria millepunctata*, Toutkowsky, 1887.]
- [**OTHOCHERINA**] *hæringense*, Gumb. Tate & Blake, Yorkshire Lias, 1876, 469, xvii, 29, 29*a*. [*Rhabdogonium*, 1868.]
- *multicostata*, Bornemann. Lias v. Göttingen, 1854, 35, iii, 14*a*, *b*, 15*a*, *b*.
- (*Triplasia*) *murchisoni*, Reuss. Carpenter, Parker, & Jones, Introd. Foram. 1862, 166, xii, 7. [*Triplasia*, 1854.]
- *pupoides*, Bornemann. Lias von Göttingen, 1854, 35, iii, 16*a*, *b*.
- *quadrilatera*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 18, i, 11 and 12; also in Spanish, 1840, 47, same pl. and fig. [*O. quadrilatera* in Spanish ed.]
- — — D'Orbigny, Foram. Fossiles Vienne, 1846, 41, xxi, 3 and 4.
- — — Reuss' Models, No. 21, 1865. (Catal. No. 39, 1861.)
- — — Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 25, pl., 4.
- — — Jones, in Microgr. Dict. ed. 4, 1883, 559, xxiii, 36*a*, *b*.
- [**OTHOCHERINA**] *rhomboidalis*, Tate & Blake. Yorkshire Lias, 1876, 470, xvii, 30, 30*a*.
- *septentrionale*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 111, xiii, 5*a*, *b*; (and Mém. Soc. Dunkerquoise).

\* Given by d'Orbigny as a subgenus of *Nodosaria*.

- ORTHOCHERINA**, sp. Dunikowski, Denkschr. k. Ak. Wiss. Wien, **XLV**, Abth. 2, 1882, 194, vi, 79.  
 —— Pictet, Traité de Paléont. IV, 1846, 219, xii, 3.
- ORTHOCHEROS**, Mendes da Costa, Elem. Conch. 1776, 156, ii, 12 and 13.
- ORTHOPLECTA**, Brady, 1884. Report Challenger, 1884, 428.  
 —— clavata, Brady. See *Cassidulina*.
- ORYZARIA**, Defrance, 1820. Dict. Sci. Nat. **xvi**, 1820, 106.  
 —— boscii, Defrance. Dict. Sci. Nat. **xvi**, 1820, 106; Atlas, Zooph. **xlviii**, 4.  
 [= *Alveolina sabulosa*.] [See *Borelis*, and *Alveolina*.]  
 —— —— —— Bronn, Syst. urweltl. Pfianzenthiere, 1825, 31, vii, 17a-c.  
 —— —— —— Blainville, Actinologie, 1834, lxxiii, 4.
- OTHOCHERINA**, Tate & Blake, 1876, error for *Orthocerina*.
- OTOSTOMUM**, Ehrenberg, 1872. Monatsber. k. preuss. Ak. Wiss. Berlin, 1872, 276. [= ? *Bifaria*, Parker & Jones.]  
 —— strophoconus, Ehr. Monatsber. k. preuss. Ak. Wiss. Berlin, 1872, 287.
- “Ova of Polythalamia?” Bailey, Smithsonian Contrib. II, 1851, 13, pl. 49.
- OVEOLITES** *margaritula*, Montfort. Conch. Syst. II, 1810, 363, 91st genre.  
 [= *Ovalites* of Lamarck.]
- OVOLINA**, Terquem, 1866. [= *Lagena*.]  
 —— elliptica, Terquem. Six. Mém. Foram. Lias, 1866, 473, xix, 1.  
 —— trigonula, Terquem. Six. Mém. Foram. Lias, 1866, 473, xix, 2.
- OVULIDA**, de Folin. Le Naturaliste, Ann. 9, 1887, 114, fig. 8a, b, c. [= ? *Lagena*.]
- OVULINA**, Ehrenberg, 1854. Mikrogeologie, 1854, pls.  
 —— clava, Ehrenberg. Mikrogeologie, 1854, xxxii, ii, 2b. [= *Lag. clavata*, d'Or.]  
 —— caudigera, Seguenza. Foram. monotal. miocen. Messina, 1862, 39, i, 3.  
 [= *L. apiculata*, Rss.]  
 —— elegantissima, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 316, xii, 1.  
 —— lacryma, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 317, xii, 2.  
 —— ornata, Seguenza. Foram. monotal. miocen. Messina, 1862, 42, i, 12.  
 [= *L. squamosa*, Montf.]  
 —— ovata, Schafhärtl. Geogn. Unters. südbayer. Alpengeb. 1851, 48, xiii [misprinted xviii in text], fig. 1, [? an “oolitic granule,” not a Foraminifer].  
 —— perforata, Seguenza. Foram. monotal. miocen. Messina, 1862, 40, i, 4.  
 [= *L. apiculata*, Rss.]  
 —— radiata, Seguenza. Foram. monotal. miocen. Messina, 1862, 40, i, 5.  
 —— reticulata, Seguenza. Foram. monotal. miocen. Messina, 1862, 42, i, 11.  
 [= *L. melo*, d'Orb.]  
 —— striata, Seguenza. Foram. monotal. miocen. Messina, 1862, 40, i, 6 and 7. [= *Lagena striata*, d'Orb.]  
 —— sulcata, Seguenza. Foram. monotal. miocen. Messina, 1862, 41, i, 8-10.  
 [= *Lagena sulcata*, W. & J.]  
 —— tenuis, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 317, xii, 3, 3\*.
- OVULINA**, Gruber, 1884. Nova Acta k. Leop.-Carol. deutsch. Ak. Nat. **XLVI**, 1884, 497. [One of the *Diffugiae*.]  
 —— urnula, Gruber. Nova Acta k. Leop.-Carol. deutsch. Ak. Nat. **XLVI**, 1884, 497, viii, 19 and 20.
- OVULITES**, Lamarck, 1812. Extrait Cours Zool. 1812, 26; and Hist. Anim. s. Vert. II, 1816, 194; Munier-Chalmas, “Siphonées dichotomes,” Bull. Soc. géol. France, [3], VII, 1878, 661-670, figs. 1-4; [= *Coralliodendron*, a genus of calcareous Algæ. See Solms-Laubach, Einleit. Palaeophytologie, 1887, 38, etc.].
- elongata, Lamarck. Hist. Anim. s. Vert. II, 1816, 194.

- OVULINA elongata**, Lamarck. Ency. Méthod., "Vers," (1830), n. d., 479, f. 8 (pls. 1827), (P. & J. quote pt. 23, 1816).  
 ——— Defrance, Dict. Sci. Nat. xxxvii, 1825, 134 ; Atlas, Zooph. xlviij, 3.  
 ——— Blainville, Actinologie, 1834, lxxiii, 3.  
 ——— Carpenter, Parker, & Jones, Introd. Foram. 1862, 179, xii, 10.  
 ——— Schwager, Palaeontographica, xxx, 1883, Pal. Theil, 146, xxix (6), 22a, b.  
 ——— **globulosa**, Defrance. Dict. Sci. Nat. xxxvii, 1825, 134.  
 ——— **margaritula**, Lamarck. Hist. Anim. s. Vert. II, 1816, p. 194.  
 ——— Lamarck, Ency. Méthod., "Vers," n. d., 479, f. 7 (pls. 1827), (P. & J. quote pt. 23, 1816).  
 ——— Schweigger, Beob. Naturh. Reisen, 1819 [131], vi, 58.  
 ——— Defrance, Dict. Sci. Nat. xxxvii, 1825, 134 ; Atlas, Zooph. xlviij, 2 ; 1, 6.  
 ——— Blainville, Actinologie, 1834, lxxiii, 2 ; lxxx, 6.  
 ——— Reuss, in Geinitz, Grundr. Verstein. 1846, 634, xxiii, 59.  
 ——— [**margaritifera**], ——— Carpenter, Parker, & Jones, Introd. Foram. 1862, 179, xii, 9 and 10.  
 ——— [**margaritacea**], ——— Reuss' Models, No. 15, 1865 (Catal., No. 32, 1861).  
 ——— ——— Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 26, pl., 46.  
 ——— **pyriformis**, Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 146, xxix (6), 21a-d.  
 ——— Lamouroux, Exposit. méthod. Ordre Polypiers, 1821, 43, etc. pl. 71.  
 ——— Bronn, Syst. urwelt. Pflanzenthiere, 23.  
 ——— Goldfuss, Petrif. German. 1826, 40.  
? ——— Schwager, Novara-Exped., Geol. Theil II, 1866, 205, v, 26. [= chamber of *Nodos. intercellularis*, Br.]  
 ——— see *Oveolites*.  
**PALMULA**, Lea. Contrib. to Geology, 1833, 219. [= *Frondicularia*.]  
 ——— **sagittaria**, Lea. Contrib. to Geology, 1833, 219, vi, 228. [See *Frondicularia*.]  
**PANDERELLA involutina**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1862, 600, plate, fig. 1.  
**PARKERIA**, Carpenter & Brady, Phil. Trans. 1869, 724-736, lxxii-lxxvi. [*P. sphærica* is the only species yet described.]  
 ——— **sphærica**, Carpenter & Brady. Carter, Ann. Mag. Nat. Hist. [4], xix, 1877, 55, viii, 13-17.  
 ——— Steinmann, Palæontographica, xxv, 1878, 118.  
 ——— Haeckel, Das Protistenreich, 1878, 37, fig. 23.  
 ——— Carpenter, Ency. Brit. 9th ed. IX, 1879, Foraminifera, 376, 7.  
 ——— Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 208, v, 23.  
 ——— Carpenter, The Microscope, ed. 6, 1881, 565, fig. 323, 324.  
 ——— Nicholson, Annals Mag. Nat. Hist. [6], I, 1888, 1.  
 ——— Carter, ibid. 6, II, 1888, 45.  
 ——— Nicholson, Manual Palæont. ed. 3, 1889, i, 199.  
**PATELLINA**, Williamson, 1858. Recent British Foram. 1858, 46; Brady, Report Challenger, 1884, 633.  
 [Note. For further information concerning *Patellinae* refer to Carpenter, Parker, and Jones, Introd. Foram. 1862, 229 ; Ann. Mag. Nat. Hist. [3], XII, 1863, 212 ; Catal. Foss. Foram. Brit. Mus. 1882, 84. The following forms are therein referred to this genus : — *Orbitolina conica*, d'Arch. ; *O. conoidea*, Gras ; *Conulites cooki*, Carter ; *Cyclolina cretacea*, d'Orb. ; *Orbitolina discoidea*, Gras ; *O. gigantea*, d'Orb. ; *Madreporites lenticularis*, Blum. ; *Orbitolina mamillata*, d'Arch. ; *Cyclolina pedunculata*, Carter ; *Orbitolina plana*, d'Arch.]  
 ——— **annularis**, P. & J. Catal. Foss. Foram. Brit. Mus. 1882, 84. [*Orbitolina*, 1860.]

- PATELLINA** *bradyana*, Howchin. Journ. R. Microsc. Soc. 1888, 544, ix, 22-25.  
 —— *campanæformis*, Brady. Report Challenger, 1884, 635, cut, 19a, b, c.  
 —— *concava* (Lam.). Zittel, Handbuch Palaeont. Abth. I, 1876, 96, fig. 35.  
 [ *Orbulites*, 1816.]  
 —— *concava* (Lam.), var. *lenticularis*, Blumenbach. See *Madreporites*.  
 —— *corrugata*, Williamson. Recent British Foram. 1858, 46, iii, 86-89.  
 —— —— Carpenter, Parker, & Jones, Introd. Foram. 1862, 229, xiii, 16, 17; figs. xxxvii and xxxviii, in text.  
 —— —— Parker & Jones, Phil. Trans. 1865, 398, xv, 29a, 29b, 29c.  
 —— —— Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 31, iv, 3a, b; (and Mém. Soc. Dunkerquoise).  
 —— —— Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 26, pl. 58.  
 —— —— Bützschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 208, ix, 9.  
 —— —— Jones, in Microgr. Dict. ed. 4, 1883, 580, xxiv, 8.  
 —— —— Brady, Report Challenger, 1884, 634, lxxxvi, 1-7.  
 —— *dentata*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 123, xii (xx), 36, 37.  
 —— *major*, Hantken. Math. Nat. Ber. Ungarn, III, 1885, 885.  
 —— *minor*, Hantken. Math. Nat. Ber. Ungarn, III, 1885, 885.  
 —— *nitida*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 123, xii (xx), 38a-e.  
 —— *oolithica*, Terquem. Cinq. Mém. Foram. Oolithique, 1883, 382, xlvi, 3a, b, c, and 4.  
 —— —— Terq., Mém. Soc. géol. France, [3], IV, 1886, 59, vii, 2-4.  
 —— *plicata*, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 72, viii, 9a, b; (and Mém. Soc. Dunkerquoise). [See *Trochammina*.]  
 —— *punctata*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 128, xvi, 9a, b; (and Mém. Soc. Dunkerquoise).  
 —— *scutum*, v. Fritsch. Palaeontographica, Supp. III, Lief. 1, 1878, 144, xviii, 15; xix, 2.  
 —— *simplex*, P. & J. Catal. Foss. Foram. Brit. Mus. 1882, 84. [*Orbitolina*, 1860.]  
 —— *semiannularis*, P. & J. Catal. Foss. Foram. Brit. Mus. 1882, 84. [*Orbitolina*, 1860.]  
 —— *trochus*, v. Fritsch. Palaeontographica, Supp. III, Lief. 1, 1878, 145, xviii, 16; xix, 1.  
**PATROCLE** *querelans*, Montfort. Conch. Syst. I, 1808, 219, 55th genre.  
 [= *Crist. calcar (rotulata)*.]  
**PAVONIA**. See *Pavonina*, d'Orb.  
**PAVONINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 260; Brady, Report Challenger, 1884, 374.  
 —— *flabelliformis*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 260, x, 10, 11.  
 —— —— D'Orbigny, Modèles, No. 56, 1826.  
 —— —— Cuvier, Règne Animal, 1836-46, IX (pls. x), 35, xv, 13.  
 —— —— Smedley, Ency. Metrop. 1845, n. d., pl. "Mollusca?" 6.  
 —— —— D'Orbigny, Foram. Fossiles Vienne, 1846, 72, xxi, 9 and 10. [*P. flabelloides* on plate.]  
 —— *[flabelloides]*, —— Bronn, Klassen Ordn. Thier-Reichs, I, 1859, 72, vi, 13a, b.  
**[PAVONIA]** —— P., J., & B. [D'O., Modèles, No. 56], Ann. Mag. Nat. Hist. [3], XVI, 1865, 27, I, 22.  
 —— *[flabelloides]*, —— Reuss' Models, No. 57, 1865 (Catal., No. 28, 1861).  
 —— —— Brady, Q. Journ. Mier. Sci. xix, 1879, 282, viii, 29, 30.  
 —— *[flabelloides]*, —— Bützschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 204, viii, 13.  
 —— —— Möbius, Beitr. Meeresfauna Insel Mauritius, etc. 1880, 91, viii, 13-15.

- PAVONINA** flabelliformis, d'Orbigny. Brady, Report Challenger, 1884, 374, xlv, 17-22.
- italica, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 178, xvi, 26, 27, and 28. [See also *Orbitolites*, and *O. tenuissima*.]
- liburnica, Stache. Abh. k. k. geol. Reichs. XIII, 1889, 89, va, 15-19 (19 v. *trilobata*).  
— (Cuneolina, d'Orb.) triangularis, Mackie. Recreative Science, I, 1859, 148, fig. 29. [= *Cuneolina pavonia*, d'Orb.]
- PELORUS**, Montfort, 1808. Conch. Syst. I, 1808, 23, 6th genre. [= *Polyst. ambigua*.]
- PELOSINA**, Brady, 1879. Quart. Journ. Micr. Sci. XIX, 1879, p. 30; Brady, Report Challenger, 1884, 235.
- cylindrica, Brady. Report Challenger, 1884, 236, xxvi, 1-6.
- rotundata, Brady. Quart. Journ. Micr. Sci. XIX, 1879, 31, iii, 4 and 5. Büttschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 194, v, 7.
- variabilis, Brady. Quart. Journ. Micr. Sci. XIX, 1879, 30, iii, 1, 2, 3.
- Brady, Report Challenger, 1884, 235, xxvi, 7-9.
- De Folin, Bull. Soc. N. H. Toulouse, XV, 1881, 139; 8 new species proposed but not described!
- PENEROPLIS**, Mantell, 1850, misprint for *Peneroplis*.
- PENEROPLIS**, Montfort, 1808. Conch. Syst. 1808, 65th genre, 259; Brady, Report Challenger, 1884, p. 203.
- arietinus (Batsch). Brady, Report Challenger, 1884, 204, xiii, 18, 19, and 22. [*Nautilus*, 1791.]
- Anon., Sci. News, Ap. 27, 1888, 389, fig. 1.
- aspergilla, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. I, 1868, 154, iii, 9.
- auris (Defr.). Defrance, Dict. Sci. Nat. XXXII, 1824, 178; Atlas, Conch. XIV, 5. [= *Planularia auris*, Defr., q. v.]
- Blainville, Manuel Malac. et Conch., 1825 (pls. 1827), 371, vi, 1 [error for 5].
- (Spirolina, d'Orb.), austriaca, Mackie. Recreative Science, I, 1859, 148, fig. 28. [See *Spirolina*.]
- carinatus, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 33, iii, 7 and 8.
- Brady, Report Challenger, 1884, 205, xiii, 14.
- cylindraceus, (Lam.). Brady, Report Challenger, 1884, 204, xiii, 20 and 21. [*Spirolinites*, 1804.]
- d'orbignii, Roemer. Verstein. norddeutsch. Oolith., Nachtrag, 1839, 47, xx, 31. [= *Cristellaria*, compare *C. reticulata*, Schwager, as fig'd by Terquem, Bull. Soc. géol. France, [3], IV, 1876, 494, xvii, 1 and 2.]
- dubius, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 62, vi, 21 and 22; also in Spanish, 1840, 79, same pl. and fig.
- elegans, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 61, vii, 1 and 2; also in Spanish, 1840, 79, same pl. and fig.
- elliptica, d'Orbigny. Ann. Sci. Nat. VII, 1826, 286, No. 2.
- fleuriausii, d'Orbigny. Ann. Sci. Nat. VII, 1826, 286, No. 4. [See also *Cristellaria fleuriausa*.]
- gervillei, d'Orb., 1847. Prodrome de Paléont. II, 1850, 406, No. 1307.
- levigata, d'Orbigny. Ann. Sci. Nat. VII, 1826, 286, No. 3.
- levigatus, Karrer. Brady, Report Challenger, 1884, 205, xiii, 12 and 13. [See *P. planatus*, var.]
- lanatus, Montfort. Conch. Syst. I, 1808, 259, 65th genre. [See *P. planatus*.]

- PENEROPLIS laubei**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 154, iii, 8.
- **liburnica**, Stache. Abh. k. k. geol. Reichs. XIII, 1889, 89, va, 20, 21 (*v. acanthina*) ; 22 (*v. strangulata*) ; 23 (*v. lœvigata*) ; 24 (*v. lata*).  
 — **lituuus** (Gmelin). Brady, Report Challenger, 1884, 205, xiii, 24, 25 (?). [*Nautilus*, 1788.]
- **opercularis** [Lamarck]. Mantell, Pictorial Atlas Foss. Rem. 1850, 143, lxii, 21. [*Renulites*, 1804.]
- **[d'Orb.]**. Terquem, Mém. Soc. géol. France, [3], II, 1882, 50, ii (x), 29a, b.
- **orbicularis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 286, No. 5.
- **pertusus** (Förskal). P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 239, viii, 28. [See *P. planatus* (F. & M.)] [*Nautilus*, 1775.]
- **Nicholson**, Manual Palæont. 1879, i, 110, fig. 18c.  
 — **Möbius**, Beitr. Meeresfauna Insel Mauritius, etc. 1880, 78, iii [numbered iv, by error], 9–12. [Structural.]  
 — **Jones**, in Microgr. Dict. ed. 4, 1883, 584, xxiii, 11a, b.  
 — **Brady**, Report Challenger, 1884, 204, xiii, 12–25.  
 — **Bütschli**, Morph. Jahrb. XI, 1886, 79, vi, 1–3, 11a, b.  
 — **[Sarcodae.]**
- **Anon.**, Sci. News, 27 Ap. 1888, 389, fig. 8.  
 — **Brady**, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 216, xlvi, 18, 19.
- [— **Costa**, Fauna Regno Napoli, 1838, Foraminiferi, not descr., i, 1–3.  
 — See *Nautilus (Lituuus) arietinus*, Batsch.  
 — **var. arietinus**, Batsch. See *Nautilus (Lituuus)*.  
 — **planatus** (Fichtel & Moll). D'Orbigny, Ann. Sci. Nat. VII, 1826, 285, No. 1. [*Nautilus*, 1798 ; see also *P. lanatus*, Montfort.]  
 — **D'Orbigny**, Modèles, 1826, No. 16, and var., No. 48.  
 — **[d'Orb.]**. Guérin-Méneville's Cuvier, Iconographie, Mollusques, 1829–43, 9, ii, 9.  
 — **[d'Orb.]**. Cuvier, Animal Kingdom, Henderson's ed., III, 834 (pls. 1837), 18, iii, 9.  
 — **[d'Orb.]**. Cuvier, Règne Animal, 1836–46, IX (pls. x), 33, xv, 2.  
 — **Ehrenberg**, Abhandl. k. Ak. Wiss. Berlin, 1838, 142, ii, 1.  
 — **[= P. pertusus (Försk.).]**  
 — **Bronn**, Lethaea Geognostica, ed. 3, III, 1853–56, 202, xxxv<sup>2</sup>, 4a–d.  
 — **Williamson**, Recent British Foram. 1858, 45, iii, 83–85.  
 — **[Montf.]**. Reuss' Models, No. 91, 1865 (Catal., No. 23, 1861).  
 — **P., J., & B. [D'O.]**, Modèles, 16], Ann. Mag. Nat. Hist. [3], XVI, 1865, 21, i, 17. [= *P. pertusus*, Försk.]  
 — **P., J., & B. [D'O.]**, Modèles, 48], Ann. Mag. Nat. Hist. [3], XVI, 1865, 26, i, 18. [= *P. arietinus*, Batsch.]  
 — **var. lœvigata**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 153, iii, 7.  
 — **[Montf.]**. Zittel, Handbuch Palæont., Abth. I, 1876, 79, fig. 13<sup>2</sup>.  
 — **[Montf.]**. Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 27, pl. 108.
- **Schlumberger**, F. Jeun. Nat., Jan. 1882, i, 13.  
 — **Brady**, Report Challenger, 1884, 204, xiii, 15.  
 — **Basset**, Ann. Soc. Sci. Charente-Inf. 1884 (85), 162<sup>2</sup>, figs.  
 — **Bütschli**, Morph. Jahrb. XI, 1886, 79, vi, 4. [Sarcodae.]  
 — **[= P. pertusus (Försk.), see *Testæ hammoniformes seu lituitatae semilunares*.**  
? — **polystomatium**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 257.

- PENEROPLIS** *prisca*, Reuss. Denkschr. k. Ak. Wiss. Wien, xxxiii, 1864, 9, i, 7.  
 —— *protea*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 60, vii, 7–11; also in Spanish, 1840, p. 78, same pl. and fig. [*P. proteus* on plate and in Spanish edit.]  
 —— Schacko, Arch. f. Naturgesch. (Wiegmann's), 1883 (49th Jahrg.), i, 429, etc., xii, 1. [Showing the shell full of perfectly developed young.]  
 —— Schacko, Arch. f. Naturgesch. (Wiegmann's), 1883 (49th Jahrg.), i, 429, etc., xii, 2 and 3. [Embryos.]  
 —— **protocænica**, Stache. Abh. k. k. geol. Reichs. xiii, 1889, 89, va, 25, 26, 28–34, vi, 14–17.  
 —— **pulchellus**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 32, iii, 5 and 6.  
 —— Reuss' Models, No. 61, 1865 (Catal., No. 22, 1861.)  
 —— **rostrata**, Stache. Abh. k. k. geol. Reichs. xiii, 1889, 89, va, 27, vi, 13.  
 [——] Martini, Neues Syst. Conchyl. i, 1769, 265, xx, 186 and 187.  
 [——] Targioni, Relaz. d'alc. viaggi, iv, 1770, xv, i, 20. [See *Lituo*.]  
 [——] see Spengler, Nye Saml. k. D. Bid. Seisk. Skr. i, 1781, 370, etc. [T. I.] figs. 4a, b, c, d, and 5a, b.  
 [——] see Schroeter, Neue Litt. u. Beytr. i, 1784, 317, i, 9.  
 [——] **varr.**, Soldaui, Testac. i (1), 1789, 73, pls. 64, 65, 66, 67 (*rr*, *ss*, *tt*) = this genus.  
 [——] Costa, Fauna Regno Napoli, 1838, Foraminiferi, not descr., i, 4 and 5.  
 —— Pictet, Traité de Paléont. iv, 1846, 230, xii, 12.  
 —— Williamson, Mem. Lit. Phil. Soc. Manchester, [2], viii, 1848, 44, pl. 31 and 32.  
 —— Carpenter, Phil. Trans. 1859 (2), pls. i and ii, and woodcuts in text, figs. i, ii, iii.  
 —— Carpenter, Parker, & Jones, Introd. Foram. 1862, 84, vii; figs. xix, xx, and xxi, in text. [Structural.]  
 —— Kolliker, Icones Histiologicalae, 1864, 31. [Structural.]  
 —— Harting, Magt van het Kleine, 1866, 101, fig. 39.  
 —— Sollass, Nature (30 Nov. 1871), v, 83, figure. [Monstrous.]  
 —— Carpenter, Ency. Brit. 9th ed. ix, 1879, Foraminifera, 374, i, 5.  
 —— Carpenter, Ency. Brit. 9th ed. ix, 1879, Foraminifera, 377, fig. 8.  
 —— Bütschli, in Bronn, Klasseen, etc. Thier-Reichs, 1880, 191, v, 1.  
 —— Carpenter, Report Challenger, "Orbitoides," 1883, 44, fig. 7. [Structural.]  
 —— Carpenter, Journ. Quekett Microsc. Club, [2], ii, 1885, 95, fig. 7. [Structural.]  
 —— Neumayr, Stämme d. Thierreiches, i, 1889 (8), 179, fig. 21.  
**PENTASYDERINA**, Nicolucci, 1846. Nuovi Ann. Sci. Nat. Bologna, [2], vi, 1846, 205.  
 —— **ehrenbergii**, Nicolucci. Nuovi Ann. Sci. Nat. Bologna, [2], vi, 1846, 206.  
 —— **tessellata**, Nicolucci. Nuovi Ann. Sci. Nat. Bologna, [2], vi, 1846, 206.  
**PENTELLINA**, Munier-Chalmas, 1882. Bull. Soc. géol. France, [3], x, 1882, 424, type *Quinqueloculina saxorum*, "d'Orb."  
 —— **tournoueri**, Schlumberger. Comptes rendus Assoc. Française, 1882 (1883), 330, figs. 63 and 64.  
 —— **saxorum** [(d'Orb.)]. Mun.-Chalmas & Schlumb., Bull. Soc. géol. France, [3], xiii, 1885, 287, figs. 13, 14; 293, figs. 20, 21. [Miliolites, Lamarck, 1804. [Structural.]  
 —— **(Quinqueloc.) saxorum** (d'Orb.). Fritel, Foss. caract. terr. sedim. tert. 1886, pl. vii, 62 and 63.  
 —— Mun.-Ch. & Schlumb., Bull. Soc. géol. France, [3], xiii, 1885, 281, etc., fig. [Structural.]  
**PERILOCULINA**, Munier-Chalmas & Schlumberger, 1885. Bull. Soc. géol. France, [3], xiii, 1885, p. 308, etc.

- PERILOCULINA** zitteli, Mun.-Ch. & Schlumb. Bull. Soc. géol. France, [3], XIII, 1885, 309, etc., figs. 36-40; pl. xiv, 56-59; xiv, bis, 69.
- PERIPLES** elongatus, Montfort. Conch. Syst. I, 1808, 271, 68th genre. [= *Crist. elongata*.]
- “Petit fossile ovoïde à côtes de melon.” Deluc, v. *Alveolina*.
- PETRASCULA**, Gümbel, 1873. Sitz. k.-bayer. Ak. Wiss. München, III, 1873, 292. [A calcareous alga; v. Solms-Laubach, Einleit. Palaeophytologie, 1887, 38, etc., on allied forms.]
- **bursiformis** (Etallon). Gümbel, Sitz. k.-bayer. Ak. Wiss. München, III, 1873, 292, i, 1-15. [1, 2, and 3, described as v. *loeviuscula*; 4-6, as v. *annulata*.] [See *Conodictyum*.]
- Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 27, pl., 118.
- Pfennigsteine**. Schroeter, Journ. Liebh. Steinreich, VI, 1780, 261. [= *Nummulites*.]
- Phacites**, Gesner, Tract. phys. petrif. 1758, 50. [= *Nummulites*.]
- Phacites fossilis**, Blumenbach, Abbild. Nat. Gegenstände, Heft 4, No. 40, 1799, pl. 40. [= *Nummulites*.]
- Phacolites**, Sage, Journ. de Phys. LX, 1805, 222. [= *Nummulites*.]
- PHANEROSTOMUM**, Ehrenberg, 1841. Abhandl. k. Ak. Wiss. Berlin, 1841, 409.
- **alloderma**, Ehr. Monatsber. k. preuss. Ak. Wiss. Berlin, 1861, 306.
- — — — — Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 12.
- **asperum**, Ehrenberg. Mikrogeologie, 1854, xxx, 26a, b, and xxxii, ii, 42. [= *Globig. cretacea*.]
- — — — — Ehr., Mikrogeologie, 1854, xxxii, i, 24. [= *Globig. hirsuta*.]
- **atlanticum**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1854, 248.
- — — — — Ehr., Mikrogeologie, 1854, xxxv, B, iv, 3 and 4. [= *Globig. cretacea*.]
- **bullaria**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 287.
- **cribrum**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 372.
- **dilatatum**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1855, 176, vii, 16 and 17. [= *Globig. cretacea*.]
- — — — — Ehr., Mikrogeologie, 1854, xxxii, i, 16 and 30. [= *Globig. hirsuta*, d’O.]
- **globigerum**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 287.
- **globulosum**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 372.
- — — — — Ehr., Mikrogeologie, 1854, xxxii, ii, 44. [= *Globig. cretacea*.]
- **globulus**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 306.
- — — — — Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 14.
- **hexacyclus**, Ehrenberg. Mikrogeologie, 1854, xxxii, i, 31. [= *Globig. hirsuta*, d’O.]
- **hexaleptum**, Ehrenberg. Mikrogeologie, 1854, xxxii, i, 23. [= *Globig. hirsuta*.]
- **hispidulum**, Ehrenberg. Mikrogeologie, 1854, xxxii, i, 22 and 29. [= *Globig. hirsuta*.]
- — ? — — Ehr., Abh. k. Ak. Wiss. Berlin, 1855, 176, vii, ii. [= *Globig. cretacea*.]
- **integerrimum**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1841, 427.
- **lacerum**, Ehrenberg. Mikrogeologie, 1854, xxxii, i, 17 and 18. [= *Globig. hirsuta*, d’O.]
- **laeve**, Ehrenberg. Mikrogeologie, 1854, xxxii, i, 19. [= *Globig. hirsuta*, d’O.]

- PHANEROSTOMUM** micromegma, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 306.  
 ——— ——— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 11.  
 ——— micromphalum, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 287.  
 ——— microporum, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 307.  
 ——— ——— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 9.  
 ——— oceanicum, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), iii, 10.  
 ——— ocellatum, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1841, 427.  
 ——— paeonia, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 307.  
 ——— pelagicum, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 287.  
 ——— ——— Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), iv, 14.  
 ——— porulosum, Ehrenberg. Mikrogeologie, 1854, xxxii, i, 15. [= *Globig. hirsuta*, d'O.]  
 ——— ? ——— Ehr., Abh. k. Ak. Wiss. Berlin, 1855, 176, vii, 15. [= *Globig. cretacea*.]  
 ——— quaternarium, Ehrenberg. Mikrogeologie, 1854, xxxii, ii, 46. [= *Globig. cretacea*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xxxii, i, 20. [= *Globig. hirsuta*, d'O.]  
 ——— scutellatum, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 13.  
 ——— senarium, Ehrenberg. Mikrogeologie, 1854, xxxii, i, 25. [= *Globig. hirsuta*.]  
 ——— ? ——— Ehr., Abh. k. Ak. Wiss. Berlin, 1855, 176, vii, 14. [= *Globig. cretacea*.]  
 ——— ? Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1855, 176, vii, 12. [= *Globig. cretacea*.]  
 ——— ? Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1855, 162, ii, x. [Glauc.] [= *Planorb. vulgaris*.]  
**PHARAMUM**, Montfort. Conch. Syst. i, 1808, 35, 9th genre. [= *Crist. calcar*.]  
**PHIALINA**, Costa, 1856. Atti Accad. Pontaniana, VII, fas. 2, 1856, 122.  
 ——— affinis, Seguenza. Foram. monotal. miocen. Messina, 1862, 44, i, 16.  
 ——— [= *Lagena levius*, Mont.]  
 ——— clavata, Seguenza. Foram. monotal. miocen. Messina, 1862, 45, i, 17.  
 ——— [= *L. levius*, Mont.]  
 ——— costæ, Seguenza. Foram. monotal. miocen. Messina, 1862, 48, i, 28. [= *L. sulcata*, W. & J.]  
 ——— costata, Seguenza. Foram. monotal. miocen. Messina, 1862, 48, i, 27.  
 ——— [= *L. sulcata*, W. & J.]  
 ——— cylindracea, Seguenza. Foram. monotal. miocen. Messina, 1862, 47, i, 24. [= *L. striata*, d'Orb.]  
 ——— exigua, Seguenza. Foram. monotal. miocen. Messina, 1862, 47, i, 25.  
 ——— [= *L. sulcata*, W. & J.]  
 ——— gemellaris, Seguenza. Foram. monotal. miocen. Messina, 1862, 47, i, 23.  
 ——— [= *L. striata*, d'Orb.]  
 ——— haidingeri, Czizek. Seguenza, Foram. monotal. miocen. Messina, 1862, 46, i, 20. [*Oolina*, 1848.]  
 ——— incesta, Seguenza. Foram. monotal. miocen. Messina, 1862, 47, i, 26.  
 ——— [= *L. sulcata*, W. & J.]  
 ——— lagena, Seguenza. Foram. monotal. miocen. Messina, 1862, 46, i, 22.  
 ——— [= *L. sulcata*, W. & J.]  
 ——— longirostris, Seguenza. Foram. monotal. miocen. Messina, 1862, 44, i, 15. [= *L. levius*, Mont.]  
 ——— longissima, Seguenza. Foram. monotal. miocen. Messina, 1862, 45, i, 18. [= *L. semistriata*, Will.]

**PHIALINA ornata**, Seguenza. Foram. monotal. miocen. Messina, 1862, 48, i, 30. [= *L. squamosa*, Mont.]

— **ovata**, Seguenza. Foram. monotal. miocen. Messina, 1862, 44, i, 14. [= *L. levis*, Mont.]

— **oviformis**, Costa. Atti Accad. Pontaniana, VII, fas. 2 (1856), 123, xi, 8 and 9.

— **piriformis**, Costa. Atti Accad. Pontaniana, VII, fas. 2 (1856), 123, xi, 6 and 10a, A.

— **propinqua**, Seguenza. Foram. monotal. miocen. Messina, 1862, 43, i, 13. [= *L. levis*, Mont.]

— **reussana**, Seguenza. Foram. monotal. miocen. Messina, 1862, 48, i, 29. [= *L. sulcata*, W. & J.]

— **semicostata**, Seguenza. Foram. monotal. miocen. Messina, 1862, 45, i, 19. [= *L. semistriata*, Will.]

— **tenuistriata**, Seguenza. Foram. monotal. miocen. Messina, 1862, 46, i, 21. [= *L. striata*, d'Orb.]

**PHONEMUS**, Montfort. Conch. Syst. I, 1808, 11, 3rd genre. [= *Crist.*]

— Meek, Smithson. Misc. Coll. VII, No. 177 (April, 1864), 1.

[This genus is used by Meek as follows: *Phonemus* (*Cristellaria*) *rotulatus*, d'Orb. ? ; *P.* (*Flabellina*) *cuneatus*, (Morton), Meek ; *P.* (*Flabellina*) *sagittarius*, (Lea), Meek ; *P.* (*Dentalina*) *pulcher*, Gabb.]

“**Phyllitæ Salicitæ seu Iteiteæ lapides, vel Silices,**” etc. Scheuchzer, MisCELL. Curiosa, Acad. Caesar. Leop., dec. III, ann. V and VI, 1697-1698, Appendix, 1700, 63, plate, fig. I. [*Nummulites*.]

**PHYSOMPHALUS**, Ehrenberg, 1855. Abhandl. k. Ak. Wiss. Berlin, 1855, 172. [Glauc.]

— **porosus**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1855, 172, v, xvi. [Glauc.] [= *Operculina*.]

**Piedras lenticulares.** } Cavanilles, Obs. Hist. Nat. Valencia, II, 1797, pp. 35, Piedras numularias. } 183, 188, 199, pl. f. 1a, b, 2a, b.

**Pierres de Laon.** Sage, Journ. de Phys. LX, 1805, 222. [= *Nummulites*.]

**Pierres de St. Boniface.** Brueckmann. [= *Nummulites*.]

**Pierres frumentaires.** Guettard, Hist. Acad. Sci. (Paris), 1752, 339. [= *Nummulites*.]

**Pierres lenticulaires.** Bourguet, Lettres philos. Sels et Crystaux, 1729 [ed. 2, 1762], 171, plate, f. i-iii. [= *Nummulites*.]

**Pierres lenticulaires.** Denys Dodart, Hist. Acad. Sci. (Paris), I, 1733, 306.

**Pierres lenticulaires.** L. B\*\*\*. [Bourguet], Traité des Pétrif., Paris, 1742, 75, l. 321-325, and La Haye, 1742 [Mém. servir l'Hist. Nat. etc., altered title], same pl. and figs.

**Pierres lenticulaires.** Barrere, Observ. Pierres figurées, 1746, 13, figs. N, P, P, Q, Q. [= *Nummulites*.]

**Pierres lenticulaires.** Guettard, Mém. diff. part. Sci. II, 1770, 185, etc. ; III, 1770, 431, pl. xiii.

**Pierres numismales.** Bourguet, Lettres philosoph. 1729, 12, fig. 1, 2, and 3. [= *Nummulites*.]

**Pierres numismales.** Guettard, Mém. diff. part. Sci. etc. II, 1770, 185, etc. ; III, 1770, 431, etc., pl. xii.

**Pietra frumentale.** Ferranto Imperato, Hist. Nat. Venice, 1672, xxiv, 579, and xxviii, 664. [= *Nummulites*.]

**PILULINA**, Carpenter, 1870. Descr. Catal. Obj. Deep-Sea Dredging, no date [1870], 5 ; Brady, Report Challenger, 1884, 244.

— **jeffreysii**, Carpenter. The Microscope, ed. 6, 1881, 560, fig. 319\* d, e.

— — — — — Brady, Report Challenger, 1884, 244, xxv, 1-6.

— — — — — Carpenter, Ency. Brit. 9th ed. IX, 1879, Foraminifera, 375, 5d, e.

**PINEINA caudata**, Schafhäutl. Geogn. Unters. sudbay. Alpengeb. 1851, 49, xiii [misprinted in text, xviii], fig. 19. [An “oolitic granule ;” may be *Cristellaria*.]

- PINEINA** oblonga, Schafhäutl. Geogn. Unters. sudbay. Alpengeb. 1851, 48, xiii [misprinted in text xviii], fig. 5. [An "oolitic granule;" may be *Trochammina*.]
- PIRULINA**, Brönn, 1851–52. Error for *Pyrulina*.
- PLACENTULA**, Lamarck, 1822. Hist. Anim. s. Vert. VII, 1822, 621.
- asterizans, [F. & M.], Lamarck. Hist. Anim. s. Vert. VII, 1822, 621, No. 2. [*Nautilus*, 1798.]
  - Crouch, Introd. Lamarck, 1827, 41, xx, 13.
  - [astricans], Brown. Conch. Text-book, 1839, 61, x, 14.
  - Brown, Elem. Foss. Conch. 1843, 23, ii, 13.
  - nitida (Reuss). Berthelin, Mém. Soc. géol. France, [3], I, 1880, 69, iv (xxvii), 11a–c. [*Rotalina*, 1844.]
  - partschiana, Berthelin. Bull. Soc. géol. France, [3], XI, 1883, 304, figure p. 307. [= *Pulvinulina partschiana*, d'Orb.]
  - pictonica, Berthelin. Revue et Mag. Zool. 1879, 36, i, 23–25.
  - pulvinata, Lamarck. Hist. Anim. s. Vert. VII, 1822, 621.
  - Defrance, Dict. Sci. Nat. XXXII, 1824, 180, XLI, 1826, 193; Atlas, Conch. XV, 5. [= *Pulv. repanda*.]
  - Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 374, vii, 5.
  - Cuvier, Animal Kingdom, Henderson's ed. III, 1834 (pls. 1837), 18, iv bis, 5.
  - repandus. See *Pulvinulus repandus*.
- Placentulæ**. Soldani, Testac. I, pt. 3, 1795, 237, pl. 161A, B, C. [*Planorbulina vermiculata*, d'O. Ann. Sci. Nat. VII, 1826, 280, 3.]
- PLACOPSILLINA**, d'Orbigny, 1847. Prodrome de Paléont. II, 1850, 96; Brady, Report Challenger, 1884, 314.
- anomala, Terquem. Cinq. Mém. Foram. Lias, 1866, 423, xvi, 6a, b, c.
  - annulata, Terquem. Six. Mém. Foram. Lias, 1866, 495, xx, 29.
  - antiqua, Terquem. Bull. Soc. géol. France, [3], VIII, 1880, 416, xi, 2. [Cast.]
  - bulla, Brady. Quart. Journ. Micr. Sci. XXI, 1881, 51.
  - — — — — Brady, Report Challenger, 1884, 315, xxxv, 16 and 17.
  - canariensis (d'Orb.). Parker & Jones, Ann. Mag. Nat. Hist. [2], XIX, 1857, 301, x, 13 and 14. [*Nonionina*, 1839.]
  - capilliformis, Terquem. Cinq. Mém. Foram. Lias, 1866, 420, xvi, 1.
  - cenomana, d'Orb., 1847. Prodrome de Paléont. II, 1850, 185, No. 758. ["Œufs de Molluscs," 1848; see also *Lituola*.]
  - — — — — Reuss, Denkschr. k. Ak. Wiss. Wien, VII, Abth. 1, 1854, 71, xxviii, 4 and 5.
  - (Lit.) — — — — Bützchli, in Brönn, Klassen, etc. Thier-Reichs, 1880, 191, v, 19.
  - — — — — Haeusler, Quart. Journ. Geol. Soc. XXXIX, 1883, 27, iii, 1.
  - — — — — Haeusler, Neues Jahrbuch, 1883, I, 59, iii, 12–14.
  - — — — — Brady, Report Challenger, 1884, 315, xxxvi, 1–3.
  - — — — — Wright, Proc. Belfast Nat. Field Club, 1884–1885, App. IX, 1886, 320, xxvi, 3a, b.
  - — — — — Haeusler, Neues Jahrb., Beil. IV, Heft 1, 1885, 8, I, 24 and 25.
  - — — — — Howchin, Journ. R. Microsc. Soc. 1888, 536, viii, 4.
  - — — — — Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 218, xlvi, 13.
  - concentrica, Terquem. Six. Mém. Foram. Lias, 1866, 496, xx, 32 and 33.
  - conglomerata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 38, I (ix), 44.
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  - *filipendula*, Terquem. Six. Mém. Foram. Lias, 1866, 492, xx, 22.
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- *compressa*, v. Hagenow. Neues Jahrb. 1842, 569.
- *cornucopiae*, Brady. Proc. Somerset. Arch. and Nat. Hist. Soc. xiii, 1865-66 (1867), 226, ii, 28 and 29.

- PLANULARIA costata**, Cornuel. Mém. Soc. géol. France, [2], III, 1848, 253, ii, 5-8.
- **crepidula** (F. & M.). = *Cristellaria*, q. v., and *Nautili lituitati*.
- **crepidularis**, Roemer. Neues Jahrbuch, 1842, 273, vii, B, 4. [v. *Cristellaria*.]
- **cuneata**, Morton. Journ. Ac. Nat. Sci. Philad. VIII, 1839, 214, xi, 5.
- **cymba**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 260, No. 4, x, 9.
- **—** D'Orbigny, Modèles, 1826, No. 27.
- **—** Cuvier, Règne Animal, 1836-46, ix (pls. x), 35, xv, 8.
- **—** P., J., & B. [d'O., Modèles, No. 27], Ann. Mag. Nat. Hist. [3], XVI, 1865, 23, i, 38.
- **—** Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 25, pl. 27.
- **—** Basset, Ann. Soc. Sci. Charente-Inf. 1884 (85), 161, fig.
- **denticulata**, Reuss. Geogn. Skizze Böhmen, II, 1844, pt. 1, 211.
- **depressa**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 259, No. 2. [v. also *Vaginulina*.]
- **elongata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 259, No. 1. [v. also *Vaginulina*.]
- **elongata**, Ehr. Mikrogeologie, 1854, xxxii, ii, 10. [= *Crist. crepidula* (F. & M.).]
- **exilis**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 372.
- **falcata**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 141, xiii, 17.
- **harpula** (d'Orb.). Brady, Proc. Somerset. Arch. and Nat. Hist. Soc. XIII, 1865-66 (1867), 227, iii, 34 and 35. [*Marginulina*, 1849.]
- **intermedia**, Philippi. Tertiär. nordwest. Deutsch. 1843, 40, i, 38. [v. *Cristellaria*.]
- **lævis**, Ehr. Abh. k. Ak. Wiss. Berlin, 1838, 132.
- **lævis**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 141, xiii, 16 and 16a.
- **longa**, Cornuel. Mém. Soc. géol. France, [2], III, 1848, 252, i, 38 and 39.
- **—** Brady, Proc. Somerset. Arch. and Nat. Hist. Soc. XIII, 1865-66 (1867), 226, ii, 27.
- **matutina**, d'O. Terquem, Mém. Ac. Imp. Metz, XXXIX, 1858, 619, iii, 14a-c.
- **nodosa**, v. Hagenow. Neues Jahrbuch, 1842, 569, ix, 21.
- **oblonga**, Philippi. Tertiär. nordwest. Deutsch. 1843, 41, not figured.
- **orbiculata**, Roemer. Neues Jahrbuch, 1842, 273, vii, B, 6.
- **pauperata**, Jones & Parker. Quart. Journ. Geol. Soc. XVI, 1860, 454, xx, 39. [v. *Cristellaria*.]
- **—** Brady, Proc. Somerset. Arch. and Nat. Hist. Soc. XIII, 1865-66 (1867), 226, ii, 24, 25 (and 26?).
- **—** Jones, M. Mier. Journ. XV, 1876, cxxviii, 27.
- ? — **pelagi**, Ehr. Abh. k. Ak. Wiss. Berlin, 1841, 427, iii, vii, 43. [= *Pulv. auricula*? (F. & M.).]
- **reticulata**, Cornuel. Mém. Soc. géol. France, [2], III, 1848, 253, ii, 1-4.
- **—** Jones & Parker, Quart. Journ. Geol. Soc. XVI, 1860, xx, 38.
- **—** Brady, Proc. Somerset. Arch. and Nat. Hist. Soc. XIII, 1865-66 (1867), 227, ii, 31-33.
- **—** Jones, M. Micr. Journ. XV, 1876, cxxix, 14.
- **rostrata**, d'Orb. Ann. Sci. Nat. VII, 1826, 260, No. 7.
- **—** P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 166, x, 75.
- **—** Jones, M. Mier. Journ. XV, 1876, cxxix, 16.
- **—** See *Nautili lituitati cuspides*. [= *Cristellaria*.]
- **semicircularis**, Philippi. Tertiär. nordwest. Deutsch. 1843, 41, i, 39. [v. *Cristellaria*.]
- **striata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 259, No. 3. [v. also *Vaginulina*.]

- PLANULARIA** *tenella*, Ehr. Mikrogeologie, 1854, xxix, 41. [= *Cristellaria*.]  
 —— *thebaica*, Ehr. Mikrogeologie, 1854, xxiv, 63. [= *Crist. italicica*?]  
**PLANULARIA**, Nilsson. K. Vet. Ak. Handl. 1825 (1826), 342; and Petrif. Suecana, 1827, 10. [= *Frondicularia*.]  
 —— *angusta*, Nilsson. K. Vet. Ak. Handl. 1825 (1826), 343. [v. also *Frondicularia*.]  
 —— Nilsson, Petrif. Suecana, 1827, 11, ix, 22a, A.  
 —— Hisinger, Lethaea Svecica, 1837, 33, viii, 4.  
 —— *elliptica*, Nilsson. K. Vetensk. Acad. Handl. for 1825 (1826), 342. [v. *Flabellina*; also *Frondicularia*.]  
 —— Nilsson, Petrif. Suecana, 1827, 11, ix, 21a, A.  
 —— Hisinger, Lethaea Svecica, 1837, 33, viii, 3.
- PLANULINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, p. 280.  
 —— *abyssicola*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 307.  
 —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 15.  
 —— *adspersa*, Ehrenberg. Mikrogeologie, 1854, xx, ii, 20. [= *Planorbulina*.]  
 —— Ehr., Mikrogeologie, 1854, xxviii, 48. [= *Crist. ? rotula vel cultrata*.]  
 —— *aethiops*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 132.  
 —— *ammonis*, Ehrenberg. Mikrogeologie, 1854, xxiv, 55. [= *Planorb. ammonoides*.]  
 —— Ehr., Mikrogeologie, 1854, xxxvii, iv, 3. [= *Operculina*, compare *O. sublaevis*, Güm., 1868.]  
 —— Kübler & Zwingli, Neujahrsblatt Burgersbibl. Winterthur, 1866, 18, iii, 22. [= *Planorbulina*.]  
 —— ? *ampla*, Ehrenberg. Mikrogeologie, 1854, xxiii, 48. [= *Crist. cultrata*.]  
 —— Ehr., Mikrogeologie, 1854, xxvii, 44 and 45. [= *Planorb. ammonoides*.]  
 —— Ehr., Mikrogeologie, 1854, xxxi, 61. [Near *P. ariminensis*.]  
 —— Ehr., Mikrogeologie, 1854, xxix, 13. [*Pulvin. elegans* group.]  
 —— *ampliata*, Ehrenberg. Mikrogeologie, 1854, xxxi, 60. [Near *P. ariminensis*.]  
? —— Ehr., Mikrogeologie, 1854, xxiii, 50. [= *Crist. cultrata*.]  
 —— Ehr., Mikrogeologie, 1854, xxiv, 54 and 60?; xxv, ii, B, 11; xxvii, 47; and xxx, 33. [= *Planorb. ammonoides*.]  
 —— *angusta*, Ehrenberg. Mikrogeologie, 1854, xxix, 14. [*Pulvin. elegans* group.]  
 —— *angusta*, Ehrenberg. Mikrogeologie, 1854, xxvi, 46, and xxxvii, 41. [= *Planorb. ammonoides*.]  
 —— *annulosa*, Ehrenberg. Mikrogeologie, 1854, xxviii, 44. [= *Cristellaria*.]  
 —— Ehr., Mikrogeologie, 1854, xxvii, 42a, b, and xxx, 29. [= *Planorb. ammonoides*.]  
 —— Ehr., Mikrogeologie, 1854, xx, i, 56. [= *Pl. ariminensis*? or *Nonionina*?]  
 —— Ehr., Mikrogeologie, 1854, xx, ii, 21b. [= *Planorbulina*.]  
? —— *apiculata*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 372.  
 —— *areolata*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 427.  
 —— *argulus*, Ehrenberg. Mikrogeologie, 1854, xxvi, 32. [= *Planorb. globulosa*.]  
 —— *argus*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 427.  
 —— Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1843, 257.

- PLANULINA argus**, Ehrenberg. Mikrogeologie, 1854, xxv, i, A, 32. [= *Planorb. farcta*.]  
 —— **ariminensis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 280, No. 1, xiv [v in text], 1-3 bis. [*ariminensis* in text.] [v. *Planorbulina*, and *P. tuberosa*, var.]  
 —— —— —— D'Orbigny, Modèles, No. 49, 1826.  
 —— —— —— Smedley, Ency. Metrop. 1845, undescr. pl. "Mollusca"? 7 and 8.  
 —— —— —— Cuvier, Règne Animal, 1836-46, ix (pls. x), 34, xv, 7.  
 —— —— —— Reuss, in Geinitz, Grundr. Verstein. 1845-46, 677, xxiv, 45.  
 —— —— —— Carpenter, Parker, & Jones, Introd. Foram. 1862, 201, fig. xxxii, F.  
 —— —— —— P., J., & B. [D'O., Modèles, 49], Ann. Mag. Nat. Hist. [3], xvi, 1865, 26, iii, 78. [= *Planorbulina*.]  
 —— —— —— Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 26, pl., 51.  
 —— —— —— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (85), 162, fig.  
 —— —— —— = *Planorb. rotula* (d'O.), v. *Ammoniae foliaceæ*, and *Hammoniae subrotundæ*.  
 —— **aspera**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 427.  
 —— —— —— Ehr., Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 288.  
 —— **baileyi**, Ehr., v. *Aristerospira*.  
 —— **caspia**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), xii, 7.  
 —— **centoculus**, Ehrenberg. Mikrogeologie, 1854, xxiv, 45. [= *Planorb. vulgaris*.]  
 —— **chloës**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 288.  
 ? —— **conspersa**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 372.  
 —— **cornu**, Ehrenberg. Mikrogeologie, 1854, xxv, i, A, 46. [= *Planorb. ariminensis*.]  
 ? —— **crisiae**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 23.  
 ? —— —— —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), xi, 18.  
 ? —— **cymodoceæ**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 24.  
 ? —— —— —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), xi, 19.  
 —— **decrescens**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 288.  
 —— **denticulata**, Ehrenberg. Mikrogeologie, 1854, xx, ii, 18. [= *Planorb. farcta*.]  
 —— **depressa**, Ehrenberg. Mikrogeologie, 1854, xxiv, 48. [= *Planorb. ungeriana*?]  
 —— —— —— Ehr., Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 307.  
 —— —— —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 20.  
 —— **diaphana**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), v, 10.  
 —— **dubia**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 280, No. 2. [v. also *Platulina*.]  
 [PLATULLINA] **dubia**, d'Orb. Guérin-Ménville's Cuvier, Iconographie, Mollusques, 1829-43, 9, ii, 10.  
 ? —— **elegans**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 372.  
 —— —— —— Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1844, 93; and Mikrogeologie, 1854, xix, 93. [= *Planorbulina haidingeri*.]  
 —— —— —— Hopkins, Execut. Doc. 45 Congress, Sess. 3, iv, Rpt. Chief Engineers, pt. 2, App. W, 1878, 79, 885, ii, 66.  
 —— { **erosa** }, Ehrenberg. Mikrogeologie, 1854, xxxv, A, iv, B, i. [= *porosa* } *Globig. bulloides*.]

- PLANULINA** *euomphala*, Ehrenberg. Mikrogeologie, 1854, xxvii, 46. [= *Crist. cultrata*.]  
 —— *euridices*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 24.  
 ? —— *urytheca*, Ehrenberg. Mikrogeologie, 1854, xxiii, 44. [= *Crist. cultrata*.]  
 ? —— —— Ehr., Mikrogeologie, 1854, xxiii, 39. [= *Planorb. ammonoides?*]  
 —— —— Ehr., Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 288.  
 —— *eusticta*, Ehrenberg. Mikrogeologie, 1854, xxv, i, 4, 38. [= *Planorb. bulina*.]  
 —— *flos*, Ehrenberg. Mikrogeologie, 1854, xxiv, 47. [= *Planorb. haidingeri*.]  
 —— *forbesii*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 24.  
 —— *fumigata*, Ehrenberg. Mikrogeologie, 1854, xx, ii, 17. [= *Planorb. haidingeri*.]  
 ? —— *fusca*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 24.  
 —— *gemmaea*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 372.  
 —— *globigerina*, Ehrenberg. Mikrogeologie, 1854, xxxii, i, 26. [= *Globig. hirsuta*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxiii, 29. [= *Planorb. haidingeri?*]  
 —— —— Ehr., Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 307.  
 —— —— Ehr., Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 288.  
 —— —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 16; and iii, 3.  
 —— *globularis*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 94; and Mikrogeologie, 1854, xix, 94. [= *Planorb. haidingeri*, limbata var.]  
 —— *granulata*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 25.  
 —— *groenlandica*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 307.  
 —— —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 17.  
 —— *hemprichii*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 133.  
 —— *heptacyclus*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 257.  
 —— *heptas*, Ehrenberg. Mikrogeologie, 1854, xxiii, 41. [= *Planorb. farcta*, var.]  
 —— *heterocyclia*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 289.  
 —— —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), iv, 6.  
 —— *heteromphala*, Ehrenberg. Mikrogeologie, 1854, xxvii, 49 and ? 50. [Near *Trunc. lobatula*.]  
 —— *heteropora*, Ehrenberg. Mikrogeologie, 1854, xxiv, 58a, b. [= *Planorb. ammonoides*.]  
 —— *hexacyclia*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 289.  
 —— *hexacyclus*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 257.  
 —— *hexas*, Ehrenberg. Mikrogeologie, 1854, xxxii, 45; and xxviii, 46. [*Rosalina globularis?* 1838.] [= *Crist. cultrata*.]  
 —— *hololea*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. 1858, 25.  
 —— *incerta*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 280, No. 3.  
 —— —— = *Truncat. lobatula* (young); see *Ammonia plano-convexa*.

- PLANULINA incurva**, Ehrenberg. Mikrogeologie, 1854, xxiii, 36. [= *P. ariminensis*.]  
 —— **incurvata**, Ehrenberg. Mikrogeologie, 1854, xxvi, 42. [= *Pulvin. menardii*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxxi, 52. [= *Globig. cretacea*.]  
 —— **integra**, Ehrenberg. Mikrogeologie, 1854, xxiv, 56, 57 and 61. [= *Planorbulina*.]  
? —— **involuta**, Ehrenberg. Mikrogeologie, 1854, xxiii, 49. [= *Crist. cultrata*.]  
 —— **isidis**, Ehrenberg. Mikrogeologie, 1854, xxiii, 31. [= ? *Globigerina*.]  
 —— **lævigata**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 307.  
 —— —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 10.  
 —— **leiopentas**, Ehrenberg. Mikrogeologie, 1854, xxv, i, A, 37. [v. *Aristerospira*; = *Planorbulina*.]  
 —— ? —— Ehr., Mikrogeologie, 1854, xxvi, 37. [= ? *Planorb. near haidingeri*.]  
 —— **lenticula**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133.  
 —— **lenticulina**? Ehrenberg. Mikrogeologie, 1854, xxiii, 42 and 43. [= *Planorbulina*.]  
 —— **leptoderma**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 307.  
 —— —— Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), v, 8.  
 —— **leptostigma**, Ehrenberg. Mikrogeologie, 1854, xxv, i, A, 44 and 47.  
 [= *Planorb. ariminensis*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxvii, 43. [= *Planorb. ammonoïdes*.]  
 —— **libyca**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133.  
 —— **lugubris**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 372.  
 —— **marmorata**, Ehrenberg. Mikrogeologie, 1854, xxvi, 51. [= *Crist. rotulata*.]  
 —— **mauryana**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 289.  
 —— —— Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), iii, 1.  
 —— **megalopentas**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 289.  
 —— —— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), iv, 7.  
 —— **megapora**, Ehrenberg. Mikrogeologie, 1854, xxiv, 46. [= *Planorb. vulgaris*.]  
 —— **membranacea**, Ehrenberg. Mikrogeologie, 1854, xxv, i, A, 41. [= *Pulv. karsteni*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxvi, 43. [= *Pulvin. menardi* (d'O.).]  
 —— **mesolia**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 25.  
 —— **mica**? Ehrenberg. Mikrogeologie, 1854, xxxvi, 67. [= *Planorbulina*.]  
 —— **micromphala**, Ehrenberg. Mikrogeologie, 1854, xxvii, 38–40. “= *Pl. turgida*, 1838, in part.” [= *Planorb. ammonoides*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxvi, 47. [= *Planorb. ammonoïdes*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxxi, 59. [Near *Plan. ariminensis*.]  
 —— ? —— Ehr., Mikrogeologie, 1854, xxvi, 50. [= *Crist. rotulata*.]  
 —— ? —— Ehr., Abh. k. Ak. Wiss. Berlin, 1855, 162, ii, ix. [= *Rotalia beccarii*.] [Glauc.]  
 —— **micropentas**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 289.

- PLANULINA** *micropentas*, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), iv, 8.
- *millepora*, Ehrenberg. Mikrogeologie, 1854, xxiv, 51. [= *Planorb. ammonoides*.]
- *mississippiica*, Ehrenberg. Mikrogeologie, 1854, xxxii, ii, 41. [= *Globig. cretacea*.]
- *monticulosa*, Ehrenberg. Mikrogeologie, 1854, xxv, i, A, 33. [= *Planorb. farcta*.]
- *morseniana*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 290.
- *nana*, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133.
- *nebulosa*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 372. Ehr., Mikrogeologie, 1854, xxxii, ii, 35. [= ? *Planorbulina*.]
- *nitida*, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133.
- ? — *obliqua*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 373.
- *obscura*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1854, 248.
- *oceani*, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1841, 427.
- *ocellaris*, Ehrenberg. Mikrogeologie, 1854, xxix, 12. [Near *P. ariminensis*.]
- *ocellata*, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1839, 133. [*Rotalia ocellata*, Ehr., in 1838 Abh.]
- Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1844, 67; and Mikrogeologie, 1854, xxi, 91. [= *Globig. bulloides*.]
- Ehr., Mikrogeologie, 1854, xxvi, 41. ("Rosalina, 1838.") [= *Planorb. haidingeri*, subvar.]
- Ehr., Mikrogeologie, 1854, xxxi, 53. [= *Globig. cretacea*.]
- *odontophæna*, Ehrenberg. Mikrogeologie, 1854, xxvii, 45a, b. [= *Crist. cultrata*.]
- *oligosticta*, Ehrenberg. Mikrogeologie, 1854, xxxii, ii, 43. [= *Globig. cretacea*.]
- Ehr., Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 25.
- *omphalolepta*, Ehrenberg. Mikrogeologie, 1854, xxviii, 43. (*Pl. turrida*, 1838.) [= between *Crist. rotulata*, and *C. cultrata*.]
- *d'orbignii*, Roem. Verst. norddeutsch. Kreide, 1840-41, 98, xv, 24.
- *orci*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 25.
- *ornata*, Roem. Verst. norddeutsch. Kreide, 1840-41, 98, xv, 25.
- *osnabrugensis*, v. Muenster. Roemer, Neues Jahrbuch, 1838, 390, iii, 5-8. [v. also *Rosalina*, and *Truncatulina*.]
- *pachyderma*, Ehrenberg. Mikrogeologie, 1854, xxv, i, A, 31. [= *Globig. cretacea*.]
- *pardalis*, Ehrenberg. Mikrogeologie, 1854, xxxi, 57. [= *P. ariminensis*.]
- Ehr., Mikrogeologie, 1854, xxiv, 52. [= *Planorb. ammonoides*.]
- *perforata*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1844; and Mikrogeologie, 1854, xxi, 89.
- *perihexas*, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 290.
- Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), iii, 13.
- *pertusa*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 67; and Mikrogeologie, 1854, xxii, 75. [= *Globigerina*.]
- *pharaonum*, Ehrenberg. Mikrogeologie, 1854, xxiii, 35. [= *Pulvin. menardii*, near *pulchella*.]
- *picta*, Ehrenberg. Mikrogeologie, 1854, xxvii, 52. [= *Pulvin. micheginiana* (d'O.).]
- *polysolenia*, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1855, 162, ii, xi. [= *Planorb. vulgaris*.] [Glauc.]

- PLANULINA** pomerana, Ehrenberg. Mikrogeologie, 1854, xxx, 30. [= *Pulvin. micheliniana*.]
- porophaena, Ehrenberg. Mikrogeologie, 1854, xxxi, 56. [= *P. ariminensis*.]
- porosa, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 68; and Mikrogeologie, 1854, xx, ii, 19. [v. *Aristerospira*; = *Planorb. farcta*.]
- — Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1844, 94; and Mikrogeologie, 1854, xix, 95. [= *Planorb. haidingeri*, limbata var.]
- — Ehr., Mikrogeologie, 1854, xxiv, 44. [= *Planorb. haidingeri*.]
- — — Ehr., Mikrogeologie, 1854, xxvi, 39 and 40. ("Rosalina *lævigata*, 1838, in part.") [= *Planorb. haidingeri*, subvar.]
- — — Ehr., Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 308.
- porosior, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), xii, 1.
- profunda, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, p. 290.
- — — Ehr., in Koldewey, Zweite Deutsche Nordpolarfahrt, 1874, ii, n. d. i, 17 and 18.
- prototetras, Ehrenberg. Mikrogeologie, 1854, xxiv, 50. [= *Planorb. tuberosa*, F. & M.]
- — — Elir., Mikrogeologie, 1854, xx, ii, 16. [= *Glob. bulloides*.]
- pyramidum, Ehrenberg. Abh. k. preuss. Ak. Wiss. Berlin, 1838, 133.
- — — Ehr., Mikrogeologie, 1854, xxiii, 38. [= *Opercul. complanata*.]
- quaternaria, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 373.
- saxipara, Ehrenberg. Mikrogeologie, 1854, xxv, i, A, 36. [= *Planorbula*.]
- scutata, see *Aristerospira*.
- septenaria, Ehrenberg. Mikrogeologie, 1854, xxv, ii, B, 10. [= *Planorb. vulgaris*.]
- ? — seriata, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), v, 9.
- sicula, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133, iv, ii, iii.
- — — Ehr., Mikrogeologie, 1854, xxvi, 48 and 49. [48 = *Rotalia*? 49 = *Planorbulina*?]
- — — Ehr., Mikrogeologie, 1854, xxix, ii. [Near *P. ariminensis*.]
- soldanii, d'Orbigny. Ann. Sci. Nat. VII, 1826, 280, No. 4. [v. *Planorbula*.]
- — — = *Planorbulina*; see *Hammoniae subrotundæ*; and *H. planæ rotundæ*.
- sparsipora, Ehrenberg. Mikrogeologie, 1854, xx, ii, 22. [= *Rotalia orbicularis*.]
- spatiosa, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 94; and Mikrogeologie, 1854, xxi, 95 [xxix, 15; xxx, 28 (near)]. [Near var. *pulchella* of *Pulv. repanda*.]
- speciosa, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133.
- spiræ, Ehrenberg. Mikrogeologie, 1854, xxvi, 52. [= ? *Planorbulina*.]
- sphærocharis, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, p. 290.
- — — Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), iv, 9.
- splendida, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133.
- spongarium, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 26.
- squamula, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 67 and 94; and Mikrogeologie, 1854, xxi, 94. [= *Planorbulina*, limbata var.]
- stellaris, Ehrenberg. Mikrogeologie, 1854, xx, ii, 23. [= *Planorb. haidingeri*.]

- PLANULINA** *stigma*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 67; and Mikrogeologie, 1854, xxii, 77. [= *Globigerina*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xxv, i, A, 29. [= *Globig. cretacea*.]  
 ——— ——— **suboconaria**, Ehrenberg. Mikrogeologie, 1854, xxxii, ii, 48. [= *Planorb. ammonoides*.]  
 ——— ——— **syriaca**, Ehrenberg. Mikrogeologie, 1854, xxv, i, A, 39. [= *Planorb. haidingeri*.]  
 ——— ——— **tenuis**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1841, 427, iii, vii, 48. [= *Planorbolina*?]  
 ——— ——— Ehr., Abh. k. Ak. Wiss. Berlin, 1872 (1873), iii, 2.  
 ? ——— ——— **turgida**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133, iv, v, II.  
 ——— ——— Harting, Magt van het Kleine, 1849, 119, fig. 1; and 1866, 113, fig. 48<sup>1</sup>; German by Dr. A. Schwartzkopf, 1851, 87, fig. 39<sup>1</sup>.  
 ? ——— ——— Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1845, 373.  
 ——— ——— Ehr., Mikrogeologie, 1854, xxxi, 62. [= small *Operculina*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xxix, 10. [Near *P. ariminensis*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xx, ii, 21a. [*Planorb.*, or may be *P. ariminensis*.]  
 ——— ——— **umbilicata**, Ehrenberg. Mikrogeologie, 1854, xxx, 31. [= *Cristellaria*, doubtful.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xxiii, 47; xxv, i, A, 40; and xxviii, 49. [= *Crist. cultrata*.]  
 ? ——— ——— Ehr., Mikrogeologie, 1854, xxiv, 59. [*Pl. millepora*, juv.?]  
 ——— ——— [Near *Planorb. ammonoides*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xxvii, 48 and 51. [= *Pulvin. truncatulinoides* (d'Orb.)].  
 ——— ——— ? Ehr., Mikrogeologie, 1854, xxxi, 55.  
 ——— ——— **vitrea**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 373.  
 ——— ——— Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1844, 94; and Mikrogeologie, 1854, xix, 96. [= *Planorb. haidingeri*.]  
 ——— ——— **zapatocensis**, Karsten. Amtlicher Ber. 32 Vers. deutscher Nat. Aerzte, 1856 (1858), 114, vi, 4a, b, c, d; and Géol. Colomb. bolivarienne; 1886, 62, vi, 4a, b, c, d.  
 ——— sp. ? Ehrenberg, Mikrogeologie, 1854, xxxv, B, iv, A, k, l. [= *Globigerinae*.]  
 ——— sp. ? Ehrenberg, Mikrogeologie, 1854, xxxv, B, iv, A, g, h. [g = *G. bulloides*; h = *Pulvin. menardii*.]  
 [——?] Macdonald, Anu. Mag. Nat. Hist. [2], xx, 1857, 193, v, 15.  
 ——— Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1875 (1876), 158, i, 1.  
**PLATOUM**, F. E. Schulze, 1875. Arch. Mikr. Anat. xi, 1875, 115.  
 ——— **parvum**, F. E. Schulze. Arch. Mikr. Anat. xi, 1875, 115, vi, 1–4.  
 ——— Möbius, Abh. k. pr. Ak. Wiss. Berlin, 1888 (1889), 15.  
**PLATULINA**, Guérin-Méneville, 1829–43. Misprint for *Planulina*.  
**PLATYCECUS** ? *squama*, Ehr. Mikrogeologie, 1854, xxx, 28. [Var. of *Pulvin. repanda*, near *P. spatiosa* (Ehr.).]  
**PLECANIUM**, Reuss, 1861. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 383.  
 ——— *acuminatum*, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 92, x, 5a, b.  
 ——— *agglutinans*, Reuss. Sitz. k. Ak. Wiss. Wien, LIX, Abth. 1, 1869, 452, i, 1a, b, 2a, b.  
 ——— *aratriforme*, Schwager. Boll. R. Com. Geol. Ital. IX, 1878, 527, i, 17.  
 ——— *carinatum* (d'Orb.). Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 26, pl., 97. [*Textularia*, 1826].  
 ——— ——— Andreea, Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 199, vii, 10.  
 ——— *comatum*, Dunikowski. Kosmos [Lemberg], IV, 1879, 131, plate, 26.

- PLECANIUM concavum**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 129, i, 3. [v. *Textularia*.]
- **costatum**, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 151, xiv, 8a, b.
- **cretaceum**, Dunikowski. Kosmos [Lemberg], iv, 1879, 130, plate, 25.
- **depravatum**, Schwager. Jahresh. Ver. vat. Nat. Württ. xxi, 1865, 93, ii, 3.
- **depressum**, Olszewski. Sprawozd. Kom. fizyj. Ak. Umiej. Krakowie, ix, 1875, 134, ii, 8.
- **elegans**, Hantken. Magyar. Földt. Társ. Munkálatai, iv, 1868, 83, i, 5a, b.
- **ecocænum**, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 603, i, 3 bis, a, b.
- **eurystoma**, Stache. Novara-Exped., Geol. Theil I, 1864, 179, xxi, 19a, b.
- **feedum**, Karrer. Jahrb. k. k. geol. Reichsanstalt, xx, 1870, 165, i, 3.
- **gibbosum** [d'Orb.].\* Zittel, Handbuch Palaeont., Abth. 1, 1876, 66, fig. 4<sup>2</sup>, and 89, fig. 26. [On p. 89 given as *P. gibbum*, d'Orb.] [*Textularia*, 1826.]
- [Reuss.].\* Hoernes, Elem. Palaeont. 1884, 33, fig. 26; French ed. 1886, same fig.
- **granosissimum**, Stache. Novara-Exped., Geol. Theil I, 1864, 179, xxi, 18a, b.
- **granuliferum**, Gümbel. Sitz. k.-bay. Ak. Wiss. III, 1873, 39, no fig.
- **irregularre**, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 151, xiv, 9a, b. [Error for 7.]
- **karreri**, Stache. Novara-Exped., Geol. Theil I, 1864, 178, xxi, 17a, b.
- **labiatum**, Reuss. Bull. Ac. Roy. Belge, [2], xv, 1863, 139. [*Textularia*, 1860.]
- **lanceolatum**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 129, i, 2.
- **laxatum**, Schwager. Novara-Exped., Geol. Theil II, 1866, 195, iv, 5a, b.
- **ligulatum**, Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 115, xxvi (3), 15a-c.
- **lysthosrotum**, Schwager. Novara-Exped., Geol. Theil II, 1866, 194, iv, 4a, b, c.
- **mariæ** (d'O.), v. **inermis**, Reuss. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 64, i, 5-7.
- — — — — Gümbel, Abh. m.-ph. Cl. k.-bayer Ak. Wiss. x, 1868 (1870), 603, i, 3 ter, a, b.
- **niloticum**, Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 115, xxiv (3), 14a-c.
- **partschi**, Reuss. In Geinitz, Palaeontographica, xx, Th. 2, 1874, 126, xxiv, 13. [*Textularia*, 1860.]
- **roscidum**, Karrer. Jahrb. k. k. geol. Reichsanstalt, xx, 1870, 165, i, 2.
- **rugosum**, Reuss. Sitz. k. Ak. Wiss. Wien, LIX, Abth. 1, 1869, 453, i, 3a, b. [v. *Textularia*.]
- **scharrachbergense**, Andreae. Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 296, vi, 16.
- **serratum**, Reuss. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 66, i, 4a, b.
- **solitum**, Schwager. Novara-Exped., Geol. Theil II, 1866, 195, iv, 6a, b, c.
- **speyeri**, Reuss. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 449, i, 3.
- **spinulosum**, Reuss. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 65, i, 3a, b.
- **sturi**, Karrer. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 703, i, 1.

\* Zittel's & Hoernes' figures are the same. They are evidently meant for, but they differ very much from, *Text. gibbosa*, d'Orb., Ann. Sci. Nat., and Modèles, 1826.

- PLECANIUM**, tuberiforme, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 152, xiv, 10a, b [error for 9].
- PLECTINA**, Marsson, 1878. Marsson, Mitt. Nat. Ver. Neu-Vorpommern u. Rügen, Jahrg. x, 1878, 160. [Eine *Gaudryina*, die statt der spaltenförmigen Mündung am inneren Rande der letzten Kammer, an oder unter der Spitze der letzten Kammer eine runde Mündung besitzt.]
- clava, Marsson. Mitt. Nat. Ver. Neu-Vorpommern u. Rügen, Jahrg. x, 1878, 161, iii, 29a-d.
- irregularis, Marsson. Mitt. Nat. Ver. Neu-Vorpommern u. Rügen, Jahrg. x, 1878, 160, iii, 28a-e.
- PLEIONA**, Franzenau, 1888. Földtani Közlöny, xviii, 1888, 491; and Termész. Füzetek, xi, 1889, 146 and 203, fig. [*P. princeps*.] [A bicamerate, compressed Nodosarian.]
- princeps, Franzenau. Termész. Füzetek, xi, 1889, 146 and 205, woodcut.
- — — — — Franzenau, Math. termész. értesítő, vii, 1889, 254, iv, 9.
- PLEURITES**, Ehrenberg, 1854.
- ? — americanus, Ehr. Mikrogeologie, 1854, xxxii, ii, 20. [= *Virg. hemprichii*.]
- ? — calciparus, Ehr. Mikrogeologie, 1854, xxviii, 28 and 29, and xxx, 19. [= *Virg. hemprichii* (Ehr.).]
- — — — — Kübler & Zwingli, Neujahrsblatt Bürgersbibl. Winterthur, 1866, 19, iii, 21. [= *Polymorphina*.]
- — — cretæ, Ehr. Mikrogeologie, 1854, xxvii, 32. [= ? *Sphaeroid. bulloides*.]
- — — turgens, Ehr. Mikrogeologie, 1854, xxxi, 37. [Probably *Virg. hemprichii*.]
- — — turgidus, Ehr. Mikrogeologie, 1854, xxix, 38. [= *Virg. hemprichii* (Ehr.).]
- PLEUROPHRYS**, Claparède & Lachmann. Mém. Inst. Nat. Génèvois, vi, 1858 (1859), 454.
- lageniformis, O. E. Schulze. Arch. Micr. Anat. xi, 1875, 125, vii, 6-8.
- — — — — Möbius, Abh. k. pr. Ak. Wiss. Berlin, 1888 (1889), i, 20 and 21.
- — — For other species of this genus, see Archer, Quart. Journ. Micro. Sci. x, p. 17; Claparède, and Schulze, above quoted.
- PLEUROSTOMELLA**, Reuss, 1859. Sitz. k. Ak. Wiss. Wien, xl, 1860, 203; Brady, Report Challenger, 1884, 410.
- acuta, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 37, xiii, 18; and Mitt. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 44, same pl. and fig.
- — — — — Schlünderger, F. Jeun. Nat., Aug. 1883, 119, ii, 5, 5a.
- — — — — Franzenau, Math. termész. értesítő, vii, 1889, 246, iv, 1.
- alternans, Schwager. Novara-Exped., Geol. Theil II, 1866, 238, vi, 79 and 80.
- — — — — Schwager, Boll. R. Com. geol. Ital. viii, 1877, 25, pl., 37.
- — — — — Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxiii, 1880, 199, ii, 46.
- — — — — Brady, Report Challenger, 1884, 412, li, 22 and 23.
- barroisi, Berthelin. Mém. Soc. géol. France, [3], i, 1880, 30, i (xxiv), 13a, b.
- bellardi, Hantken. Ertek. termesz. körebol, xiii, No. 1, 1883, 25, ii, 1a, b; and Math. Nat. Ber. Ungarn, II, 1884, 146.
- brevis, Schwager. Novara-Exped., Geol. Theil II, 1866, 239, vi, 81.
- — — — — Brady, Report Challenger, 1884, 411, li, 20a, b.
- eocæna, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 630, i, 53a, b.
- — — — — Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 37, xiii, 17; and Mitt. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 44, same pl. and fig.

**PLEUROSTOMELLA** *fusiformis*, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 205, viii, 1.

- — — — — Reuss' Models, No. 31, 1865 (Catal., No. 58, 1861). [= an extreme form of *Virgulina*.]
- — — *incrassata*, Hantken. Ertek. termesz. köreböl, XIII, No. 1, 1883, 25, i, 4a, b; 7a, b; and Math. Nat. Ber. Ungarn, II, 1884, 146.
- — — *obtusa*, Berthelin. Mém. Soc. géol. France, [3], I, 1880, 29, i (xxiv), 9a, b.
- — — *rapa*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 630, i, 54.
- — — — — Brady, Report Challenger, 1884, 411, li, 21a, b.
- — — *reussi*, Berthelin. Mém. Soc. géol. France, [3], I, 1880, 28, i (xxiv), 10a-12.
- — — *suhnodoso*, Reuss. Sitz. k. Ak. Wiss. Wien, xL, 1860, 204, viii, 2a, b. [Nodos. nodosa, 1845; Dental. subnodoso, 1850.]
- — — — — Brady, Report Challenger, 1884, 412, lii, 12 and 13.
- — — *tenuis*, Hantken. Ertek. termesz. köreböl, XIII, No. 1, 1883, 25, i, 5a, b; and Math. Nat. Ber. Ungarn, II, 1884, 145. [Omitted in explan. to plate.]

**PLEUROSTOMINA**, Costa, 1862. Annuario Mus. Zool. Univ. Napoli, I, 1862, Art. 11, 94. [Conchiglia libera, inequilatera, compressa, con tre cameragioni visibili allo esterno, delle quali una occupa per intero una delle facce, e le altre due la faccia opposta. Apertura piaggata su quest' ultima in fondo ad una cavità posta nella parte superiore della cameragine più angusta.]

- — *bimucronata*, Costa. Ann. Mus. Zool. Univ. Napoli, I, 1862, Art. 11, 94, no figure.

**PLEUROTREMA calcarina**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133.

**PLICATILIA**, Ehrenberg, 1838. Abh. k. Ak. Wiss. Berlin, 1838 (1840), Tab. 1. [A family group name.]

**Pœcilospermus**, Mercatus, Metallotheca, 1719, 285, fig., and 286, fig. [= *Nummulites*.]

**Polymorpha**, Hantken, 1875. Misprint for *Polymorphina*.

**POLLONTES vesicularis**, Montfort. Conch. syst. I, 1808, 247, 62d genre.

[= *Miliol. seminulum*.]

- — — — — Bowdich, Elem. Conch. Part 1, 1822, 16, iii, 16. [*Miliolina*, striated.]

**POLYMPORPHA globulifera**, Soldani. Testac. I, pt. 2, 1791, p. 119, pl. 130pp, qq, rr. [*Globigerina helicina*, d'O. Ann. Sci. Nat. VII, 1826, p. 277, 5.]

- — — *janiformia*, Sold. Testac. II, 1798, 39, pl. 14h. [*Textularia tuberosa*, d'O. Ann. Sci. Nat. VII, 1826, p. 263, 26.]

- — — Sold., Testac. I, pt. 2, 1791, p. 119, pl. 132I, K.. [*Textularia gibbosa*, d'O. Ann. Sci. Nat. VII, 1826, p. 262, 6.]

- — — Sold., Testac. I, pt. 2, 1791, p. 119, pl. 132L, M. [*Textularia levigata*, d'O. Ann. Sci. Nat. VII, 1826, p. 262, 4.]

- — — *pineiformia*, Sold. Testac. I, pt. 2, 1791, p. 118, pl. 127H. [*Textularia obtusa*, d'O. Ann. Sci. Nat. VII, 1826, p. 262, 1.]

- — — Sold., Testac. I, pt. 2, 1791, p. 118, pl. 127I, pl. 130vv. [*Bulimina aculeata*, d'O. Ann. Sci. Nat. VII, 1826, p. 269, 7.]

- — — Sold., Testac. I, pt. 2, 1791, p. 119, pl. 130ss, tt. [*Uvigerina pygmcea*, d'O. Ann. Sci. Nat. VII, 1826, p. 269, 2.]

- — — Sold., Testac. I, pt. 2, 1791, p. 118, pl. 126xx, yy, zz, A, B. [*Uvigerina nodosa*, d'O. Ann. Sci. Nat. VII, 1826, p. 269, 3.]

- — — Sold., Testac. I, pt. 2, 1791, p. 118, pl. 127C. [*Nod. sulcata*, d'O. Ann. Sci. Nat. VII, 1826, p. 253, 21.]

- — — Sold., Testac. I, pt. 2, 1791, p. 119, pl. 131xx. [*Bulimina trilobata*, d'O. Ann. Sci. Nat. VII, 1826, p. 269, 6.]

- — — Sold., Testac. I, pt. 2, 1791, p. 118, pl. 127K. [*Textularia echinata*, d'O. Ann. Sci. Nat. VII, 1826, p. 263, 24.]

- POLYMORPHA** sagittulae, Sold. Testac. I, pt. 2, 1791, p. 120, pl. 133T. [*Textularia sagittula*, Defr. D'O., Ann. Sci. Nat. VII, 1826, p. 263, 20.]
- sphærulae vitrae laeves, Sold. Testac. I, pt. 2, 1791, 115, pl. 118E. [*Nodos. (Gland.) laevigata*, d'O. Ann. Sci. Nat. VII, 1826, 252, 1.]
- subcordiformia vel oviformia, Sold. Testac. I, pt. 2, 1791, p. 114, pl. 112 (not 132)gg. [*Polymorphina (Glob.) ovata*, d'O. Ann. Sci. Nat. VII, 1826, p. 266, 22.]
- subovalia, Sold. Testac. I, pt. 2, 1791, p. 115, pl. 117p. [*Marginulina lobata*, d'O. Ann. Sci. Nat. VII, 1826, p. 259, 12.]
- triangulare, Sold. Testac. I, pt. 2, 1791, p. 119, pl. 132G. [*Textularia caudata*, d'O. Ann. Sci. Nat. VII, 1826, p. 263, 25.]
- tuberosa et globulifera, Sold. Testac. I, pt. 2, 1791, p. 117, pl. 123K. [*Globigerina elongata*, d'O. Ann. Sci. Nat. VII, 1826, p. 277, 4.]
- — — — — Sold., Testac. I, pt. 2, 1791, p. 117, pl. 123H, I, O, P. [*Globigerina bulloides*, d'O. Ann. Sci. Nat. VII, 1826, p. 277, 1.]
- Sold., Testac. I, pt. 2, 1791 (omitted at p. 116), pl. 122gg? [*Polymorphina (Pyruolina) gutta*, d'O. Ann. Sci. Nat. VII, 1826, p. 267, 28.]
- POLYMORPHINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, p. 265; Brady, Report Challenger, 1884, p. 557.
- abavia, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, p. 307, 337, i, iv. [“May be *Bulimina*,” P. & J.] [*Glauconite*.]
- abbreviata, Terquem. Quatr. Mém. Foram. Lias, 1864, 303, xiii, 44a, b.
- acanthophora, Ehrenberg. Mikrogeologie, 1854, xxxi, 30. [Near *Bigen. (Gemmulina) digitata*, d'O.]
- aculeata, d'Orbigny. Ann. Sci. Nat. VII, 1826, p. 265, No. 5.
- ? — — — — — Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1844, p. 94; and Mikrogeologie, 1854, xix, 85. [= *Bulimina*.]
- acuminata, d'Orbigny. B., P., & J., Trans. Linn. Soc. xxvii, 1870, 219, xxxix, 4a, b. [*Pyruolina*, 1840.]
- — — — — Chimno, Bed of Atlantic, [1870], 19, iv, 5-27, x, A.
- — — — — Brady, Ann. Mag. Nat. Hist. [5], i, 1878, 435, xx, 5a, b.
- acuminata, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), n. d. viii, 4; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875, (1881), same pl. and fig.
- acuta, d'Orbigny. Ann. Sci. Nat. VII, 1826, p. 265, No. 7.
- — — — — D'Orbigny, Foram. Fossiles Vienne, 1846, 234, xiii, 4 and 5; xiv, 5-7.
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- [humboldtii] — B., P., & J., Trans. Linn. Soc. xxvii, 1870, 236, xl, 21a, b.
- imbricata, Terquem. Six. Mém. Foram. Lias, 1866, 524, xxii, 28a, b.
- immutabilis (?), Schwager. Jahresh. Ver. vat. Nat. Württ. xxi, 1865, vii, 12 and 13. [Described by Schwager, together with ii, 4, on p. 138 as *mutabilis*.]
- incavata, Stache. Novara-Exped., Geol. Theil I, 1864, 260, xxiv, 7a, b.
- incerta, Egger. Neues Jahrbuch, 1857, 286, xiii, 19–21.
- inequalis [*inæqualis*], d'Orbigny. Ann. Sci. Nat. vii, 1826, 265, No. 4.
- inflata, Terquem. Bull. Soc. zool. Fr. xi, 1886, 335, xi, 23.
- inflata \*, Will. [?] Zittel, Handbuch Palaeont. Abth. 1, 1876, 86, fig. 23<sup>2</sup>.
- innormalis, Costa. Atti Accad. Pontaniana, vii, fas. 2, 1856, 283, xiii, 28–30.
- insignis, Reuss. Sitz. k. Ak. Wiss. Wien, xviii, 1856, 248, vii, 74 and 75.
- intorta, Terquem. Quatr. Mém. Foram. Oolithique, 1874, 300, xxxii, 11.
- irregularis, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 137, ii, 12 and 13; also in Spanish, 1840, 131, same pl. and fig.
- — — — — B., P., & J., Trans. Linn. Soc. xxvii, 1870, 239, xli, 29a, b.
- irregularis, Terquem. Quatr. Mém. Foram. Lias, 1864, 297, xii, 36.
- labiata, Schwager. Novara-Exped., Geol. Theil II, 1866, 246, vii, 90.
- (Glob.) lacrima, Reuss. Verstein. böhm. Kreide, 1845–46, i, 40, xii, 6, xiii, 83. [v. *Globulina*.]
- lactea, Walker & Jacob. Williamson, Recent British Foram. 1858, 70, vi, 145–152, "145–147 typica." [*Serpula*, 1798.]
- — — — — v. acuminata, Williamson. Recent British Foram. 1858, 71, vi, 148.
- — — — — v. communis, [d'Orb.]. Williamson, Recent British Foram. 1858, 72, vi, 153–155.
- — — — — v. concava, Williamson. Recent British Foram. 1858, 72, vi, 151 and 152.
- — — — — v. fistulosa, Williamson. Recent British Foram. 1858, 72, vi, 150.
- — — — — v. oblonga, Williamson. Recent British Foram. 1858, 71, vi, 149 and 149a.
- — — — — Dawson, Canad. Nat. iv, 1859, 28, fig. 2 and 3.
- — — — — v. horrida [Reuss]. Mackie, Recreative Science, i, 1859, 148, fig. 23. [Given also as *Globigerina tubulosa*, d'Orb. A misprint for *Globulina*.]
- — — — — Jones & Parker, Quart. Journ. Geol. Soc. xvi, 1860, xx, 44.
- — — — — Parker & Jones, Phil. Trans. 1865, 359, xiii, 45 and 46.
- — — — — v. compressa, d'O. Parker & Jones, Phil. Trans. 1865, 361, xiii, 47–51. [v. *P. compressa*.]
- — — — — v. tubulosa, d'O. Parker & Jones, Phil. Trans. 1865, 362, xiii, 52a–d. [*Globulina*, 1846.]
- — — — — Brady, Proc. Somerset. Arch. and Nat. Hist. Soc. xiii, 1865–66 (1867), 230, iii, 49.

[\* Zittel refers to the Monogr. Polymorph., Trans. Linn. Soc. xxvii, 1869; and, although *P. inflata* is not mentioned therein, *P. lactea* (W. & J.), pl. xxxix, fig. 1, is very close to this form.]

- POLYMORPHINA lactea**, Walker & Jacob. J., P., & B., Crag Foram., Pal. Soc. **xix**, 1866, n. d., i, 48.  
 ——— ——— B., P., & J., Trans. Linn. Soc. **xxvii**, 1870, 213, xxxix, 1a-c.  
 ——— ——— v. *acuminata*, Will. B., P., & J., Trans. Linn. Soc. **xxvii**, 1870, 222, xxxix, 6c. [v. *supra*.]  
 ——— ——— v. *amygdaloides*, Reuss. B., P., & J., Trans. Linn. Soc. **xxvii**, 1870, 214, figg. in text, 215. [*Globulina*, 1851.]  
 ——— ——— B., P., & J., Trans. Linn. Soc. **xxvii**, 1870, xl, 12a.  
 ——— ——— P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], viii, 1871, 170, xi, 104. [v. *P. (Glob.) ovata*, d'O.]  
 ——— ——— Dawson, Canad. Nat. vi, 1872, 254, iii, 2.  
 Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 37, v, 12; (and Mém. Soc. Dunkerquoise).  
 ——— ——— Toula, Mittb. geogr. Ges. Wien, xviii, 1875, 165, pl. 17.  
 Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 79, x, 19 and 20; (and Mém. Soc. Dunkerquoise).  
 ——— ——— Nicholson, Manual Palaeont. 1879, i, 114, fig. 18j.  
 Brady, Report Challenger, 1884, 559, lxxi, 11; 14 var. and fistulose form, lxxii, 14.  
 ——— ——— Gümbel, Geol. Bayern, Th. i, Lief. 2, 1885, fig. 266, 15.  
 ——— ——— Dawson, Handbook Zoology, ed. 3, 1886, 44, fig. 34.  
 Brady, Parker, & Jones, Trans. Zool. Soc. **xii**, pt. 7, 1888, 224, xliv, 11.  
 ——— ——— Terrigi, Mem. R. Acc. Lincei [4], vi, 1889, 113, vi, 8, 9.  
 See *Misilus*; *Cantharus*; and *Arethusa*.  
 ——— *lagenalis*, Terquem. Quatr. Mém. Foram. Lias, 1864, 301, xiii, 39a, b.  
 ——— *lanceolata*, Reuss. Zeitschr. deutsch. geol. Ges. **iii**, 1851, 83, vi, 50.  
 ——— (*Gutt.*) ——— Reuss, Sitz. k. Ak. Wiss. Wien, **xlvi**, Abth. 1, 1863 (1864), 58 and 67, vii, 75a-c, 76, 77a, b, 78a, b, 79-84.  
 ——— ——— Brady, Report Challenger, 1884, 564, lxxii, 5 and 6.  
 ——— (*Gutt.*) ——— Andreae, Abb. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 210, ix, 18-20.  
 ——— (*Gutt.*) *lata*, Egger. Neues Jahrbuch, 1857, 288, xiii, 22-24.  
 ——— *leopolitana*, Reuss. Haidinger's Naturw., Abh. IV, (1), 1851, 44, iv, 11.  
 ——— *leprosa*, Reuss. Sitz. k. Ak. Wiss. Wien, LV, (1), 1867, 89, iv, 3a-c.  
 ——— *liassica*, Strickland. Quart. Journ. Geol. Soc. II, 1846, 30, fig. b.  
 ——— ——— B., P., & J., Trans. Linn. Soc. **xxvii**, 1870, 220, fig.  
 ——— *lingua*, Roemer. Neues Jahrbuch, 1838, 385, iii, 25. [Name corrected to *lingua*.]  
 ——— [*lingua*] ——— Reuss, Sitz. k. Ak. Wiss. Wien, xviii, 1856, 248, vii, 77.  
 ——— [*lingula*] ——— B., P., & J., Trans. Linn. Soc. **xxvii**, 1870, 230, fig.  
 ——— *lingulata*, Stache. Novara-Exped., Geol. Theil I, 1864, 255, xxiv, 1a, b.  
 ——— *longicollis*, Karrer. Jahrb. k. k. geol. Reichsanstalt, **xx**, 1870, 181, ii, 11.  
 ——— *longicollis*, Brady. Quart. Journ. Micr. Sci. **xxi**, 1881, 64.  
 ——— ——— Brady, Report Challenger, 1884, 572, lxxii, 18 and 19.  
 ? ——— *longirostrata*, Gümbel. Jahrb. k. k. geol. Reichsanstalt, **xix**, 1869, 178, v, 14 and 15. [*P. longirostris* in explanation to plate.]  
 ——— *longirostris*, Gümbel. See *P. longirostrata*.  
 ——— *longissima*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d. xiii, 22 and 23.  
 ——— *marsupium*, Stache. Novara-Exped., Geol. Theil I, 1864, 258, xxiv, 5a, b.  
 ——— *media*, Egger. Neues Jahrbuch, 1857, 287, xiii, 28 and 29.  
 ——— *metensis*, Terquem. Quatr. Mém. Foram. Lias, 1864, 301, xiii, 38a, b.  
 ——— ——— Terq. et Berth., Mém. Soc. géol. France, [2], x, 1875, 68, vi (xvi), 1a-j.

- POLYMORPHINA** *minima*, Bornemann. Zeitschr. deutsch. geol. Ges. vii, 1855, 344, xvii, 3.  
 —— (**Gutt.**) aff. *minima*, Born. Andreae, Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 210, ix, 16. [*Globulina* in plate.]  
 —— (**Glob.**) *minuta*, Roemer. Neues Jahrbuch, 1838, 386, iii, 35. [v. *Globulina*.]  
 —— —— —— B., P., & J., Trans. Linn. Soc. xxvii, 1870, 215, fig.  
 —— *mucronata*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 130, xvii, 3 ; (and Mém. Soc. Dunkerquoise).  
 —— *munsteri*, Reuss. Sitz. k. Ak. Wiss. Wien, xviii, 1856, 249, viii, 80.  
 —— —— —— Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), n. d. vii, 16 ; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 61, same pl. and fig.  
 —— *mutabilis*, Schwager. Jahresh. Ver. vat. Nat. Württ. xxi, 1865, 138, ii, 4 ; vii, 12 and 13. [*Polymorphina*, on p. 138 ; in descriptions of plate vii, these specimens are described as *inmutabilis*, q. v.]  
 —— *myristiformis*, Williamson. Recent British Foram. 1858, 73, vi, 156 and 157.  
 —— —— —— B., P., & J., Trans. Linn. Soc. xxvii, 1870, 239, xli, 30a-c.  
 —— —— —— Brady, Report Challenger, 1884, 571, lxxii, 9 and 10.  
 —— —— —— Balkwill & Millett, Journ. Micr. III, 1884, 84, iv, 10.  
 —— *nitiduscula*, Schwager. Benecke's Geogn. Pal. Beiträge, I, 1866, 308, fig. 12.  
 —— *nodosaria*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII (1), 1863 (1864), 58, vii, 85.  
 —— —— —— B., P., & J., Trans. Linn. Soc. xxvii, 1870, 233, xl, 18a, b.  
 —— —— —— Tate & Blake, Yorkshire Lias, 1876, 471, xvii, 34.  
 —— *nucleus*, Ehr. Mikrogeologie, 1854, xxx, 18. [= *Virg. hemprichii*, tending to *Cassidulina*.]  
 —— *oblonga*, d'Orbigny. Foram. Fossiles Vienne, 1846, 232, xii, 29-31.  
 —— —— —— Gosse, Manual Mar. Zool. 1855, 13, fig. 16.  
 —— —— —— Brady, Report Challenger, 1884, 569, lxxii, 2 and 4.  
 —— (**Glob.**) *oblonga*, Roemer. Neues Jahrbuch, 1838, 386, iii, 34.  
 —— *oblonga*, Williamson. B., P., & J., Trans. Linn. Soc. xxvii, 1870, 222, xxxix, 7a, b. [v. *P. lactea*.]  
 —— —— —— Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 37, v, 11 ; (and Mém. Soc. Dunkerquoise).  
 —— —— —— Jones, in Microgr. Dict. ed. 4, 1883, 620, xxiii, 42.  
 —— *obscura*, von Muenster. Roemer, Neues Jahrbuch, 1838, 385, iii, 23.  
 —— —— —— [Roem.]. Reuss, Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 471, iii, 9 and 10.  
 —— —— —— [Roem.] var. Reuss, Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 471, iii, 8.  
 —— (**Gutt.**) *obtusa*, Bornemann. Andreae, Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 209, ix, 14 and 15. [*Guttulina*, 1855.]  
 —— *obtusa*, Ehr. Mikrogeologie, 1854, xxxi, 31. [Near *Bigen*. (*Gemmula*) *digitata*, d'O.]  
 —— *obtusa*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 265, No. 1.  
 —— —— —— Terquem, Mém. Soc. géol. France, [3], II, 1882, 141, xiv (xxii), 28a, b.  
 —— *oolithica*, Terquem. Quatr. Mém. Foram. Oolith. 1874, 299, xxxii, 1-10.  
 —— —— —— Deecke, Abh. geol. Specialkarte Elsass-Lothr. IV, Heft 1, 1884, 53, ii, 19a.  
 —— —— —— Terquem, Mém. Soc. géol. France, [3], IV, 1886, 62, vii, 11-14.  
 —— —— —— Deecke, Mém. Soc. Emul. Montbéliard, XVI, 1886, [37], i, 29.  
 —— *orbignii* (Zborzewski). B., P., & J., Trans. Linn. Soc. xxvii, 1870, 244, xlii, 38a-c. [*Apioptera*, 1834.]

**POLYMORPHINA** orbignii (Zborzewski). Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 200, vii, 37.

- **ornata**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, (1), 1868, 175, iv, 10.
- **B.**, P., & J., Trans. Linn. Soc. XXVII, 1870, 242, xli, 34a, b.
- **ovata**, d'Orbigny. Foram. Fossiles Vienne, 1846, 233, xiii, 1-3.
- **Brady**, Report Challenger, 1884, 564, lxxii, 7 and 8.
- **Agassiz**, Three Cruises "Blake," II, 1888, 166, fig. 509.
- **(Glob.)** — = *P. lactea* (W. & J.). See *Polymorpha subcordiformia*, etc. [*Globulina*, 1826.]
- **oviformis**, Terquem. Cinq. Mém. Foram. Lias, 1866, 449, xviii, 12a, b.
- **Terquem**, Mém. Soc. géol. France, [3], I, 1878, 40, iii (viii), 34a, b.
- **ovigera**, Terquem. Quatr. Mém. Foram. Lias, 1864, 304, xiv, 1-15.
- **ovula**, Terquem. Quatr. Mém. Foram. Lias, 1864, 294, xi, 33-44.
- **ovulata**, Dunikowski. Kosmos [Lemberg], IV, 1879, 128, plate, 22.
- **ovulum**, Reuss. Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 250, viii, 83.
- **pauperata**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 38, iii (viii), 11a-19.
- **pernaeformis**, Stache. Novara-Exped., Geol. Theil I, 1864, 256, xxiv, 2a, b.
- **philippii**, Reuss. Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 248, vii, 76.
- **pigmæa**, Schwager. Jahresb. Ver. vat. Nat. Württ. XXI, 1865, 138, vii, 8. [*Polymorphina* on p. 138, and *pygmæa* in descript. of plates.]
- **piriformis**, Terquem. Quatr. Mém. Foram. Oolithique, 1874, 302, xxxiii, 2.
- **politæ**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 139, xiv (xxii), 23-25.
- **polygona**, Terquem. Quatr. Mém. Foram. Lias, 1864, 305, xiv, 16-41.
- **Terquem**, Quatr. Mém. Foram. Oolithique, 1874, 304, xxxiii, 7-14.
- **Terq. et Berth.**, Mém. Soc. géol. France, [2], X, 1875, 70, vi (xvi), 3.
- **Terquem**, Mém. Soc. géol. France, [3], IV, 1886, 63, vii, 18a, b.
- **prælonga**, Egger. Neues Jahrbuch, 1857, 287, xiii, 25-27.
- **prælonga**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 39, iii (viii), 20-21b.
- **Terquem**, Mém. Soc. géol. France, [3], II, 1882, 142, xiv (xxii), 34-45; and xv (xxiii), 1-8.
- **prisca**, Ehr. Mikrogeologie, 1854, xxiv, 34. [= *P. compressa*, d'O.]
- **prisca**, Reuss. Berthelin, Mém. Soc. géol. France, [3], I, 1880, 57, iv (xxvii), 20a-21. [*Globulina*, 1862.]
- **problema**, d'Orbigny. Modèles, No. 61, 1826. [v. *Guttulina*.]
- **(Gutt.)** — Egger, Neues Jahrbuch, 1857, 287, x, 23-25.
- **v. deltoidea**, Reuss. Denkschr. k. Ak. Wiss. Wien, XXV, 1865, 154, iv, 8.
- **(Gutt.)** — P., J., & B. [d'O., Modèles, 61], Ann. Mag. Nat. Hist. [3], XVI, 1865, 28, ii, 50.
- **J., P., & B.**, Crag Foram., Pal. Soc. XIX, 1866, n. d., i, 64.
- **B., P., & J.**, Trans. Linn. Soc. XXVII, 1870, 225, xxxix, 11a, b.
- **v. deltoidea**, Reuss. Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 50, viii, 3; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 59, same pl. and fig. [*P. gibba*, d'O., var. *deltoidea*, Rss., in descr. of plate.]
- **Tate & Blake**, Yorkshire Lias, 1876, 470, xvii, 33.
- **(Gutt.)** — **v. deltoidea**, Reuss. Andreae, Abh. geol. Spezialkarte Elsass-Lothr. II, Heft 3, 1884, 210, ix, 21.

- POLYMORPHINA** problema, d'Orbigny. Brady, Report Challenger, 1884, 568, lxxii, 20; lxxiii, 1.
- (Gutt.) — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 161, fig.
- proteiformis, Reuss. Bull. Ac. Roy. Belg. [2], xv, 1863, 151, ii, 30-36; iii, 37-40.
- pulchella, (d'O.). B., P., & J., Trans. Linn. Soc. xxvii, 1870, 239, xli, 28a, b. [*Gutulina*, 1839.]
- pupa, d'Orbigny. Ann. Sci. Nat. vii, 1826, 265, No. 9.
- pupiformis, Terq. Quatr. Mém. Foram. Lias, 1864, 300, xiii, 22-37.
- — — — — Terquem, Six. Méin. Foram. Lias, 1866, 525, xxii, 31a, b.
- — — — — Terquem, Quatr. Mém. Foram. Oolithique, 1874, 303, xxxiii, 4.
- — — — — Terquem, Mém. Soc. géol. France, [3], iv, 1886, 63, vii, 19.
- pusilla, Ehr. Monatsbericht k. pr. Ak. Wiss. Berlin, 1872, 291.
- — — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), iv, 12.
- pygmea. See *P. pigmea*.
- pyriformis, Terquem. Quatr. Mém. Foram. Lias, 1864, 298, xii, 41-43.
- quadrata, Terquem. Quatr. Mém. Foram. Lias, 1864, 296, xii, 25-32.
- racemosa, Terquem. Bull. Soc. zool. Fr. xi, 1886, 335, xi, 22.
- regina, B., P. & J. Trans. Linn. Soc. xxvii, 1870, 241; xli, 32a, b.
- — — — — Brady, Report Challenger, 1884, 571, lxxii, 11-13.
- — — — — Wright, Proc. Belfast Nat. Field Club, 1884-85, App. ix, 1886, 331, xxvii, 13 and 14. [13 is fistulose.]
- regularis, von Muenster. Roemer, Neues Jahrbuch, 1838, 385, iii, 21.
- — — — — Reuss, Sitz. k. Ak. Wiss. Wien, xviii, 1856, 247; vii, 70-73.
- — — — — v. *nysti*, Reuss. Bull. Acad. Roy. Belg. [2], xv, 1863, 152, iii, 42.
- — — — — [Philippi]. Reuss, Sitz. k. Ak. Wiss. Wien, I, Abth. 1, 1864 (1865), 472, iii, 11, 12; iv, 1.
- — — — — B., P., & J., Trans. Linn. Soc. xxvii, 1870, 229, xl, 13a-c.
- rochefortiana, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 137, ii, 9-11; also in Spanish, 1840, 131, same pl. and fig.
- — — — — Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1060, lxxxvii, 2.
- rotundata (Born.). B., P., & J., Trans. Linn. Soc. xxvii, 1870, 234, xl, 19a-e; figs. k, l, m. [*Gutulina*, 1855.]
- — — — — Brady, Ann. Mag. Nat. Hist. [5], I, 1878, 435, xx, 6a, b.
- — — — — Brady, Report Challenger, 1884, 570, lxxii, 5-8.
- rudit, Reuss. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 319, iii, 5-8.
- rugosa, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, "Foraminifères," 1839, 138, ii, 14 and 15; also in Spanish, 1840, 132, same pl. and fig.
- — — — — B., P., & J., Trans. Linn. Soc. xxvii, 1870, 237, xl, 23a-d. [v. also *Globulina*.]
- sacculus, Stache. Novara-Exped., Geol. Theil I, 1864, 259, xxiv, 6a, b.
- sacculus, Terquem. Quatr. Mém. Foram. Lias, 1864, 303, xiii, 43a, b.
- schwageri, Karrer. Abh. k. k. geol. Reichs. IX, 1877, 384, xvii, 43.
- sequenzana, Brady. Report Challenger, 1884, 567, lxxii, 16 and 17.
- semicostata, Marsson. Mitth. Nat. Ver. Neu-Vorpommern u. Rügen, Jahrg. x, 1878, 150, ii, 19a, b, c.
- semiplana, Reuss. Sitz. k. Ak. Wiss. Wien, LXII, 1870, 488, No. 16; von Schlicht, Foram. Pietzpuhl, 1870, xxvii, 22-33, 36, 37.
- semitecta, Reuss. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 91, iii, 10a-c.

- POLYMORPHINA septata**, Terquem. Quatr. Mém. Foram. Lias, 1864, 301, xiii, 40.
- **silicea**, Schultze. Organismus Polythal. 1854, 61, vi, 10 and 11. [= *Verneuil. polystropha.*]
- **similis**, Reuss. Sitz. k. Ak. Wiss. Wien, xviii, 1856, 249, vii, 79.
- **simplex**, Terquem. Quatr. Mém. Foram. Lias, 1864, 293, xi, 1-4. [= *Lituolæ.*]
- — — — — Terq., Quatr. Mém. Foram. Oolithique, 1874, 292, xxx, 3-6.
- — — — — Terq. et Berth., Mém. Soc. géol. France, [2], x, 1875, 66, v (xv), 17a-d.
- — — — — Terquem, Mém. Soc. géol. France, [3], iv, 1886, 61, vii, 8.
- **simplex**, Olszewski. Sprawozd. Kom. fizyj. Ak. Umiej. Krakowie, ix, 1875, 119, i, 12.
- **sinuata**, Terquem. Quatr. Mém. Foram. Lias, 1864, 298, xii, 48.
- **soldanii**, d'Orb. Ann. Sci. Nat. vii, 1826, 265, No. 12.
- — — — — B., P., & J., Trans. Linn. Soc. xxvii, 1870, 235, xl, 20.
- — — — — P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], viii, 1871, 170, xi, 106.
- — — — — Terrigi, Atti Acc. Pout. Nuovi Lincei, xxxv, 1883, 183, ii, 22.
- — — — — See *Orthoceratia tuberosa*.
- **solidula**, Terquem. Mém. Soc. géol. France, [3], i, 1878, 40, iii (viii), 31a-33.
- **(Gutt.) sororia**, Reuss. Bull. Ac. Roy. Belg. [2], xv, 1863, 151, ii, 25-29.
- **(Gutt.)** — — — Reuss, Sitz. k. Ak. Wiss. Wien, xlvi, Abth. 1, 1863 (1864), 57 and 67, vii, 72a-c, 73 and 74.
- — — — — Brady, Report Challenger, 1884, 562, lxxi, 15 and 16; fistulose form, lxxiii, 15.
- — — — — **v. cuspidata**. Brady, Report Challenger, 1884, 563, lxxi, 17, 19; lxxii, 4.
- — — — — Walther, Mitt. Zool. Stat. Neapel, viii, 1888, 382, xx, 4.
- **spatulata**, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 142, xiv (xxii), 32a, b.
- **(Gutt.) spicæformis**, Roemer. Neues Jahrbuch, 1838, 386, iii, 31.
- **(Glob.) spinosa**, d'Orb. Egger, Neues Jahrbuch, 1857, 292, xiv, 9 and 10. [*Globulina*, 1846.]
- — — — — B., P., & J., Trans. Linn. Soc. xxvii, 1870, 243, xlii, 36a, b.
- — — — — Balkwill & Wright, Trans. R. Irish Ac. xxviii (Sci.), 1885, 347, xii, 27.
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**POLYSTOMATIUM**, Ehr., 1855. Abb. k. pr. Ak. Wiss. Berlin, 1855, 172, v, xii. [= *Polystomella*.] [Glauc.]  
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- — — — — Dawson, Handbook Zoölogy, ed. 3, 1886, 45, fig. 37.
- [= *P. arctica*.] Hogg, Microscope, 1886, 375, fig. 207<sup>a</sup>.
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- — — — — = *P. macella* (F. & M.); see *Nautili striati communes (crispi) Liunaei*.
- — — — — See *Themeon*.
- — — — — *cryptostoma*, Egger. Neues Jahrbuch, 1857, 301, ix, 19 and 20.
- — — — — *depressula*, Brown. Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 1, i, 3. [= *Crist. rotulata*.]
- — — — — *depressula*, G. B. Sowerby. Foram. Colne Tidal River, 1856 [privately printed], plate, fig. 1. [= *P. crispa*.]
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- — — — — *discoidalis*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 56, vi, 23 and 24; also in Spanish, 1840, 76, same pl. and fig.
- — — — — *discrepans*, Reuss. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 478, iv, 7a, b.
- — — — — *etrusca*, Defrance. Dict. Sci. Nat. XXXII, 1824, 183; Blainville, Malacol. 1825, 389.
- — — — — *excavata*, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 25, ii, 2a-f; (and Mém. Soc. Dunkerquoise).
- — — — — *exoleta*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., xix, 10.
- — — — — *fichtelliana*, d'Orbigny. Foram. Fossiles Vienne, 1846, 125, vi, 7 and 8.
- — — — — Mackie, Recreative Science, I, 1859, 147, fig. 11.
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- — — — — *flexuosa*, d'Orbigny. Foram. Fossiles Vienne, 1846, 127, vi, 15 and 16.
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- — — — — Egger. Neues Jahrbuch, 1857, 303, xv, 21 and 22.
- — — — — Eichwald, Lethaea Rossica, III, 1853, 3, i, 1a, b, c.
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- — — — — *gaimardii*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 284, No. 5.
- — — — — *gibba*, Schultze. Organismus Polythal. 1854, 66, vi, 1-4.
- — — — — *granulata*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 214, xi [error for x], 7a, A, B, C.
- — — — — *hauerina*, d'Orbigny. Foram. Fossiles Vienne, 1846, 122, vi, 1 and 2.
- — — — — *imperatrix*, Brady. Quart. Journ. Micr. Sci. XXI, 1881, 66.

- POLYSTOMELLA imperatrix**, Brady. Report Challenger, 1884, 738, ex 13-15.
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- *inflata*, Reuss. Sitz. k. Ak. Wiss. Wien, XLII, 1860 (1861), 358, i, 10a, b.
- *josephina*, d'Orbigny. Foram. Fossiles Vienne, 1846, 130, vi, 25 and 26.
- — — Egger, Neues Jahrbuch, 1857, 303, xv, 10 and 11.
- — — Hoernes, Elem. Palaeont. 1884, 25, fig. 11; French ed. 1886, same fig.
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- *lessonii*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 284, No. 6.
- — — D'Orbigny, Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 29, iii, 1 and 2.
- *listeri*, d'Orbigny. Foram. Fossiles Vienne, 1846, 128, vi, 19-22.
- *macella* (F. & M.). P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 239, xii, 154. [See *Nutilus*, 1798.]
- — — Brady, Report Challenger, 1884, 737, ex 8, 9, 11, and 10?
- — — Terrigi, Mem. R. Acc. Lincei, [4], VI, 1889, 120, x, 3. See *Ammonite*. See *Elphidium* and *Geophorus*.
- *metensis*, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 628, iv, 7a, b.
- *minima*, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 333, XVII, 38, 38a.
- *minuta*, Reuss. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 478, iv, 6a, b.
- *nobilis*, Karrer. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 710, ii, 15.
- ? — *obscura*, Schwager. Palaeontographica, XXX, Pal. Theil, 1883, 138, xxvii (4), 2a-c.
- *obtusa*, d'Orbigny. Foram. Fossiles Vienne, 1846, 124, vi, 5 and 6.
- *oceanensis*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 285, No. 8.
- *ornata*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 215, x, 8; xix, 16A, B, C.
- *ortenburgensis*, Egger. Neues Jahrbuch, 1857, 302, xv, 7-9.
- *oweniana*, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 30, iii, 3 and 4.
- *planulata*, Lamarck. Hist. Anim. s. Vert. VII, 1822, 625.
- — — Defrance, Dict. Sci. Nat. XXXII, 1824, 183; Atlas, Conch. XV, 8. [= *P. macella* (F. & M.)]
- — — Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 388, viii [error for vii], 8.
- — — Cuvier, Animal Kingdom, Henderson's ed. III, 1834 (pls. 1837), 18, iv bis, 8.

- POLYSTOMELLA** poeyana, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 55, vi, 25 and 26; also in Spanish, 1840, 75, same pl. and fig.
- ? —— **polypora**, Gümbel. Jahresh. Ver. vat. Nat. Württ. XVIII, 1862, 231, iv, 6a, b.
- **punctata**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 16, i (vi), 7a, b.
- **quaterpunctata**, Abich. Mém. Ac. Imp. Sci. [Math. Phys.] St. Pétersbourg, [6], VII, 1859, ix, 8a, b.
- **regina**, d'Orbigny. Foram. Fossiles Vienne, 1846, 129, vi, 23 and 24.
- —— Mackie, Recreative Science, I, 1859, 147, fig. 12.
- **rotula**, Michelotti. Mem. Soc. Ital. Sci. XXII, 1841, 288, ii, 8.
- **rugosa**, d'Orbigny. Foram. Fossiles Vienne, 1846, 123, vi, 3 and 4.
- —— Pictet, Traité de Paléont. 2 ed. IV, 1857, 505, cix, 24.
- **sagra**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 55, vi, 19 and 20; also in Spanish, 1840, 74, same pl. and fig.
- **salentina**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 218, xix, 12A, B, C.
- **savii**, Michelotti. Mem. Soc. Ital. Sci. XXII, 1841, 287, i, 7.
- —— Michelotti, Nat. Verh. Holland. Maatsch. Wetensch. Haarlem, II verzam. 3 dl. 2 stk. 1847, 18, not fig'd.
- **semistriata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, p. 284, No. 7.
- **spinulosa**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., xix, 14.
- **stella-borealis** (Ehr.). In Schultze, Organismus Polythal. 1854, 67, vi, 5 and 6.
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- —— P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 241, xii, 186. [*v. Robulina sulcata*, d'O.]
- —— Schulze, Arch. mikrosk. Anat. XIII, 1877, 9, etc. ii, 4-6.
- —— [Structural.]
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- —— —— Jones, in Microgr. Dict. ed. 4, 1883, 623, xxiv, 19.
- —— —— Brady, Report Challenger, 1884, 733, cix, 22, 23.
- —— —— B., P., & J., Trans. Zool. Soc. XII, pt. 7, 1888, 230, xlivi, 17.
- —— —— Terrigi, Mem. R. Acc. Lincei, [4], VI, 1889, 120, x, 2.
- —— —— Soldani, Testac. I, 1, 1789, 54, pl. 34ee, ff = this form.
- —— —— See *P. crista* (Linn.).
- **strigilata** (F. & M.). Schultze, Organismus Polythal. 1854, 64, iv and v. [*Nautilus*, 1798.] [Structural.]
- —— —— Bronn, Klassen Ordin. Thier-Reichs, I, 1859, 71, v, 1 and 2.
- —— —— Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 211, xi, 1 and 2.
- —— —— Schlumberger, F. Jeun. Nat., Feb. 1882, ii, 10 (after Schultze).
- —— —— = *P. crista*; see *Nautili striati*, etc.
- —— —— See *Andromedes*.
- —— —— var. See *Sporilus*.
- **striolata**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., xix, 15, 18.
- **subaculeata**, Eichwald. Lethaea Rossica, III, 1855, i, 3a, b, c.
- **subcarinata**, Egger. Neues Jahrbuch, 1857, 301, XIV, 24 and 25.
- **subnodososa** (v. M.). Reuss, Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 240, iv, 51. [*Robulina*, 1838.]
- —— —— Brady, Report Challenger, 1884, 734, ex, 1a, b.

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- tenuissima, Karrer. Novara-Exped., Geol. Theil I, 1864, 83, xvi, 17 [error for 16].
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- umbilicatula, Walker & Boys. See *Nautilus*.
- Williamson, Recent British Foram. 1858, 42, iii, 81, 82, 82a (v. *incerta*). [= *P. striatopunctata*.]
- v. *incerta*, Williamson. Recent British Foram. 1858, 44, iii, 82a. [= *P. arctica*, P. & J.]
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- — — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 25, ii, 3a, b; (and Mém. Soc. Dunkerquoise).
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- — — — — Brady, Report Challenger, 1884, 738, ex, 12a, b.
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- vulgaris, Reeve. Conch. system. II, 1842, 291, ccxevii, 8. [= *Planorbula*, d'O. = *Planorb.*]
- [— ?] Ledermüller, Mikr. Gemüths, 1763, 16, viii, b.
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- ind. Abich, Geol. Forsch. Kaukas. Ländern, 1882, 239, x, 6.
- sp. Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 230, xliv, 18.
- Neumayr, Stämme d. Thierreiches, I, 1889 (8), 185, fig. 27b.
- see *Nautilo*.
- see *Nautilus*.
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- POLYTREMA**, Risso, 1826. Hist. Nat. Europe Mérid. v, 1826, 340; Brady, Report Challenger, 1884, 719.
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 ——— [*miniaceum*] — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 208, ix, 11.  
 ——— [*miniaceum*] [(Linn.)]. Brady, Report Challenger, 1884, 721c, 5-9; cl. 1.  
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 ——— [*miniaceum*] — Agassiz, Three Cruises "Blake," II, 1888, 169, fig. 519.  
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 ——— *rubra*, Lamarck. See *Millepora*.  
 ——— — Carpenter, Parker, & Jones, Introd. Foram. 1862, 235, xiii, 18-20. [= *miniaceum*.] [Structural.]  
 ——— — Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 26, pl., 72.  
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**POLYTRYPA** *elongata*, Deffrance. Dict. Sci. Nat. XLII, 1826, 453; Atlas, Zooph. xlvi, 1.  
 ——— — Blainville, Actinologie, 1834, lxxiii, 1.  
 ——— = *Larvaria* = *Dactylopora* = Calcareous Alga.  
**Polytrypes**, see *Polytrypa*.  
**POLYXENES** *cribratus*, Montfort. Conch. syst. I, 1808, 139, 35th genre.  
 [= *Planorb. farcta*.]  
**POROSPHERA** *globularis* (Phillips). Steinmann, Palaeontographica, XXV, 1878, 120, xiii, 8-12. [*Millepora*, 1829; *Tragos*, 1845; *Coscinopora*, 1852; ?*Bradya*, 1877.]  
**POROSPIRA**, Ehrenberg, 1844. Ber. k. pr. Ak. Wiss. Berlin, 1844, 75.  
 ——— *comes*, Ehr. Ber. k. pr. Ak. Wiss. Berlin, 1844, 67 and 95; and Mikrogeologie, 1854, xxi, 93. [= *Planorb. ammonoides*, v.]  
 ——— *forbesii*, Ehr. Monatsber. k. pr. Ak. Wiss. Berlin, 1858, 26.  
 ——— *indica*, Ehr. Ber. k. pr. Ak. Wiss. Berlin, 1845, 373.  
 ——— *leptomphala*, Ehr. Monatsber. k. pr. Ak. Wiss. Berlin, 1872, 291.  
 ——— *lingua*, Ehr. Ber. k. pr. Ak. Wiss. Berlin, 1844, p. 95.  
 ——— *naxi*, Ehr. Monatsber. k. pr. Ak. Wiss. Berlin, 1858, 27.  
 ——— *osculata*, Ehr. Monatsber. k. pr. Ak. Wiss. Berlin, 1858, 27.  
 ——— *princeps*, Ehr. Ber. k. pr. Ak. Wiss. Berlin, 1844, 67 and 95; and Mikrogeologie, 1854, xxi, 92. [= *Planulina turgida*, young = *Planorb. ammonoides*.]  
 ——— — Ehr. Mikrogeologie, 1854, xxiv, 53. [= *Planulina ariminensis*, d'O.]  
 ——— *planulina*, Ehr. Monatsber. k. pr. Ak. Wiss. Berlin, 1872, 291.  
 ——— — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), IV, 11.  
 ——— *quaternata*, Ehr. Ber. k. pr. Ak. Wiss. Berlin, 1845, 373.  
 ——— *septenaria*, Ehr. Monatsber. k. pr. Ak. Wiss. Berlin, 1872, 291.  
 ——— — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), IV, 10.  
 ——— *sphaerotheca*, Ehr. Monatsber. k. pr. Ak. Wiss. Berlin, 1872, 292.  
 ——— *stichopora*, Ehrenberg. [v. *Aristerospira*.]  
**Porpitæ** *nummulares*, Stobaeus. Dis. epist. ad W. Grotthaus, de Numm. Bratt. 1732. [= *Orbitolites*.]  
**Porpitæ** *soluti*, Soldani. Testac. II, App. 1798, p. 140, pl. 4, 34g, G, h, H. [*Soldania spirorbis*, d'O. Ann. Sci. Nat. VII, 1826, p. 281, 2.]

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- Porpite,** Guettard, Mém. diff. parties Science, etc. III, 1770, 431, xii, 15 and 17. [= ? *Alveolina*.]
- Porpiten,** Fortis, Beschreib. Thales Ronca, 1779, 14, i, 1. [Also called "pietra da soldo."] [= *Nummulites*.]
- Porpites,** Deluc, Journ. Physique, LVI, 1802, 325, etc. plate, fig. 7-12. [*Orbitolites*.]
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- PROBLEMATINA,** Bornemann, 1874. Zeitschr. deutsch. geol. Ges. xxvi, 1874, 733.
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  - *nodosa* (Terq.). Idem, 735. [*Involutina*, 1866.]
  - *petræa* (Terq.). Idem, 734. [*Involutina*, 1866.]
- PROROPORUS,** Ehrenberg, 1844. Ber. k. pr. Ak. Wiss. Berlin, 1844, 75.
- *argus*, Ehr. Mikrogeologie, 1854, xx, ii, 8. [= *Boliv. punctata*.]
  - ? — *clavulina*, Ehr. Mikrogeologie, 1854, xxx, 15. [= *Boliv. dilatata* = *B. incrassata*, Reuss.]
  - *complanatus*, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 231, xii, 5a, b.
  - — — Reuss' Models, No. 41, 1865 (Catal., No. 76, 1861). [= 1st stage of a *Bigenerina*.]
  - — — Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 25, pl. 33.
  - *cretæ*, Ehr. Mikrogeologie, 1854, xxvii, 29, and xxviii, 20. [= *Polym. thouini*.]
  - — ? Ehr. Mikrogeologie, 1854, xxxvii, vi, 2. [= ? *Polymorphina*.]
  - *cylindroides*, Roemer. Reuss, in Geinitz, Grundr. Verstein, 1845-46, 678, xxiv, 80. [*Polymorphina*, 1838.]
  - — — Brönn, Lethaea Geognostica, ed. 3, III, 1853-56, 234, xxxv<sup>2</sup>, 31a, b.
  - ? — *denticulatus*, Ehr. Ber. k. pr. Ak. Wiss. Berlin, 1845, 374.
  - *lingua*, Ehr. Ber. k. pr. Ak. Wiss. Berlin, 1844, 67 and 95; and Mikrogeologie, 1854, xxi, 83. [= *Boliv. punctata*, ribbed v.]
  - *obtusus*, Ehr. Mikrogeologie, 1854, xxxii, ii, 23. [= *Polym. compressa*.]
  - — ? — Ehr., Mikrogeologie, 1854, xxxii, ii, 24. [= *Bigen. digitata*, d'O.]
  - *ombonii*, Hantken. Ertek. Termesz. köreböl, XIII, No. 1, 1883, 10, i, 3; and Math. Nat. Ber. Ungarn, II, 1884, 131.
  - ? — (Gramm.?) *pachyderma*, Ehr. Mikrogeologie, 1854, xxiii, 25. [= *Text. agglutinans*.]
  - *schultzei*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 80, ix, 10a, b.
  - *siculus*, Ehr. Mikrogeologie, 1854, xxvi, 18. [= probably *Polym. thouini*.]
  - *subdepressus*, Münster. Reuss, in Geinitz, Grundr. Verstein. 1845-46, 679, xxiv, 81. [*Polymorphina*, 1838.]
  - *verrucosus*, Ehr. Mikrogeologie, 1854, xxix, 29. [= *Polym. tuberculata*, (d'O.).]
  - — — Schwager, Jahresh. Ver. vat. Nat. Württ. XXI, 1865, vii, 19.
- PROTEONINA,** Williamson, 1858. Recent British Foram. 1858, 1.
- *fusiformis*, Williamson. Recent British Foram. 1858, 1, i, 1. [v. also *Reophax*.]
  - *lævigata*, Terquem. Ess. Anim. Plage Dunkerque, pt. I, 1875, 20, i, 2a, b; (and Mém. Soc. Dunkerquoise). [= ?.]
  - *pseudospirale*, Williamson. Recent British Foram. 1858, 2, i, 2 and 3. [v. also *Haplophragmium*.]

- PROTEONINA rugosa**, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 20, i, 1a, b; (and Mém. Soc. Dunkerquoise).
- sp. Carpenter, Proc. Roy. Soc. xviii, 1869, 60; The Microscope, ed. 5, 1875, 533, figs. d, e, f. [= *Marsipella elongata*, Norman.]
- PSAMMATODENDRON**, Norman, MS., 1881. Brady, Denkschr. k. Ak. Wiss. Wien, xlvi, 1881, 98, No. 13; Ann. Mag. Nat. Hist. [5], viii, 1881, 404.
- *arborescens*, Norman, MS. Idem. [v. *Hyperammina*.]
- PSAMMECHINUS**, de Folin, 1881. Bull. Soc. N. H. Toulouse, xv. [v. *Premnammina*.]
- PSAMMOLYCHNA**, de Folin, 1881. Bull. Soc. N. H. Toulouse, xv, 136, n. d.; 5 species proposed!
- PSAMMOPERIDIA**, de Folin, 1881. Bull. Soc. N. H. Toulouse, xv, 135, n. d.; 2 species proposed.
- PSAMMOSIPHON**, G. R. Vine. Quart. Journ. Geol. Soc. xxxviii, 1882, 390. [This form, of which the type is *P. amplexus*, was considered by Vine to be an annelid; F. Chapman, in Quart. Journ. Geol. Soc. 1895, shows it to be a Foraminifer.]
- PSAMMOSPHÆRA**, F. E. Schulze, 1875. II. Jahresh. Comm. Wiss. Untersuch. deutsch. Meer in Kiel, 1875, 113; Brady, Report Challenger, 1884, 249.
- *fusca*, Schulze. II. Jahresh. Comm. Wiss. Untersuch. deutsch. Meer in Kiel, 1875, 113, ii, 8a-f.
- — — — — Brady, Q. Journ. Micr. Sci. xix, 1879, 27, iv, 1 and 2.
- — — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 202, v, 6.
- — — — — Haeusler, Neues Jahrbuch, 1883, i, 57, iii, 1.
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- — — — — Brady, Report Challenger, 1884, 249, xviii, 1-8.
- — — — — De Folin, Le Naturaliste, Ann. 10, 1888, 110, figs. 4 and 5.
- — — — — de Folin, Le Naturaliste, Ann. 9, 1887, 127, fig. 13.
- PSAMMOZOTIKA**, de Folin, 1881. Bull. Soc. N. H. Toulouse, xv, 138, n. d.; 1 sp. proposed.
- PSECADIUM**, Reuss, MS. [before 1856]. Reuss, Sitz. k. Ak. Wiss. Wien, xliv (1), 1861, 383. [Although this genus was used by Neugeboren in 1856, Reuss does not appear to have described it before 1861.] [= *Glandulina*.]
- *acuminatum*, Reuss. Sitz. k. Ak. Wiss. Wien, lxii, Abth. 1, 1870, 478; v. Schlicht, Foram. Septar. Pietzpuhl, 1870, xxv, 1-10.
- *ellipticum*, Neugeboren. Denkschr. k. Ak. Wiss. Wien, xii, 2, 1856, 99, v, 14.
- — — — — Reuss' Models, No. 29, 1865 (Catal., No. 55, 1861).
- *elongatum*, Reuss. Zeitschr. deutsch. geol. Ges. x, 1858, 437, No. 1.
- *nussdorffense*, Karrer. Abh. k. k. geol. Reichs. ix, 1877, 379, xvi b, 23.
- *ovatum*, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 139, xiii, 8.
- *simplex*, Neugeboren. Denkschr. k. Ak. Wiss. Wien, xii, 2, 1856, 99, v, 13.
- *subovatum*, Karrer. Sitz. k. Ak. Wiss. Wien, l, Abth. 1, 1864 (1865), 706, i, 7.
- PSEUDOTEXTULARIA**, Rzehak, 1886. Verh. Nat. Ver. Brunn, xxiv, Heft 1, 1885 (1886), Sitzungsber. 8.
- PSEUDOTRUNCATULINA**, Andreæ, 1884.
- *dutemplei* (d'Orb.). Andreæ, Abh. geol. Speciaalkarte Elsass-Lothr. ii, Heft 3, 1884, 213, viii, 10. [= *Rotalina*, 1846.]
- Andreæ, Abh. geol. Speciaalkarte Elsass-Lothr. ii, Heft 3, 1884, 214, fig. 9.
- PTYGOSTOMUM**, Ehrenberg, 1841. Abh. k. Ak. Wiss. Berlin, 1841, 409.
- *oligoporum*, Ehr. Abh. k. Ak. Wiss. Berlin, iii, vii, 51, 1841, 427. [= *Planorbolina*?]

- PTYGOSTOMUM** orphei, Ehr. Ber. k. pr. Ak. Wiss. Berlin, 1854, 248.  
 —————— Ehr., Mikrogeologie, 1854, xxxv, B, iv, 1 and 2. [= *Globig. bulloides*.]  
 —————— quinarium, Ehr. Mikrogeologie, 1854, xxxii, i, 28. [= *Globig. hirsuta*, d'Orb.]  
 —————— Ehr., Mikrogeologie, 1854, xxv, i, A, 43. [= *Planorb. vulgaris*.]  
 —————— senarium, Ehr. Mikrogeologie, 1854, xxxi, i, 27. [= *Globig. hirsuta*, d'Orb.]  
 —————— Ehr., Mikrogeologie, 1854, xxv, i, A, 42. [= *Planorb. vulgaris*.]  
 ————— sp., Harting, Verh. Kon. Ak. Wetensch. x, 1864, 9, i, 6 and 7.  
**PTYKA**, de Folin, 1881. Bull. Soc. N. H. Toulouse, xv, 139, n. d.; 1 sp. proposed.  
**PULLENIA**, Parker & Jones, 1862. C., P., & J., Introd. Foram. 1862, 184; Brady, Report Challenger, 1884, 614.  
 ————— bulloides (d'Orbigny). C., P., & J., Introd. Foram. 1862, 184, xii, 12. [*Nonionina*, 1826.]  
 ————— Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 50, x, 9; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 59, same pl. and fig.  
 ————— Zittel, Handbuch Palaeont., Abth. I, 1876, 88, fig. 25<sup>2</sup>.  
 ————— Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 25, pl. 14.  
 ————— Bütschli, in Brönn, Klassen, etc. Thier-Reichs, 1880, 211, ix, 14.  
 ————— Andreae, Abh. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 206, ix, 23.  
 ————— Steinmann, Elem. Paléont. I, 1888, 32, fig. 16.  
 ————— **communis** (d'Orb.). Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 50, x, 10; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 59, same pl. and fig. [*P. elongata*, Hantk., on plate.] [See *Nonionina*.]  
 ————— **compressa**, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 221, xvii, 14, 14a.  
 ————— **compressiuscula**, Reuss. Denkschr. k. Ak. Wiss. Wien, xxv, 1866, 150.  
 ————— v. **quadriloba**, Reuss. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 87, iii, 8a, b.  
 ————— v. **quinqueloba**, Reuss. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 87.  
 ————— Andreae, Abh. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 206, ix, 22.  
 ————— **elongata**, Hantken. See *P. communis*, d'Orb.; = *Nonionina*.  
 ————— **falx** (Czjzek). Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxiii, 1880, 190, i, 22. [*Nonionina*, 1843.]  
 ————— **obliquiloculata**, Parker & Jones. Phil. Trans. 1865, 368, xix, 4a, b.  
 ————— Brady, Report Challenger, 1884, 618, lxxxiv, 16–20.  
 ————— **quinqueloba**, Reuss. Brady, Report Challenger, 1884, 617, lxxxiv, 14 and 15. [*Nonionina*, 1851.]  
 ————— Balkwill & Wright, Trans. R. Irish Ac. xxviii (Sci.), 1885, 348, xii, 29a, 29b.  
 ————— Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 226, xlivi, 22 and 23.  
 ————— Sherborn & Chapman, Journ. R. Mier. Soc. 1889, 487, xi, 29.  
 ————— **sphaeroides**, d'Orbigny. Parker & Jones, Phil. Trans. 1865, 368, xiv, 43a, b; xvii, 53. [*Nonionina*, 1826.]  
 ————— J., P., & B., Crag Foram., Pal. Soc. xix, 1866, n. d., ii, 31 and 32.

- PULLENIA sphæroides**, d'Orbigny. Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxiii, 1880, 18, i, 21.  
 ——— ——— ——— Hamilton, Trans. N. Zealand Inst. xiii, 1881, 396, xvi, 15.  
 ——— ——— ——— Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 104, viii, 248-250.  
 ——— ——— ——— Brady, Report Challenger, 1884, 615, lxxxiv, 12 and 13; and cut, fig. 18, 616.  
 ——— ——— ——— Balkwill & Wright, Trans. R. Irish Ac. xxviii (Sci.), 1885, 348, xii, 28a, 28b.  
 ——— ——— ——— Sherborn & Chapman, Journ. R. Micr. Soc. [2], vi, 1886, 756, xvi, 10a, b.  
 ——— ——— ——— Brady, Parker, & Jones, Trans. Zool. Soc. xii, pt. 7, 1888, 226, xlivi, 21 and 24.
- PULVINULINA**, Parker & Jones, 1862. Carpenter, Parker, & Jones, Introd. Foram. 1862, 201; Brady, Report Challenger, 1884, 681.  
 ——— *affinis*, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 68, x, 6; and Mittth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 78, same pl. and fig.  
 ——— *auricula* (Fichtel & Moll.). J., P., & B., Crag Foram., Pal. Soc. xix, 1866, n. d., ii, 33-35. [*Nautilus*, 1798.]  
 ——— ——— P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], viii, 1871, 173, xii, 143. [See *Rotalia bronniartii*, d'Ö.]  
 ——— ——— Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxiii, 1880, 206, iii, 58.  
 ——— ——— Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 109, viii, 273-275.  
 ——— ——— Brady, Report Challenger, 1884, 688, evi, 5a, b, c.  
 ——— ——— Malagoli, Atti Soc. Nat. Modena, (Rend.) 3, iii, 1887, 110, i, 16.  
 ——— ——— Agassiz, Three Cruises "Blake," ii, 1888, 169, fig. 515.  
 ——— ——— Terrigi, Mem. R. Acc. Lincei, [4], vi, 1889, 119, ix, 2.  
 ——— ——— Soldani, Testac. i, 1, 1789, 56, pl. 37E = this form.  
 ——— see *Cancris*.  
 ——— *badensis* (Czjzek). Carpenter, Parker, & Jones, Introd. Foram. 1862, 201, fig. xxxii, A. [*Rotalina*, 1848.]  
 ——— ——— Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxv, 1883, 199, iii, 43.  
 ——— *berthelotiana* (d'Orbigny). Brady, Report Challenger, 1884, 701, evi, 1a, b, c. [See *Rotalina*, 1839.]  
 ——— *bimammata* (Gümb.). Uhlig, Jahrb. k. k. geol. Reichsanstalt, xxxvi, 1886, 192, iii, 7 and 8; v, 4, 5, and 8. [*Rotalia*, 1868.]  
 ——— *brœckiana*, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 140, vi, 12.  
 ——— *brogniartia* [*bronniartia*], d'Orb. Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 68, ix, 5; and Mittth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 78, same pl. and fig. [Given as *Pulv. budensis* in descr. of plate.]  
 ——— *boueana* (d'Orbigny). Reuss, Denkschr. k. Ak. Wiss. Wien, xxv, 1865, 161, iv, 14. [*Rotalina*, 1846.]  
 ——— ——— Sherborn & Chapman, Journ. R. Micr. Soc. [2], vi, 1886, 758, xvi, 20a-c.  
 ——— *budensis*, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), not descr., ix, 5; and Mittth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), same pl. and fig. [See *P. brogniarti*.]  
 ——— cf. *campanella*, Gümbel. Schwager, Palaeontographica, xxx, 1883, Pal. Theil, 131, xxviii (5), 3a-d. [*Rotalia*, 1868.]  
 ——— *canariensis* (d'Orb.). S. R. J. Owen, Journ. Linnean Soc. (Zool.) ix, 1867, 148, v, 20 and 21. [*Rotalina*, 1839.]  
 ——— ——— Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxiii, 1880, 207, iii, 59, 60.

- PULVINULINA canariensis** (d'Orb.). Brady, Report Challenger, 1884, 692, ciii, 8-10.  
 ——— ——— Hogg, Microscope, 1886, xviii, iii, 84.  
 ——— ——— See *P. repanda* (F. & M.).  
 ——— **candidula**, Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 133, xxviii (5), 10a-d.  
 ——— **caracolla** (Roemer). See *Gyroidina*.  
 ——— ——— Soldani, Testac. I, 1, 1789, 56, pl. 38G = var. of this form.  
 ——— **communis** (d'Orbigny). P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 173, xii, 145. [*Rotalina*, 1826.]  
 ——— **concentrica**, Parker & Jones, MS. Brady, Trans. Linnean Soc. xxiv, 1864, 470, xlvi, 14.  
 ——— ——— Brady, Report Challenger, 1884, 686, cv, 1a, b, c.  
 ——— ——— Uhlig, Jahrb. k. k. geol. Reichsanstalt, xxxvi, 1886, 190, iii, 3 and 4.  
 ——— ——— Soldani, Testac. I, 1, 1789, 56, pl. 37B = this form.  
 ——— **contraria**, Reuss, Sitz. k. Ak. Wiss. Wien, LXII, 1870, 490, No. 3; v. Schlicht, Foram. Pietzpuhl, 1870, xxii, 10-13.  
 ——— **cordieriana** (d'Orb.). Jones, Cat. Foss. Foram. Brit. Mus. 1882, 88. [*Rotalina*, 1840.]  
 ——— **cordiformis** (Costa). Reuss, Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 103, v, 3a, b. [*Valvulina*, 1856.]  
 ——— **crassa** (d'Orbigny). S. R. J. Owen, Journ. Linn. Soc. (Zool.) IX, 1867, 148, v, 18 and 19. [*Rotalina*, 1840.]  
 ——— ——— Brady, Report Challenger, 1884, 694, ciii, 11 and 12.  
 ——— **deludens**, Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 135, no figure.  
 ——— **dispansa**, Brady. Report Challenger, 1884, 687, cxv, 3a, b.  
 ——— **elegans** (d'Orbigny). P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 174, xii, 142. [*Rotalina*, 1826.]  
 ——— ——— Tate & Blake, Yorkshire Lias, 1876, 472, xvii, 38, 38a.  
 ——— ——— Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 111, viii, 283-285.  
 ——— ——— v. **trochus**, Roemer. Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 112, viii, 286-288. [*Rotalina*, 1838.]  
 ——— ——— v. **tenella**, Jones. Quart. Journ. Geol. Soc. XL, 1884, 771, xxxiv, 17a, b.  
 ——— ——— Brady, Report Challenger, 1884, 699, cv, 4, 5, and 6.  
 ——— ——— [Brady]. Walther, Mitth. Zool. Stat. Neapel, VIII, 1888, 382, xx, 6.  
 ——— ——— B., P., & J., Trans. Zool. Soc. XII, pt. 7, 1888, 228, xlvi, 2.  
 ——— ——— Sherborn & Chapman, Journ. R. Micr. Soc. 1889, 487, xi, 30-32.  
 ——— ——— See *P. repanda* (F. & M.).  
 ——— **erinacea**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 187, v, 6.  
 ——— **exigua**, Brady. Report Challenger, 1884, 696, ciii, 13 and 14.  
 ——— **eximia**, Rzebak. Ann. k. k. Nat. Hofmuseums, III, Heft 3, 1888, 263, xi, 7a, b, c.  
 ——— **favus**, Brady. Geol. Mag. [2], IV, 1877, 535 [not figured].  
 ——— ——— Brady, Report Challenger, 1884, 701, civ, 12-16.  
 ——— **formosa**, Reuss. Sitz. k. Ak. Wiss. Wien, LIX, Abth. 1, 1869, 464, iii, 1a-c.  
 ——— **haidingeri** (d'Orb.). Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 67, xv, 10; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 77, same pl. and fig. [*Rotalina*, 1846.]  
 ——— **hauerii** (d'Orbigny). Brady, Report Challenger, 1884, 690, evi, 6 and 7. [*Rotalina*, 1846.]  
 ——— **karsteni** (Reuss). Brady, Trans. Linnean Soc. xxiv, 1864, 470, xlvi, 15. [See *Rotalina*, 1855.]

- PULVINULINA** karsteni (Reuss). J., P., & B., Crag Foram., Pal. Soc. xix, 1866, n. d., ii, 28–30.
- — — — — Anon., Science Gossip, 1870, 11, fig. 25.
- — — — — Brady, Ann. Mag. Nat. Hist. [5], i, 1878, 436, xxi, 11a–c.
- — — — — Brady, Report Challenger, 1884, 698, cv, 8 and 9.
- — — — — Sherborn & Chapman, Journ. R. Micr. Soc. [2], vi, 1886, 758, xvi, 21a–c.
- — — — — See *P. repanda* (F. & M.).
- — — kiliani, Andreae. Abh. geol. Specialkarte Elsass-Lothr. ii, Heft 3, 1884, 255, xi, 1.
- — — kovacsensis, Hantken. Math. Nat. Ber. Ungarn, iii, 1885, 177.
- — — lateralis (Terq.). Brady, Report Challenger, 1884, 689, cvi, 2, 3. [*Rosalina*, 1878.]
- — — lobata, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 67, x, 1 ; and Mitt. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 77, same pl. and fig. [Given as *Truncatulina* in Magyar descr. of plate.]
- — — lobsannensis, Andreae. Abh. geol. Specialkarte Elsass-Lothr. ii, Heft 3, 1884, 218, viii, 16.
- — — lotus, Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 132, xxviii (5), 9a–d.
- — — mediterraneensis (d'O.). P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], viii, 1871, 172, xii, 141. [*Rosalina*, 1826.]
- — — menardii (d'Orbigny). S. R. J. Owen, Journ. Linn. Soc. (Zool.) ix, 1867, 148, v, 16. [*Rotalia*, 1826.]
- — — — — Thomson, Proc. Roy. Soc. xxiii, 1875, 37, iii, 1 and 2.
- — — — — v. *cultivata*, d'Orb. Vanden Broeck, Ann. Soc. Belge Micros. ii, 1876, 141, iii, 13 and 15 ; and Fonds de la Mer, iii, (1876). [= *Cristellaria*.]
- — — — — v. *tumida*, Brady. Geol. Mag. [2], iv, 1877, 535 [not figured]. [See *P. tumida*.]
- — — — — Wy. Thomson, Voyage Challenger, 1877, ii, 218, fig. 48a, b.
- — — — — Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 112, viii, 289–295.
- — — — — Brady, Report Challenger, 1884, 690, ciii, 1 and 2.
- — — — — v. *fimbriata*, Brady. Report Challenger, 1884, 691, ciii, 3a, b.
- — — — — Hogg, Microscope, 1886, xviii, iii, 85.
- — — — — Malagoli, Boll. Soc. geol. Ital. vi, 1887, 523, xiii, 10.
- — — — — Brady, Parker, & Jones, Trans. Zool. Soc. xii, pt. 7, 1888, 228, xlvi, 3.
- — — — — Agassiz, Three Cruises "Blake," ii, 1888, 169, figs. 516, 517.
- — — — — See *P. repanda* (F. & M.).
- — — meneghinii, Hantken. Ertek. Termesz. köreböl, xiii, No. 1, 1883, 31, iii, 2a, b, c ; and Math. Nat. Ber. Ungarn, ii, 1884, p. 151.
- — — micheliniana (d'Orbigny). S. R. J. Owen, Journ. Linn. Soc. (Zool.) ix, 1867, 148, v, 17. [*Rotalina*, 1840.]
- — — — — Vine, Science Gossip, 1878, 52, figs. 28–30.
- — — — — Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 114, viii, 296–298.
- — — — — Brady, Report Challenger, 1884, 694, civ, 1 and 2.
- — — — — Hogg, Microscope, 1886, xviii, iii, 83.
- — — — — Brady, Parker, & Jones, Trans. Zool. Soc. xii, pt. 7, 1888, 229, xlvi, 9 and 10.
- — — — — See *P. repanda* (F. & M.).
- — — moelleri, Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 130, xxvii (4), 15a–d.
- — — mokattamensis (var.), Schwager. Palaeontographica, xxx, 1883, Pal. Theil, 134, xviii (5), 11a–d.

- PULVINULINA nonioninoides**, Andreæ. Abh. geol. Speciakarte Elsass-Lothr. II, Heft 3, 1884, 256, xi, 2.
- **normanni**, Karrer. In v. Drasche, Frag. Geol. Luzon, 1878, 97, v, 24; and Bol. Com. Map. Geol. Espa , VII, 1880, 280, F, 10.
- **oblonga** (Will.). Brady, Report Challenger, 1884, 688, cvi, 4a, b, c. [*Rotalina*, 1858.]
- **v. scabra**, Brady. Report Challenger, 1884, 689, cvi, 8a, b, c.
- **Brady, Parker, & Jones**, Trans. Zool. Soc. XII, pt. 7, 1888, 229, xlvi, 5.
- **partschiana** (d'Orbigny). See *Rotalina*, 1846.
- **Reuss**, Sitz. k. Ak. Wiss. Wien, LXII, 1870, 36; v. Schlicht, Foram. Septar. Pietzpuhl, 1870, xx, 23-25, 29-31.
- **[partschi]** — Zittel, Handb. Pal., Abth. I, 1876, 94, fig. 32<sup>1</sup>.
- **[partschi]** — Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 26, pl. 42.
- **Brady**, Report Challenger, 1884, 699, ev, 3a, b, c; and 700, cut 21.
- **patagonica** (d'O.). Brady, Report Challenger, 1884, 693, ciii, 7a, b, c. [*Rotalina*, 1839.]
- **pauperata**, Parker & Jones. Phil. Trans. 1865, 395, xvi, 50, 51a, 51b. [See *P. repanda* (F. & M.).]
- **Brady**, Report Challenger, 1884, 696, civ, 3-11.
- **perlata**, Andreæ. Abh. geol. Speciakarte Elsass-Lothr. II, Heft 3, 1884, 216, viii, 12.
- **petrolei**, Andreæ. Abh. geol. Speciakarte Elsass-Lothr. II, Heft 3, 1884, 217, viii, 15.
- **procera**, Brady. Quart. Journ. Micr. Sci. XXI, 1881, 66.
- **Brady**, Report Challenger, 1884, 698, ev, 7a, b, c.
- **prominens**, Reuss. Sitz. k. Ak. Wiss. Wien, LIX, Abth. 1, 1869, 463, iii, 2a-c.
- **punctulata** (d'Orb.). Brady, Report Challenger, 1884, 685, civ, 17a, b, c. [*Rotalia*, 1826.]
- **varr.** Sherborn & Chapman, Journ. R. Micr. Soc. [2], VI, 1886, 758, xvi, 22a-c, 23a-c.
- **See *P. repanda* (F. & M.).**
- **pulchella** (d'Orbigny). J., P., & B., Crag Foram., Pal. Soc. XIX, 1866, n. d., ii, 25-27. [*Rotalia*, 1826.]
- **Soldani**, Testac. I, 1, 1789, 56, pl. 35R = this form.
- **See *Cidarollus*.**
- **pygmaea**, Hantken. A magy. kir. f ldt. int.  vk nye, IV, 1875 (1876), 67, x, 8; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 78, same pl. and fig. [Given as *Truncatulina* in descr. of plate.]
- **[pygm a , Hantk.]** Andre , Abh. geol. Speciakarte Elsass-Lothr. II, Heft 3, 1884, 216, viii, 13.
- **repanda** (Fichtel & Moll), (varr.). Parker & Jones, Phil. Trans. 1865, 390, xiv, 12-17, xvi, 35-51. [*Nutilus*, 1798.]
- **v. elegans** (d'O.). Parker & Jones, Phil. Trans. 1865, 397, xvi, 44-46. [*Rotalia*, 1826.]
- **v. karsteni** (Rss.). Parker & Jones, Phil. Trans. 1865, 396, xiv, 14, 15, and 17, xv, 38-40. [*Rotalia*, 1855.]
- **v. menardii** (d'O.). Parker & Jones, Phil. Trans. 1865, 394, xvi, 35-37. [*Rotalia*, 1826.]
- **v. menardii** (d'O.), subv. *canariensis* (d'O.). Parker & Jones, Phil. Trans. 1865, 395, xvi, 47-49. [*Rotalina*, 1839.]
- **v. menardii** (d'O.), subv. *micheliniiana* (d'O.). Parker & Jones, Phil. Trans. 1865, 396, xiv, 16, xvi, 41-43. [*Rotalina*, 1840.]
- **v. menardii** (d'O.), subv. *pauperata*, Parker & Jones. Phil. Trans. 1865, 395, xvi, 50, 51a, 51b. [See *P. pauperata*.]

- PULVINULINA** repanda (Fichtel & Moll), v. *punctatula* (d'O.). Parker & Jones, Phil. Trans. 1865, 394, xiv, 12 and 13. [*Rotalia*, 1826.]
- J., P., & B., Crag Foram., Pal. Soc. **xix**, 1866, n. d., ii, 22, 24.
- Anon., Science Gossip, 1870, 11, fig. 24. [= *Rosalina concamerata*, Will.]
- P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], viii, 1871, 172, xii, 140. [See *Rosalina mediterranensis*, d'O.]
- Terrigi, Atti Acc. Pont. Nuovi Lincei, **xxxiii**, 1880, 206, iii, 61.
- Goës, K. Svenska Vet.-Akad. Handl. **xix**, No. 4, 1882, 110, viii, 276-282.
- Jones, in Microgr. Dict. ed. 4, 1883, 648, xxiv, 16a, b, c.
- Terrigi, Atti Acc. Pont. Nuovi Lincei, **xxxv**, 1883, 198, iii, 42.
- Brady, Report Challenger, 1884, 684, civ, 18a, b, c.
- v. *concamerata*, Montagu var. Brady, Report Challenger, 1884, 685, civ, 19a, b, c. [*Serpula*, 1808 ; fide Williamson. See also *Rotalina* and notes in Report Challenger, 685.]
- Sherborn & Chapman, Journ. R. Micr. Soc. [2], vi, 1886, 757, xvi, 18a-c.
- v. *concamerata*, Will. Sherborn & Chapman, Journ. R. Micr. Soc. [2], vi, 1886, 758, xvi, 19a-c. [*Serpula*, 1808.]
- Soldani, Testac. I, 1, 1789, 56, pl. 37C, D, F = varr. of this form.
- v. *pulchella*, d'O. Soldani, Testac. I, 1, 1789, 56, pl. 36S, V, X = varr. of this form. [X = *P. boueana* (d'O.).] [See *Rotalia*.]
- vermicular var. See *Frumentaria* 7 specie.
- rjäsanensis**, Uhlig. Jahrb. k. k. geol. Reichs. **xxxiii**, 1883, 772, viii, 4-6.
- rotula** (Kaufmann). Uhlig, Jahrb. k. k. geol. Reichsanstalt, **xxxvi**, 1886, 193, iii, 5, 6; v, 6, 7. [*Hemistegina*, 1867.]
- sacculata**, Jones & Parker. Ann. Mag. Nat. Hist. [4], xvii, 1876, 284, ents, 1, 2, and 3.
- schreibersii** (d'Orbigny). Brady, Report Challenger, 1884, 697, cxv, 1a, b, c. [*Rotalina*, 1846.]
- Brady, Parker, & Jones, Trans. Zool. Soc. **xii**, pt. 7, 1888, 228, xlvi, 4.
- scitula**, Brady. Proc. Roy. Soc. Edinburgh, **xi**, 1882, 716, not figured.
- Balkwill & Millett, Journ. Micr. **iii**, 1884, 85, iv, 12.
- semiornata**, Howchin. Trans. R. Soc. S. Austr. **xii**, 1889, 14, i, 12.
- semiplecta**, Schwager. Palaeontographica, **xxx**, 1883, Pal. Theil, 130, xxvii (4), 16a-d.
- similis**, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 68, x, 5 ; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 78, same pl. and fig.
- soldanii** (d'O.). P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], viii, 1871, 172, xii, 144. [*Rosalina*, 1826.]
- Terrigi, Atti Acc. Pont. Nuovi Lincei, **xxxv**, 1883, 199, iii, 44.
- Terrigi, Mem. R. Acc. Lincei, [4], vi, 1889, 119, ix, 3.
- spinulifera** (Reuss). Steinmann, Elem. Paléont. I, 1888, 20 and 30, figs. 3Ba and 13. [*Rotalia*, 1862.]
- Prestwich, Geology, 1888, II, 278, 144b.
- sanctæ-odiliæ**, Andreæ. Abh. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 224, viii, 17.
- subinflata** (var.), Schwager. Palaeontographica, **xxx**, 1883, Pal. Theil, 131, xxvii (4), 11a-d.

- PULVINULINA** terquemi, Schwager. *Palaeontographica*, xxx, 1883, Pal. Theil, 134, xxviii (5), 3a-d.
- trochiformis, Andreæ. *Abh. geol. Specialkarte Elsass-Lothr. II*, Heft 3, 1884, 216, viii, 14.
- truncatulinoides (d'Orbigny). Parker & Jones, *Phil. Trans.* 1865, 398, xvi, 41-43. [*Rotalina*, 1839.]
- tumida, Brady. *Report Challenger*, 1884, 692, ciii, 4-6. [*P. menardii*, var. 1877.]
- umbilicata (d'Orb.). Jones, *Geologist*, VI, 1863, 294 and 432, xv, 9-11. [*Rotalina*, 1840.]
- umbilicata, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), not descr., xv, 9; and *Mittb. a. d. Jahrb. k. ungar. geol. Anstalt*, IV, 1875 (1881), same pl. and fig. [Given as *Discorb. disca* in German text, 76.]
- umbonata, Reuss. Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 67, ix, 8; and *Mittb. a. d. Jahrb. k. ungar. geol. Anstalt*, IV, 1875 (1881), 77, same pl. and fig. [*Rotalina*, 1851.]
- Terrigi, *Atti Acc. Pont. Nuovi Lincei*, xxxv, 1883, 200, iv, 45, 46.
- Brady, *Report Challenger*, 1884, 695, cv, 2a, b, c.
- vermiculata (d'Orbigny). Carpenter, Parker, & Jones, *Introd. Foram.* 1862, 211, xiii, 4-6. [*Planorbulina*, 1826.] [Structural.]
- P., J., & B. [Soldani], *Ann. Mag. Nat. Hist.* [4], VIII, 1871, 178, xii, 146.
- Bütschli, in *Bronn, Klassen, etc. Thier-Reichs*, 1880, 207, ix, 5.
- [vermicularis] — Jones, in *Microgr. Dict. ed. 4*, 1883, 648, xxiv, 11.
- Brady, *Report Challenger*, 1884, 687, cxv, 2a, b.
- see *Eponides*.
- ? see *Jesites*.
- see *Nautilus*.

**PULVINULUS**, Lamarck, 1816.

- asterisans [F. & M.]. Lamarck, *Ency. Method.*, "Vers," (1830), n. d., 466, f. 10 (pls. 1827), (P. & J. quote pt. 23, 1816).
- repandus [F. & M.]. Lamarck, *Ency. Method.*, "Vers," (1830), n. d., 466, f. 9 (pls. 1827), (P. & J. quote pt. 23, 1816).
- Pulvis ut supra, sed ex microscopicis prorsus Testis, etc.** Soldani, *Sagg. Oritt.* 1780, 110, viii, 46AA, BB. [= *Gyroidina orbicularis*.]
- Pulvis ut supra, sed ex microscopicis prorsus Testis, etc.** Soldani, *Sagg. Oritt.* 1780, 110, viii, 46CC. [= *Nodos. scalaris*, Batsch.]
- Pulvis ut supra, sed ex microscopicis prorsus Testis, etc.** Soldani, *Sagg. Oritt.* 1780, 110, viii, 46DD. [= *Gyroidina soldanii*.]
- Pulvis ut supra, sed ex microscopicis prorsus Testis, etc.** Soldani, *Sagg. Oritt.* 1780, 110, viii, 46EE. [= *Pulvinulina auricula*.]
- Pulvis ut supra, sed ex microscopicis prorsus Testis, etc.** Soldani, *Sagg. Oritt.* 1780, 110, viii, 46XX, YY. [= *Rotalia soldanii*, var.]
- Pulvis ut supra, sed ex microscopicis prorsus Testis, etc.** Soldani, *Sagg. Oritt.* 1780, 110, vii, 46ZZ. [= *Amphistegina lessoni*.]
- PUPINA**, d'Orbigny. Reuss, in *Geinitz, Grundriss Verstein*. 1845-1846, 646. [D'Orbigny, in *De la Sagra's Hist. phys. Ile Cuba*, 1839, "Foraminifères," 109, describes the genus *Chrysalidina*; as the locality for his species is the same as that quoted by Reuss, and as only one species was known to d'Orbigny, it is fair to assume that *Pupina* was a misquotation.]
- PUSTULARIA**, Gray, 1858. *Proc. Zool. Soc. London*, xxvi, 1858, 271. [= *Polytrema*.]
- rosa, Gray. *Proc. Zool. Soc. London*, xxvi, 1858, 271, not fig'd. [= *Polytrema miniaceum*.]

- PYLODEXIA**, Ehrenberg, 1858. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 27.
- *atlantica*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 292.
  - — — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), iv, 2.
  - *globigerina*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 292.
  - *glomerulus*, Ehr. Monatsber. k. preuss. Ak. Wiss. Berlin, 1861, 308.
  - — — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 23.
  - *heteropora*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 292.
  - *megastoma*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 292.
  - *platytetras*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 293.
  - — — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), iii, 14.
  - *pusilla*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 27. [= *Globig. pusilla.*]
  - *rubra*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 293.
  - *tetratrias*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 27. [= "Globigerina."]
  - — — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), xi, 8.
  - *uvula*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 308.
  - — — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), ii, 24 and 25.

**PYRGO**, Defrance, 1824.

- *laevis*, Defrance. Diet. Sci. Nat. xxxii, 1824, 273; Atlas, Conch. lxxxvii, 2. [= *Biloc. bulloides*, d'O.]
- — — — — Blainville, Malacologie, 1825 (pls. 1827), 482, lxii bis, 2.
- — — — — Cuvier, Animal Kingdom, Henderson's ed. III, 1834 (pls. 1837), 22, vii, 18; and Griffith ed. XII (1834), 21, iii, 13.
- — — — — [Blainv.]. Cuvier, Règne Animal, 1836-46, ix (plates, x), 37, xviii, 2.

— *mediterranea*, Risso. Hist. Nat. Europe, IV, 1826, 25.

**PYRULINA**,\* d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 267.

- *acuminata*, d'Orbigny. Mém. Soc. géol. France, [1], IV, 1840, 43, iv, 18 and 19; facsimile in Science Gossip, 1870, 157, fig. 150. [See *Polymorphina.*]
- — — — — Reuss, in Geinitz, Grundr. Verstein. 1845-46, 670, xxiv, 64.
- — — — — Bronn, Lethaea Geognostica, ed. 3, II, 1851-52, 88, xxix<sup>1</sup>, 16a, b
- — — — — Beudant, Géologie, ed. 8, 1858, 117, fig. 97; later eds. same fig.

— *gutta*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 267, No. 28. [See *Polymorphina.*]

— — — — — Reuss' Models, No. 96, 1865 (Catal., No. 68, 1861).

- *obtusa*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 79, ix, 9.

- *ovulum*, Ehrenberg. Mikrogeologie, 1854, xxxi, 35 and 36. [= *Polym. lactea*, W. & J.]

— von Schlicht, Foram. Septar. Pietzpuhl, 1870, plates xxv and xxvii.

"**Quadriloculares**," Terquem, Mém. Soc. géol. France, [3], IV, 1886, 72-75, viii, 21-43. [Merely a classificatory term for some *Miliolinae.*]

**QUINQUELOCULINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 301.

- *abnormis*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 178, xix (xxvii), 13a-d.
- *affinis*, Costa. Atti Accad. Pont. VII, fas. 2, 1856, 329, xxv, 13A, B, C.
- *affinis*, Eichwald. Lethaea Rossica, III, 1853, 13, i, 15a-d. [*Miliola*, 1830.]
- *affinis*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 41.
- *agglutinans*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 195, xii, 11-13; also in Spanish, 1840, 168, same pl. and fig. [See *Miliola* and *Miliolina.*]

\* Given by d'Orbigny as a subgenus of *Polymorphina.*

- QUINQUELOCULINA** akneriana, d'Orbigny. Foram. Fossiles Vienne, 1846, 290, xviii, 16-21. [See *Miliolina*.]
- Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 85, xii, 5a, b, c; (and Mém. Soc. Dunkerquoise).
- **alata**, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 38, vi, 2a, b, c; (and Mém. Soc. Dunkerquoise).
- **anguina**, Terq. Mém. Soc. géol. France, [3], I, 1878, 78, ix (xiv), 20a-c.
- Terquem, Mém. Soc. géol. France, [3], II, 1882, 180, xix (xxvii), 20a-c.
- **angularis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 23.
- **angulata**, Terquem. Quatr. Mém. Foram. Oolithique, 1874, 334, xxxvii, 13-18.
- **angulata** (Will.). Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 40, vi, 13a, b, c; (and Mém. Soc. Dunkerquoise). [See *Miliolina bicornis*, var.]
- **angusta** (Phil.). Reuss, Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 253, ix, 90. [*Triloculina*, 1843.]
- **angustidentata**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 175, xviii (xxvi), 26-28.
- **angustissima**, Rss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 384, xlix, 18.
- **annularis**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 180, xix (xxvii), 17a-c.
- **antillarum**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 194, xii, 4-7 [error for 4-6]; also in Spanish, 1840, 167, same pl. and fig.
- **araucana**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 76, ix, 13-15.
- **arenosa**, Terquem. Mém. Soc. géol. France, [3], IV, 1886, 87, x, 19-41.
- **argus**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 374.
- **ariminensis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 16.
- **aspera**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 11.
- Terquem, Mém. Soc. géol. France, [3], I, 1878, 65, vi (xi), 11a-c.
- = *Q. seminulum* (Linn.) ; see *Frumentaria seminula*.
- **asperula**, Seguenza. Atti Accad. Gioenia Sci. Nat. [2], XVIII, 1862, 120, ii, 6, 6a and 6b.
- Schwager, Novara-Exped., Geol. Theil II, 1866, 203, iv, 16a, b, c.
- **atropos**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 152, iii, 6.
- **auberiana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 193, xii, 1-3; also in Spanish, 1840, 167, same pl. and fig. [See *Miliolina*.]
- **badenensis**, d'Orbigny. Foram. Fossiles Vienne, 1846, 299, xx, 10-12.
- **bajociana**, Terquem. Bull. Soc. géol. France, [3], IV, 1876, 499, xvii, 24.
- **berthelotiana**, d'Orbigny. Barker, Webb, & Berthelot, Hist. Nat. Iles Canaries, 1839, ii, pt. 2, "Foraminifères," 142, iii, 25-27.
- **bicarinata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 35.
- Terquem, Mém. Soc. géol. France, [3], I, 1878, 68, vii (xii), 10a-c.
- **bicarinella**, Reuss. Sitz. k. Ak. Wiss. Wien, LIX, Abth. 1, 1869, 456, i, 6a-c.
- **bicornis** (Walk.). Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 39, vi, 6a, b, c; (and Mém. Soc. Dunkerquoise). [*Serpula*, 1798.]
- **v. elegans**, Will. Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 39, vi, 7a, b; (and Mém. Soc. Dunkerquoise). [See *Miliolina bicornis*, var.]

- QUINQUELOCULINA** bicostata, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 195, xii, 8-10; also in Spanish, 1840, 168, same pl. and fig.
- bidentata, d'Orb. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 197, xii, 18-20; also in Spanish, 1840, 169, same pl. and fig.
- biondi, Seguenza. Atti Accad. Gioenia Sci. Nat. [2], xviii, 1862, 119, ii, 7, 7a and 7b.
- birostris (Lam.). Terquem, Mém. Soc. géol. France, [3], ii, 1882, 181, xix (xxvii), 23a, b. [*Miliolites*, 1804.]
- bistorta, Terquem. Mém. Soc. géol. France, [3], i, 1878, 78, ix (xiv), 21a-c.
- bosciana, d'Orb. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 191, xi, 22-24; also in Spanish, 1840, 165, same pl. and fig.
- boueana, d'Orbigny. Foram. Fossiles Vienne, 1846, 293, xix, 7-9. [See *Miliolina*.]
- — — Costa, Atti Accad. Pontaniana, vii, fas. 2, 1856, 329, xxv, 15A, B, C.
- — — Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 84, xii, 1a, b, c; (and Mém. Soc. Dunkerquoise).
- brauni, Reuss. Neues Jahrbuch, 1853, 674, ix, 4.
- bronniartii, d'Orb. J., P., & B., Crag Foram., Pal. Soc. xix, 1866, 14, iii, 41 and 42, iv, 2. [*Triloculina*, 1826.]
- — — Jones, in Microgr. Dict. ed. 4, 1883, 651, xxiii, 6a, b.
- bronniana, d'Orbigny. Foram. Fossiles Vienne, 1846, 287, xviii, 4-6.
- buchiana, d'Orbigny. Foram. Fossiles Vienne, 1846, 289, xviii, 10-12.
- — — Costa, Atti Accad. Pontaniana, vii, fas. 2, 1856, 327, xxvi, 7A, B, C.
- bulloides, d'Orbigny. Ann. Sci. Nat. vii, 1826, 301, No. 9.
- — — Terquem, Mém. Soc. géol. France, [3], i, 1878, 66, vi (xi), 17a-19c.
- canaliculata, Terquem. Mém. Soc. géol. France, [3], i, 1878, 74, viii (xiii), 23a-c.
- candieana, d'Orb. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 199, xii, 24-26; also in Spanish, 1840, 170, same pl. and fig.
- — — Brady, Ann. Mag. Nat. Hist. [4], vi, 1870, 286, xi, 1a, b.
- carinata, d'Orbigny. Ann. Sci. Nat. vii, 1826, 302, No. 28.
- — — Terquem, Mém. Soc. géol. France, [3], ii, 1882, viii (xxvi), 16 and 17.
- ? — caudata, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 374 and 376. [See *Spiroloc. caudata*.]
- ? — ? — Ehr., Mikrogeologie, 1854, xxiii, 52. [= ?]
- centrata, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 177, xix (xxvii), 3-5.
- clotho, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 146, ii, 5.
- cognata, Bornemann. Zeitschr. deutsch. geol. Ges. vii, 1855, 350, xix, 7.
- compressa, Terq. et Berth. Mém. Soc. géol. France, [2], x, 1875, 85, vii (xvii), 11a, b.
- concava, Reuss. Denkschr. k. Ak. Wiss. Wien, i, 1850, 386, li, 2.
- concinna, Reuss. Denkschr. k. Ak. Wiss. Wien, i, 1850, 384, l, 2.
- confusa, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 42, ii, 8a-c.
- conica, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 187, xx (xxviii), 22a-c.
- contorta, d'Orbigny. Foram. Fossiles Vienne, 1846, 298, xx, 4-6.
- — — Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 81, xi, 4a, b, c; (and Mém. Soc. Dunkerquoise).
- [contortus ?], d'Orb. Balkwill & Millett, Journ. Mier. iii, 1884, 24, i, 2.

- QUINQUELOCULINA contraria**, Terq. et Berth. Mém. Soc. géol. France, [2], x, 1875, 85, vii (xvii), 12a, b.
- **cora**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 76, ix, 16–18.
- **cor-anguinum** (Lamarek). Mantell, Pictorial Atlas Foss. Rem. 1850, 143, lxii, 12 and 13. [*Miliolites*, 1804.]
- **corrugata**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., xxv, 14.
- **costata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 3.
- Terquem, Mém. Soc. géol. France, [3], I, 1878, 63, vi (xi), 3a–5c.
- Terquem, Mém. Soc. géol. France, [3], II, 1882, 183, xx (xxviii), 8 and 9.
- **costata**, Karrer. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 362, iii, 4.
- **crassa**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 14.
- Terquem, Mém. Soc. géol. France, [3], II, 1882, 186, xx (xxviii), 20 and 21.
- **\*crassicostata**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 185, xx (xxviii), 14–17.
- **cuvieriana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 190, xi, 19–21; also in Spanish, 1840, 164, same pl. and fig. [v. *Miliolina*.]
- **denticulata**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 325, xxv, 9A, B, C [error for 6].
- **depressa**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 38.
- Terquem, Mém. Soc. géol. France, [3], I, 1878, 70, viii (xiii), 1–11.
- **dilatata**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 192, xi, 28–30; also in Spanish, 1840, 166, same pl. and fig.
- **dimidiata**, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 81, xi, 5a, b, c; (and Mém. Soc. Dunkerquoise).
- **disciformis** (Will.). Terquem, Mém. Soc. géol. France, [3], I, 1878, 73, viii (xiii), 22a–c. [v. *Miliolina seminulum*.]
- var. Terquem, Ess. Anim. Plage Dunkerque, pt. 3, 1881, 135, xvii, 17a, b; (and Mém. Soc. Dunkerquoise).
- **disparilis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 21.
- **disticha**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 183, xx (xxviii), 7a–c.
- **dubia**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 303, No. 47.
- **dutemplei**, d'Orbigny. Foram. Fossiles Vienne, 1846, 294, xix, 10–12.
- Harting, Magt van het Kleine, 1849, iii, fig. 6; German by Dr. A. Schwartzkopf, 1851, 81.
- **eborea**, Schwager. Novara-Exped., Geol. Theil II, 1866, 204, iv, 18a, b, c.
- **elegans**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 12.
- Terquem, Mém. Soc. géol. France, [3], I, 1878, 64, vi (xi), 7a–9c.
- **enoplostoma**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 196, xii, 14–17; also in Spanish, 1840, 169, same pl. and fig.
- **eos**, Reuss. Sitz. k. Ak. Wiss. Wien, LIX, Abth. 1, 1869, 457, i, 7a–c.
- **ermani**, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 351, xix, 6.
- v. *trigonostomea*, Franzenau. Földtani Közlöny, XI, 1881, 45 and 98, iii, 10–12.
- **excavata**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 148, ii, 9.
- **fabularoides**, Karrer. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 704, i, 3.
- **falcifera**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 151, iii, 3.

- QUINQUELOCULINA** ferussaci, d'Orbigny. Ann. Sci. Nat. vii, 1826, 301, No. 18. [v. *Miliola* and *Miliolina*.]  
 ——— ——— D'Orbigny, Modèles, No. 32, 1826.  
 ——— ——— P., J., & B. [d'O., Modèles, 32], Ann. Mag. Nat. Hist. [3], xvi, 1865, 24, i, 12.  
 ——— ——— J., P., & B. Crag Foram., Pal. Soc. xix, 1866, 12, iv, 4.  
 ——— ——— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 163, fig.  
 ——— ——— **flavescens**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 302, No. 30.  
 ——— ——— **flexuosa**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 73, iv, 4—6.  
 ——— ——— **feda**, Reuss. Denkschr. k. Ak. Wiss. Wien, i, 1850, 384, i, 5 and 6.  
 ——— ——— **fusca**, Brady. Ann. Mag. Nat. Hist. [4], vi, 1870, 286, xi, 2a, b, c, and 3.  
 ——— ——— Schulze, Arch. mikrosk. Anat. xi, 1875, 134, vi, 17—20.  
 ——— ——— **gibberula**, Terquem. Quatr. Mém. Foram. Oolithique, 1874, 333, xxxvi, 17a and b.  
 ——— ——— **glomerata**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 301, No. 7. \*  
 ——— ——— Terquem, Mém. Soc. géol. France, [3], ii, 1882, 175, xviii (xxvi), 22—25.  
 ——— ——— **gracilis**, Costa. Atti Accad. Pontaniana, vii, fas. 2, 1856, n. d., xxvi, 1.  
 ——— ——— **gracilis**, Karrer. Sitz. k. Ak. Wiss. Wien, iv, Abth. 1, 1867, 361, iii, 2.  
 ——— ——— **grata**, Terquem. Mém. Soc. géol. France, [3], i, 1878, 75, ix (xiv), 4a—7c.  
 ——— ——— **gregaria**, Andreæ. Abh. geol. Specialkarte Elsass-Lothr. ii, Heft 3, 1884, 278, xii, 10—12.  
 ——— ——— **grinzingensis**, Reuss. Denkschr. k. Ak. Wiss. Wien, i, 1850, 385, li, 1.  
 ——— ——— **gualtieriana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 186, xi, 1—3 ; also in Spanish, 1840, 162, same pl. and fig.  
 ——— ——— **guancha**, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, ii, pt. 2, "Foraminifères," 143, iii, 34—36.  
 ——— ——— **haidingerii**, d'Orbigny. Foram. Fossiles Vienne, 1846, 289, xviii, 13—15. [v. *Miliola*.]  
 ——— ——— [haidengeri] ——— Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 39, vi, 3 ; (and Mém. Soc. Dunkerquoise).  
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 ——— ——— ——— Bornemann, Zeitschr. deutsch. geol. Ges. vii, 1855, 350, xix, 8.  
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 ——— ——— ——— var. **subovalis**, Andreæ. Abh. geol. Specialkarte Elsass-Lothr. ii, Heft 3, 1884, 225, x, 27.

- QUINQUELOCULINA impressa**, Terquem. Quatr. Mém. Foram. Oolithique, 1874, 331, xxxvi, 2-7.
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- **inca**, d'Orbigny. Voyage Amér. Mérid. 1839, V, pt. 5, "Foraminifères," 75, IV, 20-22.
- **incerta**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 178, xix (xxvii), 12a-c.
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- Terquem, Mém. Soc. géol. France, [3], I, 1878, 77, ix (xiv), 15-19.
- **incrassata**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 148, II, 10.
- **inflata**, d'Orbigny. P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 249, viii, 16. [*Triloculina*, 1826.]
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- **intricata**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 73, viii (xiii), 16a-21b.
- **involuta**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 76, ix (xiv), 10a-c.
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- **italica**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 69, vii (xi), 17a-20c.
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- Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, 321, XXV, 4A, B, C, D.
- **juleana**, d'Orbigny. Foram. Fossiles Vienne, 1846, 298, xx, 1-3.
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- **kostejana**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 152, III, 4.
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- **lacunosa**, Karrer. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 362, III, 6.
- **ladidorsata**, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 386, I, 12.
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- **lanceolata**, Terq. et Berth. Mém. Soc. géol. France, [2], X, 1875, 84, VII (xvii), 7a, b.

- QUINQUELOCULINA** lata, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 82, xi, 8a, b; (and Mém. Soc. Dunkerquoise).
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- lobata, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., xxvi, 248.
- longicollis, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., xxv, 3.
- longidentata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 176, xviii (xxvi), 29 and 30, and xix (xxvii), 1 and 2.
- longirostra, d'Orbigny. Ann. Sci. Nat. VII, 1826, 303, No. 46.
- — — D'Orb., Foram. Fossiles Vienne, 1846, 291, xviii, 25-27.
- — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 84, xii, 7-9 [error for 2a, b, c], and var., fig. 3; (and Mém. Soc. Dunkerquoise).
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- See *Frumentaria seminula*.
- lucida, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 147, ii, 7.
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- — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 40, vi, 12a, b; (and Mém. Soc. Dunkerquoise).
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- navicularis, Terquem. Mém. Soc. géol. France, [3], II, 1882, 187, xx (xxviii), 24a-c.
- nobilis, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 149, ii, 11.
- ? — nodulus, Ehrenberg. Mikrogeologie, 1854, xxiv, 65.
- notata, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 385, I, 7.
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- obliqua, Reuss. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 75, II, 6a, b, 7a-c.
- ? — oblonga, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1838, 133.
- — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), I, 7.
- oblonga (Mont.). Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 40, vi, 10a, b; (and Mém. Soc. Dunkerquoise). [*Vermiculum*, 1803.]
- oblonga, Reuss. Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 252, ix, 89.
- oblonga, Will. Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 85, xii, 6a, b; (and Mém. Soc. Dunkerquoise). [See *Miliolina seminulum*, var.]
- obsoleta, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 328, xxi [error for xxvi], 4A, B, C.
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- **opaca**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 42, ii, 9a-c.
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- Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 86, xii, 9a, b; (and Mém. Soc. Dunkerquoise).
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- **ovula**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 147, ii, 8.
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- **partschii**, d'Orbigny. Foram. Fossiles Vienne, 1846, 293, xix, 4-6.
- Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 83, xi, 9a, b, c; (and Mém. Soc. Dunkerquoise).
- **patagonica**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 74, iv, 14-16.
- **paucisulcata**, Reuss. Sitz. k. Ak. Wiss. Wien, I, Abth. 1, 1864 (1865), 452, i, 7.
- **pauperata**, d'Orbigny. Foram. Fossiles Vienne, 1846, 286, xvii, 22-24.
- Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 40, vi, 11a, b, c; (and Mém. Soc. Dunkerquoise).
- **peregrina**, d'Orbigny. Foram. Fossiles Vienne, 1846, 292, xix, 1-3.
- v. **edentula**, Franzenau. Földtani Közlöny, XI, 1881, 45 and 97, iii, 4-6.
- **pertusa**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 183, xx (xxviii), 5a-c.
- **peruviana**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 73, iv, 1-3, 10-13.
- **philippii**, Reuss. Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 252, ix, 87.
- **placenta**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 374.
- **plana**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 8.
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- **planciana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 186, x, 24 and 25, xi, 4-6; also in Spanish, 1840, 162, same pl. and figs.
- **plicata**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 179, xix (xxvii), 14a-c.
- **plicatella**, Reuss. See *plicatula*.
- **plicatula**, Reuss. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 74, iii, 2a-c. [*plicatella* on plate.]

- QUINQUELOCULINA** plicosa, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 322, xxv, 24, B, C, 54, B, C, and 7.
- poeyana, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 191, xi, 25–27; also in Spanish, 1840, 166, same pl. and fig. [*Q. poeyana* on plate.]
- polygona, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 198, xii, 21–23; also in Spanish, 1840, 170, same pl. and fig.
- ponderosa, Terquem. Mém. Soc. géol. France, [3], I, 1878, 76, ix (xiv), 11a–13c.
- porosa, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 374.
- prisca, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 32.
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- — — — — (young). P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 249, viii, 20. [See *Triloc. tricostata*, d'O.]
- — — — — (very young). P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 252, viii, 21. [See *Adelos. soldanii*, d'O.]
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- — — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 3, 1881, 134, xvii, 15 and 16; (and Mém. Soc. Dunkerquoise).
- — — — — See *Frumentaria seminula*.
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- punctata, Reuss. Neues Jahrbuch, 1853, 675, ix, 8.
- punctulata, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 22.
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- quadrangularis, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 82, xi, 7a, b, c; (and Mém. Soc. Dunkerquoise).
- quinquangularis, Terquem. Mém. Soc. géol. France, [3], I, 1878, 74, ix (xiv), 1a–2c.
- radiosa, Terquem. Mém. Soc. géol. France, [3], I, 1878, 77, ix (xiv), 14a–c.
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- rodolphina, d'Orbigny. Foram. Fossiles Vienne, 1846, 299, xx, 7–9.
- rostrata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 174, xviii (xxvi), 18 and 19.
- rotunda, Roemer. Neues Jahrbuch, 1838, 394, iii, 79.
- rotundata, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., xxvi, 10.

- QUINQUELOCULINA rotundata**, Terq. & Berth. Mém. Soc. géol. France, [2], x, 1875, 85, vii (xvii), 10a, b<sup>1</sup>.
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- — — **sagra**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 188, xi, 16–18; also in Spanish, 1840, 163, same pl. and fig.
- — — **sancti-beati**, Rütimeyer. Nouv. Mém. Soc. Helvetic. Sci. Nat. XI, 1850, Mém. 2, v, 62.
- — — **sandbergeri**, Reuss. Neues Jahrbuch, 1853, 674, ix, 7.
- — — **sarmatica**, Karrer. Abh. k. k. geol. Reichs. IX, 1877, 375, xvi, a, 11a, b, c.
- — — v. **elongata**, Karrer. Abh. k. k. geol. Reichs. IX, 1877, 376, xvi, a, 11b.
- — — v. **virgata**, Karrer. Abh. k. k. geol. Reichs. IX, 1877, 376, xvi, a, 11c.
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- — — [d'Orb. & Lam.]. Galeotti, Mém. Couronnés Ac. R. Bruxelles, XII, 1837, Mém. iii, 142, iii, 19.
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- — — — — [d'Orb.]. Hoernes, Elem. Palaeont. 1884, 35, fig. 33; French ed. 1886, same fig.
- — — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 163, fig. Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1061, lxxxvii, 12.
- — — — — Steinmann, Elém. Paleont. I, 1888, 23, fig. 4E.
- — — **schreibersii**, d'Orbigny. Foram. Fossiles Vienne, 1846, 296, xix, 22–24. [v. *Miliola*.]
- — — [schreibersii] — — — Suess, Boden Stadt Wien, 1862, 45, fig. 1<sup>6</sup>.
- — — **schroeckingerii**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 149, ii, 12.
- — — — — v. **calabria**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 154, xiv, 14a, b [error for 13].
- — — **scidula**, Karrer. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 361, iii, 1.
- — — **sclerotica**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 152, iii, 5. [v. *Miliolina*.]
- — — **secans**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 303, No. 43. [See *Miliolina*.]
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- — — — — Roemer, Neues Jahrbuch, 1838, 393, iii, 77.

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 ——— ——— P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 250, viii, 15. [*Q. vulgaris*, d'O., q. v.]  
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 ——— seminuda, Terquem. Mém. Soc. géol. France, [3], I, 1878, 76, ix (xiv), 8a-c.  
 ——— seminulum (Linné). See *Serpula*, 1758.  
 ——— ——— D'Orbigny, Ann. Sci. Nat. VII, 1826, 303, No. 44.  
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 ——— ——— P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 250, viii, 11. [*Q. aspera*, d'O., q. v.]  
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 ——— semistriata, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 13.  
 ——— signata, Reuss. Deuksschr. k. Ak. Wiss. Wien, I, 1850, 385, I, 11.  
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 —— **striata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 4.  
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 —— **striatopunctata**, Karrer. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 362, iii, 5.  
 —— **striatula**, Deshayes. Descr. Coq. Charact. 1831, 252 and 259, iii, 1 and 2.  
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 —— **striolata**, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 385, I, 10.  
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 —— **subangulata**, Roeimer. Neues Jahrbuch, 1838, 394, iii, 80.  
 —— **subcarinata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 10.  
 —— —— Terquem, Mém. Soc. géol. France, [3], I, 1878, 64, vi (xi), 10a-c.  
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 —— —— [d'Orb.]. Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 85, xii, 7a, b; (and Mém. Soc. Dunkerquoise).  
 —— **sulcata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 301, No. 17.  
 —— **sulcifera**, Roemer. Neues Jahrbuch, 1838, 393, iii, 76.  
 —— **suturalis**, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 385, I, 9.  
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 —— **transilvaniæ**, Karrer. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 704, i, 4.  
 —— **transvera**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 324, xxvi, 94, B, C.  
 —— **trapezoidalis**, Terq. et Berth. Mém. Soc. géol. France, [2], X, 1875, 85, vii (xvii), 9.  
 —— **triangularis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 34. [v. *Miliola*.]  
 —— —— D'Orbigny, Foram. Fossiles Vienne, 1846, 288, xviii, 7-9.  
 —— —— J., P., & B., Crag Foram., Pal. Soc. XIX, 1866, 10, iv, 1.  
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- QUINQUELOCULINA** triangularis, d'Orbigny. Terquem, Mém. Soc. géol. France, [3], II, 1882, 180, xix (xxvii), 18 and 19.  
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 ——— tricarinata, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 187, xi, 7-9, and 13; also in Spanish, 1840, 163, same pl. and fig.  
 ——— tricostata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 184, xx (xxviii), 13a-c.  
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 ——— tubulosa, Seguenza. Atti Accad. Gioenia Sci. Nat. [2], xviii, 1862, 119, ii, 8, 8a, b.  
 ——— turgida, Philippi. Palaeontographica, I, 1851, 81, x, a, 17a-c.  
 ——— undosa, Karrer. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 361, iii, 3. [v. *Miliolina*.]  
 ——— undulata, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 27.  
 ——— undulose-costata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 185, xx (xxviii), 18 and 19.  
 ——— ungeriana, d'Orbigny. Foram. Fossiles Vienne, 1846, 291, xviii, 22-24.  
 ——— ——— var. *stenostoma*, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 141, ii, 3.  
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 ——— variolata, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 26.  
 ——— ——— Terq., Mém. Soc. géol. France, [3], I, 1878, 65, vi (xi), 13a-14b.  
 ——— venusta, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 147, ii, 6. [v. *Miliolina*.]  
 ——— vermicularis, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 150, iii, 1.  
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 ——— vulgaris, d'Orbigny. Ann. Sci. Nat. VII, 1826, 302, No. 33.  
 ——— ——— Terquem, Mém. Soc. géol. France, [3], I, 1878, 66, vi (xi), 20a-21.  
 ——— ——— = *Q. secans*, d'O.; see *Frumentaria seminula*.  
 ——— zigzag, d'Orbigny. Foram. Fossiles Vienne, 1846, 295, xix, 16-18.  
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 ——— Pictet, Traité de Paléont. IV, 1846, 244, xii, 33.  
 ——— Pilla, Trattato di Geol. pt. 1, 1847, 462, fig. 85, pt. 2, 1851, 249, fig. 161.  
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 ——— Ehrenberg, Abhandl. k. Ak. Wiss. Berlin, 1855, 169, iv, xviii, xix. [*Miliolæ*, young.] [Glauc.]  
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**QUINQUELOCULINA** sp., d'Orb. Reuss' Models, No. 99, 1865 (Catal., No. 20, 1861).

- v. Schlicht, Foram. Septar. Pietzpuhl, 1870, plate xxxvi, xxxvii.
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- de Folin, Le Naturaliste, ann. 9, 1887, 139, fig. 17a, b.
- Steinmann, Élém. Paléont. I, 1888, 23, 4D.
- Neumayr, Stämme d. Thierreiches, I, 1889 (1888), 178, fig. 20.
- Terquem, Mém. Soc. géol. France, [3], iv, 1886, 76, 77, viii, 44–51.
- see under *Miliola* and *Miliolina*.

**RAMULINA**, Jones MS., 1875. Wright, Rept. Proc. Belfast Nat. F. Cl. 1873–74, App. III, 1875, 88 [90]; Brady, Report Challenger, 1884, 587.

- *aculeata* (d'Orbigny). Wright, Proc. Belfast Nat. F. Cl. 1884–85, App. IX, 1886, 331, xxvii, 11. [*Dentalina*, 1840.]
- *brachiata*, Jones MS. Wright, Rept. Proc. Belfast Nat. F. Cl. 1873–74, App. III, 1875, 88 [90], iii, 20.
- *globulifera*, Brady. Quart. Journ. Micr. Sci. xix, 1879, 272, viii, 32 and 33.
- — — — — Brady, Report Challenger, 1884, 587, lxxvi, 22–28.
- *laevis*, Jones MS. Wright, Rept. Proc. Belfast Nat. F. Cl. 1873–74, App. III, 1875, 88 [90], iii, 19.
- *parasitica*, Carter. Ann. Mag. Nat. Hist. [6], iv, 1889, 94, viii.
- *sp.* Balkwill & Millett, Journ. Micr. III, 1884, 83, iv, 7.
- see "Flask-like objects."

**RAPHANULINA**, Zborzewski, 1834. Nouv. Mém. Soc. Imp. Nat. Moscou, III, 1834, 311.

- *humboldtii*, Zborz. Nouv. Mém. Soc. Imp. Nat. Moscou, III, 1834, 311, xxviii, 1a. [= *Polymorphina gibba*.]

**RECEPTACULITES**, Defrance, 1827. Dict. Sci. Nat. XLV, 1827, 5. [For full synonymy of this genus of Siliceous Sponges, some members of which have occasionally been referred to the Foraminifera, see G. J. Hinde, Quart. Journ. Geol. Soc. XL, 1884, 795–840.]

**RENOIDEA**, Brown, 1827.

- *glabra*, Brown. Illustr. Conch. Great Britain, 1827, fly-leaf, i, 20 and 21. [*Serpula subrotundata* and *S. tenuis*, Walker & Boys.] [v. *Triloculina*.]
- *marginata*, Brown. Illustr. Conch. Gt. Brit. 1827, fly-leaf, i, 25. [? a *Lagenia*.]
- *oblonga*, Brown. Illustr. Conch. Gt. Brit. 1827, fly-leaf, i, 16 and 17. [= *Polymorphina*.]
- — — — — Brown, Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 3, lvi, 16 and 17.
- *rotundata*, Brown. Illustr. Conch. Gt. Brit. 1827, fly-leaf, i, 14 and 15. [v. *Triloculina*.]
- Given by Bütschli as synonym of *Biloculina*.

**RENULINA**, Lamarck, 1822. Hist. Anim. s. Vert. VII, 1822, 605.

- *complanata* (Defrance). Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 371, vi, 2 [error for 4]. [*Frondicularia*, 1824.]
- *opercularia*, Lamarck. Bronn, Syst. urweltl. Conchyl. 1824, 7, i, 9. [*Renulites*, 1804.]
- — — — — Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 371, vi, 3.
- [opercularis] — — — Brown, Conch. Text-book, 1839, 63, x, 21.
- [opercularis] — — — Brown, Elem. Foss. Conch. 1843, 24, ii, 34.
- *sorbyana*, Blake. Month. Micros. Journ. xv, 1876, 262, cut. [An obscure organism ?]

**RENULINITES.** See *Renulites*.**RENULITES**, Lamarck, 1804. Ann. Mus. v, 1804, 354.— Munier-Chalmas, Bull. Soc. géol. France, [3], x, 1882, 471, "type *R. opercularia*, Lam."— *opercularia*, Lamarck. Ann. Mus. v, 1804, 354; and fig. 6, pl. 17, in vol. ix, 1807. [v. *Renulina*; *Peneroplis*; = *Vertebralina*.]**[RENULINITES]** — Parkinson, Organ. Rem. former World, iii, 1811, 163, xi, 21.— *[opercularis]* — Lamarck, Ency. Méthod., "Vers," iii, (1832), 883 (pls. 1827), 465, 8 (P. & J. quote pt. 23, 1816). [= *Verteb.*]— *[opercularis]* — Lamarck, Hist. Anim. s. Vert. viii, 1822, 606.— *[opercularis]* — Lamarck, Coq. Foss. 1823, 15, xv, 6.— *[opercularis]* — Crouch, Introd. Lamarck, 1827, 40, xxii, 4.**REOPHAX**, Montfort, 1808. Conch. Syst. i, 1808, 331; and Brady, Report Challenger, 1884, 289.— *adunca*, Brady. Proc. Roy. Soc. Edinburgh, xi, 1882, 715, not figured.— *adunca*, Brady, Report Challenger, 1884, 296, xxxi, 23-26.— *adunca*? Haeusler, Neues Jahrbuch, Beil. iv, Heft 1, 1885, 9, i, 5.— *ampullacea*, Brady. Quart. Journ. Micr. Sci. xxi, 1881, 49.— *ampullacea*, Brady, Report Challenger, 1884, 290, xxx, 6a, b.— *arctica*, Brady. Ann. Mag. Nat. Hist. [5], viii, 1881, 405, xxi, 2a, b.— *arctica*, Brady, Denkschr. k. Ak. Wiss. Wien, XLIII, Abth. 2, 1882 [1881], 99, ii, 2a, b.— *bacillaris*, Brady. Quart. Journ. Micr. Sci. xxi, 1881, 49.— *bacillaris*, Brady, Report Challenger, 1884, 293, xxx, 23 and 24.— *cylindrica*, Brady. Report Challenger, 1884, 299, xxxii, 7-9.— *dentaliniformis*, Brady. Quart. Journ. Micr. Sci. xxi, 1881, 49.— *dentaliniformis*, Brady, Report Challenger, 1884, 293, xxx, 21 and 22.— *diffugiformis*, Brady. Quart. Journ. Micr. Sci. xix, 1879, 51, iv, 3a, b.— *diffugiformis*, Brady, Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 199, v, 8.— *diffugiformis*, Brady, Report Challenger, 1884, 289, xxx, 1-5.— *diffugiformis*, Haeusler, Neues Jahrbuch, Beil. iv, Heft 1, 1885, 9, i, 1.— *diffugiformis*, Haeusler, Neumayr, Stämme d. Thierreiches, i, 1889 (8), 173, fig. 17b.— *distans*, Brady. Quart. Journ. Micr. Sci. xxi, 1881, 50.— *distans*, Brady, Report Challenger, 1884, 296, xxxi, 18-22.— *findens* (Parker). Brady, Report Challenger, 1884, 299, xxxii, 10 and 11. [*Lituola*, 1870.]— *fusiformis* (Will.). Brady, Report Challenger, 1884, 290, xxx, 7-11. [*Proteonina*, 1858.]— *fusiformis* (Will.), Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 217, xli, 18.— *guttifera*, Brady. Quart. Journ. Micr. Sci. xxi, 1881, 49.— *guttifera*, Brady, Report Challenger, 1884, 295, xxxi, 10-15.— *helvetica*, Haeusler. Neues Jahrbuch, 1883, i, 59, iii, 11.— *helvetica*, Haeusler, Quart. Journ. Geol. Soc. XXXIX, 1883, 27, ii, 8-10.— *membranacea*, Brady. Quart. Journ. Micr. Sci. xix, 1879, 53, iv, 9.— *membranacea*, Brady, Report Challenger, 1884, 297, xxxii, 1-4.— *moniliforme*, Siddall. Proc. Lit. Phil. Soc. Liverpool, xl, 1886, Appendix, Fauna Liverpool Bay, 54, i, 2.— *multilocularis*, Haeusler. Quart. Journ. Geol. Soc. XXXIX, 1883, 26, not figured.— *multilocularis*, var. Haeusler, Neues Jahrbuch, Beil. iv, Heft 1, 1885, 10, i, 6 and 7.— *nodulosa*, Brady. Quart. Journ. Micr. Sci. xix, 1879, 52, iv, 7 and 8.— *nodulosa*, Brady, Report Challenger, 1884, 294, xxxi, 1-9.

- REOPHAX nodulosa**, Brady. Toutkowski, Zap. Kievsk. Obsheh. Est. ix, 1888, 5, ii, 2a, b.
- **pilulifera**, Brady. Report Challenger, 1884, 292, xxx, 18–20.
- **polyeides**, Deecke. Abh. geol. Speciaalkarte Elsass-Lothr. iv, Heft 1, 1884, 19, i, 2–2c.
- [**RHEOPHAX**] — **Deecke**, Mém. Soc. Emul. Montbéliard, xvi, 1886, [14], ii, 20, 20a, and 29.
- **rudis**, Brady. Quart. Journ. Micr. Soc. xxi, 1881, 49. [This is the same as *R. sabulosa*.]
- Carpenter, The Microscope, ed. 6, 1881, 564, fig. 321a, b.
- **sabulosa**, Brady. Proc. Roy. Soc. Edinburgh, xi, 1882, 715.
- Brady, Report Challenger, 1884, 298, xxxii, 5 and 6.
- **scorpiurus**, Montfort. Conch. Syst. i, 1808, 331, 83d genere. [v. *Nodosaria*; *Lituola*; *L. nautiloidea*, var.; *Lituolina*.]
- Carpenter, The Microscope, ed. 6, 1881, 564, fig. 321e.
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- Balkwill & Wright, Trans. R. Irish Ac. xxviii (Sci.), 1885, 328, xiii, 5a and 5b.
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- Anon., Sci. News, 4 May, 1888, 413, fig. 9.
- Agassiz, Three Cruises "Blake," II, 1888, 163, fig. 495.
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- **soldanii**, Parker & Jones. [*Lituola*, 1860.]
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- **spiculifera**, Brady. Quart. Journ. Micr. Sci. xix, 1879, 54, iv, 10–11.
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- **variabilis**, Haeusler. Neues Jahrbuch, Beil. iv, Heft 1, 1885, 10, i, 8.
- sp. ind. Haeusler, Neues Jahrbuch, 1883, i, 61, iv, 15.
- sp. ind. Haeusler, Neues Jahrbuch, Beil. iv, Heft 1, 1885, 10, i, 2–4.
- (?) sp. Balkwill & Wright, Trans. R. Irish Ac. xxviii (Sci.), 1885, 328, xiii, 9, and 22–24.
- (**Haplostiche**). Neumayr, Stämme d. Thierreiches, 1889, i, 172, fig. 16.
- ? — Wisnioski, Jahrbuch k. k. Geol. Reichs. xxxviii (1889), 695, xiii, 65, 66.
- De Folin, Bull. Soc. N. H. Toulouse, xv, 1881, 137; 9 new species proposed but not described!
- REOPHAXOPSIS elegans**, de Folin. Le Naturaliste, ix, 1887, 128, fig. 14.
- Retolia**, Haeusler, misprint in quoting Williamson, Neues Jahrbuch, Beil. iv, Heft 1, 1885, 28. [v. *Rotalina*.]
- RETORTA**, Walker & Boys, 1784. Test. Min. rar. 1784, 3. [= *Adelosina*; see *Serpula (Retorta)*.]
- REUSSIA** (*Verneuilina aut.*) **spinulosa** (Reuss). Schwager, Boll. R. Com. Geol. Ital. viii, 1877, 26, pl., 66.
- RHABDAMMINA**, M. Sars, 1868. Forh. Vidensk.-Selsk. Christiania, 1868 (1869), 248; Brady, Report Challenger, 1884, 266. [See Haeckel's remarks under *Astrorhizidae*.]
- **abyssorum**, M. Sars. Forh. Vidensk.-Selsk. Christiania, 1868 (1869), 248.
- Carpenter, The Microscope, ed. 6, 1881, 562, fig. 321c, d.
- v. **robusta**, Goës. K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 143, xii, 430 and 431.
- Brady, Report Challenger, 1884, 266, xxi, 1–13.

- RHABDAMMINA** abyssorum, M. Sars. De Folin, Le Naturaliste, ix, 1887, 127, fig. 12a.  
 ——— 163, fig. 493. Agassiz, Three Cruises "Blake," ii, 1888, 162, fig. 492,  
 ——— Neumayr, Stämme d. Thierreiches, i, 1889 (8), 173, fig. 17a.  
 ——— cornuta, Brady. Proc. Roy. Soc. Edinburgh, xi, 1882, 714. [*Astro-rhiza*, 1879.] Haeusler, Neues Jahrbuch, 1883, i, 57, iii, 2-3.  
 ——— Brady, Report Challenger, 1884, 270, xxii, 11-13.  
 ——— discreta, Brady. Quart. Journ. Micr. Sci. xxi, 1881, 48. [*Rhabdopleura*, sp. G. M. Dawson, 1870.] Brady, Report Challenger, 1884, 268, xxii, 7-10.  
 ——— elliptica, Deecke. Abh. geol. Speciaalkarte Elsass-Lothr. iv, Heft 1, 1884, 23, i, 1, 1a, b.  
 ——— hirsuta, de Folin. Le Naturaliste, x, 1888, 122, figs. 6 and 7.  
 ——— linearis, Brady. Quart. Journ. Micr. Sci. xix, 1879, 37, iii, 10 and 11. Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 194, v, 10.  
 ——— Brady, Report Challenger, 1884, 269, xxii, 1-6.  
 ——— Agassiz, Three Cruises "Blake," ii, 1888, 163, fig. 494.  
 ——— major, de Folin. Le Naturaliste, ix, 1887, 127, fig. 12b.  
 ——— simplex, M. Sars. Forh. Vidensk.-Selsk. Christiania, 1871 (1872), 252, [not described].  
 ——— sp. ind. Haeusler, Neues Jahrbuch, 1883, i, 58, iii, 4 and 5.  
 ——— De Folin, Bull. Soc. N. H. Toulouse, xv, 1881, 133; 43 new species proposed but not described !!
- RHABDAMINELLA**, de Folin, 1881. Bull. Soc. N. H. Toulouse, xv, 1881, 140, not described, 5 sp. proposed.
- prismoeginosa, de Folin. Le Naturaliste, ix, 1887, 115, fig. 10.
- RHABDAMMINOPSIS**, de Folin, 1882. Congrès Scient. Dax, 1882 (1883), 323.
- RHABDELLA**, d'Archiac & Haime, 1854. Descr. Anim. Foss. groupe nummulitique Inde, ii, 1854, 351. ["Petits cylindres simples, droits, très-lisses extérieurement, longs d'un millimètre et demi environ et larges d'un quart de millimètre."]  
 ——— malcolmi, d'Arch. & Haime. Deser. Anim. Foss. groupe nummulitique Inde, ii, 1854, 351, xxxvi, 18a, b.  
 ? ——— sp. ind. Meneghini, Paléont. Ile Sardaigne, 1857, 330F, 11a, 11a<sup>1</sup>.
- RHABDOGONIUM**, Reuss, 1860. Sitz. k. Ak. Wiss. Wien, xl, 1860, 198; Brady, Report Challenger, 1884, 524.
- acutangulum, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 55, iv, 14a, b.  
 ——— ——— Reuss' Models, No. 26, 1865 (Catal., No. 49, 1861).  
 ——— anomalum, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 201, vii, 1.  
 ——— articulatum, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 55, v, 1a, b.  
 ——— büdensis, Hantken. Magyar. földt. társ. Munkálatai, iv, 1868, 90, i, 19a, b.  
 ——— ——— Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 36, xiii, 12a, b; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 42 same pl. and fig.  
 ——— debile, Gümbel. Sitz. k.-bayer. Ak. Wiss. i, 1871, 65, i, 8.  
 ——— excavatum, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 91, xii, 8a-c.  
 ——— globiferum, Reuss. Sitz. k. Ak. Wiss. Wien, xl, 1860, 201, vii, 6.  
 ——— hæringense, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 631, i, 55a, b.  
 ——— insigna, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 56, v, 2a, b.

- RHABDOGONIUM** *liasinum*, Berthelin. Revue et Mag. zool. 1879, 35, i, 18 and 19.  
 —— *martensi*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 56, v, 4a, b.  
 —— —— —— Reuss' Models, No. 50, 1865 (Catal., No. 50, 1861).  
 —— —— —— Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1050, lxxxvi, 10.  
 —— *minutum*, Reuss. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 84, v, 4a-c, 5a, b.  
 —— —— —— Brady, Report Challenger, 1884, 526, lxvii, 4-6.  
 —— *pygmæum*, Reuss. Denkschr. k. Ak. Wiss. Wien, XXV, 1865, 138, ii, 32.  
 —— —— —— Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 22, i, 8; (and Mém. Soc. Dunkerquoise).  
 —— *pyramidale*, Karrer. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 444, i, 5.  
 —— —— —— Schwager, Boll. R. Com. Geol. Ital. VIII, 1877, 25, pl. 5.  
 —— *roemerii*, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 201, vi, 7.  
 —— *strombeckii*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 56, v, 3a, b.  
 —— *szaboi*, Hantken. Magyar. földt. társ. Munkálatai, IV, 1868, 90, i, 18a, b, c.  
 —— *tricarinatum* (d'Orbigny). Brady, Report Challenger, 1884, 525, lxvii, 1-3. [v. *Vaginulina*, 1826.]  
? —— —— Balkwill & Wright, Trans. R. Irish Ac. XXVIII (Sci.), 1885, 344, xii, 17 and 18.  
 —— —— —— Sherborn & Chapman, Journ. R. Microsc. Soc. [2], VI, 1886, 752, xv, 16a, b.  
 —— —— —— Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 223, xlv, 3.

**RHABDOPLEURA**. A genus of polyzoan molluscs [Ray Lankester, Nature, Sept. 14, 1882, 478]. Dawson's sp. is considered by Brady to belong to the Foraminifer *Rhabdammina*.

- ? —— G. M. Dawson, Canad. Nat., n. s., v, 1870, 177, fig. 7. [= *Rhabdammina discreta*, Brady, 1884.]  
 —— *abyssorum*, G. M. Dawson. Amer. Journ. Sci. [3], I, 1871, 206, fig. 7; and Ann. Mag. Nat. Hist. [4], VII, 1871, 86, fig. 7. [= *Rhabdammina discreta*, Brady.]

**RHAPHIDODENDRON**, Möbius, 1876. Beilage Tagebl. 49 Vers. deutsch. Naturfor. Hamburg, 1876, 115.

- *album*, Möbius. Beilage Tagebl. 49 Vers. deutsch. Naturfor. Hamburg, 1876, 115, no fig.

**RHAPHIDOHELIX**, Möbius, 1880. Beitr. Meeresfauna Insel Mauritius, etc. 1880, 76.

- *elegans*, Möbius. Beitr. Meeresfauna Insel Mauritius, etc. 1880, 76, ii, 2.

**RHEOPHAX**, see *Reophax*.

**RHINOCURUS**, Montfort, 1808. Conch. Syst. I, 1808, 235.

- *araneosus*, Montfort. Conch. Syst. I, 1808, 235, 59th genre. [= *Crist. calcar.*]

**RHIPIDOCYCLINA**, Gümbel, 1868. Abh. k.-bayer. Ak. Wiss. X, Abth. 2, 1868 (1870), 688. This subgenus of *Orbitoides* was proposed by Gümbel for the following forms: *O. nummulitica*, Gümbel; *O. multiplicata*, Gümbel; *O. strophiolata*, Gümbel; *O. karakaiensis* (d'Archiac).

**RHIZAMMINA**, Brady, 1879. Quart. Journ. Micr. Sci. XIX, 1879, 39; Brady, Report Challenger, 1884, 274. [See Haeckel's remarks under *Astro-rhiza*.]

- *algæformis*, Brady. Quart. Journ. Micr. Sci. XIX, 1879, 39, iv, 16 and 17.

- — — — — Brady, Report Challenger, 1884, 274, xxviii, 1-11.

- RHIZAMMINA** *indivisa*, Brady. Report Challenger, 1884, 277, xxix, 5-7.
- RHIZOPELA**, de Folin, 1881. Bull. Soc. N. H. Toulouse, xv, 1881, 140, not described, 1 sp. proposed.
- RHYNCHOSPIRA**, Ehrenberg, 1845. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 358. [See Brady, Report Challenger, 1884, 383 and 589.]
- abnormis, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 60, vii, 17-19; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 69, same pl. and fig.
- *glomerata* (Rss.). See *Globigerina*.
- *indica*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 376.
- RIMULINA**, d'Orbigny, 1826. Ann. Sci. Nat. vii, 1826, 257.
- *bicaudata*, Costa. Mem. Acc. Sci. Napoli, ii, 1855 (1857), 119, i, 114, B, C. [?]
- *glabra*, d'Orbigny. Ann. Sci. Nat. vii, 1826, 257, No. 1.
- — — — — D'Orbigny, Modèles, No. 53, 1826.
- — — — — D'Orbigny, Foraminif. Fossiles Vienne, 1846, 63, xxi, 5 and 6.
- — — — — Carpenter, Parker, & Jones, Introd. Foram. 1862, 160, xii, 4.
- — — — — Reuss' Models, No. 51, 1865 (Catal., No. 45, 1861).
- — — — — P., J., & B. [d'O., Modèles, No. 53], Ann. Mag. Nat. Hist. [3], xvi, 1865, 27, i, 37.
- — — — — Bütschli, in Brönn, Klassen, etc. Thier-Reichs, 1880, 198, vii, 24.
- — — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 161, fig.
- — *ventricosa*, Costa. Atti Accad. Pontaniana, vii, fas. 2, 1856, 177, xiii, 11a, A.
- ROBERTINA**, d'Orbigny, 1846. Foram. Fossiles Vienne, 1846, 202.
- *arctica*, d'Orbigny. Foram. Fossiles Vienne, 1846, 203, xxi, 37 and 38.
- — — — — Schwager, Boll. R. Com. Geol. Ital. viii, 1877, 26, pl. 69.
- — — — — Schlumberger, F. Jeun. Nat., Feb. 1882, ii, 2.
- *austriaca*, Reuss. Denkschr. k. Ak. Wiss. Wien, i, 1850, 375, xlvii, 15.
- ROBULINA**, d'Orbigny, 1826. Ann. Sci. Nat. vii, 1826, 287.
- *acknerana*, Neugeboren. Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 288, iii, 17 and 18.
- *aculeata*, d'Orbigny. Ann. Sci. Nat. vii, 1826, 289, No. 14.
- — — — — Reuss, in Geinitz, Grundr. Verstein. 1845-46, 664, xxiv, 36.
- — — — — = *Crist. calcar* (Linn.). See *Nautili carinati*, etc.
- *acutiangulata*, Terquem. Mém. Ac. Imp. Metz, XLIV, 1863, 430, x, 19 [20] a, b.
- — — — — var. *alta*, Deecke. Abh. geol. Specialkarte Elsass-Lothr. iv, Heft 1, 1884, 50, ii, 17, 17a.
- *acutimargo*, Reuss. Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 640, ii, 76bis, a, b [76a and b, by error in descr. to plate]. [Reuss' sp. is *angustimargo*, q. v.]
- *alato-limbata*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 641, ii, 70a, b.
- *ambigua*, Costa. Atti Accad. Pontaniana, vii, fas. 2, 1856, not deser., xx, 17.
- *angulata*, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 154, viii, 6. [v. *Cristellaria*.]
- *angustimargo*, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 67, iv, 22.
- — — — — Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 332, xiv, 6 and 7 [and 10 ? young form].
- *antigua*, Michelotti. Nat. Verh. Holland. Maatsch. Wetensch. Haarlem, [2], III, (2), 1847, 14, i, 2.
- *arcuata*, Karrer. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 446, ii, 1.

- ROBULINA arcuato-striata**, Hantken. A magy. kir. földt. int. évkönnyve, iv, 1875 (1876), 48, vii, 2 ; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 56, same pl. and fig.
- **ariminensis**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 289, No. 15. [v. *Cristellaria*.]
- D'Orbigny, Foram. Fossiles Vienne, 1846, 95, iv, 8 and 9.
- Bronn, Klassen Ordn. Thier-Reichs, I, 1859, 70, vi, 10a, b.
- Mackie, Science Gossip, 1867, 130, fig. 125.
- Jones, M. Micr. Journ. xv, 1876, cxxix, 10a, b. [= *Crist. costata*, F. & M., var.]
- **armata**, Neugeboren. Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 282, ii, 6 and 7.
- **articulata**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 53, v, 62a, b, vi, 63a, b. [v. *Cristellaria*.]
- **austriaca**, d'Orbigny. Foram. Fossiles Vienne, 1846, 103, v, 1 and 2.
- Costa, Mem. Acc. Sci. Napoli, II, 1855 (1857), 122, i, 10A, B, C.
- Neugeboren, Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 286, iii, 7 and 8.
- Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 70, vii, 20a, b ; (and Mém. Soc. Dunkerquoise).
- **baconica**, Hantken. A magy. kir. földt. int. évkönnyve, iv, 1875 (1876), 49, xiv, 9 ; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 58, same pl. and fig.
- Jones, M. Micr. Journ. xv, 1876, cxxviii, 17.
- **badensis**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 37, iv, Geissberger Schicht, 2.
- **beyrichi**, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 332, xiv, 8 and 9 [? young form]. [v. *Cristellaria*.]
- **budensis**, Hantken. A magy. kir. földt. int. évkönnyve, iv, 1875 (1876), 49, vii, 1 ; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 58, same pl. and fig.
- Jones, M. Micr. Journ. xv, 1876, cxxviii, 5.
- **bullata**, Hantken. A magy. kir. földt. int. évkönnyve, iv, 1875 (1876), 49, xiv, 13 ; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 58, same pl. and fig.
- **calcar** (Linné). v. *Nautilus*, 1758 ; and *Cristellaria*.
- D'Orbigny, Ann. Sci. Nat. vii, 1826, 289, No. 12.
- Michelotti, Mem. Soc. Ital. Sci. xxii, 1841, 292, ii, 6.
- D'Orbigny, Foram. Fossiles Vienne, 1846, 99, iv, 18-20.
- Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, 195, x, 12a, A, C, xvii, 2a, A.
- [d'Orb.]. Neugeboren, Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 282, ii, 5.
- Jones, M. Micr. Journ. xv, 1876, cxxviii, 16.
- [d'Orb.]. Schlumberger, F. Jeun. Nat., Jan. 1882, i, 9.
- [d'Orb.]. Hoernes, Elem. Palaeont. 1884, 28, fig. 19 ; French ed. 1886, same fig.
- = *Crist. rostrata* (Montf.) ; see *Nautilus papillosum*.
- **canariensis**, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 127, iii, 3 and 4.
- Mackie, Science Gossip, 1867, 130, fig. 123.
- **cancellata**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 230, xix, 5A, B.
- **carinata**, Dunikowski. Kosmos [Lemberg], IV, 1879, 128, plate, 21.
- ? — **caspia**, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), xii, 6.
- **centrata**, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 70, vii, 19 ; (and Mém. Soc. Dunkerquoise).

- ROBULINA** clypeiformis, d'Orbigny. Foram. Fossiles Vienne, 1846, 101, iv, 23 and 24.
- var. **festonata**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 196, x, 37A, B, C [error for 11], xix, 1.
- **compressa**, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 338, xv, 17.
- **compressa**, Egger. Neues Jahrbuch, 1857, 297, xiv, 12 and 13.
- **compressa**, Neugeboren. Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 280, ii, 1-4.
- **comptoni** (Sowerby). Roemer, Verst. norddeutsch. Kreide, 1840-41, 99, xv, 34. [v. *Nautilus*.]
- **concinna**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 52, v, 58a, b.
- **confusa**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 142, xiii, 21, 21a.
- **corona-lunæ**, Stache. Novara-Exped., Geol. Theil I, 1864, 250, xxiii, 29a, b.
- **crassa**, Roemer. Verst. norddeutsch. Kreide, 1840-41, 98, xv, 32.
- **crenata**, Hagenow. Neues Jahrb. f. Min. 1842, 572.
- **cristellina**, Ehrenberg. Mikrogeologie, 1854, XX, ii, 24. [= *C. rotulata*.]
- **culturata**, de Montfort. D'Orbigny, Ann. Sci. Nat. VII, 1826, 287, No. 1; and d'Orbigny, Modèles, No. 82, 1826. [*Robulus*, 1808.]
- Michelotti, Mem. Soc. Ital. Sci. XXII, 1841, 291, ii, 5.
- ? Pilla, Distinz. terr. Etrurio, 1846, 104, i, 9.
- D'Orbigny, Foram. Fossiles Vienne, 1846, 96, iv, 10-13.
- Brönn, Lethaea Geognostica, ed. 3, III, 1853-56, 207, xxxv<sup>2</sup>, 9a, b.
- [d'Orb.] var. **antipodum**, Stache. Novara-Exped., Geol. Theil I, 1864, 251, xxiii, 30a, b.
- P., J., & B. [d'O., Modèles, No. 82], Ann. Mag. Nat. Hist. [3], XVI, 1865, 32, i, 39.
- Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 163, fig.
- = *Crist.* see *Nautili* (*Lenticulæ marginatæ*); and *Nautilus circumlati*, etc.; and *Naut. laevi-lucido*, etc.
- **cummingii**, Michelotti. Mem. Soc. Ital. Sci. XXII, 1841, 292, ii, 4.
- Michelotti, Nat. Verh. Holland. Maatsch. Wetensch. Haarlem, [2], III, (2), 1847, 14, i, 3.
- Bornemann, Zeitschr. deutsch. geol. Ges. XII, 1860, 156, vi, 1a, b.
- **curvicosta**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 144, xiii, 31 and 31a.
- **curvisepta**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 142, xiii, 20, 20a.
- **curvispira**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 144, xiii, 28a-c.
- **declivis**, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 333, xv, 11.
- Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 640, ii, 76a, b [76 bis, a and b by error in deser. to plate].
- **deformis**, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 70, iv, 30. [v. *Cristellaria*.]
- Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 337, xiv, 1-3.
- Reuss' Models, No. 33, 1865 (Catal., No. 63, 1861). [= 1st stage of *C. rotulata*.]
- Reuss, Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 53, v, 60a, b, 61a, b.
- ? — **denaria**, Ehrenberg. Mikrogeologie, 1854, xxxii, ii, 39. [= *Crist. rotulata*.]
- **depauperata**, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 70, iv, 29.

- ROBULINA depauperata**, Reuss. Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 337, xiv, 11.  
 ——— Reuss, Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 54, vi, 67a, b, 68a, b.  
 ——— Neugeboren, Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 287, iii, 9 and 10.  
 ——— Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 47, vi, 5 and 6, xiv, 16; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 55, same pl. and fig.  
**depressa**, Michelotti. Mem. Soc. Ital. Sci. XXII, 1841, 291, ii, 3.  
 ——— Michelotti, Nat. Verh. Holland. Maatsch. Wetensch. Haarlem, [2], III, (2), 1847, 15, i, 1.  
 ——— Abiech, Mém. Ac. Imp. Sci. [Math. Phys.] St. Pétersbourg, [6], VII, 1859, 104, ix, 4.  
**dilecta**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 145, xiii, 33 and 33a.  
**dimorpha**, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 67, iv, 23.  
**discooides**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 290, No. 18.  
**discrepans**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 78, ix, 7a, b.  
**d'orbignii**, Bailey. Smithsonian Contrib. II, 1851, 10, pl. 9 and 10.  
**dubia**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 144, xiii, 30 and 30a.  
**echinata**, d'Orbigny. Foram. Fossiles Vienne, 1846, 100, iv, 21 and 22. [v. *Cristellaria*.]  
 ——— Czjzek, Haidinger's Naturw. Abh. II, 1848, 141, xii, 24 and 25.  
 ——— D'Orbigny, Cours élém. Paléont. etc. I, 1849, 196, fig. 320; II, fas. 2, 1852, 818, fig. 623.  
 ——— Mackie, Science Gossip, 1867, 130, fig. 126.  
**ehrenbergii**, Roemer. Verst. norddeutsch. Kreide, 1840-41, 98, xv, 31.  
**eichbergensis**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 29, iii, 38.  
**elegantissima**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 198, xix, 4.  
**ferruginea**, Terquem. Bull. Soc. géol. France, [3], IV, 1876, 496, xvii, 11a, b, c.  
**florigemma**, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. X, 1868 (1870), 644, i, 75.  
**foliata**, Stache. Novara-Exped., Geol. Theil I, 1864, 245, xxiii, 24a, b.  
**formosissima**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 145, xiii, 32, 32a.  
**galeata**, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 67, iv, 21.  
**gibba**, Roemer. Verstein. norddeutsch. Oolith., Nachtrag, 1839, 47, xx, 30.  
**glaaca**, Coppi. Boll. R. Com. geol. Ital. VII, 1876, 208, no fig.  
**glaaca**, Doderlein MS. Malagoli, Atti Sci. Nat. Modena, Mem. [3], VII, 1888, 4, i, 3, 4, and 5.  
**granulata**, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 49, xiv, 15; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 57, same pl. and fig.  
 ——— Jones, M. Micr. Journ. XV, 1876, cxxix, 7.  
**gravidia**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 142, xiii, 23a-f.  
**goniaphora**, Neugeboren. See *R. goniphora*.  
**goniphora**, Neugeboren. Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 289, iii, 19 and 20. [*goniphora*, on plate.]  
**gottingensis**, Bornemann. Lias von Göttingen, 1854, 43, IV, 40, 41a, b.  
**gutticostata**, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. X, 1868 (1870), 643, i, 74.

- ROBULINA** *gutticostata*, Gümbel. Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 48, vi, 10; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 57, same pl. and fig.
- *papillosa*, F. & M.] Jones, M. Micr. Journ. XV, 1876, cxxix, 6a, b. [= *Crist. halophora*, Stache. Novara-Exped., Geol. Theil I, 1864, 248, xxiii, 28a, b, c.]
- *haueri*, Michelotti. Nat. Verh. Holland. Maatsch. Wetensch. Haarlem, [2], III, (2), 1847, 13, not fig'd.
- *imperatoria*, d'Orbigny. Foram. Fossiles Vienne, 1846, 104, v, 5 and 6. Jones, M. Micr. Journ. XV, 1876, cxxix, 19. [= *Crist. vortex*, F. & M., keeled.]
- See *Nautilus vortex*, F. & M.
- *inæqualis*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, ivi, and 229, xix, 34, B.
- *incompta*, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 70, iv, 28.
- Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 336, xiv, 12.
- *incrustata*, Stache. Novara-Exped., Geol. Theil I, 1864, 254, xxiii, 33a, b.
- *inflata*, Neugeboren. Arch. Ver. siebenburg. Landeskunde, N. F. X, Heft 2, 1872, 288, iii, 11–16.
- *inornata*, d'Orbigny. Foram. Fossiles Vienne, 1846, 102, iv, 25 and 26. [v. *Cristellaria*.] Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 335, xv, 2 and 3.
- Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, 229, xix, 6A, B.
- Egger, Neues Jahrbuch, 1857, 297, xiv, 14–16.
- Neugeboren, Arch. Ver. siebenburg. Landeskunde, N. F. X, Heft 2, 1872, 284, ii, 20 and 21.
- Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 47, vi, 9; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 55, same pl. and fig.
- Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 70, vii, 18a, b; (and Mém. Soc. Dunkerquoise).
- Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 25, pl. 28.
- *insignis*, Reuss. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 466, v, 4a, b.
- *integra*, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 334, xv, 12 and 13 [14, 15, and 16, “? young forms”].
- *intermedia*, d'Orbigny. Foram. Fossiles Vienne, 1846, 104, v, 3 and 4.
- *jurassofranconica*, Gümbel. Jahresh. Ver. vat. Nat. Württ. XVIII, 1862, 227, iv, 3a, b.
- *kressenbergensis*, Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. X, 1868 (1870), 641, i, 71a, b.
- *kubinyii*, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875, (1876), 47, vi, 7; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 56, same pl. and fig.
- Jones, M. Micr. Journ. XV, 1876, cxxviii, 12a, b.
- Hantken, Kohlenflötzte, etc. ungar. Krone, 1878 (transl. from Magyar), 232, fig. 51.
- *labiata*, Terquem. Mém. Soc. géol. France, [3], IV, 1886, 46, v, 1a, b.
- *levigata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 288 and 289, Nos. 9 and 16.
- = *Crist. calcar* (Linn.) ; see *Nautilus*.
- *lata*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 52, v, 57a, b.
- *lenticula*, Stache. Novara-Exped., Geol. Theil I, 1864, 246, xxiii, 25a, b.

- ROBULINA** *levida*, Reuss. Verstein. böhm. Kreide, 1845–46, ii, 109, xxiv, 46.  
 [v. *Cristellaria*.]
- *lepsii*, Schopp. Abh. Hess. geol. Landes. Darmstadt, i, (3), 1889, 380, i, 1.
  - *liasina*, Terquem. Mém. Ac. Imp. Metz, XLII, 1862, 449, vi, 9a, b.
  - *limbata*, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 335, xv, 4, 5, and 6.
  - cfr. — — — Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 336, xv, 7.
  - *limbosa*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. I, 1863 (1864), 55, vi, 69a, b.
  - — — Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 48, vi, 11; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 57, same pl. and fig.
  - — — Jones, M. Mier. Journ. XV, 1876, cxviii, 14a, b. [= *Crist. cultrata*, Montf.]
  - *lobata*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr., xx, 14.
  - *loculosa*, Stache. Novara-Exped., Geol. Theil I, 1864, 244, xxii [error for xxiii], 23a, b.
  - *lucida*, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 142, xiii, 19 and 19a.
  - *magdeburgica* (Phil.). Bornemann, Zeitschr. deutsch. geol. Ges. XII, 1860, 157, vi, 2a, b. [*Nonionina*, 1851.]
  - *marginata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 288 and 290, Nos. 6 and 19. [v. *Cristellaria*.]
  - — — = *Crist. cassis*; see *Nautili (Lenticulae marginatae)* [No. 6 of d'Orbigny] and *N. laevis*, etc.
  - *megalopolitana*, Reuss. Zeitschr. deutsch. geol. Ges. VII, 1855, 272, ix, 5. [v. *Cristellaria*.]
  - *metensis*, Terquem. Mem. Ac. Imp. Metz, XXXIX, 1858, 627, iv, 6a, b.
  - *munsteri*, Roemer. Verstein. norddeutsch. Oolith., Nachtrag, 1839, 48, xx, 29.
  - — — Roemer, Verst. norddeutsch. Kreide, 1840–41, 98, xv, 30.
  - *nautiloides*, Bornemann. Lias von Göttingen, 1854, 43, iv, 42a, b.
  - *navis*, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 338, xiv, 4 and 5.
  - *neglecta*, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 69, iv, 27.
  - — — Neugeboren, Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 284, ii, 8–19.
  - *nitida*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 290, No. 22. This name was given by d'Orbigny to Soldani, Testac. II, App. 1798, 141, pl. 7zz, ZZ. [Soldani does not appear to have described it; it is probably an *Amphistegina*.]
  - *nitida*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. I, 1863 (1864), 54, vi, 66a, b.
  - *nitidissima*, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 68, iv, 25.
  - *nodosa*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. I, 1862 (1863), 78, ix, 6a, b.
  - *notabilis*, Neugeboren. Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 285, iii, 1 and 2.
  - *nuda*, Terquem. Mém. Soc. géol. France, [3], I, 1878, 14, i (vi), 6a, b.
  - *obtusa*, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 369, xlvi, 18.
  - *obtusimargo*, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 142, xiii, 22, 22a.
  - *ocellus*, Ehrenberg. Mikrogeologie, 1854, xxxii, ii, 47. [= *Crist. cultrata*.]
  - *oculus*, Stache. Novara-Exped., Geol. Theil I, 1864, 247, xxii [error for xxiii], 27a, b.

- ROBULINA** oolithica, Terquem. Bull. Soc. géol. France, [3], iv, 1876, 496, xvii, 10a, b.  
 ——— ——— Terquem, Cinq. Mém. Foram. Oolithique, 1883, 366, xli, 12a, b.  
 ——— ——— Terquem, Mém. Soc. géol. France, [3], iv, 1886, 46, v, 2a, b.  
 ——— orbicularis, d'Orbigny. Ann. Sci. Nat. vii, 1826, 288, xv [vi in text, by error], 8 and 9. [= *Crist. vortex* (F. & M.) ; v. *Cristellaria*.]  
 ——— ——— Reuss, in Geinitz, Grundr. Verstein., 1845-46, 664, xxiv, 35.  
 ——— ——— = *Crist. vortex* (F. & M.) ; see *Nuclei conico-rotundati*.  
 ——— ——— See *Nautilus vortex*, F. & M.  
 ——— ornata, d'Orbigny. Foram. Fossiles Vienne, 1846, 98, iv, 16 and 17.  
 ——— ——— Pictet, Traité de Paléont., 2 ed. iv, 1857, 497, cix, 15.  
 ——— planciana, d'Orbigny. Ann. Sci. Nat. vii, 1826, 290, No. 20.  
 ——— ——— = *Nonion. umbilicatula* (Mont.) ; see *Lenticulae*.  
 ——— plicata, d'Orbigny. Ann. Sci. Nat. vii, 1826, 290, No. 23.  
 ——— ——— = *Crist. rotulata*, Linn. ; see *Hammoniae subrotundæ*.  
 ——— polistegia, Dunikowski. Kosmos [Lemberg], iv, 1879, 128, plate, 20.  
 ——— polyphragma, Reuss. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865) 465, iv, 5a, b.  
 ——— porvænsis, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 50, xiv, 11 ; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 58, same pl. and fig.  
 ——— princeps, Reuss. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 466, v, 3a, b.  
 ——— ——— Hantken, A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 48, vi, 8 ; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 56, same pl. and fig.  
 ——— ——— Deecke, Mémem. Soc. Emul. Montbéliard, xvi, 1886 [35], ii, 17, 17a.  
 ——— pseudo-calcarata, Stache. Novara-Exped., Geol. Theil I, 1864, 252, xxiii, 31.  
 ——— pterodiscoidea, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 642, i, 72a, b.  
 ——— pulchella, d'Orbigny. Ann. Sci. Nat. vii, 1826, 288, No. 8.  
 ——— ——— = *Crist. calcar* ; see *Nautili (Lenticulae radiatae)*.  
 ——— pusilla, Stache. Novara-Exped., Geol. Theil I, 1864, 247, xxiii, 26a, b.  
 ——— radiata, Bornemann. Zeitschr. deutsch. geol. Ges. vii, 1855, 334, xv, 1. [v. *Cristellaria*.]  
 ——— ——— Reuss, Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 54, vi, 65a, b.  
 ——— radiata, d'Orbigny. Ann. Sci. Nat. vii, 1826, 288, No. 7.  
 ——— ——— = *Crist. calcar* ; see *Nautili (Lenticulae radiatae)*.  
 ——— radiifera, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 643, ii, 76, 4a, b [76aa, bb].  
 ——— regina, Karrer. Novara-Exped., Geol. Theil I, 1864, 76, xvi, 6.  
 ——— rhenana, Andreæ. Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 300, vi, 10.  
 ——— rosacea, d'Orbigny. Ann. Sci. Nat. vii, 1826, 289, No. 11. [v. *Cristellaria*.]  
 ——— ——— = *Crist.* ; see *Nautilus lœves (Lenticulae)*.  
 ——— rosetta, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 642, i, 73a, b.  
 ——— rostrata, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 143, xiii, 24, 24a.  
 ——— rotunda, d'Orbigny. Ann. Sci. Nat. vii, 1826, 290, No. 24.  
 ——— ——— = *Crist. calcar* ; see *Nautilus lenticula*.  
 ——— rugosa, d'Orbigny. Ann. Sci. Nat. vii, 1826, 290, No. 21.  
 ——— ——— = *Lituola* ; see *Lenticulae*.

- ROBULINA seminuda**, Terquem. Cinq. Mém. Foram. Oolithique, 1883, 366, xli, 13a, b.
- — — — — Terquem, Mém. Soc. géol. France, [3], iv, 1886, 47, v, 3a, b.
- — **semistriata**, Costa. Atti Accad. Pontaniana, vii, fas. 2, 1856, not descr., xix, 7.
- — **serpens**, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 143, xiii, 25 and 25a.
- — **signata**, Reuss. Zeitschr. deutsch. geol. Ges. viii, 1855, 272, ix, 4.
- — **similis**, d'Orbigny. Foram. Fossiles Vienne, 1846, 98, iv, 14 and 15.
- — **simplex**, d'Orbigny. Foram. Fossiles Vienne, 1846, 103, iv, 27 and 28. Neugeboren, Arch. Ver. siebenburg. Landeskunde, N. F. x, Heft 2, 1872, 286, iii, 3–6.
- — — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 70, vii, 21a, b; (and Mém. Soc. Dunkerquoise).
- — — — — Jones, M. Micr. Journ. xv, 1876, cxviii, 13. [= *Crist. rotulata*, Lam.]
- — **simplicissima**, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 141, xiii, 18, 18a.
- — **sogamozae**, Karsten. Amtlicher Ber. 32 Vers. deutscher Nat. Aerzte, 1856, 1858, 114, vi, 5a, b; and Géol. Colomb. bolivarienne, 1886, 62, vi, 5a, b.
- — **soldanii**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 288, No. 5. [v. *Cristellaria*.]
- — — — — = *Crist.*; see *Nautili globuli*.
- — **spirata**, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 23, i, 15a, b; (and Mém. Soc. Dunkerquoise).
- — **stellata**, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 144, xiii, 29.
- — **stellifera**, Czjzek. Haidinger's Nat. Abh. ii, 1848, 142, xii, 26 and 27.
- — **striolata**, Czjzek. Haidinger's Nat. Abh. ii, 1848, 142, xii, 28 and 29.
- — **subangulata**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 53, vi, 64a, b.
- — **subangulosa**, Costa. Atti Accad. Pontaniana, vii, fas. 2, 1856, not descr., xiv, 2.
- — **subcultrata**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 26, v, 19 and 20. [*R. cultrata* on plate.]
- — **sublævis**, v. Hagenow. Neues Jahrbuch, 1842, 572.
- — **subnodosa**, v. Muenster. Roemer, Neues Jahrbuch, 1838, 391, iii, 61. [v. *Polystomella*.]
- — **sulcata**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 289, No. 10.
- — — — — = *Polystom. striato-punctata*; see *Nautili striati*.
- — **taettowata**, Stache. Novara-Exped., Geol. Theil i, 1864, 252, xxiii, 32a, b. [*taettovata* in explan. of plate.]
- — **tenuis**, Seguenza. Atti R. Acc. Lincei, [3], vi, 1880, 143, xiii, 26 and 26a.
- — **torosa**, Reuss. Sitz. k. Ak. Wiss. Wien, l, Abth. 1, 1864 (1865), 465, iii, 2a, b.
- — **trachyomphala**, Reuss. Haidinger's Naturw. Abh. iv, Abth. 1, 1851, 34, ii, 12.
- — **trigonostoma**, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 69, iv, 26.
- — — — ? Bornemann, Zeitschr. deutsch. geol. Ges. vii, 1855, 336, xv, 9 and 10. ("Young forms.")
- — **umbonata**, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 68, iv, 24.
- — **vaticana**, Costa. Mem. Acc. Sci. Napoli, II, 1855 (1857), 122, i, 17A, B.
- — **virgata**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 290, No. 17.
- — — — D'Orbigny, Modèles, No. 14, 1826.
- — — — P., J., & B. [d'O., Modèles, No. 14], Ann. Mag. Nat. Hist. [3], xvi, 1865, 20, i, 40.
- — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 163, fig.

- ROBULINA** *virgata*, D'Orbigny. Gümbel, Geol. Bayern, Th. I, Lief. 2, 1885, fig. 266, 16.
- *vitrea*, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 144, xiii, 27 and 27a.
- *vortex* (F. & M.). = *Crist.*, v. *Nautilus*, 1798; *Nautili globuli*, and *Naut. conico-rotundati*.
- *vulgaris* (Schwager). Deecke, Mém. Soc. Emul. Montbéliard, XVI, 1886 [35], ii, 3, 3a. [*Cristellaria*, 1868.]
- spp. Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 333, xiv, 9 and 10, xv, 8. ("Young forms.")
- von Schlicht, Foram. Septar. Pietzpuhl, 1870, plates, xvi–xix.
- ROBULUS** *cultratus*, Montfort. Conch. Syst. I, 1808, 215, 54th genre. [= *Crist.*] [v. *Robulina*; *Cristellaria*.]
- ROPALOZOTIKA**, de Folin, 1881. Bull. Soc. N. H. Toulouse, XV, 1881, 141, not described, 1 sp. proposed.
- ROSALIA**. D'Orbigny in his *Prodrome* quotes this genus several times with the date of 1825. It may be that this was the original MS. name he gave to *Rosalina*.
- ROSALINA**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271.
- *afinis*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271, No. 8.
- *amaliæ*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 254, xxi, 12A, B, C.
- *ambigua*, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 35, v, 5a, b; (and Mémem. Soc. Dunkerquoise).
- *ammoniformis*, d'Orb., 1847. D'Orbigny, *Prodrome de Paléont.* III, 1852, 194, No. 547. [*Rotalia*, 1825.]
- *ammonoides*, Reuss. Geogn. Skizze Böhmen, II, 1844, pt. 1, 214. [v. *Anomalina*; *Planorbolina*.]
- *Reuss*, Verstein. böhm. Kreide, 1845–46, I, 36, viii, 53, xiii, 66.
- *Reuss*, Haidinger's Naturw. Abh. IV, Abth. 1, 1851, 36, iii, 2.
- — — — — Jones, Lecture Geol. Hist. Newbury, 1854, 48, ii, 2a, b, c.
- — — — — Eley, Geol. in the Garden, 1859, 202, viii, 3c, 4c, Ac.
- — — — — Eley, Geol. in the Garden, 1859, 193, ii, 3, 4, iii, 17. [Flint cast.]
- — — — — Kübler & Zwingli, Neujahrsblatt Bürgersbibl. Winterthur, 1866, 22, iii, 27.
- *anomala*, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 34, v, 1a, b; (and Mémem. Soc. Dunkerquoise).
- *araucana*, d'Orbigny. Voyage Amér. Mérid. 1839, V, pt. 5, "Foraminifères," 44, vi, 16–18. [v. *Discorbina*.]
- *arcuata*, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 372, xlvi, 4. [v. *Discorbina*.]
- *aspera*, Gümbel. Jahresh. Ver. vat. Nat. Württ. XVIII, 1862, 230, iv, 8a, b.
- *asterites*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. X, 1868 (1870), 658, ii, 101a, b, c.
- *auberii*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 94, iv, 5–8; also in Spanish, 1840, 102, same pl. and fig.
- *beccarii* (Linné). See *Nautilus*, 1758.
- — — — — [Park.]. Reuss, in Geinitz, Grundr. Verstein. 1845–46, 676, xxiv, 56.
- — — — — Eley, Geol. in the Garden, 1859, 203, x, 41–44.
- — — — — Kölliker, Icones Histiologicalae, 1864, 31. [Structural.]
- — — — — Hopkins, Execut. Doc., 45 Congress, Sess. 3, IV, Rpt. Chief Engineers, pt. 2, App. W, 1878–79, 885, i, 64.
- *bertheloti*, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 135, i, 28–30. [*R. berthelotiana* on plate.] [v. *Discorbina*.]

- ROSALINA binkhorsti**, Reuss. Sitz. k. Ak. Wiss. Wien, **XLIV**, Abth. 1, 1861 (1862), 317, ii, 3a-c.
- **biseriata**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 26, ii (vii), 14a-c.
- **bosqueti**, Reuss. Sitz. k. Ak. Wiss. Wien, **XLIV**, Abth. 1, 1861 (1862), 316, iii, 1a, b.
- **bulloides**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 98, iii, 2-5; also in Spanish, 1840, 104, same pl. and fig. [v. *Discorbina*; *Cymbalopora*; *Tretomphalus*.]
- **calabra**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr., xiv, 6.
- **calymene**, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 658, ii, 100a, b, c.
- **canaliculata**, Reuss. Denkschr. k. Ak. Wiss. Wien, VII, Abth. 1, 1854, 70, xxvi, 4.
- **candeiana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 97, iv, 2-4; also in Spanish, 1840, 103, same pl. and fig.
- **catesbyana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 99, iv, 22-24; also in Spanish, 1840, 105, same pl. and fig. [*R. catesbyana* on plate.]
- **clementiana**, d'Orbigny. Mém. Soc. géol. France, [1], IV, 1840, 37, iii, 23-25; facsimile in *Science Gossip*, 1870, 155, fig. 140.
- — — — — Mangin, *Mystères Océan*, 1864, 177, fig. 9.
- **complanata**, d'Orbigny. Foram. Fossiles Vienne, 1846, 175, x, 13-15.
- — — — — var. Reuss, Denkschr. k. Ak. Wiss. Wien, I, 1850, 373, xlvii, 5.
- — — — — Bronn, *Lethaea Geognostica*, ed. 3, III, 1853-56, 229, xxxv<sup>2</sup>, 20a, b, c.
- **complanata**, Reuss. Sitz. k. Ak. Wiss. Wien, **XLVI**, Abth. 1, 1862 (1863), 86, xi, 3a-c.
- **concava**, Reuss. Denkschr. k. Ak. Wiss. Wien, VII, Abth. 1, 1854, 70, xxvi, 3.
- **conica**, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 632, iv, 11a, b.
- — — — — Terquem, Mém. Soc. géol. France, [3], II, 1882, 97, x (xviii), 9a-c.
- **consobrina**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 46, vii, 4-6.
- **cora**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 45, vi, 19-21.
- **crenata**, Reuss. Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 243, v, 57.
- **depressa**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271, No. 6.
- **discoides** (d'Orbigny). Terquem, Mém. Soc. géol. France, [3], I, 1878, 24, ii (vii), 9a-c. [*Rotalia*, 1826.]
- **dubia**, d'Orbigny. Foram. Fossiles Vienne, 1846, 177, x, 19-21.
- **dubia**, Terq. Mém. Soc. géol. France, [3], II, 1882, 100, xi (xix), 2a, b.
- **edwardsiana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 101, vi, 8-10; also in Spanish, 1840, 106, same pl. and fig.
- **elliptica**, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 15, iii, 2. [? a *Planorbulina*.]
- **excavata**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 98, x (xviii), 11a-c.
- **fasciata**, Stache. Novara-Exped., Geol. Theil I, 1864, 281, xxiv, 31a, b, c.
- **foveolata**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 133, iv, iv, μ.
- **galiciana**, Alth. Haidinger's Naturw. Abh. III, Abth. 2, 1850, 265, xiii, 20. [v. *Planorbulina*.]

- ROSALINA globigera**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 428.  
 ——— **globularis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271, No. 1, xiii, 1-4 ;  
 and Modèles, 1826, No. 69. [v. also *Discorbina*.]  
 ——— ——— ——— Smedley, Ency. Metrop. 1845, undescr. pl. "Mollusca ?"  
 30 and 31.  
 ——— ——— ——— Williamsou, Mem. Lit. Phil. Soc. Manchester, [2], VIII,  
 1848, 36, pl. 27, 28, 29. [28 = *Planorb. mediterranensis*?]  
 ——— ——— ——— P., J., & B. [d'O., Modèles, No. 69], Ann. Mag. Nat. Hist.  
 [3], XVI, 1865, 30, ii, 69.  
 ——— ——— ——— Terquem, Mém. Soc. géol. France, [3], I, 1878, 25, ii  
 (vii), 10a-c.  
 ——— **granulosa**, Karrer. Sitz. k. Ak. Wiss. Wien, I, Abth. 1, 1864 (1865),  
 710, ii, 14.  
 ? ——— **hexas**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 308.  
 ——— ——— ——— Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), I, 19.  
 ("cfr. *Planulina*, 1854.")  
 ——— **horrida**, Egger. Neues Jahrbuch, 1857, 278, viii, 14-16.  
 ——— **imperatoria**, d'Orbigny. Foram. Fossiles Vienne, 1846, 176, x, 16-18.  
 ——— **inæqualis**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr.,  
 xiv, 8.  
 ——— **inca**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères,"  
 45, vii, 1-3.  
 ——— **inflata**, Seguenza. Atti Accad. Gioenia Sci. Nat. 2, XVIII, 1862, 106, I,  
 6, 6a, b, c. [= *Rotalia beccarii*, var.]  
 ——— **inflata**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 87,  
 xi, 6a-c.  
 ——— **inflata**, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 76, ix, 8a,  
 b; (and Mém. Soc. Dunkerquoise).  
 ——— **isabelleana**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Fora-  
 minifères," 43, vi, 10-12. [v. *Discorbina*.]  
 ——— **italica**, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. III, 1852, 194,  
 No. 545. [*Turbinulina*, 1826.]  
 ——— ——— ——— Terquem, Mém. Soc. géol. France, [3], I, 1878, 27, ii  
 (vii), 16a-c.  
 ——— **kochi**, Reuss. Zeitschr. deutsch. geol. Ges. VII, 1855, 274, ix, 8.  
 ——— **lævigata**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 133, iv, vi, v.  
 ——— **lævigata**, Eichwald. Lethaea Rossica, III, 1853, 6, i, 9a-d.  
 ——— **lateralis**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 25, ii (vii),  
 11a-c. [v. *Pulvinulina*.]  
 ——— **latifrons**, Stache. Novara-Exped., Geol. Theil I, 1864, 284, xxiv, 33a,  
 b, c.  
 ——— **lenticularis**, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 631, iv,  
 10a-c.  
 ——— **linneiana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Fora-  
 minifères," 101, v, 10-12 ; also in Spanish, 1840, 106, same pl. and fig.  
 [R. linnei on plate ; R. linneiana in Index.] [v. *Globigerina*.]  
 ——— **lorneiana**, d'Orbigny. Mém. Soc. géol. France, [1], IV, 1840, 36, iii,  
 20-22 ; facsimile in Science Gossip, 1870, 155, fig. 139. [v. *Rotalia*.]  
 ——— ——— ——— Mantell, Medals Creation, ed. 2, 1854, 342, fig. 109, 5.  
 ——— **mackayi**, Karrer. Novara-Exped., Geol. Theil I, 1864, 82, xvi, 14.  
 [makeyi, in explan. to plate.]  
 ——— **maorica**, Stache. Novara-Exped., Geol. Theil I, 1864, 282, xxiv, 32a,  
 b, c.  
 ——— **maremii**, d'Orb., MS. Terq., Mém. Soc. géol. France, [3], I, 1878, 27,  
 ii (vii), 15a-c. [D'Orbigny, Planches inédites, viii, f. 2.]  
 ——— **marginata**, Reuss. Verstein. böhm. Kreide, 1845-46, I, 36, viii, 54, 74,  
 xii, 68. [v. *Globigerina*.]  
 ——— ——— ——— Reuss, in Geinitz, Grundr. Verstein. 1845-46, 676, xxiv,  
 57.

- ROSALINA marginata**, Reuss. Brunn, Ann. Mag. Nat. Hist. [2], XII, 1853, 241, ix, 7.
- — — — — Reuss, Denkschr. k. Ak. Wiss. Wien, VII, Abth. 1, 1854, 69, xxvi, 1.
- — — — — Eley, Geol. in the Garden, 1859, 202, ix, 16C.
- — — — — Eley, Geol. in the Garden, 1859, 196, iii, 16. [Flint cast.]
- — — **mariæ**, Jones. In Prestwich, Quart. Journ. Geol. Soc. VIII, 1852, 267, xvi, 13. [= *Planorbulina*.]
- — — **mediterranensis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271, No. 2. [v. *Pulvinulina*.]
- — — — — = *Pulvin. mediterr.* (d'O.); see *Hammonia subconica*.
- — — **megastoma**, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 75, ix, 6a, b [var. 7]; (and Mém. Soc. Dunkerquoise).
- — — **micropora**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 428.
- — — **moniliformis**, Reuss. Geogn. Skizze Böhmen, II, 1844, pt. 1, 214.
- — — — — Reuss, Verstein. böhm. Kreide, 1845-46, I, 36, XII, 30, xiii, 67. [Corrected in Part II, p. 109, to *Anomalina*.]
- — — **nitens**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 86, xi, 4a, b.
- — — **obtusa**, d'Orbigny. Foram. Fossiles Vienne, 1846, 179, xi, 4-6. [v. *Discorbina*.]
- — — — — Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, 258, xxii, 14A, B, C [error for xxi, 14, 15, and 16].
- — — **ocellata**, Ehrenberg, 1838. [v. *Planulina*.]
- — — **opercularis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271, No. 7. [v. *Discorbina*.]
- — — — — D'Orbigny, De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 93, iii, 24 and 25, iv, 1; also in Spanish, 1840, 101, same pl. and fig.
- — — **orbicularis**, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 407, No. 1328. [*Rosalina*, 1825.]
- — — **orbicularis**, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 75, ix, 4a, b; (and Mém. Soc. Dunkerquoise). [v. *Discorbis*, and *Discorbina*.]
- — — **orbiculus**, Stache. Novara-Exped., Geol. Theil I, 1864, 285, xxiv, 34a, b, c.
- — — **d'orbignyi**, Soldani. Walther, Mitt. Zool. Stat. Neapel, VIII, 1888, 382, xx<sup>12</sup>.
- — — **ornata**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 42, i, 18-20.
- — — — — Hogg, Microscope, 1886, 380, fig. 208<sup>2</sup>.
- — — **osnabrugensis** (v. Muënster). Reuss, Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 243, v, 58. [v. *Planulina*.]
- — — **parapsis**, Schwager. Benecke's Geogn. Pal. Beiträge, I, 1866, 310, fig. 16.
- — — **parisiensis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271, No. 5. [v. also *Discorbis* and *Discorbina*.]
- — — — — D'Orbigny, Modèles, No. 38, 1826.
- — — — — P., J., & B. [d'O., Modèles, No. 38], Ann. Mag. Nat. Hist. [3], XVI, 1865, 25, ii, 70.
- — — — — Terq., Mém. Soc. géol. France, [3], II, 1882, 99, x (xviii), 15-17.
- — — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.
- — — **parkinsoniana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 99, iv, 25-27; also in Spanish, 1840, 105, same pl. and fig. ["*Rotalia beccarii*, d'Orb., 1825."]
- — — **patella**, Egger. Neues Jahrbuch, 1857, 278, x, 12-14.
- — — **pertusa**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 133, iv, viii, 5.
- — — **peruviana**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 41, i, 12-14.

- ROSALINA** poeyi, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 92, iii, 18-20; also in Spanish, 1840, 100, same pl. and fig. [v. *Discorbina* and *Cymbalopora*.]
- polygona, Terquem. Mém. Ac. Imp. Metz, XLII, 1862, 450, vi, 10a, b.
- polystoma, Terquem. Mém. Soc. géol. France, [3], i, 1878, 26, ii (vii), 13a-c.
- propinqua, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 99, x (xviii), 14a-c.
- punctulata, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 34, v, 2a, b; (and Mém. Soc. Dunkerquoise).
- quadrata, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 98, x (xviii), 12a-c.
- radiata, Costa. Atti Accad. Pont. VII, fas. 2, 1856, 255, xxi, 13A, B, C.
- rotata, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 100, xi (xix), 1a-c.
- rufis, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 87, xi, 7a-c. [v. *Anomalina*.]
- — — — — Gümbel, Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 657, ii, 99a, b, c.
- rugata, Terquem. Mém. Soc. géol. France, [3], i, 1878, 27, ii (vii), 17a-c.
- rugosa, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 42, ii, 12-14. [v. *Discorbina*.]
- saulcyi, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 42, ii, 9-11. [*R. saulci* on plate.] [v. *Discorbina*.]
- scalaris, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 101, xi (xix), 3a-c.
- schloenbachi, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 87, xi, 5a-c.
- semipunctata, Terquem. Mém. Soc. géol. France, [3], i, 1878, 26, ii (vii), 12a-c.
- — — — — Terquem, Mém. Soc. géol. France, [3], ii, 1882, 98, x (xviii), 13a-c.
- semistriata, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271, No. 3.
- — — — — De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 95, iii, 15-17; also in Spanish, 1840, 102, same pl. and fig.
- siennensis, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. III, 1852, 194, No. 546. [*Turbulinula*, 1826.]
- simplex, d'Orbigny. Foram. Fossiles Vienne, 1846, 178, x, 25-27.
- — — — — Egger, Neues Jahrbuch, 1857, 278, x, 4-6.
- — — — — Abich, Mém. Ac. Imp. Sci. (Math.-Phys.) St. Pétersbourg, [6], VII, 1859, 56, ii, 1b, c [and 1a].
- soldanii, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271, No. 9. [v. *Pulvinulina*.]
- — — — — = *Rotalia beccarii* (?) ; see *Hammoniae trochi*.
- — — — — = *Pulvin.*; see *Hammoniae trochi*.
- spinigera, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 97, x (xviii), 10a-c.
- squamiformis, Reuss. Denkschr. k. Ak. Wiss. Wien, VII, Abth. 1, 1854, 69, xxvi, 2.
- squammosa, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 91, iii, 12-14; also in Spanish, 1840, 100, same pl. and fig. [*Rotalia*, 1826.]
- subradiata, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 256, xiv, 5a, B, C.
- subrotunda, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. III, 1852, 194, No. 544. [*Rotalia*, 1826.]
- subumbonata, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 657, ii, 98a, b, c.

- ROSALINA tenerima**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 428.  
 — **thiara**, Stache. Novara-Exped., Geol. Theil I, 1864, 279, xxiv, 29a, b, c.  
 — — — — var. **elatior**, Stache. Novara-Exped., Geol. Theil I, 1864, 280, xxiv, 30a, b, c.  
 — — — — **trifida**, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 35, v, 4a, b; (and Mém. Soc. Dunkerquoise).  
 — — — — **trocheata**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 28 ii (vii), 18a—c.  
 — — — — **truncata**, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 35, v, 3a, b; (and Mém. Soc. Dunkerquoise).  
 — — — — **valvulata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 271, No. 4.  
 — — — — Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 136, ii, 19—21. [v. *Discorbina*.]  
 — — — — De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 96, iii, 21 and 32 [error for -23]; also in Spanish, 1840, 103, same pl. and fig.  
 — — — — **varians**, Schultze. Organismus Polythal. 1854, 60, iii, 8—13. [= *Discorb. globularis*.]  
 — — — — **vesicularis**, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 407, No. 1329. [*Rosalia*, 1825.]  
 — — — — (Lam.). Parker & Jones, Ann. Mag. Nat. Hist. [2], xix, 1857, 292, x, 22—24, xi, 13 and 14. [*Discorbites*, 1804.]  
 — — — — **viennensis**, d'Orbigny. Foram. Fossiles Vienne, 1846, 177, x, 22—24.  
 — — — — Egger, Neues Jahrbuch, 1857, 277, viii, 11—13.  
 — — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 75, ix, 5a, b; (and Mém. Soc. Dunkerquoise).  
 — — — — **vilardeboana**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 44, vi, 13—15. [v. *Discorbina*.]  
 — — — — **vitrea**, Terquem. Bull. Soc. zool. France, x, 1885, 549, figs. A, B, C.  
 — — — — **weinkauffi**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, (1), 1863, 68, viii, 97. [v. *Truncatulina*.]  
 — — — — Pictet, Traité de Paléont. IV, 1846, 234, xii, 18.  
 — — — — Ansted, Ancient World, 1847, 237, fig. 90; ed. 2, 1848, 221, fig. 86.  
 — — — — Mantell, Medals Creation, ed. 2, 1854, 361, fig. 119, 1. [Sarcode.]  
? — — — — Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr., xvii, 7 and 8.  
 — — — — Dawson, Canad. Nat. II, 1857, 422, vii, 17. [= *Polystom. umbilicatula*.]  
 — — — — Mantell, Wonders Geol. 1857, 7th ed., 310, fig. 56.  
? — — — — Karrer, Sitz. k. Ak. Wiss. Wien, LII, Abth. 1, 1865 (1866), 497, pl., 13.  
 — — — — v. Schlicht, Foram. Septar. Pietzpuhl, 1870, plates xxi and xxii.  
 — — — — Terquem, Cinq. Mém. Foram. Oolithique, 1883, 373, xlvi, 8 and 9.  
 — — — — Terquem, Mém. Soc. géol. France, [3], IV, 1886, 58, vi, 28 and 29, vii, 1a, b.  
**ROSTROLINA**, v. Schlicht, 1870. Foram. Septar. Pietzpuhl, 1870, plates xxv, xxvi. [= *Polymorphina*.]  
**ROTALIA**, Lamarck, 1804. Ann. Mus. v, 1804, 184; Brady, Report Challenger, 1884, 702.  
 — — — — **abstrusa**, Franzenau. Math. termész. értesítő, VII, 1889, 268, v, 6.  
 — — — — **abyssorum**, Ehrenberg. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 28.  
 — — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), xi, 15.  
 — — — — **akneriana**. See *Ammon. univolute*.  
 — — — — **ammoniformis**, d'O. P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 174, xii, 149. [*Turbinulina*, 1826.]  
 — — — — (*Turbinula*) — — — — See *Hammonia beccarii*, etc.  
 — — — — **ammonis**, Ehrenberg. Mikrogeologie, 1854, xxv, i, 4, 45. [= *Planorb. ariminensis*.]  
 — — — — **ammonoides**, Gümbel. Sitz. k.-bay. Ak. Wiss. 1870, 283. [= *Anomalia*.]  
 — — — — **ammonoides**. See *Ammon. concavo-umbilicatae*.

- ROTALIA** ammophila, GÜMBEL. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 652, ii, 90a, b.
- ampla, EHRENBURG. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 374.
- annexens, PARKER & JONES. Phil. Trans. 1865, 387 and 422, xix, 11a, b, c.
- antarctica, EHRENBURG. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 207.
- antiilarum, EHRENBURG. Abhandl. k. Ak. Wiss. Berlin, 1841, 428.
- antiqua, EHRENBURG. Mikrogeologie, 1854, xxxvii, xi, A-D, 11. [= *Endothyra*, near *bownani*.]
- arenacea, CARTER. Ann. Mag. Nat. Hist. [5], vii, 1881, 363, xviii, 10.
- areolata, EHR. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 167.
- ? — argus, EHRENBURG. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 375.
- armata, d'ORBIGNY. Ann. Sci. Nat. vii, 1826, 273, No. 22. [v. *Rotalina*.] [v. also *Calcarina*.]
- — — — — D'ORBIGNY, Modèles, No. 70, 1826.
- — — — — P., J., & B. [d'O., Modèles, No. 70], Ann. Mag. Nat. Hist. [3], xvi, 1865, 30, iii, 88.
- — — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.
- articulata, DUNIKOWSKI. Kosmos [Lemberg], iv, 1879, 133, plate, 28.
- aspera, EHRENBURG. Mikrogeologie, 1854, xxvii, 57 and 58; xxviii, 42; xxxi, 44. [= *Globig. cretacea*.]
- — — — — EHR., Mikrogeologie, 1854, xxiii, 28. [= *Planorb. haideri?*]
- audouini, d'ORBIGNY. Ann. Sci. Nat. vii, 1826, 273, No. 19. [v. *Rotalina*.]
- auricula, EHRENBURG. Mikrogeologie, 1854, xxiii, 51. [= *Cristellaria*.]
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\* [D'ORBIGNY was mistaken as to this species: *Streblus beccarii* and *Streblus tortuosus* are both *Nautilus beccarii*, of LINNEUS; d'ORBIGNY gives *Rotalia (Turbinulina) tortuosa*, FISCHER, in Ann. Sci. Nat. vii, 1826, 275, No. 40, as the name of Modèle No. 74.]

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- *bractea*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 28. Ehrenberg, Abh. k. preuss. Ak. Wiss. Berlin, 1872 (1873), xi, 16.
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- *cochleata*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 654, ii, 94a-c.
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 ——— D'Orbigny, Modèles, No. 75, 1826.  
 ——— (*Turbinulina*) P., J., & B. [d'O., Modèles, No. 75], Ann. Mag. Nat. Hist. [3], XVI, 1865, 31, iii, 84. [= *R. beccarii*.]  
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 ——— *densa*, Ehrenberg. Mikrogeologie, 1854, xxix, 3a, b, c. [= *Planorb. globulosa* (Ehr.).]  
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 ——— *depressa*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 428.  
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 ——— var.  $\beta$ . Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1843, 272.  
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 ——— Jones & Parker, Quart. Journ. Geol. Soc. XVI, 1860, xx, 46.  
 ——— = *Pulvin.*; see *Nautili ammoniformes*, etc.  
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- (Discorbe) [**gervillei**] — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.
- **gibbosa**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 272, No. 3.
- **girardana**, Reuss. Models, No. 46, 1865 (Catal., No. 84, 1861). [= *R. soldanii*, d'O.]
- — var. **mamillata**, Andreeae. Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 234, ix, 4.
- — var. Andreeae. Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 224, ix, 5.
- **glaukopis**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 428.
- **globosa** (v. Hagenow). Reuss, Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 330, vii, 2a, b. [= *Nonionina*, 1842.]
- **globoso-ampliata**, Ehrenberg. Mikrogeologie, 1854, xxvii, 56. [= *Globig. cretacea*.]
- **globularis**, d'Orbigny. Modèles, No. 69, 1826. [See *Rosalina*, 1826 = *Discorbina*.]
- — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.
- **globulosa**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 134, iv, fig. variae i; Bericht, 1844, 67; and Mikrogeologie, 1854, xxii, 78. [= *Globigerina*.]
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- — Brönn, Lethaea Geognostica, ed. 3, III, 1853-56, 225, xxxv<sup>2</sup>, 18a, b.
- — Ehr., Mikrogeologie, 1854, xix, 89; and xxiv, 37 and 38; and xxxviii, xxi, 22. [= *Globigerina*.]
- — Ehr., Mikrogeologie, 1854, xxi, 90a, b. [= *Globig. bulloides*.]
- — Ehr., Mikrogeologie, 1854, xxviii, 40 and 41; and xxxi, 40, 41, and 43. [= *Globig. cretacea*.]
- — Ehr., Mikrogeologie, 1854, xxx, 23a, b. [= young *Globig. vel Planorb.*.]
- — (**senaria**?) — Ehr., Mikrogeologie, 1854, xxxix, iii, e. [Probably *Globigerina*; perhaps *Planorb. globulosa*.]
- — Ehr., Bericht k. pr. Ak. Wiss. Berlin, 1844, 67; and Mikrogeologie, 1854, xx, ii, 12a, b, 14a; xxi, i, 54; and xxxviii, xxiii, 1. [= *Planorbulinae*.]
- — Ehr., Mikrogeologie, 1854, xxvi, 35. [= *Planorb. farcta*.]
- — Ehr., Mikrogeologie, 1854, xxix, 6; and xxxiv, x, B, 1. [= *Planorb. globulosa*.]
- — Ehr., Mikrogeologie, 1854, xxxv, A; xix, A, 6. [= *Planorb. vel Globigerina*?]
- **globulosa-protolepta**, Ehr. Mikrogeologie, 1854, xxxii, ii, 45. [= *Globig. cretacea*.]

- ROTALIA globulosa-protolepta**, Ehr. Mikrogeologie, 1854, xxxii, i, 21. [= *Planorb. globulosa*.] —————— Ehr., Mikrogeologie, 1854, xxxii, ii, 31. [= *Pulvin. canariensis*, d'Or.] —————— **globulosa-tenuior**, Ehr. Mikrogeologie, 1854, xxxvii, vi, 3 and 4. [= *Globigerina*.] —————— Ehr., Mikrogeologie, 1854, xxvii, 60. [= "R. glob. 1838."] [= *Planorb. farcta*.] —————— Kübler & Zwingli, Neujahrsblatt Bürgersbibl. Winterthur, 1866, 18, iii, 23. [= *Planorbulina*.] —————— Cooke, Thousand Objects Microsc. 1869, 90, ix, 7. —————— Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 22. —————— American Cyclopaedia, vii (1883), 311, fig. 2. —————— **glomerata**, Ehr. Mikrogeologie, 1854, xxxi, 48. [= *Globig. cretacea*.] [v. *Aristerospira*.] —————— Ehr., Mikrogeologie, 1854, xxvii, 63. [= "R. senaria ?"] [= *Planorb. farcta*.] —————— **grata**, Reuss. Denkschr. k. Ak. Wiss. Wien, xxv, 1865, 163, iv, 17. —————— **gommunis**. [v. *R. communis*.] —————— **grateloupi**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 272, No. 10. —————— **greenlandica**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 293. —————— Ehrenberg, in Koldewey, Zweite deutsche Nordpolarfahrt, 1874, II, n. d., i, 15. —————— **guerini**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 273, No. 18. [v. *Rotolina*.] —————— **haliotina**, Ehr. Monatsber. k. preuss. Ak. Wiss. Berlin, 1872, 293. —————— **haliotis**, Ehr. Mikrogeologie, 1854, xxv, i, A, 27 and 28. [= *Planorb. farcta*.] —————— **hegemanni**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 293. —————— Ehrenberg, in Koldewey, Zweite deutsche Nordpolarfahrt, 1874, II, n. d., i, 2. —————— **helvetica**, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 18, iii, 8. [= *Planorbulina*.] —————— **hemprichii**, Ehr. Mikrogeologie, 1854, xxiv, 62. [= *Planorb. ammonooides*.] —————— **hemisphæria**, Reuss. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 314, ii, 5a-c. —————— **heptas**, Ehr. Mikrogeologie, 1854, xxxii, ii, 40. [= ? *Crist. rotulata*.] —————— **ibex**, Ehr. Mikrogeologie, 1854, xxv, ii, B, 5. [= *Planorb. ariminensis*.] —————— Ehrenberg, in Koldewey, Zweite deutsche Nordpolarfahrt, 1874, II, n. d., i, 3. —————— **impressa**, Roemer. Neues Jahrbuch, 1838, 388, iii, 49. —————— **incerta**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 28. —————— Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), xi, 17. —————— **incrassata**, Ehr. Mikrogeologie, 1854, xxiii, 40. [= *Crist. cultrata*.] —————— **increcens**, Ehr. Mikrogeologie, 1854, xxiii, 30. [= ? *Globigerina*.] —————— **infernalis**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 29. —————— Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), xi, 14. —————— **inflata** (Mont.). Brown, Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 1, i, 4. [= *Nutilus*, 1808.] —————— **intermedia**, v. Muenster. Roemer, Neues Jahrbuch, 1838, 388, iii, 50. —————— [Roem.]. Michelotti, Mem. Soc. Ital. Sci. XXII, 1841, 285, ii, 10. —————— **intermedia**, Harting. Verh. Kon. Ak. Wetensch. x, 1864, 9, i, 5. —————— (*Turbinulina*) **italica**, d'Or. = *R. beccarii* (Linn.) ; see *Hammonia conico-tuberculata* and *H. globoso-rotundata*. —————— **involuta**, Reuss, var. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 313, ii, 4a, b.

- ROTALIA** jurensis, d'Orbigny. In d'Archiae, Mém. Soc. géol. France, v, pt. 2, 1843, 369, xxv, 3, 3', 3''.  
 —— **kalenbergenensis**, d'Orb. Bronn, Lethaea Geognostica, ed. 3, III, 1853-56, 225, xxxv<sup>2</sup>, 17. [*Rotalina kalemburgensis*, 1846.]  
 —— **karsteni**, Reuss. Zeitschr. deutsch. geol. Ges. VII, 1855, 273, ix, 6. [v. *Pulvinulina*; and *P. repanda*, var.]  
 —— **lævigatus** (Mont.). Brown, Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 1, i, 9 and 10. [*Nautilus*, 1808.]  
 —— **lævis**, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. III, 1852, 193, No. 537. [*Gyroidina*, 1826.]  
 —— **laxa**, Ehr. Mikrogeologie, 1854, xxviii, 38; xxix, 1a, b, c; and xxxi, 42. [= *Globig. cretacea*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxv, i, A, 34. [= *Planorb. farcta*.]  
 —— —— Ehr. Mikrogeologie, 1854, xxv, ii, B, 7. [= *Planorb. vulgaris*, young.]  
 —— **lenticula**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 82, x, 2a, b, c.  
 —— **lenticulina**, Ehr. Mikrogeologie, 1854, xxviii, 50. [= *Planorb. ammonoides*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxxii, i, 32. [Doubtful; ? *Crist. vel Nonion.* ?]  
 —— **leptoda**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 95; and Mikrogeologie, 1854, xix, 91. [= *Planulina ariminensis*?]  
 —— —— Ehr., Mikrogeologie, 1854, xxvii, 52. [= *Planorb. ammonoides*.]  
? —— **leptodiscus**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 375.  
 —— **leptospira**, Ehr. Mikrogeologie, 1854, xxiv, 39. [= *Globigerina*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxxi, 45 and 49. [= *Globig. cretacea*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxx, 24a, b. [= young *Globig. vel Planorb.*.]  
 —— —— Ehr., Mikrogeologie, 1854, xxix, 7. [= *Planorb. globulosa* (Ehr.).]  
 —— —— Ehr., Mikrogeologie, 1854, xxxii, ii, 32. [= *Pulvin. canariensis*, d'O.]  
 —— —— Ehr., Mikrogeologie, 1854, xxvi, 38. [= ? *Pulvin. canariensis* (d'O.) vel *Planorbulina*.]  
 —— **leubeana**, Gümbel. Sitz. k.-bayer. Ak. Wiss. I, 1871, 69, i, 19.  
 —— **limbata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 274, No. 30.  
 —— **lithographica**, Gümbel. Sitz. k.-bayer. Ak. Wiss. I, 1871, 69, i, 18.  
 —— **lithothamnica**, Uhlig. Jahrb. k. k. geol. Reichsanstalt, XXXVI, 1886, 195, fig. 6, v, 9-11.  
 —— **lobata**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 148, xiii, 38a, b.  
 —— **londonensis**, Ehr. Mikrogeologie, 1854, xxviii, 51. [= *Planorb. ammonoides*.]  
 —— **lorneriana**, Cooke. Thousand Objects Microsc. 1869, 91, ix, 10. [*Rosalina lorneiana*, 1840.]  
 —— **macrocephala**, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. X, 1868 (1870), 652, ii, 91a, b.  
 —— **maculata**, Stache. Novara-Exped., Geol. Theil I, 1864, 278, xxiv, 28a, b, c.  
 —— **mammillata**, v. Muenster. Roemer, Neues Jahrbuch, 1838, 388, iii, 48.  
 —— **manilana**, Karrer. In v. Drasche, Frag. Geol. Luzon, 1878, 98, v, 27; and Bol. Com. Map. geol. Espan. VII, 1880, 281F, 13.  
 —— **marginata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 272, No. 9. [v. *Rotalina*.]  
 —— **menardii**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 273, No. 26.  
 —— —— D'Orbigny, Modèles, No. 10, 1826. [v. *Pulvinulina*; *P. repanda*, var.; and *Rotalina*.]

- ROTALIA menardii**, d'Orbigny. P., J., & B. [d'O., Modèles, No. 10], Ann. Mag. Nat. Hist. [3], xvi, 1865, 20, iii, 81. [= *Pulvinulina*.]  
 ——— ——— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.  
 ——— **micheliana** [*micheliniana*] (d'Orb.). Eley, Geol. in the Garden, 1859, 198, v, 27. [*Rotalina*, 1846.] [Flint cast.]  
 ——— **microtis**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 293.  
 ——— ——— Ehrenberg, in Koldewey, Zweite deutsche Nordpolarfahrt, 1874, II, n. d., i, 5.  
 ——— **millepora**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 167.  
 ——— ? (*Planulina*?) **monospira**, Ehr. Mikrogeologie, 1854, xxix, 8. [= *Pulvinulina*; see Parker & Jones, Annals, IX, 1872, 184.]  
 ——— **mortoni**, Reuss. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. I, 1861 (1862), 337, viii, 1a-c.  
 ——— **naticoides**, Stache. Novara-Exped., Geol. Theil I, 1864, 276, xxiv, 26a, b, c, d.  
 ——— **newboldi**, d'Archiae & Haime. Descr. Anim. Foss. groupe nummulitique Inde, [2], 1854, 347, xxxvi, 17a-d.  
 ——— **nitida**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 274, No. 31.  
 ——— (*umbilicata*?) ——— Eley, Geol. in the Garden, 1859, 198, v, 24-26. [Flint cast.]  
 ——— **nitidula**, Schwager. Novara-Exped., Geol. Theil II, 1866, 263, vii, 110.  
 ——— **nivea**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134.  
 ——— **nonas** ?, Ehr. Mikrogeologie, 1854, xxxii, ii, 36. [= *Crist. rotulata* ?]  
 ——— **nonionina**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. I, 1862 (1863), 81, x, 2a, b.  
 ——— **northamptonii**, Michelotti. Mem. Soc. Ital. Sci. XXII, 1841, 283, i, 6.  
 ——— **novo-zelandica**, Karrer. Novara-Exped., Geol. Theil I, 1864, 80, xvi, 12.  
 ——— **obscura**, Ehr. Mikrogeologie, 1854, xxx, 27. [Near *Crist. producta*, v. Hagenow.]  
 ——— **obscura**, Sowerby. Dixon, Geol. etc. Sussex, 1850, 85, and 162, ix, 6; and 2d ed. 1878, 172, same pl. and fig. [= *Discorb. trochidiformis*.]  
 ——— **ocellata**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134; *Colpopleura*, Bericht, 1844, 67 and 92; and Mikrogeologie, 1854, xxii, 76. [= *Plano. norb. near haidingeri*.]  
 ——— **orbicularis**, d'Orb. Brady, Trans. Linnean Soc. XXIV, 1864, 470, xlvi, 16. [= *Gyroidina*, 1826.]  
 ——— ——— Anon., Science Gossip, 1870, 11, fig. 27.  
 ——— ——— P., J., & B. [Soldaui], Ann. Mag. Nat. Hist. [4], VIII, 1871, 175, xii, 150.  
 ——— ——— Vine, Science Gossip, 1878, 52, fig. 35.  
 ——— ——— Brady, Report Challenger, 1884, 706, cvii, 5; cxv, 6.  
 ——— ——— See *R. beccarii* (Linn.).  
 ——— **ornata**, Ehr. Abhandl. k. preuss. Ak. Wiss. Berlin, 1838, 134.  
 ——— **ornata**, Carpenter. The Microscope, ed. 6, 1881, 546, fig. 314. [= *Rotalia veneta*, Schultze.]  
 ——— **pachyomphala**, Ehr. Mikrogeologie, 1854, xxvii, 55. [= *Globig. cretacea*.]  
 ——— **pachyphysa**, Ehr. Mikrogeologie, 1854, xxiv, 42. [Near *Trunc. lobatula*.]  
 ——— ——— Hopkins, Execut. Doc. 45 Congress, Sess. 3, iv, Rpt. Chief Engineers, pt. 2, App. W, 1878-79, 885, i, 61.  
 ? ——— **palæoceros**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 309, and 337, i, f. ix. [= *Glaucomite*.] ["May be *Nonionina*," P. & J.]  
 ——— **palæotetras**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 308 and 337, i, f. viii. [= *Glaucomite*.] ["May be *Globigerina*," P. & J.]  
 ——— **palæotrias**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 308 and 339, i, f. vii. [= *Glaucomite*.] ["May be *Globigerina*," P. & J.]  
 ——— **pandoræ** ?, Ehr. Bericht k. pr. Ak. Wiss. Berlin, 1844, 67; and Mikrogeologie, 1854, xx, ii, 11. [= *Planorbulina* ?]

- ROTALIA** pandoræ?, Ehr. Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1844, 95; and Mikrogeologie, 1854, xix, 87. [= *Planorbolina*?]
- papillosa, d'Orbigny. Ann. Sci. Nat. VII, 1826, 273, No. 16.
- papillosa, Brady. Report Challenger, 1884, 708, evi, 9a, b, c.
- v. *compressiuscula*, Brady. Report Challenger, 1884, 708, evii, 1a, b, c; young, eviii, 1a, b, c.
- *partschiana*, d'Orbigny. Cours élém. Paléont. etc. I, 1849, 199, fig. 326; II, fasc. 2, 1852, 818, fig. 625.  
See *Naut. ammoniformis*.
- *parvispira*, Roemer. Neues Jahrbuch, 1838, 388, iii, 53.
- *paupercula*, Stache. Novara-Exped., Geol. Theil I, 1864, 277, xxiv, 27a, b.
- *pelagica*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 428.
- *perforata*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134, iv, ii, iv, xi, x.  
— — — — — Ehr., Abhandl. k. Ak. Wiss. Berlin, 1841, 441, ii, vi, 41.  
[= *Planorb.*? vel *Discorb.*? *globularis*?]
- — — — — Harting, Magt van het Kleine, 1849, 119, fig. 9; and 1866, 113, fig. 48, 4; German by Dr. A. Schwartzkopf, 1851, 87, fig. 39, 9.
- — — — — Ehr., Mikrogeologie, 1854, xxix, 2; xxxi, 38; xxxviii, 36.  
[= *Globig. cretacea*.]
- — — — — *perforata*, Karrer. Novara-Exped., Geol. Theil I, 1864, 81, xvi, 13.
- ? — — — — — *pertusa*, Ehr. Mikrogeologie, 1854, xxiv, 41. [*Rosalina*, 1838, in part.]  
[= *Globigerina*.]
- — — — — ? — — — Ehr., Mikrogeologie, 1854, xxxvii, vi, 5. [= *Globigerina*.]
- — — — — Ehr., Mikrogeologie, 1854, xxx, 25. [= young *Globig.* vel *Planorb.*.]
- — — — — *peruviana*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 428. [= *Pulvinulina*?]
- — — — — *phænóstigma*, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 272.
- — — — — *phanerostigma*, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 375.
- — — — — *phanerostomum*, Ehr. Abh. k. Ak. Wiss. Berlin, 1872 (1873), v, 11.
- — — — — *picta* ?, Ehr. Mikrogeologie, 1854, xxviii, 53. [= *Pulvinulina michelini*.]
- — — — — *pileus*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 272, No. 11.
- — — — — *pisana*, Michelotti. Mem. Soc. Ital. Sci. XXXI, 1841, 284, i, 5.
- — — — — *planulina*, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 375.
- — — — — *polygonata*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 651, ii, 89a, b, c.
- — — — — *præcincta*, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 189, v, 7. [v. *Truncatulina*.]
- — — — — *prætexta*, Ehr. Mikrogeologie, 1854, xxviii, 47. [= *Crist. cultrata*.]
- ? — — — — — *profunda*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 308.
- — — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), i, 21.
- — — — — *prolepta*, Ehr. Mikrogeologie, 1854, xxv, i, A, 35. [= *Planorbolina*.]
- — — — — *propingua*, Reuss. Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 241, iv, 53.  
[v. *Truncatulina* and *Rotalina*.]
- — — — — *propinqua*, v. Muenster. Roemer, Neues Jahrbuch, 1838, 389, iii, 54.
- — — — — *protacmæa*, Ehr. Mikrogeologie, 1854, xxviii, 37. [= *Globig. cretacea*.]
- — — — — Ehr., Mikrogeologie, 1854, xxvi, 34. [= *Planorb. farcta*.]
- — — — — *protolepta*, Ehr. Mikrogeologie, 1854, xxvi, 33. [= *Planorb. farcta*.]
- — — — — *pteromphalia*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 651, ii, 88a, b, c.
- — — — — *pulchella*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 274, No. 32. [= *Pulvinulina*, q. v., and *P. repanda*, var.]
- — — — — D'Orbigny, Modèles, No. 71, 1826.
- — — — — P., J., & B. [d'O., Modèles, No. 71], Ann. Mag. Nat. Hist. [3], XVI, 1865, 30, iii, 80.

- ROTALIA pulchella** (d'O.). Brady, Report Challenger, 1884, 710, cxv, 8a, b.  
 [Calcarina, 1839.]  
 \_\_\_\_\_ Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.  
 \_\_\_\_\_ **punctata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 273, No. 13.  
 \_\_\_\_\_ **punctato-granosa**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 147,  
 xiii, 37a, b.  
 \_\_\_\_\_ **punctatula**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 273, No. 25. [v.  
*Pulvinulina*; and *P. repanda*, var.]  
 \_\_\_\_\_ D'Orbigny, Modèles, No. 12, 1826.  
 \_\_\_\_\_ P., J., & B. [d'O., Modèles, No. 12], Ann. Mag. Nat.  
 Hist. [3], XVI, 1865, 20, iii, 82. [= *Pulvinulina*.]  
 \_\_\_\_\_ Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.  
 \_\_\_\_\_ **pusilla**, Schwager. Jahresh. Ver. vat. Nat. Württ. XXI, 1865, 141, vii,  
 20.  
 \_\_\_\_\_ **quaterna**, Ehr. Mikrogeologie, 1854, xxvii, 53; xxviii, 34; and xxxi,  
 39. [= *Globig. cretacea*.]  
 \_\_\_\_\_ Ehr., Mikrogeologie, 1854, xxvi, 36. [= *Planorb. farcta*.]  
 \_\_\_\_\_ Ehr., Mikrogeologie, 1854, xxix, 5. [= *Planorb. globu-*  
*losa* (Ehr.).]  
 \_\_\_\_\_ *s. floscularis*, Ehr. Mikrogeologie, 1854, xxiv, 43. [=  
*Planorb. haidingeri*.]  
 \_\_\_\_\_ Ehr., Mikrogeologie, 1854, xxv, ii, B, 9.  
 [Compare "Planulina flos."]. [= *Planorb. farcta*.]  
 \_\_\_\_\_ **quaternaria**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 257.  
 \_\_\_\_\_ **remora**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 272.  
 \_\_\_\_\_ **repanda**, Parker & Jones. Ann. Mag. Nat. Hist. [3], V, 1860, 175,  
 No. 25. [= *Pulvinulina*.]  
 \_\_\_\_\_ **reticulata**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863),  
 83, x, 4a-c. [v. *Epistomina*.]  
 \_\_\_\_\_ **rimosa**, Reuss. Sitz. k. Ak. Wiss. Wien, LIX, Abth. 1, 1869, 464, ii,  
 5a-c.  
 \_\_\_\_\_ **roemerii**, Reuss. Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 240, iv, 52.  
 \_\_\_\_\_ **rosa**, Ehr. Mikrogeologie, 1854, xxvii, 54. [= *Globig. cretacea*.]  
 \_\_\_\_\_ **rosacea**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 273, No. 15.  
 \_\_\_\_\_ D'Orbigny, Modèles, No. 39, 1826.  
 \_\_\_\_\_ P., J., & B. [d'O., Modèles, No. 39], Ann. Mag. Nat.  
 Hist. [3], XVI, 1865, 25, ii, 71. [= *Discorbina*.]  
 \_\_\_\_\_ Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.  
 \_\_\_\_\_ **rosea**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 272, No. 7. [v. *Truncatu-*  
*lina*.]  
 \_\_\_\_\_ D'Orbigny, Modèles, No. 35, 1826.  
 \_\_\_\_\_ Guérin-Ménville's Cuvier, Iconographie, Mollusques,  
 1829-43, 9, ii, 13.  
 \_\_\_\_\_ Cuvier, Animal Kingdom, Henderson's ed. III, 1834 (pls.  
 1837), 18, iii, 13.  
 \_\_\_\_\_ P., J., & B. [d'O., Modèles, No. 35], Ann. Mag. Nat.  
 Hist. [3], XVI, 1865, 24, iii, 79. [= *Planorbulina*.]  
 \_\_\_\_\_ Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.  
 \_\_\_\_\_ **rudis**, Ehr. Mikrogeologie, 1854, xxiv, 35 and 36. [= *Globigerinæ*.]  
 \_\_\_\_\_ Ehr., Mikrogeologie, 1854, xxxvii, iv, 4. [= ? *Globi-*  
*gerina*.]  
 \_\_\_\_\_ **saxorum**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 272, No. 2. [v. *Rota-*  
*lina*.]  
 \_\_\_\_\_ **scabra**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134; Bericht, 1844,  
 67; and Mikrogeologie, 1854, xxii, 79. [= *Planorb. farcta*.]  
 \_\_\_\_\_ **schloenbachi**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862  
 (1863), 84, x, 5a-c.  
 \_\_\_\_\_ **schreibersii** (d'Orb.). See *Nautili cum Ammonius admixti*, and *Ammon.*  
*planorbes*. [*Rotalina*, 1846.]

- ROTALIA** schroedteri, d'Orb. Andreae, Abh. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 215, fig. 11. [Probably intended for *schroeteriana*, P. & J.]
- **schroeteriana**, Parker & Jones, MS. Carpenter, Parker, & Jones, Introd. Foram. 1862, 212, iv, 3 ; xii, 7-9. [Structural.] [v. *Faujasina*, sp., Williamson, 1853.]
- — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 207, ix, 3.
- — — [schroetteriana] — — Carpenter, The Microscope, ed. 6, 1881, 575, fig. 330. [Structural.]
- — — — — Brady, Report Challenger, 1884, 707, cxv, 7a, b, c.
- — — — — [Carp. ?]. Malagoli, Atti Soc. Nat. Modena, [3] VII, 1888, 113, iii, 9.
- — — **scutellaris**, Karrer. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 709, ii, 13.
- — — **semiglobosa**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 85, x, 7a, b ; xi, 1. [On the plates this variety is called *R. hemispherica* by mistake ; Reuss, on p. 85, points out the distinguishing features which separate it from that variety.]
- — — **semiornata**, Schwager. Benecke's Geog. Pal. Beiträge, I, 1868, 661, xxxiv, 20.
- — — **senaria** ? Ehr. Abhandl. k. Ak. Wiss. Berlin, 1847, 446, i, 98 ; ii, 85.
- — — — — Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1842 ; and Mikrogeologie, 1854, xix, 90. [? *Globigerina*.]
- — — — — Ehr., Mikrogeologie, 1854, xxiv, 40. [= *Globigerina*.]
- — — — — Ehr., Mikrogeologie, 1854, xxxi, 46 and 47. [= *Globig. cretacea*.]
- — — — — Ehr., Bericht k. pr. Ak. Wiss. Berlin, 1844, 68 ; and Mikrogeologie, 1854, xx, ii, 14b ; xxv, ii, B, 6. [= *Planorbolina*.]
- — — — — Ehr., Mikrogeologie, 1854, xx, i, 55. [= ? *Planorb.*]
- — — — — Ehr., Mikrogeologie, 1854, xxvi, 61. [= *Planorb. farcta*.]
- — — — — Ehr., Mikrogeologie, 1854, xxix, 4. [= *Planorb. globulosa* (Ehr.).]
- — — — — Ehr., Mikrogeologie, 1854, xxxii, ii, 30. [= *Pulvin. canariensis*, d'O.]
- — — [Rotalina in index] **siblingensis**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 35, iv, Impressathion, 15. [= a *Planorbolina*.]
- — — (**Turbin.**) **siennensis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 275, No. 50.
- — — (**Turbin.**) — — — = *Planorb. ungeriana* (d'O.) ; see *Hammoniae uniovolute*.
- — — **soldanii**, d'Orb. var. Stache, Novara-Exped., Geol. Theil I, 1864, 273, xxiv, 23a, b, c. [= *Gyroidina*, 1826.]
- — — — — var. **prominula**, Stache. Novara-Exped., Geol. Theil I, 1864, 273, xxiv, 24a, b, c.
- — — — — P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 176, xii, 151.
- — — — — Toula, Mitth. geogr. Ges. Wien, XVIII, 1875, 165, pl., 18.
- — — — — Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 69, ix, 7 ; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 80, same pl. and fig.
- — — — — Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXIII, 1880, 211, iv, 68.
- — — — — Andreae, Abh. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 155, ix, 3.
- — — — — Brady, Report Challenger, 1884, 706, cvii, 6 and 7.
- — — — — See *R. beccarii* (Linn.).
- — — **speciosa**, Karrer. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 709, ii, 12.

- ROTALIA sphærophora**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 272.  
 —— **spiculotesta**, Carter. Ann. Mag. Nat. Hist. [4], xx, 1877, 470, xvi, 1–3. [v. also *Carterina*.]  
 —— **spinulifera**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 93, xiii, 3a, b, 4a–c, 5a–c. [v. *Epistomina*.]  
 —— **squammosa**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 272, No. 8. [v. *Rosalina*.]  
 —— **stellata**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134.  
 —— **stellata**, Reuss. Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 242, v, 54.  
 —— **stigma**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134, iv, xi, x.  
 —— —— —— Abhandl. k. Ak. Wiss. Berlin, 1839, 134, ii, ii; Transl., Taylor's Scientific Memoirs, III, 1843, 357, vi, 2. [Not *R. perforata* as stated on plate.] [= *Planorbulina*.]  
 —— **subcarinata**, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 427, No. 1675. [*Gyroidina carinata*, 1826.]  
 —— **subrotunda**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 273, No. 14. [v. *Rosalina*.]  
 —— **subtortuosa**, v. Muenster. Roemer, Neues Jahrbuch, 1838, 388, iii, 45.  
 —— —— —— [Roem.]. Michelotti, Mem. Soc. Ital. Sci. XXII, 1841, 284, ii, 9.  
 —— **suescionensis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 273, No. 23. [v. *Rotalina*.]  
 —— **sulcata**, Roem. Verst. norddeutsch. Kreide, 1840–41, 97, xv, 20.  
 —— —— —— Reuss, Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 85, xi, 2a–c.  
 —— **sulcigera**, Stache. Novara-Exped., Geol. Theil I, 1864, 275, xxiv, 25a, b, c, d.  
 —— **tenuimargo**, Reuss. Sitz. k. Ak. Wiss. Wien, XLII, 1860 (1861), 359, i, 11a–c.  
 —— **terquiemi**, d'Orb., 1849. D'Orbigny, Prodrome de Paléont. I, 1849, 242, No. 270. [v. *Rotalina*.]  
 —— **thouini**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 273, No. 17.  
 —— (*Turbinulina*) **tortuosa**, Fischer. Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.  
 —— **tracheotetras**, Ehr. Mikrogeologie, 1854, xxviii, 35. [= *Globig. cretacea*.]  
 —— **trochidiformis**, Lamarck. Bronn, Syst. urweltl. Conchyl. 1824, 7, i, 7a, b. [*Rotalites*, 1804.]  
 —— —— —— Brown, Elem. Foss. Conch. 1843, 23, ii, 16.  
 —— [**trochiliformis**] —— Mantell, Pictorial Atlas Foss. Rem. 1850, 143, lxii, 1 and 2.  
 —— —— —— Schwager, Palaeontographica, XXX, 1883, Pal. Theil, 136, xxviii (v), 12a–d.  
 —— —— —— Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1057, lxxxvi, 48.  
 —— **trochus**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 272, No. 4.  
 —— **trochus**, v. Muenster. Roemer, Neues Jahrbuch, 1838, 388, iii, 47. [v. *Pulvinulina elegans*, var.]  
 —— —— —— Reuss, Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 242, v, 55.  
 —— **truncana**, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 653, ii, 93a, b, c.  
 —— **tuberculifera**, Reuss. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 313, ii, 2a–c.  
 —— **tuberosa**, Karrer. Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 349, i, 4.  
 —— (*Trochulina*) **turbo**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 274, No. 39. [v. also *Rotalina* and *Discorbina*.]  
 —— —— —— D'Orbigny, Modèles, No. 73, 1826.  
 —— —— —— v. **vesicularis**. Parker & Jones, Ann. Mag. Nat. Hist. [3], v, 1860, 293, No. 6. [= *Discorbina vesicularis*.]

- ROTALIA** turbo, d'Orbigny. Källiker, Icones Histiolegiae, 1864, 31. [Structural.]
- (Trochulina) — P., J., & B. [d'O., Modèles, No. 73], Ann. Mag. Nat. Hist. [3], xvi, 1865, 30, ii, 68. [= *Discorbina*.]
- (Trochulina) — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.
- turgida, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1839, 135, ii, iv; Transl., Taylor's Scientific Memoirs, III, 1843, 358, vi, 4. [*Planulina turgida*, Abhandl. 1838.] [= *Crist. rotulata*, Lam.]
- Williamson, Mem. Lit. Phil. Soc. Manchester, [2], VIII, 1848, 75, pl. 58.
- turgida, v. Hagenow. Neues Jahrbuch, 1842, 570, ix, 22.
- tympaniformis, Schwager. Benecke's Geogn. Pal. Beiträge, I, 1866, 310, fig. 15.
- umbilicata ?, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1855, 161, ii, vii. [? *Rotalina*; ? *Operculina*.] [= *Glauc.*]
- umbilicata, d'Orb., v. nitida, Reuss. In Geinitz, Palaeontographica, xx, Th. 2, 1874, 116, xxiii, 12. [*Rotalina*, 1840.]
- umbilicatula (W. & J.). Brown, Illustr. Recent Conch. Gt. Brit., ed. 2, 1844, 1, i, 8. [*Nautilus*, 1798.]
- umbilicus, Ehr. Bericht k. pr. Ak. Wiss. Berlin, 1844, 68; and Mikrogeologie, 1854, xx, ii, 13a, b. [= *Planorbulinæ*.]
- — — Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1844, 95; and Mikrogeologie, 1854, xix, 88. [= ? *Planorbulina*.]
- umbonella, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 221, xi, 5a-c.
- veneta, Schultze. Organismus Polythal. 1854, 59, iii, 1-5; vii, 22-24, 29. [= *Planorbulina*; vii, 22-24, 29 = ? *Globigerinae*.]
- — — Harting, Magt van het Kleine, 1866, 102, fig. 42.
- — — Claus, Lehrbuch d. Zool. 1885, 153, f. 135.
- venusta, Brady. Report Challenger, 1884, 708, cviii, 2a, b, c.
- vermiculata, Jones & Parker. Quart. Journ. Geol. Soc. XVI, 1860, 305, No. 116. [= *Pulvinulina*.]
- weinkauffi, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 68, viii, 97a-c.
- wolgensis, Ehr. Mikrogeologie, 1854, xxxi, 50 and 51. [= *Globig. cretacea*.]
- see Schroeter, Neue Litt. u. Beytr. III, 1786, iii, f. 22.
- Soldani, Testac. I, 1, 1789, 54, pl. 34K, L, = this genus.
- [—] Deshayes, Coq. Foss. Paris, 1824-1837, not descr., evi, 4-27.
- Wetherell, Trans. Geol. Soc. Lond. [2], v, 1834 (1840), 135, ix, 13-18. [13 = *C. cultrata*; 14, 15, 18 = *Planorb. haidingeri*, varr.; 16, 17 = *Pulv. boueana*.]
- Wetherell, Mag. Nat. Hist. [2], III, 1839, 162, f. 27. [= *Truncat. lobatula*.]
- Phillips, Rept. Proc. Geol. Poly. Soc. W. R. Yorkshire, 1844-45 (1846), 279, vii, 7.
- Mantell, Phil. Trans. 1846, 467, xxi, 2-4, 7-10, 13 and 14. [Showing sarcoide body.]
- Mantell, Phil. Trans. 1846, 466, xxi, 6, 15. [6 = ?; 15 = *Pulvin.*]
- Mantell, Phil. Trans. 1846, 468, xxi, 5, and 11. [Sarcode showing ova ?]
- Pilla, Distinz. terr. Etruria, 1846, 104, i, 6.
- Mantell, Wonders Geol. 1848, 6th. ed., 303, fig. 51. [= *Rosalina*, q. v.]
- ? — Ehrenberg, Abhandl. k. Ak. Wiss. Berlin, 1847, 446, ii, 83.
- Williamson, Mem. Lit. Phil. Soc. Manchester, [2], VIII, 1848, 75, pl., 56 and 57. [= *Planorb. ammonoides*.]
- Mantell, Amer. Journ. Sci. v, 1848, 70, etc., figs. 1, 2, and 3. [Soft parts, etc.]
- Mantell, Wonders Geol. 1848, 6th ed., 250, fig. 42. [= *Truncat. lobatula*.]

- ? **ROTALIA.** Dixon, Geol. etc. Sussex, 1850, 352, xxvii, 14. [= *Planorb. ammonoides*.]  
 —— Brocklesby, Views Microscop. World, 1851, 51, figs. 82 and 83.  
 —— Mantell, Medals Creation, ed. 2, 1854, 351, fig. 114, 1, 2, 3, 6 ; 356, fig. 116 ; 358, fig. 117.  
 —— Mantell, Medals Creation, ed. 2, 1854, 351, fig. 114, 5 ; 359, fig. 118, 1 and 2 ; 361, fig. 119, 4. [Sarcode.]  
? —— Ehrenberg, Mikrogeologie, 1854, xxxvi, 68. [= *Planorb. ammonoides*.]  
 —— sp. ? Ehrenberg, Mikrogeologie, 1854, xxxv, B, iv, A, n. [= *Crist. vel Nonion. ?*]  
 —— Ehrenberg, Abhandl. k. Ak. Wiss. Berlin, 1855, 173, vi, i, c ; and 176, vii, 13 (?). [vii, 13 (?), is *Planorbulina*.] [Glauc.]  
 —— Ehrenberg, Abhandl. k. preuss. Ak. Wiss. Berlin, 1855, 164, iii, v. [= *Operculina vel Nummulina*.] [Glauc.]  
 —— Walliech, North Atlantic Sea-bed, pt. 1, 1862, no descr., vi, 21. [Structural.]  
 —— Chinnmo, Bed of Atlantic [1870], 25, ix, 1. [? *Pulvinulina*.]  
? —— Wright, Rept. Proc. Belfast Nat. F. C. App. iii, 1875, 87 [89], iii, 18.  
 —— Hertwig, Jenaische Zeitschrift für Naturwiss. x, 1876, 41, etc. ii, 5–11.  
 —— sp. ind. Hopkins, Execut. Doc., 45 Congress, Sess. 3, IV, Rpt. Chief Engineers, pt. 2, App. W, 1878–79, 885, i, 62 and 63.  
 —— Carpenter, Encyc. Brit., 9th ed., IX, 1879, Foraminifera, 374, i, 18 ; fig. 4 ; fig. 17.  
 —— Carpenter, The Microscope, ed. 6, 1881, 573, fig. 328B. [Glaeconitic east.]  
? —— cast ? v. Dunikowski, Denkschr. k. Ak. Wiss. Wien, XLV, Abth. 2, 1882, 194, vi, 80.  
? —— Keeping, Geol. Mag. dec. II, IX, 1882, 490, xi, 15.  
 —— Steinmann, Elem. Paléont. I, 1888, 30, fig. 3B.  
 —— Neumayr, Stämme d. Thierreiches, I, 1889 (8), 188, fig. 29.  
 —— see *Ammonshorn*.  
 —— see *Nautilae*.  
 —— see *Nautilus*.
- ROTALINA**, Ehrenberg, 1838. Abh. k. Ak. Wiss. Berlin, 1838 (1840), Tab. 1. [A family group name.]
- ROTALINA**, d'Orbigny, 1839. In de la Sagra, Hist. Phisique, etc. Cuba, 1839, "Foraminifères ;" in Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, vol. II, pt. 2, "Foraminifères ;" and in Voyage Amér. Mérid. 1839, vol. V, pt. 5, "Foraminifères."  
 —— *aculeata*, d'Orbigny. Foram. Fossiles Vienne, 1846, 159, viii, 25–27.  
 —— —— Egger, Neues Jahrbuch, 1857, 274, vii, 1–4.  
 —— *aequabilis*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 64, v (xiii), 1a, b, c.  
 —— *affinis*, Czjzek. Haidinger's Nat. Abh. II, 1848, 144, xii, 36–38.  
 —— *affinis*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 236, xvii, 6A, B, C.  
 —— *akneriana*, d'Orbigny. Foram. Fossiles Vienne, 1846, 156, viii, 13–15. [v. *Truncatulina*.]  
 —— var. Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 340, xvi, 7.  
 —— *alvarezii*, d'Orbigny. Voyage Amér. Mérid. 1839, V, pt. 5, "Foraminifères," 35, i, 21 ; ii, 1 and 2.  
 —— *ambigua*, Terquem. Mém. Soc. géol. France, [3], I, 1878, 19, i (vi), 17a–c.  
 —— *angulifera*, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 28, iii, 8a, b ; (and Mém. Soc. Dunkerquoise).  
 —— *anomala*, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 30, iii, 12a, b ; (and Mém. Soc. Dunkerquoise).  
 —— *anomphala*, Egger. Neues Jahrbuch, 1857, 275, viii, 8–10.

- ROTALINA** antillarum, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 75, v, 4-6; also in Spanish, 1840, 89, same pl. and fig.
- aradasii, Seguenza. Atti Accad. Gioenia Sci. Nat. [2], xviii, 1862, 103, i, 5, 5a, b. [= ?]
- armata (d'Orb.). Terq., Mém. Soc. géol. France, [3], II, 1882, 67, v (xiii), 14-15. [*Rotalia*, 1826.]
- audouini (d'Orb.). Terq., Mém. Soc. géol. France, [3], II, 1882, 72, vi (xiv), 11a-c. [*Rotalia*, 1826.]
- auriculata, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 123, xv, 6a, b, c; (and Mém. Soc. Dunkerquoise).
- badensis, Čzjzek. Haidinger's Nat. Abh. II, 1848, 144, xiii, 1-3. [v. *Pulvinulina*.]
- badensis, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 35, iv, Impressathon, 14.
- beccarii (Linné). Gosse, Manual Mar. Zool. 1855, 12, fig. 13. [*Nau-tius*, 1758.]
- Williamson, Recent British Foram. 1858, 48, iv, 90-92.
- Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 26, ii, 5a, b; (and Mém. Soc. Dunkerquoise).
- berthelotiana, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 130, i, 31-33. [v. *Pulvinulina*.]
- bimammata, Gümb. Terq., Mém. Soc. géol. France, [3], II, 1882, 66, v (xiii), 5-13. [*Rotalia*, 1868.]
- binucleata, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 124, xv, 7a, b, c; (and Mém. Soc. Dunkerquoise).
- borealis, Terquem. Bull. Soc. zool. France, xi, 1886, 332, xi, 9 and 10.
- boueana, d'Orbigny. Foram. Fossiles Vienne, 1846, 152, vii, 25-27. [v. also *Pulvinulina*.]
- brongniarti (d'Orbigny). Reuss, in Geinitz, Grundr. Verstein. 1845-46, 673, xxiv, 55. [*Rotalia*, 1826.]
- D'Orbigny, Foram. Fossiles Vienne, 1846, 158, viii, 22-24.
- Egger, Neues Jahrbuch, 1857, 274, vii, 5-7.
- bulimoides, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 77, v, 38.
- campanella, Gümb. Terq., Mém. Soc. géol. France, [3], II, 1882, 74, vii (xv), 1-4. [*Rotalia*, 1868.]
- canariensis, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 130, i, 34-36. [v. *Pulvinulina*; and *P. repanda*, var.]
- Mackie, Science Gossip, 1867, 130, fig. 122.
- capitata, Gümbel. Terq., Mém. Soc. géol. France, [3], II, 1882, 59, iii (xi), 18-20. [*Rotalia*, 1868.]
- caribaea, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 74, v, 1-3; also in Spanish, 1840, 88, same pl. and fig.
- cingillata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 73, vi (xiv), 13a-c.
- claustrata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 78, vii (xv), 15a-c.
- clypeata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 62, iv (xii), 10a, b, c.
- coarctata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 76, vii (xv), 8a-c.
- communis, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 18, iii, 24. [= *Planorbula ammonoides*.]
- communis (d'Orbigny). Terq., Mém. Soc. géol. France, [3], I, 1878, 17, i (vi), 11a-c. [*Rotalia*, 1826.]
- complanata (d'Orbigny). Terq., Mém. Soc. géol. France, [3], II, 1882, 81, viii (xvi), 8a-c. [*Trochulina*, 1826.]

- ROTALINA concamerata** (Montagu). Williamson, Recent British Foram. 1858, 52, iv, 101-105. [*Serpula*, 1808 = *Pulvinulina*.]
- conoidea, Cooke, Thousand Objects Microsc. 1869, 92, ix, 23.
- *conoidea*, Czjzek. Haidinger's Nat. Abh. II, 1848, 145, xiii, 4-6.
- *conoidea*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 122, xv, 1a, b; (and Mém. Soc. Dunkerquoise).
- *conectata*, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 131, ii, 16-18.
- *contraria*, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 76, v, 37. [v. *Bulimina*.]
- *cordieriana*, d'Orbigny. Mém. Soc. géol. France, [1], IV, 1840, 33, iii, 9-11; facsimile in Science Gossip, 1870, 108, fig. 117. [v. *Rotalia*.]
- *crassa*, d'Orbigny. Mém. Soc. géol. France, [1], IV, 32, iii, 7 and 8; facsimile in Science Gossip, 1870, 108, fig. 116. [v. *Pulvinulina*, 1840.]
- *crenularis*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 61, iv (xii), 7a, b, c.
- *cristellaroides*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 57, iii (xi), 15a, b, c.
- *cryptomphala*, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 371, xlvi, 2.
- — Egger, Neues Jahrbuch, 1857, 277, ix, 4-6.
- *cultrata*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 76, v, 7-9; also in Spanish, 1840, 90, same pl. and fig.
- — ? Bailey, Smithsonian Contrib. II, 1851, ii, pl. 14-16.
- *deformis*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 75, iv, 9-11; also in Spanish, 1840, 89, same pl. and fig.
- *depressa*, Alth. Haidinger's Naturw. Abh. III, Abth. 2, 1850, 266, xiii, 21.
- *depressa*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 58, iii (xi), 17a, b, c.
- *difformis*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 64, iv (xii), 15a, b, c.
- *dimidiata*, Terquem. Mém. Soc. géol. France, [3], I, 1878, 19, i (vi), 16a-c.
- *discifera*, Phil. Jones, Catal. Foss. Foram. B. M. 1882, 29.
- *discigera*, Egger. Neues Jahrbuch, 1857, 277, viii, 5-7.
- *discoidalis*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 119, xiv, 1a, b, c; (and Mém. Soc. Dunkerquoise).
- *discoides*, d'Orb. Terq., Mém. Soc. géol. France, [3], II, 1882, 82, viii (xvi), 9a-c. [v. *Rotalia*.]
- *dubia*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 78, ii, 29 and 30; iii, 1; also in Spanish, 1840, 91, same pl. and fig.
- *dufresnii*, d'Orb. Terquem, Mém. Soc. géol. France, [3], II, 1882, 82 viii (xvi), 10a-c. [v. *Rotalia*, 1826.]
- *dutemplei*, d'Orbigny. Foram. Fossiles Vienne, 1846, 157, viii, 19-21. [v. *Truncatulina*; *Planorbolina*; *Pseudotruncatulina*; and *Heterolepa*.]
- — ? Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr., xxii, 19.
- — Egger, Neues Jahrbuch, 1857, 274, vii, 8-10.
- — Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 26, ii, 7a, b; (and Mém. Soc. Dunkerquoise).
- *ehrenbergii*, Bailey. Smithsonian Contrib. II, 1851, 10, pl. 11-13.
- *elegans*, d'Orb. Terq., Mém. Soc. géol. France, [3], I, 1878, 18, i (vi), 12a-c. [v. *Rotalia*, 1826.]
- — ? Terq., Mém. Soc. géol. France, [3], II, 1882, 75, vii (xv), 6a-c.
- *elongata*, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 24, iii, 28. [= *Pulvinulina*, near *karsteni*.]

- ROTALINA** excavata, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 123, xv, 5a, b, c; (and Mém. Soc. Dunkerquoise).  
 ——— ——— ——— Terq., Mém. Soc. géol. France, [3], II, 1882, 77, vii (xv), 13a—c.  
 ——— excedens, Gümbel. Sitz. k.-bay. Ak. Wiss. III, 1873, 39, no fig.  
 ——— exilis, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 28, iii, 5a, b, c; (and Mém. Soc. Dunkerquoise).  
 ——— fragilis, Terq. Mém. Soc. géol. France, [3], II, 1882, 78, viii (xvi), 1a—c.  
 ——— francoonica, Gümbel. Jahresh. Ver. vat. Nat. Württ. XVIII, 1862, 229, iv, 9a, b.  
 ——— fusca, Williamson. Recent British Foram. 1858, 55, v, 114 and 115. [= *Valvulina*.]  
 ——— ——— ——— Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 26, ii, 6a, b; (and Mém. Soc. Dunkerquoise).  
 ——— girardana, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 73, v, 34.  
 ——— granosa, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 75, v, 36.  
 ——— guerini (d'Orb.). Terq., Mém. Soc. géol. France, [3], II, 1882, 69, vi (xiv), 3a, b, c. [*Rotalia*, 1826.]  
 ——— gyrata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 70, vi (xiv), 6a—c.  
 ——— haidingerii, d'Orbigny. Foram. Fossiles Vienne, 1846, 154, viii, 7—9. [v. *Truncatulina*; *Pulvinulina*; *Planorbolina*; and *P. farcta*, var.]  
 ——— ——— ——— Egger, Neues Jahrbuch, 1857, 275, vii, 11—13.  
 ——— ——— ——— Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 72, viii, 6a, b; (and Mém. Soc. Dunkerquoise).  
 ——— ——— ——— Terq., Mém. Soc. géol. France, [3], II, 1882, 80, viii (xvi), 4a—c.  
 ——— hauerii, d'Orbigny. Foram. Fossiles Vienne, 1846, 151, vii, 22—24. [v. *Pulvinulina*.]  
 ——— hemisphærica, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 237, xiv, 16A, B, C.  
 ——— hemisphærica, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 122, xv, 3a, b, c; (and Mém. Soc. Dunkerquoise).  
 ——— ——— ——— Terq., Mém. Soc. géol. France, [3], II, 1882, 75, vii (xv), 7a—c.  
? ——— heteroclita, Terquem. Mém. Soc. géol. France, [3], II, 1882, 64, iv (xii), 14a, b, c.  
 ——— hirsuta, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 131, i, 37—39.  
 ——— impleta, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 120, xiv, 3a, b, c; (and Mém. Soc. Dunkerquoise).  
 ——— v. æqualis, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 120, xiv, 4a, b, c; (and Mém. Soc. Dunkerquoise).  
 ——— increscens, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 15, iii, 3. [= *Planorbolina ammonoides*.]  
 ——— inermis, Terquem. Mém. Soc. géol. France, [3], II, 1882, 68, vi (xiv), 1a, b, c.  
 ——— inflata (Montagu). Williamson, Recent British Foram. 1858, 50, iv, 93 and 94. [*Nautilus*, 1808.]  
 ——— ——— ——— Williamson, Pop. Sci. Rev. IV, 1865, 174, viii, 8.  
 ——— inflata, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 27, iii, 4a, b; (and Mém. Soc. Dunkerquoise).  
 ——— ——— ——— Hertwig, Jenaische Zeitschr. für Naturwiss. XI, 1877, 344, xx, 9 and 10. [Structural.]  
 ——— ——— ——— Terquem, Ess. Anim. Plage Dunkerque, pt. 3, 1881, 119, xiv, 2a, b, c; (and Mém. Soc. Dunkerquoise).  
 ——— infundibulum, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 237, xiv, 9A, B, C.

- ROTALINA involuta**, Reuss. Haidinger's Nat. Abh. iv, Abth. 1, 1851, 35, ii, 14.  
 ——— Hitchcock, Elem. Geology, 1860, 30th ed., 141, fig. 98.  
 ——— *involuta*, Terq. Mém. Soc. géol. France, [3], II, 1882, 76, vii (xv), 10a-c.  
 ——— *kalemburgensis*, d'Orbigny. Foram. Fossiles Vienne, 1846, 151, vii, 19-21. [v. *Rotalia*.]  
 ——— Egger, Neues Jahrbuch, 1857, 273, ix, 21-23.  
 ——— *lacrymosa*, Terq. Mém. Soc. géol. France, [3], II, 1882, 71, vi (xiv), 8a-c.  
 ——— *lamarckiana*, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 131, ii, 13-15.  
 ——— *lenticula*, Reuss. Verstein. böhm. Kreide, 1845-46, I, 35, xii, 17.  
 ——— *liasina*, Terq. et Berth. Mém. Soc. géol. France, [2], X, 1875, 59, v (xv), 5a-c.  
 ——— *limbata*, Terq. Mém. Soc. géol. France, [3], II, 1882, 80, viii (xvi), 6a-c.  
 ——— *lobata*, Terq. Mém. Soc. géol. France, [3], II, 1882, 63, iv (xii), 11a, b, c.  
 ——— *mamilla*, Williamson. Recent British Foram. 1858, 54, iv, 109-111. [= *Discorb. rosacea*, d'Orb.]  
 ——— Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 27, iii, 2a, b; (and Mém. Soc. Dunkerquoise). [= *Discorb. rosacea*.]  
 ——— *margarita*, Terquem. Six. Mém. Foram. Lias, 1866, 522, xxii, 20-22.  
 ——— *margaritifera*, Terq. Mém. Soc. géol. France, [3], I, 1878, 18, i (vi), 14a-c.  
 ——— *marginata*, Cornuel. Mém. Soc. géol. France, [2], III, 1848, 257, ii, 17-19.  
 ——— *marginata*, d'Orb. Terq., Mém. Soc. géol. France, [3], II, 1882, 80, viii (xvi), 5a-c. [*Rotalia*, 1826.]  
 ——— *megaspherica* (Gümbel). Terq., Mém. Soc. géol. France, [3], II, 1882, 59, iii (xi), 21a, b, c. [*Discorbina*, 1868.]  
 ——— *menardii*, d'Orb. Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 27, iii, 1a, b; (and Mém. Soc. Dunkerquoise). [*Rotalia*, 1826.]  
 ——— *meridionalis*, Costa. Mem. Acc. Sci. Napoli, II, 1855 (1857), 124, i, 13A, B, C.  
 ——— *micheliniana*, d'Orbigny. Mém. Soc. géol. France, [1], IV, 1840, 31, iii, 1-3; facsimile in Science Gossip, 1870, 107, fig. 114. [v. also *Pulvinulina*; *P. repanda*, var.; and *Rotalia*.]  
 ——— Reuss, Verstein. böhm. Kreide, 1845-46, I, 36, xii, 31.  
 ——— Reuss, in Geinitz, Grundr. Verstein. 1845-46, 674, xxiv, 54.  
 ——— [*michelini*] ——— Fritel, Foss. Caract. terr. sed. second. 1888, pl. xx, 33, 34, and 35.  
 ——— *moeschii*, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 37, iv, Astartien, 1. [= *Planorbolina*.]  
 ——— *nana*, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 371, xlvi, 23.  
 ——— *nautiloidea*, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 72, viii, 5a, b; (and Mém. Soc. Dunkerquoise).  
 ——— [*nautiloides*] ——— Terq., Mém. Soc. géol. France, [3], II, 1882, 62, iv (xii), 9a, b, c.  
 ——— *nitida*, Reuss. Geogn. Skizze Böhmen, II, 1844, pt. 1, 214. [v. *Placentalia*.]  
 ——— Reuss, Verstein. böhm. Kreide, 1845-46, I, 35, viii, 52; xii, 8 and 20.  
 ——— *nitida*, Williamson. Recent British Foram. 1858, 54, iv, 106-108.  
 ——— ——— Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 26, ii, 9a-e; (and Mém. Soc. Dunkerquoise).  
 ——— *nodosa*, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 72, viii, 7a, b; (and Mém. Soc. Dunkerquoise).

- ROTALINA** *nodosa*, Terquem, v. *umbilicata*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 124, xv, 8 ; (and Mém. Soc. Dunkerquoise).
- *nucleata*, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 28, iii, 6a, b, c ; (and Mém. Soc. Dunkerquoise).
- *nuda*, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 28, iii, 7a, b ; (and Mém. Soc. Dunkerquoise).
- — — — — Terquem, Mém. Soc. géol. France, [3], II, 1882, 73, vi (xiv), 16a-c.
- *nummularis*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 62, iv (xii), 8a, b, c.
- *obesa*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 61, iv (xii), 6a, b, c.
- *oblonga*, Williamson. Recent British Foram. 1858, 51, iv, 98-100. [v. *Pulvinulina* ; = *Pulvin. auricula*.]
- — — — — Dawson, Canad. Nat. v, 1860, 191, fig. 1.
- — — — — Cooke, Thousand Objects Microsc. 1869, 92, ix, 22.
- *obscura*, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 29, iii, 9a, b ; (and Mém. Soc. Dunkerquoise).
- *obtusa*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 122, xv, 2a, b ; (and Mém. Soc. Dunkerquoise).
- *obvoluta*, Terq. Mém. Soc. géol. France, [3], II, 1882, 81, viii (xvi), 7a-c.
- *ochracea*, Williamson. Recent British Foram. 1858, 55, iv, 112 ; v, 113. [v. *Trochammina*.]
- — — — — Cooke, Thousand Objects Microsc. 1869, 92, ix, 18.
- *orbicularis* (d'Orb.). Reuss, in Geinitz, Grundr. Verstein. 1845-46, 673, xxiv, 50. [? *Discorlis*, 1826.]
- *orbicularis*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 60, iv (xii), 1-3.
- *orthorapha*, Egger. Neues Jahrbuch, 1857, 275, x, 1-3.
- *ovalis*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 60, iv (xii), 4a, b, c.
- *ovigera*, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 30, iii, 11a, b ; (and Mém. Soc. Dunkerquoise).
- *partschiana*, d'Orbigny. Foram. Fossiles Vienne, 1846, 153, vii, 28-30 ; viii, 1-3. [v. *Epistomina*.]
- — — — — var. Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 340, xvi, 6.
- — — — — Mackie, Recreative Science, I, 1859, 147, fig. 10.
- *patagonica*, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 36, ii, 6, 7, and 8. [v. *Pulvinulina*.]
- *patella*, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 371, xlvi, 22.
- *peraffinis*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, not deser., xxii, 17.
- *peroralis*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 70, vi (xiv), 5a-c.
- *pertusa*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 70, vi (xiv), 7a-c.
- *peruviana*, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 35, ii, 3-5.
- *placentula*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 63, iv (xii), 12a, b, c.
- *planorbiformis*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 121, xiv, 6a, b, c ; (and Mém. Soc. Dunkerquoise).
- — — — — var. *irregularis*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 121, xiv, 7a, b, c ; (and Mém. Soc. Dunkerquoise).
- *pleurostomata*, Schlumberger. Feuille Jeun. Nat., Aug. 1883, 119, iii, 5, 5a, b.
- *polyrraphes*, Reuss. Verstein. böhm. Kreide, 1845-46, I, 35, xii, 18. [v. *Planorbulina*.]

- ROTALINA polyrraphes**, Reuss. Haidinger's Naturw. Abh. IV, Abth. I, 1851, 35, iii, 1.
- **porosa**, Terq. Mém. Soc. géol. France, [3], II, 1882, 84, viii (xvi), 15a-c.
- **problema**, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 72, viii, 8a, b; (and Mém. Soc. Dunkerquoise).
- **propingua** (Reuss). Egger, Neues Jahrbuch, 1857, 275, vii, 14-17. [*Rotalia*, 1856.]
- **punctulata**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 83, viii (xvi), 12a-c.
- **pustulosa**, Terq. Mém. Soc. géol. France, [3], II, 1882, 77, vii (xv), 12a-c.
- **quadriloba**, Terq. Mém. Soc. géol. France, [3], II, 1882, 77, vii (xv), 11a-c.
- **radiata**, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 29, iii, 10a, b; (and Mém. Soc. Dunkerquoise).
- Terq., Mém. Soc. géol. France, [3], II, 1882, 78, vii (xv), 14a-c.
- **reticulata**, Czjzek. Haidinger's Nat. Abh. II, 1848, 145, xiii, 7-9. [v. *Truncatulina*; *Planorbolina*; *P. farcta*, var.; and *Siphonina*.]
- **rosea**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 72, iii, 9-11; also in Spanish, 1840, 87, same pl. and fig.
- **rotata**, Terq. Mém. Soc. géol. France, [3], II, 1882, 83, viii (xvi), 13a-c.
- **sagra**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 77, v, 13-15; also in Spanish, 1840, 91, same pl. and fig.
- **saxorum**, d'Orb. Terq., Mém. Soc. géol. France, [3], II, 1882, 69, vi (xiv), 4a, b, c. [*Rotalia*, 1826.]
- **scaphoidea**, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 372, xlvi, 3.
- **schreibersii**, d'Orbigny. Foram. Fossiles Vienne, 1846, 154, viii, 4-6. [v. *Pulvinulina*.]
- **scutata**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 63, iv (xii), 13a, b, c.
- **semi-marginata** (d'Orb.). Terq., Mém. Soc. géol. France, [3], II, 1882, 56, iii (xi), 12-14. [*Turbinulina*, 1826.]
- **semiornata**, Terq. Mém. Soc. géol. France, [3], II, 1882, 79, viii (xvi), 2a-c.
- **semiporata**, Egger. Neues Jahrbuch, 1857, 276, viii, 1-3.
- **semipunctata**, Bailey. Smithsonian Contrib. II, 1851, 11, pl., 17-19.
- **semipunctata**, Terq. Mém. Soc. géol. France, [3], II, 1882, 83, viii (xvi), 14a-c.
- **septifera**, Terq. Mém. Soc. géol. France, [3], II, 1882, 65, v (xiii), 2a, b, c.
- **simplex**, Terq. et Berth. Mém. Soc. géol. France, [2], X, 1875, 60, v (xv), 6a, b.
- Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 71, viii, 3a, b; (and Mém. Soc. Dunkerquoise).
- Terq., Mém. Soc. géol. France, [3], II, 1882, 76, vii (xv), 9a-c.
- **soldanii**, d'Orbigny. Foram. Fossiles Vienne, 1846, 155, viii, 10-12.
- Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 26, ii, 8a-d; (and Mém. Soc. Dunkerquoise).
- Schlumberger, Feuille Jeun. Nat., Jan. 1882, I, 12.
- **solida**, Terq. Mém. Soc. géol. France, [3], II, 1882, 72, vi (xiv), 12a-c.
- **spectrum**, Terq. Mém. Soc. géol. France, [3], I, 1878, 19, i (vi), 15a-c.
- **spinimargo**, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 371, xlvi, 1.
- **spissa**, Terq. Mém. Soc. géol. France, [3], I, 1878, 18, i (vi), 13a-c.
- **stellata**, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 27, iii, 3a, b, c; (and Mém. Soc. Dunkerquoise).
- Terquem, Mém. Soc. géol. France, [3], II, 1882, 58, iii (xi), 16a, b, c.

- ROTALINA** stelligera, Reuss. Denkschr. k. Ak. Wiss. Wien, VII, Abth. 1, 1854, 69, xxv, 15. [v. *Epistomina*.]
- subæqualis, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr., xxii, 18.
- subæquilateralis, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 121, xiv, 5a, b; (and Mém. Soc. Dunkerquoise).
- subconica, Terq. Mém. Soc. géol. France, [3], II, 1882, 61, iv (xii), 5a, b, c.
- succisa, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 123, xv, 4a, b, c; (and Mém. Soc. Dunkerquoise).
- — — — — Terq., Mém. Soc. géol. France, [3], II, 1882, 71, vi (xiv), 9 and 10.
- suessonensis (d'Orb.). Terq., Mém. Soc. géol. France, [3], II, 1882, 65, v (xiii), 3 and 4. [*Rotalia*, 1826.]
- tæniata, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 341, xvi, 8.
- terquemi (d'Orb.). Terquem, Mém. Ac. Imp. Metz, XXXIX, 1858, 629, iv, 8a-c. [*Rotalia*, 1849.]
- trochidiformis (Lamarck). Reuss, in Geinitz, Grundr. Verstein. 1845-46, 674, xxiv, 51. [*Rotalites*, 1804.]
- — — — — Terq., Mém. Soc. géol. France, [3], II, 1882, 68, vi (xiv), 2a, b, c.
- ? — trochus, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 308.
- truncatulinoïdes, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 132, ii, 25-27. [v. also *Pulvinulina*.]
- tuber, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 235, xvii, A, B, C [fig. 5].
- tuberculata. Terquem, Ess. Anim. Plage Dunkerque, pt. 3, 1881, 125, xvi, 1a, b, c; (and Mém. Soc. Dunkerquoise).
- tumida, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr., xiv, 14.
- — — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 71, viii, 4a, b; (and Mém. Soc. Dunkerquoise).
- turbinata, Terq. Mém. Soc. géol. France, [3], II, 1882, 75, vii (xv), 5a, b.
- turbinella, Gümbel. Jahresh. Ver. vat. Nat. Württ. XVIII, 1862, 230, iv, 10a, b.
- turbinoidea, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 630, iv, 9a-c.
- turbo, d'Orb. Terq., Mém. Soc. géol. France, [3], II, 1882, 82, viii (xvi), 11a-c. [*Rotalia*, 1826.]
- ? — turgida, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 308.
- turgida, Williamson. Recent British Foram. 1858, 50, iv, 95-97. [v. *Nonionina*.]
- — — — — Dawson, Canad. Nat. IV, 1859, 31, fig. 20.
- — — — — Cooke, Thousand Objects Microsc. 1869, 90, ix, 12.
- umbilicata, d'Orbigny. Mém. Soc. géol. France, [1], IV, 1840, 32, iii, 4-6; facsimile in Science Gossip, 1870, 107, fig. 115. [v. *Pulvinulina*.]
- umbonata, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 75, v, 35. [v. *Pulvinulina*.]
- ungeriana, d'Orbigny. Foram. Fossiles Vienne, 1846, 157, viii, 16-18. [v. *Truncatulina*; *Planorbulina*; and *P. farcta*, var.]
- — — — — var. Bornemann, Zeitschr. deutsch. geol. Ges. VII, 1855, 341, xvi, 5.
- uviformis, Terq. Mém. Soc. géol. France, [3], II, 1882, 73, vi (xiv), 14a-c; 15a-c.
- vitrea, Terq. Mém. Soc. géol. France, [3], II, 1882, 79, viii (xvi), 3a-c.
- voltziana, d'Orbigny. Mém. Soc. géol. France, [1], IV, 1840, 31, ii, 32-34; facsimile in Science Gossip, 1870, 107, fig. 113.

- ROTALINA voltziana**, d'Orbigny. Cooke, Thousand Objects Microsc. 1869, 90, ix, 11.  
 ——— [voltzii] ——— Beudant, Géologie, ed. 8, 1858, 117, fig. 101; later eds., same fig.
- [**Rotaline form.**] Hooke, Micrographia, 1665, 80, Schem. v, fig. x; also in 1667, same fig. etc.
- [**Rotaline form.**] Hooke, Micrographia restaurata, 1745, 71, pl. iii, f. 4.
- [**Rotaline form.**] Adams, Micrographia illustrata, 1746, pl. 64, 562; ed. 2, 1747, pl. 64, 562; ed. 4, 1771, pl. 70, 562. "Resembling the shell of a small water snail [= *R. beccarii*]; same figure as in Hooke's Micrographia."
- [**Rotaline forms.**] Ginani, Opere postume, 1755, 20, pl. xiv, iii, 112.  
 ——— Lely, Quart. Journ. Geol. Soc. I, 1845, 64, fig. a.
- [**Rotaline cast.**] Bailey, Amer. Journ. Sci. XLVIII, 1845, 343, iv, 30 and 31.  
 ——— Pictet, Traité de Paléont. IV, 1846, 232, xii, 15.  
 ——— Abich, Mém. Ac. Imp. Sci. [Math. Phys.] St. Pétersbourg, [6], VII, 1859, 57, ii, 5a, b. [*R. beccarii*?]
- [**Rotaline**], Wallich, Quart. Journ. Sci. I, 1864, plate, 5.  
 ——— Williamson, Pop. Sci. Rev. IV, 1865, 176, viii, 2. (After Schultze.)  
 ——— [Showing pseudopodia.]  
 ——— Von Schlicht, Foram. Septar. Pietzpuhl, 1870, plates xx, xxi, xxii, xxiv, xxxviii.  
 ——— Wallach, Pop. Sci. Rev., N. S. II (xvii), 1878, pl. iv, 3. [Containing sarcoblasts.]  
 ——— de Folin, Congrès Scient. Dax, 1882 (1883), 305, pl. f. 1, 2, and 3. [Sarcodite body.]  
 ——— Terquem, Cinq. Mém. Foram. Oolithique, 1883, 368, xli, 16a, b; xlvi, 1-4.  
 ——— Terquem, Mém. Soc. géol. France, [3], IV, 1886, 48-50, v, 8-15.  
 ——— de Folin, Le Naturaliste, Ann. 9, 1887, 140, fig. 18. [Sarcodite body.]
- ROTALITES**, Lamarck, 1804. Ann. Mus. v, 1804, 184.  
 ——— depressa, Lamarck. Vélins du Muséum Paris, No. 22, fig. 15.  
 ——— discorbula, Lamarck. Ann. Mus. v, 1804, 185, No. 4; and VIII, 1806, fig. 9a, b, pl. 62.  
 ——— ——— Parkinson, Organ. Rem. former World, III, 1811, 160, xi, 3.  
 ——— ——— Lamarck, Coq. Foss. Paris, 1823, 14, xiv, 9a, b.  
 ——— ——— Lamarck, Ency. Méthod., "Vers," III (1832), 911 (pls. 1827), 466, f. 6 (P. & J. quote "pt. 23," 1816).  
 ——— orbiculata, Lamarck. Vélins du Muséum Paris, No. 22, fig. 14.  
 ——— radiatus, Montfort. Conch. syst. I, 1808, 163, 41st genre. [= *Numm. perforata*, var. *radiata*.] [v. *Nummulites*.]  
 ——— sinistrorsa, Lamarck. Vélins du Muséum Paris, No. 22, fig. 13.  
 ——— trochidiformis, Lamarck. Ann. Mus. v, 1804, 184, and VIII, 1806, No. 1, fig. 8a, b, pl. 62. [v. *Rotalia*; *Rotalina*; and *Discorbina*.]  
 ——— ——— Parkinson, Organ. Rem. former World, III, 1811, 160, xi, 2.  
 ——— ——— Lamarck, Coq. Foss. Paris, 1823, 14, xiv, 8a, b.  
 ——— (et **ROTULITES**) ——— Defrance, Dict. Sci. Nat. XXXII, 1824, 187; XLVI, 1827, 303; Atlas, Conch. xiv, 3; xix, 1.  
 ——— ——— Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 391, x, 1 [and vi, 3].  
 ——— ——— Lamarck, Ency. Method., "Vers," III (1832), 912 (pls. 1827), 466, f. 8 (P. & J. quote "pt. 23," 1816).  
 ——— ——— Crouch, Introd. Lamarck, 1827, 41, xxii, 5.  
 ——— ——— Cuvier, Animal Kingdom, Henderson's ed. III, 1834 (pls. 1837), 18, viii, 3.
- [**ROTULITES**] ——— Brown, Conch. Text-book, 1839, 61, x, 16.  
 ——— [trochiformis] ——— Brown, Elem. Foss. Conch. 1843 [23], iii, 12.  
 ——— Bowditch, Elem. Conch. Part 1, 1822, 22, ii, 13.

- Rotia veneta**, M. Satch. O. A. Grimm, Kaspiskai mare e ega fauna, Part 1, 1876, 69, i, 4a, 4b. [= *Rotalia veneta*, M. Schultze.]
- ROTULITES**, Defrance & Brown. v. *Rotalites*.
- RUPERTIA**, Wallieh, 1877. Ann. Mag. Nat. Hist. [4], xix, 1877, 502 ; Brady, Report Challenger, 1884, 680.
- *incrassata*, Uhlig. Jahrb. k. k. geol. Reichsanstalt, xxxvi, 1886, 185, iv, 3-9.
- *stabilis*, Wallich. Ann. Mag. Nat. Hist. [4], xix, 1877, 502, xx, 1-13. — — — Schlumberger, Feuille Jeun. Nat., Aug., 1883, 119, ii, 6, 6a, b, c, 7, 7a, 8.
- — — — — Brady, Report Challenger, 1884, 680, xcvi, 1-12.
- — — — — Uhlig, Jahrb. k. k. geol. Reichsanstalt, xxxvi, 1886, 184, iv, 1 and 2.
- Sabularia**, Bonnisan, 1867, error for *Fabularia*.
- Saccamina**, Carpenter, 1881 ; and Meunier, 1888. Error for *Saccammina*.
- SACCAMMINA**, M. Sars, 1868. Forh. Vidensk.-Selsk. Christiania, 1868 (1869), 248 ; Brady, Report Challenger, 1884, 252.
- *carteri*, Brady. Ann. Mag. Nat. Hist. [4], vii, 1871, 183, xii, 1-6.
- — — — — Brady, Nat. Hist. Trans. Northumb. and Durham, iv, 1872, 269, pl. xi.
- — — — — Brady, Carbonif. Foram., Pal. Soc. xxx, 1876, 57, i, 1-7 ; xii, 6.
- — — — — Zittel, Handbuch Palaeont., Abth. 1, 1876, 76, fig. 84.
- — — — — Schwager, Boll. R. Com. geol. Ital. viii, 1877, 26, pl. 81.
- — — — — Nicholson & Etheridge, Monogr. silur. fossils Girvan, fasc. i, 1878, 21, ix, 23.
- — — — — Nicholson, Manual Palaeont. 1879, i, 112, fig. 21A, B.
- — — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 195, v, 13.
- — — — — Roemer, Lethaea Geognostica, Th. i, Lief. 1, 1880, 264, fig. 40.
- — — — — Steinmann, Elém. Paléont. i, 1888, 25, fig. 7A, B.
- — — — — Prestwich, Geology, ii, 1888, 101, fig. 47a.
- [**SACCAMINA**] — — — — — Meunier, Bull. Soc. Hist. Nat. Autun, i, 1888, 234, vii, 1, 2.
- ? — — (*Calcsphæra*) *eriana*, Dawson. Canad. Nat. x, 1881, 5, fig. 3. [H. B. Brady doubts its rhizopodal character, idem, p. 8 ; see *Moellerina*.]
- — *schwageri*, Zittel. Handbuch Palaeont., Abth. 1, 1876, 76, fig. 86.
- — *socialis*, Brady. Report Challenger, 1884, 255, xviii, 18 and 19.
- — *sphærica*, M. Sars. Forh. Vidensk.-Selsk. Christiania, 1868 (1869), 248.
- — — — — Brady, Report Challenger, 1884, 253, xviii, 11-17.
- [**SACCAMINA**] — — — — — Carpenter, The Microscope, ed. 6, 1881, 560, fig. 319\* a, b, c.
- — — — — Neumayr, Stämme d. Thierreiches, i, 1889 (8), 173, fig. 17c.
- — — — — Carpenter, Ency. Brit. 9th ed. ix, 1879, Foraminifera, 375, 5a, b, c.
- — De Folin, Bull. Soc. N. H. Toulouse, xv, 1881, 136 ; 1 n. sp. proposed but not described.
- Sachets**. See "Säckgen."
- "**Säckgen**." Ledermüller, Mikrosk. Ergötz. 1763, 8, pl. iv, f. ii ; see also "Amusem. Microscop." 1764, same references. [= ? *Miliolinæ* ; or ? *Serpulæ*.]
- SAGENELLA**, Brady, 1879. Q. Journ. Micr. Sci. xix, 1879, 41 ; Brady, Report Challenger, 1884, 279.
- — *frondescens*, Brady. Q. Journ. Micr. Sci. xix, 1879, 41, v, 1.
- — — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 195, v, 16.

- SAGENELLA** *frondescens*, Brady. Report Challenger, 1884, 278, xxviii, 14 and 15.
- De Folin, Bull. Soc. N. H. Toulouse, xv, 1881, 135; 1 new species proposed but not described.
- See Haeckel's remarks under *Astrorhiza*.
- SAGRINA**. See *Sagrina*.
- SAGRINA**, d'Orbigny, 1839. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 149; also in Spanish, 1840, 139 [v. *Uvigerina*\*]; Brady, Report Challenger, 1884, 580.
- [**SAGRINA**] *affinis*, Fornasini. Boll. Soc. geol. Ital. II, 1883, 189, ii, 10a, b, c.
- Fornasini, Boll. Soc. geol. Ital. VII, 1888, 45, iii, 1, 1a, 1b.
- ? *annulata*, Brady. Report Challenger, 1884, 586, lxxvi, 20 and 21.
- [**SAGRINA**] *aspera*, Marsson. Mitt. Nat. Ver. Neu-Vorpommern u. Rügen, Jahrg. x, 1878, 157, iii, 26a-d.
- *bifrons*, Brady. Quart. Journ. Micros. Sci. XXI, 1881, 64.
- — — — — Brady, Report Challenger, 1884, 582, lxxv, 18-20.
- *clavata*, Franzenau. Math. termész. értesítő, VII, 1889, 260, v, 3.
- *columellaris*, Brady. Quart. Journ. Micr. Sci. XXI, 1881, 64.
- — — — — Brady, Report Challenger, 1884, 581, lxxv, 15-17.
- *cretæ*, Ehrenberg. Mikrogeologie, 1854, xxx, 16. [Near *Heterostomella aculeata* (Ehr.).]
- — — — — Ehr., Mikrogeologie, 1854, xxxi, 28. [= *Heterostomella aculeata*.]
- *dimorpha* (Park. & Jones). Brady, Report Challenger, 1884, 582, lxxvi, 1-3. [v. *Uvigerina* (*Sagrina*), 1865.]
- — — — — Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 225, xlv, 6.
- — — — — Agassiz, Three Cruises "Blake," II, 1888, 166, fig. 508.
- *divaricata*, Brady. Q. Journ. Micr. Sci. XIX, 1879, 276, viii, 22-24. [v. *Nubecularia*.]
- *limbata*, Brady. Report Challenger, 1884, 586, cxiii, 14.
- — — — — Howchin, Trans. Roy. Soc. S. Austral. XIII, 1889, 11, i, 7.
- *longirostris*, Ehrenberg. Mikrogeologie, 1854, xxxii, ii, 22. [= "Loxost. tumens," = *Heterostomella aculeata*, smooth var.]
- *nodosa*, Park. & Jones. Brady, Report Challenger, 1884, 583, exiv, 18a, b. [v. *Uvigerina* (*Sagrina*), 1865.]
- *pulchella*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 150, i, 23 and 24; also in Spanish, 1840, 140, same pl. and fig.
- — — — — D'Orbigny, Foram. Fossiles Vienne, 1846, 252, xxi, 48 and 49.
- [**SAGRINA**] — — — — — Reuss' Models, No. 83, 1865 (Catal., No. 77, 1861).
- *raphanus*, Park. & Jones. Brady, Report Challenger, 1884, 585, lxxv, 21-24. [v. *Uvigerina* (*Sagrina*), 1865.]
- *rugosa*, d'Orbigny. Mém. Soc. géol. France, [1], iv, 1840, 47, iv, 31 and 32; Facsimile in Science Gossip, 1870, 157, fig. 156.
- — — — — Reuss, in Geinitz, Grundr. Verstein. 1845-46, 678, xxiv, 70.
- [**SAGRINA**] — — — — — Bronn, Lethaea Geognostica, ed. 3, II, 1851-52, 92, xxix<sup>1</sup>, 24.
- — — — — Beudant, Géologie, ed. 8, 1858, 117, fig. 96; later eds., same fig.
- [**SAGRINA**] *striata* (Schwager). Boll. R. Com. geol. Ital. VIII, 1877, 25, pl. 35. [v. *Dimorphina*, 1866.]
- — — — — Brady, Report Challenger, 1884, 584, lxxv, 25 and 26.
- ? — *tessellata*, Brady. Report Challenger, 1884, 585, lxxvi, 17-19.
- *virgula*, Brady. Q. Journ. Micr. Sci. XIX, 1879, 275, viii, 19-21.

\* Phil. Trans. 1865, 364.

**SAGRINA** *virgula*, Brady. Report Challenger, 1884, 583, lxxvi, 4–10.

— See *Uvigerina*.

**Salicis** *serrata*, Kircher. Mundus subterr. 1665–78, 29. [= *Nummulites*.]

**Salicites helveticus niger foliolis candidis**. Lange, Hist. Lapidum Figurorum, 1708, 69 and 70, xviii. [Nummulite.]

**SARACENARIA**, Defrance, 1824.

— *italica*, Defrance. Dict. Sci. Nat. xxxii, 1824, 177; xlvi, 1827, 344; Atlas, Conch. xiii, 6. [= *Crist.*] [v. also *Cristellaria*; *Nodosarina*.]

— — — — — Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 370, v, 6.

— — — — — D'Orbigny, Ann. Sci. Nat. vii, 1826, 293, No. 26; and Modèles, 1826, No. 85. [See *Cristellaria*.]

**SAXICOLINA**, Deshayes, 1830. Eney. Meth., "Vers," II, 1830, "Cephalopodes" [Sign. Ff. 2], 231 and 234. [Type "*Miliolites saxorum*."]

**SCHIZOPHORA**, Reuss, 1861. Sitz. k. Ak. Wiss. Wien, xliv, 1861, 373; and Verzeich. Gypsmodellen Foram. [1861], No. 80.

— *capreolus* (d'Orb.). Schlumberger, Feuille Jeun. Nat., Aug. 1883, 117, iii, 4 and 4a, and cut, p. 108. [*Vulvulina*, 1826.]

— *haeringensis* (Gümb.). Hantken, A magy. kir. földt. int. évkönyve, I, 1871, 130, ii, 17a, b; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, 136, same pl. and fig. [*Venilina*, 1868.]

— — — — — Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 58, vii, 3; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 68, same pl. and fig.

— — — — — Hantken, Kohlenflözete, etc. ungar. Krone, 1878 (trans. from Magyar), 228, fig. 44.

— *neugeboreni*, Rss. Models, No. 42, 1865 (Catal., No. 80, 1861). [Bigenerine *Vulvul. pennatula*.]

— — — — — Schwager, Boll. R. Com. geol. Ital. viii, 1877, 26, pl. 64. Karrer, Abh. k. k. geol. Reichs. ix, 1877, 386, xvi, b, 51.

**SCHIZOPORA**, Hantken, 1871. See *Schizophora*.

**SCHLUMBERGERINA**, Munier-Chalmas, 1882. Bull. Soc. géol. France, [3], x, 1882, 424.

— *areniphora*, Mun.-Chalmas. Bull. Soc. géol. France, [3], x, 1882, 425, figure. [One of the *Miliolinæ*.]

**SCHWÄGERINA**, v. Moeller, 1877. Neues Jahrbuch, 1877, 143.

— *craticulifera*, Schwager. Richthofen's China, iv, 1883, 140, xviii, 15–25.

— *ellipsoidalis* (*typus lepida*), Schwager. Richthofen's China, iv, 1883, 118. [v. *Alveolina*.]

— *fusiformis*, Krotov. Trudy geol. Kom. (St. Petersburg), vi, No. 1, 1888, 438 and 552, ii, 13–15.

— *leptidea*, Schwager. Richthofen's China, iv, 1883, 138, xvii, 13 [error for 18]; xviii, 1–14.

— — — — — v. *ellipsoidalis*, Schwager. Richthofen's China, iv, 1883, 118.

— — — — — Steinmann, Elém. Paléont. i, 1888, 32, fig. 15G.

— *princeps* (Ehr.). Von Moeller, Mém. Ac. Imp. Sci. St. Pétersbourg, [7], xxv, No. 9, 1878, 71, v, 1a, b; ix, 1a, b. [*Borelis*, 1854.]

— — — — — Von Moeller, Jahrb. k. k. geol. Reichsanstalt, xxx, 1880, 577, ix, 6a.

— — — — — Von Moeller, Verh. russ. k. Min. Ges. [2], xvi, 1881, 183, etc. ix, 5a [error for 6a].

— — — — — Schwager, Richthofen's China, iv, 1883, 132, xvi, 15 and 16; xvii, 1–8.

— — — — — Steinmann, Elém. Paléont. i, 1888, 32, fig. 15D, E, F.

— — — — — Krotov, Trudy geol. Kom. (St. Petersburg), vi, No. 1, 1888, 436 and 553, ii, 7 and 8.

— *robusta* (Meek). Krotov, Trudy geol. Kom. (St. Petersburg), vi, No. 1, 1888, 437 and 553, ii, 9–12. [*Fusulina*, 1864.]

- SCHWAGERINA verbeekii** (Geinitz). Roemer, Palaeontographica, xxvii, 1880 (1881), 4, i, 1a, b. [*v. Fusulina.*] — Roemer, Lethaea Geognostica, Th. I., Lief. 1, 1880, 278, fig. 46. — Schwager, Richthofen's China, iv, 1883, 135, xvi, 14, 17, and 18; xvii, 9-17. — [verbeekii] — Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1053, lxxvi, 26.
- SCORTIMUS navicularis**, Montfort. Conch. syst. I, 1808, 251, 63d genre. [= *Cristellaria*, q. v.]
- “Seesterne.” Knorr & Walch, Rec. Monumens catastrophes, 1768-1778, III, 181, pl. 6\*, f. 9-16. [= *Siderolina calcitrapoides*.]
- SEGUENZA**. Silvestri, Boll. Soc. Italiana Microsc. I (1 and 2), 1889, 57. — anomala, Silv. Idem, 58, iii, 3-5.
- SELENOIDES**, D. D. Owen, 1852. Report Geol. Surv. Wisconsin, 1852, 586. [= *Receptaculites*.] — iowensis, D. D. Owen. Idem, 587, ii, B, 13.
- SELENOSTOMUM**, Ehrenberg, 1858. Monatsber. k. pr. Ak. Wiss. Berlin, 1858, 12. [E familia Rotalinarum, sectione Nautiloidum; spira in utroque latere obtecta, oris apertura in sinistro singularum cellularum medio latere rimam curvatam reflexam supra marginem ascendentem referente.] — ægænum, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 29. — fimbriatum, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 29.
- Semina**. Spada, Corporum lapid. Agri Veronensis, 1739, 49, no figs. [= *Nummulites*?]
- Semina anisi fœniculi.** — cuminicum. } Langius, Hist. lap. fig. Helvet. 1708, 69, pl. xviii. — melonum. } — cumini-pratensis. Kircher, Mund. subterr. 1665-78, 29. [= *Nummulites*.]
- SEPTAMMINA**, Meunier. Bull. Soc. Hist. Nat. Autun, I, 1886, 235. — dichotoma, Meunier. Idem, 236, vii, 5. — renaulti, Meunier. Idem, 235, vii, 3.
- SERPULA**, auct. — angulosa, v. Martens. Reise nach Venedig, Th. II, 1824, 482, iii, 8. [= *Miliolina*.] — bicornis, Walker & Jacob. In Kannmacher's ed. of Adams' Essays Microsc. 1798, 633, xiv, 2. [Walker's i, 2 = *Miliolina seminulum*, Linn., young.] [*v. Adelosina*; *Miliola*; *Miliolina*; *Triloculina*; *Quinqueloculina*.] — umbilico perforato, Walker & Boys. Test. Min. [1784], 2, i, 3. [= *Miliolina seminulum*, Linn.] — ventricosa, Walker & Boys. Test. Min. [1784], 1, i, 2. [= *Miliolina seminulum*, Linn., young specimen.] — concamerata, Montagu. Test. Brit. Suppl. 1808, 160 (fide Williamson). [*v. Rotalina*; *Pulvinulina*; *P. repanda*, var.; and *Discorbina*.] — filum, Schmid. Neues Jahrbuch, 1867, 583, vi, 48. [*v. Ammodiscus*; *Trochammina*.] — lactea, Walker & Jacob. In Kannmacher's ed. of Adams' Essays Microsc. 1798, 634, xiv, 4. [Walker's i, 5 = *Polymorphina lactea*, W. & J.] [*v. Miliola*; and *Polymorphina*.] — (*Lagena*) lœvis globosa, Walker & Boys. Test. Min. [1784], 3, i, 8. [= *Lagena globosa*, Mont.] — (*Lagena*) lœvis ovalis, Walker & Boys. Test. Min. [1784], 3, i, 9. [= *Lagena sulcata*, var. *lœvis*, Mont.] — (*Lagena*) sulcata, Walker & Jacob. In Kannmacher's ed. of Adams' Essays Microsc. 1798, 634, xiv, 5. [Walker's i, 6 = *Lagena sulcata*.] — lenticularis, v. Martens. Reise nach Venedig, Th. II, 1824, 482, iii, 9. [= *Adelosina*.]

- SERPULA lobatula**, Montagu. Test. Brit. 1803, 515; Suppl. 1808, 160. [= *Truncatulina*; see *Nutilus*.]
- (Lagena) **marginata**, Walker & Boys. Test. Min. [1784], 2, i, 7. [= *Lagena marginata*, Mont.] [v. *Vermiculum*; *Lagena*; *Entosolenia*; and *Lagena sulcata*.]
- **ovalis**, Walker. Adams, Trans. Linnean Soc. III, 1800, 4, i, 28, 29, 30. [*Miliolina*.]
- **perforata**, Walker & Jacob. In Kannmacher's ed. of Adams' Essays Microsc. 1798, 633, xiv, 3. [Walker's i, 3 = *Miliolina seminulum*, Linn., young.] [v. *Miliolina*; and *Triloculina*.]
- (Lagena) **perlucida** [Montagu]. Turton, Conch. Dict. 1819, 157, vii, 23. [*Vermiculum*, 1803.]
- **pusilla**, Geinitz. Verstein. deutsch. Zechsteingebirges u. Rothliegenden, Heft I, 1848, 6, iii, 3, 4, 5, 6. [v. also *Trochammina*; *Spirillina*.]
- ? — — — — Jones, in King, Pal. Soc. 1850, 57, vi, 7-9; xviii, 13a-d.
- — — — Geinitz, Dyas, etc. 1861, Heft I, 39, x, 15-21.
- **retorta**, Walker & Jacob. In Kannmacher's ed. of Adams' Essays Microsc. 1798, 634, xiv, 6. [Walker's i, 10 = *Miliolina seminulum*, Linn., young.] [v. *Lagena*.]
- (Retorta) **rotunda marginata cervice curvatim exerto**, Walker & Boys. Test. Min. [1784], 3, i, 10. [= *Miliolina seminulum*, Linn., young.]
- **roessleri**, Schmid. Neues Jahrbuch, 1867, 583, vi, 46 and 47.
- **seminulum**, Linné. Syst. Nat. 1758, ed. x, 786; Gmelin's (xiii), ed. 1788, 37, 39. [v. *Quinqueloculina*; *Miliola*; and *Miliolina*.]
- — — — Modeer, Nova Acta Acad. Caes. Leop. Carol. VIII, Appendix, 1791, 93, figure.
- — — — Pulteney, Catalogue in Hutchins, Hist. of Dorset, 2d ed. III, 1813, 60, xix, 31.
- — — — Brady, Report Challenger, 1884, 158, fig. 2. [Copied from Planctus, Gaultieri, and Martini.]
- (Lagena) **striata sulcata rotunda**, Walker & Boys. Test. Min. [1784], 2, i, 6. [= *Lagena sulcata*, W. & J.] [v. *Vermiculum*; *Lagena*; and *Lagenulina*.]
- **subovalis intorta umbilico pervio**, Walker & Boys. Test. Min. [1784], 1, i, 1. [= *Miliolina seminulum*, Linn.]
- **subrotunda dorso elevato**, Walker & Boys. Test. Min. [1784], 2, i, 4. [= *Miliolina seminulum*, var. *subrotunda*, Mont.]
- **tenuis ovalis laevis**, Walker & Boys. Test. Min. [1784], 2, i, 5. [= *Polymorphina lactea*, W. & J.]
- **urnae** [Montagu]. Turton, Conch. Dict. 1819, 158, vii, 21. [*Vermiculum*, 1803.]
- SEXLOCULINA**, Czjzek, 1848. Haidinger's Nat. Abh. II, 1848, 149. [= *Sphaeroidina*.]
- **haueri**, Czjzek. Haidinger's Nat. Abh. II, 1848, 149, xiii, 35-38.
- — — — Bronn, Lethaea Geognostica, ed. 3, III, 1853-56, 249, xxxv<sup>8</sup>, 8a, b, c.
- Sextularia**, Leidy, 1884. Misprint for *Textularia*.
- Shæroidina**, Schwager, 1866. Misprint for *Sphaeroidina*.
- SHEPHEARDELLA**, Siddall, 1880. Q. Journ. Microsc. Sci. XX, 1880, 131. [One of the *Gromidae*.]
- **tæniformis**, Siddall. Quart. Journ. Microsc. Sci. XX, 1880, 131, pl. xv.
- SIDEROLINA**, Defrance, 1824. Dict. Sci. Nat. XXXII, 1824, 180.
- **calcitrapoides** (Lamarck). [*Siderolites*, 1801.]
- **[calcytrapoides]** (Lam.). Defrance, Dict. Sci. Nat. XXXII, 1824, 180; XLIX, 1827, 98; Atlas, Conch. XIII, 7. [= *Calcar spengleri*, Gümb.]
- — — — D'Orbigny, Ann. Sci. Nat. VII, 1826, 297, No. 1.
- — — — [d'Orb.]. Guérin-Ménville's Cuvier, Iconographie, Mollusques, 1829-43, 9, ii, 8.

- SIDEROLINA calcitrapoides** [d'Orb.]. Cuvier, Animal Kingdom, Henderson's ed. III, 1834 (pls. 1837), 17, iii, 8.  
 ——— Cuvier, Règne Animal, 1836–46, IX (pls. x), 33, xv, 6.  
 ——— Pilla, Distinz. terr. Etrurio, 1846, 104, i, 13.  
 ——— Knorr, "Petrifacta," 1755–1773, III, supp., figs. 9–16.  
 ——— *cruscula*, Harting. Verh. K. Koninkl.-Nederland. Inst. [3], IV, 1852, 115, ii, 7a, b, c. [= ?]  
 ——— *defrancii*, Deshayes. Ency. Méth. "Vers," 1832, 948.  
 ? ——— *indica*, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 376.  
 ——— *kochi*, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 68, xvi, 1; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 79, same pl. and fig.  
 ——— *laevigata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 297, No. 2. [v. *Calcarina*.]  
 ——— D'Orbigny, Modèles, No. 89, 1826.  
 ——— P., J., & B. [d'O., Modèles, No. 89], Ann. Mag. Nat. Hist. [3], XVI, 1865, 33, iii, 90. [= *Calcarina*.]  
 ——— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 163, fig.  
 ? ——— *liasina*, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 618, iii, 13a, b.  
 ——— Pictet, Traité de Paléont. IV, 1846, 228, xii, 8 and 9.  
 ——— Ansted, Ancient World, 1847, 237, fig. 91; ed. 2, 1848, 221, fig. 87.  
 ——— ? see *Lenticula*.  
 "Siderolina-ähnliche formen." Gümbel, Jahresh. Ver. vat. Nat. Württ. XVIII, 1862, 235, iv, 19. [= *Sponge spicule*.]  
**SIDEROLITES**, Lamarck, 1801. Syst. Anim. s. Vert. 1801, 376.  
 ——— *calcitrapoides*, Lamarck. Syst. Anim. s. Vert. 1801, 376. [v. *Siderolina*; and *Calcarina*.]  
 ——— [*calcitrapoide*], Lamarck. Faujas de St. Fond,\* Hist. Nat. Mont St. Pierre Maestricht, 1799, 188, xxxiv, 5–12.  
 ——— [*calcitrapes*] — Montfort, Conch. Syst. I, 1808, 151, 38th genre.  
 ——— — Lamarck, Ency. Method. "Vers," III (1832), 948 (pls. 1827), 470, f. 4 (P. & J. quote "pt. 23," 1816).  
 ——— — Bowdich, Elem. Conch. Part I, 1822, 15, i, 23.  
 ——— — Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 373, v, 7.  
 ——— — Crouch, Introd. Lamarck, 1827, 41, xxii, 8.  
 ——— — Brown, Conch. Text-book, 1839, 60, x, 12.  
 ——— — Brown, Elem. Foss. Conch. 1843, 23, ii, 10.  
 ——— — Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1053, lxxxvi, 24.  
 ——— *hexagonus*, Eichwald. Zoologia specialis, II, 1830, 25, ii, 5. [? a *Polystomella*.]  
**SIDEROLITHES calcitrapoides**, Lam. Bronn, Syst. urweltl. Conchyl. 1824, 7, i, 21.  
 ——— — Reuss, in Geinitz, Grundr. Verstein, 1845–46, 661, xxiv, 46.  
 ——— — Reuss' Models, Nos. 53 and 54, 1865 (Catal., Nos. 88 and 89, 1861).  
**SIDEROLITHUS calcitrapoides**, Bronn. Lethaea Geognostica, ed. 2, 1837, 712, xxxiii, 17a, b, c.  
 ——— — Bronn, Lethaea Geognostica, ed. 3, II, 1851–52, 83, xxxiii, 17a–c.  
**SIDEROPORUS calcitrapa** (Lam.). Bronn, Syst. urweltl. Pflanzenthiere, 1825, 31, vii, 12a–g. [v. *Siderolithus*.]  
**SIGMOÖLINA**, Schlumberger, 1887. Bull. Soc. zool. France, XII, 1887, 118. [This name was proposed for the forms, *Planispirina sigmoidea*; *P. celata*; *Miliolina secans*; *Spiroloculina tenuis*.]  
 ——— *secans* (d'Orb.). Halkyard, Trans. Manchester Microsc. Soc. 1889, 61, i, 7 (var. *obliquistriata*).

\* St. Fond probably showed his specimens to Lamarck, and so the name appeared in 1799.

- SILICINA**, Bornemann, 1874. Zeitschr. deutsch. geol. Ges. xxvi, 1874, 731.  
 —— [= *Involutina*.]  
 —— **limitata** (Terq.). Bornemann, Zeitschr. deutsch. geol. Ges. xxvi, 1874, 733. [*Involutina*, 1863.]  
 —— **polymorpha** (Terq.). Bornemann, Zeitschr. deutsch. geol. Ges. xxvi, 1874, 732. [*Involutina*, 1863.]  
 —— Schwager, Boll. R. Com. geol. Ital. viii, 1877, 26, pl. 80.
- SIMPLORBITES**, de Gregorio, 1882. Fossili dint. Pachino, 1882, 10. ["Partecipano anche del gen. *Orbitolites* e *Orbitoides*, e più ancora del gen. *Hymenocyclus*, . . ."]  
 —— **cupulimis**, de Gregorio. Fossili dint. Pachino, 1882, 11, vi, 21a, b, 22a, b.  
 —— **expansopsis**, de Gregorio. Fossili dint. Pachino, 1882, 12, vi, 23 and 24.  
 —— **nummulitinus**, de Gregorio. Fossili dint. Pachino, 1882, 12, vi, 28a, b.  
 —— **pachinensis**, de Gregorio. Fossili dint. Pachino, 1882, 12, vi, 27.  
 —— **perforatæformis**, de Gregorio. Fossili dint. Pachino, 1882, 13, vi, 25a, b.  
 —— **spongians**, de Gregorio. Fossili dint. Pachino, 1882, 13, vi, 30a, b, c.  
 —— **uniconicus**, de Gregorio. Fossili dint. Pachino, 1882, 12, vi, 26a, b, c.
- SIPHOCENERINA**, Schlumberger, 1883. Feuille Jeun. Nat., Aug. 1883, 117.  
 —— **costata**, Schlumb. Feuille Jeun. Nat., Aug. 1883, 118, fig. B. [Referred to *Sagrina raphanus* by Brady.]  
 —— **glabra**, Schlumb. Feuille Jeun. Nat., Aug. 1883, 118, iii, 1 and 1a. [Referred to *Sagrina columellaris* by Brady.]  
 —— **ocracea**, Schlumb. Feuille Jeun. Nat., Aug. 1883, 118, fig. C.
- SIPHONEMA**, J. G. Bornemann, 1886. Nova Acta Acad. Leop. Carol. li, pt. 1, 1886, 17. [Referred to *Girvanella* by G. J. Hinde, Geol. Mag. dec. 3, iv, 1887, 227; described by Bornemann as an alga.]  
 ? —— **arenaceum**, Bornemann. Idem, 19, ii, 3. [Previously noticed in Zeitschr. deutsch. geol. Ges. xxxv, 1883, 274, as "rundlichen Körpern, welche undeutliche Stromatoporenstruktur zeigen."]  
 —— **incrustans**, Bornemann. Idem, 18, ii, 1 and 2.
- SIPHONINA**, Reuss, 1849. Denkschr. k. Ak. Wiss. Wien, I, 1850, 372.  
 —— **fimbriata**, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 372, xlvi, 6.  
 —— —— —— Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxiii, 1880, 212, iv, 69.  
 —— —— —— Terq., Mém. Soc. géol. France, [3], II, 1882, 84, viii (xvi), 16a-c.  
 —— **puteolana**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr., xxvii, 22.  
 —— **reticulata** (Czj.). Bronn, Lethaea Geognostica, ed. 3, III, 1853-56, 227, xxv, 23a, b, c. [*Rotalina*, 1848.]  
 —— —— —— Schwager, Boll. R. Com. geol. Ital. viii, 1877, 26, pl. 59.  
 —— **reticulata**, Reuss. Models, No. 48, 1865 (Catal., No. 86, 1861). [= *Planorbolina*.]
- Sitophorus**. Mercatus, Metallotheca, 1719, 285, fig. ; and 286, fig. [= *Nummulites*.]
- SOLDANIA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 281.  
 —— **annulata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 282, No. 6.  
 —— —— —— = *Cornuspira* ?; *Spirillina* ?; see *Hammonia trivoluta*.  
 —— **carinata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 281, No. 1.  
 —— —— —— = *Cristellaria*; see *Nautili*; and *Cristellaria*.  
 —— **elegans**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134.  
 —— —— —— Ehr., Mikrogeologie, 1854, xxxvii, viii, 6. [A cast; = *Cristellaria*.]  
 —— **limia**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 281, No. 4.  
 —— —— —— = *Cornusp. folacea* (?) (Phil.); see *Hammoniae circulares*, etc.; and *Frumentaria* 4 species.

- SOLDANIA** nitida, d'O. Ann. Sci. Nat. VII, 1826, 281, No. 3. This name was given by d'Orbigny to Soldani, Testac. I, pt. 2, 1791, 151, pl. 135J. [Soldani describes it as "alterum [J] est *Hammonia*, sive potius *Nautilus dimidiatus* ;" it is a fragment of a section of a *Planorbulina*?]
- orbicularis, d'Orbigny. Ann. Sci. Nat. VII, 1826, 281, No. 5.  
 — — — — = *Cornuspira*?; see *Hammonia*.
- spirorbis, d'Orbigny. Ann. Sci. Nat. VII, 1826, 281, No. 2.  
 — — — — = *Numm. exponens* (Sow.); see *Porpitæ soluti*.
- ? — Pilla, Distinz. terr. Etrurio, 1846, 104, i, 8.
- SOLDANINA**, Costa, 1856. Atti Accad. Pontaniana, VII, fas. 2, 1856, pl. 246.  
 — exagona, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 248, xxi [error for xx], 64, B.
- SORITES** dominicensis, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134.  
 ? — edentulus, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 428.  
 — orbiculus, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134; and v. *trip-tera*. [= Young stage of *Orbitolites orbiculus* (Forsk.)]
- SORITINA**, Ehrenberg, 1838. Abh. k. Ak. Wiss. Berlin, 1838 (1840), Tab. 1. [A family group name.]
- SOROSPHEREA**, Brady, 1879. Q. Journ. Micr. Sci. XIX, 1879, 28; Brady, Report Challenger, 1884, 251.  
 — confusa, Brady. Q. Journ. Micr. Sci. XIX, 1879, 28, iv, 18 and 19.  
 — — — — Moseley, Nature (Apr. 15, 1880), XXI, 570, fig. 11b.  
 — — — — Brady, Report Challenger, 1884, 251, xviii, 9 and 10.  
 — — — — Agassiz, Three Cruises "Blake," II, 1888, 162, fig. 490.
- Sphaeroidea**, Giebel, 1852. Misprint for *Sphaeroïdina*?
- SPHÆROIDINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 267; Brady, Report Challenger, 1884, 619.  
 — austriaca, d'Orbigny. Foram. Fossiles Vienne, 1846, 284, xx, 19-21.  
 — — — — Reuss, Denkschr. k. Ak. Wiss. Wien, I, 1850, 387, li, 3-19.  
 — — — — Egger, Neues Jahrbuch, 1857, 273, vi, 19 and 20.  
 — — — — Carpenter, Parker, & Jones, Introd. Foram. 1862, 185, xii, 13.  
 — — — — Reuss' Models, No. 37, 1865 (Catal., No. 71, 1861). [= *S. bulloides*, d'O.]  
 — — — — Schwager, Novara-Exped., Geol. Theil II, 1866, 250, vii, 98.  
 — — — — Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 53, x, 4; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 62, same pl. and fig.  
 — — — — Zittel, Handbuch Palaeont., Abth. I, 1876, 88, fig. 251.  
 — — — — Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 25, pl. 41.  
 — — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 211, ix, 15.  
 — — — — Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXIII, 1880, 188, i, 20.  
 — — — — Jones, in Microgr. Dict. ed. 4, 1883, 704, xxiv, 4.  
 — — — — Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1061, lxxxvii, 13.  
 — — — — bulloides, d'Orbigny. Ann. Sci. Nat. VII, 1826, 267, No. 1.  
 — — — — D'Orbigny, Modèles, No. 65, 1826.  
 — — — — Cuvier, Règne Animal, 1836-46, IX (pls. x), 34, xv, 9.  
 — — — — Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, 318, xxiv, A, B, C [error for xxv, 1]. [Quoted as *Sextoculina* of Czjzek.]  
 — — — — P., J., & B. [d'O., Modèles, No. 65], Ann. Mag. Nat. Hist. [3], XVI, 1865, 29, ii, 58.  
 — — — — Parker & Jones, Phil. Trans. 1865, 369, xvi, 52.  
 — — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 38, vi, 1; (and Mém. Soc. Dunkerquoise).

- SPHÆROIDINA** *bulloides*, d'Orbigny. Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 89, vi, 190-193.
- — — — — Brady, Report Challenger, 1884, 620, lxxxiv, 1-7.
- — — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 161, fig.
- — — — — Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 226, xlvi, 9, 10, 11.
- — — — — Terrigi, Mem. R. Acc. Lincei, [4], vi, 1889, 115, vi, 19.
- — — — — See *Orth. unilocularia*, etc.
- cretacea**, Ehrenberg. Mikrogeologie, 1854, xxviii, 30. [= *Virg. hemprichii*.]
- dehiscens**, Parker & Jones. Phil. Trans. 1865, 369, xix, 5a, b, c.
- — — — — Brady, Report Challenger, 1884, 621, lxxxiv, 8-11.
- gemmula**, Ehrenberg. Mikrogeologie, 1854, xxx, 22a, b. [= *S. bulloides*.]
- murrhyna**, Schwager. Novara-Exped., Geol. Theil II, 1866, 250, vii, 97.
- ornata**, Brady. Quart. Journ. Geol. Soc. XLIV, 1888, 6, i, 4.
- parisiensis**, Ehrenberg. Mikrogeologie, 1854, xxvii, 33 and 34. [33 = ?, and 34 = *Sph. bulloides*.]
- variabilis**, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 88, vii, 61-64.
- — — — — Pictet, Traité de Paléont. 2d ed. iv, 1857, 525, eix, 46.
- — — — — Reuss, Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 58, vii, 86a, b.
- — — — — Parker, Trans. Mier. Soc. London, n. s. VI, 1858, 55.
- Sphæronites**. Verchere, Journ. Asiat. Soc. Bengal, XXXVI, Pt. 2, No. 3, 1867, 208, viii, 5 and 6 ; ix, 1. [The *Syringosphæridæ* of P. M. Duncan, 1879, q. v. Verchere proposes *S. ryallii* for fig. 6, pl. viii ; Duncan mentions this species but does not identify it or use the name.]
- Sphærulæ vitræ**. Soldani, Testac. I, pt. 2, 1791, 116, pl. 119J, K, L, M. [*Orbulina universa*, d'O. For. Foss. Vienne, 1846, 22, 1, 1.]
- Sphærulæ hispidæ**. Sold., Testac. II, 1798, 53, pl. 17X ; 18a. [?? *Orbulina universa*, d'O. For. Foss. Vienne, 1846, 22, 1, 1.] [Probably *Globigerinae*.]
- SPIDESTOMELLA**, Costa, 1856. Atti Accad. Pontaniana, VII, fas. 2, 1856, not described. [= ? *Miliolina*.]
- — — — — *globulifera*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, not descr., xxvii, 27.
- SPINCTERULES costatus**, Montfort. Conch. Syst. I, 1808, 223, 56th genre. [= *Crist. costata*.]
- SPIRALINA**, Gümbel, 1862. See *Spizolina*.
- Spiriline** *Cornuspiræ*. Chimmo, Bed of Atlantic [1870], 16, i, 4<sup>2</sup>. [A gastropod.]
- SPIRILLINA**, Ehrenberg, 1841. Abhandl. k. Ak. Wiss. Berlin, 1841, 422 ; Brady, Report Challenger, 1884, 629.
- — — — — *angulata*, v. Moeller. v. *S. subangulata*.
- — — — — *arenacea*, Williamson. Recent British Foram. 1858, 93, vii, 203. [= *Trochamm. incerta*.]
- — — — — *canaliculata*, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 110, xiii, 3a, b ; (and Mém. Soc. Dunkerquoise).
- — — — — *crassa*, Zwingli & Kübler. Jones, Quart. Journ. Geol. Soc. XL, 1884, 770, xxxiv, 13. [*Cornuspira*, 1870.]
- — — — — *decorata*, Brady. Report Challenger, 1884, 633, lxxxv, 22, 25.
- — — — — *discoidea*, v. Moeller. Mém. Ac. Imp. Sci. St. Pétersbourg, [7], XXVII, No. 5, 1879, 29 [fig. 9].
- — — — — *foliacea* (Phil.). Williamson, Recent British Foram. 1858, 91, vii, 199-201. [*Orbis*, 1844.]
- — — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 68, vii, 11 ; (and Mém. Soc. Dunkerquoise).

- SPIRILLINA** gracilis, Terquem. Mém. Soc. géol. France, [3], iv, 1886, 8, i, 12a, b.  
 — helvetica, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 12, ii, 8.  
 — — — Jones, Quart. Journ. Geol. Soc. xl, 1884, 770, xxxiv, 12.  
 — — — Prestwich, Geology, 1888, II, 195, 96a.  
 — impressa (Egger). Schwager, Boll. R. Com. geol. Ital. viii, 1877, 26, pl., 53. [? *Cyclolina*, 1857.]  
 — — — Gümbel, Geol. Bayern, Th. I, Lief. 2, 1885, fig. 266, 13.  
 — inæqualis, Brady. Quart. Journ. Micr. Sci. xix, 1879, 278, viii, 25a, b.  
 — — — Brady, Report Challenger, 1884, 631, lxxxv, 8-11.  
 — irregularis; v. Moeller. Mém. Ac. Imp. Sci. St. Pétersbourg, [7], xxvii, No. 5, 1879, 29 [fig. 8].  
 — latiseptata, Terquem. Ess. Anim. Plage Dunkerque, pt. 1, 1875, 21, i, 6; (and Mém. Soc. Dunkerquoise).  
 — limbata, Brady. Quart. Journ. Micr. Sci. xix, 1879, 278, viii, 26a, b.  
 — — — Brady, Report Challenger, 1884, 632, lxxxv, 18-21.  
 — — — v. denticulata, Brady. Report Challenger, 1884, 632, lxxxv, 17.  
 — mamillata, Terquem. Mém. Soc. géol. France, [3], II, 1882, 33, i (ix), 31a, b.  
 — margaritifera, Williamson. Recent British Foram. 1858, 93, vii, 204.  
 — margaritifera, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 110, xiii, 2a, b; (and Mém. Soc. Dunkerquoise).  
 — — — Wright, Proc. Belfast Nat. Field Club, 1884-85, App. ix, 1886, 321, xxvi, 12a, b.  
 — nodifera, Terquem. Mém. Soc. géol. France, [3], II, 1882, 34, i (ix), 32a, b.  
 — nodosa, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 110, xiii, 1a, b; (and Mém. Soc. Dunkerquoise).  
 — numismalis, Terq. et Berth. Mém. Soc. géol. France, [2], x, 1875, 17, i (xi), 13. [v. *Cornuspira*.]  
 — obconica, Brady. Q. Journ. Micr. Sci. xix, 1879, 279, viii, 27a, b.  
 — — — Brady, Report Challenger, 1884, 630, lxxxv, 6 and 7.  
 — orbicula, Terq. et Berth. Mém. Soc. géol. France, [2], x, 1875, 17, i (xi), 12a-c. [v. *Cornuspira*.]  
 — perforata (Schultze). Williamson, Recent British Foram. 1858, 92, vii, 202. [*Cornuspira*, 1854; = *S. vivipara*, Ehr.]  
 — — — Williamson, Pop. Sci. Rev. iv, 1865, 174, viii, 9.  
 — — — Terquem, Ess. Anim. Plage Dunkerque, pt. 1, 1875, 21, i, 5; (and Mém. Soc. Dunkerquoise).  
 — — — Jones, in Microgr. Dict., ed. 4, 1883, 714, xxiv, 5.  
 — — — Terq., Mém. Soc. géol. France, [3], II, 1882, 33, i (ix), 29.  
 — plana, v. Moeller. Mém. Ac. Imp. Sci. St. Pétersbourg, [7], xxvii, No. 5, 1879, 28 [figs. 6 and 7].  
 — polygyrata, Gümbel. Jahresh. Ver. vat. Nat. Württ. xviii, 1862, 214, vi [error for iv], 11a, b, c.  
 — punctata, d'Orb. Reuss' Models, No. 73, 1865 (Catal., No. 31, 1861).  
 — pusilla (Geinitz). King, Journ. Geol. Soc. Dublin, vii, pt. 2, 1856, 73, i, 12a, b. [*Serpula*, 1848; = *Trochammina*.]  
 — radiata, Terquem. Mém. Soc. géol. France, [3], iv, 1886, 8, i, 13 and 14.  
 — regularis, Terquem. Bull. Soc. géol. France, [3], iv, 1876, 481, xv, 2.  
 — striato-granulosa, Terq. Mém. Soc. géol. France, [3], II, 1882, 33, i (ix), 30.  
 — subangulata, v. Moeller. Mém. Ac. Imp. Sci. St. Pétersbourg, [7], xxvii, No. 5, 1879, 27 [fig. 5], v, 3.  
 — tenuissima, Gümbel. Jahresh. Ver. vat. Nat. Württ. xviii, 1862, 214, iv, 12a, b. [v. *Cornuspira*.]

- SPIRILLINA** *trocheata*, Terquem. Mém. Soc. géol. France, [3], iv, 1886, 8, i, 11a, b, c.
- *trochoides*, Berthelin. Revue et Mag. Zool. 1879, 37, i, 20–22.
- *tuberculata*, Brady. Q. Journ. Micr. Sci. xix, 1879, 279, viii, 28a, b. See also description in Siddall, "Foram. of Dee," Proc. Chester Soc. Nat. Sci. 1878, pt. ii, p. 50.
- — — — — Brady, Report Challenger, 1884, 631, lxxxv, 12–16.
- ? — *vivipara*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 422, iii, vii, 41. [Referred to as *Spirulina* on p. 323.]
- — — — — Williamson, Mem. Lit. Phil. Soc. Manchester, [2], viii, 1848, 45, pl. 34.
- — — — — Parker & Jones, Ann. Nat. Hist. [2], xix, 1857, 284, xi, 46.
- — — — — Parker & Jones, Phil. Trans. 1865, 397, xv, 28.
- — — — — J., P., & B., Crag Foram., Pal. Soc. xix, 1866, n. d., iii, 20–22.
- — — — — Möbius, Beitr. Meeresfauna Insel Mauritius, etc. 1880, 88, viii, 1 and 2. [Structural.]
- — — — — Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 108, vii, 272.
- — — — — Brady, Report Challenger, 1884, 630, lxxxv, 1–5.
- — — — — Balkwill & Wright, Trans. R. Irish Ac. xxviii (Sci.), 1885, 348, xii, 32.
- — — — — Bütschli, Morph. Jahrb. xi, 1886, 84, vi, 12.
- — — — — var. *carinata*, Halkyard. Trans. Manchester Micro. Soc. 1889, 71.
- Ehrenberg, Abhandl. k. Ak. Wiss. Berlin, 1847, 446, ii, 82. [= young *Cornuspira* ? or *Miliola* ?]
- ? — — or young Mollusc.? Ehrenberg, Abhandl. k. Ak. Wiss. Berlin, 1855, 169, iv, xxiv. [Young Molluse.] [Glauc.]
- — sp. Schwager, Jahresh. Ver. vat. Nat. Württ. xxi, 1865, vii, 21. [= *Trochammina*.]
- [? — —] Chimmo, Nat. Hist. Euplectella, etc. 1878, 21, vi, 19a, b, c, d. [Described as a Polycystine.]
- ? — — see *Jesites*.
- SPIROBOTRYS**, Ehrenberg, 1844. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 247.
- *aegaea*, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 248.
- — — — — v. *Planulina oligosticta*.
- SPIROCERIUM**, Ehrenberg, 1858. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 310.
- *priscum*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 310; and 337, i, f. xiv. [Glauconite.]
- SPIROCYCLINA**, Munier-Chalmas, 1887. Compte-Rendu Sommaire Soc. géol. France, No. 7, 21 Fév. 1887, p. xxxi.
- *choffati*, Mun.-Ch. Ibid., no fig. ["Couches infra-valenginiennes du Portugal."] [Apparently near *Cyclolina*, d'Orb.]
- SPIROLINA**, Lamarck, 1804. Ann. Mus. Paris, v, 1804, 244.
- *æqualis*, Roem. Verst. norddeutsch. Kreide, 1840–41, 98, xv, 27. [v. *Haplophragmium*.]
- *agglutinans*, d'Orbigny. Foram. Fossiles Vienne, 1846, 137, vii, 10–12. [v. *Haplophragmium* and *Litula*.]
- — — — — Pictet, Traité de Paléont., 2d ed., iv, 1857, 506, cix, 25.
- *astartina*, Deecke. Mém. Soc. Emul. Montbéliard, xvi, 1886, [46], ii [error for i], 17, 17a; 21–21b; 30, 30a.
- *austriaca*, d'Orbigny. Foram. Fossiles Vienne, 1846, 137, vii, 7–9.
- — — — — Reuss' Models, 1865, No. 76 (Catal., 1861, No. 25).
- — — — — Jones, in Microgr. Dict., ed. 4, 1883, 717, xxiii, 12a, b.
- — — — — Quenstedt, Handbuch Petref., ed. 3, Abth. 5 (1885), 1057, lxxxvi, 44.

- SPIROLINA** bathonica, Deecke. Mém. Soc. Emul. Montbéliard, **xvi**, 1886, [46], i, 7a.
- carinatula (W. & J.). Brown, Illustr. Recent Conch. Gt. Brit., ed. 2, 1844, 1, i, 7. [*Nautilus*, 1798.]
- clavata, Crouch. Introd. Lamarck, 1827, 40, xx, 8.
- — — — — Brown, Conch. Text-book, 1839, 63, x, 23.
- cylindracea, Lamarck. Parkinson, Organ. Rem. former World, **III**, 1811, 162, xi, 9, and 10 var. ? [*Spirolinites*, 1804.]
- — — — — Lamarck, Ency. Method., "Vers," **III** (1832), 972 (pls. 1827), 466, f. 2 (P. & J. quote "pt. 23," 1816).
- — — — — Lamarck, Ency. Method., "Vers," **III** (1832), 972 (pls. 1827), 465, f. 7 (P. & J. quote "pt. 23," 1816). [= *Peneroplis*.]
- — — — — var. Lamarck, Ency. Method., "Vers," **III** (1832), 972 (pls. 1827), 466, f. 3 (P. & J. quote "pt. 23," 1816). [= *Peneroplis*.]
- — — — — Bronn, Syst. urweltl. Conchylien, 1824, 9, i, 15a-c.
- — — — — Blainville, Malacologie, 1825, v, 1. [= *Peneroplis*.]
- — — — — König, Icenes fossilium sectiles, [1825], n. d., x, 125.
- — — — — D'Orbigny, Ann. Sci. Nat. **vii**, 1826, 286, No. 1.
- — — — — D'Orbigny, Modèles, No. 24, 1826.
- (et *Spirolinites*) — — — — — Defrance, Dict. Sci. Nat. **L**, 1827, 298 ; Atlas, Conch. **xiii**, 1. [= *Peneroplis*.]
- [cylindrica] — — — — — Bronn, Lethaea Geognostica, ed. 2, 1837, 1135, xlvi, 24a, b.
- — — — — Reuss, in Geinitz, Grundr. Verstein. 1845-46, 659, xxiv, 37.
- — — — — Mantell, Pictorial Atlas Foss. Rem. 1850, 143, lxii, 9.
- — — — — P., J., & B. [d'O., Modèles, No. 24], Ann. Mag. Nat. Hist. [3], **xvi**, 1865, 22, i, 19.
- — — — — Terq., Mém. Soc. géol. France, [3], II, 1882, 52, iii (xi), 4a, b, 5.
- — — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 163, fig.
- depressa, Lamarck. Parkinson, Organ. Rem. former World, **III**, 1811, 162, xi, 8. [*Spirolinites*, 1804.]
- — — — — Blainville, Malacologie, 1825, v, 2. [= *Peneroplis*.]
- (et *Spirolinites*) — — — — — Defrance, Dict. Sci. Nat. **L**, 1827, 298 ; Atlas, Conch. **xiii**, 2. [= *Peneroplis*.]
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- *foliacea*, Schwager. *Boll. R. Com. geol. Ital.* ix, 1878, 529, i, 20.
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 9 and 10.

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- Spirolocunina**, Stohr, 1877. Misprint for *Spiroloculina*.
- SPIROPLECTA**, Ehrenberg, 1844. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 75; Brady, Report Challenger, 1884, 375.
- *abyssorum*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 293.
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  - — — Ehr., Mikrogeologie, 1854, xxxii, i, 13 and 14. [*Heterohelix*, 1843.] [= *Text. striata* with spiral growth.]
  - — — Ehr., Abhandl. k. Ak. Wiss. Berlin, 1855, 175, vii, 6.
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  - — — Balkwill & Wright, Trans. R. Irish Ac. xxviii (Sci.), 1885, 333, xiii, 21, fig. 2.
  - — — *capensis*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 294.
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  - — — *nana*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 309.
  - — — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), v, 17.
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  - ? — — — *propendissima*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 294.
  - — — *rosula*, Ehr. Mikrogeologie, 1854, xxxii, ii, 36. [Stands; = *Text. biformis*, P. & J., when sandy, *T. complexa*, H. B. B., when clear; see Parker & Jones, Ann. Mag. Nat. Hist. x, 1872, 198.]
  - ? — — — Ehrenberg, Abhandl. k. Ak. Wiss. Berlin, 1855, 169, iv, xiii. [= *Spiroplecta*.] [Glauc.]
  - — — Bronn, Klassen Ordn. Thier-Reichs, I, 1859, 69, viii, 3. [Sarcode.]

**SPIROPLEURITES nebulosus**, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1854, 248.

    - — — — Mikrogeologie, 1854, xxxv, B, iv, 7. [= *Pulvin. repanda*.]
    - — — *platystomus*, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1854, 248.

**SPIROSPHERINA**, Deshayes, 1830. See *Globulina*, Deshayes.

**SPIROSTEGINA**, Zborzewski. Bull. Soc. Imp. Nat. Moscou, xvi, 1843, 363, fig. f. [= ? Chara.]

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    - — — — Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 382, v, 1.

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    - — *vivipara*, Ehrenberg, 1841. See *Spirillina*.
    - ? — — *tenella*, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 167.

**SPORILUS**, Moutfort. Conch. syst. I, 1808, 43, 11th genre. [= *Polyst. strigilata*, var.]

**SQUAMULINA**, Schultze, 1854. Organismus Polythal. 1854, 56.

    - — *levis*, Schultze. Organismus Polythal. 1854, 56, vi, 16 and 17.

[**SQUAMMULINA**] — — — Carpenter, Parker, & Jones, Introd. Foram. 1862, 67, i, 22. [= ? young *Nubecularia*.]

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- — — — — Referred to *Gastrophysema* by Haeckel, Jenaische Zeitschr. Nat. xi, 1877, 1, etc.
- [**SQUAMMULINA**] *varians*, Carter. Ann. Mag. Nat. Hist. [4], v, 1870, 321, v, 1-5.
- — — — — see *Haliphysema*.
- STACHELIA**, Brady, 1876. Carbonif. Foram., Pal. Soc. xxx, 1876, 107.
- — — *acervalis*, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 116, ix, 6-8. [*Webbina*, 1873.]
- — — *congesta*, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 110 and 117, ix, 1-5.
- — — *fusiformis*, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 114, viii, 12-16.
- — — *grewincki*, v. Moeller. Jahrb. k. k. geol. Reichsanstalt, xxx, 1880, 584, x, 1-5.
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- — — [*marginuloides*] — — Roemer, Lethaea Geognostica, Th. I, Lief. 1, 1880, 269, fig. 43.
- — — *moriformis*, Howchin. Journ. R. Microsc. Soc. 1888, 543, ix, 19, 20.
- — — *polytrematoides*, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 110, 118, ix, 10-13.
- — — *pupoides*, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 115, viii, 17-27.
- — — — — Moeller, Mém. Ac. Imp. Sci. St. Pétersbourg, [7], xxvii, No. 5, 1879, 78, ii, 6.
- — — — — Schwager, Boll. R. Com. geol. Ital. viii, 1877, 26, pl. 94.
- Stellæ fissæ**. Knorr, Recueil des Monuments, III, Suppl., 1775, 158, vi\*, 9-16. [= *Siderolites*.]
- STEPHANOPELA**, de Folin, 1881. Bull. Soc. N. H. Toulouse, xv, 140, not described, 2 sp. proposed.
- — — Congrès Scient. Dax, 1882 (1883), 328. [Not described.]
- STOLICZKARIA**, Duncan, 1879. Sci. Results II. Yarkand Mission, "Karakoram Stones," 1879, 11. [Nicholson, writing on this genus (Man. Palaeont. ed. 3, 1889, i, p. 227), remarks on the probability of Reuss' genus *Heterastridium* (Sitz. k. Ak. Wiss. Wien, LI, 1865, 391, i-iv), from the Hallstädter beds, having priority.]
- — — *granulata*, Duncan. Sci. Results II. Yarkand Mission, "Karakoram Stones," 1879, 16, ii, 5; iii, 5-7.
- STOLICZKIELLA**, Carter, 1888. Ann. Mag. Nat. Hist. [6], I, 1888, 173. [Allied to *Loftusia*.]
- — — *theobaldi*, Carter. Ann. Mag. Nat. Hist. [6], I, 1888, 173, xiii, 1-4.
- STORILUS radiatus**, Montfort. Conch. syst. I, 1808, 131, 33d genre. [= *Rotalia*?]
- "**Stormhues-Snekke**," Spengler. Dansk. Skr. 1781, 379, ii; ix, litt. a, b, c. [= *Calcar. spengleri*.]
- STORTHOSPHÆRA**, F. E. Schulze, 1875. II. Jahresb. Comm. wiss. Untersuch. deutsch. Meer in Kiel, 1875, 113; Brady, Report Challenger, 1884, 240.
- — — *albida*, Schulze. II. Jahresb. Comm. wiss. Untersuch. deutsch. Meer in Kiel, 1875, 113, ii, 9a, b, c, d.
- — — — — Brady, Report Challenger, 1884, 241, xxv, 15-17.
- STREBLUS**, Fischer, 1817. Fischer, Mém. Soc. Imp. Nat. Moscou, v, 1817, 449. [= *Rotalia*.]
- — — *beccarii* (Linné). Fischer, Adversaria Zoologica, fas. II, 1819, 75. [*Nautilus*, 1758.]

- STREBLUS tortuosus**, Fischer. Mém. Soc. Imp. Nat. Moscou, v, 1817, 449, xiii, 5. [= *Rotalia beccarii*.]  
**Striata**, Green, 1881. = *Lagena striata*.
- STROMATOCERIUM**, Hall, 1847. Palaeont. New York, i, 1847, 48.  
 — **richmondense**, S. A. Miller. Journ. Cincin. Soc. Nat. Hist. v, 1882, 41. [Nicholson, Geol. Mag. dec. 3, vol. v, 1888, 24, states that this fossil is a species of *Girvanella*.]
- Strombus lapideus**. Gesner, De omni rerum, etc. 1565, 170, f. 1. [? a *Vaginula*.]
- STROPHOCHECUS**, H. M. Seely, 1885. Amer. Journ. Sci. xxx, 1885, 355. [Referred by G. J. Hinde to *Girvanella*, Geol. Mag. dec. 3, vol. iv, 1887, 227; described by Seely as a free calcareous sponge]: see also Nicholson, Geol. Mag. dec. 3, vol. v, 1888, 24.
- **ocellatus**, H. M. Seely. Amer. Journ. Sci. xxx, 1885, 357, figs. 1, 2, and 3.
- STROPHOCONUS**, Ehrenberg, 1843. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 166.
- ? — (Grammost.?) **acanthopus**, Ehr. Mikrogeologie, 1854, xxvi, 23. [= *Virg. hemprichii*.]
- ? — **africanus**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 68 and 96; and Mikrogeologie, 1854, xxi, 88. [= *Virg. hemprichii*.]
- **arcticus**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 294. — Ehrenberg, in Koldewey, Zweite deutsche Nordpolarfahrt, 1874, ii, n. d., i, 13.
- **auricula**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 272.
- — — Ehr., Mikrogeologie, 1854, xx, ii, 2. [= *Virg. schreibersii*.]
- **cepa**, Ehr. Mikrogeologie, 1854, xxix, 33; and xxx, 21. [= *Virg. hemprichii*.]
- **cribrosus**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 167, 272.
- **efflorescens**, Ehr. Mikrogeologie, 1854, xxvi, 24. [= *Virg. hemprichii*.]
- — — Ehr., Mikrogeologie, 1854, xxvii, 17. [= *Virg. squamosa*.]
- **falcatus**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 294. — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), iv, 15.
- **flosculus**, Ehr. Mikrogeologie, 1854, xxix, 34. [= *Virg. hemprichii*, var.]
- **fundicola**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 309.
- — — Ehrenberg, Abh. k. Ak. Wiss. Berlin, 1872 (1873), v, 16.
- **gemma**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 376.
- — — Ehr., Mikrogeologie, 1854, xxix, 35. [= *Virg. hemprichii*, var.]
- — — Ehr., Mikrogeologie, 1854, xx, ii, 5. [= *Virg. schreibersii*, approaching *Bulim. elegantissima*.]
- **gibbus**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1843, 272.
- — — Ehr., Mikrogeologie, 1854, xx, ii, 4. [= *Virg. schreibersii*.]
- **gracilis**, Ehr. Mikrogeologie, 1854, xxix, 36. [= *Virg. hemprichii*, var.]
- **græucus**, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 96; and Mikrogeologie, 1854, xix, 86. ["Textil. aciculata" of 1838; = *Virgulina schreibersii* vel *hemprichii*.]
- ? — **hemprichii**, Ehr. Mikrogeologie, 1854, xxiv, 32. [= *Virgulina*.]
- **hyperboreus**, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1872, 295.
- — — Ehrenberg, in Koldewey, Zweite deutsche Nordpolarfahrt, 1874, ii, n. d., i, 12.
- ? — (Grammost.?) **leptoderma**, Ehr. Mikrogeologie, 1854, xxiv, 28 and 30. [= *Virg. hemprichii*.]

- STROPHOCONUS** ovum, Ehr. Mikrogeologie, 1854, xxiv, 29; xxvi, 21; and xxix, 32. [= *Virg. hemprichii*.]  
 ——— ——— Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1844, 96; and Mikrogeologie, 1854, xxii, 81. [= *Virg. schreibersii*.]  
 ——— (Grammost.?) ——— ——— Ehr., Mikrogeologie, 1854, xxvii, 27. [= *Virg. schreibersii*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xx, ii, 3; xxx, 20a, b; and xxxi, 32. [= *Virg. schreibersii*.]  
 ——— polymorphus, Ehr. Mikrogeologie, 1854, xxvii, 23, 26, and 28. [= *Virg. schreibersii*.]  
? ——— (Grammost.?) polytrema, Ehr. Mikrogeologie, 1854, xxiv, 27. [= *Virg. schreibersii*.]  
 ——— spicula, Ehr. Mikrogeologie, 1854, xxiv, 31; and xxvi, 20. [= *Virg. hemprichii*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xxxi, 33 and 34. [= *Virg. schreibersii*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xxxii, ii, 21. [= *Virg. schreibersii*, approaching *Bulim. elegantissima*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xxvii, 24. [= *Virg. squamosa*.]  
 ——— spiroloculina, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1844, 96.  
 ——— (Grammost.?) stiliger, Ehr. Mikrogeologie, 1854, xxvi, 22. [= *Virg. hemprichii*.]  
? ——— (Grammost.?) teretiusculus, Ehr. Mikrogeologie, 1854, xxiv, 26. [= *Virg. schreibersii*.]  
 ——— ——— Ehr., Mikrogeologie, 1854, xxvi, 25. [= *Virg. schreibersii*.]  
? ——— (Grammost.?) ——— ——— Ehr., Mikrogeologie, 1854, xxiii, 24. [= probably *Boliv. dilatata*.]  
? ——— ——— Egger, Neues Jahrbuch, 1857, 292, viii, 30-32.
- STYLOLINA**, Karrer, 1877. Abh. k. k. geol. Reichs. IX, 1877, 371. [Near *Haplophragmium*.]  
 ——— lapugensis, Karrer. Abh. k. k. geol. Reichs. IX, 1877, 371, xvi, a, 1.
- SYNSPIRA** triquetra, Ehr. Mikrogeologie, 1854, xxix, 47. [= ? commencement of a Spirilline form.]
- SYRINGAMMINA**, Brady, 1883. Proc. Roy. Soc. XXXV, 1883, 155; Brady, Report Challenger, 1884, 242.  
 ——— fragilissima, Brady. Proc. Roy. Soc. XXXV, 1883, 155, ii, iii.  
 ——— ——— Brady, Report Challenger, 1884, 242, fig. 9.
- SYRINGOSPHÆRIA**, Duncan, 1879. Sci. Results II. Yarkand Mission, "Karakoram Stones," 1879, 10; Nicholson, Man. Palaeont. ed. 3, 1889, i, 227. [*Sphaeronites* of Verchere.]  
 ——— monticularia, Duncan. Sci. Results II. Yarkand Mission, "Karakoram Stones," 1879, 12, i, 4-12; iii, 1-4, 8, and 9.  
 ——— ——— v. aspera, Duncan. Sci. Results II. Yarkand Mission, "Karakoram Stones," 1879, 13, ii, 6 and 7.  
 ——— plana, Duncan. Sci. Results II. Yarkand Mission, "Karakoram Stones," 1879, 14, not figured.  
 ——— porosa, Duncan. Sci. Results II. Yarkand Mission, "Karakoram Stones," 1879, 15, ii, 3 and 4.  
 ——— tuberculata, Duncan. Sci. Results II. Yarkand Mission, "Karakoram Stones," 1879, 13, ii, 1 and 2.  
 ——— verrucosa, Duncan. Sci. Results II. Yarkand Mission, "Karakoram Stones," 1879, 12, i, 1-3.
- TECHNITELLA**, Norman, 1878. Ann. Mag. Nat. Hist. [5], I, 1878, 279; Brady, Report Challenger, 1884, 245.  
 ——— legumen, Norman. Ann. Mag. Nat. Hist. [5], I, 1878, 279, xvi, 3 and 4.  
 ——— ——— Brady, Report Challenger, 1884, 246, xxv, 8-12.

- TECHNITELLA melo**, Norman. Ann. Mag. Nat. Hist. [5], I, 1878, 280, xvi, 5 and 6.  
 ——— ——— ——— Brady, Report Challenger, 1884, 246, xxv, 7a, b.  
 ——— ——— ——— De Folin, Le Naturaliste, Ann. 10, 1888, 109, fig. 3.  
 ——— **raphanus**, Brady. Report Challenger, 1884, 247, xxv, 13 and 14.  
 ——— de Folin, Bull. Soc. N. H. Toulouse, xv, 1881, 141, 1 n. sp. proposed but not described. [*T. cristata*.]
- TEREBRALINA**, Terquem, 1866. Sixième Mém. Foram. Lias, 1866, 473.  
 ——— **regularis**, Terquem. Sixième Mém. Foram. Lias, 1866, 473, xix, 3.  
 [Cfr. *Ammodiscus [Trochamm.] shoneana*, Siddall.]
- TETRAGONULINA**, Seguenza, 1862. Foram. monotal. miocen. Messina, 1862, 53.  
 ——— **prima**, Seguenza. Foram. monotal. miocen. Messina, 1862, 53, ii, 54 and 55.
- TETRATAXIS**, Ehrenberg, 1843. Ber. k. preuss. Ak. Wiss. Berlin, 1843, 106.  
 ——— **conica**, Ehr. Ber. k. preuss. Ak. Wiss. Berlin, 1843, 106; and Mikrogeologie, 1854, xxxvii, xi, A-D, 12. [("Compare *Textil. palaeotrochus*")  
 = *Valvulina*, q. v.]  
 ——— ——— Moeller, Mém. Ac. Imp. Sci. St. Pétersbourg, [7], xxvii, No. 5, 1879, 71, ii, 3a-g; vii, 1 and 2; 72, fig. 30.  
 ——— ——— v. **gibba**, v. Moeller. Mém. Ac. Imp. Sci. St. Pétersbourg, [7], xxvii, No. 5, 1879, 73, ii, 4a-c; vii, 3.  
 ——— ——— Moeller, Jahrb. k. k. geol. Reichsanstalt, xxx, 1880, 577, ix, 7a.  
 ——— ——— Moeller, Verh. russ. k. min. Ges. [2], xvi, 1881, 183, ix, 6a [error for 7a]. [In rock section.]
- Testa fossilia kahirensia**, Forskal, Descr. Anim. 1775. [= *Nummulites*.]  
**Testæ hammoniformes, plano-cochleatæ, tuberosæ, articulatæ, etc.** Soldani, Testac. I, pt. 1, 1789, 77-80, pls. 70-92. [*Truncatulina variabilis*, d'O. Ann. Sci. Nat. vii, 1826, 279, 8.]
- Testæ hammoniformes seu lituitatæ semilunares**. Sold., Testac. I, pt. 1, 1789, p. 73, pl. 64M, Q. [*Peneroplis planatus* (F. & M.), d'Orb. Ann. Sci. Nat. vii, 1826, 285, 1.]
- Testæ incertæ sedis**. Terq., Mém. Soc. géol. France, [3], I, 1878, 48, iv (ix), 40 and 41. [See *Polymorphinae*.]
- Testæ ovales, oliviformes, pyriformes, fusiformes, etc.** Sold., Testac. II, 1798, 37, pl. 12P. [*Lingul. carinata*, d'O. Ann. Sci. Nat. vii, 1826, 257, 1.]
- Testæ pineiformes minusculæ**. Sold., Testac. II, 1798, 18, pl. 4E, F, G, H. [*Uvigerina nodosa*, v.  $\beta$ , d'O. Ann. Sci. Nat. vii, 1826, 269, 3.]
- Textiraria**. Amer. Cyclopaedia, 1883; see *Textularia*.
- TEXTULARIA**, Defrance, 1824. Dict. Sci. Nat. xxxii, 1824, 177; Brady, Report Challenger, 1884, 356. [*Textilaria*,\* Ehrenberg, 1839. Abhandl. k. Ak. Wiss. Berlin, 1839, 135.]  
 ——— **abbreviata**, d'Orbigny. Foram. Fossiles Vienne, 1846, 249, xv, 9-12 [error for 7-12].  
 ——— ——— Egger, Neues Jahrbuch, 1857, 293, xii, 17 and 18.  
 ——— ——— Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxiii, 1880, 190, i, 23.  
 ——— ——— Malagoli, Atti Soc. Nat. Modena, Rendiconti, [3], III, 1887, 108, i, 1.  
 ——— ——— Fornasini, Boll. Soc. geol. Ital. vi, 1887, 399, xi, 1a, b, 3a, b.  
 ——— ——— Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 219, xlvi, 4 and 5.  
 ——— ——— Terrigi, Mem. R. Acc. Lincei, [4], vi, 1889, 109, v, 3.

[\* Many Continental authors prefer to use *Textilaria* instead of *Textularia*. In all cases where this spelling is adopted an asterisk has been placed at the end of the generic reference, the compiler having considered it advisable not to separate the references into the two arrangements of *Textilaria* and *Textularia*.]

- TEXTULARIA** abbreviata, d'Orbigny. See *Nautilus amphorarius*, and *Nautilus amphorarius*.
- aciculata, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. 15, xi, 1-4.
- — — — — Smedley, Ency. Metrop. 1845, undescr., pl. "Mollusca ?," 16-19.
- — — — — Eley, Geol. in the Garden, 1859, 195, iii, 13 and 14. [Flint cast.]
- — — — — Cooke, Thousand Objects Microsc. 1869, 90, ix, 13.
- — — — — Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXIII, 1880, 191, ii, 24-27.
- aciculata ?, Ehr. Abhandl. k. prœuss. Ak. Wiss. Berlin, 1838, 134, iv, ii, vii, xii, 8.
- \* — — — — — Ehr., Abhandl. k. Ak. Wiss. Berlin, 1839, 135, ii, v; Taylor's Scientific Memoirs, III, 1843, 358, vi, 5. [= *Bolivina dilatata* (?), Rss.]
- — — — — Harting, Magt van het Kleine, 1849, 119, figs. 2 and 3; and 1866, 113, fig. 48, 2 [*Textilaria*] ; German by Dr. A. Schwartzkopf, 1851, 87, fig. 39, 2 and 3.
- — — — — Mantell, Quart. Journ. Geol. Soc. VI, 1850, 330, xxix, 3.
- \* aculeata, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 429.
- \* — — — — — Ehr., Mikrogeologie, 1854, xxviii, 18; xxxi, 17; and xxxviii, xxiii, 5. [= *T. subangulata*, d'O.]
- \* — — — — — Ehr., Mikrogeologie, 1854, xxvii, 8. ("*T. aspera*, 1838, in part.") [= *T. subangulata*, d'O.]
- \* — — — — — Ehr., Mikrogeologie, 1854, xxix, 20a, b. [20a = *T. gibbosa*; 20b = *Boliv. punctata*, v. *aculeata*, Ehr.]
- acuta, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 294, xxiii, 13 and 14.
- acuta, d'Orbigny. Ann. Sci. Nat. VII, 1826, 262, No. 9.
- \* — — — — — Ehr., Mikrogeologie, 1854, xxx, 7. [= *Virg. reussii*, Gein. = *Boliv. punctata*.]
- acuta, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 381, xlix, 1.
- \* — — — — — Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1059, lxxxvi, 60.
- \* æquilateralis, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 19, iii, 12.
- agglutinans, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 144, i, 17, 18; 32-34; also in Spanish, 1840, 136, same pl. and fig.
- — — — — var. Jones, Geologist, VI, 1863, 294, xv, 4 and 5.
- — — — — Parker & Jones, Phil. Trans. 1865, 369, xv, 21.
- — — — — v. abbreviata, d'O. Parker & Jones, Phil. Trans. 1865, 369, xvii, 76a, b. [v. *T. abbreviata*.]
- — — — — v. biformis. Parker & Jones, Phil. Trans. 1865, 370, xv, 23 and 24. [v. *Spirolecta* and *T. biformis*.]
- — — — — v. (Bigenerina) digitata, d'O. Parker & Jones, Phil. Trans. 1865, 371, xvii, 81. [v. *B. digitata*.]
- — — — — v. (Bigenerina) nodosaria, d'O. Parker & Jones, Phil. Trans. 1865, 371, xv, 25; xvii, 80a, 80b. [v. *B. nodosaria*.]
- — — — — v. carinata, d'O. Parker & Jones, Phil. Trans. 1865, 370, xvii, 79a, b. [v. *T. carinata*.]
- — — — — v. pygmæa, d'O. Parker & Jones, Phil. Trans. 1865, 370, xv, 22; xvii, 78a, b. [v. *T. pygmæa*.]
- — — — — v. sagittula, Defr. Parker & Jones, Phil. Trans. 1865, 369, xvii, 77a, b. [v. *T. sagittula*.]
- — — — — v. (Verneuil.) polystropha (Rss.). Parker & Jones, Phil. Trans. 1865, 371, xv, 26. [v. *V. polystropha*.]
- — — — — J., P., & B., Crag Foram., Pal. Soc. XIX, 1866, n. d., iii, 14-16.

- TEXTULARIA agglutinans**, d'O. Tate & Blake, Yorkshire Lias, 1876, 472, xvii, 37.
- \* Möbius, Beitr. Meeresfauna Insel Mauritius, etc. 1880, 93, ix, 1-8. [Structural.]
- Hamilton, Trans. N. Zealand Inst. XIII, 1881, 395, xvi, 10. v. (*Bigerenerina*) *nodosaria*, d'Orb. Hamilton, Trans. N. Zealand Inst. XIII, 1881, 395, xvi, 11. [v. *B. nodosaria*.]
- Brady, Report Challenger, 1884, 363, xliii, 1-3, vars. figs. 4 and 12.
- Woodward & Thomas, 13 Ann. Rep. Geol. N. H. Survey Minnesota, for 1884 (1885), 167, iii, 6 and 7.
- Vine, Proc. Yorkshire Geol. Polytech. Soc., n. s. IX, pt. 1, 1885 (1886), 28, ii, 17.
- Sherborn & Chapman, Journ. R. Micr. Soc. [2], vi, 1886, 742, xiv, 6a, b.
- Malagoli, Boll. Soc. geol. Ital. vi, 1887, 520, xiii, 2.
- Anon., Sci. News, 4 May, 1888, 413, fig. 10.
- Toutkowsky, Zap. Kievsk. Obshch. Est. IX, 1888, 9, ix, 3a-c.
- Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 219, xli, 17, 23; xlvi, 2 and 3.
- Sherborn & Chapman, Journ. R. Micr. Soc. 1889, 485, xi, 10.
- **agglutinans**, Seguenza. Atti Accad. Gioenia Sci. Nat. [2], XVIII, 1862, 114, ii, 4, 4a.
- \* **alpina**, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 19, iii, 11 and 19.
- \* **alsatica**, Andreae. Abh. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 306, vi, 5.
- \* **americana**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 429.
- \* ——— Ehr., Mikrogeologie, 1854, xxxii, i, 4a, and 7. [= *T. striata*.]
- \* ——— Ehr., Abhandl. k. Ak. Wiss. Berlin, 1855, 175, vii, 1 and 7?
- \* **ampliata**, Ehr. Mikrogeologie, 1854, xxviii, 8. [= *T. gibbosa*, d'O.]
- \* **amplior**, Ehr. Mikrogeologie, 1854, xxxi, 11. [= *T. globulosa*, Ehr.]
- **anceps**, Reuss. Verstein. böhm. Kreide, 1845-46, i, 39, viii, 79; xiii, 78.
- \* ——— Reuss, Sitz. k. Ak. Wiss. Wien, XL, 1860, 234, xiii, 2a, b.
- Eley, Geol. in the Garden, 1859, 202, ix, 15C.
- Eley, Geol. in the Garden, 1859, 196, iii, 15. [Flint cast.]
- **angularis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. 16.
- **annectens**, Parker & Jones. Ann. Mag. Nat. Hist. [3], XI, 1863, 92, fig. 1. [v. *Spiroplecta*.]
- Jones, in Microgr. Dict. ed. 4, 1883, 763, xxiii, 52.
- \* **angusta**, Terquem. Six. Mém. Foram. Lias, 1866, 527, xxii, 24a, b.
- \* **argus**, Harting. Verh. Kl. Koninkl.-Nederland. Inst. [3], IV, 1852, 115, ii, 6.
- \* **areolata**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 429.
- **articulata**, d'Orbigny. Foram. Fossiles Vienne, 1846, 250, xv, 16-18.
- **articulata**, Reuss. Haidinger's Naturw. Abh. IV, Abth. 1, 1851, 45, iv, 14.
- **aspera**, Brady. Proc. Roy. Soc. Edinburgh, XI, 1882, 715, not figured.
- Brady, Report Challenger, 1884, 367, xliv, 9-13.
- **aspera**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 134, iv, iv, v, γ.
- \* **aspera**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 147, xv, (xxiii), 14.
- **atlantica**, Bailey. Smithsonian Contrib. II, 1851, 12, pl., 38-43.

- TEXTULARIA** attenuata, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 84, vi, 54.
- \* ——— Reuss, Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 59, vii, 87.
- ? —\* bacheana, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 309.
- barrettii, Jones & Parker. Rept. Brit. Assoc. 1863, 80 and 105.
- Jones & Parker, Mém. Soc. Malac. Belgique, XI année, 1876, 99, figure.
- Brady, Report Challenger, 1884, 367, xliv, 6-8.
- baudouiniana, d'Orbigny. Mém. Soc. géol. France, [1], IV, 1840, 46, iv, 29 and 30; facsimile in Science Gossip, 1870, 157, fig. 155.
- [baudouineana] ——— Jones, Geologist, VI, 1863, 294, xv, 6.
- biformis, Parker & Jones. See *Text. agglutinans*, d'O. Phil. Trans. 1865, 370, xv, 23 and 24.
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- \* bolivinoides, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 235, xii, 6a, b, c.
- \* breoni, Terquem. Cinq. Mém. Foram. Lias, 1866, 450, xviii, 10a, b.
- \* brevis, Ehr. Mikrogeologie, 1854, xxv, iii, c, 1. [= *T. gibbosa*.]
- bronniana, d'Orbigny. Foram. Fossiles Vienne, 1846, 244, xiv, 20-22.
- \* budensis, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 57, xv, 1; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 67, same pl. and fig.
- \* ——— Hantken, Ertek. Termesz. köreböl, XIII, No. 1, 1883, 29, i, 8a, b; and Math. Nat. Ber. Ungarn, II, 1884, 149. [Fig. 6 by error in explan. to plate.]
- bulloides, Reeve. Conch. system. II, 1842, 292, cccxvii, 11. [= *Sphaeroidina*, d'Orb.; = *Sphaerodina*.]
- \* canaliculata, Terq. Mém. Soc. géol. France, [3], II, 1882, 147, xv (xxii), 17a, b.
- candiana, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 143, i, 25-27; also in Spanish, 1840, 135, same pl. and fig. [= *T. candiana* in Spanish ed.]
- \* capitata, Stache. Novara-Exped., Geol. Theil I, 1864, 270, xxiv, 19a, b, c.
- capreolus, Reeve. Conch. system. II, 1842, 292, cccxvii, 12. [= *Vulvulina*, d'Orb. = *Vulvulina*.]
- caribea, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 145, i, 28 and 29; also in Spanish, 1840, 137, same pl. and fig.
- carinata, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. 13. [= *Plecanium*.]
- ——— D'Orbigny, Foram. Fossiles Vienne, 1846, 247, xiv, 32-34.
- \* ——— v. inflata, Stache. Novara-Exped., Geol. Theil I, 1864, 271, xxiv, 22a, b, c.
- \* ——— v. maorica, Stache. Novara-Exped., Geol. Theil I, 1864, 271, xxiv, 21a, b, c.
- \* ——— Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 56, vii, 8; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 66, same pl. and fig.
- \* ——— Hantken, Kohlenflötze, etc. ungar. Krone, 1878 (transl. from Magyar), 232, fig. 52.
- Brady, Report Challenger, 1884, 360, xlvi, 15 and 16.
- Steinmann, Elém. Paléont. I, 1888, 26, fig. 7E.
- See *T. agglutinans*, d'O.
- \* caspia, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), xii, 10.
- \* caspia, Grimm. Kaspiiskai mare e gega fauna, pt. 1, 1876, 70, i, 5.
- caudata, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. 25.
- ——— = *T.?* sp.; see *Polymorphum triangulare*.
- chilostoma, Reuss. Zeitschr. deutsch. geol. Ges. IV, 1852, 18, figs. a, b.

- TEXTULARIA clypeata**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 295, xxiii, 4A, B, C.  
 ——\* **cognata**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVIII, Abth. 1, 1863 (1864), 68, viii, 96a, b.  
 —— **communis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. 27.  
 —— **complexa**, Brady. Nat. Hist. Trans. Northumb. I, 1865-67 (1867), 101, xii, 6a, b.  
 —— **compressa**, Roemer. Neues Jahrbuch, 1838, 384, iii, 13.  
 —— Michelotti, Mem. Soc. Ital. Sci. XXII, 1841, 281, i, 12.  
 —— **concava** (Karr.). Brady, Report Challenger, 1884, 360, xlvi, 13, 14; and xlvi, 11. [*Plecanium*, 1868.]  
 ——\* **concava**, Terq. et Berth. Mém. Soc. géol. France, [2], x, 1875, 62, v (xv), 8a-c.  
 —— **concinna**, Reuss. Verstein. böhm. Kreide, 1845-46, II, 109, xxiv, 54.  
 —— Reuss, Denkschr. k. Ak. Wiss. Wien, VII, Abth. 1, 1854, 71, xxvi, 6.  
 ——\* Reuss, Sitz. k. Ak. Wiss. Wien, XL, 1860, 233, xiii, 1a, b.  
 —— **conica**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 143, i, 19 and 20; also in Spanish, 1840, 135, same pl. and fig.  
 —— Williamson, Mem. Lit. Phil. Soc. Manchester, [2], VIII, 1848, 76, pl. 64 and 65.  
 —— Brady, Report Challenger, 1884, 365, xlvi, 13, 14; exiii, 1a, b.  
 —— **conica**, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 135.  
 —— **consecta**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 262, No. 7.  
 —— **conuloidea**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, xxiii, 12.  
 —— **conulus**, Reuss. Geogn. Skizze Böhmen, II, 1844, pt. 1, 215.  
 —— Reuss, Verstein. böhm. Kreide, 1845-46, i, 38; viii, 59; xiii, 75.  
 —— Reuss, in Geinitz, Grundr. Verstein. 1845-46, 680, xxiv, 73.  
 —— Reuss, Denkschr. k. Ak. Wiss. Wien, VII, Abth. 1, 1854, 72, xxvi, 7.  
 ——\* Reuss, Sitz. k. Ak. Wiss. Wien, XL, 1860, 231, xiii, 3a, b.  
 ——\* Reuss' Models, No. 40, 1865 (Catal., No. 75, 1861).  
 ——\* Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1059, lxxxvi, 61.  
 —— Mariani, Boll. Soc. geol. Ital. VII (1889), 285, x, 2.  
 ——\* **convexa**, Karrer. Novara-Exped., Geol. Theil I, 1864, 78, xvi, 8.  
 —— **cordata**, Meneghini (in litt. 1856). Fornasini, Boll. Soc. geol. Ital. VII, 1888, 318, xi, 2-5.  
 ——\* **cordiformis**, Schwager. Jahresh. Ver. vat. Nat. Württ. XXI, 1865, 139, vii, 15.  
 ——\* Deecke, Mém. Soc. Emul. Montbeliard, XVI, 1886, [36], i, 31, 31a.  
 ——\* **cordiformis**, Terquem. Cinq. Mém. Foram. Oolithique, 1883, 384, xlvi, 5a, b.  
 —— **corrugata**, Costa. Mem. Acc. Sci. Napoli, II, 1855 (1857), 125, i, 15.  
 —— **crassa**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 293, xxiii, 4, B, [fig. 6].  
 —— **crispata**, Brady. Report Challenger, 1884, 359, cxiii, 2a, b.  
 —— **cuneiformis**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. 18.  
 —— De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 147, i, 37-39; also in Spanish, 1840, 138, same pl. and fig.  
 —— Williamson, Recent British Foram. 1858, 74, vi, 158-161, "158 and 159 typica."  
 —— v. **conica**, d'Orb. Williamson, Recent British Foram. 1858, 75, vi, 160 and 161. [v. *T. conica*.]

- TEXTULARIA** *cuneiformis*, d'Orbigny. Cooke, Thousand Objects Microsc. 1869, 93, ix, 24.  
 ——— ——— Terquem, Ess. Anim. Plage Dunkerque, pt. 3, 1881, 129, xvii, 2a, b; (and Mém. Soc. Dunkerquoise).  
 ——— *cuneiformis*, Jones, MS. Mantell, Quart. Journ. Geol. Soc. vi, 1850, 330, xxix, 1.  
 ——— ——— Jones, in King, Pal. Soc. 1850, 18, vi, 6.  
 ——— ——— Richter, Zeitschr. deutsch. geol. Ges. vii, 1855, 532, xxvi, 23.  
 ——— ——— Geinitz, Dyas, Heft I, 1861, 122, xx, 34 and 35.  
 ——— ——— Jones, in Microgr. Dict. ed. 4, 1883, 763, xxiii, 47a, b.  
 ——— *deltoidea*, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 381, xlvi, 4.  
 ——— *dentata*, Alth. Haidinger's Naturw. Abh. III, Abth. 2, 1850, 262, xiii, 13.  
 ——— *deperdita*, d'Orbigny. Foram. Fossiles Vienne, 1846, 244, xiv, 23–25.  
 ——— ——— Harting, Magt van het Kleine, 1849, 111, fig. 5; and 1866, 103, fig. 43; German by Dr. A. Schwartzkopf, 1851, 81.  
 ——— ——— Mackie, Recreative Science, I, 1859, 148, fig. 27.  
 ——— \* ——— Schlumberger, Feuille Jeun. Nat., Feb. 1882, ii, 1.  
 ——— \* *depressa*, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 16, iii, 7.  
 ——— *digitata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 262, No. 5.  
 ——— *dilatata*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 135, iv, ix, 6.  
 ——— \* ——— Ehr., Mikrogeologie, 1854, xxix, 19. [= *T. gibbosa*.]  
 ——— \* ——— Ehr., Mikrogeologie, 1854, xxvii, 5. [= "T. brevis ? 1838."]  
 ——— \* ——— [= *T. striata*, Ehr.]  
 ——— \* ——— Harting, Magt van het Kleine, 1849, 119, fig. 4; and 1866, 113, fig. 48<sup>a</sup>; German by Dr. A. Schwartzkopf, 1851, 87, fig. 39, 4. [*Textularia*.]  
 ——— \* *dumortieri*, Schwager. Benecke's Geogn. Pal. Beiträge, I, 1866, 309, fig. 14.  
 ——— *echinata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. ?  
 ——— ——— = *Bulim. aculeata*, d'O.; see *Polymorpha pineiformia*.  
 ——— *ehrenbergii*, Roemer. Verst. norddeutsch. Kreide, 1840–41, 97, xv, 16.  
 ——— *elata*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 290, xxiii, 9.  
 ——— *elliptica*, Roemer. Neues Jahrbuch, 1838, 384, iii, 18.  
 ——— *elongata*, Cornuel. Mém. Soc. géol. France, [2], III, 1848, 258, ii, 25.  
 ——— *elongata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. 11.  
 ——— \* *elongata*, Ehrenberg. Abh. k. Ak. Wiss. Berlin, 1872 (1873), xii, 9.  
 ——— \* *elongata*, Hantken. A magy. kir. földt. int. evkonyve, IV, 1875 (1876), 57, xv, 3; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 67, same pl. and fig.  
 ——— *elongata*, v. Hagenow. Neues Jahrb. 1842, 570.  
 ——— *elongata*, Jones, MS. Mantell, Quart. Journ. Geol. Soc. vi, 1850, 330, xxix, 2.  
 ——— ——— Mantell, Medals Creation, ed. 2, 1854, 361, fig. 119<sup>a</sup>.  
 ——— [Sarcodae.]  
 ——— \* *euryconus*, Ehr. Mikrogeologie, 1854, xxxii, i, 9. [= *T. gibbosa*.]  
 ——— \* ——— Ehr., Abhandl. k. Ak. Wiss. Berlin, 1855, 161, ii, iv, 175, vii, 8. [= *T. agglutinans*.]  
 [TEXTILLARIA] \* *exigua*, Schwager. Dittmar, Die Contorta-Zone, 1864, 200, iii, 12.  
 ——— ——— See *T. pusilla*.  
 ——— \* *eximia*, Eichwald. Lethaea Rossica, I, 1860, 355, xxii, 19a–d.  
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 ——— \* *falcata*, Ehr. Mikrogeologie, 1854, xxxvii, xi, A–D, 14. [Edge view of *T. recurvata*, xxxvii, xi, A–D, 17.]

- [**TEXTULARIA**]\* *faujasii*, Reuss. Sitz. k. Ak. Wiss. Wien, **XLIV**, Abth. 1, 1861 (1862), 320, iii, 9a, b.  
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 ———\* *flesus*, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 376.  
 ———\* *flexa*, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 35, iv, Impressathon, 17, 17a.  
 ——— *foeda*, Reuss. Verstein. böhm. Kreide, 1845–46, ii, 109, xliii, 12 and 13.  
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 ——— *gibbosa*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 262, No. 6.  
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 ——— ——— Idem, 167, xi, 116. [See *T. levigata*, d'O.]  
 ——— ——— Idem, 167, xi, 117. [See *T. punctulata*, d'O.]  
 ——— ——— Idem, 168, xi, 118.  
 ——— ——— Idem, 169, xi, 119. [See *T. tuberosa*, d'O.]  
 ——— ——— Idem, 169, xi, 120. [See *T. caudata*, d'O.]  
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 ——— ——— See *Polymorpha janiformia*, and *Nautili amphorarii*.  
 ———\* *gigas*, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 18, iii, 9.  
 ———\* *globifera*, Reuss. Sitz. k. Ak. Wiss. Wien, **XL**, 1860, 232, xiii, 7a, 6, 8.  
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 ———\* *globigera*, Terq. et Berth. Mém. Soc. géol. France, [2], x, 1875, 64, v (xv), 13.  
 ———\* *globigerina*, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 19, iii, 13.  
 ———\* *globosa*, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 58, xv, 5; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 67, same pl. and fig. [*T. globulosa* in deser. of plate.]  
 ——— *globulosa*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 135, iv, fig. β frequens.  
 ———\* ——— Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1844; and Mikrogeologie, 1854, xxi, 87. [= *T. gibbosa*.]  
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- \* — Mantell, Medals of Creation, ed. 2, 1854, 342, fig. 109<sup>2</sup>.
- \* — Ehr., Abhandl. k. Ak. Wiss. Berlin, 1847, 446, ii, 78, 79 ; iii, i, 76 ; v, ii, 111 ; vi, iii, 59 ?, 80. [79, *T. carinata*, d'O. ; 59, *T. gibbosa*, d'O.]
- \* — Ehr., Mikrogeologie, 1854, xxxvii, vi, 6 ; and xxxviii, xxiii, 3.
- \* — Ehr., Mikrogeologie, 1854, xxv, i, A, 8 ; v. *amplior*, 9 and 11. [= *T. globulosa*, Ehr.]
- \* — Ehr., Mikrogeologie, 1854, xxxix, 140. [= *T. globulosa*, or *T. gibbosa*?]
- \* — and vars. *obtusa* (4), *amplior* (5), *dilatata* (6), Ehr. Mikrogeologie, 1854, xxiii, 3–6. [= *T. globulosa*, Ehr.]
- \* (*globulosa-ampliata*), Ehr. Mikrogeologie, 1854, xxxi, 12 and 13 ; and xxxvii, vi, 7. [= *T. globulosa*, Ehr.]
- \* — Ehr., Mikrogeologie, 1854, xxv, i, A, 13. [Near *T. agglutinans*.]
- \* — Ehr., Mikrogeologie, 1854, xxxvii, vii, 12. [A cast ; ind.]
- \* — Ehr., Mikrogeologie, 1854, xxiv, 13 and 14 ; xxvii, 6 ; xxix, 17a, b ; xxx, 3a, b ; xxxii, i, 8 ; xxxii, ii, 12 and 13. [= *T. gibbosa*, d'O.]
- \* (*globulosa-ampliata*), Ehr. Mikrogeologie, 1854, xxviii, 12. [= *T. gibbosa*.]
- \*  $\gamma$  *amplior*, Ehr. Mikrogeologie, 1854, xxiv, 12. [= *T. gibbosa*, d'O.]
- \*  $\beta$  *obtusa*, Ehr. Mikrogeologie, 1854, xxvi, 9 and 10. [= *T. gibbosa*.]
- \* — Ehr., Mikrogeologie, 1854, xxviii, 9 and 10. [= *T. gibbosa*, arrested.]
- \* — Ehr., Mikrogeologie, 1854, xxxix, xiv, g. [= *T. gibbosa*, vel *Globigerina*.]
- \* — Ehr., Abhandl. k. Ak. Wiss. Berlin, 1855, 161, ii, i. [Glauc.]
- \* — Ehr., Abhandl. k. Ak. Wiss. Berlin, 1855, 175, vii, 9.
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- — — G. M. Dawson, Report Geol. 49th Par. 1875, 79, xvii, 2a.
- — — Morris, Lecture Geol. Croydon, [1876], 8, fig. 3<sup>2</sup>.
- — — Dawson, Proc. Amer. Assoc. 1876 (Detroit), 104, fig. 4a.
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- ? *granulata*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., xv, 4.
- \* *groenlandica*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 309.
- *hauerii*, d'Orbigny. Foram. Fossiles Vienne, 1846, 250, xv, 13-15.
- \* *hayi*, Karrer. Novara-Exped., Geol. Theil I, 1864, 78, xvi, 7.
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- \* *incrassata*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 429.
- \* *inflata*, Ehr. Mikrogeologie, 1854, xxx, 12. [= *T. aspera*, 1838, partly.]  
 [= *T. subangulata*, d'O.]
- \* — Ehr., Mikrogeologie, 1854, xxiv, 15. [= *T. gibbosa*, d'O.]
- \* — Ehr., Mikrogeologie, 1854, xxv, i, 4, 10. [= *T. globulosa*, Ehr.]
- \* *inflata*, Andreae. Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 306, vi, 6.
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- \* *inversa*, Terquem. Mém. Soc. géol. France, [3], IV, 1886, 60, vii, 6a, b.
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- \* *jurassica*, Gümbel. Jahresh. Ver. vat. Nat. Württ. XVIII, 1862, 228, iv, 17a, b.
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- D'Orbigny, Foram. Fossiles Vienne, 1846, 243, xvi, 14-16.

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- *lævis*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 135, iv, ix,  $\zeta$ .
- *lævis*, Roemer. Verst. norddeutsche Kreide, 1840–41, 97, xv, 17.
- \* *lagenosa*, Ehr. Mikrogeologie, 1854, xxxvii, xi, A–D, 15. [Same as *Grammost. bursigerum*.]
- *laminaris*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 290, xxiii, 15A, B, C, and 16.
- *lanceolata*, v. M. Roemer, Neues Jahrbuch, 1838, 384, iii, 15.
- \* *leptotheaca*, Ehr. Mikrogeologie, 1854, xxviii, 11. [= *T. gibbosa*.]
- \* — — — Ehr., Mikrogeologie, 1854, xxxviii, xxiii, 2. [= *Virg. schreibersii*.]
- *liaatica*, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 634, iv, 12a, b.
- \* *limbata*, Terq. et Berth. Mém. Soc. géol. France, [2], x, 1875, 63, v (xv), 9.
- \* *linearis*, Ehr. Mikrogeologie, 1854, xxix, 18a, b. [= “*T. aciculata*, 1838 ; see *Strophoconus*.”] [= *Boliv. punctata*.] [v. *Bolivina*.]
- \* — — — Ehr., Mikrogeologie, 1854, xxiv, 16 and 17 ; xxvii, 7a-d ; and xxx, 6a, b, c, d. [= *Boliv. punctata*.]
- \* — — — Ehr., Mikrogeologie, 1854, xxiii, 7.
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- *lobata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. 12.
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- \* *lunata*, Ehr. Mikrogeologie, 1854, xxxvii, xi, A–D, 16 and 16\*.
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- *mariae*, d'Orbigny. Foram. Fossiles Vienne, 1846, 246, xiv, 29–31. [v. *Plecanium*.]
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- — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 205, viii, 5.
- \* *mathayensis*, Deecke. Mém. Soc. Emul. Montbéliard, XVI, 1886, [37], i, 23, 23a. [*mathayana* in deser. to plate.]
- *mayeriana*, d'Orbigny. Foram. Fossiles Vienne, 1846, 245, xiv, 26–28.
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- [meyeriana] — — Nicholson, Manual Palaeont. 1879, I, 115, fig. 22.
- *metensis*, Terquem. Mém. Ac. Imp. Metz, XXXIX, 1858, 635, iv, 13a, b.
- *meneghinii*, Fornasini. Boll. Soc. geol. Ital. VII, 1888, 318, xi, 6–8.
- \* *minima*, Karrer. Novara-Exped., Geol. Theil I, 1864, 79, xvi, 9.
- \* *minuta*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 147, xv (xxiii), 15a, b.
- \* *missouriensis*, Ehr. Mikrogeologie, 1854, xxxii, I, 5. [= *T. gibbosa*.]
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- — — — Brady, Carbonif. Foram., Pal. Soc. XXX, 1876, 135, x, 23.
- *mutata*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, not deser., xxiii, 19.
- *nussdorffensis*, d'Orbigny. Foram. Fossiles Vienne, 1846, 243, xiv, 17–19.

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***obtusangula***, Roemer. Verst. norddeutsch. Kreide, 1840–41, 97, xv, 18.  
 ——— ——— Reuss, Verstein. böhm. Kreide, 1845–46, I, 38; viii, 58.  
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 ———\* *ovalis*, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 16, iii, 6.  
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 ———\* *oxfordiana*, Deecke. Mém. Soc. Emul. Montbéliard, XVI, 1886, [36] i, 24, 24a.  
 ———\* *pachyaulax*, Ehr. Mikrogeologie, 1854, xxix, 21a; and xxx, 5a, b. [Compare *T. brevis*.] [= *T. striata*, Ehr.]  
 ——— *pala*, Czjzek. Haidinger's Naturw. Abh. II, 1848, 148, xiii, 25–27.  
 ———\* *palæotrochus*, Ehr. Mikrogeologie, 1854, xxxvii, x, A, 1–4. [v. also *Valvulina*.]  
 ——— *palmata*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 293, xxiii, 21A, B, C.  
 ———\* *parallela*, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 233, xii, 7a, b.  
 ——— *partschii*, Czjzek. Haidinger's Naturw. Abh. II, 1848, 148, xiii, 22–24.  
 ——— *partschii*, Reuss. Verstein. böhm. Kreide, 1845–46, I, 39; xiii, 80.  
 ———\* [*partschi*] ——— Reuss, Sitz. k. Ak. Wiss. Wien, XL, 1860, 233, xiii, 6a, b.  
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 ———\* ——— Reuss, Denkschr. k. Ak. Wiss. Wien, XXV, 1865, 157, iv, 12 and 13.  
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 ——— *perforata*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 135, iv, xi, ε.  
 ———\* ——— Ehr., Bericht k. preuss. Ak. Wiss. Berlin, 1844, 68; and Mikrogeologie, 1854, xxii, 80. [Obscure?; ? *Globigerina*.]  
 ——— *pennatula*, Batsch, var. *aculeata*, Ehr. Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 79, v, 165, 166. [*Nautilus*, 1791.]  
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 ———\* *pikettyi*, Terquem. Six. Mém. Foram. Lias, 1866, 527, xxii, 23a, b, c.  
 ——— *plana*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 263, No. 14.  
 ———\* *pleuronectes*, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 377.  
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 ———\* *poroconus*, Ehr. Mikrogeologie, 1854, xxxii, I, 6. [= *T. gibbosa*.]  
 ——— *prælonga*, Reuss. Verstein. böhm. Kreide, 1845–46, I, 39, xii, 14. [v. *Spiroplecta*.]  
 ——— ——— Reuss, in Geinitz, Grundr. Verstein. 1845–46, 679, xxiv, 71.

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 ——— \* ——— ——— Reuss, in Geinitz, Palaeontographica, XX, Th. 2, 1874, iii, xxiii, 7 and 8.  
 ——— \* ——— ——— Hoernes, Elem. Palaeont. 1884, 30, fig. 23; French ed. 1886, same fig.  
 ——— \* *prælonga*, Schwager. Novara-Exped., Geol. Theil II, 1866, 252, vii, 104.  
 ——— \* *problematica*, Terq. et Berth. Mém. Soc. géol. France, [2], x, 1875, 64, v (xv), 12.  
 ——— *problematica*, Dunikowski. Kosmos [Lemberg], IV, 1879, 132, plate, 27.  
 ——— \* *prodromus*, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 7, i, Turnerithon, 17.  
 ——— *proxima*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 291, xxiii, 8.  
 ——— \* *pugunculus*, Schwager. Jahresh. Ver. vat. Nat. Württ. XXI, 1865, 140, vii, 16.  
 ——— *punctata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 262, No. 3.  
 ——— *punctulata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 262, No. 4.  
 ——— ——— ——— = *T. gibbosa*, d'O.; see *Nautili amphorarii*, etc.  
 ——— \* *pupa*, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 232, xii, 4a, b, 5a, b.  
 ——— *pupoïdes*, d'Orb. Goës, K. Svenska Vet.-Akad. Handl. XIX, No. 4, 1882, 81, vi, 173–180. [*Gaudryina*, 1840.]  
 ——— ——— ——— v. *conica*, Goës. K. Svenska Vet.-Akad. Handl. XIX, No. 4, 1882, 83, vi, 181 and 182. [v. *T. conica*.]  
 ——— \* *pusilla*, Schwager. Jahresh. Ver. vat. Nat. Württ. XXI, 1865, 139, vii, 14. [In descript. of plates, called *exigua*.]  
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 ——— ——— ——— See *T. agglutinans*, d'O.  
 ——— \* *pygmæa*, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 80, ix, 11a, b.  
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 ——— \* *quadrata*, Terq. Mém. Soc. géol. France, [3], II, 1882, 147, xv (xxiii), 16a, b.  
 ——— \* *quadrilatera*, Schwager. Novara-Exped., Geol. Theil II, 1866, 253, vii, 103. [*T. quadrilatera* in explan. to plate.]  
 ——— ——— ——— Brady, Report Challenger, 1884, 358, xlII, 8–12.  
 ——— \* *racemata*, Terq. et Berth. Mém. Soc. géol. France, [2], x, 1875, 63, v (xv), 11a, b.  
 ——— \* *recurvata*, Ehr. Mikrogeologie, 1854, xxxvii, xi, A–D, 17. [See *T. falcata*, of which this is a side view.]  
 ——— \* *rhodiensis*, Terq. Mém. Soc. géol. France, [3], I, 1878, 35, iii (viii), 10a and b.

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- (forma *Bigenerina*), Goës. K. Svenska Vet.-Akad. Handl. XIX, No. 4, 1882, 78, v, 159-161.
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- var. *fistulosa*, Brady. Report Challenger, 1884, 362, xlvi, 19-22.
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- See *Polymorpha sagittula*.
- See *T. agglutinans*, d'O.
- *saulcyana*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 146, i, 21 and 22; also in Spanish, 1840, 137, same pl. and fig.
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— \* *spicata*, Kübler & Zwingli. Neujahrsblatt Bürgersbibl. Winterthur, 1866, 15, iii, 4.
- \* *spinigera*, Terquem. Mém. Soc. géol. France, [3], **ii**, 1882, 146, xv (xxiii), 13.
- *spinosa*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 135.
- \* *squamosa*, Terq. et Berth. Mém. Soc. géol. France, [2], **x**, 1875, 64, v (xv), 14.
- \* *stichopora*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 429, iii, vii, 46.  
[= *T. sagittula*?]
- *striata*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 135, iv, a.  
— \* *striata*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1847, 446, ii, 77.  
[= *T. gibbosa* (?), d'O.]
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- \* *striata*, Ehr., Abhandl. k. Ak. Wiss. Berlin, 1855, 175, vii, 3.
- \* *striata*, Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1059, lxxxvi, 62.
- *striata*, Cooke, Thousand Objects Microsc. 1869, 90, ix, 6.
- *striata* (Ehr.). Toutkowski, Zap. Kievsk. Obszeh. Est. **viii**, 1887, 348, iii, 1a-d ; vii, a.
- *striato-punctata*, Egger. Neues Jahrbuch, 1857, 294, xii, 27-29.
- *strombus*, Costa. Atti Accad. Pontaniana, **vii**, fas. 2, 1856, not deser., xiii, 34.
- *subangularis*, Roemer. Neues Jahrbuch, 1838, 384, iii, 16.
- *subangulata*, d'Orbigny. Foram. Fossiles Vienne, 1846, 247, xv, 1-3.
- *subangulata*, Egger, Neues Jahrbuch, 1857, 293, xii, 15 and 16.
- \* *subflabelliformis*, Hantken. A magy. kir. földt. int. évkönyve, **iv**, 1875 (1876), 57, xv, 2 ; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, **iv**, 1875 (1881), 66, same pl. and fig.
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- \* *subtilis*, Ehr. Mikrogeologie, 1854, xxx, 8. [= *Boliv. punctata*.]  
— \* *subtilis*, Ehr., Mikrogeologie, 1854, xxiv, 11. [= *T. gibbosa*, d'O.]
- \* *sulcata*, Ehr. Mikrogeologie, 1854, xxx, 4a, b, c. [= *T. striata*, 1838.]  
[= *T. striata*, Ehr.]
- \* *sulcata*, Ehr., Mikrogeologie, 1854, xxxi, 10. [= *T. striata*?]  
[= *T. striata*.]
- \* *tetraedra*, Costa. Atti Accad. Pontaniana, **vii**, fas. 2, 1856, 288, xxiii, 10A. C.
- ? — \* (*Grammobotrys*?) *thebaica*, Ehr. Mikrogeologie, 1854, xxiv, 33.  
[= *Virg. hemprichii*.]
- *transversaria*, Brady. Report Challenger, 1884, 359, cxiii, 3-5.
- *tricarinata*, Reuss. Geogn. Skizze Böhmen, **ii**, 1844, pt. 1, 215.
- *tricarinata*, Reuss, Verstein. böhm. Kreide, 1845-46, i, 39, viii, 60.  
[v. *Tritaxia*.]
- \* *trigeri*, Schwager. Benecke's Geogn. Pal. Beiträge, **i**, 1866, 308, fig. 13.
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- *triquetra*, v. Muenster. Reuss, Verstein. böhm. Kreide, 1845-46, i, 39, xiii, 77.
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 ——— ——— Eley, Geol. in the Garden, 1859, 199, vi, 34. [Flint cast.]  
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 ———\* *uniseriata*, Ehr. Monatsbericht k. preuss. Ak. Wiss. Berlin, 1861, 309.  
 ——— *unita*, Fornasini. Boll. Soc. geol. Ital. VI, 1887, 397, x, 2a, b.  
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 ——— ——— v. *diformis*, Williamson. Recent British Foram. 1858, 77, vi, 166 and 167.  
 ——— ——— v. *laevigata*, d'Orb. Williamson, Recent British Foram. 1858, 77, vi, 168.

- [**TEXTULARIA**] *variabilis*, Williamson, v. *spathulata*, Williamson. Recent British Foram. 1858, 76, vi, 164 and 165.
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- \* *zwinglii*, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 30, iii, 44.
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- \* sp. ? Ehrenberg, Mikrogeologie, 1854, xxxv, B, iv, A, o; xxxviii, xxiii, 4. [= *T. gibbosa*.]
- \* Ehrenberg, Abhandl. k. preuss. Ak. Wiss. Berlin, 1855, 169, iv, xiv-xvi. [Grooved.] [Glauc.]
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- (or *Polymorphina*?). Eley, Geol. in the Garden, 1859, 202, viii, 12C.
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- TEXTULARINA**, Ehrenberg, 1838. Abh. k. Ak. Wiss. Berlin, 1838 (1840), Tab. 1. [A family group name.]
- Texularia**. Hamilton, 1881. Error for *Textularia*, q. v.
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- (**Ceriopora**) *cribrosa* (Goldfuss). Roemer, Verst. norddeutsch. Kreide, 1841, 21. [*Ceriopora*, 1826.]

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**THEMEON rigatus**, Montfort. Conch. syst. i, 1808, 203, 51st genre. [= *Polyst. crispa.*]   
**THOMASINELLA**, Schlumberger, 1889. C. R. Soc. géol. France, 18 Mars 1889, xlvi.  
**THURAMMINA**, Brady, 1879. Q. Journ. Micros. Sci. xix, 1879, 45; Brady, Report Challenger, 1884, 321.  
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 \_\_\_\_\_ *compressa*, Brady. Q. Journ. Mier. Sci. xix, 1879, 46, v, 9.  
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**THYRSOPORELLA**. Gümbel, Abh. k.-bayer. Ak. Wiss. München, xi, 1871 (1874), 231, etc., plates. [A genus of calcareous Algae, v. Solms-Laubach, Einleit. Palaeophytologie, 1887, 38, etc.] [Gümbel's spp. are *T. cancellata*; *T. cibrosa*.]  
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**TOXINOPSIS**, de Folin, 1881. Bull. Soc. N. H. Toulouse, xv, 138 ; not described ; 1 species proposed.  
**TRAGOS**. See *Coscinopora*.  
**TRETOMPHALUS**, Möbius, 1880. Beitr. Meeresfauna Insel Mauritius, etc. 1880, 98.  
 —— bulloides (d'Orb.). Möbius, Beitr. Meeresfauna Insel Mauritius, etc. 1880, 98, x, 6-9. [*Rosalina*, 1826 ; = *Cymbalopora*.]  
**TRIGONULINA**, Seguenza, 1862. Foram. monotal. miocen. Messina, 1862, 74.  
 —— biangulata, Seguenza. Foram. monotal. miocen. Messina, 1862, 74, ii, 57 and 59.  
 —— globosa, Seguenza. Foram. monotal. miocen. Messina, 1862, 75, ii, 60-62.  
 —— oblonga, Seguenza. Foram. monotal. miocen. Messina, 1862, 74, ii, 56 and 58. [v. *Lagena*, and *L. trigono-oblonga*.]  
 —— regolaris, Seguenza. Foram. monotal. miocen. Messina, 1862, 75, ii, 63 and 64.  
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 —— angulosa, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 315, xxvi, 14 and 154, B, C.

- TRILOCULINA angusta**, Deshayes. Encyc. Méth. (Vers), III, 1832, 1052.  
 —— *angusta*, Philippi. Tertiär. nordwest. Deutsch. 1843, 43, i, 40. [v. *Quinqueloculina*.]  
 —— *angusta*, Terq. Mém. Soc. géol. France, [3], I, 1878, 59, v (x), 28a, b.  
 ? —— *antillarum*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1841, 429, ii, vi, 39.  
 [= ? *Quinqueloc.*]  
 —— *austriaca*, d'Orbigny. Foram. Fossiles Vienne, 1846, 275, xvi, 25–27.  
 [v. *Miliola*.]  
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 —— *bicarinata*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 180, x, 18–20; also in Spanish, 1840, 158, same pl. and fig.  
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 —— *boliviana*, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 69, iv, 7–9.  
 —— *bornemanni*, Bosquet. Verh. Koninkl. Akad. Wetensch. VII, 1859, 25, ii, 12a–c.  
 —— *brongniartiana*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 176, x, 6–8; also in Spanish, 1840, 156, same pl. and fig.  
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 —— *carinata*, Philippi. Tertiär. nordwest. Deutsch. 1843, 43, i, 36.  
 —— *cassis*, Terquem. Mém. Soc. géol. France, [3], I, 1878, 60, v (x), 30a, b.  
 —— *caudata*, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 81, xi, 1; (and Mém. Soc. Dunkerquoise).  
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- ——— Terq., Mém. Soc. géol. France, [3], I, 1878, 58, v (x), 25a-c.
- [diformis] ——— Terq., Mém. Soc. géol. France, [3], II, 1882, 117, xvii (xxv), 12-18.
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- dilatata, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 139, ii, 1.
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- fulgurata, Schlumberger. Feuille Jeun. Nat., July, 1883, 107, ii, 1 and 1a, b.
- gibba, d'Orbigny. Ann. Sci. Nat. VII, 1826, 299, No. 3. [v. *Miliola*.]
- ——— D'Orbigny, Foram. Fossiles Vienne, 1846, 274, xvi, 22-24. [v. *Miliola*.]
- ——— Bronn, Klassen Ordn. Thier-Reichs, I, 1859, 69, vi, 3a, b, c, and 7.
- ——— Reuss' Models, No. 11, 1865 (Catal., No. 19, 1861). [= *T. trigonula*, Lam.]
- ——— var. Reuss, Sitz. k. Ak. Wiss. Wien, I, Abth. 1, 1864 (1865), 450, i, 4.

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- — — — — Toula, Mittb. geogr. Ges. Wien, XVIII, 1875, 165, pl. 19.
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- — — — — Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 27, pl. 115.
- — — — — Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 190, viii, 3.
- — — — — Terq., Mém. Soc. géol. France, [3], II, 1882, 163, xvi (xxiv), 31a, b, c.
- — — — — Hoernes, Elem. Palaeont. 1884, 34, fig. 32 ; French ed. 1886, same fig.
- — — — — See *Frumentaria tricostata*.
- — **gibberula**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 60, v (x), 29a, b.
- — **glabra** (Brown). Brown, Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 2, lvi, 20, 21. [*Renoidea*, 1827.]
- — — — — G. B. Sowerby, Foram. Colne Tidal River, 1856, [privately printed], plate, fig. 10. [= *M. seminulum*.]
- — **globulus**, d'Orbigny. Voyage Amér. Mérid. 1839, V, pt. 5, "Foraminifères," 71, ix, 9 and 10.
- — **gracilis**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 181, xi, 10-12 ; also in Spanish, 1840, 159, same pl. and fig. [Given as *Quinqueloculina* in error on plate.] [v. *Miliolina*.]
- — **granulata**, Reuss. Denkschr. k. Ak. Wiss. Wien, XXIII, 1864, 8, i, 13.
- — **gualtieriana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 170, ix, 5-7 ; also in Spanish, 1840, 152, same pl. and fig.
- — **hartingi**, Bosquet. Verh. Koninkl. Akad. Wetenschappen, VII, 1859, 24, ii, 11a-c.
- — **hemisphærica**, Terquem. Mém. Soc. géol. France, [3], II, 1882, 163, xvi (xxiv), 32, 33.
- — **incerta**, Terquem. Mém. Soc. géol. France, [3], I, 1878, 57, v (x), 19a, b.
- — **inflata**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 300, No. 10. [v. *Quinqueloculina*.]
- — — — — Roemer, Neues Jahrbuch, 1838, 393, iii, 72.
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- — — — — D'Orbigny, Foram. Fossiles Vienne, 1846, 278, xvii, 13-15.
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- — — — — = *Quinqueloc.* ; see *Frumentarium nautiliforme*.
- — **inflata**, Deshayes. In Lyell, Principles of Geology, III, 1833, 251, iv, 1-4.
- — **inornata**, d'Orbigny. Foram. Fossiles Vienne, 1846, 279, xvii, 16-18.
- — **intermedia**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 138, i, 11.
- — **josephina**, d'Orbigny. Cours élém. Paléont. I, 1849, 204, fig. 331 ; II, fas. 2, 1852, 818, fig. 626.
- — **kochi**, Nemes. Orvos term. értesítő (term. szak), XIII, 1888, 162 and 217, vi, 1.

- TRILOCULINA** kochi, Reuss. *Zeitschr. deutsch. geol. Ges.* vii, 1855, 289, xi, 6 and 7.  
 —— *labiosa*, d'Orbigny. *De la Sagra, Hist. Phisiq. etc. Cuba*, 1839, "Foraminifères," 178, x, 12-14; also in Spanish, 1840, 157, same pl. and fig. [v. *Miliolina*.]  
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 —— —— —— *Terq.*, *Mém. Soc. géol. France*, [3], ii, 1882, 168, xvii (xxv), 22-23.  
 —— *lævissima*, Costa. *Atti Accad. Pontaniana*, vii, fas. 2, 1856, not deser., xxv, 8 and 9.  
 —— *liasina*, Terquem. *Mém. Ac. Imp. Metz*, xxxix, 1858, 637, iv, 14a-c.  
 —— *lineata*, Conrad. *Proc. Ac. Nat. Sci. Philad.* 1865, 73; not described, not figured.  
 —— *linneiana*, d'Orbigny. *De la Sagra, Hist. Phisiq. etc. Cuba*, 1839, "Foraminifères," 172, ix, 11-13; also in Spanish, 1840, 153, same pl. and fig. [v. *Miliolina*.]  
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 —— *maurinii*, d'Orbigny. *Ann. Sci. Nat.* vii, 1826, 300, No. 25.  
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 —— *moguntiaca*, Reuss. *Neues Jahrbuch*, 1853, 672, ix, 5a-c.  
 —— *nitens*, Reuss. *Denkschr. k. Ak. Wiss. Wien*, i, 1850, 383, xlvi, 10.  
 —— *nitida*, d'Orbigny. *Barker Webb & Berthelot, Hist. Nat. Iles Canaries*, 1839, ii, pt. 2, "Foraminifères," 141, iii, 22-24.  
 —— —— —— Mackie, *Science Gossip*, 1867, 131, fig. 134.  
 —— *rodosaroides*, Karrer. *Sitz. k. Ak. Wiss. Wien*, lv, Abth. 1, 1867, 360, ii, 9.  
 —— *nodulus*, Eichwald. *Lethaea Rossica*, iii, 1853, 12, i, 14a-d.  
 —— *oblonga* (Montagu). D'Orbigny, *Ann. Sci. Nat.* vii, 1826, 300, No. 16. [*Vermiculum*, 1803.]  
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 —— —— —— Gosse, *Manual Mar. Zool.* 1855, 14, fig. 19.  
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 ——— [d'Orb.]. Terquem, Ess. Anin. Plage Dunkerque, pt. 1, 1875, 38, v, 19a, b; (and Mém. Soc. Dunkerquoise).  
 ——— ——— Terq., Mém. Soc. géol. France, [3], i, 1878, 58, v (x), 22a-24b.  
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 ——— ——— ——— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 163, fig.  
**obotritica**, Boll. Geogn. deutsch. Ostseeländer, 1846, 177, ii, 14.  
**oculina**, d'Orbigny. Foram. Fossiles Vienne, 1846, 277, xvii, 7-9.  
**orbicularis**, Roemer. Neues Jahrbuch, 1838, 393, iii, 74.  
 ——— ——— Reuss, Sitz. k. Ak. Wiss. Wien, xviii, 1856, 251, viii, 85.  
 ——— ——— Andreæ, Abh. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 220, x, 24.  
**ovalis**, Roemer. Neues Jahrbuch, 1838, 393, iii, 73.  
**oviformis**, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 165, xvii (xxv), 2a, b.  
**oxfordiana**, Deecke. Mém. Soc. Emul. Montbéliard, xvi, 1886, [18], i, 32, 32a.  
**perforata** [W. & J.]. Brown, Illustr. Recent Conch. Gt. Brit. ed. 2, 1844, 2, lvi, 26. [*Serpula*, 1798.]  
**planciana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 173, ix, 17-19; also in Spanish, 1840, 154, same pl. and fig.  
**plicata**, Terquem. Mém. Soc. géol. France, [3], i, 1878, 61, vi (xi), 2a, b.  
**porvaensis**, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 76, xiii, 3; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 21, same pl. and fig.  
**propinqua**, Terquem. Mém. Soc. géol. France, [3], ii, 1882, 168, xvii (xxv), 19a-e.  
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 ——— ———— Brady, Report Challenger, 1884, 342, xl, 13-16.  
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 ——— Haeusler, Neues Jahrbuch, Beil. iv, Heft 1, 1885, 29, iii, 32.  
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- TROCHULINA**,\* d'Orbigny, 1826. Ann. Sci. Nat. vii, 1826, 274.  
 ——— complanata, d'Orbigny. Ann. Sci. Nat. vii, 1826, 274, No. 37. [v. *Rotalina*.]  
 ——— ferussaci, d'Orbigny. Ann. Sci. Nat. vii, 1826, 274, No. 38.  
 ——— turbo, d'Orbigny. Ann. Sci. Nat. vii, 1826, 274, No. 39.
- TRUNCATULINA**, d'Orbigny, 1826. Ann. Sci. Nat. vii, 1826, 279; Brady, Report Challenger, 1884, 658.  
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 ——— agglomerata, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 125, xvi, 3; (and Mém. Soc. Dunkerquoise).  
 ——— akneriana (d'O.). Brady, Report Challenger, 1884, 663, xciv, 8a, b, c. [*Rotalina*, 1846.]  
 ——— ———— Toutkowski, Zap. Kievsk. Obshch. Est. ix, 1888, 44, vi, 1 and 2.  
 ——— alternans, Costa. Atti Accad. Pontaniana, vii, fas. 2, 1856, 250, xx, 12A, B, C. [*Iobatula* in expl. to plate.]  
 ——— amphisyliensis, Andreæ. Abh. geol. Speciaalkarte Elsass-Lothr. ii, Heft 3, 1884, 255, x, 30.

\* Given as a subgenus of *Rotalia*.

- TRUNCATULINA** *arabica*, Ehr. Abhandl. k. Ak. Wiss. Berlin, 1838, 135.  
 ——— *ariminensis*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 279, No. 7.  
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 ——— ——— ——— Brown, Ann. Mag. Nat. Hist. [2], XII, 1853, 241, ix, 9a, b.  
 ——— *boueana*, d'Orbigny. Foram. Fossiles Vienne, 1846, 169, ix, 24–26. [v.  
     *Pulvinulina*.]  
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     ix, 2a, b; (and Mém. Soc. Dunkerquoise).  
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     iii, 41.  
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     110, i, 15.  
 ——— ——— ——— Terrigi, Mem. R. Acc. Lincei, [4], VI, 1889, 117, vii, 10.  
 ——— *budensis*, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876),  
     65, viii, 6; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875  
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 ——— *candei*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Fora-  
     minifères," 88, iii, 6–8; also in Spanish, 1840, 98, same pl. and fig.  
 ——— *carbonifera*, Brady. Carbonif. Foram., Pal. Soc. XXX, 1876, 138, vi, 10.  
 ——— *carinata*, Terq. Mém. Soc. géol. France, [3], II, 1882, 94, x (xvii), 1a–c  
     and 2.  
 ——— *colligera*, Schwager. Palaeontographica, XXX, 1883, Pal. Theil, 126,  
     xxix (6), 14a–d.  
 ——— *communis*, Roemer. Neues Jahrbuch, 1838, 389, iii, 56.  
 ——— ——— ——— Reuss, Sitz. k. Ak. Wiss. Wien, XVIII, 1856, 242, v, 56.  
 ——— *compressa*, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875  
     (1876), 62, viii, 8; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV,  
     1875 (1881), 72, same pl. and fig.  
 ——— *concinna*, Reuss. Zeitschr. deutsch. geol. Ges. VII, 1855, 288, xi, 4.  
 ——— *conica*, Hantken. A magy. kir. földt. int. évkönyve, I, 1871, 130, ii, 13a,  
     b, c; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, 136, same  
     pl. and fig.  
 ——— *conectata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 279, No. 4.  
 ——— *convexa*, Reuss. Haidinger's Naturw. Abh. IV, Abth. 1, 1851, 36, iii, 4.  
 ——— n. sp. ind. aff. *coronata* (P. & J.). Uhlig, Jahrb. k. k. geol. Reichs-  
     anstalt, XXXVI, 1886, 180, iii, 1. [*Anomalina*, 1857.]  
 ——— *costata*, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876),  
     63, ix, 2; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875  
     (1881), 73, same pl. and fig.  
 ——— *cristata*, Gumbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. X, 1868 (1870),  
     660, ii, 105a, b.  
 ——— ——— (?) Uhlig, Jahrb. k. k. geol. Reichsanstalt, XXXVI, 1886,  
     179, ii, 23 and 24.  
 ——— *cryptomphala* (Rss.). Hantken, A magy. kir. földt. int. évkönyve,  
     IV, 1875 (1876), 64, ix, 1; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt,  
     IV, 1875 (1881), 73, same pl. and fig. [*Rotalina*, 1850.]  
 ——— *cultus* (Parker & Jones). Brady, Report Challenger, 1884, 668, xcvi,  
     3a, b, c. [*Planorbolina*, 1865.]  
 ——— *dekayi*, Reuss. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862),  
     388, vii, 6a–b.  
 ——— *depressa*, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Forami-  
     nifères," 39, vi, 4–6.

- TRUNCATULINA disjuncta**, Terq. Mém. Soc. géol. France, [3], II, 1882, 95, x (xviii), 3a-c.
- **dispars**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 38, v, 25-27.
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- **Hantken**, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 61, viii, 5; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 71, same pl. and fig.
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- **Toutkowsky**, Zap. Kievsk. Obshch. Est. IX, 1888, 48, vii, 2a-c.
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- **v. lœvigata**, Howchin. Trans. R. Soc. S. Austral. XII, 1889, 13, i, 8.
- **elegantissima**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 91, ix, 7a, b.
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- **Terq.**, Mém. Soc. géol. France, [3], II, 1882, 93, ix (xvii), 26a, b.
- **evoluta**, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 65, x, 1; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 75, same pl. and fig. [*T. lobata*, in deser. of plate.]
- **falcata**, Reuss. Sitz. k. Ak. Wiss. Wien, LIX, Abth. 1, 1869, 461, ii, 1a-c.
- **flos**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 182, iv, 15.
- **formosa**, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 149, XIV, 6a, b [error for 5].
- **globulosa**, Terquem. Bull. Soc. zool. Fr. XI, 1886, 333, xi, 12 and 13.
- **granosa**, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 65, x, 2; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 74, same pl. and fig.
- **grosserugosa**, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. X, 1868 (1870), 660, ii, 104a, b. [v. *Anomalina*.]
- **Hantken**, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 64, ix, 6; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 74, same pl. and fig.
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- **haidingeri** (d'O.). Brady, Report Challenger, 1884, 663, xev, 7a, b, c. [*Rotalina*, 1846.]
- **Toutkowsky**, Zap. Kievsk. Obshch. Est. IX, 1888, 50, viii, 3a-c.
- **Terrigi**, Mem. R. Acc. Lincei, [4], VI, 1889, 118, viii, 7-9.
- **horrida**, Karrer. Jahrb. k. k. geol. Reichsanstalt, XX, 1870, 183, ii, 14.
- **humilis**, Brady. Report Challenger, 1884, 665, xciv, 7a, b, c.
- **Terrigi**, Mem. R. Acc. Lincei, [4], VI, 1889, 117, vii, 11.
- n. sp. aff. **humilis**, Brady. Uhlig, Jahrb. k. k. geol. Reichsanstalt, XXXVI, 1886, 181, iii, 2.
- **inæqualis**, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 182, iv, 14.
- **infractuosa**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 279, No. 3.

- TRUNCATULINA** *infractuosa*, d'Orbigny. *Terq., Mém. Soc. géol. France*, [3], i, 1878, 22, ii (vii), 1a-2b.
- *innormalis*, Costa. *Atti Accad. Pontaniana*, vii, fas. 2, 1856, not descr., xxi, 11.
- *insignis*, Reuss. *Sitz. k. Ak. Wiss. Wien*, lix, Abth. 1, 1869, 461, ii, 2a-c.
- *interrupta*, Terquem. *Ess. Anim. Plage Dunkerque*, pt. 3, 1881, 127, xvi, 8a, b, c; (and *Mém. Soc. Dunkerquoise*).
- *involuta*, Rss. *Franzenau, Math. termész. értesítő*, vii, 1889, 263, v, 4. [*Rotalina*, 1851.]
- *kallomphala*, Gümbel. *Abh. m-ph. Cl. k.-bayer. Ak. Wiss.* x, 1868 (1870), 659, ii, 102a, b, c.
- *karreri*, Seguenza. *Atti R. Acc. Lincei*, [3], vi, 1880, 150, xiv, 7a, b [error for 6].
- *kreibensis*, Toutkowski. *Zap. Kievsk. Obshch. Est.* ix, 1888, 52, viii, 2a-c.
- *laciniosa*, Karrer. *Sitz. k. Ak. Wiss. Wien*, lviii, Abth. 1, 1868, 183, v, 1.
- *levigata*, Roem. *Verst. norddeutsch. Kreide*, 1840-41, 97, xv, 23.
- — — — — Reuss, *Verstein. böhm. Kreide*, 1845-46, i, 37, viii, 71 (pessima); xiii, 47.
- *levitis*, Ehr. *Bericht k. preuss. Ak. Wiss. Berlin*, 1845, 377.
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- *limbata*, Seguenza. *Atti R. Acc. Lincei*, [3], vi, 1880, 64, vii, 7.
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- — — — — Dawson, *Canad. Nat.* v, 1860, 191, fig. 5. [= *T. lobata*.]
- *lobata*, Hantken. *A magy. kir. földt. int. évkönyve*, iv, 1875 (1876), not descr., x, 1; and *Mitth. a. d. Jahrb. k. ungar. geol. Anstalt*, iv, 1875 (1881), same pl. and fig. [See *T. evoluta* and *Pulvin. lobata*.]
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 ——— magnifica, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., xiv, 3.  
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 ——— osnabrugensis, v. Muenst. Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 63, ix, 4; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 73, same pl. & fig. [*Planulina*, 1838.]  
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 ——— papillata, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 183, v, 2.  
 ——— præcincta (Karr.). Brady, Report Challenger, 1884, 667, xciv, 1-3. [*Rotalia*, 1868.]

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- *propinqua* (Rss.). Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 62, viii, 9; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 71, same pl. and fig. [*Rotalia*, 1856.]
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- *pygmæa*, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), n. d., x, 8; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), same pl. and fig. [See *Pulvinulina*.]
- *[pygmæa]* — Brady, Report Challenger, 1884, 666, xciv, 9 and 10.
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- — — — Terrigi, Mem. R. Acc. Lincei, [4], VI, 1889, 117, viii, 1–3. See *Hammonia balanus*, etc.
- *regularis*, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 184, v, 3.
- *reticulata* (Czj.). Brady, Report Challenger, 1884, 669, xvi, 5–8. [*Rotalina*, 1848.]
- — — — Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 228, xlv, 23 and 24.
- *rhodiensis*, Terq. Mém. Soc. géol. France, [3], I, 1878, 21, i (vi), 26a–c.
- *robertsoniana*, Brady. Quart. Journ. Micr. Sci. XXI, 1881, 65.
- — — — Brady, Report Challenger, 1884, 664, xciv, 4a, b, c.
- *rosea* (d'O.). Brady, Report Challenger, 1884, 667, xvi, 1a, b, c. [*Rotalia*, 1826.]
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- *rostrata*, Brady. Quart. Journ. Micr. Sci. XXI, 1881, 65.
- — — — Brady, Report Challenger, 1884, 668, xciv, 6a, b, c.
- *rotula*, Terquem. Ess. Anim. Plage Dunkerque, pt. 2, 1876, 74, ix, 1a, b; (and Mém. Soc. Dunkerquoise).
- *scarenaensis*, Hantk. Math. Nat. Ber. Ungarn, II, 1884, 151, ii, 6a–c.
- *schreibersii*, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 149, etc. [= *Pulvinulina*.]
- *solidula*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, n. d., x, 9.
- *soluta*, Brady. Quart. Journ. Micr. Sci. XXI, 1881, 66.
- — — — Brady, Report Challenger, 1884, 670, xcvi, 4a, b, c.
- *spirata*, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 91, and 149, xiv, 4.

- TRUNCATULINA** *stella*, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 182, iv, 13.  
 —— *sublævis*, v. Hagenow. Neues Jahrb. 1842, 571.  
 —— *sublobatula*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 659, ii, 103a, b, c.  
 —— —— Uhlig, Jahrb. k. k. geol. Reichsanstalt, XXXVI, 1886, 180, ii, 22.  
 —— *tenella*, Reuss. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 477, v, 6a-c.  
 —— *tenera*, Brady. Report Challenger, 1884, 665, xciv, 11a, b, c.  
 —— *tenuimargo*, Brady. Report Challenger, 1884, 662, xciii, 2 and 3.  
 —— *tenuissima*, Reuss. Sitz. k. Ak. Wiss. Wien, XLIV, Abth. 1, 1861 (1862), 317, iii, 2a-c.  
 —— *trochoidea*, Karrer. In von Drasche, Frag. Geol. Luzon, 1878, 97, v, 25; and Bol. Com. Map. geol. Espaň. VII, 1880, 281F, 11.  
 —— *tuberosa* (F. & M.). P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 177, xii, 138. [See *T. variabilis*, d'O.] [*Nautilus*, 1798].  
 —— *tuberculata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 279, No. 1.  
 —— —— d'Orbigny, Modèles, 1826, No. 37.  
 —— —— P., J., & B. [d'O., Modèles, No. 37], Ann. Mag. Nat. Hist. [3], XVI, 1865, 25, ii, 77. [= *T. lobatula*, W. & J.]  
 —— —— [Sold.]. Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.  
 —— —— = *T. lobatula* (W. & J.); see *Hammoniae tuberculatae*.  
 —— *tumescens*, Egger. Neues Jahrbuch, 1857, 279, ix, 14-16.  
 —— *tumidula*, Brady. Report Challenger, 1884, 666, xciv, 8a, b, c.  
 —— *ungeriana*, d'Orb. Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 62, viii, 7; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 72, same pl. and fig. [*Rotalina*, 1846].  
 —— —— Brady, Report Challenger, 1884, 664, xciv, 9a, b, c, d.  
 —— *[ungherana*, d'O.]. Hantken, Ertek. Termesz. köreböl, XIII, No. 1, 1883, 12; and Math. Nat. Ber. Ungarn, II, 1884, 133.  
 —— —— Agassiz, Three Cruises "Blake," II, 1888, 169, fig. 518.  
 —— —— Terrigi, Mem. R. Acc. Lincei, [4], VI, 1889, 117, viii, 4.  
 —— *variabilis*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 279, No. 8.  
 —— —— Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 135, ii, 29.  
 —— —— Reuss, Denkschr. k. Ak. Wiss. Wien, XXIII, 1864, 10, i, 15.  
 —— —— Mackie, Science Gossip, 1867, 131, fig. 139.  
 —— —— Terquem, Ess. Anim. Plage Dunkerque, pt. 2, 1876, 75, ix, 3a, b; (and Mém. Soc. Dunkerquoise).  
 —— —— Terq., Mém. Soc. géol. France, [3], I, 1878, 20, i (vi), 18a-25.  
 —— —— **v. obscura**, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 127, xvi, 7a, b; (and Mém. Soc. Dunkerquoise).  
 —— —— Terq., Mém. Soc. géol. France, [3], II, 1882, 92, ix (xvii), 22-25.  
 —— —— Brady, Report Challenger, 1884, 661, xciii, 6 and 7.  
 —— —— Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 227, xlv, 17.  
 —— —— Terrigi, Mem. R. Acc. Lincei, [4], VI, 1889, 116, vii, 8, 9.  
 —— —— = *T. tuberosa* (F. & M.); see *Testae hammoniformes*.  
 —— *varians*, Reuss. Sitz. k. Ak. Wiss. Wien, XLII, 1860 (1861), 359, ii, 12a-c.  
 —— *vermiculata*, d'Orbigny. Voyage Amér. Mérid. 1839, V, pt. 5, "Foraminifères," 39, vi, 1-3.  
 —— *vortex*, Seguenza. Atti R. Acc. Lincei, [3], VI, 1880, 91, ix, 8a, b.  
 —— *weinkauffi* (Rss.). Andreea, Abh. geol. Specialkarte, Elsass-Lothr. II, Heft 3, 1884, 218, viii, 11. [*Rosalina*, 1863.]

- TRUNCATULINA** *wuellerstorfi* (Schw.). Brady, Report Challenger, 1848, 662, xciii, 8 and 9. [*Anomalina*, 1866.]
- Uhlig, Jahrb. k. k. geol. Reichsanstalt, xxxvi, 1886, 174, fig. 3.
- Schroeter, Neue Litt. u. Beytr. III, 1786, iii, f. 23.
- Pictet, Traité de Paléont. IV, 1846, 233, xii, 17.
- Williamson, Mem. Lit. Phil. Soc. Manchester, [2], VIII, 1848, 46, pl. 35.
- Schultze, Organismus Polythal. 1854, 27, figures *a*, *b*. [Showing young.]
- Wright, Ann. Mag. Nat. Hist. [3], VII, 1861, 360, xviii, 6. [Showing reproductive elements.]
- J. G. Wood, Common Objects Micro. 1867, 121, xii, 14.
- Von Schlicht, Foram. Septar. Pietzpuhl, 1870, plates xxi and xxii.
- Terquem, Cinq. Mém. Foram. Oolithique, 1883, 370, xli, 5 and 6.
- Terquem, Mém. Soc. géol. France, [3], IV, 1886, 57, vi, 26*a*, *b*, *c*.
- Terrigi, Mem. R. Acc. Lincei, [4], VI, 1889, 118, viii, 6.  
see *Nautilus*.
- Truntulina**, Mackie, 1867; error for *Truncatulina*.
- Tubularia**, Bronn, 1853–56; misprint for *Fabularia*.
- Tubulus anulatus**. Soldani, Testac. I, pt. 1, 1789, 33, pl. 27*xx*, *yy*. [*Nod. orthocera*, d'Orbigny, Ann. Sci. Nat. 1826, vii, 252, 8.]
- Tubulus marinus irregularites intortus vermicularis**. Gaultieri, Index Testarum, 1742, pl. xix, fig. S. [= *Miliolina*.]
- TURBINULINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 275. [Given as a subgenus of *Rotalia*.]
- *ammoniformis*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 276, No. 55.
- *becarii*, Turt. Idem, 275, No. 42.
- *bulloides*, d'Orbigny. Idem, 275, No. 51.
- *corallinarum*, d'Orbigny. Idem, 275, No. 48.
- *crassa*, d'Orbigny. Idem, 275, No. 41.
- *elegans*, d'Orbigny. Idem, 276, No. 54.
- *gaimardi*, d'Orbigny. Idem, 275, No. 46.
- *gaudichaudii*, d'Orbigny. Idem, 275, No. 47.
- *italica*, d'Orbigny. Idem, 275, No. 43. [v. *Rosalina* and *Rotalia*.]
- *inflata*, d'Orbigny. Idem, 275, No. 45.
- *lævis*, d'Orbigny. Idem, 276, No. 52.
- *maremini*, d'Orbigny. Idem, 275, No. 44.
- *semimarginata*, d'Orbigny. Idem, 276, No. 53. [v. *Rotalina*.]
- *siennensis*, d'Orbigny. Idem, 275, No. 50. [v. *Rosalina*; and *Rotalia*.]
- *tortuosa*, Fischer. Idem, 275, No. 40. [See *Streblus*.]
- *umbilicata*, d'Orbigny. Idem, No. 49.
- TURRILINA**, Andreæ, 1884. Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 212.
- *alsatica*, Andreæ. Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 212, viii, 18 and 19. [*Rotalia alsatica*, N. Jahrb., 1882, q. v.]
- U. lineata**, Conrad. Proc. Ac. Nat. Sci. Philad. No. 2, 1865, 73. [Headed "Triloculina," therefore *U* is probably a misprint for *T*.]
- U. saxorum** testa majuscula lenticulari sinistro latere medio tumido, articulis ultimis in latere dextro prominulis. In saxis Insulæ Rügen cretaceis. Ehrenberg, Abhandl. k. preuss. Ak. Wiss. Berlin, 1838, 132. [No genus is given.]
- Umbilicum parvulum marinum eodem loco reiectum qui lapidem numismaticum refert**. F. Colonna, Phytob., 1744, Appendix, pl. xxxviii, f. F. [= *Orbitolites complanatus*.]
- UNCINULINA**, Terquem, 1862. Mem. Ac. Imp. Metz, XLII, 1862, 433.
- =? Spicules of *Astrophyton*; see Terquem et Jourdy, Mém. Soc. géol. France, [2], IX, 1869, 145, xv, 12–14.
- *polymorpha*, Terq. Mem. Ac. Imp. Metz, XLII, 1862, 433, v, 7a–k.
- UNILOCULINA**, d'Orbigny, 1846. Foram. Foss. Vienne, 1846, 261. [=young stage of *Miliolina*.]

- UNILOCULINA indica**, d'Orbigny. Foram. Fossiles Vienne, 1846, 261, xxi, 53 and 54.  
 ——— Reuss' Models, No. 82, 1865 (Catal., No. 16, 1861).  
 [= ? young of a striped *Quinqueloc.*]  
 ——— Jones, in Microgr. Dict. ed. 4, 1883, 791, xxiii, 2.  
 ——— Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1060, lxxxvii, 7.  
 ——— **orbignyi**, Terquem. Ess. Anim. Plage Dunkerque, pt. 3, 1881, 132, xvii, 8a, b; (and Mém. Soc. Dunkerquoise).  
 ——— Parker, Trans. Micr. Soc. London, n. s. vi, 1858, 54, fig.  
**URNULINA**, Gruber, 1884. Nova Acta k. Leop.-Carol. Deutsch. Ak. Nat. XLVI, 1884, 496.  
 ——— **difflugiaformis**, Gruber. Nova Acta k. Leop.-Carol. Deutsch. Ak. Nat. XLVI, 1884, 496, viii, 18.  
**UTERIA**, Michelin, 1845. Iconogr. Zoophyt. 1840-47, 177; see Gümbel, Abb. k.-bayer. Ak. Wiss. München, XI, 1871 (1874), 231, etc. plates. [A genus of calcareous algae; v. Solms-Laubach, Einleit. Palaeophytologie, 1887, 38, etc.]  
**UVELLINA**, Ehrenberg, 1838. Abb. k. Ak. Wiss. Berlin, 1838 (1840), Tab. 1. [A family group name.]  
**UVIGERINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 268; Brady, Report Challenger, 1884, 573.  
 ——— **abbreviata**, Terq. Mém. Soc. géol. France, [3], II, 1882, 120, xii (xx), 33.  
 ——— **aculeata**, d'Orbigny. Foram. Fossiles Vienne, 1846, 191, xi, 27 and 28.  
 ——— Brady, Report Challenger, 1884, 578, lxxv, 1-3.  
 ——— **angulosa**, Williamson. Recent British Foram. 1858, 67, v, 140.  
 ——— Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 200, vii, 31.  
 ——— Brady, Report Challenger, 1884, 576, lxxiv, 15-18.  
 ——— v. **spinipes**, Brady. Report Challenger, 1884, 577, lxxiv, 19 and 20. [*U. spinipes*, 1881.]  
 ——— See *U. pygmaea*, d'O.  
 ——— **asperula**, Czjzek. Haidinger's Naturw. Abb. II, 1848, 146, xiii, 14 and 15.  
 ——— Reuss, Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 93, iv, 6a, b, 7, 8, and 9.  
 ——— Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXV, 1883, 185, ii, 26.  
 ——— Brady, Report Challenger, 1884, 578, lxxv, 6-8.  
 ——— v. **ampullacea**, Brady. Report Challenger, 1884, 579, lxxv, 10 and 11.  
 ——— v. **auberiana**, d'O. Brady, Report Challenger, 1884, 579, lxxv, 9. [*U. auberiana*, 1839.]  
 ——— Sherborn & Chapman, Journ. R. Micr. Soc. [2], VI, 1886, 755, xvi, 7.  
 ——— Anon., Sci. News, 4 May, 1888, 413, fig. 15.  
 ——— Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 225, xlv, 4 and 5.  
 ——— Toutkowsky, Zap. Kievsk. Obshch. Est. IX, 1888, 41, ii, 3a, b, c.  
 ——— **aueriana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 106, ii, 23 and 24; also in Spanish, 1840, 110, same pl. and fig. [v. also *U. asperula*, var.]  
 ——— Goës, K. Svenska Vet.-Akad. Handl. XIX, No. 4, 1882, 60, iv, 71-75.  
 ——— **baccalis**, Schwager. Boll. R. Com. geol. Ital. IX, 1878, 523, i, 9.  
 ——— **bifurcata**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 53, vii, 17.

- UVIGERINA** bononiensis, Fornasini. Boll. Soc. geol. Ital. vii, 1888, 48, iii, 12, 12a.
- ? — borealis, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1841, 429.
- ? — — — Ehr., Mikrogeologie, 1854, xxxv, A, xx, 9. [= ? ; may be *Truncatulina*.]
- brunnensis, Karrer. Abh. k. k. geol. Reichs. ix, 1877, 385, xvi, b, 49.
- — — Brady, Report Challenger, 1884, 577, lxxv, 4 and 5.
- canariensis, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, ii, pt 2, "Foraminifères," 138, i, 25–27.
- — — Brady, Report Challenger, 1884, 573, lxxiv, 1–3.
- — — Woodward & Thomas, 13 Ann. Rep. Geol. N. H. Survey Minnesota, for 1884 (1885), 171, iv, 37.
- cochlearis, Karrer. Abh. k. k. geol. Reichs. ix, 1877, 385, xvi, b, 48.
- crassicostata, Schwager. Novara-Exped., Geol. Theil II, 1866, 248, vii, 94.
- cibrosa, Ehrenberg. Bericht. k. preuss. Ak. Wiss. Berlin, 1845, 377.
- cristata, Marsson. Mittl. Nat. Ver. Neu-Vorpommern u. Rügen, Jahrg. x, 1878, 150, iii, 20a, b, c.
- decora, Ehr. Bericht. k. preuss. Ak. Wiss. Berlin, 1845, 377.
- (*Sagrina*) dimorpha, Park. & Jones. Phil. Trans. 1865, 364, xviii, 18. [v. also *Sagrina*.]
- — — Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 62, iv, 77–81.
- eocæna, Gumbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 645, ii, 78.
- farinosa, Hantken. A magy. kir. földt. int. évkönyve, iv, 1875 (1876), 53, vii, 6; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, iv, 1875 (1881), 62, same pl. and fig.
- fragilis, Terquem. Mém. Soc. géol. France, [3], II, 1882, 120, xii (xx), 30.
- gemmæformis, Schwager. Novara-Exped., Geol. Theil II, 1866, 247, vii, 92.
- globosa, Karrer. In von Drasche, Frag. Geol. Luzon, 1878, 94, v, 20; and Bol. Com. Map. geol. Espaň. VII, 1880, 277F, 6.
- gracilis, Reuss. Zeitschr. deutsch. geol. Ges. III, 1851, 77, v, 39.
- hispida, Schwager. Novara-Exped., Geol. Theil II, 1866, 249, vii, 95.
- interrupta, Brady. Q. Journ. Mier. Sci. xix, 1879, 274, viii, 17 and 18.
- — — Brady, Report Challenger, 1884, 580, lxxv, 12–14.
- irregularis, Brady. Nat. Hist. Trans. Northumb. I, 1865–67 (1867), 100, xii, 5.
- — — Soldani, Testac. II, 1798, 18, pl. 4H, resembles this form; see P., J., & B., Ann. Mag. 1871, 171.
- lævis, Ehrenberg. Bericht k. preuss. Ak. Wiss. Berlin, 1845, 377.
- (*Heterostomella*) lævis, P. & J. Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 61, iv, 76. [v. *Heterost. aculeata*, *lævis*, P. & J., 1872.]
- multistriata, Hantken. A magy. kir. földt. int. évkönyve, I, 1871, 129, ii, 14; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, 135, same pl. and fig.
- — — Hantken, Kohlenflötze, etc. ungar. Krone, 1878 (transl. from Magyar), 217, fig. 30.
- muralis, Terquem. Mém. Soc. géol. France, [3], II, 1882, 119, xii (xx), 26–29.
- nitidula, Schwager. Novara-Exped., Geol. Theil II, 1866, 248, vii, 93.
- nodosa, d'Orbigny. Ann. Sci. Nat. VII, 1826, 269, No. 3. [v. *Sagrina*.]
- (*Sagrina*) — Parker & Jones, Phil. Trans. 1865, 363, xviii, 15.
- — — = *U. pygmæa*, d'O.; see *Polymorpha pineiformia*.

- UVIGERINA nodosa**, var.  $\beta$ , d'Orbigny. = *U. pygmaea*, d'O.; see *Testae pineiformes*, etc.
- *nuda*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 120, xii (xx), 31.
  - *orbignyana*, Czjzek. Haidinger's Naturw. Abh II, 1848, 147, xiii, 16 and 17.
  - *parkeri*, Karrer. Abh. k. k. geol. Reichs. IX, 1877, 385, xvi, b, 50.
  - *paucicosta*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 268, xxii, 7A.
  - *pigmea*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 269, No. 2. [Error for *pygmaea*.]
  - *plicata*, Ehr. Bericht k. preuss. Ak. Wiss. Berlin, 1854, 249.
  - *orrecta*, Brady. Q. Journ. Micr. Sci. XIX, 1879, 274, viii, 15 and 16.
  - — — — — Brady, Report Challenger, 1884, 577, lxxiv, 21–23.
  - *proboscidea*, Schwager. Novara-Exped., Geol. Theil II, 1866, 250, vii, 96.
  - *pygmaea*, d'Orb. Ann. Sci. Nat. VII, 1826, 269, xii, 8 and 9.
  - — — — — D'Orbigny, Modèles, No. 67, 1826.
  - — — — — Cuvier, Règne Animal, 1836–46, IX (pls. x), 34, xv, 4.
  - — — — — Smedley, Ency. Metrop. 1845, undescr., pl. "Mollusca" ?, 28.
  - — — — — Reuss, in Geinitz, Grundr. Verstein. 1845–46, 672, xxiv, 62.
  - — — — — D'Orbigny, Foram. Fossiles Vienne, 1846, 190, xi, 25 and 26. [*U. pygmaea* on plate.]
  - — — — — Brönn, Lethaea Geognostica, ed. 3, III, 1853–56, 230, xxxv<sup>2</sup>, 22a, b.
  - [— — — — —] Macdonald, Ann. Mag. Nat. Hist. [2], XX, 1857, 193, v, 6.
  - [— — — — —] Macdonald, Ann. Mag. Nat. Hist. [2], XX, 1857, 193, vi, 21. [Aecalete.]
  - — — — — Parker & Jones, Ann. Mag. Nat. Hist. [2], XIX, 1857, 297, xi, 41–43.
  - — — — — Williamson, Recent British Foram. 1858, 66, v, 138, 139.
  - [pygmaea] — Mackie, Recreative Science, I, 1859, 148, fig. 25.
  - — — — — P., J., & B. [d'O., Modèles, No. 67], Ann. Mag. Nat. Hist. [3], XVI, 1865, 29, ii, 54.
  - — — — — Reuss' Models, No. 93, 1865 (Catal., No. 66, 1861).
  - — — — — Parker & Jones, Phil. Trans. 1865, 363, xvii, 65a, b; xiii, 53–57.
  - — — — — var. *angulosa*, Will. Parker & Jones, Phil. Trans. 1865, 364, xiii, 58; xvii, 66a, b.
  - — — — — Mackie, Science Gossip, 1867, 131, fig. 138.
  - — — — — P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 171, xi, 109.
  - — — — — Idem, 171, xi, 110. [See *U. nodosa*, d'O.]
  - — — — — Idem, 171, xi, 111. [See *U. nodosa*, var.  $\beta$ .]
  - — — — — Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 52, vii, 4; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 62, same pl. and fig.
  - — — — — Zittel, Handbuch Palaeont. Abth. I, 1876, 86, fig. 23<sup>5</sup>.
  - — — — — Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 25, pl., 34.
  - — — — — Vine, Science Gossip, 1878, 52, fig. 34.
  - — — — — var. Brady, Ann. Mag. Nat. Hist. [5], I, 1878, 435, xx, 7a, b.
  - — — — — Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXIII, 1880, 184, i, 14 and 15.
  - — — — — Goës, K. Svenska Vet.-Akad. Handl. XIX, No. 4, 1882, 59, iv, 68–70.

- UVIGERINA** *pygmæa*, d'Orbigny. Terrigi, Atti Acc. Pont. Nuovi Lincei, xxxv, 1883, 184, ii, 25.  
 ——— Jones, in Microgr. Dict. ed. 4, 1883, 799, xxiii, 44.  
 ——— (cf.) ——— Schwager, Palaeontographica, xxx, 1883, Pal. Theil, 112, xxvii (4), 3 and 4.  
 ——— ——— Brady, Report Challenger, 1884, 575, lxxiv, 11 and 12; var. 13 and 14.  
 ——— ——— Hoernes, Elem. Palaeont. 1884, 29, fig. 20; French ed. 1886, same fig.  
 ——— ——— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 161, fig. Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1058, lxxxvi, 52.  
 ——— ——— Gümbel, Geol. Bayern, Th. I, Lief. 2, 1885, fig. 266<sup>17</sup>.  
 ——— ——— Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 224, xliv, 1 and 2.  
 ——— ——— See *Polymorpha pineiformia*, and *Nautili amphorarii*.  
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 ——— **striata**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 266, xv, 2A, C, [error for 3].  
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- VAGINULINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 257; Brady, Report Challenger, 1884, 529.
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 —— *cornu*, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 25, iii, 13.  
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 ——— ——— Ehr., Mikrogeologie, 1854, xxxii, ii, 8. [= *V. leguminiformis*, Batsch.]  
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? ——— elongata, Roemer. Verst. norddeutsch. Kreide, 1840-41, 96, xv, 14.  
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 ——— hoffmanni, Ehr. Mikrogeologie, 1854, xxvi, 7. [= *V. levigata*, Roem.]  
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 —— **incompta**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 45, iii, 5a, b.  
 —— **incrassata**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 52, iv, 9a, b.  
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 —— **lanceolata**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 25, iii, 12.  
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  - See *Orthocerata vaginalum*, etc.
  - leguminiformis** (Batsch). See *Nautilus (Orthoc.)*, 1791.
  - lens**, Costa. Mem. Acc. Sci. Napoli, II, 1855 (1857), 144, ii, 164, B.
  - liaistica**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 5, i, Turnerithon, 4.
  - ligata**, Reuss. Sitz. k. Ak. Wiss. Wien, I, Abth. 1, 1864 (1865), 457, i, 11.
  - linearis**, Ehrenberg. Mikrogeologie, 1854, xxix, 39. [= *Margin. ensis*, Reuss (Böh. Kreide, II, xiii, 27).]
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  - margulinoides**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 26, iii, 19.
  - metensis**, Terquem. Mém. Ac. Imp. Metz, XLIV, 1863, 394, viii, 2a, b.
  - minima**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 20, ii, Macrocephalus oolith, 4.
  - mosquensis**, Uhlig. Jahrb. k. k. geol. Reichs. XXXIII, 1883, 751, ix, 9.
  - neglecta**, Terquem. Six. Mém. Foram. Liás, 1866, 497, xx, 35.
  - nodulosa**, Ehrenberg. Mikrogeologie, 1854, xxvii, 4. [= *V. lœvigata*, Roem. var.]
  - notata**, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 203, ix, 3.
  - obscura**, Ehr. Mikrogeologie, 1854, xxvi, 27. [= *Virg. hemprichii*.]
  - oolithica**, Terq., var. **elongata**, Deecke. Abh. geol. Specialkarte Elsass-Lothr. IV, Heft 1, 1884, 32, i, 14. [*Dentalina*, 1870.]
  - orthonota**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 49, iv, 3a, b. [v. *Marginulina*.]
  - paradoxa**, Ehr. Mikrogeologie, 1854, xxvi, 26. [= *Virg. hemprichii*.]
  - parkinsoni**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 18, ii, Parkinsonithon, 7.
  - patens**, Brady. Report Challenger, 1884, 533, lxvii, 15 and 16.
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  - paucistriata**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 48, iii, 16a-c.
  - perfoliata**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 6, i, Turnerithon, 6.

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- **recta**, Karrer. Novara-Exped., Geol. Theil I, 1864, 74, xvi, 2.
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- **rotundata**, Ehrenberg. Mikrogeologie, 1854, xxxi, 7. [Near *V. marginata*, d'O.]
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- **schloenbachi**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 46, iii, 6a, b.
- **siblingensis**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 34, iv, Impressathon, 7.
- **simplex**, Terquem. Mém. Ac. Imp. Metz, XLIV, 1863, 394, viii, 1a, b.
- **sparsicostata**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 50, iv, 4a, b.
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- **striata**, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 182, xvi, 16a, A, B [error for 17].
- **striato-costata**, d'Orb., 1847. D'Orbigny, Prodrome de Paléont. II, 1850, 185, No. 751.
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- **strombecki**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. 1, 1862 (1863), 46, iii, 8.
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- **subulata**, Ehr. Mikrogeologie, 1854, xxiv, 10. [= *V. levigata*, Roem.]
- **Ehr.**, Abhandl. k. Ak. Wiss. Berlin, 1855, 160, i, x. [Glauc.]
- **sulcata**, Costa. Mem. Acc. Sci. Napoli, II, 1855 (1857), 145, ii, 17A, B.
- **tenuis**, Ehr. Mikrogeologie, 1854, xxvi, 8.
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**truncata**, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI, Abth. I, 1862 (1863), 47, iii, 9.  
 ——— Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 25, pl. 25.  
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 ——— Prestwich, Geology, 1888, II, 278, fig. 144a.  
 ——— Goës, Bihang K. Svenska Vet.-Ak. Handl. XV, 1889, ii, 30.  
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**vandenbroeckii**, Berthelin. Mém. Soc. géol. France, [3], II, 1880, 38, i (xxiv), 20a, b.  
**vicia**, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 34, iv, Impressathon, 8.  
**zeuschneri**, Reuss. Haidinger's Naturw. Abh. IV, Abth. I, 1851, 28, i, 19.  
 ——— Olszewski, Sprawozd. Kom. fizyj. Ak. Umiej. Krakowie, IX, 1875, 108, i, 7.  
 ——— Ehrenberg, Abhandl. k. Ak. Wiss. Berlin, 1855, 160, i, ix. [*Glauc.*]  
 ——— Parker & Jones, Ann. Mag. Nat. Hist. [2], XIX, 1857, 282, xi, 2.  
 ——— Ehrenberg, Monatsbericht k. preuss. Ak. Wiss. Berlin, 1858, 306 and 337, pl. i, fig. 1. [*Glauc.*]  
 ——— Carpenter, Parker, & Jones, Introd. Foram. 1862, xxii, 8B. [*Cast.*]  
 ——— sp. Schwager, Jahresh. Ver. vat. Nat. Württ. XXI, 1865, 112, iv, 10.  
 ——— fragments. Zwingli & Kübler, Foraminif. schweiz. Jura, 1870, 40, iv, Rheinfallschicht, 2, and 20, ii, Macrocephalus oolith, 5.  
 ——— sp. Sherborn & Chapman, Journ. R. Mier. Soc. 1889, 487, xi, 25.  
 ——— see *Nautilus*.
- VALVATINA**, Bornemann, 1855. Zeitschr. deutsch. geol. Ges. VII, 1855, 318.  
 [A gasteropod.]
- VALVULINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 270; Brady, Report Challenger, 1884, 391.
- allomorphinoides, Reuss. Sitz. k. Ak. Wiss. Wien, XL, 1860, 223, xi, 6a-c. [*v. Discorbina.*]  
 — alpina, Gümbel. Anleit. geol. Beob. Alpenreisen Zeitschr. D. & O. Alpenver., Beilage, 1878, 105, fig. 25, 17.  
 — angularis, Jones & Parker. Q. Journ. Geol. Soc. XVI, 1860, 305, No. 92. [= *Clavulina*, q. v.]  
 — auris, d'Orbigny. Voyage Amér. Mérid. 1839, V, pt. 5, "Foraminifères," 47, ii, 15-17.  
 — austriaca, d'Orbigny. Foram. Fossiles Vienne, 1846, 181, xi, 7 and 8.  
 — Jones, in Microgr. Dict. ed. 4, 1883, 800, xxiii, 20.  
 — bulloides, Brady. Carbonif. Foram., Pal. Soc. XXX, 1876, 89, iv, 12-15.  
 — clavulus (Lam.). Jones, Catal. Foss. Foram. B. M. 1882, 71. [*Nodosaria*, 1816.]  
 — columna-tortilis, d'Orbigny. Ann. Sci. Nat. VII, 1826, 270, No. 3.  
 — [columna-tordis, d'Orb.]. Guérin-Menéville's Cuvier, Iconographie, Mollusques, 1829-43, 9, ii, 14. [*Columna-torilis* on plate.]  
 — [columna-torilis] Cuvier, Animal Kingdom, Henderson's ed. III, 1834 (pls. 1837), 18, iii, 14.  
 — Terq., Mém. Soc. géol. France, [3], II, 1882, 103, xi (xix), 8.  
 — conica, Parker & Jones. Brady, Report Challenger, 1884, 392, xlvi, 15 and 16. [*V. triangularis*, var. 1865.]  
 — Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 220, xli, 21; xlvi, 16 and 17.

- VALVULINA cordiformis**, Costa. Atti Accad. Pontaniana, vii, fas. 2, 1856, 262, xxi, 104, B. [*v. Pulvinulina*.]
- **cornu**, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 135.
- **decurrens**, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 87, iii, 17 and 18.
- **deformis**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 271, No. 8.
- **excavata**, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, ii, pt. 2, "Foraminifères," 137, i, 43–45.
- **fusca** (Will.). Brady, Report Challenger, 1884, 392, xlix, 13 and 14. [*Rotalina*, 1858.]
- **gervillii**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 271, No. 7.
- **gibbosa** — Mém. Soc. géol. France, [1], iv, 1840, 38, iv, 1 and 2; Facsimile in Science Gossip, 1870, 156, fig. 141.
- **[gibba]** — Reuss, in Geinitz, Grundr. Verstein. 1845–46, 671, xxiv, 58.
- **globularis**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 270, No. 6.
- — — — Terq., Mém. Soc. géol. France, [3], ii, 1882, 102, xi (xix), 6a, b.
- **globularis**, v. Muenster. Roemer, Neues Jahrbuch, 1838, 387, iii, 42b, c.
- **ignota**, Defr. D'Orbigny, Ann. Sci. Nat. vii, 1826, 270, No. 5.
- **inæqualis**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 48, vii, 10–12. [*v. Discorbina*.]
- **inflata**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 48, vii, 7–9.
- **irregularis**, Terq. Mém. Soc. géol. France, [3], ii, 1882, 103, xi (xix), 9a, b.
- **limbata**, Terq. Mém. Soc. géol. France, [3], ii, 1882, 102, xi (xix), 7a–c.
- **mixta**, P. & J. See Valvulina, Carp., Park., & Jones, Introd. 1862.
- **oblonga**, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, ii, pt. 2, "Foraminifères," 136, i, 40–42.
- **ovalis**, Terq. Mém. Soc. géol. France, [3], ii, 1882, 103, xi (xix), 10a, b.
- **oviedoiana**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 103, ii, 21 and 22; also in Spanish, 1840, 108, same pl. and fig. [*v. oviedoana* on plate.]
- **palæotrochus**, Ehr. Brady, Carbonif. Foram., Pal. Soc. xxx, 1876, 83, iv, 1–4. [*Textilaria*, 1854.]
- — — — **v. compressa**, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 85, iv, 5a, b.
- — — — [Br.]. Nicholson, Manual Palaeont. 1879, i, 112, fig. 21C, D.
- — — — Roemer, Lethaea Geognostica, Th. 1, Lief. 1, 1880, 267, fig. 42.
- **parisiensis** (d'Orb.). P., J., & B., Ann. Mag. Nat. Hist. [3], xvi, 1865, 29 and 35, pl. 1, f. 26. [= *Clavulina*, q. v.]
- **parvula**, v. Muenster. Roemer, Neues Jahrbuch, 1838, 387, iii, 41b, c.
- **pileolus**, d'Orbigny. Voyage Amér. Mérid. 1839, v, pt. 5, "Foraminifères," 47, i, 15–17. [*v. Discorbina*.]
- **plicata**, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 88, iv, 10 and 11.
- **pupa**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 270, No. 2.
- — — — Terq., Mém. Soc. géol. France, [3], ii, 1882, 101, xi (xix), 5.
- **quadribullata**, v. Hagenow. Neues Jahrb. f. Min. 1842, 570.
- **rawackensis**, d'Orbigny. Ann. Sci. Nat. vii, 1826, 270, No. 4.
- **rudis**, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 90, iii, 19 and 20.
- **spicula**, Reuss. Geogn. Skizze Böhmen, ii, 1844, pt. 1, 214.
- — — — Reuss, Verstein. böhm. Kreide, 1845–46, i, 37, xiii, 69.

- VALVULINA** triangularis, d'Orbigny. Ann. Sci. Nat. vii, 1826, 270, No. 1.  
 ——— ——— D'Orbigny, Modèles, No. 25, 1826.  
 ——— ——— Guérin-Méneville's Cuvier, Iconographie, Mollusques, 1829-43, 9, ii, 15.  
 ——— ——— Cuvier, Animal Kingdom, Henderson's ed. III, 1834 (pls. 1837), 18, iii, 15.  
 ——— ——— Brönn, Lethaea Geognostica, ed. 2, 1837, 1134, xlvi, 22a, b, c.  
 ——— ——— Reuss, in Geinitz, Grundr. Verstein. 1845-46, 671, xxiv, 59.  
 ——— ——— Brönn, Lethaea Geognostica, ed. 3, III, 1853-56, 229, xlvi, 22a, b, c.  
 ——— ——— Parker & Jones, Ann. Mag. Nat. Hist. [2], xix, 1857, 295, xi, 15 and 16.  
 ——— ——— Carpenter, Parker, & Jones, Introd. Foram. 1862, xi, 15.  
 ——— ——— Reuss' Models, No. 95, 1865 (Catal., No. 5, 1861).  
 ——— ——— P., J., & B. [d'O., Modèles, No. 25], Ann. Mag. Nat. Hist. [3], xvi, 1865, 23, i, 24.  
 ——— ——— Bütschli, in Brönn, Klassen, etc. Thier-Reichs, 1880, 205, vii, 35.  
 ——— ——— Terq., Mém. Soc. géol. France, [3], II, 1882, 101, xi (xix), 4.  
 ——— ——— Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 86, xi, 387-389. [Forma *Clavulina*.]  
 ——— ——— var. *eocæna*, Gümb. Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 88, xi, 401-403. [v. *Clavulina*.]  
 ——— ——— var. *polyphragma*, Goës. K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 87, xi, 390-400.  
 ——— ——— var. *conica*, Parker & Jones. Phil. Trans. 1865, 406, xv, 27. [v. also *V. conica*.]  
 ——— ——— Agassiz, Three Cruises "Blake," II, 1888, 165, fig. 502.  
 ——— ——— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig.  
 ——— tribullata, v. Hagenow. Neues Jahrb. 1842, 570.  
 ——— youngi, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 86, iv, 6, 8, and 9.  
 ——— ——— v. *contraria*, Brady. Carbonif. Foram., Pal. Soc. xxx, 1876, 87, iv, 7a, b.  
 ——— Pictet, Traité de Paléont. IV, 1846, 234, xii, 19.  
 ——— Carpenter, Parker, & Jones, Introd. Foram. 1862, 146, xi, 15-26. [17 = *V. parisiensis*, d'O.; 18 = *V. angularis*, d'O.; 19 = *V. mixta*, P. & J.; 23 = *V. conica*, P. & J.] [Structural.]  
 ——— sp. Zittel, Handbuch Palaeont., Abth. 1, 1876, 90, fig. 27.  
 ——— Carter, Ann. Mag. Nat. Hist. [4], xix, 1877, xiii, 23, 24, and 25.  
 ——— sp. Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 26, pl. 91.  
 ——— Bütschli, in Brönn, Klassen, etc. Thier-Reichs, 1880, 205, vii, 34 and 36.  
**VENILINA**, Gümbel, 1868 (1870). Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 648.  
 ——— *haeringensis*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 649, ii, 84bis, a, b. [v. also *Schizophora*.]  
 ——— *nikobarensis*, Schw. Boll. R. Com. geol. Ital. VIII, 1877, 27, pl. 102.  
 ——— *nummulina*, Gümbel. Abh. m.-ph. Cl. k.-bayer. Ak. Wiss. x, 1868 (1870), 648, ii, 84a, b.  
**Vermiculi ammoniformes**, Soldani. Sagg. Orritt. 1780, 106, iv, 36K, L.  
**VERMICULUM**, Montagu, 1803. Test. Brit. 1803, 517.  
 ——— *bicornis* (Walker & Boys). Montagu, Test. Brit. 1803, 519. [*Serpula*, 1784.]  
 ——— *disciforme*, Macgillivray. Hist. Moll. Anim. Aberdeen, etc. 1843, 319. [v. also *Miliolina* and *M. seminulum*.]

- VERMICULUM globosum** (Walker & Boys). Montagu, Testac. Brit. 1803, 523. [v. *Lagena*.] [*Serpula*, 1784.]  
 ——— **intortum**, Montagu. Test. Brit. 1803, 520.  
 ——— ——— Fleming, Mem. Werner. Nat. Hist. Soc. IV, 1822, 564, xv, 3a, b.  
 ——— **lacteum**, Montagu. Test. Brit. 1803, 522. [v. *Miliola* and *Biloculina*.]  
 ——— ——— Fleming, Mem. Werner. Nat. Hist. Soc. IV, 1822, 566, xv, 6k, l, m. [= *Polymorphina*.]  
 ——— **læve** (Walker & Boys). Montagu, Testac. Brit. 1803, 524. [*Serpula*, 1784.]  
 ——— **marginatum** (Walker & Boys). Montagu, Test. Brit. 1803, 524. [*Serpula*, 1784.] [v. *Lagena*, *Renoidea*, and *Biloculina*.]  
 ——— **oblongum**, Montagu. Test. Brit. 1803, 522, xiv, 9. [v. *Miliola*, *Biloculina*, *Lagena*, *Miliolina*, *Quinqueloc.*, *Triloculina*.]  
 ——— ——— Fleming, Mem. Werner. Nat. Hist. Soc. IV, 1822, 565, xv, 4d, e, f.  
 ——— **perforatum** (Walker & Boys). Montagu, Test. Brit. 1803, 519. [*Serpula*, 1784.]  
 ——— **perlucidum**, Montagu. Test. Brit. 1803, 525, xiv, 3. [v. *Lagena*.]  
 ——— **retortum** (Walker & Boys). Montagu, Test. Brit. 1803, 524. [*Serpula*, 1784.]  
 ——— **squamosum**, Montagu. Test. Brit. 1803, 526, xiv, 2. [v. *Entosolenia*, *E. globosa*, and *Lagena*.]  
 ——— **striatum** (Walker & Boys). Montagu, Test. Brit. 1803, 523. [*Serpula*, 1784.]  
 ——— **subrotundum** (Walker & Boys). Montagu, Test. Brit. 1803, 521. [*Serpula*, 1784.] [v. *Miliola*, *Miliolina*, and *Quinqueloculina*.]  
 ——— [**subrotundatum**], [Mont.]. Fleming, Mem. Werner. Nat. Hist. Soc. IV, 1822, 565, xv, 5g, h, i.  
 ——— **urnæ**, Montagu. Test. Brit. 1803, 525, xiv, 1. [v. *Serpula*, and *Lagena*.]  
 ——— ——— = *Entosol. lineata*, Will. [Williamson] = ? ovary of a Coralline [Jeffrey].

**Vermiculus saxis et lignis adhærens Cornu Hammonis referens.**  
 Planeus, De Conch. Min. 1739, also 1760, 17, pl. i, f. viii, N, M, L.  
 [= ? *Serpula*.]

**Verneolina**, Costa ; misprint for *Verneuilina*.

**Verneueilina**, Williamson, 1848 ; misprint for *Verneuilina*.

- VERNEUILINA**, d'Orbigny, 1840. Mém. Soc. géol. France, [1], IV, 1840, 39 ; Brady, Report Challenger, 1884, 382.  
 ——— **bronni**, Reuss. Verstein. böhm. Kreide, 1845-46, I, 38, xii, 5.  
 ——— [**bronni**] ——— Reuss, Haidinger's Naturw. Abh. IV, Abth. 1, 1851, 40, iv, 2.  
 ——— [**bronni**] ——— Brönn, Lethaea Geognostica, ed. 3, II, 1851-52, 88, xxix<sup>1</sup>, 15.  
 ——— **cognata**, Reuss. Sitz. k. Ak. Wiss. Wien, L, Abth. 1, 1864 (1865), 448, i, 1.  
 ——— ——— Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 26, pl., 98.  
 ——— **communis** (d'Orb.). J., P., & B., Crag Foram., Pal. Soc. XIX, 1866, n. d., iii, 19. [*Clavulina*, 1826.]  
 ——— ——— Vanden Broeck, Ann. Soc. belge Microsc. II, 1876, 136, iii, 14 ; and Fonds de la Mer, III (1876).  
 ——— **compressa**, Andreæ. Abh. geol. Specialkarte Elsass-Lothr. II, Heft 3, 1884, 199, viii, 23 [error for 2 and 3].  
 ——— **convexa**, Olszewski. Sprawozd. Kom. fizyj. Ak. Umiej. Krakowie, IX, 1875, 131, ii, 7.  
 ——— **cretacea**, Karrer. Jahrb. k. k. geol. Reichsanstalt, XX, 1870, 164, i, 1.  
 ——— **dubia**, Reuss. Haidinger's Naturw. Abh. IV, Abth. 1, 1851, 40, iv, 3.

- VERNEUILINA** elongata, Terq. Mém. Soc. géol. France, [3], II, 1882, 106, xi (xix), 13a-c.
- georgiæ, Terquem. Cinq. Mém. Foram. Lias, 1866, 448, xviii, 19a, b.
- liasina, Terq. et Berth. Mém. Soc. géol. France, [2], X, 1875, 64, v (xv), 15.
- limbata, Terq. Mém. Soc. géol. France, [3], II, 1882, 105, xi (xix), 12a-c.
- mauritii, Terquem. Cinq. Mém. Foram. Lias, 1866, 448, xviii, 18a, b.
- muensteri, Reuss. Denkschr. k. Ak. Wiss. Wien, VII, Abth. 1, 1854, 71, xxvi, 5.
- oberburgensis, Freyer, MS. Reuss, Denkschr. k. Ak. Wiss. Wien, XXIII, 1864, 6, i, 2.
- obtusa, Terq. Mém. Soc. géol. France, [3], II, 1882, 106, xi (xix), 14 and 15.
- polystrophia, Rss. Brady, Ann. Mag. Nat. Hist. [5], I, 1878, 436, xx, 9a-c. [*Bulimina*, 1845.]
- — — — — Brady, Report Challenger, 1884, 386, xlvi, 15-17.
- — — — — Wright, Proc. Belfast Nat. Field Club, 1884-85, App. ix, 1886, 320, xxvi, 2.
- — — — — See *Text. agglutinans*, d'O.
- propinqua, Brady. Report Challenger, 1884, 387, xlvi, 8-14.
- pygmæa (Egger). Brady, Report Challenger, 1884, 385; xlvi, 4-7. [*Bulimina*, 1857.]
- — — — — Macdonald, Ann. Mag. Nat. Hist. [2], XX, 1857, 193, vi, 22.
- rotundata, Karrer. In v. Drasche, Frag. Geol. Luzon, 1878, 85, v, 2; and Bol. Com. Map. Geol. Espan. VII, 1880, 266, E, 2.
- spinosa, Reuss. Models, No. 4, 1865 (Catal., No. 6, 1861).
- spinosissima, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 263, xxiii, 54, B, C.
- spinulosa, Reuss. Denkschr. k. Ak. Wiss. Wien, I, 1850, 374, xlvi, 12.
- — — — — Egger, Neues Jahrbuch, 1857, 292, ix, 17 and 18.
- — — — — Brady, Ann. Mag. Nat. Hist. [4], VI, 1870, 301, xii, 6a-c.
- — — — — Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXIII, 1880, 192, ii, 29.
- — — — — Terq., Mém. Soc. géol. France, [3], II, 1882, 107, xi (xix), 16a, b.
- — — — — Brady, Report Challenger, 1884, 384, xlvi, 1-3.
- — — — — Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 219, xlii, 14 and 15.
- tokodensis, Hantken. A magy. kir. földt. int. évkönyve, I, 1871, 128, ii, 12a, b, c; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, 134, same pl. and fig.
- — — — — Hantken, Kohlenflötze, etc. ungar. Krone, 1878, 217, fig. 28. (Also in Magyar.)
- tricarinata, d'Orbigny. Mém. Soc. géol. France, [1], IV, 1840, 39, iv, 3 and 4; Facsimile in Science Gossip, 1870, 156, fig. 142.
- — — — — Reuss, in Geinitz, Grundr. Verstein. 1845-46, 670, xxiv, 65.
- — — — — D'Orbigny, Foram. Fossiles Vienne, 1846, 182, xxi, 26 and 27.
- — — — — Mantell, Medals of Creation, ed. 2, 1854, 342, fig. 109, 3.
- — — — — Eley, Geol. in the Garden, 1859, 200, vi, 37.
- — — — — Sherborn & Chapman, Journ. R. Micr. Soc. [2], VI, 1886, 743, xiv, 9.
- triquetra (Münst.). Brady, Report Challenger, 1884, 383, xlvi, 18-20. [*Textularia*, 1838.]
- variabilis, Brady. Report Challenger, 1884, 385, xlvi, 21-24.

- VERNEUILINA.** Deshayes, Coq. Foss. Paris, 1824–1837, not descr., evi, 1–3.  
 ——— Eley, Geol. in the Garden, 1859, 202, ix, 38C.  
 ——— Eley, Geol. in the Garden, 1859, 197, iv, 22; v, 31. [Flint cast.] [Referred to *V. tricarinata* on p. 200.]  
 ——— sp. ind. Andreæ, Abh. geol. Speciakarte Elsass-Lothr. II, Heft 3, 1884, 296, vi, 15.  
 ——— Folin, Congrès Scient. Dax, 1882 (1883), 325, pl. f. 9. [Sarcodine body.]
- Vernouilina,** Eley, 1859; misprint throughout his book for *Verneuilina*, q. v.
- VERTEBRALINA,** d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 283; Brady, Report Challenger, 1884, 186.  
 ——— *cassis*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 51, vii, 14 and 15; also in Spanish, 1840, 72, same pl. and fig.  
 ——— *conicoarticulata*, Batsch. Goës, K. Svenska Vet.-Akad. Handl. xix, No. 4, 1882, 121, ix, 311–318. [*Nautilus*, 1798.]  
 ——— *contracta*, Terquem. Mém. Soc. géol. France, [3], II, 1882, 45, ii (x), 19–22.  
 ——— *elongata*, Karrer. Sitz. k. Ak. Wiss. Wien, LVIII, Abth. 1, 1868, 155, iii, 10.  
 ——— *foveolata*, Franzenau. Földtani Közlöny, XI, 1881, 49 and 101, iii, 19–21.  
 ——— *insignis*, Brady. Report Challenger, 1884, 187, xii, 9–11.  
 ——— *lævigata*, Terg. Mém. Soc. géol. France, [3], II, 1882, 44, ii (x), 15–18.  
 ——— *mucronata*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 52, vii, 16–19; also in Spanish, 1840, 72, same pl. and fig.  
 ——— ——— D'Orbigny, Foram. Fossiles Vienne, 1846, 120, xxi, 18 and 19.  
 ——— ——— Reuss' Models, No. 60, 1865 (Catal., No. 26, 1861).  
 ——— ——— Zittel, Handbuch Palaeont. Abth. I, 1876, 78, fig. 12.  
 ——— *niebuhrii*, Ehrenberg. Abhandl. k. Ak. Wiss. Berlin, 1838, 135.  
 ——— *sarmatica*, Karrer. Abh. k. k. geol. Reichs. IX, 1877, 376, xvi, b, 12.  
 ——— *striata*, d'Orbigny. Ann. Sci. Nat. VII, 1826, 283, No. 1.  
 ——— ——— D'Orbigny, Modèles, No. 81, 1826.  
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 ——— ——— Carpenter, Parker, & Jones, Introd. Foram. 1862, 72, v, 17–25.  
 ——— ——— P., J., & B. [d'O., Modèles, No. 81], Ann. Mag. Nat. Hist. [3], XVI, 1865, 32, i, 1.  
 ——— ——— P., J., & B. [Soldani], Ann. Mag. Nat. Hist. [4], VIII, 1871, 239, viii, 27.  
 ——— ——— Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 27, pl., 106.  
 ——— ——— Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 190, iv, 17.  
 ——— ——— Jones, in Microgr. Dict. ed. 4, 1883, 806, xxiii, 10.  
 ——— ——— Brady, Report Challenger, 1884, 187, xii, 14–16.  
 ——— ——— Anon., Sci. News, 27 Ap. 1888, 389, fig. 6.  
 ——— ——— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 162, fig. See *Litius*.  
 ——— (*Articulina*) *sulcata*, Reuss. Denkschr. k. Ak. Wiss. Wien, XXIII, 1864, 9, i, 3–6.  
 ——— Deshayes, Coq. Foss. Paris, 1824–37, not descr., pl. ciii, 35–39.  
 ——— Parker, Trans. Micr. Soc. London, n. s. VI, 1858, 55.  
 ——— Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 190, iv, 18. [= *Articulina*, d'Orb.]  
 ——— Bütschli, in Bronn, Klassen, etc. Thier-Reichs, 1880, 190, iv, 19. [= *Renulina*, Lam.]

- VIRGULINA**, d'Orbigny, 1826. Ann. Sci. Nat. VII, 1826, 267; Brady, Report Challenger, 1884, 413.
- **hemprichii** (Ehr.). Jones, Catal. Foss. Foram. B. M. 1882, 88. [*Strophoconus*, 1854.]
- **hungarica**, Hantken. A magy. kir. földt. int. évkönyve, I, 1871, 129, II, 15a, b; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, I, 1871, 135, same pl. and fig.
- **mustoni**, Andreæ. Abh. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 254, xi, 4.
- **paradoxa** (Ehr.). Jones, Catal. Foss. Foram. B. M. 1882, 88. [v. *Vaginulina*.]
- **pauciloculata**, Brady. Report Challenger, 1884, 414, lii, 4 and 5.
- **pertusa**, Reuss. Sitz. k. Ak. Wiss. Wien, XLII, 1860 (1861), 362, II, 16a, b.
- — — — — Reuss' Models, No. 36, 1865 (Catal., No. 65, 1861).
- **punctata**, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 139, I, 35 and 36; also in Spanish, 1840, 133, same pl. and fig.
- — — — — Morris, Lecture Geol. Croydon, [1876], 8, fig. 34.
- **reussii**, Geinitz. Reuss, Verstein. böhm. Kreide, 1845-46, I, 40, viii, 61. Geinitz, Charakt. Schicht. Petref. sächs.-böhm. Kreidegeb. 1850, 70, xvii, 23.
- — — — — Reuss, Sitz. k. Ak. Wiss. Wien, LII, Abth. 1, 1865 (1866), 454, pl. 7.
- **schreibersiana**, Czjzek. Haidinger's Nat. Abh. II, 1848, 147, xiii, 18-21.
- — — — — Egger, Neues Jahrbuch, 1857, 295, xii, 12-14.
- **[schreibersii]** — Macdonald, Ann. Mag. Nat. Hist. [2], XX, 1857, 193, vi, 23 and 24.
- **[schreibersana]** — Reuss, Sitz. k. Ak. Wiss. Wien, LV, Abth. 1, 1867, 96, iv, 4a, b, 5.
- **[schreibersi]** — Hantken, A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 53, vii, 15; and Mitth. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 63, same pl. and fig.
- **[schreibersii]** — Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 25, pl. 39.
- **[schreibersii]** — Terrigi, Atti Acc. Pont. Nuovi Lincei, XXXIII, 1880, 196, ii, 38 and 39.
- **[aff. schreibersii]** — Schwager, Palaeontographica, XXX, 1883, Pal. Theil, 112, xxix (6), 12.
- — — — — Brady, Report Challenger, 1884, 414, lii, 1-3.
- **[schreibersi]** — Andreæ, Abh. geol. Speciaalkarte Elsass-Lothr. II, Heft 3, 1884, 213, ix, 8 and 9.
- — — — — Malagoli, Atti Soc. Nat. Modena (Rend.), [3], III, 1887, 108, i, 5.
- **[schreibersii]** — See *Bulim. presli*, Rss.
- squamosa**, d'Orbigny. Ann. Sci. Nat. VII, 1826, 267, No. 1.
- — — — — D'Orbigny, Modèles, No. 64, 1826.
- — — — — Bronn, Lethaea Geognostica, ed. 2, 1837, 1134, xlvi, 23.
- — — — — Roemer, Neues Jahrbuch, 1838, 386, iii, 39.
- — — — — Reuss, in Geinitz, Grundr. Verstein. 1845-46, 681, xxiv, 78.
- — — — — Bronn, Lethaea Geognostica, ed. 3, III, 1853-56, 233, xlvi, 23.
- — — — — P., J., & B. [d'O., Modèles, No. 64], Ann. Mag. Nat. Hist. [3], XVI, 1865, 29, ii, 66.
- — — — — See *Bulim. presli*, Rss.
- — — — — Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 161, fig.
- **subdepressa**, Brady. Report Challenger, 1884, 416; lii, 14-17.
- **subsquamosa**, Egger. Neues Jahrbuch, 1857, 295, xii, 19-21.
- — — — — Brady, Report Challenger, 1884, 415, lii, 7-11.

- VIRGULINA** *tegulata*, Reuss. Verstein. böhm. Kreide, 1845–46, i, 40, xiii, 81. [v. *Bolivina*.] Reuss, in Geinitz, Grundr. Verstein. 1845–46, 682, xxiv, 79. ——— ——— Bronn, Lethaea Geognostica, ed. 3, ii, 1851–52, 91, xxix<sup>1</sup>, 23; xlvi, 23. ——— *tenuis*, Seguenza. Atti Accad. Gioenia Sci. Nat. [2], xviii, 1862, 112, ii, 2 and 2a. ——— *texturata*, Brady. Report Challenger, 1884, 415, lii, 6a, b. ——— Pictet, Traité de Paléont. iv, 1846, 239, xii, 27.
- VORTICIALIS**, Lamarck, 1812. Extrait Cours Zool. 1812, 122; and Ency. Méthod., "Vers," iii [1832], 1148.
- *craticulata* (F. & M.). Defrance, Dict. Sci. Nat. xxxii, 1824, 181; Atlas, Conch. xv, 6. [= *Polystomella*.] [*Nautilus*, 1798.] ——— ——— Blainville, Manuel Malac. et Conch. 1825 (pls. 1827), 375, vii, 6. ——— ——— Cuvier, Animal Kingdom, Henderson's ed. iii, 1834 (pls. 1837), 18, iv bis, 6. ——— ——— *depressa*, v. *strigilata* (F. & M.). Lamarck, Ency. Méthod., "Vers," iii (1832), 1148 (pls. 1827), 470, f. 2 (P. & J. quote pt. 23, 1816). [*Nautilus*, 1798.] ——— ——— *marginata* (F. & M.). Lamarck, Ency. Méthod., "Vers," iii (1832), 1148 (pls. 1827), 470, f. 3 (P. & J. quote pt. 23, 1816). [*Nautilus*, 1798.] ——— ——— Brown, Elem. Foss. Conch. 1843, not descr., iii, 9. ——— ——— *strigilata* (F. & M.), v. *craticulata* (F. & M.). Lamarck, Ency. Méthod., "Vers," iii (1832), 1148 (pls. 1827), 470, f. 1 (P. & J. quote pt. 23, 1816). [*Nautilus*, 1798.] ——— ——— Crouch, Introd. Lamarck, 1827, 42, xx, 15. [= *Poly-stomella*.] ——— ——— Brown, Conch. Text-book, 1839, 60, x, 9 [error for 10]. ——— ——— Dujardin, Hist. Nat. Zooph. Infusoires, 1841, 258, i, 15. ——— ——— Brown, Elem. Foss. Conch. 1843, 22, ii, 9.
- VULVULINA**, d'Orbigny, 1826. Ann. Sci. Nat. vii, 1826, 264.
- *abrupta*, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 35, iv, Impressathon, 16, [= *Textularia*.] ——— ——— *alata*, Seguenza. Atti Accad. Gioenia Sci. Nat. [2], xviii, 1862, 115, ii, 5 and 5a. [v. *Bolivina heyrichi*.] ——— ——— *capreolus*, d'Orbigny. Ann. Sci. Nat. vii, 1826, 264, No. 1, xi, 5, 6, 7, and 8. [v. *Bigenerina* and *Schizophora*.] ——— ——— D'Orbigny, Modèles, No. 59, 1826. ——— ——— Cuvier, Règne Animal, 1836–46, ix (pls. x), 34, xiv, 11. ——— ——— P., J., & B. [d'O., Modèles, No. 59], Ann. Mag. Nat. Hist. [3], xvi, 1865, 28, ii, 63. [= *Grammost.* = *Vulvulina pennatula*, Batsch.] ——— ——— Basset, Ann. Soc. Sci. Charente-Inf. 1884 (1885), 161, fig. ——— *eichbergensis*, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 30, iii, 43 and 43a. [= *Textularia*.] ——— ——— *elegans*, d'Orbigny. Ann. Sci. Nat. vii, 1826, 264, No. 3. [v. *Grammostomum*.] ——— ——— = *Grammost. elegans*, d'O.; see *Orthoceratia pupa*. [= *Bigenerina*.] ——— ——— *farcimen*, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 30, iii, 41. [= a *Virgulina*.] ——— ——— *gramen*, d'Orbigny. De la Sagra, Hist. Phisiq. etc. Cuba, 1839, "Foraminifères," 148, i, 30 and 31; also in Spanish, 1840, 139, same pl. and fig. [v. *Grammostomum*.] ——— ——— D'Orbigny, Foram. Fossiles Vienne, 1846, 251, xxi, 46 and 47. ——— ——— Carpenter, Parker, & Jones, Introd. Foram. 1862, 190, xii, 15.

- VULVULINA** gramen, d'Orbigny. Reuss' Models, No. 85, 1865 (Catal., No. 78, 1861).
- — — Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 26, pl., 62.
  - — — Jones, in Microgr. Dict. ed. 4, 1883, 815, xxiii, 49a, b.
  - minutissima, Zwingli & Kübler. Foraminif. schweiz. Jura, 1870, 30, iii, 42. [= *Textularia*.]
  - oblonga, Mackie. Science Gossip, 1867, 130; fig. 121. [= *Valvulina oblonga*, d'Orb.]
  - oolithica, Deecke. Abh. geol. Specialkarte Elsass-Lothr. IV, Heft 1, 1884, 54, ii, 20.
  - pectinata, Hantken. A magy. kir. földt. int. évkönyve, IV, 1875 (1876), 58, vii, 10; and Mittb. a. d. Jahrb. k. ungar. geol. Anstalt, IV, 1875 (1881), 68, same pl. and fig.
  - pennatula (Batsch). Jones, Catal. Foss. Foram. B. M. 1882, 88. [*Nautilus*, 1791.]
  - pupa, d'Orbigny. Ann. Sci. Nat. VII, 1826, 264, No. 2. [v. *Grammostomum*.]
  - — — = *Grammost. pupa* (d'O.) ; see *Orthoceratia pupa*.
  - soldani, d'Orb. Costa, Atti Accad. Pontaniana, VII, fas. 2, 1856, 298, xxiii, 22 and 23.
  - subrhomboidalis, Schwager. Jahresh. Ver. vat. Nat. Württ. XXI, 1865, 140, vii, 17.
  - textile, Schwager. Jahresh. Ver. vat. Nat. Württ. XXI, 1865, 141, vii, 18.
- WAGNERELLA**, von Mereschowsky. Mém. Ac. Imp. Sci. St. Pétersbourg, [7], xxvi, No. 7, 1878, 22 ; and Ann. Mag. Nat. Hist. [5], I, 1878, 70.
- borealis, v. Mereschowsky. Mém. Ac. Imp. Sci. St. Pétersbourg, [7], xxvi, No. 7, 1878, 22, ii, 1-5.
  - — — — — Mereschowsky, Ann. Mag. Nat. Hist. [5], I, 1878, 76, vi, 1-6.
- WEBBINA**, d'Orbigny, 1839. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 125 ; Sollas, Geol. Mag. [2], IV, 1877, 102 ; Brady, Report Challenger, 1884, 348.
- acervalis, Brady. Mem. Geol. Surv. Scotland, Expl. Sheet 23, 1873, pp. 69, 95, etc. [v. also *Stacheia*.]
  - acuminata, Terq. & Piet. Terquem, Mém. Ac. Imp. Metz, XLII, 1862, 457, vi, 17a, b.
  - — — — — Terquem, Mém. Ac. Imp. Metz, LI, 1870, 374, xxix, 27-29.
  - breoni, Terq. & Piet. Terquem, Mém. Ac. Imp. Metz, XLII, 1862, 458, vi, 18a-h.
  - clavata (Jones & Parker). Brady, Report Challenger, 1884, 349, xli, 12-16. [*Trochan. irregularis clavata*, 1860.]
  - — — — — Brady, Parker, & Jones, Trans. Zool. Soc. XII, pt. 7, 1888, 218, xlii, 21.
  - crassa, Terq. & Piet. Terquem, Mém. Ac. Imp. Metz, XLII, 1862, 456, vi, 15a, b.
  - — — — — Deecke, Abh. geol. Specialkarte Elsass-Lothr. IV, Heft 1, 1884, 17, i, 8.
  - fimbriata, Howchin. Journ. R. Microsc. Soc. 1888, 538, viii, 8 and 9.
  - flagellum, Terquem. Mém. Ac. Imp. Metz, LI, 1870, 375, xxix, 30.
  - hemisphærica, Jones, Parker, & Brady. Crag Foram., Pal. Soc. XIX, 1866, 27, iv, 5.
  - — — — — Brady, Report Challenger, 1884, 350, xli, 11.
  - impressa, Terquem. Mém. Soc. géol. France, [3], IV, 1886, 17, i, 49.
  - incerta, Terquem. Mém. Soc. géol. France, [3], IV, 1886, 17, i, 50.
  - infraoolithica, Terquem. Mém. Ac. Imp. Metz, LI, 1870, 373, xxix, 19-26.
  - — — — — Terquem, Mém. Soc. géol. France, [3], IV, 1886, 16, i, 43-48.

- WEBBINA irregularis**, d'Orbigny. Prodrome de Paléont. II, 1850, 111, No. 783. [Cornuel's "Œufs de Molluscs," Mém. Soc. géol. France, 1848, pl. ii, f. 37.] [v. *Trochammina*.] ——— Bronn, Lethaea Geognostica, ed. 3, II, 1851-52, 91, xxix<sup>1</sup>, 27. ——— Brady, Proc. Somerset. Arch. and Nat. Hist. Soc. XIII, 1865-66 (1867), 221, i, 2, 3. ——— Sherborn, Proc. Bath N. H. Antiq. F. Club, VI, pt. 3, 1888, 332, fig. ——— Howchin, Journ. R. Microsc. Soc. 1888, 539, ix, 16 and 17. ——— *lævis*, Sollas. Geol. Mag., [2], IV, 1877, 103, vi, 1-3. ——— Vine, Proc. Yorkshire Geol. Polytech. Soc. n. s. IX, pt. 1, 1885 (1886), 26, ii, 13.
- [**WEBINA**] *lævigata*, Costa. Atti Accad. Pontaniana, VII, fas. 2, 1856, 187, xvi, 14.
- *orbignyi*, Terq. & Piet. Terquem, Mém. Ac. Imp. Metz, XLII, 1862, 458, vi, 19.
- *rostrata* (Quenst.). Deecke, Mém. Soc. Emul. Montbéliard, XVI, 1886, [p. 25]. [*Bullopora*, 1858.]
- *rugosa*, d'Orbigny. Barker Webb & Berthelot, Hist. Nat. Iles Canaries, 1839, II, pt. 2, "Foraminifères," 126, i, 16-18. [v. *Nubecularia*.]
- D'Orbigny, Foram. Fossiles Vienne, 1846, 74, xxi, 11 and 12.
- Schwager, Boll. R. Com. geol. Ital. VIII, 1877, 26, pl., 84.
- *scorpionis*, d'Orb. Terquem, Mém. Ac. Imp. Metz, XLII, 1862, 456, vi, 16a-c. [v. *Placopsilina*.]
- *tuberculata*, Sollas. Geol. Mag. [2], IV, 1877, 104, vi, 4-9.
- Vine, Proc. Yorkshire Geol. Polytech. Soc. n. s. IX, pt. 1, 1885 (1886), 26, ii, 14.
- Gabb & Horn, Journ. Ac. Nat. Sci. Philad. n. s. V, 1862, part ii, 179, xxi, 71.
- Quenstedt, Handbuch Petref. ed. 3, Abth. 5 (1885), 1051, lxxxvi, 16. [= *Placopsilina*.]
- see *Œufs*.
- see *Trochammina*.
- WEBINA**, Costa, 1856. See *Webbina*.

## ADDITAMENTA ET CORRIGENDA.

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**ALVEOLINA** montipara, Ehr. For xxxviii read xxxvii.

**AMMONIAE**. Line 3; *T*, *V*, are near *Pulvinulina elegans*.

**AMMONICERINA**. For 51 read 15.

**AMPHISTEGINA lenticula** (Defr.). Jones, Catal. Foss. Foram. B. M. 1882, 50. [v. *Nunnulites lenticularis*.]

**ANNULINA**. Line 3; for Pernemann read Bornemann.

**ANOMALINA polymorpha**. Costa's reference should read 7-9.

— Williamson, 1848. Corrected to *Globigerina bulloides* in 1872.

**ARTICULINA arcuata**, Deshayes. Ency. Méth. (Vers), 1830, 75.

**ASSILINA placentula** (Desh.). Jones, Catal. Foss. Foram. B. M. 1882, 65. [v. *Nunnulites*.]

**ATAXOPHRAGMIUM**. For suborale read subovale.

**BATHYBIOPSIS**, de Folin. Le Naturaliste, 1887, 103, figg. 1, 2, 3.

— astrorhizoides, de Folin. Sous les Mers, 1887, 221, f. 22. [Here spelled *Bathybiopsis*.]

**BIFARINA**. Schwager refers to but does not figure this form.

**BILOCULINA amphiconica**. Reuss, 1867, in description of plate calls this, var. *platystoma*, and at p. 68, says that he had previously described it under specific name of *platystoma*.

— *opposita*, Deshayes. Ency. Méth. (Vers), 1830, 138.

— *seguenziana*, Forn. Transfer to *Lagena*; entered here in error.

— Carpenter. For 374 read 376.

**BIOMYXA**, Leidy, 1875. Proc. Ac. Nat. Sci. Philad. 1875, 123.

— *vagans*, Leidy. *Ibidem*, 124; and Report U. S. Geol. Surv. Territ. XII, 1879, 281, xlvi, 5-12; xlviii.

**BOLIVINA beyrichi**. Terrigi, 1880, 198 describes figg. 43 and 45 as v. *cari-nata*; Mariani, Atti Soc. Ital. Sci. XXXI, 1888, describes 102, xxxi, 3 as v. *lobata*.

— *biformis*, Eley. Jones, Catal. Foss. Foram. B. M. 1882, 15.

— *obsoleta*, Eley. Geol. in the Garden, 1859, 195, ii, 11; 202, viii, 11c. [v. *Textularia*.]

— — — Jones, Catal. Foss. Foram. B. M. 1882, 15.

**BORELIS palæophus**. Should read *palæolophus*.

**BUCCININA**. In description of plate on p. 48, Costa calls this genus *Buccinu-lina*, and makes the specific names *africana* and *irregularis*.

**BULIMINA buliminoides** (Rss.). Jones, Catal. Foss. Foram. B. M. 1882, 78. [v. *Rotalia*.]

**CALCARINA atlantica**. Ehrenberg's description is obscure; it may be he refers to pl. XXXV, A.

— *rarispina*, Deshayes. Ency. Méth. (Vers), 1830, 164.

**CAPSULLINA**. Are not these pedicellariae of echinoderms?

**CEOPHONUS**, Bosc. Nouv. Dict. Sci. Nat. v, 1816, 491; founded on one of Fichtel & Moll's forms, but which, is not stated.

**CLADOCERA manipulata**? Mich. Abich's figure (Mém. Ac. Imp. Sci. St. Pétersbourg, [6], vii, 1859, viii, 2c) seems to be a section of a *Spirolocu-lina*.

**CLAUSULUS.** Should come before *Clavulina*.

**CLAVULINA corrugata**, Deshayes. Ency. Méth. (Vers), 1830, 242.

— irregularis, Deshayes. *Ibidem*.

**CORNUSPIRA archimedes**. Read archimedis.

**COSC NOSPIRA**. P. 47 ; should read **COSCINOSPIRA**.

**COSKINOLINA**. Is not figured by Schwager.

**CRISTELLARIA caleata**. Read *cælata*.

— elongata, K. & Z. Altered to *turbinoides*, 1870.

— exserta, Eichwald. Leth. Rossica (Moy. période), 1868, 184, xv, 9.

— fittonii, Berthelin. Mém. Soc. géol. France, [3], I, 1880, 49, replaces *C. laevigata*, Reuss.

— forestii, Fornasini. Boll. Soc. geol. Ital. IV, 1885, 113.

— hamiformis, Reuss. Sitz. k. Ak. Wiss. Wien, XLVI (1), 1862 (1863), vii, 4. [Described also as *cephalotes*, q. v.]

— mermis, Terq. Misprint by Terquem for *inermis*.

— osnaburgensis. Should read *osnabrugensis*.

— recta, d'Orb. Reuss, 1874, makes 2 var. *hmosa*.

— rotulata. Schlumberger, Journ. Cincin. Soc. N. H. V, 1882, 119, v, 2, 2a.

— — — Jones, 1884 ; add fig. 7 (marginuline variety).

— — — P. 68 ; for Brönn, 1853, read Brown.

— — — squammula. Add, Macgillivray, Conch. Text-book, 1845, 72, x, 25.

— — — tangentialis, Reuss. Denkschr. k. Ak. Wiss. Wien, XXV, 1865 (1866), 143.

— — — turgida, Reuss. Should read *turgidula*.

— — — zittlei, Schw. Should read *zitteli*.

— — — sp. Schw. Is given as *Dentalina*, on p. 112 of Schwager's paper.

**CYCLAMMINA**. For note concerning other supposed species, see de Amicis, Nat. Sicill. XIV, 1895.

**CYCLOGYRA**, S. V. Wood. Ann. Mag. Nat. Hist. IX, 1842, 458, v, 5. [= *Cornuspira*.]

**DENDROPELA multiramosa**, de Folin. Le Naturaliste, 1887, 113, figg. 5 and 6.

— typicum, de Folin. Sous les Mers, 1887, 159, fig.

**DENTALINA edelina**. See *Nodosaria*, infra.

— fortinensis. Should read *fontinensis*.

**DILLINA**, Schlumberger. Comptes Rendus, xcvi, 1883, 862. [Nomen nudum.]

**DISCORBINA valvulata**. Brady ; for lxxvii read lxxviii.

**FABULARIA discolites**. Brönn is author of specific name ; add p. 43 to his reference.

**FLABELLINA baudouiniana**. Spelled *baudouiniana* by d'Orbigny.

— rugosa. Beudant ; is *Frondicularia* in Millett's copy.

**FRONDICULARIA cordai**. Reuss makes var. *tribrachiala* on p. 108 of Verst. Böhm. Kreide, II.

— subovata, Deshayes. Ency. Méth. (Vers), 1830, 146 (T\*).

**FUSULINA verneuli**. Should read *verneuili*, and the reference is ii, 2a-g.

**FUSULINELLA struvii**. The plate should be ii ; Möller is in error.

**GLANDULINA inflata**. Haensler, 1887 ; for 179 read 189.

**GLOBIGERINA bulloides**. Williamson, 1858 ; as these forms are said to be arenaceous, they are probably *Haplophragmium globigeriniforme*.

— — — v. *rubra*. To Vanden Broeck's reference add fig. 7.

— — — *glomerata*. In the French edition of Hoernes called *conglomerata*.

— — — *omphaloletras*. Should read *omphalotetras*.

**GLOBULINA minima**, Bornemann. Zeitschr. deutsch. geol. Ges. VII, 1855, 344, xvii, 3.

— — — papillata, Costa. Atti Acc. Pontan. VII (2), 1856, xviii, 2.

**GRAMMOSTOMUM convergens**. Fig. 26 is described as *divergens*.

— — — *megaloglossum*. Is *megaglossum* in descript. of plate.

— — — *polytheca*. For xxxii read xxiii.

**GROMIA** dujardini, Schultze. Organ. Polyth. 1854, 55, vii, 1-7.

- fluviatilis, Duj. Micro. Dict. ed. 2, 1860, 324, xxiv, 15.
- gracilis. To Möbius, add p. 17.
- oviformis. To Möbius, add p. 15.

**GYPSINA** melobesioides. Add at end [v. *Polytrema plana*.].

**HELICITEN**. Add Schmidel, Fortg. zu Vorst. merkw. Verst. 1793, 32, xviii, xxi, and xxii.

**HETERILLINA**, Schlumberger. Comptes Rendus, xcvi, 1883, 862. [Nomen nudum.]

**HETEROSTEGINA** papyracea. Seguenza makes vii, 2, var. *gigantea*.

**HOLOCOCCUS**. Delete 7-.

**HYBRIDINA** obliqua. Called *Vaginulina laxa*, 1870.

**HYMENOCYCLUS**. Add, discus (Rüt.), xv, 7; fortisii (d'A.), xv, 2; ephippium (Schl.), xv, 4; patellaris (Schl.), xv, 1; Eichwald, Leth. Rossica (Moy. période), 1868, 185, etc.

**LAGENA** formosa foveolata. Should read **LAGENA** foveolata.

- globosa. Terrigi, 1889; for iii read 111.
- gracilicostata, Reuss. Should read *gracilicosta*.
- gracilis. Reuss, 1862; add at end, and v, 62.
- isabella. Reuss' fig. 56 is described as var. *rari costa*, d'Orb.
- laevis. Jones, 1884; for xi read xli.
- laticostata, T. & B. Should read *laticosta*.
- pulchella, Brady. Balkwill & Wright's is the trigonal form.
- reticulata (Macgill.). Add Reuss before Sitz.

**LINGULINA**. Add furcillata, rediviva, and stillula, which have been inserted in error under *Lingulinopsis*.

**LINGULINOPSIS** seguana. Should read *sequana*.

- See *Lingulina*, supra.

**LITUOLA**. Millett thinks Deshayes' figures (1837) are mainly *Haplophragmia* and *Peneroplidies*.

**LITUUS** abbaticus, Spalowsky. Testac. 1795, 9, i, 9.

**MARGINULINA** affinis, Neugeboren. Ver. Mitth. Siebenburg. Ver. Nat. II, 1851, 144.

- splendens. Out of alphabetical order.
- tumida. Reuss makes this *Cristellaria* in Denkschr. k. Ak. Wiss. Wien, xxiii, 1864, 138.
- sp. Von Dunikowski; add fig. 78.
- sp. Schwager; for 109 read 108.
- sp. Williamson; ascribed in 1872 to *Vaginulina costata*.

**MELOSSIS**, Oken. Lehrbuch Naturg. III (1), 1815, 333. [Founded on *Nutilus pomphiloides*, F. & M.]

**NODOSARIA** annulata. For — read Reuss.

- bitziana. Should read *bilziana*; also for *bietziana* read *bielziana*.
- capitata, v. *costata*. Should read *ecostata*.
- congrua, Eichwald. Leth. Rossica (Moy. période), 1868, 171, xv, 17.
- conica, v. *coarctata*. For 44 read 42.
- conspurcata. Reuss, Denkschr.; this is corrected to *subcostulata* in Sitz. LXII, 1870, No. 41.
- edelina. For 7 read 17; this is *Dentalina*.
- fortinensis. Should read *fontinensis*.
- gigantea, P. & M. This is not a foraminifer.
- globosa, Eichwald. Leth. Rossica (Moy. période), 1868, n. d., xv, 16.
- granosa, Eichwald. Ibidem, 172, xv, 19. [*punctata* in text.]
- hispida. For Hartwig read Harting, and add fig. 37<sup>2</sup> to Schwartzkopf.
- javanica. Add viii after vii.
- longisulcata. Mackie's reference is an error for *longiscata*.
- monilis. Add var. *gracilis*, Silvestri, p. 75.
- raphanus, v. *coarctata*, Silvestri. This is a var. of *raphanistrum*.

**NODOSARIA rugosa.** Mackie's reference is an error for *semirugosa*.

- *scalaris* (Batsch). Add to Brady; var. *separans*, 511, lxiv, 16–19.
- *scalaris*, d'Orb. Add var. *nonglobosa*, Silvestri, p. 57.
- *tenuicosta* [Reuss]. Eichwald, Leth. Rossica (Moy. période), 1868, 171, xv, 18.
- sp. Wisnioski. Should read Wisniowski.

**NONIONINA compressa.** Roemer confuses two figures; this should be 34.

- *germanica*. For Hartwig read Harting.
- Millett makes the following notes: *bathyomphala* = *Anomalina*; *compressa*, Roem., and *macromphalus* = *Cristellaria*; *heteropora* = *Polystomella*; *pelagica* = *Hastigerina*; *quatriloba*, *quaternaria*, and *subcarinata*, d'Orb. & Seg., all = *Pullenia*.

**NUMMULARIA comptoni** (J. Sow.). J. de C. Sowerby, Min. Conch. vi, 1826, 74 and 76. [*Nutilus*, 1816.]

**NUMMULITES tuberosus**, Eichwald. Leth. Rossica (Moy. période), 1868, 181.

- De Roissy, in Buffon, Hist. Nat. (Sonnini's), Mollusques, v (an xiii), records the following: *depressa*, p. 56; *levigata*, 55; *mamilla*, 57; *plana*, 56; *ovata*, 59; *radiata*, 58; *spira*, 57; var. *rucosa*, 58.

**PLANORBULINA haidingeri.** Brady, 1864; for ii read 11.

**PLANULARIA matutina.** Should be *Cristellaria*.

**PLANULINA osnabrugensis.** For 5–8 read 58.

**PLECTINA.** Marsson (p. 160) assigns to this genus *Gaudryina ruthenica*, Rss.

**PLEUROSTOMELLA.** Seguenza, Atti Acc. Lincei [3], XII, 1880, proposes but does not figure: *costae*; *cylindrica*; *nodosaria* (p. 226); *inflata*, *involuta* (227); *obtusa* (307).

**POLYMORPHINA confluens**, Eichwald. Leth. Rossica (Moy. période), 1868, 172.

**POLYSTOMELLA arctica.** Brady, Ann. Mag. [5], i, should be 1878.

**RAMULINA kittlitzii**, Rzehak. Verh. k. k. geol. Reichs. 1885, 187.

**RHABDOGONIUM.** For *globiferum* read *globuliferum*.

- *szaboi*. Genus altered to *Clavulina* in 1875.

**ROBULLINA comptoni.** Roemer confuses two figures; this should be 33.

- *depauperata*. To Reuss, 1863, add 66, viii, 90a, b; and var. *callifera*, fig. 91.
- *ferruginea*, Terq. Should be *Rotalina*.
- *gravida*. Seguenza makes figg. b, c, var. *paucisepta*; d, e, var. *multisepta*; f, var. *discoidea*; and a fourth variety he calls *anormalis*.
- *inornata*. Egger, 1857; for xiv read xv.

**ROSALINA foveolata.** iv,  $\mu$ , is Ehrenberg's error; should be vi,  $\mu$ .

**ROTALIA perforata.** Ehrenberg, 1854; for xxxvii read xxvii.

**ROTALINA ferruginea**, Terquem. Bull. Soc. géol. France, [3], iv, 1876, 496, xvii, 11.

- *inflata*, Terq. The 1875 and 1881 forms differ; in the "Tableau" and "Explic. planche," Terquem alters the 1881 form to *utriculata*.
- *micheliniiana*. Eley, Geol. Garden, 1859, 198, v, 27. [*micheliana*.]
- *nitida*. Ibidem, 198, v, 24–26.

**SPHÆROIDINA variabilis.** Reuss, 1863, calls this "var. *conica*."

**SPIRILLINA latiseptata.** Williamson does not name this in 1848, but in 1872 he refers it to *S. perforata*.

- *margaritifera*. Halkyard, Trans. Manchester Micr. Soc. 1889, 71, ii, 7.

**SPIROLOCULINA canaliculata.** Costa; for 98, 10 read 9, 10; Vine, for 52 read 53.

- *nitida*. Terquem, 1882; for 6a, b read 16a, b.

**SPIROPLECTA americana.** First line, for 35 read 25.

- *rosula*. For 36 read 26.

**STREBLUS tortuosus.** Prof. Rupert Jones points out that this specific name is d'Orbigny; see *Turbinulina tortuosa*, Ann. Sci. Nat. VII, 1826, 275. Fischer used the word to define the generic name.

- TEXTULARIA agglutinans, v. porrecta**, Brady. Report Challenger, 1884, 364, xlivi, 4.  
 —— *carinata*, d'Orb. 1826, for 13 read 23.  
 —— *flexuosa*, Reuss. Sitz. k. Ak. Wiss. Wien, xl, 1860, 91. [*T. articulata*, 1851.]  
 —— *inflata*, Ehr. Mikrogeol. 1854, xxxii, ii, 13. (Remove from *globulosa* in "Index.")  
 —— *laminaris*, Costa. 1856, add fig. 17.  
 —— *minuta*, Berthelin. Mém. Soc. géol. France, [3], i, 26. (Replaces *pygmaea*, Reuss.)  
 —— *obtusa*, varr. *inflata* and *maorica*. Stache, 1864, so named in expl. to plate, but in text they appear as *antipodum* and *robusta*.  
 —— *pristis*, Costa. Atti Accad. Pontan. vii, fas. 2, 1856, 292.  
 —— *striata*, Ehr. Mikrogeol. 1854, xxviii; fig. 7 is described as *dilatata*.  
 —— Williamson, 1848. Altered to *Bolivina punctata* in 1872.  
 —— Chimmo, 1870. Is named *variabilis*.

**UVIGERINA**. Brady, Challenger, 1884, 573, 575, lxxiv, 24–26, describes a variety intermediate between *pygmaea* and *aculeata*.

**VAGINULINA badenensis**, Costa, 1856. Also described as *Marginulina inversa*, q. v.  
 —— *elongata*, Roemer, 1841. Figure should be 13.  
 —— *arpa*, Roemer, 1841. Figure should be 12.

**VALVULINA subrhombica**, Stache. Denkschr. k. Ak. Wiss. Wien, xlvi, 1883, 408, vii, 31.

**VERTEBRALINA**, Deshayes, 1824–37. These are apparently *Articulina nitida*.  
**VIRGULINA schreibersii**, Schwager, 1883. 12 is Schwager's error for 10.

The following nomina nuda were given to Von Schlicht's specimens from Pietz-plubl, by Reuss in "Zeitschr. deutsch. geol. Ges." x, 1858, pp. 433–438:—

- Cornuspira cassis*; *polygyra*.  
*Dentalina anomala*; *bennigseni*; *declivis*; *fusiformis*; *grandis*; *indifferens*; *inflexa*; *isotoma*; *laza*; *leptosoma*; *nutans*; *obtusa*; *scolex*; *soror*; *subcostulata*; *xiphidium*.  
*Fissurina acuta*; *angustimargo*; *mucronata*; *oblonga*.  
*Glandulina aequalis*; *armata*; *amphioxys*; *bipartita*; *dolichocentra*; *elliptica*; *globulus*; *gracilis*; *obtusata*; *obtusissima*; *strobilos*; *suturalis*.  
*Lagena amphora*; *angustissima*; *centrophora*; *coronulata*; *decrescens*; *elliptica*; *emaciata*; *frumentum*; *globosa*; *gracilicosta*; *lepidia*; *mucronulata*; *oxystoma*; *punctigera*; *reticulosa*; *siphonifera*; *tubulifera*.  
*Marginulina acuaria*; *crassiuscula*; *fallax*; *mucronulata*.  
*Nodosaria anomala*; *bactridium*; *bornemanni*; *calomorpha*; *dacrydium*; *ewaldi*; *inconspicua*; *isomera*; *isopleura*; *pedunculata*; *sceptrum*; *schlichti*; *tubulosa*.  
*Psecadium elongatum*.

[In studying Von Schlicht's paper attention should be given to Reuss' second publication on this correction (Sitz. k. Ak. Wiss. Wien, lxii, 1870), in which he renames and confuses numerous forms. The paper is also full of error and misquotation.]

The following forms are described and illustrated in R. Haeusler's "Micro-geologische Untersuchungen der jurassischen Sedimentärsteine. I Theil. Die microscopischen Structurverhältnisse der Aargauer Jurakalke, mit besonderer Berücksichtigung ihrer Foraminiferenfauna." (Als Dissertation gedrückt.) 8vo, Brugg, 1881, 47 pp. 2 pls.<sup>1</sup> I give the full list of new names for reference. The plates are very bad,—it is difficult to see the utility of publishing such caricatures,—and from the numerous corrections by the author in the copy before me, the book might well have been left in oblivion.

*Cornuspira minima*, p. 26; *sinemurensis*, 15.

*Cristellaria birmenstorffensis*, 27; *complanata*, 26; *difformis*, 27; *helvetojurassica*, 17; *irregularis*, 17; *pusilla*, 18; *pygmaea*, 26; *reniformis*, 27; *sinemurensis*, 17; *vocetica*, 38.

<sup>1</sup> Seen too late for insertion in proper order.

- Dentalina corniformis*, 35; *helvetica*, 34; *multiformis*, 35; *sexcamerata*, 35.  
*Frondicularia bucklandi*, 18; *decipiens*, 27; *lanceolata*, 18; *liassica*, 18; *monilifera*, 27;  
    *problematica*, 18; *pupiformis*, 18; *robusta*, 27.  
*Globigerina helveto-jurassica*, 36.  
*Lugenulina liassica*, 16; *pupoides*, 16; *sexcostata*, 16.  
*Marginulina dentalina*, 17.  
*Nodosaria chrysalis*, 34; *simplex*, 17; *sinemuriensis*, 16; *transversarii*, 34.  
*Orbulina argoviensis*, 36.  
*Placopsisilina argoviensis*, 34; *bathoniana*, 26.  
*Robulina liassica*, 19.  
*Rotalina maclurea*, 37; *macrocephala*, 40; *mayeri*, 37; *peregrina*, 37; *pygmæa*, 40; *sulcifera*,  
    40; *supra-jurensis*, 38; *universa*, 28.  
*Textilaria argoviensis*, 36; *auensteinensis*, 40; *oolitica*, 28; *shrubsolei*, 35; *simplex*, 28;  
    *tenuissima*, 40; *triangularis*, 38.  
*Vaginulina fragilis*, 16.