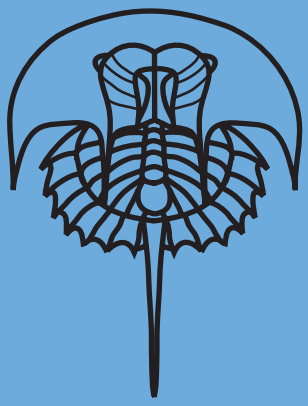

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Names of Indeterminate, Unrecognizable, or Excluded Genera Previously Assigned to Fenestrata

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PART G, REVISED, VOLUME 2, CHAPTER 8H: NAMES OF INDETERMINATE, UNRECOGNIZABLE, OR EXCLUDED GENERA PREVIOUSLY ASSIGNED TO FENESTRATA

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INTRODUCTION

Since the earliest valid publication of a genus of the order Fenestrata in 1838, many genera have been named. The bulk of these are considered in this *Treatise* revision to be valid. Many of the others are synonymous with these valid taxa, while a small number are considered to be indeterminate, unrecognizable, or have had to be excluded from the order Fenestrata. These taxa are detailed below.

In a number of publications where genera were first named, inadequate characterization—together with poor descriptions and illustrations—has not allowed for these taxa to be recognized. As was shown by Morozova (1974), the internal characters of fenestrate bryozoans can be quite varied, although the external appearance is almost identical; the internal morphology characterizes some genera. In a number of instances where the type suite of the type species of a fenestrate genus is preserved either as molds or has been silicified, this taxonomically valuable internal morphological detail is lacking.

In a number of cases, the rules of nomenclature were not adhered to when genera were erected. Authors may not have provided a diagnosis, not named a type species, or may have designated a type species from a suite of species without specifically naming one.

For other taxa, the original specimens are now unfortunately lost, due to episodes of conflict or simply carelessness, and despite making considerable efforts to locate them during the course of this work, they remain missing. In such cases, consideration was given to recollecting material and designating a neotype, but this has not always proven possible.

The actual dates of publication of a number of James Hall's and George Simpson's papers and monographs have proven to be problematic. While the date of publication is frequently provided on the title page, the actual dates of publication and distribution were often later (Horowitz, 1987). In the case of two of Simpson's contributions, on the genera of the family Fenestellidae and his "Handbook of the Genera of North American Paleozoic Bryozoa," these were distributed two years after the dates given on the title page (Nickles & Bassler, 1900, p. 148–149), and these later dates (Simpson, 1895, 1897) have since been widely published. These are accepted here as the date of distribution and, therefore, publication, and this conforms to the ICZN Code (1999, p. 102).

Aetomacladia Bretnall, 1926, p. 21 [**A. ambrosioides;* OD; Carboniferous, Fossil Hill, Wyndham River and Gascoyne River District, Western Australia]. Originally likened to *Penniretepora* d'Orbigny, 1849. Recognized by Utgaard (1983, p. 434) as a valid cystoporate bryozoan genus but later regarded as a junior synonym of *Ramipora* Toula, 1875 (Nakrem & Spjeldnaes, 1995).

Aequifenestella Termier & Termier, 1971, p. 41. Invalid. No type species designated, in violation of ICZN Article 67.4.1 (ICZN, 1999).

Australofenestella Engel, 1979, p. 154 [**Fenestrellina malchi* Crockford, 1949, p. 422; OD]. Internal characteristics of the type species inadequately known; based on latex replicas and molds.

McKinney, Frank K., and Patrick N. Wyse Jackson. 2015. Part G, Revised, Volume 2, Chapter 8H: Names of indeterminate, unrecognizable, or excluded genera previously assigned to Fenestrata. Treatise Online 64:1–5.

Australopolypora Engel, 1979, p. 143 [**Polypora palenensis* Crockford, 1949, p. 427; OD]. Unweathered surficial as well as internal characteristics of the type species unknown; based on latex replicas and molds.

Aviculofenestella Xia, 2002, p. 244 [**A. triapertalis;* OD; Quima Co Formation, Bajocian, Middle Jurassic, Zalsang-Gêrla section, Balin Township, Nagqu Prefecture, Tibet]. The illustrations and description of the type specimens of *Aviculofenestella* are inadequate for determination of possible synonymy within the fenestrates, and the reported stratigraphic determination needs to be confirmed. Diverse fenestrates were piled one on another in a block from the site (Xia, 2002, fig. 1), including apparent *Unitrypa*, suggesting a possible Devonian assemblage.

Bajoola Fleming, 1966, p. 1 [**Fenestella* (*Bajoola*) *capellae;* OD; Middle Devonian (Givetian), Capella Creek, Queensland, Australia]. Holotype of type species apparently consisting only of a mold of the obverse surface, fan-shaped. Branches intermediate width, linear to moderately sinuous, essentially parallel, spacing intermediate; dissepiments intermediate width, perpendicular or oblique to branches, regularly spaced, obverse side striated. Two rows of autozooecia on branches, separated by a broad median keel on which a single row of low nodes apparently is present. Internal characters unknown, except that basal autozooecial shape reported to be oval. Distal tube diameter intermediate to large, apertures immediately adjacent to the median keel, some reported to be scalloped on interior surface, parallel with obverse plane due to partial peristomes that are high laterally and taper to nothing against the median keel; peristomes terminating in approximately 8 spines. In the absence of information on chamber shape, this taxon cannot be differentiated from or synonymized with other superficially similar fenestellids.

Chasmatoporella Nekhoroshev, 1936, p. 7 [**C. metzi;* OD; Lower Silurian, Carnic Alps, Austria]. Nekhoroshev (1936) illustrated several specimens of *C. metzi* but did not designate any as type material; all specimens were destroyed during WWII (L. Nekhorosheva, personal communication, 26 January 2005). The original description and illustrations are insufficient to characterize the genus.

Conphylloporina Kiepura, 1962, p. 390 [**C. mochtyensis;* OD; Middle or Upper Ordovician boulder, Mochty, Warsaw region, Poland]. Unrecognizable. Type specimens lost (A. Halamski, personal communication, 21 June 2010). The original description and illustrations are insufficient to characterize the genus.

Cryptopora Nicholson, 1874, p. 77, *non* Jeffreys, 1869, p. 136 (Brachiopoda) (type, *Atretia gnomon* Jeffreys, 1876, p. 251) [**C. mirabilis;* OD]. As first noted by Hall (1885), original type specimens were preserved as molds in fine-grained siliciclastic sandstone, overall branch morphology and superstructure are enigmatic, and more than one species may be present among the type specimens. *Cryptopora* commonly has been considered a junior synonym of *Semicoscinium*, but we consider it to be unrecognizable. Lower Devonian, Ontario, Canada.

Dogaddanella Ganesan, 1972, p. 438 [**D. audeni;* OD]. The type species is a biserial fenestellid with large zooecial apertures, distantly and irregularly spaced dissepiments, and a sharp obverse keel along branches devoid of nodes or spines; type locality yielded only molds, hence zooecial morphology and skeletal microstructure are unknown. So-called Boulder Slate (middle or upper Carboniferous), India.

Fenestella (Nebrodensia?) De Gregorio, 1930, p. 28. *Nebrodensia* was first published by De Gregorio in 1883 (p. 75), along with five species descriptions of concentrically layered, globular Mesozoic fossils. He then used it in idiosyncratic combinations, including the 1930 combination or alternative for *Fenestella*, accompanied by an enigmatic description and illustration.

Fenesteverta Elias, 1957, p. 413 [**F. nicklesi;* OD]. Unrecognizable; the single specimen is a mold and appears possibly to be an *Archimedes*.

Flabelliporina Simpson, 1895, p. 703, *nom. nud.*

Helicopora Claypole, 1881, p. 191 [**H. latispiralis;* OD]. Type specimens apparently lost, and no additional specimens known (Condra & Elias, 1944, p. 68); preserved as molds, without definable axial structure, and (according to Claypole, 1883), with obverse surface facing toward base of spiral, therefore not synonymous with *Archimedes*. Unrecognizable at present.

Levifenestella Miller, 1961, p. 493 [**L. maeve;* OD]. Unrecognizable; chamber shape unknown.

Loculiporina Elias & Condra, 1957, p. 104 [**Fenestella (Loculiporina) muscus;* OD]. Unrecognizable; original silicified material currently unavailable.

Lyroporina Simpson, 1895, p. 723, *nom. nud.*

Patellipora Rominger, 1887, p. 11 [**P. stellipora;* OD]. Unrecognizable.

Pinnaporella Simpson, 1895, p. 704, *nom. nud.*

Polipora Vinassa de Regny, 1910, p. 17. Used in the binomen *Polipora tomasii* Vinassa de Regny, 1910, p. 17, for a taxon from the Upper Ordovician of the Carnic Alps. This only superficially resembles *Polypora* M'Coy, 1844, and is most probably a phylloporinid bryozoan (A. Ernst, personal communication, January 2005). *Polipora* cannot be regarded as a homonym of *Polypora* M'Coy, 1844 as it differs from it in spelling by one letter (ICZN Article 56.2).

Polyporina Fredericks, 1920, p. 554, *non* Levinsen, 1902, p. 26 (no type species designated by Levinsen) [**Polypora orbicribrata* Keyserling, 1846, p. 189; OD]. Unrecognizable.

Pteropora Eichwald, 1855, p. 452, *non* Hall, 1883, p. 192 [**P. pennula;* OD; Pirgu and Porkuni horizons, Upper Ordovician, Haapsalu and Seli-Merksula, Estonia]. Accepted by Karklins (1983,

p. 496) as a ptilodictyid cryptostome. [*Pteropora* HALL, 1883, is a junior synonym of the cystoporate bryozoan *Taeniopora* NICHOLSON, 1874 (UTGAARD, 1983, p. 431).]

Rhabdinopora EICHWALD, 1855, p. 453 [**Gorgonia flabelliformis* EICHWALD, 1840a, p. 220 (p. 207 in EICHWALD, 1840b, German edition); SD BULMAN, 1970, p. 38]. While the taxonomic status of *Rhabdinopora* and *Gorgonia flabelliformis* is convoluted (BULMAN, 1967), there is no doubt that it is a graptolite, as was listed by BASSLER (1935, 1953). BULMAN (1970, p. 38) treats *Rhabdinopora* as a junior synonym of *Dictyonema* HALL, 1851, a wide-ranging dendroid graptolite.

Rugofenestella TERMIER & TERMIER, 1971, p. 43. Invalid. No type species designated, in violation of ICZN Article 67.4.1 (ICZN, 1999).

Ryhopora SOUTHWOOD, 1990, p. 35 [**R. delicata;* OD; Ryhope, Sunderland, England, Zechstein, Middle Magnesian Limestone Reef, Tunstall member of Ford Formation, Zechstein Cycle 1, Upper Permian]. Based on exterior of dolomitized material; location of type specimens unknown.

Samaria STUCKENBERG, 1905, p. 31, *non* RAGONOT, 1893 [**S. volgensis;* OD]. NIKIFOROVA 1938, p. 163 examined the type suite (University of Kazan K32, K32a), which is comprised of poorly preserved specimens, and was unable to characterize the species, but assigned *Samaria* to *Reteporidra* NICKLES & BASSLER, 1900.

Shulgapora TERMIER & TERMIER, 1971, p. 33. Invalid. No type species designated from among the three species within the *Polypora helenae–Polypora kolvae* group (SHUL'GA-NESTERENKO, 1951, p. 130) for which the genus was erected, in violation of ICZN Article 67.4.1 (ICZN, 1999).

Sphragiopora ULRICH in MILLER, 1889, p. 323 [**S. parasitica;* OD]. Unrecognizable; Chesterian, USA. [ULRICH (1890) mistook young colonies, consisting only of the ancestrula and the first few budded zooecia that constitute the basal attachment, as an aberrant growth habit of fenestrates. The associated fenestrate fauna is diverse, and at present insufficient information about their basal attachments is available to determine affinity of the young colonies in the original type suite with specific associated species.]

Subretepora D'ORBIGNY, 1849, p. 500 [**Intricaria? reticulata* HALL, 1847, p. 77; OD; lower Trenton Limestone, Watertown, New York]. *Nomen oblitum,* except for use in BASSLER, 1935, as senior synonym of *Chasmatopora*, and by TITUS (1986) in a distribution table.

Synocladiopsis DE GREGORIO, 1930, p. 33 [**S. elegans;* OD; Sosio Limestone, Permian, Palazzo Adriano, Sicily, Italy]. Unrecognizable. [This genus was based on specimens contained in a private collection whose whereabouts is now not known. The original description, although vague, together with the crude hand-drawn illustrations, indicates that the taxon has no fenestrate characteristics. Internal features are not known.]

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