CATALOGUE OF TYPE INVERTEBRATE FOSSILS OF THE GEOLOGICAL SURVEY OF CANADA

Volume I

Thomas E. Bolton

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GEOLOGICAL SURVEY
OF CANADA

VOLUME I

CATALOGUE OF TYPE INVERTEBRATE FOSSILS OF THE GEOLOGICAL SURVEY OF CANADA

By
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DEPARTMENT OF
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INTRODUCTION

Since the founding of the Geological Survey of Canada in 1842 the study and determination of fossils has assumed an indispensible role in the geological mapping of Canada. Specimens used in the description of new genera and species have been gradually accumulating in the type collection of the Survey. The collection includes many fossils described by E. Billings and J. F. Whiteaves between 1856 and 1909. These pioneer palæontologists, in association with Sir W. E. Logan, the first Director, laid the foundation for Canadian stratigraphy. In subsequent years the palæontological staff has included such palæontologists as H. M. Ami, L. M. Lambe, A. E. Wilson, F. H. McLearn, P. E. Raymond, W. A. Bell, and E. M. Kindle. Survey material has also been examined and described by such palæontological specialists as James Hall, J. W. Salter, T. Rupert Jones, A. Handlirsch, S. Scudder, C. D. Walcott, F. Springer, W. H. Twenhofel, H. W. Shimer, A. F. Foerste, and W. A. Parks. As a consequence the number of type specimens has greatly increased in quantity, variety, and scientific value.

Up to the present no catalogue has been published listing all the known type fossil specimens within the Survey collection that have been described during this past century. The recent increase of research in stratigraphic and systematic palæontology has created a definite need for such a list and the present catalogue is an attempt to fill this void in Canadian palæontology in so far as it concerns the Geological Survey of Canada collection of invertebrate fossil types.

Volume I of this catalogue includes fossil representatives of the FORAMINIFERA, PORIFERA, ARCHAEOCYATHA, STROMATOPOROIDEA, ANTHOZOA, ECHINODERMATA, GRAPTOLITHINA, BRYOZOA, and BRACHIOPODA. It is intended that volume II will include the remaining groups and any addenda to volume I. Later additions to the collection will be included in future volumes. Each type fossil is listed alphabetically by genus as originally published. Subsequent changes in the generic designation are included when the types are figured or when definite evidence is presented that the specimens were re-examined. A complete synonymy for each or any species is neither attempted nor intended.

The type catagories used in this catalogue are as follows:

Holotype: the single specimen taken as the 'type' by the original author of a species.

Paratype: a specimen or specimens, supplementary to the holotype, used by the original author as the basis of a new species. Specimens need only to be mentioned in the original description.

Syntype: one of several specimens of equal rank upon which a species is based, no one specimen being designated as the holotype.

Lectotype: a single specimen, selected from a syntypic series, subsequent to the original description, to serve as the holotype.

Neotype: a specimen, preferably from the original locality and stratigraphic horizon, selected to replace the holotype if the latter is lost or destroyed.

Hypotype: a described, listed, or figured specimen.

Various other figured specimens (fig. spec.) are also listed in the catalogue. In some instances, where such an arrangement would provide additional assistance to the stratigraphic palæontologist, the types have been segregated according to geological periods. All specimens listed in this catalogue are in the type fossil collection of the Geological Survey of Canada, unless specified as missing, and are normally so designated in publications by the abbreviation GSC. This collection includes all invertebrate fossils formerly attributed to the Victoria Memorial or National Museum of Canada.

No compilation is the work of one person alone. Several members of the Stratigraphical Palæontology section of the Survey have generously aided in the preparation of this catalogue. To these the writer is greatly indebted.

FORAMINIFERA

CARBONIFEROUS

Nodosinella priscilla (Dawson)

Hypotype 7668

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 90, pl. 1, fig. 3.

Upper Windsor, Mississippian, Nova Scotia.

PERMIAN

Fusulina hyperborea Salter

Paratypes 13476, a-e

Salter, J. W., 1855 *in* "Last of the Arctic Voyages under the Command of Captain Sir Edward Belcher", vol. 2, p. 380, pl. 36, figs. 1-3.

Permian, Depot Point (loose), Devon Island, Arctic.

Loftusia columbiana Dawson

Syntypes 6233, a-c

Dawson, G. M.

1879, Quart. J. Geol. Soc. London, vol. 35, No. 5, p. 74, pl. 6, figs. 1-7.

1879, Geol. Surv., Canada, Rept. Prog. 1877-78, p. 88B.

Permian, Marble Canyon, British Columbia.

=*Neoschwagerina columbiana*, Dunbar, C. O., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 46, pl. 1, figs. 1-4.

JURASSIC

Ammodiscus sp. ?

Fig. spec. 8010

Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 157, pl. 1, fig. 1.

Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Cornuspira tenuissima ? (Gumbel)

Hypotype 8037

Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 159, pl. 1, fig. 5.

Jurassic, Eagle Butte well #2 (4,430'), Alberta.

Dentalinopsis oolithica ? (Terquem)

Hypotype 8026

Wickenden, R.T.D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 167, pl. 2, figs. 6a, b.

Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Eponides cf. *semiornata* (Schwager)

Hypotype 8034

Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 167, pl. 2, figs. 15a-c.

Jurassic, Eagle Butte well #2 (4,430'), Alberta.

Flabellina muralis Terquem

Hypotype 8023

Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 165, pl. 2, fig. 3.

Jurassic, Moose Jaw well (3,140'), Saskatchewan.

Frankeina sp. ?

Fig. spec. 8011

Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 158, pl. 1, fig. 2.

Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Frondicularia cf. *franconia* Gumbel
Hypotype 8025
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 164, pl. 2, fig. 5.
Jurassic, Eagle Butte well #2 (4,450'), Alberta.

Frondicularia lingulaeformis Schwager
Hypotypes 8024a, b
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 164, pl. 2, figs. 4, 10.
Jurassic, Saskatchewan and Alberta.

Globigerina sp. ?
Fig. spec. 8035
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 168, pl. 2, figs. 16a, b.
Jurassic, Eagle Butte well #2 (4,430'), Alberta.

Guttulina cf. *pigmaea* (Schwager)
Hypotype 8033
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 166, pl. 2, figs. 14a, b.
Jurassic, Moose Jaw well (3,140'), Saskatchewan.

Guttulina sp. ?
Fig. spec. 8032
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 167, pl. 2, figs. 13a, b.
Jurassic, Moose Jaw well (3,140'), Saskatchewan.

Haplophragmoides sp. ?
Fig. spec. 8013
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 158, pl. 1, figs. 4a, b.
Jurassic, Eagle Butte well (4,490'), Alberta.

Lenticulina sarthacensis (Schwager)
Hypotypes 8016a, b, 8017
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 160, pl. 1, figs. 9-11.
Jurassic, Moose Jaw well (3,150') and Boundary well (3,850'), Saskatchewan.

Lenticulina sp. ?
Fig. spec. 8015
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 160, pl. 1, figs. 8a, b.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Marginulina cf. *canadensis* (D'Orbigny)
Hypotype 8036
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 162, pl. 2, figs. 1a, b.
Jurassic, Moose Jaw well (3,140'), Saskatchewan.

Marginulina cf. *lacunata* (Terquem and Berthelin)
Hypotype 8019
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 162, pl. 1, fig. 13.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Marginulina cf. *limata* (Schwager)
Hypotype 8021
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 162, pl. 1, figs. 17a, b.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Marginulina cf. *sparsa* (Terquem and Berthelin)
Hypotype 8039
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 161, pl. 1, fig. 14.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Marginulina sp. ?
Fig. spec. 8018
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 163, pl. 1, figs. 12a, b.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Nodosaria cf. *corallina* Gumbel
Hypotype 8030
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 165, pl. 2, fig. 11.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Nodosaria fontinensis ? Terquem
Hypotype 8029
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 166, pl. 2, fig. 9.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Nodosaria cf. *immutabilis* (Schwager)
Hypotype 8028
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 165, pl. 2, fig. 8.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Nodosaria sp. ?
Fig. spec. 8027
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 166, pl. 2, fig. 7.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Placopsilina cf. *cenomana* D'Orbigny
Hypotype 8012
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 159, pl. 1, fig. 3.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Robulus cf. *vulgaris* (Schwager)
Hypotypes 8014a, b
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 160, pl. 1, figs. 6a, b, 7a, b.
Jurassic, Moose Jaw well (3,160'), Saskatchewan.

Vaginulina foliacea (Schwager)
Hypotype 8022
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 163, pl. 2, figs. 2a, b.
Jurassic, Moose Jaw well (3,140'), Saskatchewan.

Vaginulina lepida (Schwager)
Hypotypes 8020a, b
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 163, pl. 1, figs. 15, 16.
Jurassic, Alberta and Saskatchewan.

Webbina gracilis Terquem
Hypotype 8031
Wickenden, R. T. D., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 168, pl. 2, fig. 12.
Jurassic, Eagle Butte well #2 (4,460'), Alberta.

CRETACEOUS

Ammobaculites coprolithiforme (Schwager)
Hypotype 13471
Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 130, pl. 1, figs. 6, 7.
Upper Cretaceous, British Petroleum well #3 (2,044'-2,054'), sec. 29, tp. 45, rge. 6, W. 4th mer., Alberta.

Ammobaculites coprolithiformis (Schwager)
Hypotype 6696
Wickenden, R. T. D., 1932, J. Pal., vol. 6, No. 2, p. 204, pl. 29, fig. 2.
Alberta shale, Upper Cretaceous, Border Oils well (543'), southern Alberta.

Ammobaculites fragmentaria Cushman
Holotype 9024
Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 130, pl. 1, fig. 8.
Upper Cretaceous, British Petroleum well #3, sec. 29, tp. 45, rge. 6, W. 4th mer., Alberta.

Anomalina moniliformis (Reuss)
Hypotype 6776
Wickenden, R. T. D., 1932, J. Pal., vol. 6, No. 2, p. 207, pl. 29, figs. 10a-c.
Alberta shale, Upper Cretaceous, Devonshire well #1 (520'), southern Alberta.

Bigenerina angulata Cushman
Holotype 9026
Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 131, pl. 1, fig. 10.
Upper Cretaceous, British Petroleum well #3 (2,044'-2,054'), sec. 29, tp. 45, rge. 6, W. 4th mer., Alberta.
=*Gaudryina canadensis*, Cushman, J. A., 1943, Contr. Cushman Lab. Foram. Res., vol. 19, pt. 2, No. 244, p. 28.

Bigenerina hastata Cushman
Holotype 9025
Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 131, pl. 1, fig. 9.
Upper Cretaceous, Northern Manitoba Oil Co. well, sec. 33, tp. 42, rge. 26, W. Prin. mer., Manitoba.

Bullopora laevis Sollas
Hypotypes 6774a-c
Wickenden, R. T. D., 1932, J. Pal., vol. 6, No. 2, p. 206, pl. 29, figs. 6-8.
Alberta shale, Upper Cretaceous, Border Oils well (543'), southern Alberta.

Clavulina ? sp.
Fig. spec. 6773
Wickenden, R. T. D., 1932, J. Pal., vol. 6, No. 2, p. 205, pl. 29, fig. 5.
Alberta shale, Upper Cretaceous, Ko. Top well (820'), southern Alberta.

Cornuspira cretacea Reuss
Hypotype 13472
Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 132, pl. 1, fig. 12.
Upper Cretaceous, Pelican Rapids well, sec. 6, tp. 79, rge. 17, W. 4th mer., Alberta.

Eoeponidella linki Wickenden
Holotype 9121
Wickenden, R. T. D., 1949, Trans. Roy. Soc. Can., ser. 3, vol. 42, sec. 4, p. 81, fig. 1.
Upper Cretaceous, Imperial Oil well #526, l.s.d. 16, sec. 36, tp. 21, rge. 23, W. 3rd mer., Saskatchewan.

Gaudryina bearpawensis Wickenden

Holotype 6400

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 88, pl. 1, fig. 7.

Bearpaw shales, Upper Cretaceous, Oldman river ¼ mile north of main highway from Lethbridge, SE. ¼ sec. 11, tp. 9, rge. 22, W. 4th mer., Alberta.

Gaudryina canadensis Cushman

Hypotypes 1360, 1361

Cushman, J. A., 1943, Contr. Cushman Lab. Foram. Res., vol. 19, pt. 2, No. 244, p. 28, pl. 6, figs. 7, 8.

Upper Cretaceous, London Ribstone well #1 (1930'), l.s.d. 14, sec. 10, tp. 43, rge. 3, W. 4th mer., Alberta.

Gaudryina filiformis Bethelin

Hypotype 6772

Wickenden, R. T. D., 1932, J. Pal., vol. 6, No. 2, p. 205, pl. 29, fig. 4.

Alberta shale, Upper Cretaceous, Devonshire well #1 (470'), southern Alberta.

Gaudryina oxycona Reuss

Hypotype 6771 (missing)

Wickenden, R. T. D., 1932, J. Pal., vol. 6, No. 2, p. 205, pl. 29, figs. 3a, b.

Alberta shale, Upper Cretaceous, Border Oils well (543'), southern Alberta.

Gaudryina painoides Wickenden

Holoypte 6396

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 88, pl. 1, figs. 3a-c.

Boyne beds, Upper Cretaceous, Pembina escarpment 8 miles south of Morden, SE. ¼ sec. 32, tp. 1, rge. 5, W. Prin. mer., Manitoba.

Gyroidina depressa (Alth)

Hypotype 6775

Wickenden, R. T. D., 1932, J. Pal., vol. 6, No. 2, p. 206, pl. 29, figs. 9a-c.

Alberta shale, Upper Cretaceous, Border Oils well (543'), southern Alberta.

Hantkenina multispinata Cushman and Wickenden

Holotype 6433; paratypes 6432, 6434

Cushman, J. A. and Wickenden, R. T. D., 1930, Contr. Cushman Lab. Foram. Res., vol. 6, pt. 2, No. 91, p. 40, pl. 6, figs. 4a-c, 5a-d, 6.

Cretaceous, north bank Boyne River, NE. ¼ sec. 11, tp. 6 N., rge. 8, W. Prin. mer., Manitoba.

Haplophragmoides calcula Cushman and Waters

Hypotype 13469

Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 129, pl. 1, fig. 3.

Upper Cretaceous, Rush Lake well, sec. 30, tp. 19, rge. 11, W. 3rd mer., Saskatchewan.

Haplophragmoides excavata Cushman and Waters

Hypotype 13467

Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 128, pl. 1, fig. 1.

Upper Cretaceous, Rush Lake well, sec. 30, tp. 19, rge. 11, W. 3rd mer., Saskatchewan.

Haplophragmoides fraseri Wickenden

Holotype 6377

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 81, pl. 1, figs. 2a, b.

Bearpaw shales, Upper Cretaceous, badlands east of Manyberries, Alberta.

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Haplophragmoides gigas Cushman

Holotype 9023

Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 129, pl. 1, fig. 5.

Upper Cretaceous, British Petroleum well #3 (1921'-1929'), sec. 29, tp. 45, rge. 4, W. 4th mer., Alberta.

Haplophragmoides glabra Cushman and Waters

Hypotype 13470

Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 129, pl. 1, fig. 4.

Upper Cretaceous, Rush Lake well, sec. 30, tp. 19, rge. 11, W. 3rd mer., Saskatchewan.

Haplophragmoides kirki Wickenden

Holotype 6379

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 85, pl. 1, figs. 1a-c.

Bearpaw shales, Upper Cretaceous, east of Manyberries, sec. 14, tp. 5, rge. 5, W. 4th mer., Alberta.

Haplophragmoides rugosa Cushman and Waters

Hypotype 13468

Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 128, pl. 1, fig. 2.

Upper Cretaceous, Rush Lake well, sec. 30, tp. 19, rge. 11, W. 3rd mer., Saskatchewan.

Heterostomella boynensis Wickenden

Holotype 6401

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 89, pl. 1, figs. 5a, b.

Boyne beds, Upper Cretaceous, 1 mile east of Babcock, NE. ¼ sec. 11, tp. 6, rge. 8, W. Prin. mer., Manitoba.

Loxostomum cushmani Wickenden

Holotype 6439

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 91, pl. 1, figs. 6a, b.

Boyne beds, Upper Cretaceous, 1½ miles SSW. of Treherne, Manitoba.

Miliammina manitobensis Wickenden

Holotype 6406

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 90, pl. 1, fig. 11.

Lower Benton-Ashville, Upper Cretaceous, east end Thunder Hill, NW. ¼ sec. 19, tp. 35, rge. 29, W. Prin. mer., Manitoba.

Neobulimina canadensis Cushman and Wickenden

Holotype 6297

Cushman, J.A. and Wickenden, R. T. D., 1928, Contr. Cushman Lab. Foram. Res., vol. 4, pt. 1, No. 56, p. 13, pl. 1, figs. 1-2.

Upper Cretaceous, Imperial Ribstone well #1 (360'-370'), l.s.d. 6, sec. 6, tp. 45, rge. 1, W. 4th mer., Alberta.

Reophax texana Cushman and Waters

Hypotype 6695

Wickenden, R. T. D., 1932, J. Pal., vol. 6, No. 2, p. 204, pl. 29, fig. 1.

Alberta shale, Upper Cretaceous, Ko. Top well (810'), southern Alberta.

Spiroplectammina mordenensis Wickenden

Holotype 6388

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 86, pl. 1, figs. 4a, b.

Morden beds, Upper Cretaceous, southwest bank Assiniboine River, ½ mile above mouth Cypress River, NE. ¼ sec. 29, tp. 8, rge. 11, W. Prin. mer., Manitoba.

Tritaxia manitobensis Wickenden

Holotype 6397

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 87, pl. 1, fig. 10.

Lower Benton-Ashville beds, Upper Cretaceous, near east end Thunder Hill, NW. ¼ sec. 19, tp. 35, rge. 29, W. Prin. mer., Manitoba.

Trochammina albertensis Wickenden

Holotype 6407

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 90, pl. 1, figs. 9a, c.

Bearpaw shales, Upper Cretaceous, west bank Oldman River, ½ mile north of main highway west from Lethbridge, SE. ¼ sec. 11, tp. 9, rge. 22, W. 4th mer., Alberta.

Trochammina ribstonensis Wickenden

Holotype 6408

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 90, pl. 1, figs. 12a, c.

Upper Cretaceous, Imperial Ribstone well #1 (700'), Alberta.

Verneuilina bearpawensis Wickenden

Holotype 6394

Wickenden, R. T. D., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 87, pl. 1, fig. 8.

Bearpaw shales, Upper Cretaceous, west bank Oldman River, ½ mile north main highway west from Lethbridge, SE. ¼ sec. 11, tp. 9, rge. 22, W. 4th mer., Alberta.

Verneuilina canadensis Cushman

Holotype 9027

Cushman, J. A., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 131, pl. 1, fig. 11.

Upper Cretaceous, British Petroleum well #3 (1896'-1904'), sec. 29, tp. 45, rge. 6, W. 4th mer., Alberta.

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PORIFERA

Archaeoscyphia minganensis (Billings)

Syntypes 449, 463

Petraia minganensis, Billings, E.,
1859, Can. Naturalist Geol., vol. 4, p. 346.

Archaeocyathus minganensis, Billings, E.,
1861, "New Species of Lower Silurian Fossils", p. 5.
1861, Rept. Geol. Vermont, vol. 2, p. 945.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 5; p. 354, figs. 342-344.

Archaeoscyphia minganensis, Hinde, G. J.,
1889, Quart. J. Geol. Soc. London, vol. 45, p. 142, pl. 5, figs. 12-14.

Lower Ordovician (Romaine formation), Mingan Islands, Quebec.

Astylospongia ? perplexa Wilson

Holotype 9296; paratype 9299
Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 16, pl. 7, figs. 7, 8.

Cobourg beds, Ottawa formation, Middle Ordovician, Booth Street, Ottawa, Ontario.

Aulacopella winnipegensis Rauff

Holotype 6863
Rauff, H., 1895, Palæontographica, vol. 41, p. 269, pl. 24, figs. 4-6; text fig. 124.
Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 3, No. 4, p. 145, pl. 16, figs. 1-3; text fig. 9.

Ordovician (Cat Head member, Red River formation), Cat Head, Lake Winnipeg, Manitoba.

Aulocopina granti Billings

Syntypes 2599, a-c
Billings, E., 1874, Can. Naturalist, n.s., vol. 7, p. 230, figs. 1, 2.

Middle Silurian (chert beds, Lockport formation), Hamilton, Ontario.

Brachiospongia hullensis Wilson

Holotype 9309; paratypes 9310, a, b
Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 23, pl. 11; pl. 12, figs. 2-4.

Hull beds, Ottawa formation, Middle Ordovician, Wrights' quarry, Hull, Quebec; Cobourg beds, Ottawa formation, Middle Ordovician, foot of Sussex Street, Ottawa, Ontario.

Calathium affine Billings

Holotype 532
Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 209, fig. 193.

Division G (St. George), Lower Ordovician, Cape Norman, Newfoundland.

Calathium anstedi Billings

Holotype 533
Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 210, fig. 194.

Division H (St. George), Lower Ordovician, Schooner Island, Pistolet Bay, Newfoundland.

Calathium crassum Billings

Holotype 7457
Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 337, figs. 325a, b.

Division H (St. George), Lower Ordovician, Schooner Island, Pistolet Bay, Newfoundland.

Calathium fittoni Billings

Holotype 531

Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 211; fig. 195.

Division K (Table Head), Middle Ordovician, Point Rich, Newfoundland.

Calathium formosum Billings

Holotype 534 (missing)

Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 209, fig. 192.

Division G (St. George), Lower Ordovician, Cape Norman, Newfoundland.

Calathium ? paradoxicum Billings

Holotype 451

Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 358, fig. 345.

Lower Ordovician (Romaine formation), Mingan Islands, Quebec.

=*Nipterella paradoxica,* Hinde, G. J., 1889, Quart. J. Geol. Soc. London, vol. 45, p. 144, pl. 5, fig. 15.

Caryomanon editum punctatum Wilson

Holotype 1368

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 17, pl. 7, fig. 6.

Sherman Fall beds, Ottawa formation, Middle Ordovician, Brewery Creek, Hull, Quebec.

Caryomanon parvulum (Billings)

Hypotypes 1369,a-h

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 17, pl. 7, figs. 4, 5 (not syntypes of *Astylospongia parvula* (1861) as collected by J. Stewart, 1866-67).

Cobourg beds, Ottawa formation, Middle Ordovician, Booth Street, Ottawa, Ontario.

Eospongia roemeri Billings

Syntypes 1008,a-c, 1110,a

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 19.

1861, Rept. Geol. Vermont, vol. 2, p. 956.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 19.

Raymond, P. E. and Okulitch, V. J., 1940, Bull. Mus. Comp. Zool. Harvard, vol. 86, No. 5, p. 198, pl. 1, fig. 1 (holotype 1008,a—parts of one specimen).

Middle Ordovician (Mingan formation), Mingan Islands, Quebec.

=*Zittelela varians,* Raymond, P. E. and Okulitch, V. J., 1940, ibid., p. 199 (1008b).

=*Hudsonospongia duplicata,* Raymond, P. E. and Okulitch, V. J., 1940, ibid., p. 207, pl. 4, figs. 1, 2 (holotype 1008c).

Eospongia varians Billings

Syntypes 999a-k, 1109

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 19.

1861, Rept. Geol. Vermont, vol. 2, p. 956.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 19.

Middle Ordovician (Mingan formation), Clear Water Point, Mingan Islands, Quebec.

=*Zittelella varians,* Howell, B. F., 1938, Bull. Wagner Free Inst. Sci., vol. 13, No. 4, p. 31, pl. 1, figs. 3, 4 (holotype 999f,h—parts of one specimen).

=*Zittelella varians,* Raymond, P. E. and Okulitch, V. J., 1940, Bull. Mus. Comp. Zool. Harvard, vol. 86, No. 5, p. 200, pl. 7, figs. 1-4 (holotype 999f, h; paratypes 999d, e).

=*Hudsonospongia irregularis,* Raymond, P. E. and Okulitch, V. J., 1940, ibid., p. 207, pl. 4, figs. 6, 7 (holotype 999b; paratype 999c).

=*Hudsonospongia minganensis,* Raymond, P. E. and Okulitch, V. J., 1940, ibid., p. 205, pl. 4, fig. 4 (holotype 999g, i—parts of one specimen; paratypes 999j, k, 1109).

Hindia parva Ulrich
Hypotype 9303
Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 18, pl. 7, fig. 1.
Cobourg ? beds, Ottawa formation, Middle Ordovician, Ottawa, Ontario.

Hudsonospongia duplicata see *Eospongia roemeri*

Hudsonospongia irregularis see *Eospongia varians*

Hudsonospongia minganensis see *Eospongia varians*

Nipterella paradoxica see *Calathium ? paradoxicum*

Okulitchina magna Wilson
Holotype 9307a-c (parts of one specimen); paratype 9307d
Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 22, pl. 9, figs. 8-11.
Cobourg ? beds, Ottawa formation, Middle Ordovician, Ottawa, Ontario.

Okulitchina parva Wilson
Holotype 9308; paratype 9308a
Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 22, pl. 9, figs. 6, 7; pl. 10.
Cobourg beds, Ottawa formation, Middle Ordovician, south end Booth Street, Ottawa, Ontario.

Rhabdaria fragilis Billings
Holotype 453
Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 357.
Lower Ordovician (Romaine formation), Mingan Islands, Quebec.

Rhabdaria furcata Billings
Holotype 454
Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 358.
Lower Ordovician (Romaine formation), Mingan Islands, Quebec.

Sphaerospongia tesselata Phillips
Hypotypes 3855, a, b, d, g, 3856, 3857, 3984, a.
Whiteaves, J. F., Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 259, pl. 33.
Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

Cf. *Steinmannia utriculus* Regny
Hypotype 9615
Lees, E. J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 32, pl. 1, fig. 1.
Lewes River formation, Triassic, Laberge area, Yukon.

Steliella billingsi Hinde
Syntypes 982, a-e
Hinde, G. J., 1889, Can. Rec. Sci., vol. 3, p. 396, pl. D, figs. 1-4.
Wilson, A. E.,
1948, Geol. Surv., Canada, Bull. 11, p. 19, pl. 8, figs. 1, 2; pl. 9, figs. 1-3 (holotype 982; paratypes 982a-e).
1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 1, fig. 9.
Middle Ordovician (Cobourg ? beds), corner Somerset and Booth Streets, Ottawa, Ontario.

Steliella crassa Hinde
Holotype 983; paratypes 983a-c
Hinde, G. J., 1889, Can. Rec. Sci., vol. 3, p. 397, pl. D, figs. 5, 6.
Wilson, A. E.,
1948, Geol. Surv., Canada, Bull. 11, p. 20, pl. 7, fig. 2; pl. 8, figs. 4-6.
1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 1, fig. 11.
Middle Ordovician (Cobourg ? beds), corner Somerset and Booth Streets, Ottawa, Ontario.

Steliella ottawaensis Wilson

Holotype 9305; paratypes 9305a, b

Wilson, A. E.,

1948, Geol. Surv., Canada, Bull. 11, p. 20, pl. 8, figs. 3, 7; pl. 9, figs. 4, 5.

1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 1, fig. 10.

Cobourg beds, Ottawa formation, Middle Ordovician, corner of Booth and Elm Streets, Ottawa, Ontario.

Stephanella sancta Hinde

Syntypes 13480, a-d

Hinde, G. J., 1891, Geol. Mag., n.s., dec. 3, vol. 8, p. 22, fig.

Upper Ordovician (Eastview formation), Albert Street between O'Connor and Bank Streets, Ottawa, Ontario.

Trachyum cyathiforme Billings

Holotype 530

Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 211, fig. 196.

Division G (St. George), Lower Ordovician, Cape Norman, Newfoundland.

Trichospongia hystrix Whiteaves

Holotype 6864

Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 3, p. 147, pl. 17, fig. 3.

Cat Head member, Red River formation, Ordovician, Cat Head, Lake Winnipeg, Manitoba.

Trichospongia sericea Billings

Syntypes 452, a

Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 357.

Lower Ordovician (Romaine formation), Mingan Islands, Quebec.

Zittelella varians see *Eospongia varians*

Ajacicyathus clarus (Vologdin)

Hypotype 12762

Okulitch, V. J. and Roots, E. F., 1947, Trans. Roy. Soc. Can., ser. 3, vol. 41, sec. 4, p. 40, pl. 1, fig. 5.

Ingenika group, Lower Cambrian, Osilinka River, Aiken Lake area, British Columbia.

Ajacicyathus nevadensis (Okulitch)

Hypotype 12360

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 49, pl. 2, fig. 2.

Atan group, Lower Cambrian, McDame area, British Columbia.

Ajacicyathus osilinka Okulitch and Roots

Holotype 12763

Okulitch, V. J., and Roots, E. F., 1947, Trans. Roy. Soc. Can., ser. 3, vol. 41, sec. 4, p. 40, pl. 1, fig. 4.

Ingenika group, Lower Cambrian, Osilinka River, Aiken Lake area, British Columbia.

Ajacicyathus purcellensis Okulitch

Hypotypes 12758-12761

Okulitch, V. J. and Roots, E. F., 1947, Trans. Roy. Soc. Can., ser. 3, vol. 41, sec. 4, p. 39, pl. 1, figs. 1-3, 12.

Ingenika group, Lower Cambrian, Osilinka River, Aiken Lake area, British Columbia.

See *Ajacicyathus* sp.

Ajacicyathus purcellensis Okulitch

Hypotype 13325

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 915, pl. 109, fig. 1.

Lower Cambrian, 1 mile due NE. of northeast end Crescent Lake, lat. 60°12′30″, long. 131°11′30″, Wolfe Lake area, Yukon.

Ajacicyathus undulatus Okulitch

Holotype 9515

Okulitch, V. J., 1948, J. Pal., vol. 22, No. 3, p. 342, pl. 53, fig. 4.

Donald formation, Lower Cambrian, Dogtooth Range, British Columbia.

Ajacicyathus undulatus Okulitch

Hypotype 12361

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 49, pl. 2, fig. 9.

Atan group, Lower Cambrian, McDame area, British Columbia.

Ajacicyathus yukonensis Kawase and Okulitch

Holotype 13326

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 915, pl. 109, fig. 2.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Yukon.

Ajacicyathus sp.

Fig. spec. 9514

Okulitch, V. J., 1943, Geol. Soc. Amer., Sp. Paper 48, p. 13, pl. 1, fig. 5.

Donald formation, Lower Cambrian, Purcell Range, British Columbia.

=*Ajacicyathus purcellensis,* Okulitch, V. J., 1948, J. Pal., vol. 22, No. 3, p. 342, pl. 53, fig. 2 (syntype).

Archaeocyathellus sp.

Fig. spec. 14316

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 65, pl. 14, fig. 8.

Lower Cambrian (Laib group), south forks of Salmo River, British Columbia.

Archaeocyathus atlanticus Billings

Holotype 369

Billings, E.

1861, "New Species of Lower Silurian Fossils", p. 4, figs. 1-4.

1861, Rept. Geol. Vermont, vol. 2, p. 945, figs. 341-343.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 5, figs. 5a-c.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 283, figs. 285a-c.

Okulitch, V. J.,

1940, Trans. Roy. Soc. Can., ser. 3, vol. 34, sec. 4, p. 77, pl. 1, figs. 1-3.

1943, Geol. Soc. Amer., Sp. Paper 48, p. 68, pl. 5, figs. 1, 2.

Lower Cambrian (Forteau formation), L'Anse au Loup, Straits of Belle Isle, Labrador.

Archaeocyathus atlanticus Billings

Hypotype 12363

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 53, pl. 3, fig. 1.

Atan group, Lower Cambrian, McDame area, British Columbia.

Archaeocyathus atlanticus Billings

Hypotypes 14315, 14322

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 67, pl. 12, figs. 7-9; pl. 14, fig. 11.

Lower Cambrian (Laib group), south fork of Salmo River, British Columbia and about 1 mile north of Colville, Washington, U.S.A.

Archaeocyathus cf. *A. atlanticus* Billings

Hypotype 12765

Okulitch, V. J. and Roots, E. F., 1947, Trans. Roy. Soc. Can., ser. 3, vol. 41, sec. 4, p. 41, pl. 1, fig. 6.

Ingenika group, Lower Cambrian, Osilinka River, Aiken Lake area, British Columbia.

Archaeocyathus cf. *A. atlanticus* Billings

Hypotype 13339

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 922, pl. 111, figs. 6, 7.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Wolf Lake area, Yukon.

Archaeocyathus borealis Okulitch

Holotype 12355

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 55, pl. 2, fig. 1.

Atan group, Lower Cambrian, McDame area, British Columbia.

Archaeocyathus borealis Okulitch

Hypotype 14321

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 67, pl. 12, fig. 6.

Lower Cambrian, about 1 mile north of Colville, Washington, U.S.A.

Archaeocyathus cf. *latus* (Vologdin)

Hypotype 12364

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 54, pl. 3, fig. 3.

Atan group, Lower Cambrian, McDame area, British Columbia.

Archaeocyathus loculiformis Okulitch

Holotype 12354

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 54, pl. 2, fig. 3.

Atan group, Lower Cambrian, McDame area, British Columbia.

Archaeocyathus minganensis see *Archaeoscyphia minganensis* (Porifera)

Archaeocyathus profundus Billings

Syntypes 341, a, 373m; hypotypes 373, a, e, f

Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 4, figs. 1-4.

Lower Cambrian (Forteau formation), L'Anse au Loup, Straits of Belle Isle, Labrador.

=*Cambrocyathus profoundus,* Okulitch, V. J.,

1940, Trans. Roy. Soc. Can., ser. 3, vol. 34, sec. 4, p. 81, pl. 2, figs. 1, 2; pl. 3, figs. 1, 3.

1943, Geol. Soc. Amer., Sp. Paper 48, p. 72, pl. 7, figs. 1, 2; pl. 8, figs. 1-3, 5.

=*Pycnoidocyathus profundus,* Okulitch, V. J., 1950, J. Pal., vol. 24, No. 3, p. 394.

Archaeocyathus ? sp.

Fig. spec. 13340

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 923, pl. 111, fig. 8.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′,Wolf Lake area, Yukon.

Archaeofungia obliqua Okulitch

Holotype 12353

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 59, pl. 1, figs. 6, 7.

Atan group, Lower Cambrian, McDame area, British Columbia.

Archaeopharetra typica Bedford and Bedford

Hypotypes 14319, 14325

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 68, pl. 11, figs. 4, 5.

Lower Cambrian, about 1 mile north of Colville, Washington, U.S.A.

Archaeopharetra sp.

Fig. spec. 12372

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 57.

Atan group, Lower Cambrian, McDame area, British Columbia.

Cambrocyathus columbianus Okulitch

Holotype 9519; paratype 9518

Okulitch, V. J.,

1943, Geol. Soc. Amer., Sp. Paper 48, p. 78, pl. 12, fig. 3; pl. 13, fig. 1.

1948, J. Pal., vol. 22, No. 3, p. 346, pl. 54, fig. 6.

Donald formation, Lower Cambrian, Dogtooth Range, Canyon Creek near Golden, British Columbia.

=*Pycnoidocyathus columbianus,* Okulitch, V. J., 1950, J. Pal., vol. 24, No. 3, p. 394.

Cambrocyathus loupensis Okulitch

Holotype 366

Archaeocyathus profundus, Hinde, G. J., 1889, Quart. J. Geol. Soc. London, vol. 45, p. 131, pl. 5, fig. 2.

Cambrocyathus loupensis, Okulitch, V. J.,
1940, Trans. Roy. Soc. Can., ser. 3, vol. 34, sec. 4, p. 82, pl. 1, fig. 4.
1943, Geol. Soc. Amer., Sp. Paper 48, p. 74, pl. 8, fig. 6.

Forteau formation, Lower Cambrian, L'Anse au Loup, Straits of Belle Isle, Labrador.

=*Pycnoidocyathus loupensis,* Okulitch, V. J., 1950, J. Pal., vol. 24, No. 3, p. 394.

Cambrocyathus profundus see *Archaeocyathus profundus*

Cambrocyathus cf. *profundus* (Billings)

Hypotype 373d

Okulitch, V. J.,
1940, Trans. Roy. Soc. Can., ser. 3, vol. 34, sec. 4, p. 81, pl. 3, fig. 2.
1943, Geol. Soc. Amer., Sp. Paper 48, p. 72, pl. 6, fig. 7.

Forteau formation, Lower Cambrian, L'Anse au Loup, Straits of Belle Isle, Labrador.

Cambrocyathus sp.

Fig. spec. 12768

Okulitch, V. J. and Roots, E. F., 1947, Trans. Roy. Soc. Can., ser. 3, vol. 41, sec. 4, p. 43, pl. 1, fig. 9.

Ingenika group, Lower Cambrian, Osilinka River, Aiken Lake area, British Columbia.

Carinacyathus perforatus Kawase and Okulitch

Holotype 13336; paratypes 13337, 13338

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 922, pl. 111, figs. 1-5.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Wolf Lake area, Yukon.

Claruscyathus solidus Vologdin

Hypotype 14323

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 71, pl. 11, fig. 8.

Lower Cambrian, about 1 mile north of Colville, Washington, U.S.A.

Coscinocyathus cassiarensis Kawase and Okulitch

Holotype 13330; paratypes 13331, 13332

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 917, pl. 109, figs. 10-13.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Wolf Lake area, Yukon.

Coscinocyathus dentocanis Okulitch

Holotype 9516

Okulitch, V. J.,
1943, Geol. Soc. Amer., Sp. Paper 48, p. 67, pl. 4, fig. 2.
1948, J. Pal., vol. 22, No. 3, p. 343, pl. 53, fig. 5.

Donald formation, Lower Cambrian, Dogtooth Range, Canyon Creek near Golden, British Columbia.

Coscinocyathus dentocanis Okulitch

Hypotypes 12359, 12367, 12368

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 51, pl. 3, figs. 5-7.

Atan group, Lower Cambrian, McDame area, British Columbia.

Coscinocyathus dentocanis Okulitch

Hypotypes 13327, 13328

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 916, pl. 109, figs. 4-6.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Wolf Lake area, Yukon.

Coscinocyathus multiporus Kawase and Okulitch

Holotype 13329

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 917, pl. 109, figs. 7-9.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Wolf Lake area, Yukon.

Coscinocyathus tubicornus Kawase and Okulitch

Holotype 13334

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 921, pl. 110, figs. 10, 11.

Lower Cambrian, 1 mile due NE. of northeast end Crescent Lake, lat. 60°12′30″, long. 131°11′30″, Wolf Lake area, Yukon.

Coscinocyathus veronicus Kawase and Okulitch

Holotype 13333

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 920, pl. 110, fig. 8.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Wolf Lake area, Yukon.

Coscinocyathus sp.

Fig. spec. 9517

Okulitch, V. J.,

1943, Geol. Soc. Amer., Sp. Paper 48, p. 67, pl. 4, fig. 6.

1948, J. Pal., vol. 22, No. 3, p. 343, pl. 53, fig. 6.

Donald formation, Lower Cambrian, Dogtooth Range, British Columbia.

Coscinocyathus sp.

Fig. spec. 12764

Okulitch, V. J. and Roots, E. F., 1947, Trans. Roy. Soc. Can., ser. 3, vol. 41, sec. 4, p. 41, pl. 1, fig. 11.

Ingenika group, Lower Cambrian, Osilinka River, Aiken Lake area, British Columbia.

Coscinocyathus sp.

Fig. spec. 13335

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 921, pl. 110, fig. 12.

Lower Cambrian, 1 mile due NE. of northeast end of Crescent Lake, lat. 60°12′30″, long. 131°11′30″, Wolf Lake area, British Columbia.

Dendrocyathus unexpectans Okulitch and Roots

Holotype 12769

Okulitch, V. J. and Roots, E. F., 1947, Trans. Roy. Soc. Can., ser. 3, vol. 41, sec. 4, p. 44, pl. 1, figs. 10, 13.

Ingenika group, Lower Cambrian, Osilinka River, Aiken Lake area, British Columbia.

Ethmophyllum americanum Okulitch

Hypotypes 14316, 14322

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 66, pl. 13, fig. 11; pl. 14, fig. 5.

Lower Cambrian (Laib group), south fork of Salmo River, British Columbia and about 1 mile north of Colville, Washington, U.S.A.

Ethmophyllum sp. *E.* cf. *americanum* Okulitch

Hypotype 14316

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 66, pl. 14, fig. 9.

Lower Cambrian (Laib group), south fork of Salmo River, British Columbia.

Ethmophyllum lineatus Greggs

Holotype 14315; paratype 14316

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 66, pl. 14, figs. 2, 3.

Lower Cambrian (Laib group), south fork of Salmo River, British Columbia.

Ethmophyllum cf. *ratum* Vologdin

Hypotype 12370

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 50, pl. 3, fig. 8.

Atan group, Lower Cambrian, McDame area, British Columbia.

Ethmophyllum whitneyi Meek

Hypotype 14323

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 66, pl. 13, fig. 7.

Lower Cambrian, about 1 mile north of Colville, Washington, U.S.A.

Loculicyathus ellipticus Kawase and Okulitch

Holotype 13347; paratypes 13348, 13349, a

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 926, pl. 113, figs. 1-6.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Wolf Lake area, Yukon.

Metacoscinus deasensis Okulitch

Holotype 12358

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 62, pl. 1, figs. 3, 4.

Atan group, Lower Cambrian, McDame area, British Columbia.

Metacoscinus gabrielsensis Okulitch

Holotype 12357

Okulitch, V. J., 1955, Trans. Roy Soc. Can., ser. 3, vol. 49, sec. 4, p. 61, pl. 1, figs. 1, 5.

Atan group, Lower Cambrian, McDame area, British Columbia.

Metacoscinus poolensis Kawase and Okulitch

Holotype 13350; paratypes 13351, 13352

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 927, pl. 113, figs. 7-11.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Wolfe Lake area, Yukon.

Monocyathus sp.

Fig. spec. 14320

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, pl. 11, fig. 1.

Lower Cambrian, about 1 mile north of Colville, Washington, U.S.A.

Protopharetra dunbari Okulitch

Hypotype 14316

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 69, pl. 14, fig. 1.

Lower Cambrian (Laib group), south fork of Salmo River, British Columbia.

Protopharetra rootsi Okulitch and Roots

Holotype 12766

Okulitch, V. J. and Roots, E. F., 1947, Trans. Roy. Soc. Can., ser. 3, vol. 41, sec. 4, p. 42, pl. 1, fig. 7.

Ingenika group, Lower Cambrian, Osilinka River, Aiken Lake area, British Columbia.

Protopharetra sp.

Fig. spec. 12767

Okulitch, V. J. and Roots, E. F., 1947, Trans. Roy. Soc. Can., ser. 3, vol. 41, sec. 4, p. 43, pl. 1, fig. 8.

Ingenika group, Lower Cambrian, Osilinka River, Aiken Lake area, British Columbia.

Protopharetra sp.

Fig. spec. 14324

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 69, pl. 12, fig. 2.

Lower Cambrian, about 1 mile north of Colville, Washington, U.S.A.

Pycnoidocyathus armourensis (Okulitch)

Hypotype 12366

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 58, pl. 2, fig. 8.

Atan group, Lower Cambrian, McDame area, British Columbia.

Pycnoidocyathus armourensis (Okulitch)

Hypotype 13341

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 923, pl. 112, fig. 1.

Lower Cambrian, 1 mile due NE. of northeast end Crescent Lake, lat. 60°12′30″, long. 131°11′30″, Wolf Lake area, Yukon.

Pycnoidocyathus columbianus (Okulitch)

Hypotypes 12362, 12369

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 58, pl. 2, figs. 4-6.

Atan group, Lower Cambrian, McDame area, British Columbia.

See *Cambrocyathus columbianus*

Pycnoidocyathus cf. *P. occidentalis* (Okulitch)

Hypotypes 13342-13345

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 924, pl. 112, figs. 3-6.

Lower Cambrian, 1 mile due NE. of northeast end Crescent Lake, lat. 60°12′30″, long. 131°11′30″, Wolfe Lake area, Yukon.

Pycnoidocyathus solidus Kawase and Okulitch

Holotype 13346

Kawase, Y. and Okulitch, V. J., 1957, J. Pal., vol. 31, No. 5, p. 925, pl. 112, figs. 8, 9.

Lower Cambrian, 3 miles S30°E from Veronica Lake near mile post 702, Alaska Highway, lat. 60°3′, long. 130°21′, Wolf Lake area, Yukon.

Syringocnema colvillensis Greggs

Holotype 14317; paratype 14318

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 72, pl. 13, figs. 5, 6.

Lower Cambrian, about 1 mile north of Colville, Washington, U.S.A.

Syringocyathus canadensis Okulitch

Holotype 12356

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 63, pl. 2, fig. 7.

Atan group, Lower Cambrian, McDame area, British Columbia.

Syringocyathus sp.

Fig. spec. 14322

Greggs, R. G., 1959, J. Pal., vol. 33, No. 1, p. 74, pl. 13, fig. 13.

Lower Cambrian, about 1 mile north of Colville, Washington, U.S.A.

Thalamocyathus sp.

Hypotype 12365

Okulitch, V. J., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 50, pl. 3, fig. 2.

Atan group, Lower Cambrian, McDame area, British Columbia.

STROMATOPOROIDEA

Actinodictyon canadense Parks

Holotype 9123, a (slides)

Parks, W. A., 1909, Univ. Tor. Studies, Geol. Ser., No. 6, p. 32, pl. 20, figs. 1, 2.

Niagaran, Middle Silurian, Southampton Island, Hudson Bay.

Actinodictyon keelei Parks

Hypotype 11025 (slide)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 52, pl. 1, fig. 5.

East Arm formation, Middle Silurian, Mile 5.5, Churchill branch CNR, Manitoba.

Actinodictyon lowi Parks

Holotype 9127, a (slides)

Parks, W. A., 1909, Univ. Tor. Studies, Geol. Ser., No. 6, p. 33, pl. 20, figs. 3, 4.

Niagaran, Middle Silurian, Southampton Island, Hudson Bay.

Actinodictyon neptuni Parks

Holotype 9128, a (slides)

Parks, W. A., 1909, Univ. Tor. Studies, Geol. Ser., No. 6, p. 34, pl. 20, figs. 5, 6.

Niagaran, Middle Silurian, Southampton Island, Hudson Bay.

Actinostroma franklinense Parks

Holotype 9125, a (slides)

Parks, W. A., 1909, Univ. Tor. Studies, Geol. Ser., No. 6, p. 27, pl. 29, figs. 3, 4.

Niagaran, Middle Silurian, Beechy Island, Lancaster Sound.

Actinostroma tenuifilatum Parks

Hypotype 9124b (slide)

Parks, W. A., 1909, Univ. Tor. Studies, Geol. Ser., No. 6, p. 25.

Niagaran, Middle Silurian, Southampton Island, Hudson Bay.

Actinostroma tenuifilatum cylindricum Parks

Syntypes 9124, a, 9129b, c (slides)

Parks, W. A., 1909, Univ. Tor. Studies, Geol. Ser., No. 6, p. 26.

Niagaran, Middle Silurian, Southampton Island, Hudson Bay.

Actinostroma sp.

Fig. spec. 11029

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 49, pl. 1, fig. 2.

East Arm formation, Middle Silurian, southeast corner Reader Lake, Manitoba.

Amphipora sp.

Fig. spec. 13831

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 202, pl. 9, fig. 8.

Southesk formation, Upper Devonian, South end of the Ancient Wall, Jasper Park, Alberta.

Beatricia nodulosa Billings

Syntypes 1971, a, 2100 (missing)

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 344.

Upper Ordovician (Vaureal formation), Battery Cliff, Anticosti Island, Quebec.

Beatricia nodulosa Billings

Hypotype 4376

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 2, fig. 2.

Birse member, Stony Mountain formation, Upper Ordovician, Gunton, Manitoba.

Beatricia regularis Stearn

Holotype 10467; paratypes 11002, 11003

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 53, pl. 9, fig. 14.

Stonewall formation, Upper Ordovician, Stonewall, Manitoba.

Beatricia undulata Billings

Neotype 1969g

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 344.

Upper Ordovician (Vaureal formation), West end lighthouse, Anticosti Island, Quebec.

Beatricia undulata Billings

Hypotype 4616

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 2, fig. 1.

Birse member, Stony Mountain formation, Upper Ordovician, Gunton, Manitoba.

Clathrodictyon crickmayi Parks

Holotype 9147 (missing)

Parks, W. A. 1933. Univ. Tor. Studies, Geol. Ser., No. 33, p. 9, pl. 2, figs. 5, 6.

La Vieille formation, Middle Silurian, Anse à la Vieille, Gascons, Quebec.

Clathrodictyon cystosum Parks

Hypotype 11057 (slide)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 49, pl. 2, fig. 1.

Chemahawin member, Cedar Lake formation, Middle Silurian, Chemahawin, Manitoba.

Clathrodictyon cystosum cylindricum Parks

Holotype 9129, a (slides)

Parks, W. A., 1909, Univ. Tor. Studies, Geol. Ser., No. 6, p. 29.

Niagaran, Middle Silurian, Southampton Island, Hudson Bay.

Clathrodictyon drummondense Parks

Hypotype 9126 (slide)

Parks, W. A., 1909, Univ. Tor. Studies, Geol. Ser., No. 6, p. 30, pl. 20, fig. 8.

Niagaran, Middle Silurian, Southampton Island, Hudson Bay.

Clathrodictyon drummondense Parks

Hypotype 11028 (slide)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 50, pl. 2, fig. 4.

Inwood formation, Middle Silurian, base of Grand Rapids, Manitoba.

Clathrodictyon fastigiatum Nicholson

Hypotype 11030 (slide)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 50, pl. 2, fig. 5.

East Arm formation, Middle Silurian, Moose Lake, sec. 4, tp. 57, rge. 20, W. Prin. mer., Manitoba.

Clathrodictyon osteolatum Nicholson

Hypotype 10466

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 51, pl. 1, fig. 1.

Chemahawin member, Cedar Lake formation, Middle Silurian, Davis Point, Lake Manitoba, Manitoba.

76336-7—3

Clathrodictyon cf. *regulare* Rosen

Hypotype 11056

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 51, pl. 2, fig. 2.

Chemahawin member, Cedar Lake formation, Middle Silurian, sec. 29, tp. 29, rge. 8, W. Prin. mer., Manitoba.

Clathrodictyon striatellum (D'Orbigny)

Hypotype 11027 (slide)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 51, pl. 2, fig. 3.

Cross Lake member, Cedar Lake formation, Middle Silurian, Moose Lake settlement, Manitoba.

Cryptophragmus antiquatus Raymond

Holotype 5390; paratypes 4329a-k, 5391, 7832

Raymond, P. E., 1914, Geol. Surv., Canada, Mus. Bull. 5, p. 8, pls. 1-4.

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 46, pl. 22, figs. 3-5.

Pamelia beds, Ottawa formation, Middle Ordovician, Broad Street, Aylmer, Quebec; Gull River formation, Middle Ordovician, Dalyrmple and lot 25, con. 6, Carden tp., Ontario.

Cryptophragmus ? *rochensis* Wilson

Holotype 6605

Wilson, A. E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 385, pl. 3, figs. 5, 6.

1948, Geol. Surv., Canada, Bull. 11, p. 46, pl. 23, figs. 4, 5.

Leray beds, Ottawa formation, Middle Ordovician, Mille Roches, Ontario.

Dermatostroma ottawaense Wilson

Holotype 13204, a, b

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 49, pl. 24, figs. 1-5.

Pamelia beds, Ottawa formation, Middle Ordovician, quarry west side Merivale road, Ottawa, Ontario.

Labechia antiqua Wilson

Holotype 8848, a

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 48, pl. 25, figs. 8, 9.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Cobden road 1½ miles northwest of Douglas, Ontario.

Labechia cf. *conferta* Nicholson

Hypotype 11061, a, b

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 53.

Chemahawin member, Cedar Lake formation, Middle Silurian, Davis Point, Lake Manitoba, Manitoba.

Labechia subcylindrica James?

Hypotype 9120

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 49, pl. 25, figs. 1, 2.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Lophiostroma ? *dubium* Parks

Holotype 9148 (missing)

Parks, W. A., 1933, Univ. Tor. Studies, Geol. Ser., No. 33, p. 14, pl. 8, fig. 2.

La Vieille formation, Middle Silurian, Anse Cascon, Quebec.

Stromatocerium huronense (Billings)

Hypotypes 5596, 8436

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 74, pl. 2, fig. 2; pl. 3, fig. 2.

Upper Ordovician, Clay cliffs, Manitoulin Island, Ontario.

Stromatocerium rugosum Hall

Hypotype 1126j

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., fig. 72.

Black River (Leray-Rockland beds), Middle Ordovician, Paquette Rapids, Ottawa River.

Stromatocerium rugosum Hall

Hypotype 1127c

Wilson, A. E.,
1948, Geol. Surv., Canada, Bull. 11, p. 47, pl. 23, fig. 3.
1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 2, fig. 2.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Stromatocerium rugosum tumidum Wilson

Holotype 1127c; hypotype 8803

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 47, pl. 23, figs. 3, 6, 7.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Stromatopora ami Parks

Holotype 9122,a (slides)

Parks, W. A., 1909, Univ. Tor. Studies, Geol. Ser., No. 6, p. 36, pl. 19, figs. 7, 8.

Niagaran, Middle Silurian, Southampton Island, Hudson Bay.

Stromatopora cf. *constellata* Hall

Hypotype 11026 (slide)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 52, pl. 1, fig. 3.

Chemahawin member, Cedar Lake formation, Middle Silurian, sec. 12-13, tp. 31, rge. 10, W. Prin. mer., Manitoba.

Stromatopora danielensis Parks

Holotype 9146 (missing)

Parks, W. A., 1933, Univ. Tor. Studies, Geol. Ser., No. 33, p. 18, pl. 4, figs. 2, 3.

West Point formation, Middle Silurian, near Indian Point, Port Daniel, Quebec.

Stromatoporella distincta Parks

Holotype 9153 (missing)

Parks, W. A., 1933, Univ. Tor. Studies, Geol. Ser., No. 33, p. 24, pl. 5, figs. 2, 3.

La Vieille formation, Middle Silurian, west limb syncline, Jacquet River, New Brunswick.

Stromatoporella remota Parks

Holotype 9154 (missing)

Parks, W. A., 1933, Univ. Tor. Studies, Geol. Ser., No. 33, p. 26, pl. 5, figs 4, 5.

La Vieille formation, Middle Silurian, west limb syncline, Jacquet River, New Brunswick.

Stromatoporella sp.

Fig. spec. 11021 (slide)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 52, pl. 1, fig. 4.

Stonewall formation, Upper Ordovician, Stonewall quarry, Manitoba.

Syringostroma (?) *northropi* Parks

Holotype 9152 (missing)

Parks, W. A., 1933, Univ. Tor. Studies, Geol. Ser., No. 33, p. 23, pl. 5, fig. 1.

La Vieille formation, Middle Silurian, Jacquet River, New Brunswick.

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ANTHOZOA

ORDOVICIAN

Angopora manitobensis Stearn

Holotype 11048; paratypes 10407, 11007, 11041

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 67, pl. 4, figs. 4, 5, 8; pl. 5, fig. 5.

Stonewall formation, Upper Ordovician, Stonewall quarry, Manitoba.

Aphyllostylus gracilis Whiteaves

Holotype 4409

Whiteaves, J. F.,

1904, Ottawa Naturalist, vol. 18, No. 6, p. 113.

1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 279, pl. 24, figs. 1, a.

Stonewall formation, Upper Ordovician, Stonewall quarry, Manitoba.

See *Tryplasma gracilis*

Arcturia complexa Wilson

Holotype 6505; paratype 6505a

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 295, pl. 3, figs. 1-3.

Ordovician or Silurian drift, Fossil Island, Lake Nettelling, Baffin Island, Arctic.

Calapoecia anticostiensis Billings

Holotype 2267,a-d (parts of one specimen)

Billings, E.,

1865, Can. Naturalist Geol., n.s., vol. 2, p. 426.

1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 32, figs. 15a, b.

Upper Ordovician (Ellis Bay formation), west shore Gamache (Ellis) Bay, Anticosti Island, Quebec.

=*Calapoecia canadensis anticostiensis,* Cox, I., 1936, Geol. Surv., Canada, Mus. Bull. 80, p. 12, pl. 1, fig. 6; pl. 3, figs. 1a-c.

Calapoecia canadensis Billings

Neotype 1136b

Cox, I., 1936, Geol. Surv., Canada, Mus. Bull. 80, p. 7, pl. 1, fig. 1.

Leray-Rockland beds, Middle Ordovician, Paquette Rapids, Ottawa River.

Calapoecia canadensis Billings

Hypotypes 1136d, e

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 44, pl. 21, figs. 6-9.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Calapoecia huronensis Billings

Syntype 1985

Billings, E., 1865, Can. Naturalist Geol., n.s., vol. 2, p. 426.

Upper Ordovician, Cape Smyth, Lake Huron, Ontario.

=*Calapoecia canadensis,* Cox, I., 1936, Geol. Surv., Canada, Mus. Bull. 80, p. 10, pl. 1, figs. 5a, b; pl. 2, figs. 9a, b.

Catenipora rubra Sinclair and Bolton

Hypotype 12383, a-g

Sinclair, G. W., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 99, pl. 1, figs. 2, 6, 7, 11; text fig. 2.

Selkirk member, Red River formation, Ordovician, Tyndall (Garson), Manitoba.

Chaetetes perantiquus Whiteaves

Holotype 7189

Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 238, text figs. 17-19.

Ordovician (Red River formation), Lower Fort Garry, Manitoba.

Columnaria alveolata Goldfuss

Hypotypes 1131, d

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 33, pl. 15, figs. 12, 13.

Leray beds, Ottawa formation, Middle Ordovician, lot 6, con. 4, Cornwall tp., Ontario.

Columnaria alveolata blainvilli (Billings)

Hypotype 8437

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 67, pl. 5, fig. 2.

Richmond, Upper Ordovician, Snake Island, Lake St. John, Quebec.

Columnaria alveolata minima Foerste

Hypotype 9091

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, p. 60, pl. 5, fig. 2.

Liskeard formation, Ordovician, Lake Timiskaming, Ontario.

Columnaria alveolata rigida (Billings)

Hypotype 8438

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 67, pl. 5, fig. 1.

Richmond, Upper Ordovician, Snake Island, Lake St. John, Quebec.

Columnaria alveolata stellaris Wilson

Holotype 6737; paratype 6737a

Wilson, A. E., 1926, Geol. Surv., Canada, Bull. 44, p. 16, pl. 3, figs. 1, 2.

Beaverfoot formation, Upper Ordovician, Palliser pass and between Spray and Palliser Rivers, Kananaskis area, British Columbia.

Columnaria calicina (Nicholson)

Syntypes ? 6688, a

Nicholson, H. A., 1879, Tabulate Corals Palæoz., p. 197, pl. 10, figs. 2, a.

Richmond, Upper Ordovician, Credit River, Ontario.

Columnaria calicina (Nicholson)

Hypotypes 2054, 5473

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 68, pl. 4, figs. 3a, b.

Richmond, Upper Ordovician, Streetsville, Ontario.

Columnaria erratica Billings

Syntype 1380

Billings, E.,

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 166.

1858, Can. Naturalist Geol., vol. 3, p. 421.

Middle Ordovician, Pointe Bleue, Lake St. John, Quebec.

Columnaria (?) *halli* Nicholson

Syntypes 6690, a

Nicholson, H. A., 1879, Tabulate Corals Palæoz., p. 200, pl. 10, figs. 3, a.

Middle Ordovician, Peterborough, Ontario.

=*Lyopora halli,* Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 37.

=*Foerstephyllum halli,* Bassler, R. S., 1950, Geol. Soc. Amer., Mem. 44, p. 269.

Columnaria incerta Billings

Holotype 1014; hypotype 1014a-g

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 428, figs 1, 2.

Middle Ordovician (Mingan formation), St. Charles Island, Mingan Islands, Quebec.

=*Fletcheria incerta,* Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 48, pl. 1, figs. 8, a, 9.

=*Fletcheria incerta,* Okulitch, V. J., 1937, Trans. Roy. Can. Inst., vol. 21, pt. 2, No. 46, p. 314, pl. 1, fig. 1.

=*Eofletcheria incerta,* Bassler, R. S., 1950, Geol. Soc. Amer., Mem. 44, p. 266.

Columnaria magnifica Okulitch

Hypotypes 9334, a

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 34, pl. 16, figs. 1-3.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Columnaria parva Billings

Syntype 1003

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 428.

Middle Ordovician (Mingan formation), Mingan Islands, Quebec.

=*Stylaraea parva,* Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 91.

=*Billingsaria parva,* Okulitch, V. J., 1936, Trans. Roy. Soc. Can., ser. 3, vol. 30, sec. 4, p. 62.

Columnaria rugosa see *Palaeophyllum rugosum*

Diphyphyllum ? *halysitoides* Wilson

Holotype 6741; paratype 6741a

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 18, pl. 2, figs, 8, 9.

Beaverfoot formation, Upper Ordovician, Golden, British Columbia.

Diphyphyllum ? *primum* Wilson

Holotype 6742

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 18, pl. 2, fig. 10.

Beaverfoot formation, Upper Ordovician, between Mount Sir Douglas and Mount Munroe, Palliser Pass, British Columbia.

Diphyphyllum stokesi (Milne-Edwards and Haime)

Hypotype 6877

Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 152, pl. 17, fig. 5.

Ordovician (Red River formation), Stone Fort 20 miles from Winnipeg, Red River, Manitoba.

Eofletcheria incerta see *Columnaria incerta*

Favosites cf. *favosus* (Goldfuss)

Hypotype 6738

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 16, pl. 3, fig. 7.

Beaverfoot formation, Upper Ordovician, Stoddart Creek, British Columbia.

Favosites intermedius Okulitch

Holotype 1594

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, p. 70, pl. 1, fig. 16.

Gunton member, Stony Mountain formation, Ordovician, ½ mile south of Gunton station, Manitoba.

See *Paleofavosites okulitchi* Stearn

Fletcheria incerta see *Columnaria incerta*

Fletcheria incerta (Billings)

Hypotype 7399

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 42, pl. 21, fig. 3.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Foerstephyllum halli see *Columnaria ? halli*

Halysites catenularia quebecensis Lambe

Lectotype 11305

Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 69, pl. 4, figs. 1, a, b.

Middle Ordovician, 2 miles south Pointe Bleue, Lake St. John, Quebec.

=*Catenipora quebecensis,* Buehler, E. J., 1955, Peabody Mus. Natural Hist., Bull. 8, p. 46.

=*Quepora quebecensis,* Sinclair, G. W., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 96.

Halysites catenularia quebecensis Lambe

Hypotypes 9092, a

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 5, fig. 3.

Liskeard formation, Ordovician, Lake Timiskaming area, Ontario.

Halysites cylindricus Wilson

Holotype 6736

Wilson, A. E., 1926, Geol. Surv. Canada, Mus. Bull. 44, p. 15, pl. 2, figs. 6, 7.

Beaverfoot formation, Upper Ordovician, Harrogate, British Columbia.

=*Catenipora cylindricus,* Buehler, E. J., 1955, Peabody Mus. Natural Hist., Bull. 8, p. 59.

=*Eocatenipora cylindricus,* Hamada, T., 1957, J. Fac. Sci. Univ. Tokyo, vol. 10, sec. 2, pt. 3, p. 398, text fig. 1.

Halysites delicatulus Wilson

Holotype 6734

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 14, pl. 2, figs. 3-5.

Beaverfoot formation, Upper Ordovician, Golden, British Columbia.

=*Catenipora delicatulus,* Buehler, E. J., 1955, Peabody Mus. Natural Hist., Bull. 8, p. 58.

Halysites gracilis (Hall)

Hypotype 6506

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, pl. 3, fig. 4.

Ordovician, subsurface, Winnipeg, Manitoba.

Halysites gracilis borealis Wilson

Holotype 6507

Wilson, A. E., Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 296, pl. 3, fig. 5.

Richmond, Upper Ordovician, canyon near Foxe basin, Putnam Highland, Baffin Island, Arctic.

=*Catenipora gracilis borealis,* Buehler, E. J., 1955, Peabody Mus. Natural Hist., Bull. 8, p. 60.

Halysites pulchellus Wilson

Holotype 6735; paratype 6735a

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 15, pl. 3, figs. 8, 9.

Beaverfoot formation, Upper Ordovician, Sinclair gorge, British Columbia.

=*Catenipora pulchellus,* Buehler, E. J., 1955, Peabody Mus. Natural Hist., Bull. 8, p. 59.

Halysites robustus Wilson

Holotype 6733, a (parts of one specimen)
Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 14, pl. 1, figs. 8-10.
Beaverfoot formation, Upper or Lower Ordovician, Palliser Pass, British Columbia.
=*Catenipora robustus,* Buehler, E. J., 1955, Peabody Mus. Natural Hist., Bull. 8, p. 58.

Heliolites exiguus Billings

Holotype 2239
Billings, E.,
1865, Can. Naturalist Geol., n.s., vol. 2, p. 428.
1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 31, fig. 14.
Upper Ordovician (Ellis Bay formation), Ellis Bay, Anticosti Island, Quebec.
=*Lyellia exigua,* Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 86, pl. 5, figs. 3, a.

Heliolites speciosus Billings

Syntypes 2240, a
Billings, E.,
1865, Can. Naturalist Geol., n.s., vol. 2, p. 426.
1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 30, fig. 13.
Upper Ordovician (Ellis Bay formation), Junction cliff, Anticosti Island, Quebec.
=*Lyellia speciosa,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 135.

Heliolites tenuis Billings

Syntypes 2236, a
Billings, E.,
1865, Can. Naturalist Geol., n.s., vol. 2, p. 428.
1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 32.
Upper Ordovician (Ellis Bay formation), Junction cliff, Anticosti Island, Quebec.
=*Protarea tenuis,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 136, pl. 3, fig. 6.

Holophragma anticonvexa Okulitch

Holotype 1363
Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, p. 68, pl. 1, figs. 11, 12.
Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.
=*Bighornia anticonvexa,* Duncan, H., 1957, J. Pal., vol. 31, No. 3, p. 610.

Lambeophyllum ? *apertum* see *Petraia aperta*

Lambeophyllum ? *apertum rotundum* Wilson

Holotype 1137; paratype 1137f
Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 31, pl. 15, figs. 6, 7.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Lambeophyllum profundum (Conrad)

Hypotype 1135b, k
Wilson, A. E.,
1948, Geol. Surv., Canada, Bull. 11, p. 32, pl. 15, figs. 8-10.
1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 2, fig. 3.
Leray beds, Ottawa formation, Middle Ordovician, La Petite Chaudière, Ottawa, Ontario.

Lichenaria typa Winchell and Schuchert

Hypotype 13205
Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 38, pl. 16, fig. 11.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Lindstromia whiteavesi Foerste

Holotype 1162

Foerste, A. F., 1906, Kentucky Geol. Surv., Bull. 7, p. 312.
Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 32, pl. 16, figs. 6, 7.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, La Petite Chaudière, Ottawa, Ontario.

Lyellia exigua see *Heliolites exiguus*

Lyopora goldfussi (Billings)

Hypotypes 1764a, b

Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 88, pl. 5, figs. 6,a, 7.

Upper Ordovician, Snake Island, Lake St. John, Quebec.

Note: Possibly syntypes of *Columnaria goldfussi* Billings.

Lyopora goldfussi (Billings)

Hypotype 1764

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 69, pl. 3, fig. 1.

Richmond, Upper Ordovician, Snake Island, Lake St. John, Quebec.

Lyopora goldfussi (Billings)

Hypotype 9335

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 36, pl. 16, figs. 8, 9.

Cobourg beds, Ottawa formation, Middle Ordovician, Nepean Point, Ottawa, Ontario.

Lyopora halli (Nicholson)

Hypotypes 9336,a

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 37, pl. 16, figs. 12, 13.

Leray beds, Ottawa formation, Middle Ordovician, lot 14, con. 2 or 3, Stafford tp., Ontario.

Lyopora halli (Nicholson)

Hypotype 13611

Wilson, A. E., 1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 2, fig. 8.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

See *Columnaria halli*

Manipora amicarum Sinclair

Holotype 12382

Sinclair, G. W., 1955, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 97, pl. 1, figs. 1, 4, 10; text figs. 1a-e.

Selkirk member, Red River formation, Ordovician, Tyndall (Garson), Manitoba.

Neozaphrentis hindi Stearn

Holotype 10421a; paratypes 10414, 10421b

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 76, pl. 9, figs. 5, 6; text figs. 4, 4a-d.

Stonewall formation, Upper Ordovician, mile 25.5 Flin Flon Highway, Manitoba.

Nyctopora billingsi Nicholson

Syntypes 6689,a

Nicholson, H. A., 1879, Tabulate Corals Palæoz., p. 184, pl. 9, figs. 3a, b.
Hill, D., 1959, New Mexico Inst. Mining Technology, State Bur. Mines Mineral Res., Bull. 64, p. 16.

Trenton, Middle Ordovician, Peterborough, Ontario.

Nyctopora billingsi Nicholson

Hypotypes 6011,a

Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 49, pl. 2, figs. 1,a.

Trenton, Middle Ordovician, Peterborough, Ontario.

Palaeophyllum pasense Stearn

Holotype 10403

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 89, pl. 16, fig. 7.

Stonewall formation, Upper Ordovician, mile 25 Flin Flon Highway, Manitoba.

Palaeophyllum pasense parvum Stearn

Holotype 10482; paratype 10494

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 90, pl. 7, fig. 5.

Stonewall formation, Upper Ordovician, mile 19.5 Flin Flon Highway, Manitoba.

Palaeophyllum rugosum Billings

Holotype 1379, slides 1379a-e

Billings, E., 1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 168.

Hill, D., 1959, New Mexico Inst. Mining Technology, State Bur. Mines Mineral Res., Bull. 64, p. 4, pl. 1, figs. 6a, b.

Ordovician, Petit Descharge, Lake St. John, Quebec.

=*Columnaria rugosa,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 101, pl. 6, figs. 3,a, b.

Paleoalveolites paquettensis Okulitch

Hypotype 1233

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 45, pl. 22, fig. 2.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Paleofavosites capax (Billings)

Hypotype 2776

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 1, fig. 17.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Paleofavosites capax (Billings)

Hypotype 10493

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 61, pl. 10, fig. 12.

Stonewall formation, Upper Ordovician, Stonewall quarry, Manitoba.

Paleofavosites okulitchi Stearn

Hypotypes 10404, 12865 (missing)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 61, pl. 3, figs. 4, 6; pl. 8, fig. 3.

Stonewall formation, Upper Ordovician, Stonewall quarry and mile 26.7 Flin Flon Highway, Manitoba.

Paleofavosites poulseni Teichert

Hypotypes 10483, 10500, 11023

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 62, pl. 4, figs. 6, 11; pl. 10, fig. 16.

Stonewall formation, Upper Ordovician, mile 19 Flin Flon Highway; Fisher Branch formation, Middle Silurian, 7 mile point, Lake Atikameg, Manitoba.

Paleofavosites prolificus (Billings)

Hypotype 4124

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 2, fig. 3.

Stony Mountain formation, Upper Ordovician, 1½ miles north of Woodman, Manitoba.

Petraia angulata Billings

Holotype 1984, 1984a (slide)

Billings, E.,

1862,"New Species of Lower Silurian Fossils", p. 103, figs. 90a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 103, figs. 90a, b.

Upper Ordovician (English Head formation), English Head, Anticosti Island, Quebec.

=*Streptelasma angulatum,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 112.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 111, pl. 3, fig. 5.

Cox, I., 1937, Geol. Mag., vol. 74, p. 4, pl. 1, fig. 5.

Petraia aperta Billings

Syntypes 1137a-e

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 102, figs. 89a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 102, figs. 89a, b.

Middle Ordovician (Leray-Rockland beds), Paquette Rapids, Ottawa River.

=*Lambeophyllum ? apertum,* Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 31, pl. 15, figs. 4, 5 (holotype 1137e; paratypes 1137a-d).

Petraia minganensis see *Archaeoscyphia minganensis* (Porifera)

Petraia ottawaensis Billings

Syntypes 1377, a-d

Billings, E., 1865, Can. Naturalist Geol., n.s., vol. 2, p. 429.

Trenton, Middle Ordovician, Ottawa, Ontario.

Petraia pulchella Billings

Syntype 2243, a (parts of one specimen)

Billings, E., 1865, Can. Naturalist Geol., n.s., vol. 2, p. 429.

Upper Ordovician (Ellis Bay formation), Ellis Bay, Anticosti Island, Quebec.

=*Streptelasma selectum,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 113, pl. 6, figs. 8, a.

Plasmadictyon irregulare Wilson

Holotype 6743

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 19, pl. 1, figs. 11, 12.

Beaverfoot formation, Upper Ordovician, Stoddart Creek, Windermere area, British Columbia.

Plasmopora lambii Schuchert

Hypotype 9090

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 5, figs. la, b.

Liskeard formation, Ordovician, Lake Timiskaming area, Ontario.

Protarea richmondensis Foerste

Hypotype 8535

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 73, pl. 1, fig. 4.

Richmond, Upper Ordovician, bluff southwest of Gore Bay, Manitoulin Island, Ontario.

Protarea richmondensis papillata Foerste

Hypotypes 8533a, b.

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 74, pl. 1, figs. 3a, b.

Richmond, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Protarea tenuis (Billings)

Hypotype 1374b

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 43, pl. 21, fig. 2.

Cobourg ? beds, Ottawa formation, Middle Ordovician, Ottawa, Ontario.

See *Heliolites tenuis*

Protarea (*vetusta* ? var.) *magna* Whiteaves

Syntypes 6903, a, 6904, a-d, 7189

Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 155, pl. 18, figs. 2, 3.

Ordovician (Red River formation), Lower Fort Garry, Manitoba.

Quepora ? *lacustris* Sinclair

Holotype 12386

Sinclair, G. W., 1956, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 97, pl. 1, fig. 9.

Simard beds ?, Middle Ordovician, Pointe Bleue, Lake St. John, Quebec.

Quepora quebecensis (Lambe)

Hypotypes 12384, a, b, 12385

Sinclair, G. W., 1956, Trans. Roy. Soc. Can., ser. 3, vol. 49, sec. 4, p. 96, pl. 1, figs. 3, 5, 8, 12.

Simard beds, Middle Ordovician, north of St. Anne de Chicoutimi, Quebec.

Streptelasma angulatum see *Petraia angulata*

Streptelasma ? *arcticum* Wilson

Holotype 6499; paratypes 6500-6502

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 292, pl. 2, figs. 1-5.

Cox, I, 1937, Geol. Mag., vol. 74, p. 5, pl. 1, fig. 6.

Ordovician or Silurian, Lake Nettilling at Koukjuak Bay, Fossil Island, and Putnam highlands, Baffin Island, Arctic.

Cf. *Streptelasma* ? *arcticum* Wilson

Paratypes 6503, a

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 293, pl. 1, figs. 5, 6.

Upper Ordovician, Putnam highlands, Baffin Island, Arctic.

Streptelasma corniculum Hall

Hypotypes 1378, b, c, h

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 108, pl. 6, figs. 7, a, b.

Wilson, A. E.,

1948, Geol. Surv., Canada, Bull. 11, p. 30, pl. 15, figs. 1-3.

1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 2, fig. 4.

Middle Ordovician (Cobourg ? beds), Ottawa, Ontario.

Streptelasma distinctum Wilson

Holotype 6731; paratype 6731a

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 12, pl. 1, figs. 6, 7.

Beaverfoot formation, Upper or Lower Ordovician, ½ mile east of Palliser Pass, British Columbia.

Streptelasma fragile Wilson

Holotype 6728; paratype 6728a

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 11, pl. 1, figs. 1, 2; text fig. 2.

Beaverfoot formation, Upper Ordovician, Stoddart Creek, Windermere area, British Columbia.

Streptelasma patellum Wilson

Holotype 6732

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 13, pl. 2, fig. 1.

Beaverfoot formation, Upper Ordovician, Windermere Creek, British Columbia.

=*Bighornia patella*, Duncan, H., 1957, J. Pal., vol. 31, No. 3, p. 610.

Streptelasma prolongatum Wilson
Holotype 6729; paratypes 6729a, b, 6730
Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 11, pl. 1, figs. 3, 4, 5; pl. 2, fig. 2.
Beaverfoot formation, Upper Ordovician, Palliser Pass and Fairmont Springs, British Columbia.

Streptelasma robustum Whiteaves
Holotype 6886
Whiteaves, J. F.,
1896, Can. Rec. Sci., vol. 6, p. 390.
1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 154, pl. 18, figs. 1, a.
Red River formation, Ordovician, East Selkirk, Manitoba.

Streptelasma robustum Whiteaves
Hypotypes 6880, a (missing)
Cox, I., 1937, Geol. Mag., vol. 74, p. 10, pl. 2, figs. 1, 2.
Red River formation, Ordovician, Garson quarry, Tyndall and Lower Fort Garry, Manitoba.

Streptelasma cf. *robustum* Whiteaves
Hypotype 6504
Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 294, pl. 1, fig. 7.
Ordovician? drift, Snowgoose Bay, Lake Nettilling, Baffin Island, Arctic.

Streptelasma rusticum (Billings)
Hypotypes 5822, a-c
Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 110, pl. 7, figs. 2, 3.
Richmond, Upper Ordovician, Snake Island, Lake St. John, Quebec.

Streptelasma rusticum (Billings)
Hypotypes 8529a-c, 8573a-c
Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 65, pl. 1, figs. 1, 2.
Richmond, Upper Ordovician, Clay cliffs, Manitoulin Island, Ontario.

Streptelasma rusticum (Billings)
Hypotypes 8530b, c
Cox, I., 1937, Geol. Mag., vol. 74, p. 11, pl. 2, figs. 11, 12.
Richmond, Upper Ordovician, Manitowaning, Manitoulin Island, Ontario.

Streptelasma selectum see *Petraia pulchella*
Streptelasma trilobatum (Whiteaves)
Hypotype 3980
Okulitch V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 1, figs. 13, 14.
Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Streptelasma trilobatum (Whiteaves)
Hypotype 9072
Cox, I., 1937, Geol. Mag., vol. 74, p. 13, pl. 2, fig. 5.
Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Stylaraea parva see *Columnaria parva*
Syringopora burlingi Wilson
Holotype 6739, a (parts of one specimen)
Wilson, A. E., 1926, Geol. Surv., Canada, Bull. 44, p. 17, pl. 3, figs. 3, 4.
Beaverfoot formation, Upper Ordovician, near Golden, British Columbia.

Syringopora columbiana Wilson
Holotype 6740, a (parts of one specimen)
Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 17, pl. 3, figs. 5, 6.
Beaverfoot formation, Upper Ordovician, Stoddart Creek, Windermere area, British Columbia.

Tetradium cellulosum (Hall)

Hypotype 7395

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 39, pl. 17, fig. 4.

Lowville beds, Ottawa formation, Middle Ordovician, Stewart quarry, Rockland, Ontario.

Tetradium clarki Okulitch

Hypotypes 7396-7398

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 39, pl. 18, figs. 1-3; pl. 19, figs. 1-3.

Leray beds, Ottawa formation, Middle Ordovician, lots 32 and 33, con. A, Nepean tp.; Stewart quarry, Rockland; Beechwood Cemetery, Ottawa, Ontario.

Tetradium cylindricum Wilson

Holotype 4566

Wilson, A. E., 1921, Geol. Surv., Canada, Mus. Bull. 33, p. 46, pl. 3, fig. 3; text figs. 5a-c.

Pamelia beds, Ottawa formation, Middle Ordovician, MacLaren Landing, Ontario.

=*Tetradium syringoporoides,* Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 42, pl. 17, fig. 1.

Tetradium fibratum Safford

Hypotype 1129

Wilson, A. E.,

1948, Geol. Surv., Canada, Bull. 11, p. 40, pl. 20, fig. 2.

1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 2, fig. 7.

Leray beds, Ottawa formation, Middle Ordovician, Pakenham, Ontario.

Tetradium halysitoides Raymond

Holotype 7839; paratype 7839a

Raymond, P. E., 1913, Geol. Surv., Canada, Mus. Bull. 1, p. 49, pl. 6, fig. 3; pl. 7, fig. 1.

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 40, pl. 18, figs. 4, 5.

Lowville beds, Middle Ordovician, Carden, Ontario.

Tetradium peachii canadense Foord

Syntypes 1557-61

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., pt. 1, p. 24, pl. 6, figs. 1a-f.

Middle Ordovician, Ottawa, Ontario; Hull, Montmorency, Joliette, and Murray Bay, Quebec.

See *Solenopora canadensis* (Algae)

Tetradium racemosum Raymond

Holotype 7837

Raymond, P. E., 1913, Geol. Surv., Canada, Mus. Bull. 1, p. 50, pl. 6, fig. 2.

Hull beds, Ottawa formation, Middle Ordovician, Montreal road 3 miles east of Ottawa, Ontario.

=*Tetradium cellulosum,* Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 39, pl. 17, fig. 3.

Tetradium syringoporoides see *Tetradium cylindricum* and *Tetradium* sp. indet.

Tetradium sp. indet.

Fig. spec. 1128

Raymond, P. E., 1913, Geol. Surv., Canada, Mus. Bull. 1, p. 50, pl. 6, fig. 4.

Lowville ? beds, Ottawa formation, Middle Ordovician, Munroe quarry, McNabb tp., Ontario.

=*Tetradium syringoporoides,* Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 42, pl. 17, fig. 2.

Tryplasma gracilis (Whiteaves)

Hypotypes 10409, 12866 (missing)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 91, pl. 6, figs. 1, 8.

Stonewall formation, Upper Ordovician, Stonewall quarry, Manitoba.

Zaphrentis affinis Billings

Syntypes 1987,a-e

Billings, E.,

1865, Can. Naturalist Geol., n.s., vol. 2, p. 430.

1886, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 7.

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 118, pl. 7, figs. 6,a, b.

Upper Ordovician (Ellis Bay formation), Wreck Point, Anticosti Island, Quebec.

SILURIAN

Acervularia gracilis see *Strombodes gracilis*

Acervularia gracilis (Billings)

Hypotype 4509

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 5, fig. 3.

Manitoulin formation, Lower Silurian, Manitowaning Bay, Manitoulin Island, Ontario.

Alveolites depressus Parks

Syntypes 9150, 9151 (missing)

Parks, W. A., 1933, Univ. Tor. Studies, Geol. Ser., No. 33, p. 37, pl. 7, figs. 7, 8.

La Vieille formation, Middle Silurian, Jacquet River, New Brunswick; L'Anse à la Vieille, Gascons, Quebec.

Alveolites labechei Milne-Edwards and Haime

Hypotype 2642a

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 14, fig. 3.

'Lockport', Middle Silurian, Skunk Island, south side Manitoulin Island, Ontario.

Amplexoides severnensis (Parks)

Hypotype 11051

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 79, pl. 7, fig. 6.

Inwood formation, Middle Silurian, north bank Grand Rapids, Manitoba.

Amplexoides sp. A.

Fig. spec. 10497

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 79, pl. 9, figs. 12, 15.

Chemahawin member, Cedar Lake formation, Middle Silurian, Lundar quarry, Manitoba.

Amplexus cingulatus Billings

Syntypes 3038, a-c

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 106.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 106.

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 129, pl. 10, figs. 2, 3, a.

La Vieille? formation, Middle Silurian, L'Anse à la Barbe, Chaleur Bay, Quebec.

Arachnophyllum diffluens (Edwards and Haime)

Hypotype 2639

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 183, pl. 14, fig. 12.

'Lockport' (Fossil Hill) formation, Middle Silurian, Owen Sound, Ontario.

Asthenophyllum inwoodense Stearn

Holotype 11012; paratypes 10501, 11006, 12867 (missing)

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 83, pl. 10, figs. 8-10; text fig. 5.

Inwood formation, Middle Silurian, Inwood quarry; Atikameg formation, Middle Silurian, Dunsekikan Island, Lake St. Martin, Manitoba.

Asthenophyllum occidentale (Whiteaves)

Hypotypes 10408, 11001, 11037

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 85, pl. 10, figs. 6, 7; pl. 16, fig. 4.

Atikameg formation, Middle Silurian, south shore head of Grand Rapids, Manitoba.

Asthenophyllum sp. A

Fig. spec. 11039

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 86, pl. 10, fig. 11.

Cedar Lake formation, Middle Silurian, 3.5 miles north of Demicharge Rapids, Cross Lake, Manitoba.

Boreaster lowi Lambe

Syntypes 7849, a

Lambe, L. M., 1906, "Cruise of the Neptune", p. 323.

Bassler, R. S., 1944, J. Pal., vol. 18, No. 1, p. 49, figs. 28, 29.

Silurian, Beechey Island, Lancaster Sound, Arctic.

Chonophyllum belli Billings

Holotype 2624; paratypes 2624a, b

Billings, E., 1865, Can. Naturalist Geol., vol. 2, p. 431.

Lambe, L. M., 1901, Geol. Surv. Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 186, pl. 16, figs. 5, 6.

Middle Silurian (Fossil Hill formation), West Bay and ½ mile northwest of Portage Bay, Lake Manitou, Manitoulin Island, Ontario.

Chonophyllum canadense see *Ptychophyllum canadense*

Chonophyllum nymphale see *Cyathophyllum nymphale*

Cladopora reticulata Hall

Hypotype 5120

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 18, fig. 3.

'Lockport' (Fossil Hill) formation, Middle Silurian, plateau east of Sandfield, Manitoulin Island, Ontario.

Coenites crassus (Rominger)

Hypotype 5123

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 19, fig. 1.

'Lockport' (Fossil Hill) formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Corrugopora praecursor Stearn

Holotype 10402; paratypes 11010, 11060

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 68, pl. 7, figs. 2, 4, 7.

East Arm formation, Middle Silurian, southeast corner Reader Lake, Manitoba.

Corrugopora rhabdota Stearn

Holotype 10406; paratypes 10401, 10481

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 68, pl. 6, figs. 5-7, 9.

East Arm formation, Middle Silurian, Mile 5.5 Churchill branch, CNR, Manitoba.

Cyathophyllum anticostiense Billings

Hypotype 2493

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 117.

Jupiter formation, Middle Silurian, Southwest Point, Anticosti Island, Quebec.

Cyathophyllum articulatum (Wahl)

Hypotype 9102

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 7, fig. 1.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Cyathophyllum eriphyle Billings

Holotype 3041, a (parts of one specimen)

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 111.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 111.

Middle Silurian (La Vieille formation), L'Anse à la Vieille, Chaleur Bay, Quebec.
=*Omphyma eriphyle*, Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 180, pl. 15, figs. 2, a, b.

Cyathophyllum euryone Billings

Holotype 2491

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 110.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 110.
Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 135, pl. 11, figs. 1, a, b.

Middle Silurian (Jupiter formation), 'The Jumpers', Anticosti Island, Quebec.

Cyathophyllum interruptum Billings

Holotype 3042, a (parts of one specimen)

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 109.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 109.
Lambe, L. M. 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 137, pl. 11, figs. 3, a, b.

Middle Silurian (La Vieille? formation), L'Anse à la Barbe, Chaleur Bay, Quebec.

Cyathophyllum nymphale Billings

Holotype 3037, a (parts of one specimen)

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 111.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 111.

Middle Silurian (La Vieille? formation), L'Anse à la Vieille, Chaleur Bay, Quebec.
=*Chonophyllum nymphale*, Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 187, pl. 18, figs. 1, a.

Cyathophyllum pasithea Billings

Holotype 3039, a, b (parts of one specimen)

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 112.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 112.
Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 148, pl. 12, figs. 5, a, b.

Middle Silurian (La Vieille formation), L'Anse à la Vieille, Chaleur Bay, Quebec.

Cyathophyllum pelagicum Billings

Holotype missing

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 108.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 108.

Lower Silurian (Becscie formation), Becscie River Bay, Anticosti Island, Quebec.
=*Diphyphyllum caespitosum*, Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 158, pl. 13, fig. 3.

Cyathophyllum pennanti Billings

Syntype 3040

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 107.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 107.
Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 138, pl. 11, figs. 4, a, b.

Middle Silurian (La Vieille? formation), L'Anse au Gascon, Chaleur Bay, Quebec.

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Cyathophyllum solitarium Billings

Holotype 2637

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 93.

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 15, fig. 1.

Middle Silurian (Fossil Hill formation), Portage Bay, Manitou Lake, Manitoulin Island, Ontario.

Cyathophyllum thoroldense Lambe

Holotype 2622

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 147, pl. 11, figs. 5, a, b.

Lockport formation, Middle Silurian, Thorold, Ontario.

Cyathophyllum wahlenbergi Billings

Holotype 2428 (missing)

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 108.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 108.

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 136, pl. 11, figs. 2, a, b.

Middle Silurian (Jupiter formation), East point, Anticosti Island, Quebec.

Cystiphyllum huronense Billings

Holotype 2628

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 92.

Middle Silurian, Cockburn Island, Lake Huron, Ontario.

=*Cystiphyllum niagarense,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 190, pl. 16, fig. 7.

Cystiphyllum maritimum Billings

Holotype 3036,a, b (parts of one specimen)

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 112.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 112.

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 191, pl. 18, figs. 2,a.

Middle Silurian (La Vieille formation), L'Anse à la Vieille, Chaleur Bay, Quebec.

Dinophyllum lundarense Stearn

Holotype 10473; paratypes 10468, 10469, 10478, 11053

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 87, pl. 9, figs. 8-11; text fig. 4, 1a-c.

Chemahawin member, Cedar Lake formation, Middle Silurian, Lundar quarry and Fort Island, Cedar Lake, Manitoba.

Diphyphyllum caespitosum see *Cyathophyllum pelagicum*

Enterolasma cf. *geometricum* (Foerste)

Hypotype 4511

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 5, figs. 4a, b.

Manitoulin formation, Lower Silurian, near Ice Lake, Manitoulin Island, Ontario.

Eridophyllum vennori Billings

Holotype 2625

Billings, E., 1865, Can. Naturalist Geol., n.s., vol. 2, p. 431.

Middle Silurian (Fossil Hill formation), ½ mile northwest of Portage Bay, Manitou Lake, Manitoulin Island, Ontario.

=*Diphyphyllum multicaule,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 159.

Favosites cristatus Milne-Edwards and Haime

Hypotypes 4506, 4513

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 4, fig. 1; pl. 5, fig. 8.

St. Edmund formation, Middle Silurian, Cabot Head, Ontario.

Favosites favosus (Goldfuss)
Hypotype 5118
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 18, fig. 1.
Fossil Hill formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Favosites favosus (Goldfuss)
Hypotype 9112
Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 9, fig. 1.
'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Favosites gaspensis Lambe
Holotype 3028
Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 8.
Middle Silurian (La Vieille? formation), L'Anse au Gascon, Chaleur Bay, Quebec

Favosites gothlandicus Lamarck
Hypotype 9113
Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 9, figs. 2a, b.
'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Favosites gothlandicus Lamarck
Hypotype 10499
Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 54, pl. 4, fig. 7.
Chemahawin member, Cedar Lake formation, Middle Silurian, Lundar quarry, Manitoba.

Favosites gothlandicus magnus Stearn
Holotype 10472; paratype 10474
Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 56, pl. 6, figs. 2, 4.
Fisher Branch formation, Middle Silurian, l.s. 6, sec. 10, tp. 25, rge. 2, W. Prin. mer.; southeast corner sec. 3, tp. 25, reg. 2, W. Prin. mer., Manitoba.

Favosites hisingeri Milne-Edwards and Haime
Hypotype 5076
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 17, fig. 2.
'Lockport' (Fossil Hill) formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Favosites hisingeri Milne-Edwards and Haime
Hypotype 10470
Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 58, pl. 3, fig. 7.
Chemahawin member, Cedar Lake formation, Middle Silurian, Lundar quarry, Manitoba.

Favosites hispidus Rominger
Hypotype 5119
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 18, fig. 2.
'Lockport' (Fossil Hill) formation, Middle Silurian, Cabot Head, Ontario.

Favosites hispidus Rominger
Hypotype 9115
Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, p. 62, pl. 9, fig. 4.
'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Favosites niagarensis Hall
Hypotypes 9114,a
Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 9, fig. 3.
'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

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Favosites cf. *niagarensis* Hall

Hypotype 6003

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 32, pl. 1, fig. 11.

Ross Brook formation, Middle Silurian, Arisaig, Nova Scotia.

Favosites niagarensis inaequalis Stearn

Holotype 10471; paratypes 10477, 11052

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 57, pl. 3, figs. 1, 2.

Chemahawin member, Cedar Lake formation, Middle Silurian, Lundar quarry, Manitoba.

Favosites niagarensis lundarensis Stearn

Holotype 10475; paratypes 10476, 11034

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 57, pl. 3, figs. 3, 5; pl. 10, fig. 14.

Chemahawin member, Cedar Lake formation, Middle Silurian, Lundar quarry, Manitoba.

Goniophyllum pyramidale (Hisinger)

Hypotype 11065

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, 1957, pl. 11, fig. 1.

Fossil Hill formation, Middle Silurian, Manitowaning-South Baymouth highway, lot 4, con. 2, Assiginack tp., Manitoulin Island, Ontario.

Halysites catenularia (Linnaeus)

Hypotype 5124

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 19, fig. 2.

'Lockport' (Fossil Hill) formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Halysites catenularia feildeni Etheridge

Hypotype 9106

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 8, fig. 3.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Halysites catenularia micropora (Whitfield)

Hypotype 2766

Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 70, pl. 3, fig. 4.

'Lockport', Middle Silurian, southwestern Ontario.

Halysites catenularia microporus (Whitfield)

Hypotype 5125

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 20, fig. 1.

'Lockport' (Fossil Hill) formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Halysites catenularia microporus (Whitfield)

Hypotype 9107

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 8, fig. 4.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Halysites catenularia nitida Lambe

Holotype 3035

Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 71, pl. 4, fig. 2.

Middle Silurian (La Vieille formation), L'Anse à la Barbe, Chaleur Bay, Quebec.

=*Halysites nidita*, Buehler, E. J., 1955, Peabody Mus. Natural Hist., Bull. 8, p. 49, pl. 8, figs. 6, 7.

Halysites compactus Rominger

Hypotype 9104

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 8, fig. 1.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Halysites compactus Rominger var.

Holotype 9165 (missing)

Northrop, S. A., 1939, Geol. Soc. Amer., Sp. Paper 21, p. 154, pl. 10, fig. 6.

La Vieille formation, Middle Silurian, Anse Cascon, Chaleur Bay, Quebec.

Halysites cf. *feildeni* Etheridge

Hypotype 6508

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 297, pl. 3, figs. 6, 7.

Silurian (?), Fossil Island, Lake Nettilling, Baffin Island, Arctic.

Halysites labyrinthicus (Goldfuss)

Hypotype 9105

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 8, fig. 2.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Heliolites affinis Billings

Syntype 2340, a (part of one specimen)

Billings, E.

1865, Can. Naturalist Geol., n.s., vol. 2, p. 427.

1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 5, fig. 12.

Middle Silurian (Chicotte formation), 3 miles west of Jupiter River, Anticosti Island, Quebec.

Heliolites sparsus Billings

Syntype 2478(?)

Billings, E., 1865, Can. Naturalist Geol., n.s., vol. 2, p. 428.

Middle Silurian (Chicotte formation), 2 miles west of Chicotte River, Anticosti Island, Quebec.

=*Plasmopora petaliformis,* Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 83.

Heliophrentis bilateralis beechhillensis McLearn

Holotype 6004; paratypes 6005, 6006

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 31, pl. 1, figs. 1-3.

Beechhill formation, Lower Silurian, Beechhill Cove, Arisaig, Nova Scotia.

Labrinthites chidlensis Lambe

Syntypes 7933, a

Lambe, L. M., 1906, "Cruise of the Neptune", p. 327, fig. 8.

Silurian (?), Cape Chidley, Hudson Strait, Arctic.

Lyellia affinis see *Heliolites affinis*

Lyellia affinis (Billings)

Hypotype 10413

Stearn, C. W., Geol. Surv., Canada, Mem. 281, p. 72, pl. 6, fig. 3.

Fisher Branch formation, Middle Silurian, Grand Rapids, Manitoba.

Lyellia americana Edwards and Haime

Hypotype 5121

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 18, fig. 4.

'Lockport' (Fossil Hill) formation, Middle Silurian, Cabot Head, Ontario.

Lyellia thebesensis paucivesiculosa Bolton

Paratype 11066

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, 1957, p. 64, pl. 6, fig. 1.

Manitoulin formation, Lower Silurian, quarry east side of bay, Owen Sound, Ontario.

Lyellia superba see *Trematopora superba* (Bryozoa)

Michelinia niagarensis ? Davis

Hypotype 9111

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, p. 63, pl. 8, fig. 8.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Multisolenia confluens Stearn

Holotype 10412; paratypes 10419, 10495, 10496

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 66, pl. 5, figs. 6-8.

Fisher Branch formation, Middle Silurian, southwest corner Seven Mile Point, Lake Atikameg and l.s. 1, sec. 8, tp. 25, rge. 2, W. Prin. mer., Manitoba.

Multisolenia tortuosa Fritz

Hypotypes 10485, 10486, 11046

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 66, pl. 5, figs. 1-4.

Cross Lake member, Cedar Lake formation, Middle Silurian, small island southeast corner Cross Lake, Manitoba.

Neozaphrentis manitobensis Stearn

Holotype 10416; paratypes 10415, 10418, a, b, 10489, 11033

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 73, pl. 9, figs. 1, 2, 4; text fig. 4, 2a-d.

Middle Silurian, Cedar Lake formation, 2 miles southwest of Fairford; Fisher Branch formation, 4 miles south of Narcisse; East Arm formation, sec. 4, tp. 57, rge. 20, W. Prin. mer.; Cross Lake member, Cedar Lake formation, island southwest corner Cross Lake, Manitoba.

Neozaphrentis symmetricus Stearn

Holotype 10498; paratype 11011

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 77, pl. 9, fig. 13.

Cross Lake member, Cedar Lake formation, Middle Silurian, Demicharge rapids, Saskatchewan River, Manitoba.

Neozaphrentis tyrrelli Stearn

Holotype 10420; paratypes 10417, a-c, 10422

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 74, pl. 9, figs. 3, 7; text fig. 4, 3a-e.

Middle Silurian, Fisher Branch formation, l.s. 9, sec. 31, tp. 25, rge. 2, W. Prin. mer. and l.s. 11, sec. 10, tp. 25, rge. 2, W. Prin. mer.; Inwood formation, 4.5 miles north of Grand Rapids, Manitoba.

Neozaphrentis (?) sp. A

Fig. spec. 11024

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 78.

Cedar Lake formation, Middle Silurian, Anchor point, Saskatchewan River, Manitoba.

Omphyma congregata Billings

Syntypes 2632, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 93.

Middle Silurian, Cockburn Island, Lake Huron, Ontario.

Omphyma eriphyle see *Cyathophyllum eriphyle*

Palaeocyclus rotuloides magnus Northrop

Syntype 9159 (missing)

Northrop, S. A., 1939, Geol. Soc. Amer., Sp. Paper 21, p. 139.

La Vieille formation, Middle Silurian, Port Daniel-Black Cape region, Gaspé, Quebec.

Palaeophyllum umbellicrescens Chadwick

Syntypes 13591, 13592, a, b, 13593, a

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 129.

Manitoulin formation, Lower Silurian, 'The Rock' and 'Devil's Needle' near Manitowaning, Manitoulin Island, Ontario.

Palaeophyllum (*Cyathophylloides*?) *williamsi* Chadwick

Holotype 4508

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 128, pl. 5, fig. 2.

Manitoulin formation, Lower Silurian, east of Manitowaning Bay, Manitoulin Island, Ontario.

Paleofavosites asper D'Orbigny

Hypotypes 4514, 5138

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 6, figs. 1, a, b; pl. 17, fig. 3.

Manitoulin formation, Lower Silurian, near Ice Lake; 'Lockport' (Fossil Hill) formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Paleofavosites groenlandicus Poulsen

Hypotype 11022

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 64, pl. 7, fig. 8.

Fisher Branch formation, Middle Silurian, Grand Rapids, Manitoba.

Paleofavosites kirki Stearn

Holotype 11005; paratypes 11044, 11045

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 63, pl. 7, figs. 1, 3, 10, 11.

Inwood formation, Middle Silurian, Grand Rapids, Manitoba.

Paleofavosites poulseni minor Stearn

Holotype 10492; paratype 11008

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 63, pl. 4, figs. 9, 10.

Fisher Branch formation, Middle Silurian, Grand Rapids, Manitoba.

Paleofavosites prolificus (Billings)

Hypotypes 10410, 11009

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 60, pl. 4, fig. 1; pl. 10, fig. 13.

East Arm formation, Middle Silurian, sec. 4, tp. 57, rge. 20, W. Prin. mer.; Stonewall formation, Upper Ordovician, Stonewall quarry, Manitoba.

Paleofavosites transiens Stearn

Holotype 10490; paratypes 10405, 10487

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 62, pl. 4, figs. 2, 3; pl. 7, fig. 9; pl. 10, fig. 15.

Cross Lake member, Cedar Lake formation, Middle Silurian, south shore Portage Bay, Cross Lake and east side Cross Lake rapids, Manitoba.

Petraia pygmaea Billings

Holotype missing; hypotypes 2486,a-d

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 103, fig. 91.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 103, fig. 91.

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 106, pl. 6, figs. 6, a, b.

Middle Silurian (Jupiter formation), Heath point, Anticosti Island, Quebec.

Petraia (*pygmaea* ? var.) *occidentalis* Whiteaves

Syntypes 5648,a

Whiteaves, J. F., 1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 291, pl. 24, figs. 2-5.

Middle Silurian, Grand Rapids tramway, Saskatchewan River, Manitoba.

Plasmopora petaliformis see *Heliolites sparsus*

Ptychopyhllum canadense Billings

Syntypes 2483,a, b

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 107.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 107.

Middle Silurian (Chicotte formation), Southwest point, Anticosti Island, Quebec.

=*Chonophyllum canadense*, Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 185, pl. 17, fig. 1.

Ptychophyllum stokesi Edwards and Haime

Hypotype 4696,a

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 14, fig. 4; pl. 15, fig. 3.

'Lockport' (Fossil Hill) formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Pycnactis canadensis Stearn

Holotype 11054

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 88, pl. 16, figs. 1-3.

Moose Lake formation, Middle Silurian, East Arm narrows, Moose Lake, Manitoba.

Pycnostylus elegans Whiteaves

Syntypes 2790,c

Whiteaves, J. F., 1884, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 4, pl. 1, figs. 2, a.

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 22, figs. 2, 3.

Guelph formation, Middle Silurian, Hespeler, Ontario.

Pycnostylus guelphensis Whiteaves

Syntypes 2789, 2793

Whiteaves, J. F., 1884, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 3, pl. 1, figs. 1,a,b.

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 22, fig. 1.

Guelph formation, Middle Silurian, Hespeler and Durham, Ontario.

Pycnostylus guelphensis Whiteaves

Hypotype 10411

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 82, pl. 8, fig. 7.

Chemahawin member, Cedar Lake formation, Middle Silurian, Davis Point, Lake Manitoba, Manitoba.

Streptelasma cf. *hoskinsoni* Foerste

Hypotype 4512

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 5, fig. 5.

Manitoulin formation, Lower Silurian, near Ice Lake, Manitoulin Island, Ontario.

Streptelasma latusculum Billings

Hypotypes 9073, 9074

Cox, I., 1937, Geol. Mag., vol. 74, pl. 2, fig. 10.

Jupiter formation, Middle Silurian, "The Jumpers", Anticosti Island, Quebec.

Striatopora robusta Stearn

Holotype 10488; paratype 10491

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 69, pl. 8, figs. 1, 2, 5.

East Arm formation, Middle Silurian, sec. 4, tp. 57, rge. 20, W. Prin. mer., Manitoba.

Strombodes approximatus Parks

Holotype 9149 (missing)

Parks, W. A., 1933, Univ. Tor. Studies, Geol. Ser., No. 33. p. 38, pl. 8, fig. 5.

La Vieille formation, Middle Silurian, L'Anse à la Vieille, Gascons, Quebec.

Strombodes eximius Billings

Holotype 2633

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 93.

'Lockport', Middle Silurian, Manitoulin Island, Ontario.

=*Arachnophyllum eximium,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 184, pl. 16, figs. 3,a.

Strombodes gracilis Billings

Holotype 2636

Billings E.,

1862, "New Species of Lower Silurian Fossils" p. 113, fig. 94.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 113, fig. 94.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 306, fig. 309.

Lower Silurian, Manitowaning, Manitoulin Island, Ontario.

=*Acervularia gracilis,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 163, pl. 14, figs. 2,a.

Strombodes pentagonus Goldfuss

Hypotypes 5073,a

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 15, fig. 2; pl. 16, fig. 2.

'Lockport' (Fossil Hill) formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Syamplexoides varioseptatus Stearn

Holotype 11047; paratypes 11042, 11043.

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 80, pl. 8, figs. 4, 6, 8, 9.

Chemahawin member, Cedar Lake formation, Middle Silurian, Lundar quarry, Manitoba.

Synaptophyllum multicaule (Hall)

Hypotype 5074

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 16, fig. 1.

'Lockport' (Fossil Hill) formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Syringopora dalmani Billings

Holotype 2618

Billings, E., 1858, Geol. Surv., Canada, Rept. Prog. 1857-58, p. 169.

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 16, fig. 3.

'Lockport' (Thornloe) formation, Middle Silurian, head of Lake Timiskaming, Ontario.

Syringopora dalmani Billings

Hypotype 9108

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 8, fig. 5.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Syringopora fibrata Rominger

Hypotype 5076

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 17, fig. 4.

'Lockport' (Fossil Hill) formation, Middle Silurian, ½ mile east of Long Bay, Manitoulin Island, Ontario.

Syringopora retiformis Billings

Holotype 2617

Billings, E., 1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 170.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 329, fig. 307.

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 17, fig. 1.

'Lockport' (Fossil Hill) formation, Middle Silurian, Owen Sound, Ontario.

Syringopora timiskamensis Hume

Holotype 9103

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, p. 62, pl. 7, figs. 2a, b.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Syringopora verticellata Goldfuss

Hypotype 9109

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, pl. 8, fig. 6.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Vermipora niagarensis Rominger?

Hypotype 5117

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 17, fig. 5.

'Lockport' (Fossil Hill) formation, Middle Silurian, Fossil Hill, Manitoulin Island, Ontario.

Zaphrentis bigsbyi Billings

Holotype 2629

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 92.

'Lockport' (Fossil Hill) formation, Middle Silurian, east side Cockburn Island, Ontario.

Zaphrentis patens Billings

Holotype 2426

Billings, E., 1865, Can. Naturalist Geol., n.s., vol. 2, p. 430.

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 119, pl. 8, figs. 2,a.

Middle Silurian (Jupiter formation), Cormorant Point, Anticosti Island, Quebec.

Zaphrentis rectus Hume

Holotype 9110; paratype 9110a

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, p. 62, pl. 8, figs. 7a-c.

'Lockport' (Thornloe) formation, Middle Silurian, Lake Timiskaming area, Ontario.

Zaphrentis stokesi Milne-Edwards and Haime

Hypotypes 4688, 4694

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 14, figs. 1, 2.

'Lockport' (Fossil Hill) formation, Middle Silurian, plateau east of Sandfield, Manitoulin Island; Cabot Head, Ontario.

DEVONIAN

Acervularia davidsoni Milne-Edwards and Haime

Hypotype? 3417

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal. vol. 4, pt. 2, p. 164, pl. 14, fig. 3.

Onondaga formation, Middle Devonian, Woodstock, Ontario.

Acinophyllum camselli see *Disphyllum* [*Synaptophyllum*] *camselli*

Acinophyllum simcoense see *Diphyphyllum simcoense*

Acinophyllum stramineum see *Diphyphyllum stramineum*

Acrophyllum oneidaense see *Clisiophyllum oneidaense*

Actinocystis variabilis Whiteaves

Syntypes 3880c, e

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 271, pl. 35, figs. 3,a.

Devonian, south end Rowan Island, Dawson Bay, Lake Winnipegosis, Manitoba.

Alveolites fischeri Billings

Syntype 3613

Billings, E., 1860, Can. J., n.s., vol. 5, p. 256, fig. 6.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 383, fig. 413.

Hamilton formation, Middle Devonian, Bosanquet tp., Ontario.

=*Cladopora fischeri,* Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 33.

Alveolites labiosa Billings

Syntypes 3395,a, c-h

Billings, E., 1859, Can. J., n.s., vol. 4, p. 114, figs. 14 (3395), 15 (3395c).

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 366, figs. 371a, b.

Onondaga formation, Middle Devonian, Rama farm, Ontario.

=*Cladopora labiosa,* Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 32.

Alveolites multiperforatus Salee *in* Lecompte

Hypotypes 9319,a,b

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 13, pl. 26, figs. 4, 5.

Upper Devonian, Hay River, 2 miles below first island below Alexander Falls, N.W.T.

Alveolites multiperforatus Salee *in* Lecompte

Hypotype 9322

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 13, pl. 26, fig. 3.

Upper Devonian, Redknife River gorge section, N.W.T.

Alveolites roemeri Billings

Syntypes 3610,a-l

Billings, E., 1860, Can. J.,n.s., vol. 5, p. 255.

Hamilton formation, Middle Devonian, lot 25, con. 5, Bosanquet tp., Ontario.

=*Cladopora roemeri,* Lambe, L. M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 36.

Amplexus exilis Billings

Holotype 6232

Billings, E., 1874, Can. Naturalist, n.s., vol. 7, p. 232.

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 131, pl. 9, figs. 5,a,b.

Onondaga formation, Middle Devonian, southwestern Ontario.

Amplexus mirabilis Billings

Holotype 3461,a

Billings, E., 1874, Can. Naturalist, n.s., vol. 7, p. 232.

Onondaga formation, Middle Devonian, lot 14, con. 1, Oneida tp., Ontario.

=*Zaphrentis mirabilis,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 126, pl. 10, figs. 1,a,b.

Aulocystis ramosa see *Raemeria ramosa*

Aulopora cornuta Billings

Syntypes 3403,a-d

Billings, E., 1859, Can. J., n.s., vol. 4, p. 118, fig. 20.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 366, figs. 364a-c.

Onondaga formation, Middle Devonian, lot 6, con. 1, Wainfleet tp., Ontario.

Aulopora filiformis Billings

Holotype (?) 3401 (missing)

Billings, E., 1859, Can. J, n.s., vol. 4, p. 119.

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 211, pl. 29, fig. 1.

Onondaga, Middle Devonian, Rama farm, Port Colborne, Ontario.

=*Syringopora hisingeri,* Lambe, L.M., 1900, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 57.

Aulopora cf. *repens* Edwards and Haime

Hypotypes 9327, 9328

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 16, pl. 28, figs. 9, 10.

Upper Devonian, Redknife River, Bouvier River, and Trout River, N.W.T.

Aulopora umbellifera Billings

Syntypes 3402, a-d

Billings, E., 1859, Can. J., n.s., vol. 4, p. 119, fig. 21.

Onondaga, Middle Devonian, lot 6, con. 1, Wainfleet tp., Ontario.

Aulopora sp. A

Fig. spec. 9324

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 17, pl. 28, fig. 11.

Upper Devonian, Hay River 5 miles below foot of portage around Alexander Falls, N.W.T.

Campophyllum ellipticum (Hall and Whitfield)

Hypotypes 4206,a-e

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 202, pl. 27, figs. 5 (4206b-c), 6(4206,a).

Devonian, 40 miles above mouth Hay river, N.W.T.

=*Cyathophyllum mcconnelli,* Whiteaves, J. F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 422 (syntypes).

=*Tabulophyllum mcconnelli,* Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 59 (lectotype 4206,a; paratypes 4206b-e).

Cayugaea whiteavesiana Lambe

Holotype 4690,a, b

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 196, pl. 18, figs. 4,a,b.

Onondaga formation, Middle Devonian, N.½ lot 53, con. 1, Cayuga tp., Ontario.

Charactophyllum sp.

Fig. spec. 9288

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 18, pl. 1, fig. 6.

Upper Devonian, Hay River 5 miles below foot of portage around Alexander Falls, N.W.T.

Chonophyllum magnificum Billings

Holotype 3433a

Billings, E., 1860, Can. J., n.s., vol. 5, p. 264, pl. 1.

Onondaga, Middle Devonian, lot 1, con. 14, Walpole tp., Ontario.

Cladochonus antiquus see *Monilopora antiqua*

Cladopora fischeri see *Alveolites fischeri*

Cladopora labiosa see *Alveolites labiosa*

Cladopora roemeri see *Alveolites roemeri*

Cladopora sp.

Fig. spec. 13830

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 202, pl. 9, fig. 7.

Mount Hawk formation, Upper Devonian, north side North Ram River gap, Front Range, Alberta.

Clisiophyllum oneidaense Billings

Syntypes 3416,a-c

Billings, E., 1859, Can. J., n.s., vol. 4, p. 128.

Onondaga formation, Middle Devonian, Rama farm, Port Colborne, Ontario.

=*Acrophyllum oneidaense,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 175, pl. 16, figs. 1, 2.

Coenites selwyni (Nicholson)

Hypotype 6334

Lambe, L. M., 1890, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 1, p. 28, pl. 1, figs. 4,a.

Onondaga formation, Middle Devonian, Hagersville, Ontario.

Columnaria (*Cyathophylloides*) *disjuncta* Whiteaves

Syntypes 3871, 4131,a

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 269, pl. 34, figs. 3,a, b.

Devonian, mouth Steep Rock River, Dawson Bay, Lake Winnipegosis, Manitoba.

Crepidophyllum colligatum (Billings)

Hypotype 3590

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 155, pl. 13, fig. 2.

Onondaga formation, Middle Devonian, Walpole tp., Ontario.

Cyathophyllum athabascense Whiteaves

Holotype 4207 (missing)

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 202, pl. 32, figs. 1,a, b.

Devonian, Athabasca River, 3 miles below Calumet, Alberta.

Cyathophyllum caespitosum Goldfuss

Hypotypes 4300,a, b

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 145, pl. 12, figs. 3,a,b.

Devonian, Peace River near mouth Red River, Alberta.

Cyathophyllum caespitosum Goldfuss

Hypotypes 4204,a, b

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 200, pl. 27, figs. 7, 8.

Devonian, Hay River 40 miles above mouth, N.W.T.

Cyathophyllum exiguum see *Heliophyllum exiguum*

Cyathophyllum halli see *Heliophyllum canadense*

Cyathophyllum mcconnelli see *Campophyllum ellipticum*

Cyathophyllum petraioides Whiteaves

Holotype 3867,a

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 265, pl. 34, figs. 1,a, 2.

Devonian, Lower Salt Spring, Red Deer River, Manitoba.

Cyathophyllum profundum Hall var.

Syntypes 4134,a-c

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 268, pl. 24, figs. 4(4134c), a(4134).

Devonian, Snake Island, Lake Winnipegosis, Manitoba.

=*Cyathophyllum spenceri,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 139.

Cyathophyllum guadrigeminum Goldfuss

Hypotypes 4299,c

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 153, pl. 12, figs. 6, 7,a, b.

Devonian, Ramparts, Mackenzie River, N.W.T.

Cyathophyllum richardsoni (Meek)

Hypotypes 4205,a-g, i, j

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 200, pl. 27, figs. 3, 4.

Devonian, Ramparts, Mackenzie River, N.W.T.

=*Mictophyllum richardsoni*, Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 34, pl. 5, figs. 11, 12a, b.

Cyathophyllum spenceri Lambe

Syntypes 3879, 4133,a

Lambe, L. M.,

1899, Ottawa Naturalist, vol. 12, No. 12, p. 238.

1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 139, pl. 12, figs. 2,b(4133), a(3879).

Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

Cyathophyllum vermiculare praecursor Frech

Hypotype 3865

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 263, pl. 35, figs. 1,a, b.

Devonian, Manitou Island, Lake Winnipegosis, Manitoba.

Cyathophyllum waskasense Whiteaves

Syntypes 3868,c-e

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 264, pl. 34, figs. 5,a, 6, 7.

Devonian, Red Deer River, Manitoba.

Cyathophyllum zenkeri Billings

Holotype 3414, a (parts of one specimen)

Billings, E., 1860, Can. J., n.s., vol. 5, p. 262, fig. 11.

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 138, pl. 12, fig. 1.

Onondaga formation, Middle Devonian, Rama farm, Port Colborne, Ontario.

Cystiphyllum aggregatum Billings

Hypotype 6331

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 193, pl. 18, fig. 3.

Onondaga formation, Middle Devonian, lot 6, con. 13, Walpole tp., Ontario.

Cystiphyllum sulcatum Billings

Syntypes 3439,a, b

Billings, E.,

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 178.

1859, Can. J., n.s., vol. 4, p. 136.

Onondaga formation, Middle Devonian, Rama farm, Port Colborne, Ontario.

=*Chonophyllum* (?) *sulcatum*, Fenton, C. L. and Fenton, M. A., 1938, Annals Carnegie Mus., vol. 27, p. 233 (syntype 3439a).

Diphyphyllum arundinaceum Billings

Syntypes 3431b-f; 3432a,b, slides 3432c, d; 3602, slides 3602a-p.

Billings, E., 1859, Can. J., n.s., vol. 4, p. 134.

Onondaga (Bois Blanc) formation, Middle Devonian, Wainfleet, Walpole and Cayuga tps., Ontario.

=*Synaptophyllum arundinaceum*, McLaren, D. J., 1959, Geol. Surv., Canada, Bull. 48, p. 18, pl. 7, figs. 1-3; pl. 8, figs. 1-5; text figs. 4-6 (lectotype 3602,a-p).

Diphyphyllum simcoense (Billings)

Hypotype 3436, slides 3436a-d

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 161, pl. 13, figs. 6,a,b.

"Corniferous limestone", Middle Devonian, near Woodstock, Ontario.

=*Acinophyllum simcoense,* McLaren, D. J., 1959, Geol. Surv., Canada, Bull. 48, p. 24, pl. 8, fig. 6; pl. 9, figs. 1, 2; text fig. 7.

Diphyphyllum stramineum Billings

Syntype 3431,a

Billings, E., 1859, Can. J., n.s., vol. 4, p. 135.

Onondaga (Bois Blanc) formation, Middle Devonian, lot 6, con. 1, Wainfleet tp., Ontario.

=*Acinophyllum stramineum,* McLaren, D. J., 1959, Geol. Surv., Canada, Bull. 48, p. 25, pl. 9, figs. 3, 4; text fig. 8 (lectotype 3431).

Disphyllum [*Synaptophyllum*] cf. *arundinaceum* (Billings)

Hypotypes 9330,a

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 22, pl. 12, figs. 1, 2.

Upper Devonian (Grumbler formation), Grumbler Rapid, Hay River, N.W.T.

=*Phacellophyllum fenense,* McLaren, D. J., 1959, Geol. Surv., Canada, Bull. 48, p. 26 (holotype 9330, slides 9330a-g).

Disphyllum [*Synaptophyllum*] *camselli* Smith

Holotype 6311

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 23, pl. 12, figs. 4a-h.

Upper Devonian, 8 miles above mouth Bouvier River, N.W.T.

=*Acinophyllum camselli,* McLaren, D. J., 1959, Geol. Surv., Canada, Bull. 48, p. 27.

Disphyllum catenatum Smith

Holotype 6305; paratypes 6306, 9331, 9332

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 21, pl. 11, figs. 9-12.

Upper Devonian, 8 and 9 miles above mouth Bouvier River and below lowest chute, gorge section Redknife River, N.W.T.

Disphyllum [*Synaptophyllum*] *densum* Smith

Holotype 6312

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 22, pl. 12, figs. 3a-c.

Upper Devonian (Grumbler formation), rapids 5½ miles above Alexander Falls, Hay River, N.W.T.

=*Phacellophyllum densum,* McLaren, D. J., 1959, Geol. Surv., Canada, Bull. 48, p. 30.

Disphyllum [*Synaptophyllum*] *stramineum* (Billings)

Hypotypes 6023, 6309, 6310, 9337, 9338, 9341,a

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 23, pl. 13, figs. 1, 2, 4-12.

Upper Devonian (Grumbler formation), Jean Marie River; 3rd falls, 19 and 14 miles above mouth, and ½ mile below Table Rock rapid, Trout River, N.W.T.

=*Phacellophyllum tructense,* McLaren, D. J., 1959, Geol. Surv., Canada, Bull. 48, p. 29 (holotype 6310, slides 6310a-g; hypotype 6309, slides 6309a-d).

Favosites canadensis see *Fistulipora canadensis* (Bryozoa)

Favosites cervicornis Milne-Edwards and Haime

Hypotype 3388

Billings, E., 1859, Can. J., n.s., vol. 4, p. 110, fig. 9.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 363, fig. 356.

Onondaga formation, Middle Devonian, Rama farm, lot 6, con. 1, Wainfleet tp., Ontario.

Favosites turbinata Billings

Syntype 3393

Billings, E.,
1859, Can. J., n.s., vol. 4, p. 109.
1860, Can. J., n.s., vol. 5, p. 258, figs. 7,a.
Fenton, C. L. and Fenton, M. A., 1936, Annals Carnegie Mus., vol. 25, p. 33 (syntype 3393).

Onondaga formation, Middle Devonian, Rama farm, Port Colborne, Ontario.

Haimeophyllum ordinatum Billings

Syntypes 3444,a

Billings, E., 1859, Can. J., n.s., vol. 4, p. 139, fig. 29 (3444a).
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 365, fig. 362.

Onondaga formation, Middle Devonian, near Woodstock, Ontario.

Heliophyllum canadense Billings

Syntypes 3419, 6332

Billings, E., 1859, Can. J., n.s., vol. 4, p. 125.

Onondaga formation, Middle Devonian, lot 19, con. 3, Walpole tp., Ontario.

Heliophyllum eriense Billings

Syntype 3442a

Billings, E., 1859, Can. J., n.s., vol. 4, p. 124.

Onondaga formation, Middle Devonian, lot 19, con. 3, Walpole tp., Ontario.

Heliophyllum exiguum Billings

Holotype 3424g; syntypes 3424,a-d, f, h-k

Billings, E., 1860, Can. J., n.s., vol. 5, p. 261, figs. 9, 10.

Onondaga formation, Middle Devonian, Rama farm, Port Colborne, Ontario.

=*Zaphrentis* ? *exiguum*, Fenton, C. L. and Fenton, M. A., 1938, Annals Carnegie Mus., vol. 27, p. 228 (syntypes 3424).

=*Metriophyllum* (*Aemulophyllum*) *exiguum*, Oliver, W. A., Jr., 1958, J. Pal., vol. 32, No. 5, p. 822, pl. 105, figs. 7-9 (3424i), 10-12 (3424j).

Heliophyllum parvulum Whiteaves

Syntypes 4209, a-c

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 203, pl. 27, figs. 9, 10.

Upper Devonian, 40 miles above mouth Hay River, N.W.T.

Heterophrentis compta Billings

Holotype 3454

Billings, E., 1874, Can. Naturalist Geol., ser. 3, vol. 7, p. 236.

Onondaga formation, Middle Devonian, Cayuga, Ontario.

Heterophrentis prolifica see *Zaphrentis prolifica*

Heterophrentis spatiosa see *Zaphrentis spatiosa*

Hexagonaria caurus see *Prismatophyllum parvulum*

Macgeea proteus Smith

Holotype 9300; paratypes 9300a-c, e, j, l-n, p, 9301, 9302, 9304

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 57, pl. 24, figs. 2-15.

Upper Devonian, 5 miles below foot of portage around Alexander Falls, Hay River; ½ mile below Table Rock rapids, Trout River, N.W.T.

Metriophyllum (*Aemulophyllum*) *exiguum* see *Heliophyllum exiguum*

Metriophyllum sp. A

Fig. specs. 9290, a-c

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 29, pl. 1, figs. 14-17.

Upper Devonian, gorge section, Redknife River, N.W.T.

Michelinia convexa D'Orbigny

Hypotype 3406a

Billings, E., 1859, Can. J., n.s., vol. 4, p. 112, fig. 13.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 364, fig. 359.

Onondaga formation, Middle Devonian, Rama farm, Port Colborne, Ontario.

Microcyclus bifidus Stumm

Hypotypes 10237, 10238, 10260-10262

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 7, pl. 4, figs. 15, 16; pl. 7, figs. 2-4, 8.

Hamilton formation, Middle Devonian, Hungry Hollow and Tile Yard, Thedford, Ontario.

Microcyclus canadensis Stauffer

Syntypes 10239, 10240, 10242; paratypes 10241, 10243-10247, 10265, 10266, 10271

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 8, pl. 5, figs. 1, 2, 4-14; pl. 7, figs. 12, 24; pl. 8, figs. 3, 4.

Hamilton formation, Middle Devonian, Hungry Hollow and Tile Yard, Thedford, Ontario.

Microcyclus crenulatus Stauffer

Holotype 10228; paratypes 10229, 10230

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 9, pl. 3, figs. 11-16.

Hamilton formation, Middle Devonian, Tile Yard, Thedford, Ontario.

Microcyclus discus Meek and Worthen

Hypotypes 10201-10209

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 4, pl. 1, figs. 7-20.

Lingle limestone, Middle Devonian, north end Devil's Backbone ridge, Grand Tower, Jackson co., Illinois.

Microcyclus grandis Stauffer

Holotype 10226; paratype 10227

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 10, pl. 3, figs. 7-10.

Hamilton formation, Middle Devonian, Rock Glen, Arkona, Ontario.

Microcyclus (?) *ignotus* Stauffer

Holotype 10254

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 10, pl. 5, figs. 23-25.

Hamilton formation, Middle Devonian, Tile Yard, Thedford, Ontario.

Microcyclus laticostatus Stauffer

Holotype 10234

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 11, pl. 4, figs. 3-5; pl. 8, figs. 1-2.

Hamilton formation, Middle Devonian, Tile Yard, Thedford, Ontario.

Microcyclus macilentus Stauffer

Syntypes 10255, 10256

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 11, pl. 6, figs. 1-6.

Lingle limestone, Middle Devonian, quarry north end Devil's Backbone Ridge, Grand Tower, Jackson co., Illinois.

Microcyclus microdiscus Stauffer

Holotype 10235; paratype 10273

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 11, pl. 4, figs. 7, 8; pl. 8, figs. 5-7.

Lingle limestone, Middle Devonian, Devil's Backbone Ridge, Grand Tower, Jackson co., Illinois.

Microcyclus microdiscus (?) Stauffer

Hypotype 10210

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 11, pl. 2, figs. 3, 4; pl. 4, fig. 6.

Hamilton formation, Middle Devonian, Hungry Hollow, Ontario.

76336-7—5

Microcyclus ontarioensis Stauffer

Holotype 10248; paratypes 10240, 10249-10253, 10267, 10269, 10274-10277

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 12, pl. 5, figs. 3, 15-22; pl. 7, figs. 16, 20; pl. 8, figs. 8-15.

Hamilton formation, Middle Devonian, Rock Glen, Arkona; Stephens Farm and Tile Yard, Thedford; Hungry Hollow, Ontario.

Microcyclus planoconvexus Stauffer

Holotype 10257

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 13, pl. 6, figs. 7-9.

Lingle limestone, Middle Devonian, quarry north end Devil's Backbone ridge, Grand Tower, Jackson co., Illinois.

Microcyclus (?) *sinuatus* Stauffer

Holotype 10236

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 13, pl. 4, figs. 9-12.

Hamilton formation, Middle Devonian, Tile Yard, Thedford, Ontario.

Microcyclus southworthi Stauffer

Holotype 10259; paratypes 10224, 10225

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 14, pl. 3, figs. 1-6; pl. 7, fig. 1.

Hamilton formation, Middle Devonian, Fraser farm near Arkona and Hungry Hollow, Ontario.

Microcyclus striolatus Stauffer

Holotype 10231; paratypes 10232, 10233, 10263-10265, 10278

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 15, pl. 3, figs. 17-20; pl. 4, figs. 1, 2; pl. 7, figs. 5-7, 9-11, 13-15; pl. 8, fig. 16.

Hamilton formation, Middle Devonian, Rock Glen, Arkona and Tile Yard, Thedford, Ontario.

Microcyclus thedfordensis Bassler

Hypotype 10211

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 5, pl. 2, fig. 10.

Hamilton formation, Middle Devonian, Tile Yard, Thedford, Ontario.

Microcyclus thedfordensis Bassler

Hypotypes 10212-10215, 10218, 10219, 10221-10223

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 5, pl. 2, figs. 11-15, 18, 19, 21-23.

Hamilton formation, Middle Devonian, Hungry Hollow, Ontario.

Microcyclus thedfordensis Bassler

Hypotypes 10216, 10217, 10220

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 5, pl. 2, figs. 16, 17, 20.

Hamilton formation, Middle Devonian, Rock Glen, Arkona, Ontario.

Microcyclus ventricosus Stauffer

Holotype 10258

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 15, pl. 6, figs. 10-12.

Lingle limestone, Middle Devonian, north end Devil's Backbone Ridge, Grand Tower, Jackson co., Illinois.

Microcyclus venustus Stauffer

Syntypes 10268, 10270

Stauffer, C. R., 1952, Geol. Surv., Canada, Bull. 24, p. 16, pl. 7, figs. 17-19, 21-23.

Hamilton formation, Middle Devonian, Tile Yard, Thedford, Ontario.

Mictophyllum modicum Smith

Holotype 9276; paratypes 9277, 9279, 9284, 9285, 9293

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 32, pl. 5, figs. 1-6; pl. 7, fig. 8.

Upper Devonian, gorge section Redknife River and 3rd falls, Trout River, N.W.T.

Mictophyllum near *modicum* Smith

Hypotypes 9280, 9286

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 33, pl. 5, figs. 7, 8.

Upper Devonian, 14 miles above mouth Bouvier River and 20 miles above mouth Trout River, N.W.T.

Mictophyllum multiseptatum Smith

Holotype 9275; paratype 9282

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 33, pl. 5, fig. 9.

Upper Devonian, gorge section Redknife River, N.W.T

Mictophyllum nobile Lang and Smith

Holotype 9272

Lang, W. D. and Smith, S., 1939, Ann. Mag. Natural Hist., ser. 11, vol. 3, p. 155, pl. 4, figs. 1a, b.

Smith, S, 1945, Geol. Soc. Amer., Sp. Paper 59, p. 30, pl. 4, figs. 1a-d.

Upper Devonian, gorge section Redknife River, N.W.T.

Mictophyllum richardsoni see *Cyathophyllum richardsoni*

Mictophyllum semidilatum Smith

Holotype 9273; paratype 9274

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 31, pl. 4, figs. 2, 3.

Upper Devonian, gorge section Redknife River, N.W.T.

Monilopora antiqua Whiteaves

Syntypes 3751, a, b

Whiteaves, J. F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 364, pl. 48, figs. 1, 2, 3, a.

Hamilton formation, Middle Devonian, Thedford, Ontario.

=*Cladochonus antiquus,* Watkins, J. L., 1959, J. Pal., vol. 33, No. 5, p. 805, pl. III, fig. 29 (lectotype 3751b; specimen figured=3751).

Pachyphyllum cinctum (Smith)

Hypotype 13826

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 200, pl. 8, figs. 28, 29.

Mount Hawk formation, Upper Devonian, northeastern spur of Mount Cardinal, Alberta.

Pachyphyllum devoniense Milne-Edwards and Haime

Hypotypes 4301, a, b

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 170, pl. 14, figs. 8, a.

Devonian, Peace River, Alberta.

=*Phillipsastraea vesiculosa,* Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 42.

Pachyphyllum nevadense magnum Stumm

Hypotype 13827

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 202, pl. 9, figs. 1, 2.

Mount Hawk formation, Upper Devonian, eastern fault block Job Creek, Alberta.

Pachyphyllum cf. *P. woodmani* (White)

Hypotype 13828

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 202, pl. 9, figs. 3, 4.

Mount Hawk formation, Upper Devonian, Winnifred Pass, Alberta.

Phacellophyllum densum see *Disphyllum* [*Synaptophyllum*] *densum*

Phacellophyllum fenense see *Disphyllum* [*Synaptophyllum*] cf. *arundinaceum*

Phacellophyllum tructense see *Disphyllum* [*Synaptophyllum*] *stramineum*

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Phillipsastraea affinis Billings

Holotype 3270

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 11.

Grande Greve formation, Devonian, Indian Cove, Gaspé, Quebec.

Phillipsastraea cincta Smith

Holotype 9244

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 43, pl. 22, figs. 4a-c; pl. 23, fig. 8.

Upper Devonian, 5 miles above falls, Redknife River, N.W.T.

Phillipsastraea exigua Lambe

Hypotypes 9246-9249b

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 41, pl. 21, figs. 3-6; pl. 23, fig. 7.

Upper Devonian, Kakisa Lake and Trout River, N.W.T.

Phillipsastraea macouni Smith

Holotype 9233; paratypes 4303a, 6330, 9231, 9232, 9234, 9235

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 41, pl. 20, figs. 4-8; pl. 21, figs. 1, 2; pl. 23, figs. 5, 6.

Upper Devonian, 5 miles below foot of portage around Alexander Falls, Hay River; 2 miles below first island below Alexander Falls, Hay River; Grumbler Rapid, Hay River; Little Red River, Alberta.

Phillipsastraea verrilli (Meek)

Hypotypes 4302,a, b, 4304

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 167, pl. 14, figs. 5,a, b, 6.

Devonian, Vermilion Falls, Peace River, Alberta; 40 miles above mouth Hay River, N.W.T.

=*Phillipsastraea macouni*

Phillipsastraea verrilli exiguum Lambe

Holotype 4306,a, b

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 168, pl. 14, fig. 7.

Devonian, 40 miles above mouth Hay River, N.W.T.

Phillipsastraea vesiculosa Smith

Holotype 6320; paratypes 6321, 6322

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 42, pl. 22, figs. 1-3.

Upper Devonian, 19-20 miles above mouth Trout River and 14 miles above mouth Bouvier River, N.W.T.

Phillipsastraea whittakeri Smith

Holotype 6303; paratypes 9242,a, b, 9243,a, c, 9245 (large var.)

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 39, pl. 19, figs. 5, 6; pl. 20, figs. 1-3; pl. 23, figs. 2-4.

Upper Devonian, gorge section and 5 miles above falls, Redknife River; 19 miles above mouth and at 3rd falls, Trout River, N.W.T.

Prismatophyllum bompasi Smith

Holotype 6302; paratypes 6302a, b

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 49, pl. 17, figs. 2-5; pl. 18, fig. 5 (actually fig. 4 on plate).

Upper Devonian, rapids 5½ miles above Alexander Falls, Hay River, N.W.T.

Prismatophyllum firthi Smith

Holotype 6300

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 49, pl. 17, fig. 1.

Upper Devonian, rapids 5½ miles above Alexander Falls, Hay River, N.W.T.

Prismatophyllum cf. *magnum* Fenton and Fenton

Hypotypes 9254,a, b, 9256,a

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 47, pl. 15, figs. 1-4; pl. 18, fig. 2.

Upper Devonian, upper end middle gorge Jean Marie River and 14 miles above mouth Trout River, N.W.T.

Prismatophyllum parvulum Smith

Holotype 9240; paratype 9240a

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 50, pl. 17, figs. 6, 7.

Upper Devonian, 19 miles above mouth Trout River, N.W.T.

=*Hexagonaria caurus,* Smith, S., 1953, J. Pal., vol. 27, p. 759.

Prismatophyllum reticulatum Smith

Holotype 6027; paratypes 6027a, 6028, 6301, a

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 48, pl. 16, figs. 1-3; pl. 18, fig. 4 (actually fig. 5 on plate).

Upper Devonian, Grumbler Rapid, Hay River, N.W.T.

Prismatophyllum schucherti Smith

Holotype 6021; paratypes 6020, 6024, 6029, 6031

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 48, pl. 16, figs. 4-8; pl. 18, fig. 3.

Upper Devonian, 20 miles above mouth and at 3rd falls, Trout River; gorge section Redknife River, N.W.T.

Ptychophyllum (?) *kindlei* Smith

Holotype 6316a; paratypes 6315, a, 6316, 6317

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 52, pl. 7, figs. 1-5; pls. 8, 9.

Upper Devonian, gorge section Redknife River; 20 miles above mouth and at 3rd falls, Trout River, N.W.T.

Ptychophyllum (?) *whittakeri* Smith

Holotype 6313

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 53, pl. 7, figs. 6a, b; pl. 10, figs. 1, 2.

Upper Devonian, 20 miles above mouth Trout River, N.W.T.

Raemeria [*Roemeria*?] *ramosa* Whiteaves

Syntypes 3753, a

Whiteaves, J. F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 367, pl. 48, figs. 4, 5.

Hamilton formation, Middle Devonian, Bosanquet tp., Ontario.

=*Aulocystis ramosa,* Watkins, J. L., 1959, J. Pal., vol. 33, No. 5, p. 797, pl. 109, fig. 19 (lectotype 3753a).

Spongophyllum imperfectum Smith

Holotype 6307

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 55, p. 59, pl. 11, figs. 3a-g.

Upper Devonian, Jean Marie River, N.W.T.

Spongophyllum near *imperfectum* Smith

Hypotype 6308

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 56, pl. 11, figs. 4a-e.

Upper Devonian, Jean Marie River, N.W.T.

Spongophyllum lituus Smith

Holotype 9297

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 56, pl. 11, figs. 5a-d.

Upper Devonian, Jean Marie River, N.W.T.

Spongophyllum pax Smith

Holotype 3588

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 56, pl. 11, figs. 6a-c.

Devonian, loose near old Fort St. John, British Columbia.

Spongophyllum near *S. semiseptatum* Schluter

Hypotype 9298

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 55, pl. 11, figs. 2a-c.

Upper Devonian, Kakisa Lake, N.W.T.

Streptelasma rectum (Hall)

Hypotypes 4203, a

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 199, pl. 27, figs. 1, 2.

Devonian, 10 miles below Bear River, Mackenzie River, N.W.T.

Striatopora formosa Billings

Syntypes (?) 3464, a-e

Billings, E., 1860, Can. J., n.s., vol. 5, p. 254.

Onondaga formation, Middle Devonian, near Woodstock, Ontario.

Striatopora linneana Billings

Syntype 3611f

Billings, E., 1860, Can. J., n.s., vol. 5, p. 253, fig. 1.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 383, fig. 410.

Hamilton formation, Middle Devonian, Thedford, Ontario.

Synaptophyllum arundinaceum see *Diphyphyllum arundinaceum*

"Synaptophyllum" camselli Smith

Hypotype 13829

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 202, pl. 9, figs. 5, 6.

Mount Hawk formation, Upper Devonian, north side North Ram River Gap, Front Range, Alberta.

Syringopora hisingeri Billings

Holotype 3598

Billings, E.,

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 172.

1859, Can. J., n.s., vol. 4, p. 116, fig. 18.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 366, fig. 367.

Onondaga formation, Middle Devonian, Walpole tp., Ontario.

Syringopora hisingeri see *Aulopora filiformis*

Syringopora nobilis Billings

Syntypes (?) 3410, a-c

Billings, E.,

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 171.

1859, Can. J., n.s., vol. 4, p. 118.

Stumm, E. C., 1947, Wagner Free Instit. Sci., "Type Invertebrate Fossils of North America (Devonian)", Tabulata card 78, photo (lectotype 3410a, c).

Onondaga formation, Middle Devonian, near Woodstock, Ontario.

Tabulophyllum mcconnelli (Whiteaves)

Hypotypes 9258, 9259, 9261-9264, 9266-9268, 9271

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 59, pl. 2, figs. 1-9; pl. 3, figs. 1-4.

Upper Devonian, 2 miles below first island below Alexander Falls and 5 miles below foot of portage around Alexander Falls, Hay River; Jean Marie River, N.W.T.

Thamnopora near *T. cervicornis* De Blainville

Hypotypes 9318, a-d

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 63, pl. 27, figs. 4-6.

Upper Devonian, rapids 5¼ miles above Alexander Falls, Hay River, N.W.T.

Thamnopora near *T. polyforata* (Schlotheim)
Hypotypes 9306, 9311, 9312, a, b, 9313
Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 64, pl. 28, figs. 3-6.
Upper Devonian, ½ mile below Table Rock Rapid, Trout River; 5 miles below foot of portage around Alexander Falls, Hay River; Jean Marie River, N.W.T.

Thamnopora sp. A
Fig. spec. 9316
Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 64, pl. 28, figs. 7a-d.
Upper Devonian, 3rd falls Trout River, N.W.T.

Thamnopora sp.
Fig. spec. 13830
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 202, pl. 9, fig. 7.
Mount Hawk formation, Upper Devonian, north side North Ram River Gap, Front Range, Alberta.

Trachypora elegantula Billings
Syntypes 3614, h, j
Billings, E., 1860, Can. J., n.s., vol. 5, p. 254, figs. 2-4.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 383, fig. 411.
Hamilton formation, Middle Devonian, Thedford, Ontario.

Zaphrentis cingulosa Billings
Holotype 3268, a, b
Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 10, pl. 1, fig. 5.
Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 124, pl. 8, figs. 5, a, b
Devonian (Grande Greve formation), Mont Joli, Gaspé, Quebec.

? *Zaphrentis corticata* Billings
Holotype 3269, a
Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 9, pl. 1, figs. 4a, b.
Devonian (Grande Greve formation), Split Rock, Percé, Quebec.

Zaphrentis egeria Billings
Syntype 3460, a (parts of one specimen)
Billings, E., 1874, Can. Naturalist, n.s., vol. 7, p. 234.
Devonian, southwestern Ontario.

Zaphrentis incondita Billings
Syntypes 3267, a-c
Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 7, pl. 1, figs. 1, a, b.
Devonian (Grande Greve formation), Indian Cove, Gaspé, Quebec.

Zaphrentis mirabilis see *Amplexus mirabilis*

Zaphrentis aff. *phrygia* Rafinesque and Clifford
Hypotype 9289
Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 66, pl. 1, figs. 4a-f.
Upper Devonian, gorge section Redknife River, N.W.T.

Zaphrentis prolifica Billings
Holotype 3449h
Billings, E.,
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 176.
1859, Can. J., n.s., vol. 4, p. 121, figs. 22, 23.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 365, figs. 360a, b.
Onondaga formation, Middle Devonian, Rama farm, Port Colborne, Ontario.
=*Heterophrentis prolifica,* Billings, E., 1874, Can. Naturalist, n.s., vol. 7, No. 4, p. 236.

Zaphrentis rugatula Billings

Holotype 3183,a

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 8, pl. 1, figs. 3,a.

St. Albans formation, Devonian, Cape Gaspé, Quebec.

=*Zaphrentis shumardi,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 122.

Zaphrentis shumardi (Milne-Edwards and Haime)

Hypotype 3182f, g

Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 121, pl. 8, fig. 4.

St. Albans formation, Devonian, Cap Bon Ami, Quebec.

Zaphrentis spatiosa Billings

Syntypes 3451,a

Billings, E.,

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 178.

1859, Can. J., n.s., vol. 4, p. 123.

Onondaga formation, Middle Devonian, Rama farm, Port Colborne, Ontario.

=*Heterophrentis spatiosa,* Billings, E., 1874, Can. Naturalist, n.s., vol. 7, p. 235.

Zaphrentis subrecta Billings

Holotype 3452

Billings, E., 1874, Can. Naturalist, n.s., vol. 7, p. 235.

Onondaga formation, Middle Devonian, southwestern Ontario.

Zaphrentis sp. A

Fig. spec. 9287

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 66, pl. 1, fig. 5.

Upper Devonian, gorge section, Redknife River, N.W.T.

Zaphrentis sp. B.

Fig. spec. 9291

Smith, S., 1945, Geol. Soc. Amer., Sp. Paper 59, p. 66.

Upper Devonian, 14 miles above mouth Bouvier River, N.W.T.

CARBONIFEROUS

Amplexi-Zaphrentis cassa Sutherland

Holotype 10589; paratypes 10590-10597

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 54, pl. 8, figs. 1a-g, 2a-e, 3a, b, 4, 5a-c; pl. 9, figs. 1a-d, 2a-e, 3a-c, 4a, b.

Kindle formation, Mississippian, south side river 0.3 mile south of Mile 380, Alaska Highway, Tetsa River, British Columbia.

Amplexi-Zaphrentis cf. *cassa* Sutherland

Hypotypes 10598, 10599

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 55, pl. 9, figs. 5a-e; pl. 10, figs. 1a-e.

Kindle formation, Mississippian, south side river 0.3 mile south of Mile 380, Alaska Highway, Tetsa River, British Columbia.

Amplexi-Zaphrentis enniskilleni cf. *derbiensis* (Lewis)

Hypotype 10575

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 52, pl. 5, figs. 1a-e.

Middle ? Mississippian, Mount Flett, Flett Rapids west of Liard River area, N.W.T.

Amplexi-Zaphrentis enniskilleni cf. *enniskilleni* (Lewis)

Hypotypes 10572-10574

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 51, pl. 4, figs. 1a-g, 2a-d, 3.

Middle ? Mississippian, Liard River area, N.W.T.

Amplexi-Zaphrentis indifferens Sutherland

Holotype 10576; paratypes 10577, 10578

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 53, pl. 5, figs. 2a-h, 3a-d, 4a-e.

Middle ? Mississippian, Liard River area, N.W.T.

Amplexi-Zaphrentis pilata Sutherland

Holotype 10600; paratypes 10601, 10602

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 56, pl. 10, figs. 2a-c, 3a, b, 4a-c.

Kindle formation, Mississippian, Tetsa River, British Columbia.

Amplexi-Zaphrentis taylori Sutherland

Holotype 10579

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 52, pl. 6, figs. 1a-e.

Mississippian, east bank 5 miles above Flett Rapids, Liard River, N.W.T.

Amplexi-Zaphrentis cf. *taylori* Sutherland

Hypotype 10580

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 53, pl. 6, fig. 2.

Kindle formation, Mississippian, Tetsa River, British Columbia.

Amplexi-Zaphrentis sp. A

Fig. spec. 10603

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 57, pl. 10, fig. 5.

Kindle formation, Mississippian, Tetsa River, British Columbia.

Amplexi-Zaphrentis sp. B

Fig. specs. 10604-10607, 10656

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 57, pl. 11, figs. 1a-f, 2, 3, 4a, b, 5.

Prophet formation, Mississippian, talus block, north of Bull Creek, British Columbia.

Amplexi-Zaphrentis sp. C

Fig. specs. 10582, 10583

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 58, pl. 7, figs. 1a-c, 2a, b.

Upper ? Mississippian, Liard Range, N.W.T.

Amplexi-Zaphrentis cf. sp. C.

Fig. specs. 10584, 10585

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 59, pl. 7, figs. 3a-c, 4.

Rundle formation, Mississippian, east bank Liard River, 5 miles above Flett Rapids, N.W.T., and Kakwa-Jarvis Lakes region, British Columbia.

Amplexi-Zaphrentis sp. D

Fig. specs. 10586, 10587

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 59, pl. 7, figs. 5a, b, 6a-c.

Banff formation, Mississippian, 725 feet above lowest exposure on second mountain west of Mount Hannington, north of Jarvis Lakes, British Columbia.

Amplexi-Zaphrentis cf. sp. D

Fig. spec. 10588

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 60, pl. 7, fig. 7.

Prophet formation, Mississippian, Sikanni River region, British Columbia.

Amplexi-Zaphrentis sp. E

Fig. spec. 10581

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 60, pl. 6, fig. 3.

Member B, Prophet formation, Mississippian, north of Bull Creek, Prophet-Muskwa Rivers area, British Columbia.

Aulopora curva Shimer

Syntypes 4443,a

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 29, pl. 5, figs. 6-8.

Pennsylvanian, Lake Minnewanka, Alberta.

Canadiphyllum knoxi Sutherland

Holotype 10566; paratype 10567

Sutherland, P. K.,

1954, Geol. Mag., vol. 91, No. 5, p. 362, pl. 9, figs. 1a-f, 2a-c; text fig. 1.

1958, Geol. Surv., Canada, Mem. 295, p. 60, pl. 12, figs. 1a-g, 2a-f.

Middle Mississippian, Halfway River valley, British Columbia.

Canadiphyllum knoxi Sutherland

Paratypes 10608, 10609

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 60, pl. 12, figs. 3a, b, 4a-d.

Prophet formation, Mississippian, 125 feet stratigraphically below highest beds exposed at top of anticlinal mountain north of Halfway River, about 40 miles west of Alaska Highway, British Columbia.

Caninia dawsoni (Lambe)

Hypotypes 7650,a-f

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 91, pl. 2, figs. 3,a-c; pl. 3, figs. 1-6.

Upper Windsor, Mississippian, Kennetcook River at junction Avon River, Nova Scotia.

Clisiophyllum ? *banffense* Warren

Holotype 8907

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 46, pl. 3, fig. 4.

Minnewanka formation, Upper Devonian, Rundle-Cascade ranges, Alberta.

Dibunophyllum lambii Bell

Holotype 13589,a-g (parts of one specimen); paratypes 7665c, d

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 95, pl. 4, figs. 1-3.

Upper Windsor, Mississippian, Avon River, Hants co., Windsor, Nova Scotia.

Dibunophyllum ? sp. A

Fig. spec. 10644

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 85, pl. 30, figs. 1a-e.

Member B, Prophet formation, Mississippian, about 40 miles west of Alaska Highway, Halfway River area, British Columbia.

Dibunophyllum ? sp. B

Fig. spec. 10645

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 86, pl. 30, figs. 2a-f.

Middle? Mississippian, Liard River area, N.W.T.

Diphyphyllum astraeiforme Warren

Syntypes 8911,a

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 44, pl. 3, figs. 2, 3; pl. 6, fig. 1.

Rundle formation, Pennsylvanian?, Tunnell Mountain, Alberta.

Diphyphyllum mutabile Kelly

Holotype 9642,a, b (parts of one specimen)

Kelly, W. A., 1942, J. Pal., vol. 16, No. 3, p. 358, pl. 51, figs. 7, 8.

Rundle formation, Mississippian, northwest of McLeod river and Whitehorse Creek junction, Alberta.

Diphyphyllum sinuosum Kelly

Hypotype 9645

Kelly, W. A., 1942, J. Pal., vol. 16, No. 3, p. 358.

Rundle formation, Mississippian, 1st north tributary of Whitehorse River, Mountain Park area, Alberta.

Diphyphyllum sp.

Fig. spec. 9643

Kelly, W. A., 1942, J. Pal., vol. 16, No. 3 p. 359.

Rundle formation, Mississippian, Blackface Creek, Mountain Park area, Alberta.

Ekvasophyllum enclinotabulatum Sutherland

Holotype 10636; paratypes 10637-10641

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 81, pl. 27, figs. 1a-i, 2a-e, 3, 4a, b; pl. 28, figs. 1a-h, 2a-d.

Member B, Prophet formation, Mississippian, about 40 miles west of Alaska Highway, Halfway River area, British Columbia.

Ekvasophyllum cf. *enclinotabulatum* Sutherland

Hypotype 10635

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 81, pl. 26, figs. 4a, b.

Middle ? Mississippian, core of anticline 2 miles west of Mount Withrow, Sikanni River, British Columbia.

Ekvasophyllum ? *harkeri* Sutherland

Holotype 10643; paratype 10642

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 83, pl. 28, figs. 3a-c; pl. 29, figs. 1a-h, 2a-d.

Member B, Prophet formation, Mississippian, about 40 miles west of Alaska Highway, Halfway River area, British Columbia.

Ekvasophyllum cf. *inclinatum* Parks

Hypotypes 10618, 10619

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 77, pl. 20, figs. 1a-e, 2a-h.

Harker, P. and Raasch, G. O., "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 4.

Middle Mississippian, about 6 miles north of Flett mountain, Sawmill mountain, and Liard River area, N.W.T.

Ekvasophyllum proteus Sutherland

Holotype 10620; paratypes 10621-10634

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 78, pl. 21, figs. 1a-o, 2a-e; pl. 22, figs. 1a-h, 2a-f; pl. 23, figs. 1a-k, 2a-f; pl. 24, 1a-j, 2a-c, 3; pl. 25, figs. 1a-m, 2a-h, 3a-c; pl. 26, figs. 1a-i, 2, 3.

Middle? Mississippian, Liard River area, N.W.T.

Faberophyllum cf. *leathamense* Parks

Hypotype 13445

Harker, P. and Raasch, G. O., 1958, "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 6.

Upper part of Rundle group, Mississippian, Mount Norquay, Banff, Alberta.

Kakwiphyllum dux Sutherland

Holotype 10569

Sutherland, P. K.,

1954, Geol. Mag., vol. 91, No. 5, p. 366, pl. 10, figs. 1a-c; text figs. 2a, b.

1958, Geol. Surv., Canada, Mem. 295, p. 69, pl. 18, figs. 1a-d; pl. 19, fig. 3.

Rundle (?) formation, Mississippian, Kakwa-Jarvis Lakes area, British Columbia.

Kakwiphyllum cf. *dux* Sutherland

Hypotype 10570

Sutherland, P. K.,

1954, Geol. Mag., vol. 91, No. 5, p. 368, pl. 10, figs. 2a-c.

1958, Geol. Surv., Canada, Mem. 295, p. 70, pl. 19, figs. 1a-d.

Rundle formation, Mississippian, Kakwa-Jarvis Lakes area, British Columbia.

Kakwiphyllum sp. A

Fig. spec. 10617

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 71, pl. 19, fig. 2.

Banff formation, Mississippian, Carrot Creek near Banff, Alberta.

Liardiphyllum hagei Sutherland

Holotype 10571

Sutherland, P. K.,

1954, Geol. Mag., vol. 91, No. 5, p. 369, pl. 9, figs. 4a, b; text figs. 3a-c.

1958, Geol. Surv., Canada, Mem. 295, p. 99, pl. 6, figs. 4a-g.

Middle Mississippian, Liard Range, N.W.T.

Lithostrotion banffense Warren

Syntypes 8912, a

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 46, pl. 3, figs. 5, 6; pl. 5.

Rundle formation, Pennsylvanian?, Stoney Squaw Mountain, Alberta.

Lithostrotion flexulosum Warren

Syntypes 8913, a

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 47, pl. 3, fig. 7; pl. 6, fig. 2.

Rundle formation, Pennsylvanian?, Tunnel Mountain, Alberta.

=*Diphyphyllum sinuosum,* Kelly, W. A., 1942, J. Pal., vol. 16, No. 3, p. 358.

Lithostrotion macouni Lambe

Syntypes 4327, a, b

Lambe, L. M.,

1899, Ottawa Naturalist, vol. 7, No. 11, p. 220.

1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 176, pl. 14, figs. 11, a, b.

Carboniferous, Fossil point, Peace River, British Columbia.

Lithostrotion [*Diphyphyllum*] aff. *mutabile* Kelly

Hypotypes 10654, 10655

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 96, pl. 33, figs. 2a, b.

Lower Mississippian, east bank 5 miles above Flett Rapids, Liard River, N.W.T.

Lithostrotion cf. *pauciradiale* (McCoy)

Hypotypes 10649-10651

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 92, pl. 32, figs. 1, 2, 3a-c.

Member B, Prophet formation, Mississippian, north of Bull Creek, British Columbia.

Lithostrotion pennsylvanicum Shimer

Syntypes 4459, a

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 27, pl. 5, figs. 3-5.

Pennsylvanian, Lake Minnewanka, Alberta.

Lithostrotion pictoense Billings

Holotype 4334

Billings, E., 1868, "Acadian Geology", 2nd ed., p. 285, fig. 83.

Upper Windsor, Mississippian, East River of Pictou, Nova Scotia.

=*Lonsdaleia pictoense,* Lambe, L. M., 1901, Geol. Surv., Canada, Contr. Can. Pal., vol. 4, pt. 2, p. 173, pl. 15, figs. 9, a.

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 96, pl. 5, figs. 4, a.

Lithostrotion [*Diphyphyllum*] aff. *proliferum* (Thomson and Nicholson)

Hypotype 10653

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 97, pl. 32, fig. 5.

Middle Mississippian, Mount Flett, N.W.T.

Lithostrotion cf. *whitneyi* Meek

Hypotype 10648

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 93, pl. 31, fig. 3.

Middle ? Mississippian, south side river, vertical beds 500 feet east of west-dipping beds at west end first mountain west of Mountain Creek, Pine River, British Columbia.

Lithostrotion [*Diphyphyllum*] sp. A.

Fig. spec. 10652

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 98, pl. 32, figs. 4a-d.

Rundle formation, Mississippian, talus block, Jarvis Lakes, British Columbia.

Lithostrotion sp.

Fig. spec. 9666

McLaren, D. J. and Sutherland, P. K., 1949, J. Pal., vol. 23, No. 6, p. 631, pl. 103, figs. 1-9.

Prophet formation, Mississippian, Bull Creek, Prophet River, British Columbia.

=*Lithostrotion* [*Lithostrotionella*] [*Thysanophyllum*] *mclareni,* Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 95, pl. 33, figs. 1a-g.

Lithostrotionella jasperensis Kelly

Holotype 9647; paratypes 9644, 9646

Kelly, W. A., 1942, J. Pal., vol. 16, No. 3, p. 356, pl. 51, figs. 3, 6.

Rundle formation, Mississippian, Rocky Pass, Mountain Park area, Alberta.

Lithostrotionella micra Kelly

Holotype 9648

Kelly, W. A., 1942, J. Pal., vol. 16, No. 3, p. 357, pl. 50, fig. 7.

Rundle formation, Mississippian, Rocky Pass, Mountain Park area, Alberta.

Lonsdaleia pictoense see *Lithostrotion pictoense*

Lophophyllum avonensis Bell

Holotype 7651; paratypes 7651b, 7652a

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 94, pl. 4, figs. 4-6.

Upper Windsor, Mississippian, Hants co., Nova Scotia.

Lophophyllum ? *cascadense* Warren

Syntypes 8910, a, b (8910-lectotype, Sutherland, 1958)

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 44, pl. 3, fig. 1.

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 78.

Rundle formation, Pennsylvanian?, Rundle-Cascade range, Alberta.

Paracarinia ? *wilsonae* Sutherland

Holotype 10612

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 65, pl. 14, figs. 1a-e.

Middle ? Mississippian, 5 miles west of Liard River at Big Island and 18 miles north of Fort Liard, Liard Range, N.W.T.

Permia sp. A

Fig. spec. 10615

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 72, pl. 16, figs. 1a-c.

Mississippian, about 6 miles north of Mount Flett, Sawmill Mountain, N.W.T.

Pseudozaphrentoides ? *burlingi* Sutherland

Holotype 10616

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 67, pl. 16, figs. 2a, b; pl. 17, figs. 1a-c.

Upper Rundle formation, Mississippian, Kakwa-Jarvis Lakes region, British Columbia.

Pseudozaphrentoides aff. *torquius* (Owen)

Hypotypes 10613, 10614

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 66, pl. 15, figs. 1a, b, 2a-d.

Mississippian, 25 miles north of Fort Liard, east shore Liard River, N.W.T.

Pseudozaphrentoides ? sp. A

Fig. spec. 10611

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 68, pl. 13, fig. 3; pl. 14, figs. 2a, b.

Rundle formation, Mississippian, talus block, Jarvis Lakes, British Columbia.

Sciophyllum lambarti Harker and McLaren

Holotype 9667

Harker, P. and McLaren, D. J., 1950, Geol. Surv., Canada, Bull. 15, p. 31, pl. 4, figs. 1-5.

Carboniferous, long, 141°W., lat. 68°48′40″ N., Yukon-Alaska boundary.

Syringopora pennsylvanica Shimer

Holotype 4451

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 31, pl. 6, fig. 1.

Mississippian, Lake Minnewanka area, Alberta.

Triplophyllum minnewankensis Shimer

Holotype 4477; paratype 4477a

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 25, pl. 5, figs. 1, 2.

Pennsylvanian, Lake Minnewanka, Alberta.

Waagenophyllum columbicum Smith

Holotype 9059, a-d (parts of one specimen); paratypes 9060, a-c, 9061

Smith, S., 1935, J. Pal., vol. 9, No. 1, p. 38, pl. 8, fig. 9; pl. 9, figs. 1-10.

? Permian or Upper Carboniferous, 4 miles east of Keremeos, Similkameen district, British Columbia.

Zaphrentis minas Dawson

Hypotypes 7666, a, 7667, a

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 90, pl. 1, figs. 1, 2; pl. 2, figs. 1, 2.

Upper Windsor, Mississippian, Kennetcook River at junction with Avon River, and north of Brooklyn, Hants co., Nova Scotia.

Zaphriphyllum disseptum Sutherland

Holotype 10568

Sutherland, P. K.,

1954, Geol. Mag., vol. 91, p. 364, pl. 9, figs. 3a-f.

1958, Geol. Surv., Canada, Mem. 295, p. 61, pl. 13, figs. 1a-g.

Middle Mississippian, Liard Range, N.W.T.

Zaphriphyllum disseptum Sutherland

Paratype 10610

Sutherland, P. K., 1958, Geol. Surv., Canada, Mem. 295, p. 61, pl. 13, figs. 2a-c.

Middle Mississippian, Liard River area, N.W.T.

TRIASSIC

Calamophyllia dawsoni Clapp and Shimer

Syntypes 7806,a

Clapp, C. H. and Shimer, H. W., 1911, Boston Soc. Natural Hist., vol. 34, No. 12, p. 431, pl. 40, fig. 1; pl. 42, fig. 16.

Sutton series, Triassic, Lake Cowichan, Vancouver Island, British Columbia.

Calamophyllia suttonensis Clapp and Shimer

Syntypes 7809,a

Clapp, C. H. and Shimer, H. W., 1911, Boston Soc. Natural Hist., vol. 34, No. 12, p. 431, pl. 40, figs. 5, 7; pl. 41, fig. 15.

Sutton series, Triassic, Lake Cowichan, Vancouver Island, British Columbia.

Isastrea cowichanensis Clapp and Shimer

Holotype 7818

Clapp, C. H. and Shimer, H. W., 1911, Boston Soc. Natural Hist., vol. 34, No. 12, p. 429, pl. 41, fig. 11.

Sutton series, Triassic, Lake Cowichan, Vancouver Island, British Columbia.

Isastrea vancouverensis Clapp and Shimer

Holotype 7808

Clapp, C. H. and Shimer, H. W., 1911, Boston Soc. Natural Hist., vol. 34, No. 12, p. 430, pl. 40, fig. 8; pl. 42, fig. 17.

Sutton series, Triassic, Lake Cowichan, Vancouver Island, British Columbia.

Isastrea whiteavesi Clapp and Shimer

Holotype 7807

Clapp, C. H. and Shimer, H. W., 1911, Boston Soc. Natural Hist., vol. 34, No. 12, p. 429, pl. 40, figs. 9, 10.

Sutton series, Triassic, Lake Cowichan, Vancouver Island, British Columbia.

JURASSIC(?)

Astrocoenia irregularis Whiteaves

Holotype 4884; paratype 4884a

Whiteaves, J. F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 246, pl. 33, fig. 1.

Lower shales (Jurassic?), south side Maude Island, Queen Charlotte Islands, British Columbia.

ECHINODERMATA

Cystoidea

Amecystis cordiformis Sinclair
Holotype 13277
Sinclair, G. W., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 72, pl. 2, fig. 1.
Middle Ordovician, Pont Rouge, Quebec.

Amecystis laevis see *Pleurocystites laevis*

Apiocystites canadensis Billings
Holotype 2655
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 90.
Middle Silurian (Rochester formation), Grimsby, Ontario.

Apiocystites huronensis Billings
Holotype 2641
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 91, fig. 28.
Lower Silurian (Cataract group), near Cabot Head, Ontario.
=*Brockocystis huronensis*, Foerste, A. F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 473.

Apiocystites ? *tecumseth* Billings
Syntypes (?) 2663,a-g
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 91.
Silurian (Manitoulin formation), Manitoulin Island, Ontario.
See *Brockocystis tecumseth*

Ateleocystites huxleyi Billings
Syntypes 1392,a-g
Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 72, fig. 4.
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 7, pl. 2, figs. 1-4 (holotype 1392; paratypes 1392a-d).
Trenton (Hull beds), Middle Ordovician, Brigham farm, Hull, Quebec.

Brockocystis huronensis see *Apiocystites huronensis*

Brockocystis tecumseth (Billings)
Neotype 8447
Foerste, A. F.,
1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 469, pl. 5, figs. 2a-c.
1919, ibid., vol. 19, p. 8, pl. 3, fig. 1.
Manitoulin formation, Cataract group, Lower Silurian, ½ mile east of Ice Lake, Manitoulin Island, Ontario.

Brockocystis tecumseth (Billings)
Hypotypes 4516,a
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 5, figs. 6, 7.
Manitoulin formation, Cataract group, Lower Silurian, about 3 miles east of Ice Lake, Manitoulin Island, Ontario.

Glyptocystites batheri Sinclair
Holotype 6295; paratype 6295a
Sinclair, G. W., 1948, J. Pal., vol. 22, No. 3, p. 311, pl. 44, figs. 1-9.
Middle Trenton, Middle Ordovician, Chute aux Galets, Shipshaw River, Quebec.

Glyptocystites forbesi Billings

Syntypes 1010c-e

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 283.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 59, pl. 4, figs. 3a, b, g, h.

Chazy, Middle Ordovician, Caughnawaga, Quebec.

Glyptocystites grandis Sinclair

Holotype 11080

Sinclair, G. W., 1945, Can. Field-Naturalist, vol. 59, p. 73, pl. 2, figs. 4, 5.

Kirkfield formation, Middle Ordovician, Kirkfield, Ontario.

Glyptocystites grandis Sinclair

Hypotype 11083

Sinclair, G. W., 1948, J. Pal., vol. 22, No. 3, p. 311, pl. 43, figs. 3, 5.

Kirkfield formation, Middle Ordovician, Kirkfield, Ontario.

Glyptocystites logani Billings

Syntypes 1385, a, c-g, 1389d

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 282.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 57, pl. 4, figs. 1a (1385g), b (1385), d, e (1385a), f (1385), i, j (1389d).

Trenton, Middle Ordovician, Montreal, Quebec.

Glyptocystites logani gracilis Billings

Holotype 1389

Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 59, pl. 4, fig. 2.

Middle Ordovician, Montreal, Quebec.

Glyptocystites multipora Billings

Syntypes 1387c, f, g, k, m

Billings, E.,

1854, Can. J., vol. 2, p. 216, figs. 1-5.

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 281.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 54, pl. 3, figs. 1a, c-l, n.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Glyptocystites regnelli Sinclair

Holotype 6296

Sinclair, G. W., 1948, J. Pal., vol. 22, No. 3, p. 312, pl. 44, figs. 10-14.

Middle Trenton, Middle Ordovician, Chute aux Galets, Shipshaw River, Quebec.

Malocystites barrandi Billings

Syntype 1011b

Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 67, pl. 7, figs. 2a, b, d; text figs. 1, 2.

Chazy, Middle Ordovician, Island of Montreal, Quebec.

=*Canadocystis barrandi*, Jaekel, O., 1900, Zeits. deutsche. Geol. Gesell., vol. 52, p. 675, text fig. 11 [Paracrinoidea].

Malocystites murchisoni Billings

Syntypes 1012, a, d

Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 66, pl. 7, figs. 1a-c, e, f.

Chazy, Middle Ordovician, Island of Montreal, Quebec.

Ottawacystites laevis see *Amygdalocystites florealis laevis* (Paracrinoidea)

76336-7—6

Palaeocystites chapmani Billings

Syntype 1021

Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 71.

Chazy, Middle Ordovician, lot 26, Front con., Clarence tp., Ontario.

=*Palaeocrinus chapmani*, Hudson, G. H., 1911, Bull. N.Y. State Mus., No. 149, p. 244, text fig. 20 (holotype).

Palaeocystites dawsoni Billings

Syntypes 1020, a

Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 70.

Hudson, G. H., 1911, Bull. N.Y. State Mus., No. 149, p. 247, text figs. 21, 22, 24-28, 30-34.

Chazy, Middle Ordovician, Island of Montreal, Quebec.

Palaeocystites dawsoni Billings

Hypotype 1020b

Hudson, G. H., 1911, Bull. N.Y. State Mus., No. 149, p. 247, text figs. 23, 29.

Chazy, Middle Ordovician, Island of Montreal, Quebec.

Palaeocystites pulcher Billings

Holotype 1009

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 430.

Chazy, Middle Ordovician, Mingan Islands, Quebec.

Pleurocystites anticostiensis Billings

Holotype 1993

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 288.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 52, pl. 1, fig. 3.

Upper Ordovician (English Head formation), Carleton point, Anticosti Island, Quebec.

Pleurocystites elegans Billings

Syntypes 1382, a-c

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 287.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 51, pl. 2, figs. 2a-c.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Pleurocystites elegans Billings

Hypotype 9065

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 13, pl. 3, figs. 3a-c.

Cobourg beds, Ottawa formation, Middle Ordovician, Lemieux Island, Ottawa, Ontario.

Pleurocystites filitextus Billings

Holotype (?) 1400a; hypotype 1400

Billings, E.,

1854, Can. J., vol. 2, p. 252, fig. 13.

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 286.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 50, pl. 2, figs. 1a, b.

Bather, F. A., 1913, Trans. Roy Soc. Edinburgh, vol. 49, pt. 2, p. 465 (holotype =Billings 1854, fig. 13).

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 13, pl. 3, fig. 4 (holotype 1400).

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Pleurocystites filitextus Billings

Hypotype 6607

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 387, pl. 4, fig. 1.

Cobourg beds, Ottawa formation, Middle Ordovician, Indian Lands, con. 3, Kenyon tp., Ontario.

Pleurocystites laevis Raymond

Holotype 7936; paratype 3248

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 2, pl. 2, figs. 1-3.

Crinoid beds (Kirkfield formation), Middle Ordovician, Kirkfield liftlock, Ontario.

=*Amecystis laevis,* Ulrich, E. O. and Kirk, E., 1921, Proc. Biol. Soc. Washington, vol. 34, p. 147.

Pleurocystites robustus Billings

Holotype 1384

Billings, E.,
1854, Can. J., vol. 2, p. 252, fig. 15.
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 287.
1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 49, pl. 1, fig. 2a.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 13, pl. 4, fig. 4.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Pleurocystis squamosa robusta,* Bather, F. A., 1913, Trans. Roy. Soc. Edinburgh, vol. 49, pt. 2, p. 465, text fig. 66.

Pleurocystites squamosus Billings

Hypotypes 1381, a-c; 9064

Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 49, pl. 1, figs. 1a-e.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 12, pl. 2, figs. 5, 6 (syntypes 1381a, b, c).

Trenton (Cobourg beds), Middle Ordovician, unspecified locality and south end LeBreton Street, Ottawa, Ontario.

Syringocrinus paradoxicus Billings

Holotype 1521

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 65, pl. 10, fig. 14.

Trenton, Middle Ordovician, Beauport, Quebec.

=*Dendrocystis ? paradoxicus,* Bather, F. A.,
1913, Trans. Roy Soc. Edinburgh, vol. 49, pt. 2, p. 397, text fig. 13.
1928, Geol. Surv., Canada, Mus. Bull. 49, p. 7, text fig. 2.

Blastoidea

Blastoidocrinus carchariaedens Billings

Syntypes 1016, a-d, 1120

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 18, pl. 1, figs. 1a, c, i, k, l, p.

Hudson, G. H., 1911, Bull. N.Y. State Mus., No. 149, pl. 1, figs. 3-5; pl. 2, fig. 1; pl. 3, figs. 1, 2; pl. 4, figs. 1-3 (the type 1016).

Chazy, Middle Ordovician, Island of Montreal, Quebec.

Codaster canadensis Billings

Hypotype 3664

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 109, pl. 14, figs. 4, a.

Hamilton formation, Middle Devonian, near Thedford, Ontario.

Devonoblastus whiteavesi see *Granatocrinus leda*

Eleutherocrinus cassedayi Shumard and Yandell

Hypotype 3665

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 110, pl. 14, figs. 5, a, b.

Hamilton formation, Middle Devonian, near Thedford, Ontario.

76336-7—6½

Granatocrinus leda (Hall)
Hypotype 3661
Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 108, pl. 14, figs. 3, a-d, f.
Hamilton formation, Middle Devonian, near Thedford, Ontario.
=*Devonoblastus whiteavesi,* Reimann, I. G., 1935, Bull. Buffalo Soc. Nat. Sci., vol. 17, No. 1, p. 32.

Nucleocrinus elegans Conrad
Hypotype 3662
Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 107, pl. 14, fig. 2.
Hamilton formation, Middle Devonian, near Thedford, Ontario.

Pentremites grandis Warren
Holotype 8914
Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 48, pl. 3, fig. 8.
Rundle formation, Pennsylvanian?, Cascade Mountain, Alberta.

Pentremites perelongatus Warren
Holotype 8915
Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 48, pl. 3, fig. 9.
Rundle formation, Pennsylvanian?, Stoney Squaw Mountain, Alberta.

Pentremitidea filosa Whiteaves
Syntypes 3660, a-f
Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 104, pl. 14, figs. 1, a, b (3660).
Hamilton formation, Middle Devonian, near Thedford, Ontario.

Eocrinoidea

Gogia prolifica Walcott
Hypotypes 10088a-h
Harker, P. and Hutchinson, R. D., 1953, J. Pal., vol. 27, No. 2, p. 286, pl. 40, figs. 1-5.
Middle Cambrian, Mount Kitchener, Alberta.

Paracrinoidea

Amygdalocystites florealis Billings
Syntypes [?] 1396,a
Billings, E.,
1854, Can. J., vol. 2, p. 270, figs. (?) 4-6.
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 289.
1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 63, pl. 6, figs. 1a-e.
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 9 (holotype 1396; paratype 1396a).
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Amygdalocystites florealis Billings
Hypotype 3246
Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 5, pl. 2, fig. 4.
Crinoid beds (Kirkfield formation) Middle Ordovician, north of railway bridge near Kirkfield, Ontario.

Amygdalocystites florealis Billings
Hypotypes 9062,a
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 9, pl. 1, figs. 1, 2.
Cobourg beds, Ottawa formation, Middle Ordovician, Booth Street, Ottawa, Ontario.

Amygdalocystites florealis laevis W. R. Billings

Holotype 1395

Billings, W. R., 1883, Ottawa Field-Naturalist Club, Trans. No. 4, p. 52, pl., fig. 4.

Trenton (Hull beds), Middle Ordovician, Hull, Quebec.

=*Ottawacystites laevis,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 14, pl. 3, fig. 1.

Amygdalocystites ? gorgo Sinclair

Holotype 13587

Sinclair, G. W., 1948, J. Pal., vol. 22, No. 3, p. 313, pl. 42, fig. 8; text fig. 6.

Upper Trenton, Middle Ordovician, Gravel's quarry, Chateau Richer, Montmorency co., Quebec.

Amygdalocystites radiatus Billings

Syntypes 1394,a,b

Billings, E.,

1854, Can. J., vol. 2, p. 271, figs. 7, 8.

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 289.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 65, pl. 6, figs. 3a, b.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 10, pl. 1, fig. 4 (holotype 1394; paratypes 1394a, b).

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Amygdalocystites radiatus Billings

Hypotypes 3236,a, b

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 3, pl. 2, figs. 5-7.

Crinoid beds (Kirkfield formation), Middle Ordovician, Healey Falls, Ontario.

Amygdalocystites radiatus Billings

Hypotype 9063

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 10, pl. 1, figs. 3a-c.

Cobourg beds, Ottawa formation, Middle Ordovician, corner of Booth and Elm Streets, Ottawa, Ontario.

Amygdalocystites tenuistriatus Billings

Holotype 1393 (missing)

Billings, E.,

1854, Can. J., vol. 2, p. 271, fig. 9.

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 289.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 64, pl. 6, figs. 2a, b.

Trenton, Middle Ordovician, Ottawa, Ontario.

Canadocystis barrandi see *Malocystites barrandi* (Cystoidea)

Comarocystites punctatus Billings

Holotype 1391; paratype 1391g

Billings, E.,

1854, Can. J., vol. 2, p. 270, figs. 1-3.

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 288.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 61, pl. 5, figs. 1, 2.

Grant, J. A., 1880, Ottawa Field-Naturalist Club, Trans. No. 1, p. 29, pl. 1, figs. 2-5.

Foerste, A. F., 1916, Ottawa Naturalist, vol. 30, No. 8, p. 93, pl. 3.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Comarocystites punctatus Billings

Hypotype 333a

Grant, J. A., 1880, Ottawa Field-Naturalist Club, Trans. No. 1, p. 29, pl. 1, fig. 1.

Foerste, A. F., 1916, Ottawa Naturalist, vol. 30, No. 9, p. 113, pl. 5.

Trenton (Cobourg beds), Middle Ordovician, St. Patrick Street, Ottawa, Ontario.

Crinoidea

Abrotocrinus sp.
Fig. specs. 9927-9929
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 554, pl. 65, figs. 29-31.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Ancyrocrinus bulbosus Hall
Hypotype 3752, a
Whiteaves, J. F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 375, pl. 48, figs. 8, 9.
Hamilton formation, Middle Devonian, Stony Point, Lake Huron, Ontario.

Aorocrinus banffensis Laudon, Parks and Spreng
Holotype 9966
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 568, pl. 67, figs. 18, 19; pl. 69, fig. 19.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Aorocrinus iola Laudon
Hypotypes 9968, 9969
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 569, pl. 67, figs. 16, 17.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Aorocrinus sp.
Fig. spec. 9967
Laudon L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 569, pl. 67, fig. 20.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Arachnocrinus canadensis Whiteaves
Holotype 4213
Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 208, pl. 28, fig. 2.
Upper Devonian, Hay River, 40 miles above mouth, N.W.T.

Archaeocrinus desideratus W. R. Billings
Syntypes 1508c, d
Billings, W. R., 1885, Ottawa Field-Naturalist Club, Trans. No. 6, vol. 2, No. 2, p. 249, pls., figs.
Trenton, Middle Ordovician, Division (Booth) Street, Ottawa, Ontario.

Archaeocrinus desideratus W. R. Billings
Hypotypes 1508a, 5595
Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 257, pl. 10, figs. 4a, b.
Trenton, Middle Ordovician, Ottawa, Ontario.

Archaeocrinus lacunosus see *Glyptocrinus lacunosus*

Archaeocrinus microbasalis see *Thysanocrinus* (*Rhodocrinus*) *microbasalis*

Archaeocrinus microbasalis (Billings)
Hypotypes 1500s, 1520
Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 256, pl. 10, figs. 2a-c.
Trenton (Hull beds), Middle Ordovician, cement quarries, Hull, Quebec.

Archaeocrinus ottawaensis Wilson
Holotype 9607
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 26, pl. 5, fig. 1.
Trenton (Cobourg beds), Middle Ordovician, corner Rochester and Lydia Streets, Ottawa, Ontario.

Archaeocrinus pyriformis see *Thysanocrinus* (*Rhodocrinus*) *pyriformis*

Arthroacantha punctobrachiata (Hall)
Hypotypes 3648, 3650
Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 96, pl. 13, figs. 1, a.
Hamilton formation, Middle Devonian, Bartlett Mills near Arkona, Ontario.

Athabascacrinus colemanensis Laudon, Parks and Spreng
Holotype 9964; paratype 9965
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 567, pl. 68, figs. 1-3; pl. 69, figs. 16-18.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Blothrocrinus sp.
Fig. specs. 9922-9925
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 553, pl. 65, figs. 23, 26, 27, 33.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Botryocrinus crassus see *Homocrinus crassus*

Cactocrinus arnoldi (Wachsmuth and Springer)
Hypotype 9976
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 571, pl. 68, fig. 5.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Cactocrinus imperator Laudon
Hypotypes 9974, 9975
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 571, pl. 68, fig. 4.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Cactocrinus kuenzi Laudon, Parks and Spreng
Holotype 9979; paratypes 9980, 9981
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 572, pl. 68, figs. 7-10; pl. 69, fig. 22.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Cactocrinus sp.
Fig. specs. 9977, 9978
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 571, pl. 68, figs. 6, 11.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Carabocrinus huronensis Foerste
Hypotype 11082
Sinclair, G. W., 1945, Am. Midland Naturalist, vol. 34, p. 716, pl. 2, fig. 17.
Lower Trenton, Middle Ordovician, Kirkfield, Ontario.

Carabocrinus radiatus Billings
Syntypes 1425, b, d, e
Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 276.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 31, pl. 2, figs. 3a-c.
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 38, pl. 5, fig. 5.
Trenton, Middle Ordovician, Ottawa, Ontario.

Carabocrinus ? *tuberculatus* Billings
Holotype 1991
Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 33, pl. 10, figs. 2a-c.
Upper Ordovician (English Head formation), Carleton point, Anticosti Island, Quebec.

Carabocrinus vancortlandti Billings
Holotype 1424
Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 32, pl. 2, fig. 4.
Trenton, Middle Ordovician, McNab tp., Ontario.

Castocrinus articulosus see *Heterocrinus articulosus*

Castocrinus inaequalis see *Heterocrinus inaequalis*

Cleiocrinus magnificus Billings
Holotype 1447
Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 54, pl. 5, fig. 3.
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Cleiocrinus magnificus Billings
Hypotype 1592
Springer, F., 1905, Mem. Mus. Comp. Zoology Harvard, vol. 25, No. 2, p. 111, pl. 1, fig. 11.
Trenton (Hull beds), Middle Ordovician, cement quarries, Hull, Quebec.

Cleiocrinus regius Billings
Syntypes 1443, a-c
Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 277.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 53, pl. 5, figs. 1a-g.
Springer, F., 1905, Mem. Mus. Comp. Zoology Harvard, vol. 25, No. 2, p. 110, pl. 1, figs. 1-10.
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 23, (holotype 1443a; paratypes 1443, c).
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Compsocrinus harrisi (Miller)
Hypotype 8576
Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 103, pl. 6, figs. 1a-c.
Meaford formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Cosmetocrinus sp.
Fig. spec. 9926
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 553, pl. 65, fig. 28.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Cradeocrinus warreni Laudon, Park and Spreng
Holotype 9915; paratypes 9916-9918
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 551, pl. 65, figs. 18-21; pl. 69, fig. 3.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Cradeocrinus sp.
Fig. spec. 9921
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 551, pl. 65, fig. 25.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Cremacrinus articulosus see *Heterocrinus articulosus*

Cremacrinus inaequalis see *Heterocrinus inaequalis*

Cribanocrinus wilsoni Laudon, Parks and Spreng
Holotype 9960; paratype 9961
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 563, pl. 67, figs. 10, 11; pl. 69, fig. 15.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Cupulocrinus conjugans see *Dendrocrinus conjugans*

Cupulocrinus jewetti (Billings)
Hypotype 7784 z
Springer, F., 1911, Geol. Surv., Canada, Mem. 15-P, p. 28, pl. 1, fig. 10.
Trenton, Middle Ordovician, Kirkfield, Ontario.

Cyathocrinites sp. A, B
Fig. spec. 9902-9907
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 547, pl. 65, figs. 3-8.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Decadocrinus brazeauensis Laudon, Parks and Spreng
Holotype 9934; paratypes 9935, 9936
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 556, pl. 65, figs. 36-38; pl. 69, fig. 7.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Decadocrinus spinobrachiatus Goldring
Holotype 9389; paratype 9390
Goldring, W., 1938, Bull. Am. Pal., vol. 24, No. 81, p. 15, pl. 2, figs. 1,2.
'Upper' Devonian, third chute, Redknife River and gorge section Bouvier River, N.W.T.

Dendrocrinus acutidactylus Billings
Holotype 1426
Billings, E.
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 266.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 37, pl. 3, figs. 2a, b.
Trenton, Middle Ordovician, Mile End quarries, Montreal, Quebec.

Dendrocrinus angulatus Billings
Holotype 1435
Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 269.
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.
=*Palaeocrinus angulatus,* Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 45, pl. 3, figs. 6a, b.
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 40, pl. 6, figs. 1a, b.

Dendrocrinus conjugans Billings
Syntypes 1429, a, b
Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 268.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 41, pl. 4, figs, 1, 2.
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.
=*Cupulocrinus conjugans,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull, 4, p. 36, pl. 6, fig. 6 (holotype 1429).

Dendrocrinus cylindricus Billings
Holotype 1421
Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 44, pl. 3, figs. 8a, b.
Trenton, Middle Ordovician, Mile End quarries, Montreal, Quebec.

Dendrocrinus gregarius Billings
Syntypes 1427b, e
Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 265.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 36, pl. 3, figs. 1a-c.
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 37, pl. 6, figs. 4a, b.
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Dendrocrinus latibrachiatus Billings
Syntypes 1992,a-c
Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 270.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 39, pl. 3, figs. 5a-c.
Upper Ordovician, Carleton point, Anticosti Island, Quebec.

Dendrocrinus proboscidiatus Billings

Holotype 1431

Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 267.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 38, pl. 3, figs. 3a-c.

Trenton, Middle Ordovician, Mile End quarries, Montreal, Quebec.

Dendrocrinus similis Billings

Holotype 1428

Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 267.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 40.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Iocrinus similis,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 33, pl. 5, fig. 3.

Dendrocrinus tener Billings

Holotype 1990

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 9.

Upper Ordovician (Vaureal formation), West End lighthouse, Anticosti Island, Quebec.

Deocrinus asperatus see *Rhodocrinus asperatus*

Dichocrinus bozemanensis (Miller and Gurley)

Hypotype 9991

Laudon, L. R., *et al.,* 1952, J. Pal., vol. 26, No. 4, p. 574, pl. 68, fig. 28.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Dichocrinus spp.

Fig. specs. 9992-9996

Laudon, L. R., *et al.,* 1952, J. Pal., vol. 26, No. 4, pp. 574-575, pl. 68, figs. 21-30.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Dinotocrinus albertaenis Laudon, Parks and Spreng

Holotype 9930

Laudon, L. R., *et al.,* 1952, J. Pal., vol. 26, No. 4, p. 554, pl. 65, fig. 32; pl. 69, fig. 5.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Dolatocrinus canadensis Whiteaves

Holotype 3653

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 99, pl. 12, figs. 3,a-c.

Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 315, pl. 25, figs. 7a, b.

Hamilton formation, Middle Devonian, near Thedford, Ontario.

Dolatocrinus subaculeatus Whiteaves

Syntype 3763

Whiteaves, J. F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 369, pl. 48, figs. 6, a, b.

Hamilton formation, Middle Devonian, near Thedford, Ontario.

Drymocrinus manitouliensis Foerste

Syntypes 8578a-e, g

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 101, pl. 7, figs. 1a-f.

Sheguiandah formation, Upper Ordovician, northeast of Tamarack point, Manitoulin Island, Ontario.

Drymocrinus sp.
Fig. spec. 8587
Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 102, pl. 7, fig. 2.
Cryptolithus zone, Lorraine, Upper Ordovician, St. Hyacinthe, Quebec.

Ectenocrinus canadensis see *Heterocrinus canadensis*

Eretmocrinus tentor Laudon
Hypotype 9973
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 570, pl. 67, fig. 24.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Eucheirocrinus ontario Springer
Holotype 4330
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 127, fig. 6.
Manitoulin formation, Cataract group, Lower Silurian, Stoney Creek, Ontario.

Euspirocrinus obconicus W. R. Billings
Syntype 1566
Billings, W. R., 1885, Ottawa Field-Naturalist Club, Trans. No. 6, vol. 2, No. 2, p. 248, pl.
Trenton (Cobourg beds), Middle Ordovician, Division (Booth) Street, Ottawa, Ontario.

Eutaxocrinus pulvinatus Laudon, Parks and Spreng
Holotype 9946
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 560, pl. 66, figs. 8, 9; pl. 69, fig. 10.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Forbesiocrinus withersi Laudon, Parks and Spreng
Holotype 9939; paratypes 9940-9942
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 559, pl. 66, figs. 1-4; pl. 69, fig. 9.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Gennaeocrinus arkonensis Whiteaves
Syntype 3755
Whiteaves, J. F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 373, pl. 48, fig. 7.
Hamilton formation, Middle Devonian, Bartlett Mills, Ontario.

Glyptocrinus lacunosus Billings
Syntypes 1589, a
Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 261.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 61, pl. 8, figs. 3a, b.
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.
=*Archaeocrinus lacunosus*,
Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 255, pl. 10, fig. 1 (the type 1589).
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 25, (holotype 1589a; paratype 1589).

Glyptocrinus marginatus Billings
Holotype 1523
Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 260.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 59, pl. 9, fig. 1a.
Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 275, pl. 20, fig. 2.
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Glyptocrinus ornatus Billings

Syntypes 1524, a, b

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 260.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 60, pl. 9, fig. 2a.

Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 274, pl. 20, figs. 6a, b (the type 1524).

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Pycnocrinus ornatus,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 29 (holotype 1524).

Glyptocrinus ottawaensis see *Glyptocrinus ramulosus*

Glyptocrinus priscus Billings

Holotype 1522

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 257.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 56, pl. 7, figs. 1a, b.

Black River-Trenton (Leray-Rockland beds), Middle Ordovician, fourth chute of Bonnechère River, Renfrew co., Ontario.

=*Periglyptocrinus priscus,* Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 278, pl. 21, fig. 2.

Glyptocrinus quinquepartitus Billings

Holotype 1526

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, pl. 8, figs. 2a, b.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Glyptocrinus ramulosus Billings

Syntypes 1456d, j, m, 1579

Billings, E.,

1856, Can. J., n.s., vol. 1, p. 165.

1856, Can. Naturalist Geol., vol. 1, p. 54, figs. 1, 3, 4-8.

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 258.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 57, pl. 7, figs. 2a-f; pl. 8, figs. 1a-d.

Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 233, pl. 20, figs. 5a, b.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 28, (holotype 1456m, paratype 1579).

Trenton (Hull beds), Middle Ordovician, Brigham Lake, Hull, Quebec.

=(pars) *Glyptocrinus ottawaensis,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 27 (holotype 1456j).

Goniocrinus angulatus Laudon, Parks and Spreng

Holotype 9919; paratype 9920

Laudon, L. R., *et al.,* 1952, J. Pal., vol. 26, No. 4, p. 552, pl. 65, figs. 22, 24.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Heterocrinus articulosus Billings

Holotype 1445

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 51, pl. 4, fig. 8.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Castocrinus articulosus,* Ringueberg, E. N. S., 1889, Ann. N.Y. Acad. Sci., vol. 4, p. 395, pl. 10, fig. 4.

=*Cremacrinus articulosus,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 35, pl. 6, fig. 5.

Heterocrinus bellevillensis W. R. Billings

Syntypes 1439, a, b

Billings, W. R., 1883, Ottawa Field-Naturalist Club, Trans. No. 4, p. 49, pl., figs.

Trenton, Middle Ordovician, Belleville, Ontario.

Heterocrinus canadensis Billings

Syntypes 1441, b, h

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 273.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 48, pl. 4, figs. 5a-d.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Ectenocrinus canadensis,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 32, pl. 6, figs. 8a, b.

Heterocrinus inaequalis Billings

Holotype 1444

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 51, pl. 4, fig. 7a.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Castocrinus inaequalis,* Ringueberg, E. N. S., 1889, Ann. N.Y. Acad. Sci., vol. 4, p. 395, pl. 10, fig. 5.

=*Cremacrinus inaequalis,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 35, pl. 5, figs. 4a, b.

Heterocrinus tenuis Billings

Syntype 1438

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 273.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 50, pl. 4, figs. 6a, b.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Hexacrinus humei Springer

Holotype 6242

Springer, F., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 132, pl. 24, figs. 18, 19.

Upper Devonian, 40 miles upriver from mouth Root River, N.W.T.

Homocrinus crassus Whiteaves

Holotype 3647

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 95, pl. 12, fig. 2.

Hamilton formation, Middle Devonian, Thedford, Ontario.

=*Botryocrinus crassus,* Bather, F. A., 1906, Ottawa Naturalist, vol. 20, No. 5, p. 101.

Goldring, W., 1923, N.Y. State Mus., Mem. 16, p. 365, pl. 47, figs. 7, 8.

Hybocrinus conicus Billings

Syntypes 1418, a

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 274.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 29, pl. 2, figs. 2a, b.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Hybocrinus pristinus Billings

Hypotype 1017

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 23, pl. 1, fig. 2a.

Chazy, Middle Ordovician, near Mile End, Montreal, Quebec.

Hybocrinus tumidus Billings

Syntypes 1419a-c

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 275.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 28, pl. 2, figs. 1a-e.

Springer, F., 1911, Geol. Surv., Canada, Mem. 15-P, p. 24, pl. 5, fig. 5.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Hylodecrinus sp.

Fig. spec. 9932

Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 555, pl. 65, fig. 35.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Iocrinus similis see *Dendrocrinus similis*

Iocrinus cf. *subcrassus* Meek and Worthen

Hypotype 9068

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 34, pl. 6, fig. 7.

Trenton (Cobourg beds), Middle Ordovician, Rideau Hall grounds, Ottawa, Ontario.

Lecanocrinus elegans Billings

Holotype 1433

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 278.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 47, pl. 4, fig. 4.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Protaxocrinus elegans*, Springer, F., 1920, Smithsonian Inst., "The Crinoidea Flexibilia", p. 346, pl. 45, fig. 1.

Lecanocrinus laevis Billings

Holotype 1442

Billings, E.

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 278.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 47, pl. 4, fig. 3a.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Protaxocrinus laevis*, Springer, F., 1920, Smithsonian Inst., "The Crinoidea Flexibilia", p. 348, pl. 45, fig. 2.

Lichenocrinus obliquus Foerste

Holotype 8579 (missing)

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 102, pl. 6, fig. 2.

Sheguiandah formation, Upper Ordovician, ½ mile south of Clay Cliffs, Manitoulin Island, Ontario.

Lichenocrinus ottawaensis Wilson

Holotype 13209

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 17, pl. 3, fig. 2.

Trenton (Cobourg beds), Middle Ordovician, Lakeside Park, Ottawa, Ontario.

Linobrachiocrinus kindlei see *Linocrinus kindlei*

Linocrinus faculensis Laudon, Parks and Spreng

Holotype 9933

Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 555, pl. 65, fig. 16; pl. 69, fig. 6.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Linocrinus kindlei Goldring

Holotype 9393; paratype 9394

Goldring, W., 1938, Bull. Am. Pal., vol. 24, No. 81, p. 21, pl. 2, figs. 5, 6.

Upper Devonian, gorge section and 8 miles above mouth Bouvier River, N.W.T.

=*Linobrachiocrinus kindlei*, Goldring, W., 1939, J. Pal., vol. 13, No. 3, p. 354.

Maligneocrinus medicinensis Laudon, Parks and Spreng
Holotype 9962; paratype 9963
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 566, pl. 67, figs. 12-15; pl. 69, fig. 26.
Banff formation, Mississippian, Maligne Lake area, Jasper Park, Alberta.

Megistrocrinus sp. indet.
Fig. spec. 3655
Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 101, pl. 13, figs. 2, a, b.
Hamilton formation, Middle Devonian, near Thedford, Ontario.

Melocrinus borealis Springer
Holotype 6043; paratype 6044
Springer, F., 1921, Geol. Surv., Canada, Bull. 33, p. 16, pl. 1, figs. 1, 2.
Upper Devonian, Hay River 9 miles below Alexandra Falls, N.W.T.

Melocrinus canadensis Springer
Holotype 6042
Springer, F., 1921, Geol. Surv., Canada, Bull. 33, p. 17, pl. 1, fig. 3.
Upper Devonian, Hay River about 7½ miles above Alexandra Falls, N.W.T.

Melocrinus humei Goldring
Holotype 9386; paratypes 9386a, 9387
Goldring, W., 1938, Bull. Am. Pal., vol. 24, No. 81, p. 11, pl. 1, figs. 7, 8.
Upper Devonian, upper falls Redknife River, N.W.T.

Melocrinus kindlei Springer
Syntypes 6240, a-f
Springer, F., 1926, Geol. Surv., Canada, Bull. 42, p. 130, pl. 24, figs. 1-9.
Upper Devonian, 40 miles up from mouth Root River, N.W.T.

Melocrinus mackenzie Springer
Syntypes 6241, a, b
Springer, F., 1926, Geol. Surv., Canada, Bull. 42, p. 131, pl. 24, figs. 10-13.
Upper Devonian, 40 miles up from mouth Root River, N.W.T.

Melocrinus subtilistriatus Goldring
Syntypes 9384,a-d
Goldring, W., 1938, Bull. Am. Pal., vol. 24, No. 81, p. 8, pl. 1, figs. 1-5.
Upper Devonian, upper falls Redknife River, N.W.T.

Melocrinus sulcosutra Goldring
Holotype 9385
Goldring, W., 1938, Bull. Am. Pal., vol. 24, No. 81, p. 9, pl. 1, fig. 6.
Upper Devonian, lowest chute, Redknife River, N.W.T.

Melocrinus whittakeri Springer
Holotype 6243
Springer, F., 1926, Geol. Surv., Canada, Bull. 42, p. 131, pl. 24, figs. 14-17.
Upper Devonian, 15 miles up from mouth Trout River, N.W.T.

Melocrinus whittakeri Springer
Hypotypes 9383,a,b
Goldring, W., 1938, Bull. Am. Pal., vol. 24, No. 81, p. 7.
Upper Devonian, upper falls Redknife River, N.W.T.

Nipterocrinus wachsmuthi Meek and Worthen
Hypotypes 9943-9945
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 559, pl. 66, figs. 5-7.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Ollacrinus spinigerus (Hall)

Hypotype 3657

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 103, pl. 13, figs. 4a, b.

Hamilton formation, Middle Devonian, near Thedford, Ontario.

Onychocrinus sp.

Fig. spec. 9951

Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 561, pl. 66, fig. 15.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Pachylocrinus sp.

Fig. spec. 9931

Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 555, pl. 65, fig. 34.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Pachyocrinus crassibasalis Billings

Holotype 1018

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 22, pl 1, figs. 3a, b.

Hudson, G. H., 1907, Bull. N.Y. State Mus., No. 107, p. 120, text fig. 4.

Chazy, Middle Ordovician, Island of Montreal, Quebec.

Palaeocrinus angulatus see *Dendrocrinus angulatus*

Palaeocrinus chapmani see *Palaeocystites chapmani*

Palaeocrinus pulchellus Billings

Holotype 1434

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 46.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 40, pl. 6, fig. 3.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Palaeocrinus rhombiferus Billings

Holotype 1436

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 45.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 40, pl. 6, fig. 2.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Palaeocrinus striatus Billings

Holotype 1015

Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 25, pl. 1, figs. 5a, b.

Hudson, G. H., 1911, Bull. N.Y. State Mus., No. 149, p. 216, text figs. 4-10, 12, 14; pl. 5, figs. 1-4; pl. 6, figs. 1-4; pl. 7, figs. 1, 2.

Chazy, Middle Ordovician, Island of Montreal, Quebec.

Paraichthyocrinus seversoni Laudon, Parks and Spreng

Holotype 9947; paratypes 9948-9950

Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 560, pl. 66, figs. 10-14; pl. 69, fig. 11.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Pelecocrinus banffensis Laudon, Parks and Spreng

Holotype 9911; paratypes 9912, 9913

Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 547, pl. 65, figs. 13-15; pl. 69, fig. 1.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Pelecocrinus primordialis Laudon, Parks and Spreng

Holotype 9914

Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 548, pl. 65, fig. 17; pl. 69, fig. 2.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Pelecocrinus sp.
Fig. specs. 9909, 9910
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 550, pl. 65, figs. 11, 12.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Pellecrinus sp.
Fig. spec. 9901
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 546, pl. 65, figs. 1, 2.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Periglyptocrinus billingsi Wachsmuth and Springer
Syntypes 1499a, b
Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 277, pl. 21, figs. 1a, b.
Trenton (Hull beds), Middle Ordovician, cement quarries at Hull, Quebec.

Periglyptocrinus priscus see *Glyptocrinus priscus*

Platycrinites decadactylus Laudon, Parks and Spreng
Holotype 9985; paratype 9986
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 573, pl. 68, figs. 17, 18; pl. 69, fig. 25.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Platycrinites sunwaptaensis Laudon, Parks and Spreng
Holotype 9982; paratypes 9983, 9984
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 573, pl. 68, figs. 12-14; pl. 69, figs. 23, 24.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Platycrinites spp.
Fig. specs. 9987-9990
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 574, pl. 68, figs. 15, 16, 19, 20.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Porocrinus conicus Billings
Syntypes 1423, a-d
Billings, E.,
1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 279.
1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 34, pl. 2, figs. 5a-d.
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Porocrinus smithi Grant
Syntypes 1422a-c
Grant, J., 1881, Ottawa Field-Naturalist Club, Trans. No. 2, p. 42, pl., figs. 1-8.
Hudson, G. H., 1915, Bull. N.Y. State Mus., No. 177, p. 163, pls. 1, 2.
Trenton, Middle Ordovician, Belleville, Ontario.

Poteriocrinites sp.
Fig. spec. 9908
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 547, pl. 65, figs. 9, 10.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Prininocrinus robustus Goldring
Holotype 9391; paratype 9392
Goldring, W., 1938, Bull. Am. Pal., vol. 24, No. 81, p. 18, pl. 2, figs. 3, 4.
Upper Devonian, 3rd chute and gorge section Redknife River, N.W.T.

Protaxocrinus elegans see *Lecanocrinus elegans*

Protaxocrinus laevis see *Lecanocrinus laevis*

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Protaxocrinus laevis (Billings)
Hypotype 1442a
Springer, F.,
1911, Geol. Surv., Canada, Mem. 15-P, p. 11, pl. 3, figs. 11a, b.
1920, Smithsonian Inst., "The Crinoidea Flexibilia", p. 348, pl. 45, figs. 5a, b.
Trenton, Middle Ordovician, Ottawa, Ontario.

Pycnocrinus ornatus see *Glyptocrinus ornatus*

Ramulocrinus nigelensis Laudon, Parks and Spreng
Holotype 9937; paratype 9938
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 558, pl. 65, figs. 39, 40; pl. 69, fig. 8.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Reteocrinus ? fimbriatus Billings
Holotype 1994
Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 65, pl. 9, figs. 3a-c.
Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 179, pl. 9, fig. 4.
Upper Ordovician (English Head formation), Carleton point, Anticosti Island, Quebec.

Reteocrinus stellaris Billings
Syntypes 1525, a-f
Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 64, pl. 9, figs. 4a-e.
Wachsmuth, C. and Springer, F.
1883, Am. J. Sci., 3rd ser., vol. 25, No. 48, p. 263, figs. 1, 2 (type 1525b).
1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 178, pl. 9, figs. 3a-c.
Springer, F., 1911, Geol. Surv., Canada, Mem. 15-P, p. 10, pl. 1, figs. 6, 7.
Trenton, Middle Ordovician, Ottawa, Ontario.

Rhodocrinites brewsteri Laudon, Parks and Spreng
Holotype 9952; paratypes 9953-9956
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 561, pl. 67, figs. 1-6; pl. 69, fig. 12.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Rhodocrinites cirrusi Laudon, Parks and Spreng
Holotype 9958; paratype 9959
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 563, pl. 67, figs. 8, 9; pl. 69, fig. 14.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Rhodocrinites pantheri Laudon, Parks and Spreng
Holotype 9957
Laudon, L. R., *et al.*, 1952, J. Pal., vol. 26, No. 4, p. 562, pl. 67, fig. 7; pl. 69, fig. 13.
Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Rhodocrinus asperatus Billings
Syntypes 1019, a
Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 27, pl. 1, figs. 4a-e.
Chazy, Middle Ordovician, Island of Montreal, Quebec.
=*Deocrinus asperatus,* Hudson, G. H., 1907, Bull. N.Y. State Mus., No. 107, p. 122, pl. 8 (the type 1019a).

Rhodocrinus microbasalis see *Thysanocrinus (Rhodocrinus) microbasalis*

Rhodocrinus pyriformis see *Thysanocrinus (Rhodocrinus) pyriformis*

Siphonocrinus pentagonus Wachsmuth and Springer

Hypotypes 11063, 11064

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, 1957, p. 54, pl. 7, figs. 1-4.

Wiarton member, Amabel formation, Middle Silurian, Colpoy village-Adamsville road and south of Lions Head village, Bruce Peninsula, Ontario.

Sunwaptacrinus brazeauensis Laudon, Parks and Spreng

Holotype 9970; paratypes 9971, 9972

Laudon, L. R., *et al.,* 1952, J. Pal., vol. 26, No. 4, p. 570, pl. 67, figs. 21-23; pl. 69, figs. 20, 21.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

Synaptocrinus ? rotundatus Goldring

Holotype 9388

Goldring, W., 1938, Bull. Am. Pal., vol. 24, No. 81, p. 12, pl. 1, fig. 9.

Upper Devonian, Jean Marie River, N.W.T.

Taxocrinus lobatus Hall var.

Holotype 3646

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 94, pl. 12, fig. 1.

Hamilton formation, Middle Devonian, Thedford, Ontario.

Thysanocrinus (*Rhodocrinus*) *microbasalis* Billings

Syntypes 1450, a, b

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 264.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Rhodocrinus microbasalis,* Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 63, pl. 6, fig. 2.

=*Archaeocrinus microbasalis,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 26 (holotype 1450a; paratypes 1450,b).

Thysanocrinus (*Rhodocrinus*) *pyriformis* Billings

Syntypes 1446b, c

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 262.

Trenton (Cobourg beds), Middle Ordovician, steamboat landing foot of Sussex Street, Ottawa, Ontario.

=*Rhodocrinus pyriformis,* Billings, E., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 4, p. 61, pl. 6, figs. 1b, c.

=*Archaeocrinus pyriformis,* Wachsmuth, C. and Springer, F., 1897, Mem. Mus. Comp. Zoology Harvard, vol. 20, p. 255, pl. 10, figs. 3a, b (the type 1446c).

Edrioasteroidea

Agelacrinites jasperensis Harker

Holotype 10051

Harker, P., 1953, J. Pal., vol. 27, No. 2, p. 288, text fig. 1.

Banff formation, Mississippian, Morro Creek, Jasper, Alberta.

Astrocystites ottawaensis Whiteaves

Syntype 752

Whiteaves, J. F., 1897, Can. Rec. Sci., vol. 7, p. 287, text figs. 1, 2.

Bather, F. A., 1914, Geol. Mag., n.s., dec. 6, vol. 1, p. 194, pl. 15, figs. 1, 3, 4, 6, 7, text figs. 1-4, 6 (holotype).

Hudson, G. H.,

1925, J. Geol., vol. 33, p. 642, text fig. 1, pls. 1, 2 (holotype).

1927, Geol. Surv., Vermont, 15th Ann. Rept., p. 97, pls. 6-10.

Bassler, R. S., 1937, Smithsonian Misc. Coll., vol. 95, No. 6, p. 23, pl. 1, fig. 15.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 23, pl. 4, fig. 1 (holotype).

Trenton (Cobourg beds), Middle Ordovician, Booth Street, Ottawa, Ontario.

=*Steganoblastus ottawaensis,* Whiteaves, J. F., 1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 316, text figs. 21, 23, 34.

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Carneyella billingsi see *Lebetodiscus billingsi*

Carneyella chapmani see *Lebetodiscus chapmani*

Carneyella multibrachiata see *Lebetodiscus multibrachiatus*

Carneyella platys see *Lebetodiscus platys*

Carneyella youngi see *Lebetodiscus youngi*

Cyclaster bigsbyi see *Edrioaster bigsbyi*

Cyclocystoides billingsi Wilson
Holotype 9066
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 18, pl. 4, fig. 3.
Trenton (Cobourg beds), Middle Ordovician, foot of Sussex Street, Ottawa, Ontario.

Cyclocystoides halli Billings
Syntypes 1416, a
Salter, J. W. and Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 86, pl. 10 bis, figs. 2-5.
Raymond, P. E., 1913, Geol. Surv., Canada, Mus. Bull. 1, p. 25, pl. 3, fig. 3.
Begg, J. L., 1934, Geol. Mag., vol. 71, p. 226, pl. 11, fig. 6.
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Cyclocystoides halli Billings
Hypotype 7790
Raymond, P. E., 1913, Geol. Surv., Canada, Mus. Bull. 1, p. 25, pl. 3, fig. 1; text fig. 2.
Trenton, Middle Ordovician, Kirkfield, Ontario.

Cyclocystoides huronensis Billings
Holotype 1998
Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 393, text fig. 369.
Raymond, P. E., 1913, Geol. Surv., Canada, Mus. Bull. 1, p. 29, pl. 3, fig. 2.
Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 80, pl. 6, fig. 3.
Begg, J. L., 1934, Geol. Mag., vol. 71, p. 226, pl. 11, fig. 7.
Richmond, Upper Ordovician, Rabbit Island, Lake Huron, Ontario.

Edrioaster bigsbyi (Billings)
Syntypes 1407, a, b, e, f
Cyclaster bigsbyi, Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 293.
Edrioaster bigsbyi, Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 82, pl. 8, figs. 1, 2.
Bather, F. A., 1914, Geol. Mag., n.s., dec. 6, vol. 1, p. 116 (holotype Billings fig. 1=1407, a).
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Edrioaster bigsbyi (Billings)
Hypotype 1403
Bather, F. A.,
1900, Treatise on Zoology, pt. 3, Echinoderma, p. 209, fig. 6.
1914, Geol. Mag., n.s., dec. 6, vol. 1, p. 116, pl. 10, figs. 1-11; text figs. 1, 3, 4.
Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Hemicystites see *Lebetodiscus*

Isorophus inconditus see *Lebetodiscus inconditus*

Isorophusella inconditus see *Lebetodiscus inconditus*

Lebetodiscus billingsi (Chapman)

Hypotypes 1413 (missing), 5140 (variously assigned No. 1408E and 5393)
Raymond, P. E., 1915, Ottawa Naturalist, vol. 29, p. 58.

Trenton, Middle Ordovician, Ottawa and Peterborough, Ontario.

=*Carneyella billingsi,* Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 7, pl. 3, fig. 3.

=*Hemicystites* (*Agelacrinus*) *billingsi,* Bassler, R. S., 1937, Smithsonian Misc. Coll., vol. 95, No. 6, p. 12, pl. 3, fig. 2.

Lebetodiscus chapmani Raymond

Holotype 3235
Raymond, P. E., 1915, Ottawa Naturalist, vol. 29, p. 58, pl. 1, fig. 3.

Trenton, Middle Ordovician, quarry near entrance to Jackson Park, Peterborough, Ontario.

=*Carneyella chapmani,* Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 9, pl. 2, fig. 8; pl. 3, fig. 6.

=*Hemicystites (Lebetodiscus) chapmani,* Bassler, R. S., 1937, Smithsonian Misc. Coll., vol. 95, No. 6, p. 11, pl. 3, fig. 9.

Lebetodiscus dicksoni (Billings)

Hypotype 437
Grant, J., 1881, Trans. Ottawa Field-Naturalist Club, vol. 1, No. 2, pl., fig. 9.
Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 5, pl. 1.

Trenton, Middle Ordovician, foot of Sussex Street, Ottawa, Ontario.

Lebetodiscus dicksoni (Billings)

Hypotype 1412
Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 5, pl. 3, fig. 1.

Trenton, Middle Ordovician, Peterborough, Ontario.

Lebetodiscus inconditus Raymond

Holotype 1409
Raymond, P. E., 1915, Ottawa Naturalist, vol. 29, p. 61, pl. 1, fig. 1.

Trenton, Middle Ordovician, Ottawa, Ontario.

=*Isorophus inconditus,* Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 12, pl. 4.

=*Isorophusella inconditus,* Bassler, R. S., 1935, Smithsonian Misc. Coll., vol. 93, No. 8, p. 5; 1937, ibid., vol. 95, No. 6, p. 19, pl. 7, fig. 12.

Lebetodiscus loriformis Raymond

Holotype 1414
Raymond, P. E.,
1915, Ottawa Naturalist, vol. 29, p. 56, pl. 1, fig. 6.
1921, Geol. Surv., Canada, Mus. Bull. 31, p. 7, pl. 2, fig. 9; pl. 3, fig. 2.
Bassler, R. S., 1937, Smithsonian Misc. Coll., vol. 95, No. 6, p. 9, pl. 3, fig. 10.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Lepidiconia loriformis,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 21, pl. 4, figs. 2a, b.

Lebetodiscus multibrachiatus Raymond

Holotype 7789
Raymond, P. E., 1915, Ottawa Naturalist, vol. 29, p. 60, pl. 1, fig. 2.

Kirkfield formation, Middle Ordovician, Kirkfield liftlock, Ontario.

=*Carneyella multibrachiata,* Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 11, pl. 3, fig. 5.

=*Hemicystites* (*Lebetodicus*) *multibrachiatus,* Bassler, R. S., 1937, Smithsonian Misc. Coll., vol. 95, No. 6, p. 11, pl. 4, fig. 3.

Lebetodiscus platys Raymond

Holotype 7941

Raymond, P. E., 1915, Ottawa Naturalist, vol. 29, p. 59, pl. 1, fig. 5.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Carneyella platys,* Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 10, pl. 3, fig. 7.

=*Carneyella* ? (*Lebetodiscus*) *platys,* Bassler, R. S., 1937, Smithsonian Misc. Coll., vol. 95, No. 6, p. 7, pl. 7, fig. 15.

Lebetodiscus youngi Raymond

Holotype 3234

Raymond, P. E., 1915, Ottawa Naturalist, vol. 29, p. 58, pl. 1, fig. 4.

Trenton, Middle Ordovician, lot 12, con. 1, Eldon tp., Ontario.

=*Carneyella youngi,* Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 9, pl. 3, fig. 4.

=*Hemicystites* (*Lebetodiscus*) *youngi,* Bassler, R. S., 1937, Smithsonian Misc. Coll., vol. 95, No. 6, p. 12, pl. 3, fig. 1.

Lepidiconia loriformis see *Lebetodiscus loriformis*

Steganoblatus ottawaensis see *Astrocystites ottawaensis*

Thresherodiscus ramosa Foerste

Holotype 8446

Foerste, A. F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 432, pl. 1, fig. 8; pl. 3, fig. 3.

Bassler, R. S., 1937, Smithsonian Misc. Coll., vol. 95, No. 6, p. 15, pl. 2, fig. 8.

Trenton, Middle Ordovician, Goat Island, northeast of Little Current, Manitoulin Island, Ontario.

Stelleroidea

Comptonia ? *stelcki* McLearn

Holotype 8992; paratype 8993

McLearn, F. H., 1944, Can. Field-Naturalist, vol. 58, No. 4, p. 133, pl. 1, fig. 1.

Lower Cretaceous, Peace River 8 miles below mouth Cadotte River, Alberta.

Hallaster cylindricus see *Palaecoma cylindrica*

Hallaster cylindricus (Billings)

Hypotype 1405

Spencer, W. K., 1925, Palæont. Soc. Monog., pt. 6, p. 293, text fig. 199b.

Trenton, Middle Ordovician, Ottawa, Ontario.

Hudsonaster matutinus see *Palasterina rigidus*

Hudsonaster rugosus see *Palasterina rugosa*

Lophidiaster silentiensis McLearn

Holotype 8995; holoplastotype 8995a

McLearn, F. H., 1944, Can. Field-Naturalist, vol. 58, No. 4, p. 133, pl. 1, fig. 3.

Hasler formation, Lower Cretaceous, north bank Peace River opposite mouth Starfish Creek, Alberta.

Lophidiaster cf. *silentiensis* McLearn

Hypotype 8994,a

McLearn, F. H., 1944, Can. Field-Naturalist, vol. 58, No. 4, p. 133, pl. 1, fig. 2.

Hasler formation, Lower Cretaceous, south side Peace River, near mouth Starfish Creek, Alberta.

Mesopalaeaster bellulus see *Petraster bellulus*

Mesopalaeaster (?) *parviusculus* (Billings)

Hypotype 3084

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 41, pl. 3, figs. 1, 2.

McAdam ? formation, Middle Silurian, Arisaig, Nova Scotia.

Palaeaster pulchellus Billings

Holotype 1397a

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 292.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Stenaster pulchellus,* Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 79, pl. 10, fig. 2.

=*Urasterella pulchella,* Hudson, G. H., 1916, Bull. N.Y. State Mus., No. 187, pp. 117-139, pl. 7, figs. 1, 2; pl. 8, figs. 1, 2; pl. 9, figs. 1-3.

Palaeaster ? *wilsoni* Raymond

Holotype 8150

Raymond, P. E., 1912, Ottawa Naturalist, vol. 26, p. 77, pl. 5, figs. 1-4.

Leray-Rockland beds, Middle Ordovician, City View, southwest of Ottawa, Ontario.

=*Promopalaeaster wilsoni,* Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 106, pl. 13, figs. 1, 2.

Palaecoma cylindrica Billings

Syntypes 1405a (2 specs. on one slab)

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 292.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Taeniaster cylindricus,* Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 81, pl. 10, figs. 4a, b.
Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 220, pl. 36, figs. 2, 3.

=*Hallaster cylindricus,* Spencer, W. K., 1925, Palæont. Soc. Monog., pt. 6, p. 293, text figs. 198, 199a.

Palaeocoma spinosa Billings

Syntypes 1404, a, b

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 292.

'Trenton', Middle Ordovician, Montmorency Falls, Quebec.

=*Taeniaster spinosus,* Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 81, pl. 10, figs. 3a-d.
Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 219, pl. 36, fig. 1; text figs. 17a-c.

=*Protaster (Taeniaster) spinosus,* Spencer, W. K., 1922, Palæont. Soc. Monog., pt. 5, p. 201, text fig. 140.

=*Taeniaster spinosus,* Spencer, W. K., 1934, Palæont. Soc. Monog., pt. 9, p. 448, pl. 31, fig. 9; text figs. 291c, 293, 320.

Palasterina rigidus Billings

Syntypes 1401a, 1402

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 291.

Trenton (Cobourg beds), Middle Ordovician, Rideau Hall grounds, and Governor Bay, Ottawa, Ontario.

=*Petraster rigidus,* Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 80, pl. 9, figs. 3a, b.
Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 141, pl. 27, fig. 5 (holotype 1401a).

=*Hudsonaster matutinus,* Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 57.
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 4, p. 42 (hypotype 1402).

Palasterina rugosa Billings

Syntypes 1999, a

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 291.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 77, pl. 9, figs. 2a-c.

Upper Ordovician (English Head formation), Carleton point, Anticosti Island, Quebec.

=*Hudsonaster rugosus,* Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 64, pl. 3, fig. 1.

Palasterina stellata Billings

Holotype 1399

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 290.

1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 76, pl. 9, figs. 1a, b.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

=*Schuchertia stellata,* Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 196, pl. 32, fig. 2.

Spencer, W. K., 1922, Palæont. Soc. Monog., pt. 5, p. 211, pl. 16, fig. 8.

Petraster bellulus Billings

Holotype 2665

Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 393, text fig. 368.

"Niagara" group (Rochester formation), Middle Silurian, Grimsby, Ontario.

=*Mesopalaester bellulus,* Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 91, text fig. 7.

Petraster rigidus see *Palasterina rigidus*

Promopalaeaster wilsoni see *Palaeaster ? wilsoni*

Protaster (*Taeniaster*) *spinosus* see *Palaeocoma spinosa*

Schuchertia stellata see *Palasterina stellata*

Schuchertia stellata (Billings)

Hypotype 8148

Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 196, pl. 33, fig. 1.

Spencer, W. K., 1922, Palæont. Soc. Monog., pt. 5, p. 211, text fig. 149.

Trenton (Cobourg beds), Middle Ordovician, Governor Bay, Ottawa, Ontario.

Stenaster huxleyi Billings

Holotype 554

Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 213, fig. 197.

Chazy (Bed I), Middle Ordovician, Point Rich, Newfoundland.

=*Urasterella huxleyi,* Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 182, pl. 29, fig. 2.

Stenaster pulchellus see *Palaeaster pulchellus*

Stenaster salteri Billings

Syntypes 1398, a

Billings, E., 1858, Geol. Surv., Canada, Can. Org. Rem., dec. 3, p. 78, pl. 10, figs. 1a, b.

Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 165, pl. 32, fig. 1 (the type 1938).

Trenton, Middle Ordovician, Belleville, Ontario.

=*Stenaster obtusus,* Spencer, W. K., 1927, Palæont. Soc. Monog., pt. 7, p. 356, pl. 23, fig. 7.

Stenaster salteri Billings

Hypotype 9069

Wilson, A. E., 1946, Geol. Surv., Canada, Mus. Bull. 4, p. 44, pl. 6, fig. 9.

Cobourg beds, Middle Ordovician, Governor Bay, Ottawa, Ontario.

Taeniaster cylindricus see *Palaeocoma cylindrica*

Taeniaster meafordensis Foerste

Syntypes 8580, a-c

Foerste, A. F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 326, pl. 4, figs. 5-7.

1924, Geol. Surv., Canada, Mem. 138, p. 104, pl. 8, figs. 1-4.

Meaford formation, Upper Ordovician, Workman's Brook, 3 miles southeast of Meaford, Ontario.

Taeniaster spinosus see *Palaeocoma spinosa*

Urasterella huxleyi see *Stenaster huxleyi*

Urasterella pulchella see *Palaeaster pulchellus*

Urasterella pulchella (Billings)

Hypotype 1397

Schuchert, C., 1915, U.S. Nat. Mus., Bull. 88, p. 178, pl. 28, fig. 3.

Hudson, G. H., 1916, Bull. N.Y. State Mus., No. 187, pp. 117-139, pl. 10, fig. 1; pl. 11, figs. 1, 2; pl. 12, figs. 1, 2.

Spencer, W. K., 1918, Palæont. Soc. Monog., pt. 3, p. 135, pl. 11, figs. 7, 8.

Trenton (Cobourg beds), Middle Ordovician, Ottawa, Ontario.

Echinoidea

Albertechinus montanus Stearn

Holotype 12770

Stearn, C. W., 1956, J. Pal., vol. 30, No. 3, p. 744, pl. 81, figs. 1-3.

Fairholme formation, Upper Devonian, south side north fork Hummingbird Creek, Alberta.

Hemiaster vancouverensis Whiteaves

Syntypes 5862, 5863

Whiteaves, J. F., 1904, Am. J. Sci., vol. 18, p. 289.

Upper Cretaceous, north bank Cowichan River near Menzies Creek and Shopland, Vancouver Island, British Columbia.

? *Nortonechinus* sp.

Fig. spec. 12771

Stearn, C. W., 1956, J. Pal., vol. 30, No. 3, p. 746, pl. 81, fig. 4.

Fairholme formation, Upper Devonian, first creek south of Cripple Pass, Ram Range, Alberta.

Palaeechinus sprengi Kier

Holotype 12008

Kier, P., 1954, Geol. Mag., vol. 91, p. 252, 2 text figs.

Banff formation, Mississippian, Sunwapta Pass area, Alberta.

GRAPTOLITHINA

Anisograptus flexuosus Bulman
Hypotypes 9854, 9860, 9861, 9875
Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 84, pl. 6, figs. 13-15; pl. 7, fig. 13; pl. 8, fig. 10; text figs. 6a-c.
Ordovician, Matane, Quebec.

Anisograptus matanensis Ruedemann
Hypotypes 9851-9853, 9855, 9856
Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 80, pl. 7, figs. 5, 7, 10-12; text figs. 4a, b, e.
Ordovician, Matane, Quebec.

Anisograptus matanensis tetragraptoides Bulman
Holotype 9857; paratypes 9858, 9859
Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 83, pl. 7, figs. 15-17; pl. 8, figs. 4, 11; text fig. 4h.
Ordovician, Matane, Quebec.

Anisograptus richardsoni Bulman
Hypotypes 9862-9867
Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 85, pl. 6, figs. 8-12; text figs. 7a-d, f.
Ordovician, Matane, Quebec.

Azygograptus canadensis Ruedemann
Holotype 12506; paratype 12507
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 357, pl. 58, figs. 9-11.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Bryograptus patens Matthew
Hypotypes 9872, 9873
Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 90, pl. 6, figs. 4-6.
Ordovician, Cape Rosier, Quebec.

Bryograptus pusillus Ruedemann
Hypotype 12462
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 299, pl. 49, figs. 5, 6.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Callograptus diffusus see *Dendrograptus* ? (*Callograptus*?) *diffusus*

Callograptus elegans Hall
Syntypes 956,a-c
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 134, pl. 18, fig. 4; pl. 19, figs. 1-4.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 205, pl. 16, fig. 16; pl. 17, fig. 8.
Levis formation, Ordovician, Gros Maule, Quebec.

Callograptus salteri Hall
Syntypes 955,a-d
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 135, pl. 19, figs. 5-8.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 205, pl. 16, fig. 17.
Levis formation, Ordovician, Gros Maule, Quebec.

Callograptus salteri strictus Ruedemann
Holotype 13596, a (parts of one specimen)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 206, pl. 17, figs. 10, 11.
Cape Rosier shale, Lower Ordovician, Cape Rosier, Gaspé, Quebec.

Cardiograptus angustifolius Ruedemann
Holotype 12503
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 356, pl. 58, fig. 4.
Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Cardiograptus folium Ruedemann
Syntypes 12504, 12505 (missing)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 356, pl. 58, figs. 1, 2.
Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Climacograptus antennarius Hall
Syntypes 6230, a
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 112, pl. 13, figs. 12, 13.
Levis formation, Ordovician, Point Levis, Quebec.

Climacograptus antiquus bursifer Elles and Wood
Hypotype 12515 (missing)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 423, pl. 71, fig. 54.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Climacograptus cf. *extremus* Lapworth
Hypotype 13478
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 426, pl. 72, figs. 20, 21.
Ordovician, Mont Joli, Gaspé, Quebec.

Climacograptus inuiti similis Wilson
Holotype 13208
Wilson, A. E.,
1948, Geol. Surv., Canada, Bull. 11, p. 50, pl. 26, fig. 8.
1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 4, fig. 15.
Cobourg beds, Ottawa formation, Middle Ordovician, cliff at Research Council laboratories, Sussex Street, Ottawa, Ontario.

Climacograptus pungens major Ruedemann
Syntype 12542
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 421, pl. 90, fig. 11.
Ordovician, Riviere du Loup, Quebec.

Climacograptus cf. *tenuis* Ruedemann
Hypotypes 13477, a
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 436, pl. 75, figs. 12-15.
Ordovician, about 1½ miles upriver, Middle Port Daniel River, Gaspé, Quebec.

Climacograptus typicalis spinothecatus Ruedemann
Holotype 12531 (missing)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 442, pl. 75, figs. 47, 48.
Ordovician, shore of Lake Winnipeg, Manitoba.

Clonograptus flexilis see *Graptolithus flexilis*

Corynoides gracilis perungulatus Ruedemann
Hypotypes 12508, 12509 (missing)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 361, pl. 58, figs. 44-46.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Corynoides sp. cf. *tricornis* Ruedemann
Hypotype 12510 (missing)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 362, pl. 58, fig. 47.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Cryptograptus antennarius (Hall)
Hypotype 12516
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 444, pl. 76, fig. 16.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Cryptograptus antennarius gracilis Ruedemann
Holotype 12518 (missing)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 445, pl. 76, figs. 21, 22.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Cryptograptus rigidus n. subsp. A.
Syntypes 11358-11361, 11363-11372, 11381, 11383
Thorsteinsson, R., 1955, Geol. Mag., vol. 92, pp. 37-49, pl. 3, figs. 1-4; text figs. 1-4.
Silurian, Cornwallis Island, Arctic.

Cryptograptus rigidus n. subsp. B.
Holotype 11357
Thorsteinsson, R., 1955, Geol. Mag., vol. 92, pp. 37-49, pl. 3, fig. 5.
Silurian, Cornwallis Island, Arctic.

Cryptograptus sp. nov.
Holotype 12517 (missing)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, pl. 76, fig. 20.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Dendrograptus ? (*Callograptus*?) *diffusus* Hall
Syntypes 946, a
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 132, pl. 18, figs. 1-3.
Levis formation, Ordovician, Point Levis, Quebec.
=*Callograptus diffusus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 205, pl. 17, fig. 9.

Dendrograptus divergens Hall
Holotype 945
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 129, pl. 17, figs. 3, 4.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 214, pl. 20, figs. 1, 2.
Levis formation, Ordovician, Point Levis, Quebec.

Dendrograptus erectus Hall
Holotype 953
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 130, pl. 17, fig. 7.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 214, pl. 20, fig. 3.
Levis formation, Ordovician, Point Levis, Quebec.

Dendrograptus flexuosus Hall
Syntypes 952, a
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 127, pl. 17, figs. 1, 2; text fig. 3.
Levis formation, Ordovician, Point Levis, Quebec.

Dendrograptus fruticosus Hall
Syntypes 951, a, 926b
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 131, pl. 17, figs. 8, 9.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 215, pl. 20, fig. 12.
Levis formation, Ordovician, Point Levis, Quebec.

Dendrograptus striatus Hall
Holotype 958
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 132 pl. 18, figs. 5, 6.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 216, pl. 20, figs. 15, 16.
Levis formation, Ordovician, Point Levis, Quebec.

Dendrograptus kindlei Ruedemann

Holotype 8040; paratype 8040a

Ruedemann, R.,
1933, Bull. Milwaukee Mus., vol. 12, p. 318, pl. 53, fig. 5; pl. 54, fig. 4.
1947, Geol. Soc. Amer., Mem. 19, p. 213, pl. 19, figs. 22, 23.

Upper Cambrian, Murphy's Creek, Gaspé co., Quebec.

Dendrograptus striatus Hall

Holotype 957

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 129, pl. 17, figs. 5, 6.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 217, pl. 21, fig. 1.

Levis formation, Ordovician, Point Levis, Quebec.

Dicellograptus forceps Ruedemann

Syntypes 12511 (missing), 12512 (missing), 12513

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 381, pl. 57, fig. 49; pl. 63, figs. 5-8.

Glenogle formation, Ordovician, Glenogle, British Columbia.

Dichograptus octonarius see *Graptolithus octonarius*

Dicranograptus ramosus see *Graptolithus ramosus*

Dictyonema approximatum Ruedemann

Holotype 13597, a (parts of one specimen)

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 166, pl. 5, fig. 2.

Ordovician, Cape Rosier, Gaspé, Quebec.

Dictyonema canadense Lapworth

Lectotype 9825; hypotypes 9826-31.

Lapworth, C., 1898, "An intermediate text-book of Geology", 13th edition, p. 194, fig. 67.
Bulman, O.M.B., 1927, Palæont. Soc. London, vol. 79, no. 4, p. 10, fig. 4a.
1950, Quart. J. Geol. Soc. London, vol. 106, p. 72, pl. 4, figs. 1-7, 11; pl. 8, fig. 3.

Ordovician, Matane and Great White River, Quebec.

Dictyonema canadense ? Lapworth

Hypotype 9832

Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 72, pl. 7, fig. 24.

Ordovician, ½ mile west of Long Point, Quebec.

Dictyonema canadense see *Inocaulis canadensis*

Dictyonema cristatum Bulman

Holotype 9843; paratype 9844

Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 196, p. 74, pl. 5, figs. 8-10.

Ordovician, 1 mile southeast of Little Capuchin River and ½ mile east of Capuchin River, Quebec.

Dictyonema cyathiforme Bulman

Holotype 9845; paratypes 9846-9848

Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 196, p. 75, pl. 5, figs. 12, 21, 22.

Ordovician, 2 miles below Little White River, Quebec.

Dictyonema insulare Twenhofel

Syntypes 2254, a

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 107, pl. 1, figs. 3, 5.

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 168, pl. 5, figs. 33, 34.

Ellis Bay formation, Upper Ordovician, Ellis Bay and Junction Cliff, Anticosti Island, Quebec.

Note: Discrepancies exist in Memoir 154 between legend and plate for these specimens; figs. 3 and 4 both refer to holotype. The legend for fig. 3 obviously refers to plate fig. 5 (G.S.C. type No. 2254-White cliff), fig. 4 legend refers to plate fig. 3 (G.S.C. type No. 2254a—1 mile south of Junction cliff), and fig. 5 legend describes the type of *D. jupiterense,* plate fig. 4. These errors were repeated by Ruedemann. The assignment of a lectotype is left to graptolite specialists.

Dictyonema irregularis Hall

Syntypes 954c, 977

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 136, pl. 20, figs. 1,2.

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 169, pl. 10, figs. 2, 3 (holotype 977; paratype 954c).

Levis formation, Ordovician, Point Levis, Quebec.

Dictyonema lapworthi Bulman

Holotype 9849; paratype 9850

Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 75, pl. 5, figs. 15-17; pl. 8, fig. 2.

Ordovician, Matane, Quebec.

Dictyonema murrayi Hall

Syntypes 962, a

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 138, pl. 20, figs. 6, 7.

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 171, pl. 4, fig. 15; pl. 10, fig. 1.

Levis formation, Ordovician, Point Levis, Quebec.

Dictyonema quadrangularis Hall

Holotype 959

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 138, pl. 20, fig. 5.

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 174, pl. 10, fig. 6.

Levis formation, Ordovician, Point Levis, Quebec.

Dictyonema robusta Hall

Syntypes 960, a

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 137, pl. 20, figs. 3, 4.

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 175, pl. 10, figs. 4, 5.

Levis formation, Ordovician, Point Levis, Quebec.

Dictyonema rusticum Bulman

Holotype 9833, a; paratypes 9834-9842

Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 77, pl. 5, figs. 1-3, 5; pl. 8, figs. 1, 12, 13; text figs. 2a-g.

Ordovician, 1 mile above Tatigo River, Quebec.

Dictyonema splendens Billings

Holotype 3181

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 1, p. 12, fig. 2.

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 193, pl. 13, fig. 4.

Lower Devonian, between Cape Gaspé and Cape Rosier, Quebec.

Didymograptus arcuatus see *Graptolithus arcuatus*

Didymograptus canadensis Ruedemann

Syntypes 12470, a-c

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 328, pl. 54, figs. 21-24.

Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Didymograptus columbianus Ruedemann

Holotype 12471; paratypes 12472, 12473

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 329, pl. 54, figs. 25-28.

Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Didymograptus constrictus see *Graptolithus constrictus*

Didymograptus euodus Lapworth

Hypotypes 12474-12475 (missing), 12476, 12477 (missing)

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 332, pl. 55, figs. 33-35; pl. 56, fig. 24.

Glenogle formation, Ordovician, Glenogle and Windermere Creek, British Columbia.

Didymograptus extensus see *Graptolithus extensus*

Didymograptus extenuatus see *Graptolithus extenuatus*

Didymograptus hirundo Salter

Hypotype 13479

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 334, pl. 55, fig. 46.

Ordovician, Mechins Point wharf, Quebec.

Didymograptus hirundo occidentalis Ruedemann

Holotype 12478 (missing); paratype 12479

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 335, pl. 55, fig. 47; pl. 56, fig. 25.

Glenogle formation, Ordovician, Glenogle and Windermere Creek, British Columbia.

Didymograptus pennatulus see *Graptolithus pennatulus*

Didymograptus primigenius Bulman

Holotype 9874

Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 93, pl. 7, fig. 23; pl. 8, fig. 6.

Ordovician, Matane, Quebec.

Didymograptus similis see *Graptolithus similis*

Didymograptus spinosus Ruedemann

Hypotypes 12480-12481 (missing), 12482

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 348, pl. 54, figs. 43-46.

Glenogle formation, Ordovician, Glenogle, British Columbia.

Diplograptus amplexicaulis cf. *pertenuis* Ruedemann

Hypotype 13206

Wilson, A. E.,

1948, Geol. Surv., Canada, Bull. 11, p. 51, pl. 26, fig. 1.

1957, Can. Field-Naturalist, vol. 70, No. 1, 1956, pl. 4, fig. 14.

Cobourg beds, Ottawa formation, Middle Ordovician, excavation Mines Bureau, Rochester Street, Ottawa, Ontario.

Diplograptus (*Glyptograptus*) *gladius* Ruedemann

Holotype 12514

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 406, pl. 69, fig. 60.

Glenogle formation, Ordovician, Glenogle, British Columbia.

Diplograptus inutilis Hall

Holotype 998

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 111, pl. 13, fig. 14.

Levis formation, Ordovician, Point Levis, Quebec.

=*Lasiograptus* (*Hallograptus*) *inutilis,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 465, p. 80, fig. 43.

Diplograptus (*Mesograptus*) *multidens* Elles and Wood

Hypotype 12541

Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 420, pl. 71, figs. 15, 16.

Ordovician, south bluff Griffin Cove, Gaspé, Quebec.

Diplograptus ottawaensis Wilson

Holotype 13207

Wilson, A. E., 1948, Geol. Surv., Canada, Bull. 11, p. 51, pl. 26, fig. 7.

Cobourg beds, Ottawa formation, Middle Ordovician, corner Rochester and Lydia Streets, Ottawa, Ontario.

Diplograptus pristiniformis see *Graptolithus pristiniformis*

Diplograptus (*Orthograptus*) *truncatus intermedius* Elles and Wood

Hypotypes 12533, 12534

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 403, pl. 69, figs. 16, 17.

Ordovician, Ross River below Fourth Lake, Yukon.

Glossograptus ciliatus Emmons

Hypotype 12520

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 449, pl. 77, fig. 37.

Glenogle formation, Ordovician, Glenogle, British Columbia.

Glossograptus horridus Ruedemann

Hypotypes 12521, 12522

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 451, pl. 77, figs. 20-22.

Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Glossograptus quadrimucronatus (Hall)

Hypotypes 12535, 12536

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 452, pl. 78, figs. 2, 3.

Ordovician, Ross River below Fourth Lake, Yukon.

See *Graptolithus quadrimucronatus*

Goniograptus thureaui selwyni Ami

Syntypes 967, c

Ami, H. M., 1889, Can. Rec. Sci., vol. 3, p. 422, figs. 1, 2.

Levis formation, Ordovician, Point Levis, Quebec.

=*Goniograptus thureaui postremus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 295.

Graptolithus abnormis Hall

Holotype 941

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 144.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 117.

1865, Geol. Surv., Canada, dec. 2, p. 106, pl. 11, fig. 6.

Levis formation, Ordovician, Point Levis, Quebec.

=*Zygograptus abnormis,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 282, pl. 44, fig. 2.

Graptolithus alatus Hall

Holotype 920

Hall, J.

1858, Can. Naturalist Geol., vol. 3, p. 162.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 127.

1865, Geol. Surv., Canada, dec. 2, p. 93, pl. 6, fig. 9.

Levis formation, Ordovician, Point Levis, Quebec.

=*Tetragraptus alatus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 301, pl. 50, fig. 1.

Graptolithus arcuatus Hall

Syntypes 911a, c, e, f

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 79, pl. 2, figs. 6-10.

Levis formation, Ordovician, Point Levis, Quebec.

=*Didymograptus arcuatus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 325, pl. 54, fig. 53.

Graptolithus bifidus Hall

Syntypes 910, a, b

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 164.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 130.

1865, Geol. Surv., Canada, dec. 2, p. 73, pl. 1, figs. 16-18; pl. 3, figs. 9, 10.

Levis formation, Ordovician, Point Levis, Quebec.

Graptolithus bigsbyi Hall

Syntypes 923, a-c, g, 977

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 86, pl. 16, figs. 22, 23, 25, 27-30.

Levis formation, Ordovician, Point Levis, Quebec.

=*Tetragraptus similis,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 310, pl. 51, figs. 4, 5.

Graptolithus bryonoides Hall

Syntypes 922, a-e, h, 978

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 150.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 126.

1865, Geol. Surv., Canada, dec. 2, p. 84, pl. 3, figs. 11, 12; pl. 4, figs. 1-4, 6-11.

Levis formation, Ordovician, Point Levis, Quebec.

=*Tetragraptus serra* and *T. ami,* Ruedmann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 301, 309.

Graptolithus constrictus Hall

Syntypes 913, a, 7461

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 76, pl. 1, figs. 23, 25-27.

Levis formation, Ordovician, Point Levis and Gros Maule, Quebec.

=*Didymograptus constrictus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 329, pl. 56, fig. 20.

Graptolithus crucifer Hall

Syntypes 924, a-d

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 149.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 125.

1865, Geol. Surv., Canada, dec. 2, p. 92, pl. 5, figs. 10-13; pl. 6, fig. 7.

Levis formation, Ordovician, Point Levis, Quebec.

=*Tetragraptus crucifer,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 302, pl. 50, fig. 30.

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Graptolithus denticulatus Hall

Syntypes 927, a-c

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 166.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 132.

1865, Geol. Surv., Canada, dec. 2, p. 88, pl. 4, figs. 12-16.

Levis formation, Ordovician, Point Levis, Quebec.

=*Tetragraptus denticulatus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 303, pl. 49, figs. 25-27.

Graptolithus ensiformis Hall

Syntypes 949a, e-g

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 167.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 133.

Levis formation, Ordovician, Point Levis, Quebec.

=*Retiolites ensiformis,* Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 114, pl. 14, figs. 1-5.

Graptolithus extensus Hall

Syntypes 976, 979

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 166.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 132.

1865, Geol. Surv., Canada, dec. 2, p. 80, pl. 2, figs. 11-16.

Levis formation, Ordovician, Point Levis, Quebec.

=*Didymograptus extensus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 331, pl. 56, figs. 3, 4.

Graptolithus extenuatus Hall

Holotype 916

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 75, pl. 1, figs. 21, 22.

Levis formation, Ordovician, Point Levis, Quebec.

=*Didymograptus extenuatus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 331, pl. 56, figs. 3, 4.

Graptolithus flaccidus Hall

Holotype 1957

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 143, pl. 2, figs. 17-19.

'Utica' shales, Upper Ordovician, east from Pointe Bleue, Lake St. John, Quebec.

=*Leptograptus flaccidus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 364, pl. 59, figs. 10, 11.

Graptolithus flexilis Hall

Syntypes 965, a-d

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 145.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 119.

1865, Geol. Surv., Canada, dec. 2, p. 103, pl. 10, figs. 3-9.

Levis formation, Ordovician, Point Levis, Quebec.

=*Clonograptus flexilis,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 280, pl. 44, fig. 4.

Graptolithus fruticosus Hall

Syntypes 925, a, 926,a

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 162.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 128.

1865, Geol. Surv., Canada, dec. 2, p. 90, pl. 6, figs. 1-3; pl. 5, figs. 6-8.

Levis formation, Ordovician, 3 miles above Ste. Anne River and Point Levis, Quebec.

Graptolithus headi Hall

Holotype 930

Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 161.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 127.
1865, Geol. Surv., Canada, dec. 2, p. 8, fig. 3; p. 94, pl. 6, fig. 8.
Logan, W. E., 1863, "Geology of Canada," Geol. Surv., Canada, Rept. Prog., p. 228, fig. 236.

Levis formation, Ordovician, Point Levis, Quebec.

=*Tetragraptus headi,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 305, pl. 51, fig. 33.

Graptolithus indentus Hall

Holotype 915a

Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 163.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 128.
1865, Geol. Surv., Canada, dec. 2, p. 74, pl. 1, fig. 20.

Levis formation, Ordovician, Point Levis, Quebec.

=*Didymograptus indentus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 336, pl. 54, fig. 1.

Graptolithus logani Hall

Syntypes 932, a-i

Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 142, pl. 1, figs. 1-6; pl. 2, figs. 1-4.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 115.
1865, Geol. Surv., Canada, dec. 2, p. 100, pl. 9, figs. 1-9; pl. 11, fig. 7.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 226, fig. 234b (932a).

Levis formation, Ordovician, Point Levis, Quebec.

=*Loganograptus logani,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 286, pl. 46, figs. 1, 2.

Graptolithus nitidus Hall

Syntypes 914, a-e

Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 163.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 129.
1865, Geol. Surv., Canada, dec. 2, p. 69, pl. 1, figs. 1-9.

Levis formation, Ordovician, Point Levis, Quebec.

Graptolithus octobrachiatus Hall

Syntypes 931a-d, f-i

Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 147.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 122.
1865, Geol. Surv., Canada, dec. 2, p. 8, fig. 4; p. 96, pl. 7, figs. 1-7; pl. 8, figs. 1-4.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 226, fig. 232 (931i).

Levis formation, Ordovician, Point Levis, Quebec.

Graptolithus octonarius Hall

Holotype 933

Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 148.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 124.
1865, Geol. Surv., Canada, dec. 2, p. 95, pl. 10, figs. 1, 2.

Levis formation, Ordovician, Gros Maule, Quebec.

=*Dichograptus octonarius,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 289, pl. 46, fig. 9.

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Graptolithus patulus Hall

Syntypes 918, a, b

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 165.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 131.

1865, Geol. Surv., Canada, dec. 2, p. 71, pl. 1, figs. 10-15.

Levis formation, Ordovician, Point Levis, Quebec.

Graptolithus pennatulus Hall

Syntypes 968, 997

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 82, pl. 3, figs. 1-8.

Levis formation, Ordovician, 3 miles above Ste. Anne River and Point Levis, Quebec.

=*Didymograptus pennatulus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 342, pl. 55, fig. 41.

Graptolithus pristiniformis Hall

Syntypes 943, a

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 167.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 133.

Levis formation, Ordovician, Point Levis, Quebec.

=*Diplograptus pristiniformis,* Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 110, pl. 13, figs. 15-17.

Graptolithus quadribrachiatus Hall

Syntypes 928, a, e, f

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 149.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 125.

1865, Geol. Surv., Canada, dec. 2, p. 91, pl. 5, figs. 1-5.

Levis formation, Ordovician, Point Levis, Quebec.

Graptolithus quadrimucronatus Hall

Syntypes 1898, a, b, d

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 144, pl. 13, figs. 1-7.

Utica shale, Upper Ordovician, east from Pointe Bleue, Lake St. John, Quebec.

=*Glossograptus quadrimucronatus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 452, pl. 78, fig. 1.

Graptolithus ramosus Hall

Hypotype 1896

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 200, fig. 194.

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 15, fig. 20.

Utica shale, Upper Ordovician, St. Charles River, Quebec.

=*Dicranograptus ramosus,* Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 112.

Graptolithus ramulus Hall

Holotype 934

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 108, pl. 12, figs. 9, 10.

Levis formation, Ordovician, Point Levis, Quebec.

=*Temnograptus ramulus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 284, pl. 44, figs. 17, 18.

Graptolithus richardsoni Hall

Syntypes 937, a, c

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 107, pl. 12, figs. 1-5, 7, 8.

Levis formation, Ordovician, 3 miles above Ste. Anne River, Quebec.

=*Hologroptus richardsoni,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 293, pl. 47, fig. 11.

Graptolithus rigidus Hall

Syntypes 935, a-d

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 146.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 121.

1865, Geol. Surv., Canada, dec. 2, p. 105, pl. 11, figs. 1-5.

Levis formation, Ordovician, Point Levis, Quebec.

=*Clonograptus rigidus,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 281, pl. 44, fig. 1 (assigned to *Zygograptus abnormis*).

Graptolithus similis Hall

Syntypes 944b, c

Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 78, pl. 2, figs. 2-5.

Levis formation, Ordovician, Point Levis, Quebec.

=*Didymograptus similis,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 347, pl. 55, fig. 37.

Graptolithus tentaculatus Hall

Syntypes 950a, b

Hall, J.,

1858, Can. Naturalist Geol., vol. 3, p. 167.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 134.

Levis formation, Ordovician, Point Levis, Quebec.

=*Retiograptus tentaculatus,* Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 116, pl. 14, figs. 6-8.

Haplograptus canadensis Ruedemann

Holotype 12537; paratypes 12538-12540

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 264, pl. 40, figs. 14-21.

Ordovician, Riviere du Loup, Quebec.

Hologràptus richardsoni see *Graptolithus richardsoni*

Inocaulis canadensis Whiteaves

Holotype 6867

Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 149, pl. 17, fig. 4.

Ordovician (Cat Head member, Red River formation), Inmost Island, Kinwow Bay, Lake Winnipeg, Manitoba.

=*Dictyonema canadense,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 167, pl. 30, fig. 5.

See Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 72.

Isograptus caduceus (Salter)

Hypotypes 12483-12485

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 350, pl. 57, figs. 12-14.

Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Isograptus caduceus armatus Ruedemann

Syntypes 12487, 12488

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 352, pl. 57, figs. 20-23.

Glenogle formation, Ordovician, Beard Creek, British Columbia.

Isograptus caduceus gracilis Ruedemann

Holotype 12486

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 351, pl. 57, figs. 15, 16.

Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Isograptus furcula Ruedemann

Holotype 12489

Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 353, pl. 57, fig. 48.

Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Isograptus lyra Ruedemann
Holotype 12490
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 353, pl. 57, fig. 47.
Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Isograptus walcottorum Ruedemann
Syntypes 12491-12500
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 354, pl. 57, figs. 26-34, 36.
Glenogle formation, Ordovician, Windermere Creek and Glenogle, British Columbia.

Lasiograptus (*Hallograptus*) *echinatus* (Ruedemann)
Hypotype 12527
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 462, pl. 77, fig. 13.
Glenogle formation, Ordovician, Windermere area, British Columbia.

Lasiograptus (*Hallograptus*) cf. *echinatus* (Ruedemann)
Hypotype 12528
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 462, pl. 77, fig. 16.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Lasiograptus (*Hallograptus*) *echinatus major* Ruedemann
Holotype 12529
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 463, pl. 77, fig. 15.
Glenogle formation, Ordovician, ridge east of Edgewater, British Columbia.

Lasiograptus (*Hallograptus*) *inutilis* see *Diplograptus inutilis*

Leptograptus flaccidus see *Graptolithus flaccidus*

Leptograptus flaccidus spinifer Elles and Wood
Hypotype 12532
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 365, pl. 59, fig. 19.
Ordovician, Ross River below Fourth Lake, Yukon.

Licanograptus elegans Ruedemann
Holotype 13598, a
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 196, pl. 16, figs. 1-4.
Cape Rosier shale, Lower Ordovician, Cape Rosier, Gaspé, Quebec.

Loganograptus logani see *Graptolithus logani*

Loganograptus logani pertenuis Ruedemann
Hypotype 12461
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 299, pl. 49, figs. 5, 6.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Marsipograptus perceensis Ruedemann
Holotype 8854; paratypes 8854a, b
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 226, pl. 24, figs. 5-9.
Whitehead formation, Upper Ordovician, Grande Coupe, Percé, Quebec.

Monograptus regularis Tornquist
Hypotypes 13599, 13600
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 486, pl. 84, figs. 15-18.
Silurian, north and south branches St. John River, Sirois tp., Gaspé, Quebec.

Monograptus tumescens Wood
Hypotypes 13601, 13602
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 488, pl. 84, figs. 30-33.
Silurian, north branch St. John River, Sirois tp., Gaspé, Quebec.

Monograptus cf. *varians* Wood
Hypotype 12543
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 489, pl. 85, figs. 7, 8.
Silurian, Gaspé peninsula, Quebec.

Monograptus varians pumilus Wood
Hypotype 12544
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 489, pl. 85, figs. 13, 14.
Silurian, Gaspé peninsula, Quebec.

Oncograptus divergens Ruedemann
Holotype 12502
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 355, pl. 58, fig. 7.
Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Oncograptus walkeri Ruedemann
Holotype 12501
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 354, pl. 58, fig. 6.
Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Phyllograptus angustifolius Hall
Syntypes 939, a, b
Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 172.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 139.
1865, Geol. Surv., Canada, dec. 2, p. 125, pl. 16, figs. 17-21.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 228, fig. 237.
Levis formation, Ordovician, Point Levis, Quebec.

Phyllograptus angustifolius Hall
Hypotype 12465
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 315, pl. 53, fig. 6.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Phyllograptus anna Hall
Syntypes 938, a
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 124, pl. 16, figs. 11-16.
Levis formation, Ordovician, 3 miles above Ste. Anne River, Quebec.

Phyllograptus anna longus Ruedemann
Syntypes 12466-12468
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 317, pl. 53, figs. 36-40.
Glenogle formation, Ordovician, Windermere area, British Columbia.

Phyllograptus ilicifolius Hall
Syntypes 940, a-d
Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 171.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 139.
1865, Geol. Surv., Canada, dec. 2, p. 121, pl. 16, figs. 2-9.
Levis formation, Ordovician, Point Levis, Quebec.

Phyllograptus similis Hall
Syntypes 923, a-c, g, 977
Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 173.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 140.
Levis formation, Ordovician, Point Levis, Quebec.
See *Graptolithus bigsbyi*

Phyllograptus typus Hall
Syntypes 942, a-g
Hall, J.,
1858, Can. Naturalist Geol., vol. 3, p. 170.
1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 137.
1865, Geol. Surv., Canada, dec. 2, p. 119, pl. 15, figs. 1-12.
Levis formation, Ordovician, Point Levis, Quebec.

Phyllograptus walkeri Ruedemann
Holotype 12469
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 321, pl. 53, fig. 8.
Glenogle formation, Ordovician, Windermere Creek, British Columbia.

Protistograptus rectus Ruedemann
Holotype 12530
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 497, pl. 90, fig. 19.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Ptilograptus geinitzianus Hall
Syntypes 961, a, b
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 140, pl. 21, figs. 5-8.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 246 pl. 33 fig. 9. (holotype 961a).
Levis formation, Ordovician, Point Levis, Quebec.

Ptilograptus plumosus Hall
Syntypes 947, a, b
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 140, pl. 21, figs. 1-4.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 247, pl. 33, fig. 1.
Levis formation, Ordovician, Point Levis, Quebec.

Radiograptus rosieranus Bulman
Holotype 9871, a (parts of one specimen)
Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 89, pl. 6, figs. 1-3; text fig. 8.
Ordovician, Cape Rosier, Quebec.

Retiograptus eucharis Hall
Holotype 13623
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 146, pl. 14, fig. 9.
'Utica' shale, Ordovician, Pointe Bleue, Lake St. John, Quebec.
=*Lasiograptus* (*Thysanograptus*) *eucharis,* Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 461, pl. 82, fig. 1.

Retiograptus tentaculatus see *Graptolithus tentaculatus*

Retiograptus tentaculatus (Hall)
Hypotypes 12523-12526
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 460, pl. 80, figs. 6-9.
Glenogle formation, Ordovician, ridge east of Mount Tegart, Windermere area, British Columbia.

Retiolites ensiformis see *Graptolithus ensiformis*

Temnograptus ramulus see *Graptolithus ramulus*

Tetragraptus alatus see *Graptolithus alatus*

Tetragraptus ami see *Graptolithus bryonoides*

Tetragraptus crucifer see *Graptolithus crucifer*

Tetragraptus denticulatus see *Graptolithus denticulatus*

Tetragraptus headi see *Graptolithus headi*

Tetragraptus kindlei Ruedemann
Holotype 12463
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 306, pl. 50, figs. 6, 7.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Tetragraptus serra see *Graptolithus bryonoides*

Tetragraptus similis see *Graptolithus bigsbyi*

Tetragraptus sp.
Fig. spec. 12464
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 312, pl. 49, fig. 31.
Glenogle formation, Ordovician, Windermere area, British Columbia.

Thamnograptus affinis Whiteaves
Hypotype 6866
Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 148, fig. 10.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 273, pl. 43, fig. 1.
Ordovician (Cat Head member, Red River formation), Cat Head, Lake Winnipeg, Manitoba.

Thamnograptus anna Hall
Holotype 912
Hall, J., 1865, Geol. Surv., Canada, dec. 2, p. 141, pl. 21, fig. 9.
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 273, pl. 43, fig. 2.
Levis formation, Ordovician, 3 miles above mouth Ste. Anne River, Quebec.

Thamnograptus capillaris Hall
Hypotype 12460 (missing)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 274, pl. 43, fig. 5.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Trigonograptus ensiformis obtusus Ruedemann
Holotype 12519 (missing)
Ruedemann, R., 1947, Geol. Soc. Amer., Mem. 19, p. 448, pl. 76, fig. 58.
Glenogle formation, Ordovician, Glenogle, British Columbia.

Triograptus canadensis Bulman
Holotype 9869; paratypes 9868, 9870
Bulman, O. M. B., 1950, Quart. J. Geol. Soc. London, vol. 106, p. 88, pl. 7, figs. 18, 19, 21; pl. 8, figs. 7, 9; text fig. 4k.
Ordovician, Matane, Quebec.

Zygograptus abnormis see *Graptolithus abnormis*

BRYOZOA

Acanthocladia multipora Fritz

Holotype 6822 (4)

Fritz, M. A., 1932, Trans. Roy. Soc. Canada, ser. 3, vol. 26, sec. 4, p. 104, pl. 3, figs. 6, 9.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Amplexopora canadensis Foord

Syntypes 1544a-d, 1546

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 17, pl. 4, figs. 2, a-d.

Black River-Trenton, St. Joseph Island, Lake Huron, Ontario, and Joliette, Quebec.

Amplexopora glengarria Fritz

Holotype 12399 (spec. and slide)

Fritz., M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 9, pl. 1, figs. 1, 2.

Cobourg beds, Ottawa formation, Middle Ordovician, Alexandria, Ontario.

Amplexopora glengarria shermanensis Fritz

Holotype 12400 (specimen and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 10, pl. 1, figs. 3, 4.

Sherman Fall beds, Ottawa formation, Middle Ordovician, east of Black River station, Ontario.

Amplexopora superba Foord

Holotype 1729

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 16, pl. 4, figs. 1, a-c.

Trenton, Middle Ordovician, vicinity of Montreal, Quebec.

Anaphragma delicatula Fritz

Holotype 12401 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 10, pl. 2, figs. 2, 5.

Tetreauville beds, Middle Ordovician, Natural Quarry Co., Island of Montreal, Quebec.

Anastomopora quebecensis Fritz

Syntypes 9172, 9173

Fritz, M. A., 1938, Bull. Am. Pal., vol. 24, appendix 82A, p. 5, pl. 1, fig. 5.

Gaspé sandstone, Devonian, Four Mile Brook near Causapscal, Quebec.

Arthroclema pulchellum Billings

Holotype 1528; paratype 1569

Billings, E., 1862, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, pt. 2, p. 54, fig. 60.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 157, fig. 119.

Trenton, Middle Ordovician, Ottawa, Ontario.

Aspidopora vacua Fritz

Holotype 12402 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 11, pl. 2, figs. 1, 4.

Sherman Fall beds, Ottawa formation, Middle Ordovician, Val Tetreau, Quebec.

Batostoma gallowayi Fritz

Holotype 12403 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 11, pl. 2, fig. 3; pl. 3, fig. 4.

Sherman Fall beds, Ottawa formation, Middle Ordovician, Payne River, Finch tp., Ontario.

Batostoma manitobense Ulrich

Syntype 5410

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 33, pl. 9, fig. 3.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Batostoma ottawaense Foord

Syntypes 1552, a, b, 1553, a-c (spec. and slides)

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 18, pl. 2, figs. 1, a-f; text fig.

Black River-Trenton, Middle Ordovician, Ottawa and Paquette Rapids, Ottawa River, Ontario.

Batostoma winchelli (Ulrich)

Hypotype 12404 (slide)

Fritz, M.A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 12, pl. 4, figs. 1-3.

Rockland beds, Ottawa formation, Middle Ordovician, Stewart quarry, Rockland, Ontario.

Batostoma winchelli spinulosum Ulrich

Hypotype 12405, a (slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 12, pl. 3, figs. 1, 2.

Sherman Fall beds, Ottawa formation, Middle Ordovician, east of Black River, Ontario.

Batostomella abrupta Ulrich

Hypotypes 7686a, 7687, a, b

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 103, pl. 12, figs. 1, 2; pl. 13, figs. 7, 8.

Lower Windsor, Mississippian, Windsor quarry and Maxner point, Windsor, Nova Scotia.

Batostomella exilis (Dawson)

Syntypes 7738a, 7740; paratypes 7737, 7738g, k

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 102, pl. 11, figs. 1-3; pl. 12, figs. 3, 4.

Lower Windsor, Mississippian, Cogmagun River above Lower Burlington and Miller quarry, Windsor, Nova Scotia.

Bythopora striata Ulrich

Holotype 6826

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 36.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Ceramopora vesiculosa Fritz

Holotype 12453 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 38, pl. 3, fig. 3; pl. 5, fig. 1.

Rockland beds, Ottawa formation, Middle Ordovician, quarry right bank of river at Pakenham, Ontario.

Clausotrypa spinosa Fritz

Holotype 6817, a, b (slides)

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 97, pl. 1, fig. 11; pl. 2, figs. 3, 4, 9.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Constellaria polystomella Nicholson

Hypotype 8550

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 106, pl. 9, fig. 1.

Richmond, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Constellaria varia Fritz

Hypotype 12406 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 13, pl. 5, figs. 4, 5.

Hull beds, Ottawa formation, Middle Ordovician, quarry south of river at Embrun, Ontario.

Cornyotrypa canadensis see *Stomatopora canadensis*

Cryptopora mirabilis Nicholson

Syntypes 6237, 6238

Nicholson, H. A.,

1874, Can. J., n.s., vol. 14, p. 131.

1874, Ann. Mag. Natural Hist., ser. 4, vol. 13, p. 79, fig. 1.

1874, Pal. Prov. Ontario, p. 103, fig. 40.

Onondaga, Middle Devonian, Port Colborne, Ontario.

Cystodictya hamiltonensis Ulrich

Hypotype 3890

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 279, pl. 36, figs. 2, a, b.

Middle Devonian, island east side Dawson Bay, Lake Winnipegosis, Manitoba.

Dekayella clavata Fritz

Holotype 12407 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 13, pl. 5, figs. 2, 3.

Cobourg beds, Ottawa formation, Middle Ordovician, lot 22, con. IV, Kenyon tp., Ontario.

Dekayella praenuntia alexandria Fritz

Holotype 12408 (spec. and slide)

Fritz, M.A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 14, pl. 6, figs. 3, 5.

Cobourg beds, Ottawa formation, Middle Ordovician, Alexandria, Ontario.

Dekayella praenuntia echinata Ulrich

Hypotype 12409 (spec. and slide)

Fritz., M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 14, pl. 6, figs. 1, 2.

Cobourg beds, Ottawa formation, Middle Ordovician, cliff National Research building, Ottawa, Ontario.

Dekayia typica Fritz

Holotype 12410 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 15, pl. 7, figs. 1, 2.

Cobourg beds, Ottawa formation, Middle Ordovician, cliff National Research building, Ottawa, Ontario.

Dianulites rocklandensis Wilson

Holotype 6217 (slides)

Wilson, A. E., 1921, Geol. Surv., Canada, Mus. Bull. 33, p. 47, pl. 2, figs. 1, 2.

Leray beds, Black River, Middle Ordovician, Rockland, Ontario.

Diplotrypa quebecensis Ami

Holotype 14370; slide 14370a

Ami, H. M., 1892, Can. Rec. Sci., vol. 5, p. 100.

'Trenton', Ordovician, Côte d'Abraham, Quebec City, Quebec.

Diplotrypa regularis Foord

Holotype 1543, a-c (spec. and slides)

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 13, pl. 1, figs. 3, a-c.

Trenton, Middle Ordovician, Ottawa, Ontario.

Diplotrypa westoni Ulrich

Holotype 6932, a, b (spec. and slides)

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 30, pl. 8, figs. 4, a, b.

'Trenton', Ordovician, Big Island, Lake Winnipeg, Manitoba.

Eostenopora ? *klochensis* Fritz

Holotype 1365, a, b (slides)

Fritz, M. A., 1942, Trans. Roy. Can. Inst., vol. 24, p. 167, pl. 4, figs. 1, 2.

Mississippian, Cassiar district, British Columbia.

Eridotrypa aedilis (Eichwald)

Hypotype 12411 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 16, pl. 6, fig. 4; pl. 7, figs. 4, 5.

Sherman Fall beds, Ottawa formation, Middle Ordovician, axe factory quarry, Hull, Quebec.

? *Eridotrypella ottawaensis* Fritz

Holotype 12412 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 16, pl. 7, fig. 3; pl. 8, fig. 1.

Cobourg beds, Ottawa formation, Middle Ordovician, corner Rochester and Lydia Streets, Ottawa, Ontario.

? *Eridotrypella prima* Fritz

Holotype 12413 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 17, pl. 8, figs 2, 4.

Cobourg beds, Ottawa formation, Middle Ordovician, cliff west end Sparks Street, Ottawa, Ontario.

Escharopora frondosa Wilson

Holotype 6219, a

Wilson, A. E., 1921, Geol. Surv., Canada, Mus. Bull. 33, p. 48, pl. 2, figs. 5, 6.

Chazy, Middle Ordovician, MacLaren Landing, Ontario.

Escharopora hogbeni Fritz

Holotype 5098, a-c (slides); paratypes 13694, a, b

Fritz, M. A., 1944, J. Pal., vol. 18, No. 3, p. 263, figs. 1-4.

Hull beds, Ottawa formation, Middle Ordovician, cement quarry, Hull, Quebec.

Evactinopora ? *stellata* Warren

Holotype 8916

Warren, P.S., 1927, Geol. Surv., Canada, Mem. 153, p. 49, pl. 3, fig. 10.

Rundle formation, Pennsylvanian?, Tunnel Mountain, Alberta.

Evactinopora ? *tenuiradiata* Warren

Holotype 8916

Warren, P.S., 1927, Geol. Surv., Canada, Mem. 153, p. 49, pl. 3, fig. 11.

Rundle formation, Pennsylvanian?, Tunnel Mountain, Alberta.

Favositella laxata (Ulrich)

Hypotype 12454 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 38, pl. 8, fig. 3; pl. 9, fig. 2.

Cobourg beds, Ottawa formation, Middle Ordovician, Booth Street, Ottawa, Ontario.

Favositella mammilata Fritz

Holotype 12455 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 39, pl. 9, figs. 1, 4.

Cobourg beds, Ottawa formation, Middle Ordovician, Nepean Point, Ottawa, Ontario.

Fenestella bella Bassler

Holotype 2494

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 156, pl. 12, figs. 1, 2.

Chicotte formation, Middle Silurian, 2 miles west of Chicotte River, Anticosti Island, Quebec.

Fenestella davidsoni Nicholson

Syntypes 3844, a

Nicholson, H. A., 1875, Pal. Prov. Ontario, p. 81, pl. 2, fig. 3b.

Hamilton, Middle Devonian, Arkona, Ontario.

Fenestella sp. cf. *F. dispanda* Hall

Hypotype 3893

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, p. 279, pl. 36, fig. 4.

Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

Fenestella filiformis Nicholson

Holotype 6235

Nicholson, H. A.,

1874, Geol. Mag., n.s., dec. 2, vol. 1, p. 199, pl. 9, figs. 24a, b.

1874, Pal. Prov. Ontario, p. 107, fig. 45.

Onondaga, Middle Devonion, lot 6, con. 1, Wainfleet tp., Ontario.

Fenestella lyelli Dawson

Hypotypes 7725, 7727a, 7729b, d, g

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 101, pl. 5, fig. 3; pl. 6, figs. 3-5; pl. 7, fig. 3; pl. 8, fig. 2.

Lower Windsor, Mississippian, Avon River, Maxner point and Miller quarry, Windsor, Nova Scotia.

Fenestella lyelli mut. Bell

Holotype 7753; paratype 7730c

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 101, pl. 7, figs. 4, 5.

Upper Windsor, Mississippian, mouth of Kennetcook River and Cogmagun River, Hants co., Nova Scotia.

Fenestella magnifica Nicholson

Holotype 6236

Nicholson, H. A.,

1874, Geol. Mag., n.s., dec. 2, vol. 1, p. 197, pl. 9, figs. 22a, b.

1874, Pal. Prov. Ont., p. 104, figs. 41a, b.

Onondaga, Middle Devonian, Port Colborne, Ontario.

Fenestella marginalis Nicholson

Holotype 6236a

Nicholson, H. A.,

1874, Geol. Mag., n.s., dec. 2, vol. 1, p. 197, pl. 9, figs. 23a-c.

1874, Pal. Prov. Ont., p. 105, figs. 42a-c.

Onondaga, Middle Devonian, Port Colborne, Ontario.

Fenestella subarctica Whiteaves

Holotype 4398

Whiteaves, J. F.,

1904, Geol. Surv., Canada, Ann. Rept., n.s., vol. 14, 1901, p. 39F.

1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 249, pl. 23.

Silurian, portage road at falls, Ekwan River, Ontario.

Fenestella vera Ulrich

Hypotype 3894

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, p. 279, pl. 36, figs. 3, a.

Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

Fenestrellina gaspiensis Fritz

Syntypes 9168-9170

Fritz, M. A., 1938, Bull. Am. Pal., vol. 24, appendix 82A, p. 7, pl. 1, figs. 1, 3, 4.

Gaspé sandstone, Devonian, Sonneau Brook, York River valley, Gaspé, Quebec.

Fenestrellina occidentalis Fritz

Holotype 9174

Fritz, M. A., 1938, Bull. Am. Pal., vol. 24, appendix 82A, p. 6, pl. 2, fig. 2.

Gaspé sandstone, Devonian, Four Mile Brook near Causapscal, Quebec.

Fistulipora canadensis Billings

Syntypes (?) 3387, a, b

Billings, E.,

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 165.

1858, Can. Naturalist Geol., vol. 3, p. 420.

1859, Can. J., n.s., vol. 4, p. 98, fig. 1.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 364, fig. 358.

Onondaga formation, Middle Devonian, lot 6, con. 1, Wainfleet tp., Ontario.

=*Favosites canadensis*, Stumm, E. C., 1947, Wagner Free Inst. Sci., "Type Invertebrate Fossils of North America (Devonian)", Tabulata card 236 (holotype 3387).

Fistulipora ? *laxata* Ulrich

Holotype 6933, a-d (spec. and slides)

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 37, pl. 8, figs. 2, a.

Trenton?, Ordovician, St. Andrews, Manitoba.

Fistulipora stewarti Fritz

Holotype 12456 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, p. 39, pl. 9, figs. 3, 5.

Pamelia-Lowville beds, Ottawa formation, Middle Ordovician, lowest 10 feet Stewart quarry, Rockland, Ontario.

Goniocladia intermedia Fritz

Syntypes 6823, a

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 106, pl. 3, figs. 8, 10.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Goniotrypa bilateralis Ulrich

Holotype 974

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 41, pl. 9, fig. 1.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Hallopora caleyi Bolton

Hypotype 11067 (spec. and slide)

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, 1957, p. 67, pl. 9, fig. 1.

Manitoulin formation, Lower Silurian, east shore Colpoy Bay, Ontario.

Hallopora dumalis magna Fritz

Holotype 12414, a (slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 18, pl. 10, figs. 3, 5.

Hull beds, Ottawa formation, Middle Ordovician, Powder Magazine quarry north of Montreal road, Ottawa, Ontario.

Hallopora lydiana Fritz

Holotype 12415 (slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 18, pl. 10, figs. 1, 4.

Cobourg beds, Ottawa formation, Middle Ordovician, corner Rochester and Lydia Streets, Ottawa, Ontario.

Hallopora multitabulata (Ulrich)

Hypotypes 12416, 12417 (specimens and slides)
Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 19, pl. 11, figs. 1-4.

Rockland and Cobourg beds, Ottawa formation, Middle Ordovician, ¾ mile south of Embrun and corner Rochester and Lydia Streets, Ottawa, Ontario.

Hallopora peculiaris Bolton

Hypotype 11068 (spec. and slide)
Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, 1957, p. 68, pl. 10, fig. 3.

Manitoulin formation, Lower Silurian, east shore Colpoy Bay, Ontario.

Hederella canadensis (Nicholson)

Hypotype 4217e
Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, p. 210, pl. 28, figs. 8, a.

Upper Devonian, 40 miles above mouth Hay River, N.W.T.

Helopora bellula Billings

Holotype 2434
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 38.
Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 159, pl. 14, figs. 4, 6.

Middle Silurian (Jupiter formation), 2 miles east of Jupiter River, Anticosti Island, Quebec.

Helopora concava Billings

Holotype 2355 (missing)
Billings, E., 1866, Geol. Surv., Canada, Cat Sil. Fossils Anticosti, p. 37.
Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 158, pl. 14, fig. 7.

Middle Silurian (Jupiter formation), 2 miles east of Jupiter River, Anticosti Island, Quebec.

Helopora formosa Billings

Holotype 2356
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 37.
Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 158, pl. 14, figs. 1, 2.

Middle Silurian (Jupiter formation), East Point, Anticosti Island, Quebec.

Helopora fragilis Hall

Hypotype 4507
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 4, fig. 2.

Cabot Head formation, Lower Silurian, Stoney Creek, Ontario.

Helopora irregularis Billings

Holotype 2437
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 39.

Middle Silurian (Jupiter formation), Shallop River, Anticosti Island, Quebec.
=*Trematopora irregularis,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 155.

Helopora lineata Billings

Holotype 2251 (missing)
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 36.

Upper Ordovician (Ellis Bay formation), Junction Cliff, Anticosti Island, Quebec.
=*Nematopora lineata,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 160, pl. 7, figs. 20, 21.

Helopora lineopora Billings

Holotype 2433

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 38.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 159, pl. 10, figs. 14, 15.

Middle Silurian (Jupiter formation), 2 miles west of Jupiter River, Anticosti Island, Quebec.

Helopora striatopora Billings

Holotype 2435

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 39.

Middle Silurian (Jupiter formation), 4 miles west of Southwest Point, Anticosti Island, Quebec.

=*Thamniscus striatoporus,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 157, pl. 14, figs. 16, 17.

Helopora varipora Billings

Holotype 8443

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 40.

Middle Silurian (Jupiter formation), Shallop River, Anticosti Island, Quebec.

=*Lioclema variporum,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 153.

Hemiphragma crassicrenulatum Fritz

Holotype 12418 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 19, pl. 12, figs. 4, 5.

Cobourg beds, Ottawa formation, Middle Ordovician, ½ mile west of Green Creek, east of Ottawa, Ontario.

Hemiphragma ottawaense (Foord)

Hypotypes 12419 (spec. and slides), 12420 (slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 20, pl. 10, fig. 2; pl. 12, figs. 1-3.

Cobourg and Leray-Rockland beds, Ottawa formation, Middle Ordovician, Ore Building excavation, Booth Street, Ottawa, Ontario and Paquette Rapids, Ottawa River.

Hemiphragma shermanense Fritz

Holotype 12421 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 20, pl. 13, figs. 2, 4.

Hull or Sherman Fall beds, Ottawa formation, Middle Ordovician, cliff behind Canada Match Company, Hull, Quebec.

Hemiphragma tenuimurale Ulrich

Hypotypes 12422 (spec. and slide), 12459 (slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 21, pl. 13, figs. 3, 5.

Sherman Fall beds, Ottawa formation, Middle Ordovician, Brewery Creek, Hull, and railway-cut at Val Tetreau, Quebec.

Homotrypa lowvillensis Fritz

Holotype 12423 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 22, pl. 13, fig. 1; pl. 14, fig. 3.

Lowville beds, Ottawa formation, Middle Ordovician, about ½ mile south of river at Embrun, Ontario.

Homotrypa cf. *minnesotensis* Ulrich

Hypotype 12424 (slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 22, pl. 14, figs. 1, 2.

Leray beds, Ottawa formation, Middle Ordovician, corner Young Street and Fairmont Avenue, Ottawa, Ontario.

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Homotrypa similis Foord

Syntypes 1538, a-e (specs. and slides)

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 10, pl. 2, figs. 2, a-d.

Trenton, Middle Ordovician, Ottawa, Ontario.

Homotrypa similis Foord

Hypotype 12425 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 23, pl. 14, figs. 4, 5.

Cobourg beds, Ottawa formation, Middle Ordovician, corner Rochester and Lydia Streets, Ottawa, Ontario.

Homotrypella hospitalis crassa (Ulrich)

Hypotype 12426 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 23, pl. 15, figs. 3, 4.

Leray beds, Ottawa formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario.

Homotrypella spicata Fritz

Holotype 12427 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 23, pl. 15, figs. 1, 2.

Hull beds, Ottawa formation, Middle Ordovician, between CPR tracks and Armouries, Hull, Quebec.

Leptotrypa crassa Bassler

Holotype missing

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 150, pl. 6, figs. 9-11; pl. 7, fig. 5.

English Head formation, Upper Ordovician, English Head, Anticosti Island, Quebec.

Lichenalia concentrica Hall

Hypotype 4432

Williams, M. Y., 1915, Geol. Surv., Canada, Mus. Bull. 20, p. 5, pl. 1, fig. 1.

Eramosa member, 'Lockport' formation, Middle Silurian, Eramosa River, Ontario.

Lichenalia utricula Bassler

Syntypes 2247, a (missing)

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 168, pl. 7, figs. 16, 17.

Ellis Bay formation, Upper Ordovician, Junction cliff, Anticosti Island, Quebec.

Lioclema variporum see *Helopora varipora*

Mesotrypa angularis parvatrypa Fritz

Holotype 12428 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 24, pl. 16, figs. 1, 2, 4.

Sherman Fall beds, Ottawa formation, Middle Ordovician, east of Black River station, Ontario.

Mesotrypa obliqua Fritz

Holotype 12429 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 25, pl. 16, fig. 3; pl. 17, fig. 3.

Leray beds, Ottawa formation, Middle Ordovician, Mille Roches quarries, Ontario.

Mesotrypa prolifica Fritz

Hypotype 12430 (slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 25, pl. 17, figs. 1, 2; pl. 30, fig. 4.

Cobourg beds, Ottawa formation, Middle Ordovician, corner Rochester and Lydia Streets, Ottawa, Ontario.

Mesotrypa selkirkensis Whiteaves

Syntypes 6931, a-e

Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 162, pl. 19, figs. 1, a.

'Trenton', Ordovician, East Selkirk, Manitoba.

Mesotrypa whiteavesii (Nicholson)

Hypotypes 12431 (spec. and slide), 12432 (slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 26, pl. 18, figs. 2-4.

Cobourg and Hull beds, Ottawa formation, Middle Ordovician, corner Rochester and Lydia Streets, Ottawa, Ontario, and Brigham creek, Hull, Quebec.

Monotrypa incerta Ami

Syntypes 14371, 14372; slides 14371a, b, 14372a

Ami, H. M., 1892, Can. Rec. Sci., vol. 5, p. 101.

'Trenton', Ordovician, Côte d'Abraham, Quebec City, Quebec.

Monotrypella unjiga Whiteaves

Syntypes 4224, a-c

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 214, pl. 30, figs. 1, a-d.

Upper Devonian, Vermilion Falls, Peace River, Alberta.

Monticulipora arborea Ulrich

Hypotype 12433 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 26, pl. 19, figs. 3, 4.

Sherman Fall beds, Ottawa formation, Middle Ordovician, railway-cut at Val Tetreau, Quebec.

Monticulipora billingsi Foord

Holotype 1540, a, b, (spec. and slides)

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 8, pl. 1, figs. 2, a-c.

Trenton, Middle Ordovician, Hull, Quebec.

Monticulipora bullata Fritz

Holotype 12434 (slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 27, pl. 19, figs. 1, 2.

Cobourg beds, Ottawa formation, Middle Ordovician, Nepean Point, Ottawa, Ontario.

? *Monticulipora cannonensis* Ulrich

Hypotype 12435 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 27, pl. 19, figs. 1, 2.

Sherman Fall beds, Ottawa formation, Middle Ordovician, Castor River, Embrun, Ontario.

Monticulipora loeblichi Fritz

Holotype 12436 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 28, pl. 20, figs. 1, 2.

Hull beds, Ottawa formation, Middle Ordovician, quarry south of river at Embrun, Ontario.

Monticulipora parasitica plana Ulrich

Holotype 13693

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 29, pl. 8, figs. 3, a.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Monticulipora westoni Foord

Holotype 1541, a, b (spec. and slides)

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 7, pl. 1, figs. 1a, b.

Trenton, Middle Ordovician, Ottawa, Ontario.

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Nematopora lineata see *Helopora lineata*

Nicholsonella ottawaensis Wilson

Holotype 6218 (spec. and slide)

Wilson, A. E., 1921, Geol. Surv., Canada, Mus. Bull. 33, p. 47, pl. 2, figs. 3, 4.

Leray beds, Black River, Middle Ordovician, 3 miles east of Ottawa, Ontario.

Nicholsonella wilsonae Fritz

Holotype 12437 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 29, pl. 21, figs. 1, 2.

Rockland beds, Ottawa formation, Middle Ordovician, loose blocks Stewart quarry, Rockland, Ontario.

Orbignyella definita Fritz

Holotype 12438 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 29, pl. 22, figs. 3, 4.

Pamelia or Lowville beds, Ottawa formation, Middle Ordovician, Clarendon Avenue at sanatorium, Ottawa, Ontario.

Orbipora americana Fritz

Holotype 12439 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 30, pl. 21, fig. 3; pl. 22, fig. 2.

Cobourg beds, Ottawa formation, Middle Ordovician, Booth Street, Ottawa, Ontario.

Pachydictya hexagonalis Ulrich

Holotype 13695

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 42, pl. 9, figs. 2, a-c.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Pachydictya magnipora Ulrich

Holotype 6928

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 43.

'Trenton', Ordovician, St. Andrews, Manitoba.

Petigopora scabiosa Ulrich

Syntypes 5457, a, b

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 34.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Phaenopora excellens see *Ptilodictya excellens*

Phaenopora keewatinensis Whiteaves

Holotype 3833, a (spec. and slide)

Whiteaves, J. F.,

1904, Geol. Surv., Canada, Ann. Rept., n.s., vol. 14, 1901, p. 40F.

1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 268, pl. 24, figs. 6 a.

Silurian, Sutton Mill Lake, Ontario.

Phaenopora superba see *Ptilodictya superba*

Phyllodictya hybrida Fritz

Holotype 12457 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 40, pl. 22, fig. 1; pl. 23, fig. 1.

Hull beds, Ottawa formation, Middle Ordovician, quarry on first farm south of river at Embrun, Ontario.

Phyllopora cf. *haimeana* Koninck

Hypotypes 6281, a, b (slides)

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 103, pl. 3, figs. 1-4.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Pinacotrypa marginata Whiteaves

Syntypes 3891, a-d

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 278, pl. 36, figs. 1, a,b.

Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

Pinnatopora grandis Fritz

Holotype 6822 (1)

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 104, pl. 3, figs. 5, 7.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Polypora elongata Fritz

Holotype 6222(3), 6819 (slide)

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 101, pl. 2, figs. 5-7.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Polypora (*porosa* ? var.) *manitobensis* Whiteaves

Syntypes 3895, a, b

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 280, pl. 36, fig. 5.

Devonian, Monroe Point, Lake Manitoba, Manitoba.

Polypora orientalis Fritz

Holotype 9171

Fritz, M. A., 1938, Bull. Am. Pal., vol. 24, appendix 82A, p. 7, pl. 1, fig. 2; pl. 2, fig. 1.

Gaspé sandstone, Devonian, Sonneau Brook, York River valley, Gaspé, Quebec.

Polypora ? *pysche* Billings

Syntypes 3151, 3271

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, pt. 1, p. 11, fig. 1.

Devonian (Grande Greve formation), Indian Cove, Gaspé, Quebec.

Polypora schucherti Bell

Holotype 7731; paratypes 4338a, 7732

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 103, pl. 13, figs. 1-4.

Lower Windsor, Mississippian, Maxner Point, Windsor, and Dominion Atlantic railway bridge, Hants co., Nova Scotia.

Polypora vancouverensis Fritz

Holotype 6818, a (slide)

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 100, pl. 2, figs. 1, 2.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Prasopora affinis Foord

Holotype 1536, a, b (spec. and slides)

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 12, pl. 3, figs. 2, a-c.

Trenton, Middle Ordovician, Ottawa, Ontario.

Prasopora cf. *conoidea* Ulrich

Hypotype 12440 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 31, pl. 23, figs. 2, 3.

Hull beds, Ottawa formation, Middle Ordovician, Brigham creek, Hull, Quebec.

Prasopora grandis (Ulrich)

Hypotype 12441 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 31, pl. 24, figs. 3, 4.

Rockland beds, Ottawa formation, Middle Ordovician, loose blocks Stewart quarry, Rockland, Ontario.

Prasopora hybrida Fritz

Holotype 12442 (slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 32, pl. 24, figs. 1, 2.

Cobourg beds, Ottawa formation, Middle Ordovician, west half lot 22, con. 3, Roxborough tp., Ontario.

Prasopora insularis Ulrich

Hypotype 12443 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 32, pl. 25, figs. 3, 5.

Sherman Fall beds, Ottawa formation, Middle Ordovician, Plantagenet, Ontario.

Prasopora lycoperdon selwyni Ami

Syntypes 14368, 14369; slides 14368a-c, 14369a

Ami, H. M., 1892, Can. Rec. Sci., vol. 5, p. 99.

'Trenton', Ordovician, Côte d'Abraham, Quebec City, Quebec.

Prasopora mesoporosa Fritz

Holotype 12444 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 32, pl. 25, figs. 1, 4.

Sherman Fall beds, Ottawa formation, Middle Ordovician, Axe factory quarry, Brewery Creek, Hull, Quebec.

Prasopora oculata Foord

Syntypes 1537, a, c, d (specs. and slides)

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 11, pl. 3, figs. 1, a-f.

Trenton, Middle Ordovician, Ottawa, Ontario.

Prasopora prismatica Fritz

Holotype 12446 (spec. and slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 33, pl. 27, figs. 2, 3.

Cobourg beds, Ottawa formation, Middle Ordovician, quarry south of St. Isidore de Prescott, Ontario.

Prasopora similis Fritz

Holotype 12449 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 34, pl. 29, figs. 1, 2.

Rockland beds, Ottawa formation, Middle Ordovician, Stewart quarry, Rockland, Ontario.

Prasopora simulatrix orientalis Ulrich

Hypotype 12450, a (slides)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 34, pl. 28, figs. 2, 3.

Sherman Fall beds, Ottawa formation, Middle Ordovician, con. I, Roxborough tp., east of Strathmore, Ontario.

Prasopora sinclairi Fritz

Holotype 12451 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 35, pl. 29, fig. 3; pl. 30, fig. 3.

Rockland beds, Ottawa formation, Middle Ordovician, loose blocks Stewart quarry, Rockland, Ontario.

Prasopora sp.
Fig. spec. 13612
Wilson, A. E., 1957, Can. Field-Naturalist, vol. 70, No. 1, pl. 2, fig. 11.
Sherman Fall beds, Ottawa formation, Middle Ordovician, Ottawa, Ontario.

Prasoporina oculata (Foord)
Hypotype 12445 (spec. and slide)
Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 36, pl. 26, figs. 2, 3.
Cobourg beds, Ottawa formation, Middle Ordovician, corner Rochester and Lydia Streets, Ottawa, Ontario.

Prasoporina selwyni (Nicholson)
Hypotype 12447 (spec. and slide)
Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 36, pl. 26, figs. 1, 4.
Sherman Fall beds, Ottawa formation, Middle Ordovician, Castor River about a mile east of Embrun, Ontario.

Prasoporina semioculata Fritz
Holotype 12448 (slides)
Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 36, pl. 27, fig. 1; pl. 28, fig. 1.
Hull beds, Ottawa formation, Middle Ordovician, Brigham creek, Hull, Quebec.

Proboscina laxa Whiteaves
Holotype 4218
Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, p. 212, pl. 28, figs. 9, a.
Upper Devonian, 40 miles above mouth Hay River, N.W.T.

Ptilodictya alcyone Billings
Syntypes 2499, a, b
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 36.
Middle Silurian (Chicotte formation), 2 miles west of Chicotte River, Anticosti Island, Quebec.

Ptilodictya arguata Billings
Holotype 2354
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 36.
Middle Silurian (Gun River formation), Cape Sandtop Bay, Anticosti Island, Quebec.

Ptilodictya canadensis Billings
Holotype 2005
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 9.
Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 161, pl. 7, fig. 19; pl. 9, fig. 9.
Upper Ordovician (English Head formation), Carleton Point, Anticosti Island, Quebec.

Ptilodictya excellens Billings
Holotype 2248
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 34.
Upper Ordovician (Ellis Bay formation), Point Laframboise, Anticosti Island, Quebec.
=*Phaenopora excellens,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 163, pl. 14, figs. 10, 11.

Ptilodictya fragilis Billings
Holotype 2249 (missing)
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 9.
Upper Ordovician (Ellis Bay formation), Junction Cliff, Anticosti Island, Quebec.
=*Dicranopora fragilis,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 166, pl. 14, figs. 12, 13.

Ptilodictya gladiola Billings

Holotype 2353 (missing)

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 10.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 162, pl. 10, figs. 12, 13.

Middle Silurian (Jupiter formation), East Cliff, Anticosti Island, Quebec.

Ptilodictya nitidula Billings

Holotype 2004

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 9.

Upper Ordovician, Salmon River, Anticosti Island, Quebec.

Ptilodictya rustica Billings

Holotype 2500

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 36.

Middle Silurian (Jupiter formation), The Jumpers, Anticosti Island, Quebec.

Ptilodictya sulcata Billings

Syntypes 2496 (missing), 2501, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 35.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 162, pl. 10, figs. 9-11.

Middle Silurian (Jupiter formation), The Jumpers, Anticosti Island, Quebec.

Ptilodictya superba Billings

Holotype 2352

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 35.

Lower Silurian (Becscie formation), Walls Cove, Anticosti Island, Quebec.

=*Phaenopora superba*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 164, pl. 9, fig. 6.

Ptilodictya tarda Billings

Holotype 3272

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, pt. 1, p. 13.

Devonian (Grande Greve formation), Grande Greve, Gaspé, Quebec.

Ptilodictya whiteavesi Ulrich

Syntypes 6829, 6833

Ulrich, E. O., 1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 44, pl. 8, figs. 1, a.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Rhinidictya fidelis (Ulrich)

Hypotype 12458 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, pl. 25, fig. 2.

Rockland beds, Middle Ordovician, Stewart quarry, Rockland, Ontario.

Rhinidictya obliqua Ulrich

Holotype 4410

Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 240.

Ordovician, Deer Island, Lake Winnipeg, Manitoba.

Rhombopora porifera Fritz

Syntypes 6815, b (slide)

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 96, pl. 1, figs. 4, 5, 7, 8.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Rhombotrypa quadrata (Rominger)

Hypotype 8551, a, b

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 106, pl. 9, fig. 2.

Meaford formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Sceptropora facula Ulrich

Syntypes 974, 975

Ulrich, E. O.,

1888, Amer. Geol., vol. 1, No. 4, p. 229, fig. 1.

1889, Geol. Surv., Canada, Contr. Micro-Pal., pt. 2, p. 46, figs. 2a-d.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Septopora primitiva Bell

Holotype 7735a; paratypes 7734, a-c, 7735, b, c

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 102, pl. 6, fig. 6; pl. 7, figs. 1, 2; pl. 8, fig. 1; pl. 9, figs. 1-4.

Lower Windsor, Mississippian, Maxner point and Miller quarry, Windsor, Nova Scotia.

Spatiopora areolata Foord

Syntypes 1550a, b, c (slide), 1573, a

Foord, A. H., 1883, Geol. Surv., Canada, Contr. Micro-Pal., p. 21, pl. 5, figs. 1, b, i.

Trenton, Middle Ordovician, Ottawa, Ontario, and Hull, Quebec.

Stenopora adherens Billings

Syntype 1004

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 427.

Ordovician (Mingan formation), Mingan Islands, Quebec.

=*Crepipora adherens,* Twenhofel, W. H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 43, pl. 6, fig. 9.

Stenopora bulbosa Billings

Holotype missing

Billings, E.,

1865, Can. Naturalist Geol., ser. 2, vol. 2, p. 429.

1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 32.

Upper Ordovician (Ellis Bay formation), Junction Cliff, Anticosti Island, Quebec.

=*Cyphotrypa bulbosa,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 150, pl. 7, fig. 18; pl. 8, figs. 8, 9.

Stenopora patula Billings

Syntype 1005

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 427.

Chazy, Island of Montreal, Quebec.

Stigmatella ottawaensis Fritz

Holotype 12452 (spec. and slide)

Fritz, M. A., 1958, Geol. Surv., Canada, Bull. 42, 1957, p. 37, pl. 30, figs. 1, 2, 5.

Hull beds, Ottawa formation, Middle Ordovician, Rockcliffe Park, Ottawa, Ontario.

Stomatopora canadensis Whiteaves

Holotype 6927

Whiteaves, J. F., 1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 161, pl. 18, figs. 4, a.

'Trenton', Ordovician, Swampy Island, Lake Winnipeg, Manitoba.

=*Cornyotrypa canadensis,* Bassler, R. S., 1910, Proc. U.S. Nat. Mus., vol. 39, p. 526, fig. 27.

Stomatopora moniliformis Whiteaves

Syntypes 4219, a-c

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 212, pl. 28, fig. 10.

Devonian, 40 miles above mouth Hay River, N.W.T.

Streblotrypa biformata Bell

Syntypes 7741 (missing), b; paratype 7741c

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 104, pl. 13, figs. 5, 6; pl. 14, figs. 1, a.

Lower Windsor, Mississippian, Windsor, Nova Scotia.

Streblotrypa pulchra Fritz

Holotype 6816, a, b (slides)

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 97, pl. 1, figs. 6, 9, 10.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Tabulipora acadica Bell

Holotype 7739; paratypes 7739a-c, 7746

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 105, pl. 10, figs. 1-5.

Upper Windsor, Mississippian, Cogmagun and Hebert Rivers, Hants co., Nova Scotia.

Tabulipora sustutensis Fritz

Holotype 8771, c, d (slides); paratypes 8771a, b

Fritz, M. A., 1946, J. Pal., vol. 20, No. 1, p. 86, figs. 1, 2.

Permian?, Sustut Lake, British Columbia.

? *Thamniscus unilateralis* Fritz

Holotype 6820

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 94, pl. 1, fig. 8.

Permian, Strathcona Park, Vancouver Island, British Columbia.

Trachytoechus moniliformis Fritz

Holotype 1495a, b, c (slides)

Fritz, M. A., 1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 36, pl. 1, figs. 1-4.

Middle Devonian, Lemieux tp., Gaspé, Quebec.

Trematopora irregularis see *Helopora irregularis*

Trematopora superba Billings

Holotype 2631

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 93.

Middle Silurian, Cabot Head, Ontario.

=*Lyellia superba*, Lambe, L. M., 1900, Contr. Can. Pal., vol. 4, pt. 1, p. 87, pl. 5, fig. 4.

Ulrichotrypa prolifica Fritz

Holotype 6814, a, b (slides)

Fritz, M. A., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 94, pl. 1, figs. 1-3.

Permian, Strathcona Park, Vancouver Island, British Columbia.

BRACHIOPODA

Acrothele levisensis Walcott

Holotype 8230; paratypes 8230a, b

Walcott, C. D.,
1908, Smithsonian Misc. Coll., vol. 53, No. 3, p. 85, pl. 8, fig. 13.
1912, Monog. U.S. Geol. Surv., vol. 51, p. 646, pl. 81, figs. 12, a, b.

Levis formation, Lower Ordovician, Point Levis, Quebec.

Acrotreta gemma Billings

Syntypes 547, a, b

Billings, E.,
1865, "New Species of Lower Silurian Fossils", p. 216, figs. 201b, d-f.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 216, figs. 201b, d-f.
Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 685, pl. 66, figs. 1, a, b (lectotype fig. 1=547a).

Division P (Cow Head), Lower Ordovician, 4 miles northeast of Portland Creek, Newfoundland.

Acrotreta idahoensis Walcott

Hypotype 12007

Kobayashi, T., 1938, Japanese J. Geol. Geog., vol. 15, p. 167, pl. 16, figs. 3a-c.

Upper Cambrian, west of Harrogate, British Columbia.

Acrotreta ovalis Walcott

Holotype 564

Walcott, C. D.,
1902, Proc. U.S. Nat. Mus., vol. 25, p. 592.
1912, Monog. U.S. Geol. Surv., vol. 51, p. 699, pl. 66, figs. 2, a, b.

Lower Ordovician, 4 miles northeast of Portland Creek, Newfoundland.

Acrotreta sipo Matthew

Syntypes 7319, a-g

Matthew, G. F.,
1902, Natural Hist. Soc. New Brunswick, vol. 4, pt. 5, p. 406, pl. 18, figs. 1, 2.
1903, Geol. Surv., Canada, Rept. Camb. Rocks Cape Breton, p. 185, pl. 18, figs. 1, 2.

Upper Cambrian or Lower Ordovician, McLeod Brook, Cape Breton, Nova Scotia.

Allanaria allani (Warren)

Hypotypes 13821, 13822

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol Geol., p. 200, pl. 8, figs. 14-17.

Flume formation, Upper Devonian, ridge between Beaver and Medicine Lakes, Jasper Park, Alberta.

Allanaria minutilla (Crickmay)

Hypotype 13823

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol Geol., p. 200, pl. 8, figs. 18-20.

Upper Flume formation, Upper Devonian, east of Esplanade Mountain, Jasper Park, Alberta.

Allorhynchus hartii Bell

Holotype 7468

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 128, pl. 20, figs. 11, a, b.

Upper Windsor, Mississippian, Hants co., Nova Scotia.

Allorhynchus cf. *macra* (Hall)
Hypotypes 7466, a
Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 128, pl. 20, figs. 4, a, 5, a.
Lower Windsor, Mississippian, old limekiln, Brookfield road, Colchester co., Nova Scotia.

Allorhynchus ramosum Bell
Holotype 7477; paratypes 7478, b-d
Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 127, pl. 20, figs. 6-10.
Lower Windsor, Mississippian, Brookfield road, Colchester co., Nova Scotia.

Ambocoelia acadica Bell
Holotype 7525; paratype 7525a
Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 141, pl. 22, figs. 3, 4.
Upper Windsor, Mississippian, Murphy road 2 miles south of Scotch Village, Hants co., Nova Scotia.

Ambocoelia magna Shimer
Holotype 4817; paratype 4817a
Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 66, pl. 3, figs. 3a-c, 4a, b.
Mississippian, Lake Minnewanka, Alberta.

Amphistrophia arisaigensis McLearn
Holotype 5422
McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 63, pl. 5, fig. 31.
Stonehouse ? formation, Middle or Upper Silurian, Arisaig, Nova Scotia.

Aporthophyla ? *aurora* see *Strophomena aurora*

Archaeorthoris electra see *Orthis electra*

Archaeorthis hippolyte see *Orthis hippolyte*

Archaeorthis intermedia Ulrich and Cooper
Syntypes 9064, a-d
Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 97, pl. 13E, figs. 19-22.
Erratics in Levis formation, Ordovician, Point Levis, Quebec.

Athyris angelica occidentalis Whiteaves
Syntypes 4259, a-f
Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 227, pl. 32, figs. 3, a, b (4259).
Upper Devonian, La Saline and first 10 miles below Clearwater, Athabasca River, Alberta.

Athyris (*Merista*) *arcuata* Hall
Hypotype 3300
Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, pl. 3, figs. 9, a, b.
Devonian (Grande Greve formation), Grande Greve, Gaspé, Quebec.
=*Meristella champlaini,* Clarke, J. M., 1908, N.Y. State Mus., Mem. 9, pt. 1, p. 175.

Athyris (?) *chlöe* Billings
Syntypes 3708, 3709, a, b
Billings, E., 1860, Can. J., n.s., vol. 5, p. 282, figs. 45-47 (3709a).
Hamilton formation, Middle Devonian, lot 26, con. 3, Bosanquet tp., Ontario.
=*Retzia chlöe,* Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 385, figs. 419a-c.

Athyris ? *clusia* Billings
Holotype 3497
Billings, E., 1860, Can. J., n.s., vol. 5, p. 279.
Onondaga formation, Middle Devonian, lot 45, con. 1, Cayuga tp., Ontario.

Athyris julia Billings

Holotype 2525

Billings, E., 1862, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 146, figs. 124a-c.

Middle Silurian (Jupiter formation), Anticosti Island, Quebec.

=*Whitfieldella ? julia,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 221, pl. 20, figs. 15-17.

Athyris junia Billings

Syntypes 2374, 2524

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 46.

Middle Silurian (Gun River and Jupiter formations), 6 miles east of Otter River and The Jumpers, Anticosti Island, Quebec.

=*Hyattidina congesta junea,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 223, pl. 30, figs. 4-6.

Athyris lara Billings

Syntypes 2375, a-f

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 47.

Middle Silurian (Gun River formation), Gull Cape, Anticosti Island, Quebec.

=*Whitfieldella ? lara,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 222, p. 20, figs. 18-20.

Athyris parvula Whiteaves

Syntypes 4261, a-d, 4262

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 228, pl. 32, figs. 4, 5, a.

Upper Devonian, 3 miles below Calumet and 30 miles below Red River, Athabasca River, Alberta.

Athyris (?) *rostrata* (Hall)

Hypotype 3701

Billings, E., 1860, Can. J., n.s., vol. 5, p. 281, figs. 43, 44.

Hamilton formation, Middle Devonian, Thedford, Ontario.

=*Charionella rostrata,* Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 385, figs. 420a, b.

Athyris solitaria Billings

Holotype 2523

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 48.

Middle Silurian (Chicotte formation), Southwest Point, Anticosti Island, Quebec.

=*Whitfieldella ? solitaria,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 221, pl. 30, figs. 7-9.

Athyris tumidula Billings

Syntype 2456

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 47.

Middle Silurian, near Jupiter River, Anticosti Island, Quebec.

Athyris (?) *unisulcata* (Conrad)

Hypotype 3501

Billings, E., 1860, Can. J., n.s., vol. 5, p. 279, figs. 39-42.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 373, figs. 396a-c.

Middle Devonian (Onondaga formation), Haldimand co., Ontario.

"*Athyris* (or *Cleiothyridina* ?) sp. C

Fig. spec. 13795

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 10-12.

Palliser formation, Upper Devonian, Winnifred Pass, Alberta.

Athyris sp.

Fig. spec. 13825

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 200, pl. 8, figs. 25-27.

Flume equivalent, Upper Devonian, south end of the Ancient Wall, Jasper Park, Alberta.

Atrypa independencis (?) see *Atrypa reticularis*

Atrypa multicostellata Kottlowski

Hypotype 10903

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 200, pl. 8, figs. 11-13.

Flume formation, Upper Devonian, Morro Peak, Jasper Park, Alberta.

Atrypa parksi Williams

Holotype 4673

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 120, pl. 7, figs. 19a-c.

Cabot Head formation, Lower Silurian, Credit Forks, Ontario.

Atrypa planosulcata Webster var.

Hypotypes 6790, a, b

Fentons, C. L. and M. A., 1932, Am. Midland Naturalist, vol. 13, p. 220, pl. 23, figs. 4-6.

Devonian, 2 miles below first island below Alexandria Falls, Hay River, N.W.T.

Atrypa reticularis (Linnaeus)

Hypotype 5443

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 80, pl. 8, fig. 37.

Stonehouse formation, Middle or Upper Silurian, Arisaig, Nova Scotia.

Atrypa reticularis (Linnaeus)

Hypotype 4146

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 289, pl. 37, fig. 8.

Devonian, Pentamerus Point, Lake Manitoba, Manitoba.

=*Atrypa independencis* (?), Fentons, C. L. and M.A., 1932, Am. Midland Naturalist, vol. 13, p. 207, pl. 23, fig. 7.

Atrypa sp. J

Fig. spec. 12274

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, figs. 16-18.

Mount Hawk formation, Upper Devonian, south end of Idlewilde Mountain, Clearwater River, Alberta.

Atrypa sp. K

Fig. spec. 10921

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, figs. 19-21.

Southesk formation, Upper Devonian, headwater of Job Creek, Alberta.

Atrypa sp. L

Fig. spec. 10923

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, figs. 22-24.

Southesk formation, Upper Devonian, headwater of Job Creek, Alberta.

Atrypa sp. M

Fig. spec. 10944

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, figs. 25-27.

Mount Hawk formation, Upper Devonian, north side of road, Shunda Creek gap, near Nordegg, Alberta.

Barrandella kindlei Northrop

Syntypes 9161, 9162 (missing)

Northrop, S. A., 1939, Geol. Soc. Amer., Sp. Paper 21, p. 167, pl. 12, figs. 3-5.

La Vieille formation, Middle Silurian, Black Cape and Anse Gascon, Gaspé, Quebec.

Brachymimulus triplicatus Cooper and Kindle

Syntype 8861

Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 357.

Whitehead formation, Upper Ordovician, Priest's road, Percé, Quebec.

Brachyprion acanthopterus (Whiteaves)

Hypotypes 10438, 10439

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 96, pl. 11, figs. 20, 21, 25.

Chemahawin member, Cedar Lake formation, Middle Silurian, Chemahawin and east side of bay behind Denbeigh Point, Lake Winnipegosis, Manitoba.

See *Strophomena acanthoptera*

Brachyprion elegantulum Twenhofel

Holotype 2519

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 189, pl. 16, fig. 18.

Jupiter formation, Middle Silurian, The Jumpers, Anticosti Island, Quebec.

Brachyprion gilpini (Dawson)

Hypotypes 5420, 5421; hypoplastotype 5420a

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 61, pl. 5, figs. 28, 29.

Stonehouse formation, Middle or Upper Silurian, Arisaig, Nova Scotia.

Brachyprion inflatus Stearn

Hypotype 10457

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 97, pl. 11, figs. 22, 23.

Cross Lake member, Cedar Lake formation, Middle Silurian, south shore Portage Bay, Cross Lake, Manitoba.

Brachyprion leda (Billings)

Lectotype 2442

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 188.

Jupiter formation, Middle Silurian, 2 miles east of Jupiter River, Anticosti Island, Quebec.

Brachyprion majus see *Strophomena inequiradiata*

Brachyprion mertoni McLearn

Holotype 5417; paratypes 5418, 5419; paraplastotype 5419a

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 61, pl. 4, figs. 16-18; pl. 28, fig. 12.

Stonehouse formation, Middle or Upper Silurian, Arisaig, Nova Scotia.

Brachyprion paskoiacensis Stearn

Holotype 10440; paratype 10449

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 97, pl. 11, figs. 8, 16, 17.

Inwood formation, Middle Silurian, sec. 16, tp. 48, rge. 13, and Grand Rapids, l.s. 5, sec. 16, tp. 48, rge. 13, W. Prin. mer., Manitoba.

Brachyprion paskoiacensis geniculatus Stearn

Holotype 10443

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 98, pl. 11, figs. 18, 19.

Fisher Branch formation, Middle Silurian, sec. 8, tp. 25, rge. 2, W. Prin. mer., Manitoba.

Brachyprion philomena (Billings)

Hypotype 2443

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 189, pl. 23, fig. 10.

Jupiter formation, Middle Silurian, Iron River, Anticosti Island, Quebec.

Brachyprion robustus Twenhofel

Hypotype 10458

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 99, pl. 11, fig. 26.

Cedar Lake formation, Middle Silurian, first corner north of Hilbre, Manitoba.

Buxtonia cogmagunensis Bell

Holotype 7442d; paratypes 7442, a-c, 7465

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 118, pl. 18, figs. 13-18.

Upper Windsor, Mississippian, Murphy road 2 miles south of Scotch village and Kennetcook River at junction with Avon River, Hants co., Nova Scotia.

Calvinaria ? *inelegans* McLaren

Holotype 11248

McLaren, D. J.,

1954, "Western Canada Sedimentary Basin", Am. Assoc. Petrol. Geol., p. 178, pl. 1, figs. 19-21.

1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol Geol., p. 198, pl. 7, figs. 22-24.

Perdrix equivalent, Upper Devonian, ridge on south side Winnifred Pass, Alberta.

Camarotoechia acadiensis (Davidson)

Hypotype 4348a

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 122, pl. 19, figs. 3, a, b.

Lower Windsor, Mississippian, Windsor, Nova Scotia.

Camarotoechia allani circularis Brown

Holotype 9175; paratype 9176 (missing)

Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 88, pl. 4, fig. 4.

Rundle formation, Carboniferous, Cobblestone Creek, Mount Greenock area, Alberta.

Camarotoechia allani greenockensis Brown

Holotype 9187; paratypes 9177 (missing), 9179, 10010

Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 89, pl. 4, figs. 1a-c.

Rundle formation, Carboniferous, west of Windy Point, southwest end of Mount Greenock, Alberta.

Camarotoechia ? *argentea* see *Rhynchonella* ? *argentea*

Camarotoechia atlantica Bell

Holotype 7473; paratype 7475

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 122, pl. 9, figs. 1, a, b, 2, a, b.

Upper Windsor, Mississippian, Kennetcook River at junction with Avon River and Cogmagun River above Lower Burlington, Hants co., Nova Scotia.

Camarotoechia banffensis Warren

Holotype 8903

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 51, pl. 4, figs. 7-9.

Minnewanka formation, Upper Devonian, Sulphur Mountain, Alberta.

Camarotoechia banffensis Warren

Hypotype 13796

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 13-15.

Palliser formation, Upper Devonian, Maligne Canyon, Jasper Park, Alberta.

Camarotoechia bimesiornata McLearn

Holotype 5426; paratypes 5427, a, 5428

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 69, pl. 5, figs. 1-5; pl. 30, fig. 9.

Beechhill formation, Lower Silurian, Rory McDonald brook, Arisaig, Nova Scotia.

Camarotoechia (?) *coalescens* Whiteaves

Holotype 4325

Whiteaves, J. F., 1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 272, pl. 25, fig. 7.

Silurian, Winisk River, Ontario.

Camarotoechia cobblestonensis Brown

Holotype 9180; paratypes 9181, 9182

Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 90, pl. 4, figs. 3a-d.

Harker, P. and Raasch, G. O., 1958, "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 8.

Rundle formation, Carboniferous, west of Windy Point, southwest end of Mount Greenock, Alberta.

Camarotoechia dryope see *Rhynchonella dryope*

Camarotoechia ekwanensis Whiteaves

Holotype 4425

Whiteaves, J. F.,

1904, Geol. Surv., Canada, Ann. Rept., n.s., vol. 14, 1901, p. 42F.

1906, ibid., Palæoz. Fossils, vol. 3, pt. 4, p. 252, pl. 25, figs. 4, a, b.

Silurian, portage at falls, Ekwan River, Ontario.

Camarotoechia excellens see *Rhynchonella excellens*

Camarotoechia fringilla see *Rhynchonella fringilla*

Camarotoechia glacialis see *Rhynchonella glacialis*

Camarotoechia glomerosa McLearn

Holotype 5433

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 71, pl. 5, figs. 15-19.

Stonehouse formation, Middle or Upper Silurian, coast section Arisaig, Nova Scotia.

Camarotoechia indianensis (Hall)

Hypotypes 10454, 10455

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 104, pl. 11, figs. 1, 2.

Fisher Branch and Inwood formations, Middle Silurian, Mile 24.5, Churchill branch, CNR and Broad Valley quarry, Manitoba.

Camarotoechia llandoveriana rossonia McLearn

Holotype 5430; paratype 5431

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 70, pl. 5, figs. 12, 13; pl. 10, fig. 9.

Ross Brook formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Camarotoechia marklandensis McLearn

Paratype 5432

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 71, pl. 5, fig. 20.

Stonehouse formation, Middle or Upper Silurian, coast section Arisaig, Nova Scotia.

Camarotoechia neglecta (Hall)

Hypotype 5219

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 11, pl. 7, figs. 10a, b.

Cabot Head formation, Cataract group, Lower Silurian, Eugenia, Ontario.

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Camarotoechia nordeggi Kindle

Syntypes 5821, a

Kindle, E. M., 1924, Pan-Am. Geologist, vol. 42, p. 218, pl. 14, figs. 8-10.

Devonian, Mount Hole-in-the-Wall, 4½ miles northwest of Nordegg, Alberta.

Camarotoechia nucula moydartensis McLearn

Holotype 5429

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 70, pl. 5, figs. 9-11.

Moydart formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Camarotoechia plena (Hall)

Hypotype 13613

Wilson, A. E., 1957, Can. Field-Naturalist, vol. 70, No. 1, pl. 1, figs. 7, 8.

St. Martin formation, Chazy, Middle Ordovician, near L'Orignal, Ontario.

Camarotoechia ? pyrrha see *Rhynchonella pyrrha*

Camarotoechia shimeri Warren

Syntypes 8904, a-c

Warren, P. S., 1929, Geol. Surv., Canada, Mem. 153, p. 52, pl. 4, figs. 5, 6 (8904).

Minnewanka formation, Upper Devonian, Sulphur Mountain, Alberta.

Camarotoechia thedfordensis Whiteaves

Syntypes 3696, a-j, l

Whiteaves, J. F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 386, pl. 48, figs. 11, a, b (3696j).

Hamilton formation, Middle Devonian, Thedford, Ontario.

Camarotoechia vicina see *Rhynchonella vicina*

Camarotoechia (?) *winiskensis* Whiteaves

Syntypes 4198, a

Whiteaves, J. F., 1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 272, pl. 25, figs. 5, 6.

Silurian, Winisk River, Ontario.

Camarotoechia winiskensis Whiteaves

Hypotype 10436

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 104, pl. 11, fig. 7.

Cross Lake member, Cedar Lake formation, Middle Silurian, south channel, Demicharge Rapids, Manitoba.

Camarotoechia sp. E (n. sp.)

Fig. spec. 13797

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 16-18.

Member B, Alexo formation, Upper Devonian, Proposal Mountain south end of Medicine Lake, Jasper Park, Alberta.

Camarotoechia sp.

Fig. specs. 9079, a, b

Hume, G. S., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 62, pl. 13, figs. 1a-d.

Ordovician, North Arm Great Slave Lake, N.W.T.

Camerella antiquata Billings

Holotype 394

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 10, fig. 13.

1861, Geol. Vermont, vol. 2, p. 949, fig. 353.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 10, fig. 13.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 284, fig. 290.

Lower Cambrian, Swanton, Vermont, U.S.A.

Camerella breviplicata Billings

Syntypes 759, a-h

Billings, E.,
1865, "New Species of Lower Silurian Fossils", p. 304, fig. 295.
1865, Geol Surv., Canada, Palæoz. Fossils, vol. 1, p. 304, fig. 295.
Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 565, pl. 115E, figs. 32-34 (holotype 759).

Beekmantown (boulder in Mystic conglomerate), Lower Ordovician, rge. 6, lot. 20, Stanbridge tp., Quebec.

Camerella calcifera Billings

Syntypes 795, a-c, 796, a, b

Billings, E., 1861, Can. Naturalist, vol. 6, p. 319, figs. 3a, b.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 231, figs. 247a, b.

Beekmantown, Lower Ordovician, Philipsburg and Port Levis, Quebec.
=*Syntrophia calcifera,* Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 800, pl. 104, figs. 1, a, b, c, c^1 (lectotype 796a), d (paratype 796), e, e^1 (paratype 795).
=*Clarkella calcifera,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 211, pl. 450, figs. 5, 6.
See *Clarkella* aff. *C. mcgerriglei*

Camerella costata Billings

Holotype 793

Billings, E.,
1865, "New Species of Lower Silurian Fossils", p. 305, fig. 296.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 305, fig. 296.

Beekmantown (Mystic conglomerate), Lower Ordovician, rge. 6, lot 20, Stanbridge tp., Quebec.

Camerella hemiplicata (Hall)

Hypotype 6416

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 118, pl. 11, fig. 4.

Rockland beds, Ottawa formation, Middle Ordovician, Rockland, Ontario.

Camerella lenticularis Billings

Syntypes 2280, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 45.

Upper Ordovician (Ellis Bay formation), Reef Point, Anticosti Island, Quebec.

Camerella longirostra Billings

Holotype 1039

Billings, E., 1859, Can. Naturalist Geol., vol. 4, pp. 302, 445, fig. 23.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 127, figs. 53a-c.
Twenhofel, W. H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 62, pl. 7, figs. 25-27.

Chazy (Mingan formation), Middle Ordovician, Mingan Islands, Quebec.
=*Onychoplecia longirostris,* Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 533, pl. 100A, figs. 1-3.

Camerella ops Billings

Holotype 2515

Billings, E.,
1863, "New Species of Lower Silurian Fossils", p. 148, figs. 128a, b.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 148, figs. 128a, b.

Middle Silurian (Chicotte formation), The Jumpers, Anticosti Island, Quebec.
=*Parastrophia ops,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 201 (holotype 2515).

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Camerella panderi Billings

Syntypes 1149, a-e

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 302.

Logan, W. E. 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 143, figs. 78a, b.

Middle Ordovician (Leray-Rockland beds), Allumette Island, Ottawa River, Quebec.

=*Idiospira panderi*, Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 691.

Camerella panderi Billings

Hypotypes 6812, a

Wilson, A. E., 1932, Can. Field-Naturalist, vol. 46, No. 6, p. 139, pl. 2, figs. 4, 5.

Leray beds, Middle Ordovician, lot 10, con. 8, N. Crosby tp., Ontario.

Camerella panderi Billings

Hypotype 13244

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 118, pl. 11, fig. 2.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Camerella parva Billings

Syntypes 557, a-g

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 219.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 219.

Division P (Table Head series), Middle Ordovician, 4 miles northeast of Portland Creek, Newfoundland.

Camerella polita Billings

Syntypes 745, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 305, fig. 297.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 305, fig. 297.

Beekmantown (Mystic conglomerate), Lower Ordovician, rge. 6, lot 20, Stanbridge tp., Quebec.

Camerella varians Billings

Syntypes 1038, a

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 445, fig. 24.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 127, figs. 52a-d.

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 583, pl. 110, figs. 6, 7 (paratype 1038a), 12-15 (lectotype 1038).

Middle Ordovician (Mingan formation), Mingan Islands, Quebec.

Camerella volborthi Billings

Syntypes 1148, a, b

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 301.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 143, figs. 77a-c.

Schuchert, C. and Cooper, G. A., 1932, Mem. Peabody Mus. Natural Hist., vol. 4, pt. 1, pl. 25, figs. 20, 21, 27, 30.

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 585 (lectotype 1148a; paratype 1148b).

Middle Ordovician (Leray-Rockland beds), Allumette Island, Ottawa River, Quebec.

Camerella volborthi Billings

Hypotype 6417

Schuchert, C. and Cooper, G. A., 1932, Mem. Peabody Mus. Natural Hist., vol. 4, pt. 1, pl. 25, figs. 22, 28, 29.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 119, pl. 11, fig. 3.

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 585, pl. 110c, figs. 8-11.

Black River (Leray-Rockland beds), Middle Ordovician, Paquette Rapids, Ottawa River.

Camerella wiartonensis Bolton

Holotype 11592; paratypes 11599-11602

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, 1957, p. 68, pl. 12, figs. 1, 2.

Wiarton member, Amabel formation, Middle Silurian, top of road-cut, Wiarton, and south of Lions Head village, Ontario.

Catazyga anticostiensis (Billings)

Hypotype 8133

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 215, pl. 20, figs. 10-12.

Vaureal formation, Upper Ordovician, Observation Cliff, Anticosti Island, Quebec.

Catazyga cartieri Cooper and Kindle

Paratype 8867

Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 359, pl. 52, figs. 8, 13.

Whitehead formation, Upper Ordovician, Amphitheatre road, Percé, Quebec.

Catazyga erratica

Hypotypes 6781, 6782

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 130, pl. 15, figs. 6a, b.

Lorraine, Upper Ordovician, Weston and Humber Rivers, Ontario.

Centronella glans-fagea (Hall)

Hypotype 3486f

Billings, E.,

1859, Can. Naturalist Geol., vol. 4, p. 132, figs. 1-3.

1861, Can. J., n.s., vol. 6, p. 271, figs. 97a-c.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 374, figs. 405a-c.

Middle Devonian (Onondaga formation), Haldimand co., Ontario.

Centronella hecate Billings

Syntypes 3571, a-f

Billings, E., 1861, Can. J., n.s., vol. 6, p. 272, figs. 99a (3571f), 99b-d (3571b).

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 374, figs. 403a-d.

Middle Devonian (Onondaga formation), Haldimand co., Ontario.

Charionella circe Billings

Syntype 3567, a, b

Billings, E., 1861, Can. J., n.s., vol. 6, p. 273, fig. 100.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 374, figs. 400a-c.

Middle Devonian (Onondaga formation), Haldimand co., Ontario.

Charionella rostrata see *Athyris* (?) *rostrata*

Chonetes antiopa Billings

Holotype 3276

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 19.

Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 208, pl. 45, fig. 5.

Devonian (Grande Greve formation), Mont Joli, Gaspé, Quebec.

Chonetes canadensis Billings

Syntype 3274

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, pt. 1, p. 17, fig. 7.

Devonian (Grande Greve formation), Percé, Quebec.

Chonetes dawsoni Billings

Syntypes 3275, a-c

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, pt. 1, p. 18, fig. 8.

Devonian (Grande Greve formation), Split Rock, Percé, Quebec.

=*Chonostrophia dawsoni*, Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 240.

Chonetes hemisphericus Hall

Hypotypes 3475, 3476a

Billings, E., 1861, Can. J., n.s., vol. 6, p. 349, figs. 121-123.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 368, figs. 380a-c.

Onondaga formation, Middle Devonian, lot 49, con. 1, Oneida tp., and near Port Colborne, Ontario.

Chonetes logani aurora Hall

Hypotypes 4228, a, b, 4229, a, b

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 215, pl. 29, figs. 2, a, b (4229).

Upper Devonian, Athabasca River, Alberta and Ramparts, Mackenzie River, N.W.T.

Chonetes manitobensis Whiteaves

Syntypes 3910, a-g

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 281, pl. 37, figs. 1, a, 2 (3910, a).

Upper Devonian, north end Manitoba Island, Lake Manitoba, Manitoba.

Chonetes melonica Billings

Syntypes 3273

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, pt. 1, p. 15, figs. 6a-d.

Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 206, pl. 46, fig. 1.

Devonian (Grande Greve formation), Little Gaspé, Quebec.

Chonetes novascoticus Hall

Hypotype 5426

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 65, pl. 5, fig. 36.

Stonehouse formation, Middle or Upper Silurian, coast section Arisaig, Nova Scotia.

Chonetes novascoticus crassiconcentricus McLearn

Holotype 5425

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 66, pl. 5, fig. 37.

Stonehouse formation, Middle or Upper Silurian, Stonehouse field, Arisaig, Nova Scotia.

Chonetes politus M'Coy

Hypotypes 7476, a, b

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 108, pl. 15, figs. 1-3.

Upper Windsor, Mississippian, Murphy road near Hebert River, Hants co., Nova Scotia.

Chonostrophia dawsoni see *Chonetes dawsoni*

Clarkella calcifera see *Camerella calcifera*

Clarkella lobata Ulrich and Cooper
Holotype 9068
Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 213, pl. 45B, fig. 3.
Luke Hill formation, Lower Ordovician, Philipsburg, Quebec.

Clarkella aff. *C. mcgerriglei* Ulrich and Cooper
Hypotype 795c
Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 213, pl. 45E, fig. 8.
Hastings Creek ? formation, Lower Ordovician, Philipsburg, Quebec.

Cleiothyridina lata Shimer
Holotype 4841
Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 71, pl. 4, figs. 1a-c.
Mississippian, Lake Minnewanka, Alberta.

Cliftonia (*Oxoplecia*) *perfecta* Cooper and Kindle
Holotype 8864
Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 358, pl. 51, figs. 25-29.
Whitehead formation, Upper Ordovician, Grande Coupé, Percé, Quebec.

Clintonella bailliei Stearn
Holotype 11031; paratypes 11014, 11015
Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 105, pl. 12, figs. 8-12.
East Arm formation, Middle Silurian, Mile 5.5, Churchill branch CNR, Manitoba.

Clitambonites ottawaensis Wilson
Holotype 13240; paratype 13241
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 114, pl. 3, figs. 33, 34.
Cobourg beds, Ottawa formation, Middle Ordovician, Research Council laboratories, Sussex Street, Ottawa, Ontario.

Clitambonites ? *parva* Wilson
Holotype 6602; paratype 6603
Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 383, pl. 2, figs. 8-10.
Upper Chazy (Aylmer formation), Middle Ordovician, core from Barnhart Island near Cornwall, Ontario.

Clitambonites porcia see *Orthis porcia*

Clitambonites trentonensis Raymond
Holotype 1612b (missing)
Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 27, pl. 8, figs. 6, 7.
Trenton, Middle Ordovician, Jessop Rapids, Bonnechère River, Ontario.
=*Vellamo trentonensis*, Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 115, pl. 3, fig. 31.

Coelospira planoconvexa (Hall)
Hypotypes 4518, a
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 6, figs. 5a-c.
Manitoulin formation, Lower Silurian, east side Lake Manitou, lot 17, con. 3, Assiginack tp., Manitoulin Island, Ontario.

Coenothyris petriana McLearn
Holotype 9141
McLearn, F. H., 1937, Can. Field-Naturalist, vol. 51, No. 7, p. 95, pl. 1, fig. 1.
Schooler Creek formation, Triassic, Beattie hill, Peace River district, British Columbia.

Coenothyris silvana McLearn

Holotype 9142

McLearn, F. H.,

1937, Can. Field-Naturalist, vol. 51, No. 7, p. 96, pl. 1, fig. 3.

1947, Geol. Surv., Canada, Paper 47-24, Appendix, pl. 7, fig. 5

Schooler Creek formation, Triassic, Beattie hill, Peace River district, British Columbia.

Composita athabaskensis esplanadensis Brown

Holotype 9208; paratypes 9209, 9210

Brown, R.A.C., 1952, Geol. Surv., Canada, Mem. 264, p. 104, pl. 5, figs. 2a, b.

Rundle formation, Carboniferous, Cobblestone Creek, Mount Greenock area, Alberta.

Composita dawsoni (Hall and Clarke)

Hypotypes 7501, a-f

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 132, pl. 20, figs. 16-23.

Lower Windsor, Mississippian, Maxner point, Windsor, Nova Scotia.

Composita immatura (Girty)

Hypotype 10008

Brown, R.A.C., 1952, Geol. Surv., Canada, Mem. 264, p. 105, pl. 4, figs. 4a, b.

Banff formation, Carboniferous, south end Esplanade Mountain, Jasper Park, Alberta.

Composita obligata Bell

Holotype 7526b; paratypes 7526, a

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 135, pl. 20, fig. 26; pl. 21, figs. 1, a, b, 2, a.

Upper Windsor, Mississippian, Cogmagun River, Nova Scotia.

Composita offirmata Bell

Holotype 7507

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 136, pl. 20, figs. 24, a-d.

Lower Windsor, Mississippian, Brookfield, Colchester co., Nova Scotia.

Composita strigata Bell

Holotype 7510b; paratypes 7510, a, 7511

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 134, pl. 21, figs. 3-6.

Upper Windsor, Mississippian, Brookfield and Stellarton, Nova Scotia.

Composita windsorensis Bell

Holotype 7516; paratypes 7514, a, 7515, a, b, 7516a, b

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 133, pl. 21, figs. 7-10, 12, 14-16.

Lower Windsor, Mississippian, Miller quarry, Dominion Atlantic railway bridge, and Maxner point, Windsor, Nova Scotia.

Composita windsorensis incisa Bell

Holotype 7518; paratypes 7512, 7516c, 7517

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 134, pl. 21, figs. 11, 13, 17, 18.

Lower Windsor, Mississippian, Miller quarry and Maxner point, Windsor, and Brookfield, Nova Scotia.

Conchidium decussatum (Whiteaves)

Hypotypes 4397, a-e

Kindle, E. M., 1915, Geol. Surv., Canada, Mus. Bull. 21, pl. 3, figs. 1-6; pl. 4, figs. 1-4.

Middle Silurian (Fisher Branch formation), overflow channel, Grand Rapids, Saskatchewan River, Manitoba.

See *Pentamerus decussatus*

Conchidium decussatum (Whiteaves) var. a

Hypotypes 4394 (missing), a

Kindle, E. M., 1915, Geol. Surv., Canada, Mus. Bull. 21, p. 16, pl. 2, figs. 3, 4.

Middle Silurian (Fisher Branch formation), overflow channel, Grand Rapids, Saskatchewan River, Manitoba.

Conchidium decussatum (Whiteaves) var. b

Hypotype 4395

Kindle, E .M., 1915, Geol. Surv., Canada, Mus. Bull. 21, p. 16, pl. 2, fig. 5.

Middle Silurian (Fisher Branch formation), overflow channel, Grand Rapids, Saskatchewan River, Manitoba.

Conchidium decussatum (Whiteaves) var. c

Hypotype 4396

Kindle, E. M., 1915, Geol. Surv., Canada, Mus. Bull. 21, p. 16, pl. 2, fig. 6.

Middle Silurian (Fisher Branch formation), overflow channel, Grand Rapids, Saskatchewan River, Manitoba.

Cornwallia minuta Wilson

Holotype 6609

Wilson, A. E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 388, pl. 4, fig. 4.

1946, Geol. Surv., Canada, Bull. 8, p. 32, pl. 1, fig. 17.

Upper Cobourg beds, Middle Ordovician, Indian Lands, con. 3, Kenyon tp., Ontario.

Cranaena tumida Bell

Holotype 7504; paratypes 7502, 7503,a, 7756

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 148, pl. 24, figs. 11-16.

Lower Windsor, Mississippian, McDonald quarry, Brookfield, Miller quarry and near Dominion Atlantic railway bridge, Windsor, Nova Scotia.

Crania bella Billings

Syntypes 3193, a

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, pt. 1, p. 15, fig. 5.

Devonian (St. Albans formation), Cape Bon Ami, Gaspé, Quebec.

=*Orbiculoidea bella,* Clarke, J. M., 1908, Mem. N. Y. State Mus., vol. 9, pt. 1, p. 116, pl. 47, figs. 17, 18.

Crania brookfieldensis Bell

Holotype 7438

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 106, pl. 14, fig. 3.

Lower Windsor, Mississippian, Brookfield, Nova Scotia.

Crania cincta Bell

Holotype 7441

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 105, pl. 14, fig. 2.

Upper Windsor, Mississippian, Murphy road at Hebert River, Hants co., Nova Scotia.

Cyclospira bisulcata (Emmons)

Hypotype 6422

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 123, pl. 11, figs. 1a, b.

Sherman Fall beds, Ottawa formation, Middle Ordovician, behind axe factory, Hull, Quebec.

Cyclospira glansfagea Cooper and Kindle

Paratype 8866

Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 359.

Whitehead formation, Upper Ordovician, Priest's road, Percé, Quebec.

Cyrtia myrtea Billings

Syntypes 2522, a-e

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 165, figs. 149a-c.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, pt. 4, p. 165, figs. 149a-c.

Middle Silurian (Chicotte formation), Southwest Point, Anticosti Island, Quebec.

=*Cyrtia exporrecta myrtea*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 219, pl. 20, figs. 13, 14 (holotype 2522e).

Cyrtia standlyensis Shimer

Holotype 4663

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 62, pl. 1, figs. 2a-e.

Upper Devonian, Lake Minnewanka area, Alberta.

Cyrtina affinis Billings

Syntype 3306

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 49, pl. 3A, figs. 6, a, b.

Devonian (Grande Greve formation), Grande Greve, Gaspé, Quebec.

Cyrtina billingsi symmetrica Kindle

Syntypes 5593, a, b

Kindle, E. M., 1927, Geol. Surv., Canada, Mus. Bull. 49, p. 17.

Upper Devonian, Peace Point, Alberta.

Cyrtina extensa Bolton

Holotype 11593; paratype 11070

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, 1957, p. 71, pl. 12, figs. 3-6.

Wiarton member, Amabel formation, Middle Silurian, top of road-cut, Wiarton, and road-cut south of Lions Head village, Ontario.

Cyrtina glabra Kindle

Holotype 7968

Kindle, E. M., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 4, pl. 1, figs. 1-3.

Simpson shale, Upper Devonian, east bank of Mackenzie River 5 miles above Rabbitskin River, N. W. T.

Cyrtina cf. *C. inulta* Stainbrook

Hypotype 13814

McLaren, D. J., 1958, Guide Book, 8th Field Conference, Alberta Soc. Petrol. Geol., p. 198, pl. 7, figs. 19-21.

Mount Hawk formation, Upper Devonian, north side North Ram River gap, Front Range, Alberta.

Cyrtina lewesensis Lees

Syntypes 9619, a

Lees, E. J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 35, pl. 1, figs. 14-16.

Lewes River formation, Triassic, Laberge area, Yukon.

Cyrtiopsis normandvillana Crickmay

Hypotype 13794

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 7-9.

Palliser formation, Upper Devonian, lat. 53°40′, long. 119°15′, Winnifred Pass, Alberta.

Cyrtiopsis cf. *C. prepta* (Crickmay)

Hypotype 13799

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 21-23.

Member A, Alexo formation, Upper Devonian, ridge between Beaver and Medicine Lakes, Jasper Park, Alberta.

Cyrtospirifer ex gr. *C. whitneyi* (Hall)
Holotype 13810
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 198, pl. 7, figs. 3-6.
Mount Hawk formation, Upper Devonian, eastern fault block, Job Creek, Alberta.

Dalmanella conservatrix McLearn
Holotype 6205; holoplastotype 6205a; paratypes 6206, 6207; paraplastotypes 6206a, 6207a
McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 52, pl. 2, figs. 24-26.
Ross Brook formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Dalmanella elegantula submedia McLearn
Holotype 6208; holoplastotype 6208a
McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 53, pl. 3, figs. 3, 4.
McAdam formation, Middle Silurian, McAdam brook, Arisaig, Nova Scotia.

Dalmanella eugeniensis Williams
Syntypes 4521, a, b, 4522, a, 5218
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 118, pl. 7, figs. 1-6.
Manitoulin and Cabot Head formations, Lower Silurian, Lavender Falls and Eugenia, Ontario.

Dalmanella eugeniensis palaeoelegantula Williams
Syntypes 4609, a
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 118, pl. 7, figs. 7, 8.
Cabot Head formation, Lower Silurian, Eugenia, Ontario.

Dalmanella evadne see *Orthis evadne*

Dalmanella lucia see *Orthis lucia*

Dalmanella lunata (Sowerby)
Hypotype 5408
McLearn, F. H., Geol. Surv., Canada, Mem. 137, p. 55, pl. 4, fig. 6.
Stonehouse formation, Middle Silurian, Arisaig, Nova Scotia.

Dalmanella manitoulinensis Foerste
Syntypes 8526, a-d
Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 109, pl. 11, fig. 2.
Richmond, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Dalmanella millepunctata Wilson
Holotype 6610
Wilson, A. E.,
1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 389, pl. 4, figs. 5, 6.
1946, Geol. Surv., Canada, Bull. 8, p. 37, pl. 2, figs. 20a, b.
Cobourg beds, Ottawa formation, Middle Ordovician, 1 mile east of Strathmore, con. 1, Roxborough tp., Ontario.

Dalmanella orbicularis (Sowerby)
Hypotype 5409; hypoplastotype 5409a
McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 56, pl. 4, fig. 7.
Stonehouse formation, Middle or Upper Silurian, Stonehouse field, Arisaig, Nova Scotia.

Dalmanella resupinata Raymond
Holotype 3241; paratype 3241a
Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 16, pl. 5, figs. 7-10.
Black River?, Middle Ordovician, north end Grand Island, Balsam Lake, Ontario.

Dalmanella rogata (Sardeson)
Hypotype 6390
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 38, pl. 2, fig. 21.
Leray beds, Ottawa formation, Middle Ordovician, quarry west of L'Orignal, Ontario.

Dalmanella ruida see *Orthis ruida*

Dalmanella storeya Okulitch

Holotype 1362; paratypes 1362a, b

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, p. 70, pl. 1, figs. 1-4.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Dalmanella whittakeri Raymond

Holotype 3240; paratype 3240a

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 16, pl. 5, figs. 11-14.

Prasopora bed, Trenton, Middle Ordovician, Peterborough, Ontario.

Dalmanella (?) sp.

Fig. specs. 10446, 10447

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 94, pl. 11, figs. 5, 6.

Fisher Branch formation, Middle Silurian, sec. 8, tp. 25, rge. 2 and sec. 16, tp. 32, rge. 6, W. Prin. mer., Manitoba.

Delthyris rugaecosta (Hall)

Hypotypes 3095, a, c

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 82, pl. 8, fig. 31; pl. 9, figs. 1-3.

Stonehouse formation, Middle or Upper Silurian, Arisaig, Nova Scotia.

Devonoproductus vulgaris Stainbrook

Hypotype 13806

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, fig. 6.

Mount Hawk formation, Upper Devonian, eastern fault block, Job Creek, Alberta.

Diaphragmus tenuicostiformis (Beede)

Hypotypes 7460, 7943, a-d, k, 7944, a, 7945, 7946, 7960b

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 119, pl. 18, figs. 1-11.

Lower Windsor, Mississippian, Miller quarry, Windsor, Nova Scotia.

Dielasma davidsoni (Hall and Clarke)

Hypotypes 7485-7487, 7674, 7754

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 144, pl. 23, figs. 8, 15-18.

Lower Windsor, Mississippian, Miller quarry, near Dominion Atlantic railway bridge, Maxner point, Windsor, and Brookfield, Nova Scotia.

Cf. *Dielasma julicum* (Bittner)

Hypotype 9616

Lees, E. J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 33, pl. 1, figs. 2-5.

Lewes River formation, Triassic, Laberge area, Yukon.

Dielasma latum Bell

Syntypes 7491, 7673; paratypes 4340, 7488, 7491a (missing)

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 146, pl. 23, figs. 5, 13, 14; pl. 24, figs. 2, 3.

Lower Windsor, Mississippian, near Dominion Atlantic railway bridge, Maxner point, Windsor, and Boisdale hill, Cape Breton, Nova Scotia.

Dielasma latum gibbosum Bell

Holotype 7492; paratype 7500

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 147, pl. 24, figs. 1, 4.

Lower Windsor, Mississippian, Maxner point, Windsor, and Boisdale hill, Cape Breton, Nova Scotia.

Dielasma mesaplanum Bell

Holotype 7495; paratypes 7495a (missing), 7496, 7551

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 148, pl. 23, figs. 6, 7, 11, 12.

Lower Windsor, Mississippian, Maxner point, near Dominion Atlantic railway bridge, and Miller quarry, Windsor, Nova Scotia.

Dielasma milviformis Bell

Holotype 7494c; paratypes 7493, 7494, b, 7497, 7755

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 147, pl. 24, figs. 5-10.

Lower Windsor, Mississippian, Maxner point, Miller quarry, and near Dominion Atlantic railway bridge, Windsor, Nova Scotia.

Dielasma suttonense (Clapp and Shimer)

Hypotypes 9617, a

Lees, E. J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 33, pl. 1, figs. 6-10.

Lewes River formation, Triassic, Laberge area, Yukon.

Dinobolus canadensis see *Obolus canadensis*

Dinobolus erectus Wilson

Holotype 6301

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 17, pl. 1, fig. 25.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Fourth Chute of Bonnechère River, Renfrew co., Ontario.

Dinobolus magnificus see *Obolus canadensis*

Dinorthis browni Wilson

Holotype 1620; paratype 6391

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 39, pl. 4, figs. 18, 19.

Trenton, Middle Ordovician, Belleville; Hull or Sherman Fall beds, Ottawa formation, Middle Ordovician, 4 miles west of L'Orignal, Ontario.

Dinorthis calderi Wilson

Holotype 13223

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 40, pl. 4, figs. 16a-c.

Sherman Fall beds, Ottawa formation, Middle Ordovician, 1 mile west of Finch, Ontario.

Dinorthis carletona Twenhofel

Holotype 2030k

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 182, pl. 16, figs. 5, 6, 8.

English Head formation, Upper Ordovician, Carleton Point, Anticosti Island, Quebec.

Dinorthis columbia Wilson

Holotype 6752; paratypes 6752a-c

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 25, pl. 5, figs. 7-10.

Beaverfoot formation, Upper or Lower Ordovician, east of Palliser Pass, British Columbia.

Dinorthis dubia Wilson

Holotype 13224

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 40, pl. 4, fig. 20.

Hull ? beds, Ottawa formation, Middle Ordovician, Murray quarry, L'Original, Ontario.

Dinorthis iphigenia see *Orthis iphigenia*

Dinorthis iphigenia media Wilson

Holotype 6392; paratype 6392a

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 41, pl. 4, figs. 1, 2.

Sherman Fall ? beds, Ottawa formation, Middle Ordovician, Jessops Rapids, Bonnechère River, Ontario.

Dinorthis iphigenia minor Wilson

Holotype 6393; paratype 6393a

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 42, pl. 4, figs. 3, 4.

Cobourg beds, Ottawa formation, Middle Ordovician, lot 1, con. 8, Cornwall tp., Ontario.

Dinorthis meedsi germana (Winchell and Schuchert)

Hypotype 6405

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 42, pl. 4, fig. 6.

Cobourg beds, Ottawa formation, Middle Ordovician, lot 1, con. 8, Cornwall tp., Ontario.

Dinorthis meedsi plana Wilson

Holotype 6395

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 43, pl. 4, figs. 5a-c.

Cobourg beds, Ottawa formation, Middle Ordovician, old limekiln, Rochester Street, Ottawa, Ontario.

Dinorthis ottawaensis Wilson

Holotype 6398

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 43, pl. 4, fig. 17.

Cobourg beds, Ottawa formation, Upper Ordovician, lot 23, con. 7, Roxborough tp., Ontario.

Dinorthis pectinella (Emmons)

Hypotypes 6399, 13225

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 43, pl. 4, figs. 12, 13.

Sherman Fall and Hull ? beds, Ottawa formation, Middle Ordovician, Castor River 1 mile east of Embrun and Murray quarry, L'Orignal, Ontario.

Dinorthis regularis Wilson

Holotype 6402

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 44, pl. 4, fig. 15.

Sherman Fall beds, Ottawa formation, Middle Ordovician, Aux Raisins River just east of Black River station, Ontario.

Dinorthis rockymountana Wilson

Holotype 6753; paratypes 6753a, b

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p.26, pl. 5, figs. 11-14.

Beaverfoot formation, Upper or Lower Ordovician, ½ to ¾ mile east of Palliser Pass, British Columbia.

Dinorthis strathmoria Wilson

Holotype 6611

Wilson, A. E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 391, pl. 4, figs. 7, 8.

1946, Geol. Surv., Canada, Bull. 8, p. 45, pl. 4, figs. 8a, b.

Cobourg beds, Ottawa formation, Middle Ordovician, 1 mile east of Strathmore, Ontario.

Dinorthis subquadrata (Hall)

Hypotype 6403

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 45, pl. 4, figs. 7a, b.

Hull beds, Ottawa formation, Middle Ordovician, Robillard quarries east of Ottawa, Ontario.

Dinorthis subquadrata alternata see *Orthis subquadrata*

Discina circe Billings

Holotype 1654

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 51, fig. 55.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, pt. 2, p. 51, fig. 55.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 159, fig. 125.

Trenton, Middle Ordovician, Belleville, Ontario.

Discina pelopea Billings

Holotype ? 1656

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 52, fig. 56.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, pt. 2, p. 52, fig. 56.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 159, fig. 124.

Trenton, Middle Ordovician, Montreal, Quebec.

Discina semipolita Whiteaves

Syntypes 4865, a-g

Whiteaves, J. F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, p. 252, pl. 33, figs. 9, a (1900).

Cretaceous (Maude formation, Lower Jurassic), south side Maude Island, Queen Charlotte Island, British Columbia.

Doleroides gibbosus (Billings)

Hypotype 6409

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 49, pl. 3, figs. 27a, b.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, lot 3, con. 3, R. F., Gloucester tp., Ontario.

Doleroides pervetus ottawanus Wilson

Holotype 6727; paratypes 6727a, b, 13499

Wilson, A. E.,
1932, Can. Field-Naturalist, vol. 46, No. 6, p. 136, pl. 1, figs. 3-5a, b; pl. 2, figs. 14, 15.
1946, Geol. Surv., Canada, Bull. 8, p. 49, pl. 3, figs. 28, 29 (paratypes 6727a, b).

Leray beds, Middle Ordovician, Rockland, and Merivale Road quarry, Ottawa, Ontario.

Dolerorthis redrockensis Stearn

Holotype 10434; paratypes 11035, 11036, 11049

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 93, pl. 12, figs. 28, 29, 31.

East Arm formation, Middle Silurian, Redrock Rapids and ¼ mile east of Orok, Manitoba.

Douvillinaria sp.

Fig. spec. 13804

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, figs. 3, 4.

Mount Hawk formation, Upper Devonian, North Ram River gap, north side, Front Range, Alberta.

Drepanorhyncha ottawaensis see *Porambonites* ? *ottawaensis*

Eatonia peculiaris (Conrad)

Hypotype 3296

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 40, pl. 3A, figs. 2, a-c.

Devonian (Grande Greve formation), Indian Cove, Gaspé, Quebec.

Eatonia variabilis Whiteaves

Syntypes 4272, a-h, j-l, n, o

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 233, pl. 29, figs. 6-9 (4272, a-c).

Upper Devonian, 40 miles above mouth Hay River, N.W.T.

Eatonioides lamellornatus McLearn

Holotype 5435; paratype 5434; paraplastotypes 5434a, b

McLearn, F. H.,

1918, Am. J. Sci., vol. 45, p. 138.

1924, Geol. Surv., Canada, Mem. 137, p. 75, pl. 7, figs. 22-26; pl. 8, figs. 34, 35; pl. 30, fig. 1.

Moydart formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Ectenoglossa ? *lyelli* see *Lingula lyelli*

Ectenoglossa nympha (Billings)

Hypotype 11295

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 64, pl. 2, fig. 6.

Chazy ?, Middle Ordovician, Cap a l'Aigle, Quebec.

See *Lingula nympha.*

Ectenoglossa philomela (Billings)

Hypotype 11296

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 63.

Middle Trenton, Middle Ordovician, Montmorency River, Quebec.

See *Lingula philomela*

Eichwaldia subtrigonalis Billings

Syntypes 1145, a-g; hypotype 6418

Billings, E.,

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 192, figs. 24a-e.

1858, Can. Naturalist Geol., vol. 3, p. 443, fig. 24a-e.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 142, figs. 76a-e.

Hall, J. and Clarke, J. M., 1893, Pal. N.Y., vol. 8, pt. 2, p. 310, figs. 241, 242; pl. 83, figs. 1-4 (1145g, a).

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 120, pl. 8, figs. 6-9 (holotype 1145a; paratypes 1145, b-g).

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 947, pl. 163A, fig. 6.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Allumette Island, Ottawa River, Quebec.

Eleutherokomma sp.

Fig. specs. 13815, 13816

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 198, pl. 7, figs. 28-30.

Perdrix formation, Upper Devonian, north side of the Gap, Brazeau Range, Alberta.

Elkania alaskensis Ulrich and Cooper

Syntypes 9121, a-e

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 59, pl. 31D, figs. 8-12; text fig. 1.

Lower Ordovician (?), Squaw Mountain north of Tatonduk River, Yukon-Alaska boundary.

Elkania ida see *Obolella ida*

Emanuella meristoides (Meek)
Hypotype 13824
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 200, pl. 8, figs. 21-24.
Upper Flume formation, Upper Devonian, ridge between Beaver and Medicine Lakes, Jasper Park, Alberta.

Eoorthis ochus Walcott
Hypotypes 9369, a
Kindle, C. H., 1929, Can. Field-Naturalist, vol. 43, No. 7, p. 145, figs. 1, 2.
Upper Cambrian, Swift's ranch, 7 miles north of Jasper, Alberta.

Eoorthis cf. *ochus* Walcott
Hypotypes 9371, a
Kindle, C. H., 1929, Can. Field-Naturalist, vol. 43, No. 7, p. 145, figs. 4, 5.
Upper Cambrian, Swift's ranch, 7 miles north of Jasper, Alberta.

Eoorthis ochus concentrica Kindle
Holotype 9370
Kindle, C. H., 1929, Can. Field-Naturalist, vol. 43, No. 7, p. 145, fig. 3.
Upper Cambrian, Swift's ranch, 7 miles north of Jasper, Alberta.

Eridorthis rocklandensis Wilson
Holotype 6387; paratype 6389
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 36, pl. 3, figs. 17a-c, 18.
Leray beds, Ottawa formation, Middle Ordovician, Stewart quarry, Rockland, Ontario.

Eumetria osagensis (Swallow)
Hypotype 9205
Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 106, pl. 5, fig. 3.
Banff formation, Carboniferous, Windy Point, Mount Greenock, Alberta.

Eunella attenuata Whiteaves
Syntypes 3788, a-g
Whiteaves, J. F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 389, figs. 4a, b (3788).
Hamilton formation, Middle Devonian, Thedford, Ontario.

Eunella sullivanti see *Terebratula sullivanti*

Fardenia costatula Cooper and Kindle
Syntype 8860
Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 357.
Whitehead formation, Upper Ordovician, Amphitheatre road, Percé, Quebec.

Fardenia elegans (Prouty)
Hypotype 10459
Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 101, pl. 10, fig. 5; pl. 11, fig. 4.
Moose Lake formation, Middle Silurian, west shore Moose Lake, Manitoba.

Fardenia ellipsoides Stearn
Holotype 10460; paratypes 10461, 10462, 10465
Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 102, pl. 11, figs. 12-15.
Atikameg and Inwood formations, Middle Silurian, Dunsekikan Island, Lake St. Martin; l.s. 9, sec. 28, tp. 23, rge. 2, W. Prin. mer.; and 1.7 miles west of Sandridge, Manitoba.

Fardenia transversalis Stearn
Holotype 10450; paratype 11032
Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 103, pl. 12, figs. 18-20.
Inwood formation, Middle Silurian, l.s. 5, sec. 16, tp. 48, rge. 13, W. Prin. mer., Manitoba.

Fenestriorostra glacialis see *Rhynchonella glacialis*

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Finkelnburgia armanda (Billings)
Hypotypes 9060, a, b
Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 133, pl. 23B, figs. 10, 12, 15, 17.
Luke Hill formation, Lower Ordovician, 1 mile southeast of Philipsburg, Quebec.
See *Orthis ? armanda*

Finkelnburgia philipsburgensis see *Orthis ? armanda*

Gaspesia aurelia see *Orthis aurelia*

Gigantoproductus brazerianus (Girty)
Hypotype 13446
Harker, P. and Raasch, G. O., 1958, "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 5.
Upper part of Rundle group, Mississippian, Mount Norquay, Banff, Alberta.

Glassia variabilis Whiteaves
Syntypes 4326, a, b
Whiteaves, J. F.,
1904, Geol. Surv., Canada, Ann. Rept., n.s., vol. 14, 1901, p. 42F.
1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 273, pl. 26, figs. 3-5.
Silurian, Winisk River, Ontario.

Glassia variabilis Whiteaves
Hypotypes 4431, a, b
Whiteaves, J. F., 1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 277, pl. 26, figs. 7-9.
Silurian, rapids on Fawn River, Ontario.

Glyptorthis bellarugosa (Conrad)
Hypotypes 13222, a, b
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 35, pl. 3, figs. 13-15.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

Glyptorthis insculpta manitoulinensis Foerste
Holotype 6784
Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 111, pl. 5, fig. 7.
Meaford formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Glyptotrophia jasperensis (Kindle)
Hypotypes 9119, a-d
Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 202, pl. 41E, figs. 21, 22, 24, 26, 27.
Mons formation, Lower Ordovician, Jubilee Mountain, Alberta.

Greenockia snaringensis Brown
Holotype 9183; paratypes 9187-9190, 10009
Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 91, pl. 4, figs. 2a-f.
Banff formation, Carboniferous, Windy Point, Mount Greenock, Alberta.

Grunewaldtia americana Stainbrook
Hypotype 13809
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 198, pl. 7, figs. 1, 2.
Mount Hawk formation, Upper Devonian, Roche Miette, Jasper Park, Alberta.

Gypidula cf. *G. cornuta* Fenton and Fenton
Hypotype 13801
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 27-29.
Mount Hawk formation, Upper Devonian, Winnifred Pass, Alberta.

Gypidula galeata var. see *Pentamerus galeatus* var.

Hartella dielasmoidea Bell

Holotype 7499b; paratypes 7499, a

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 151, pl. 24, figs. 19-21.

Lower Windsor, Mississippian, Maxner point, Windsor, Nova Scotia.

Hartella gibbosa Bell

Holotype 7505; paratypes 7506, 7508, 7509

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 150, pl. 24, figs. 22-25.

Upper Windsor, Mississippian, Avon River bridge, Windsor; near Dimock Station wharf; Murphy road, Hants co.; old limekiln road near Brookfield, Nova Scotia.

Hartella parva Bell

Holotype 7498 (missing); paratype 7498a (missing)

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 150, pl. 24, figs. 17, a, b, 18.

Lower Windsor, Mississippian, first creek south of Summerville, Hants co., Nova Scotia.

Hebertella imperator (Billings)

Hypotype 6527

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 381, pl. 2, figs. 1, 2.

Upper Chazy (Aylmer formation), Middle Ordovician, shaft Barnhart Island near Cornwall, Ontario.

Hebertella latistriata Wilson

Holotype 6524; paratypes 6524a, 6525

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 380, pl. 2, figs. 4-7.

Upper Chazy (Aylmer formation), Middle Ordovician, shaft Barnhart Island near Cornwall, Ontario.

=*Mimella latistriata,* Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 478.

Hebertella maria parkensis Foerste

Hypotype 9095

Hume, G. S., 1925, Geol., Surv., Canada, Mem. 145, pl. 4, figs. 5a-c.

Liskeard formation, Ordovician, Lake Timiskaming area, Ontario.

Hebertella occidentalis Hall

Hypotype 8439

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 110, pl. 5, fig. 5.

Upper Ordovician, Nicolet River, Quebec.

Hebertella pulchella Wilson

Holotype 6563; paratypes 6564, 6601

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 381, pl. 1, figs. 5-8.

Upper Chazy (Aylmer formation), Middle Ordovician, shaft Barnhart Island near Cornwall, Ontario.

Hesperonomia ? eudocia see *Orthis eudocia*

Hesperorthis davidsoni (Verneuil)

Hypotype 10437

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 93, pl. 11, fig. 3.

Cedar Lake formation, Middle Silurian, Fort Island, Cedar Lake, Manitoba.

Hesperorthis tricenaria (Conrad)

Hypotype 1151c

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 34, pl. 2, figs. 19a-c.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River.

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Hindella prinstana (Billings)
Hypotype 2285
Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 220, pl. 22, figs. 12, 13.
Ellis Bay formation, Upper Ordovician, Junction Cliff, Anticosti Island, Quebec.

Hindella umbonata (Billings)
Hypotype 2284
Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 221, pl. 20, figs. 21-23.
Ellis Bay formation, Upper Ordovician, Junction Cliff, Anticosti Island, Quebec.

Holtedahlina sulcata see *Strophomena sulcata*

Holtedahlina sulcata moniquensis Foerste
Holotype 8519
Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 124, pl. 11, fig. 7.
Upper Ordovician, Snake Island, Lake St. John, Quebec.

Holtedahlina varensis Foerste
Holotype 8572
Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 124, pl. 11, fig. 6.
Upper Ordovician, 1 mile northwest of Vars, Ontario.

Homeospira lowi (Whiteaves)
Hypotypes 10456, 11013, 11019, 11020
Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 107, pl. 12, figs. 14-17.
Atikameg formation, Middle Silurian, narrows of Cross Lake and 1 mile southwest of Atikameg Lake Station, Manitoba.

Homoeospira apriniformis Hall
Hypotype 5127
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 20, figs. 4a, b.
'Lockport' formation, Middle Silurian, plateau east of Sandfield, Manitoulin Island, Ontario.

Huenella jasperensis Kindle
Holotype 9374
Kindle, C. H., 1929, Can. Field-Naturalist, vol. 43, No. 7, p. 146, fig. 10.
Upper Cambrian, Swift's ranch 7 miles north of Jasper, Alberta.
See *Glyptotrophia jasperensis*

Hyattidina congesta junea see *Athyris junia*

Hypothyridina emmonsi (Hall and Whitfield)
Hypotype 13808
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, figs. 10-12.
Mount Hawk formation, Upper Devonian, Winnifred Pass, Alberta.

Hypothyridina sp. B
Fig. spec. 13807
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, figs. 7-9.
Mount Hawk formation, Upper Devonian, Winnifred Pass, Alberta.

Idiospira panderi see *Camerella panderi*

Indospirifer orestes (Hall and Whitfield)
Hypotype 13811
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 198, pl. 7, figs. 7-10.
Mount Hawk formation, Upper Devonian, eastern fault block, Job Creek, Alberta.

Iphidea logani Walcott
Holotype 382
Walcott, C. D., 1897, Proc. U.S. Nat. Mus., vol. 19, p. 711, pl. 59, figs. 2, a, b.
Middle ? Cambrian, Trois Pistoles, Quebec.
=*Micromitra (Paterina) logani*, Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 350, pl. 2, figs. 6, a, b.

Kingena occidentalis Whiteaves
Holotype 5874
Whiteaves, J. F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 404, pl. 51, figs. 7, a.
Upper Cretaceous, Trent River, Vancouver Island, British Columbia.

Kullervo pyramidata Cooper and Kindle
Syntype 8857
Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 353, pl. 51, fig. 2.
Whitehead formation, Upper Ordovician, Grande Coupe, Percé, Quebec.

Ladogia kakwaensis (McLaren)
Hypotype 13819
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 200, pl. 8, figs. 1, 2.
Flume equivalent, Upper Devonian, Kakwa Lake, British Columbia.

Leiorhynchus athabascensis Kindle
Syntypes 5819, a-d
Kindle, E. M., 1924, Pan-Am. Geologist, vol. 42, p. 217, pl. 14, figs. 1-3.
Devonian, Roche à Perdrix, Jasper Park, Alberta.

Leiorhynchus cascadense Warren
Syntypes 8905, a
Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 53, pl. 4, figs. 10-12.
Minnewanka formation, Upper Devonian, Cascade Mountain, Alberta.

Leiorhynchus glaber Kindle
Syntypes 5820, a
Kindle, E. M., 1924, Pan-Am. Geologist, vol. 42, p. 218, pl. 14, figs. 4-7.
Devonian, Roche à Perdrix, Jasper Park, Alberta.

Leptaena affinis Wilson
Holotype 13232
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 53, pl. 3, fig. 19.
Cobourg ? beds, Ottawa formation, Middle Ordovician, Governor Bay, Ottawa, Ontario.

Leptaena ? *ceres* see *Strophomena ceres*

Leptaena decipiens Billings
Syntypes 743, a-c
Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 74, figs. 67a-c.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 74, figs. 67a-c.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 231, figs. 243a-c.
Levis formation, Lower Ordovician, Point Levis, Quebec.
=*Leptellina* ? *decipiens*, Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 191, pl. 39F, figs. 13-15.

Leptaena ? *diminuta* Wilson
Holotype 13233; paratype 6412
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 53, pl. 3, figs. 20, 21a, b.
Cobourg beds, Ottawa formation, Middle Ordovician, Research Council laboratories, Sussex Street, and corner Spadina and Somerset Streets, Ottawa, Ontario.

Leptaena julia see *Strophomena julia*

Leptaena moniquensis Foerste

Syntypes 8558, a-c, 8559, a, b, 8560, a-h (missing)

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 116, pl. 14, figs. 2, 3, a-c.

Upper Ordovician, Don Valley brickyards, Toronto, Ontario; Nicolet River and Petite Caroline, 2½ miles northeast of Rougemont, Quebec.

Leptaena ? nitens see *Strophomena nitens*

Leptaena parvula Kindle

Syntypes 4321, 4322, a, 4323

Kindle, E. M., 1915, Geol. Surv., Canada, Mus. Bull. 21, p. 14, pl. 1, figs. 5-9.

Middle Silurian, 8 miles west of Gypsumville and east end Cedar Lake, Chemahawin, Manitoba.

Leptaena rhomboidalis (Wilckens)

Hypotype 4520

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 6, fig. 6.

Manitoulin formation, Lower Silurian, Blue Mountain 5 miles west of Collingwood, Ontario.

Leptaena rhomboidalis (Wilckens)

Hypotype 5415

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 59, pl. 4, fig. 14.

Beechhill formation, Lower Silurian, Beechhill Cove, Nova Scotia.

Leptaena sinuosus Kindle

Syntypes 4320, a-c

Kindle, E. M., 1915, Geol. Surv., Canada, Mus. Bull. 21, p. 13, pl. 1, figs. 1-4.

Middle Silurian, east end Cedar lake, Chemahawin, Manitoba.

Leptaena sordida Billings

Syntypes 742, a-m, o, q

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 73, figs. 66a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 73, figs. 66a, b.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 231, figs. 242a, b.

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Leptella sordida,*

Hall, J. and Clarke, J. M., 1892, Pal. N.Y., vol. 8, pt. 1, p. 293, pl. 15A, figs. 12-16.

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 189, pl. 39H, figs. 17, 21.

Leptaena trentonensis Wilson

Holotype 6636

Wilson, A. E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 394, pl. 4, fig. 12.

1946, Geol. Surv., Canada, Bull. 8, p. 53, pl. 3, fig. 22.

Lower Cobourg beds, Middle Ordovician, lot 21, con. 8, Cornwall tp., Ontario.

Leptaena ? vaurealensis Twenhofel

Holotype 2015

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 186, pl. 16, figs. 10, 11.

English Head formation, Upper Ordovician, Cape Robert, Anticosti Island, Quebec.

Leptella sordida (Billings)

Hypotypes 9069, a-g

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 189, pl. 39H, figs. 18-20, 23-26, 28, 30, 31.

Levis formation, Lower Ordovician, Point Levis, Quebec.

See *Leptaena sordida*

Leptellina ? decipiens see *Leptaena decipiens*

Leptocoelia flabellites (Conrad)

Hypotype 3299, 3311

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 42, pl. 3, figs. 5, a, b, 6, a.

Devonian, Gaspé, Quebec.

Leptostrophia blainvillii see *Strophomena blainvillei*

Leptostrophia irene see *Strophomena irene*

Leptostrophia magnica tullia see *Strophomena tullia*

Lingula acuminata Conrad

Hypotypes 377a, b

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 102, figs. 8a-e.

Potsdam, Lower Ordovician, Bastard tp., Ontario.

Lingula artemis Billings

Syntypes 3188, a-d

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 14, fig. 4.

Devonian (Cape Bon Ami formation), Cape Bon Ami, Gaspé, Quebec.

Lingula belli Billings

Syntypes 1026, a-c

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 431, figs. 7, 8.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 124, figs. 47a, b.

Middle Ordovician, Island of Montreal, Quebec.

=*Obolus belli*, Walcott, C. D., 1912, Monog. U. S. Geol. Surv., vol. 51, p. 386, pl. 38, figs. 3, a, b (lectotype fig. 3=1026b).

=*Palaeoglossa ? belli*, Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 221, pl. 7F, fig. 27.

Lingula billingsiana Whiteaves

Syntypes 309, a, b

Whiteaves, J. F., 1878, Am. J. Sci., vol. 16, p. 226.

Upper Cambrian ?, Kelly Island, Conception Bay, Newfoundland.

=*Lingulella billingsiana*, Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 483, pl. 29, figs. 3, a (holotype fig. 3a=309b).

Lingula briseis Billings

Syntypes 1643, a-i

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 48, figs. 52a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 48, figs. 52a, b.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 161, figs. 136a, b.

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 71, pl. 3, figs. 7, 12 (lectotype 1643e, paratypes 1643, a-d, f-i).

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 18, pl. 1, fig. 7 (syntypes 1643c, e).

Middle Ordovician (Sherman Fall beds), near Olivier's Mills on River Bayonne, Berthier co., Quebec.

Lingula clochensis Foerste

Syntypes 8403, a

Foerste, A. F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 253, pl. 2, figs. 11a, b.

Lowville formation, Middle Ordovician, La Cloche Peninsula, Ontario.

=*Lingulella* ? *clochensis,* Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 197 (holotype 8403, paratype 8403a).

Lingula cobourgensis Billings

Syntypes 1635, a-f

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 50, figs. 54a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 50, figs. 54a, b.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 161, figs. 132a, b.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 18, pl. 1, fig. 16 (holotype 1635a).

Middle Ordovician (Cobourg beds), Cobourg, Ontario.

Lingula ? *crassa* Hall

Hypotypes 11262-11264

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 71, pl. 3, figs. 1, 2.

Lower Trenton, Middle Ordovician, Pont Rouge, Quebec.

Lingula curta Conrad

Hypotype 6304

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 18, pl. 1, fig. 4.

Sherman Fall beds, Ottawa formation, Middle Ordovician, lot 26, con. 5, Osnabruck tp., Ontario.

Lingula cyane Billings

Syntypes 552, a-i

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 216, figs. 200a-d.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 216, figs. 200a-d.

Division P (Table Head series), Middle Ordovician, 4 miles northeast of Portland Creek, Newfoundland.

=*Obolus cyane,* Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 388, pl. 27, figs. 4, a, b. (lectotype fig. 4=552b).

Lingula (*Palaeoglossa*) *distornata* McLearn

Holotype 6201

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 46, pl. 2, fig. 8.

Stonehouse formation, Middle or Upper Silurian, coast section Arisaig, Nova Scotia.

Lingula elongata Hall

Hypotype 1639

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 161, fig. 135.

Trenton, Middle Ordovician, lot 26, con. 5, Osnabruck tp., Ontario.

Lingula elongata Hall

Hypotype 6314

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 18, pl. 1, fig. 5.

Hull beds, Ottawa formation, Middle Ordovician, cement quarries, Hull, Quebec.

Lingula eva Billings

Syntypes 1160a, b

Billings, E., 1861, Can. Naturalist Geol., vol. 6, p. 150, fig.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 141, fig. 73a, b.

Black River ?, Middle Ordovician, Murray Bay, Quebec.

=*Pseudolingula ? eva,*

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 60, pl. 1, figs. 16, 17 (lectotype 1160a, paratypes 1160b).

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 215.

=*Lingulasma eva,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 21, pl. 1, figs. 21, 22.

Lingula foerstei Sinclair

Holotype 11283; paratype 11284

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 74, pl. 3, figs. 9, 10.

Tetreauville formation, Middle Ordovician, Montreal east, Quebec.

Lingula forbesi Billings

Syntypes 2257, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 115, fig. 96.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 115, fig. 96.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 170, pl. 12, fig. 13 (holotype=2257).

Upper Ordovician (Ellis Bay formation), Junction Cliff, Anticosti Island, Quebec.

Lingula hamata Sinclair

Holotype 11271

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 75, pl. 3, fig. 11.

Tetreauville formation, Middle Ordovician, Montreal east, Quebec.

Lingula hastata Sinclair

Holotype 11255; paratypes 11256, 11257

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 76, pl. 4, figs. 4-6.

Eastview formation, Upper Ordovician, Ottawa, Ontario.

Lingula ? horrida Sinclair

Holotype 11260; paratype 11261

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 66, pl. 2, figs. 15, 16, 19.

Rosemount member, Montreal formation and Tetreauville formation, Middle Ordovician, d'Argenson, Ile Jésus and Montreal east, Quebec.

Lingula hullensis Wilson

Holotype 6318

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 19, pl. 1, fig. 6.

Hull beds, Ottawa formation, Middle Ordovician, Brewery Creek, Hull, Quebec.

Lingula huronensis Billings

Syntypes 1159, a

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 433, figs. 9a-d.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 124, figs. 48a-d.

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 69, pl. 4, figs. 1-3 (lectotype 1159, paratype 1159a).

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 19, pl. 1, fig. 14.

Black River, Middle Ordovician, St. Joseph Island, Lake Huron, Ontario.

=*Lingulella huronensis,* Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 201.

Lingula huronensis Billings

Hypotype 6319

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 19, pl. 1, fig. 15.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

Lingula hyacinthensis Foerste

Syntypes 8589, a, b (missing)

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 107, pl. 11, figs. 4a, b.

Upper Ordovician, St. Hyacinthe, Quebec.

Lingula iole Billings

Syntypes 549, a-g

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 215, figs. 199a-e.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 215, figs. 199a-e.

Division P (Table Head series), Middle Ordovician, 4 miles northeast of Portland Creek, Newfoundland.

=*Lingulella iole,* Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 508, pl. 27, figs. 5, a (lectotype fig. 5=549a).

Lingula irene Billings

Syntypes 459, 794, a, b

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 71, figs. 64a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 71, figs. 64a, b.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 230, figs. 240a, b.

Beekmantown and Levis formations, Lower Ordovician, Island of Montreal and Point Levis, Quebec.

=*Lingulella irene,* Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 508, pl. 27, figs. 6, a (lectotype fig. 6=749).

Lingula iris Billings

Holotype 734

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 301, fig. 290.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 301, fig. 290.

Boulder in Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Lingulella iris,* Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 509, pl. 27, fig. 2.

Lingula johnsoni Northrop

Holotype 9163 (missing)

Northrop, S. A., 1939, Geol. Soc. Amer., Sp. Paper 21, p. 160, pl. 11, fig. 5.

La Vieille formation, Middle Silurian, Bonaventure River at junction of Riviere Duval, Gaspé, Quebec.

Lingula kingstonensis Billings

Syntype 1158, a-f

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 48, figs. 51a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 48, figs. 51a, b.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 141, figs. 74a, b.

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 68, pl. 2, figs. 13, 14 (lectotype 1158, paratypes 1158a-c, e, f).

Black River, Middle Ordovician, Long Island near Kingston, Ontario.

=*Lingulella kingstonensis,* Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 201.

Lingula lewisi Sowerby

Hypotype 6199

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 45, pl. 2, fig. 6.

Stonehouse formation, Middle or Upper Silurian, coast section Arisaig, Nova Scotia.

Lingula lucretia Billings

Syntypes 3187, a, b

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 14, fig. 3.

Devonian (Cape Bon Ami formation), Cape Bon Ami, Gaspé, Quebec.

Lingula lyelli Billings

Syntypes 1027, a-c

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 348, figs. 1a-d.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 124, figs. 49a, b.

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 67, pl. 2, figs. 11, 12 (lectotype 1027c, paratype 1027).

Chazy, Middle Ordovician, Allumette Island, Ottawa River, Quebec.

=*Ectenoglossa* ? *lyelli,* Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 217, pl. 3C, figs. 6, 7.

Lingula mantelli Billings

Syntype 458

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 349, fig. 1f.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 113, fig. 20a.

Beekmantown, Lower Ordovician, near St. Eustache, Quebec.

Lingula melvillensis Lambe

Holotype 10002

Lambe, L. M., 1910, Report on the Dominion of Canada Expedition to the Arctic Islands and Hudson Strait on Board the D. G. S. *Arctic,* J. E. Bernier, Appendix A, p. 481.

Carboniferous ?, ravine about 7 miles northeast of Cape Providence, Melville Islands, Arctic.

Lingula minima Sowerby

Hypotype 6198

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 44, pl. 2, fig. 4.

Stonehouse formation, Middle or Upper Silurian, coast section Arisaig, Nova Scotia.

Lingula nympha Billings

Syntypes 553, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 214, fig. 198.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 214, fig. 198.

Division N (Table Head series), Middle Ordovician, Table Head, Newfoundland.

=*Ectenoglossa nympha,* Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 64, pl. 2, figs. 3-5 (lectotype 553a, paratype 553).

Lingula obtusa Hall

Hypotype 1636

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 161, fig. 37.

'Trenton', Middle Ordovician, Sault au Recollet, Laval co., Quebec.

Lingula obtusa Hall

Hypotype 6323

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 19, pl. 1, fig. 3.

Sherman Fall beds, Ottawa formation, Middle Ordovician, lot 26, con. 5, Osnabruck tp., Ontario.

Lingula ? oculata Sinclair

Holotype 11254

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 75, pl. 3, fig. 4.

Sherman Fall formation, Middle Ordovician, Watertown, New York, U.S.A.

Lingula philomela Billings

Syntypes 1616, 1641

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 48, fig. 53.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 48, fig. 53.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 161, fig. 133.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 20, pl. 1, fig. 12 (holotype 1641a=1616, paratype 1641).

Trenton, Middle Ordovician, Montmorency Falls and Montreal, Quebec.

=*Ectenoglossa philomela,* Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 63, pl. 2, figs. 1, 2, 18 (lectotype 1616=fig. 2, paratype 1641=fig. 1).

Lingula placibilis Sinclair

Holotype 11267 (missing); paratypes 11268-11270

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 73, pl. 3, fig. 8.

Tetreauville formation, Middle Ordovician, Montreal east, Quebec.

Lingula progne Billings

Syntypes 1647, a

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 161, fig. 134.

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 70, pl. 3, figs. 13, 14 (lectotype 1647, paratype 1647a).

Trenton, Middle Ordovician, Montreal, Quebec.

Lingula prolixa Sinclair

Holotype 11265

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol 39, sec. 4, p. 72, pl. 3, fig. 3.

Lower Trenton, Middle Ordovician, above falls Montmorency River, Quebec.

Lingula ? pulicis Sinclair

Holotype 11272; paratypes 11273-11282 (missing)

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 68, pl. 2, figs. 7-9.

Black River ?, Rivière Sault à la Puce, Montmorency co., Quebec.

Lingula quebecensis Billings

Syntypes 732a-e

Billings, E.
1862, "New Species of Lower Silurian Fossils", p. 72, figs. 65a-c (732d, a, e).
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 72, figs. 65a-c.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 230, fig. 241a-c.

Levis formation, Lower Ordovician, Point Levis, Quebec.

Lingula ? quercera Sinclair

Holotype 11266

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 66, pl. 2, figs. 10, 17.

Middle Trenton, Middle Ordovician, Grondines East, Portneuf co., Quebec.

Lingula riciniformis Hall

Hypotype 6324

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 20, pl. 1, fig. 2.

Hull beds, Ottawa formation, Middle Ordovician, Wright's quarry, Hull, Quebec.

Lingula scutum Sinclair

Holotype 11249; paratypes 11250, a-c, 11251, 11252, a, 11253

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 75, pl. 3, figs. 15, 16, 22.

Sherman Fall beds, Middle Ordovician, Lakefield, Ontario and Brewery creek, Hull, Quebec; Rosemount member, Montreal formation, Middle Ordovician, Montreal north, Quebec.

Lingula scymmus Sinclair

Holotype 11259

Sinclair, G. W., 1945, Trans. Roy Soc. Can., ser. 3, vol. 39, sec. 4, p. 74, pl. 3, figs. 17, 20.

Tetreauville formation, Middle Ordovician, Montreal east, Quebec.

Lingula sinclairi Wilson

Holotype 13215; paratype 13216

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 20, pl. 1, figs. 8, 9.

Sherman Fall beds, Ottawa formation, Middle Ordovician, 1 mile west of Finch, Ontario.

Lingula subacutirostris McLearn

Paratype 6197

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 44, pl. 2, fig. 3.

Ross Brook formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Lingula taeniola Hall and Clarke

Hypotype 6200

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 45, pl. 2, fig. 7.

Moydart formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Lingula thedfordensis Whiteaves

Holotype 3673; paratype 3673a

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 111, pl. 15, fig. 1.

Hamilton formation, Middle Devonian, near Thedford, Ontario.

Lingula trentonensis Conrad

Hypotype 13217

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 21, pl. 1, fig. 1.

Cobourg beds, Ottawa formation, Middle Ordovician, Parliament Hill, Ottawa, Ontario.

Lingulasma curtum Sinclair

Holotype 11300

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 57, pl. 1, figs. 1, 2, 11.

Terrebonne formation, Middle Ordovician, Ile St. Jean, Terrebonne, Quebec.

Lingulasma dixianum Sinclair

Hypotype 11100

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 57, pl. 1, figs. 5, 15.

Tetreauville formation, Middle Ordovician, loose near Dixie Station, Island of Montreal, Quebec.

Lingulasma eva (Billings)

Hypotype 6325

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 21, pl. 1, fig. 23.

Middle Ordovician (Cobourg ? beds), Ottawa, Ontario.

See *Lingula eva*

Lingulella ? affinis Billings

Plastoholotype 306

Billings, E.,
1872, Can. Naturalist, n.s., vol. 6, p. 468, fig. 4.
1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 67, fig. 55.
1882, Geol. Surv., Newfoundland, Rept. Prog. 1881, Appendix p. 15.

Upper Cambrian ? —Lower Ordovician, Bell Island, Conception Bay, Newfoundland.

Lingulella billingsiana see *Lingula billingsiana*

Lingulella ? clochensis see *Lingula clochensis*

Lingulella huronensis see *Lingula huronensis*

Lingulella iole see *Lingula iole*

Lingulella irene see *Lingula irene*

Lingulella iris see *Lingula iris*

Lingulella kingstonensis see *Lingula kingstonensis*

Lingulops nitida Sinclair

Holotype 11285; paratypes 11286-11294

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 56, pl. 3, figs. 18, 19, 21.

Lower Trenton, Middle Ordovician, Charlesbourg, Quebec co., Quebec.

Liostrophia glabra Cooper and Kindle

Syntype 8858

Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 355.

Whitehead formation, Upper Ordovician, Amphitheatre road, Percé, Quebec.

Maclarenella maculosa Stehli

Paratypes 11792, 11793

Stehli, F. G., 1955, J. Pal., vol. 29, No. 5, p. 869, pl. 87, figs. 6, 8-11, 13.

Waterways formation, Devonian, west end Rocke Island, Athabasca River, Alberta.

Martinia galataea Bell

Syntypes 4343, 7524; paratypes 7523, 7524a

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 55, p. 142, pl. 22, figs. 5, a, b; pl. 23, figs. 1, a, 2a-c, 3.

Upper Windsor, Mississippian, Avon River, Windsor, Nova Scotia.

Martinia thetis Bell

Holotype 7533

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 143, pl. 23, figs. 4, a-c.

Upper Windsor, Mississippian, Murphy road, Hebert River, Nova Scotia.

Megamyonia nitens (Billings)

Hypotypes 10451-10453

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 101, pl. 11, figs. 9-11.

Stonewall formation, Upper Ordovician, Stonewall quarry, Manitoba.

Meristella champlaini see *Athyris (Merista) arcuata*

Meristina billingsi (Dawson)

Hypotypes 5450, 5451

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 89, pl. 9, figs. 4, 5.

McAdam formation, Middle Silurian, Arisaig brook, Arisaig, Nova Scotia.

Meristina (?) *expansa* Whiteaves

Syntype 4407

Whiteaves, J. F.,

1904, Geol. Surv., Canada, Ann. Rept., n.s., vol. 14, 1901, p. 45F.

1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 245, pl. 27, figs. 6, a.

Silurian, falls on Ekwan River, Ontario.

Meristina manitobensis Stearn

Holotype 11038; paratypes 10463, 10464, 11004

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 106, pl. 12, figs. 25, 26, 30.

Cedar Lake formation, Middle Silurian, sec. 36, tp. 29, rge. 9, W. Prin. mer.; west shore of Cross Lake north of Cranberry Bay; l.s. 2, sec. 7, tp. 51, rge. 19, W. Prin. mer.; and northwest point Fort Island, Cedar Lake, Manitoba.

Meristina tumida (Dalman) ?

Hypotypes 5448, 5449

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 89, pl. 9, figs. 6, 7.

Stonehouse ? formation, Middle or Upper Silurian, coast section Arisaig, Nova Scotia.

Meristospira dunbari Stearn

Holotype 10444; paratypes 10445, 11017, 11018

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 109, pl. 12, figs. 21-24.

East Arm formation, Middle Silurian, southeast corner Reader Lake, Manitoba.

Mesonomia battis see *Orthis battis*

Mesonomia canadensis see *Orthis battis*

Micromitra apicalis see *Orthis ? apicalis*

Micromitra (*Paterina*) *logani* see *Iphidea logani*

Microtrypa altilis Wilson

Holotype 7649; paratypes 7649a, 7650

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 144, pl. 2, figs. 10-12.

1946, Geol. Surv., Canada, Bull. 8, p. 111, pl. 10, figs. 10-12.

Leray beds, Ottawa formation, Middle Ordovician, Stewart quarry, Rockland, Ontario.

Microtrypa ? modesta Wilson

Holotype 7643; paratype 13239

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 145, pl. 2, figs. 16-18.

1946, Geol. Surv., Canada, Bull. 8, p. 112, pl. 10, figs. 16a, b, 17.

Cobourg beds, Ottawa formation, Middle Ordovician, dam west of Alexandria and about 2 miles west of McAlpine, Ontario.

Microtrypa ? nasuta Wilson

Holotype 7641; paratype 7641a

Wilson, A.E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 146, pl. 2, figs. 13, 14.

1946, Geol. Surv., Canada, Bull 8, p. 112, pl. 10, figs. 13, 14.

Rockland beds, Ottawa formation, Middle Ordovician, Ange gardien road 4 miles west of L'Orignal, Ontario.

Microtrypa ? nitida Wilson

Holotype 7644; paratype 7645

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 146, pl. 2, figs. 22, 23.

1946, Geol. Surv., Canada, Bull. 8, p. 113, pl. 10, figs. 21, 22.

Cobourg beds, Ottawa formation, Middle Ordovician, lot 8, between cons. 6 and 7, Cumberland tp. and La Salle academy, Ottawa, Ontario.

Microtrypa ? plana Wilson

Holotype 7646; paratype 7646a

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 147, pl. 2, figs. 5, 6.

1946, Geol. Surv., Canada, Bull. 8, p. 113, pl. 10, figs. 5, 6.

Cobourg beds, Ottawa formation, Middle Ordovician, foot of Sussex Street, Ottawa, Ontario.

Microtrypa ? tersa Wilson

Holotype 7647; paratype 7648

Wilson, A.E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 147, pl. 2, figs. 19, 20.

1946, Geol. Surv., Canada, Bull. 8, p. 114, pl. 10, figs. 18, 19.

Cobourg beds, Ottawa formation, Middle Ordovician, corner of Booth and Elm Streets, and Rideau Hall grounds, Ottawa, Ontario.

Mimella borealis see *Orthis borealis*

Mimella imperator see *Orthis imperator*

Mimella latistriata see *Herbertella latistriata*

Monomerella durhamensis Whiteaves

Holotype 2966,a, b

Whiteaves, J. F., 1895, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 2, p. 57, pl. 9, fig. 1.

Guelph formation, Middle Silurian, Durham, Ontario.

Monomerella laurentina (Twenhofel)

Hypotype 10435

Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 92, pl. 12, fig. 27.

Inwood formation, Middle Silurian, 3 miles north of Grand Rapids, Manitoba.

Monomerella orbicularis Billings

Syntypes 2812, a-d

Billings, E.,

1871, Can. Naturalist, n.s., vol. 6, p. 221.

1872, Am. J. Sci., 3rd ser., vol. 3, p. 359.

Davidson, T. and King, W., Quart. J. Geol. Soc. London, vol. 30, p. 158, pl. 17, figs. 10, a.

Guelph formation, Middle Silurian, Elora, Ontario.

Monomerella cf. *orbicularis* Billings

Hypotype 4433

Williams, M. Y., 1915, Geol. Surv., Canada, Mus. Bull. 20, pl. 1, fig. 2.

Eramosa member, 'Lockport' formation, Middle Silurian, Eramosa River east of Guelph, Ontario.

Monomerella ovata Whiteaves

Syntypes 2815, a-c

Whiteaves, J. F., 1884, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 1, p. 5, pl. 2, fig. 1; pl. 8, figs. 1, a-c.

Guelph formation, Middle Silurian, Durham, Ontario.

Monomerella ovata lata Whiteaves

Syntypes 2816, a,b

Whiteaves, J. F., 1884, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 1, p. 6, pl. 2, figs. 2, a; pl. 8, figs. 2, a.

Guelph formation, Middle Silurian, Durham, Ontario.

Monomerella prisca Billings

Syntypes 2811, a-f

Billings, E.,

1871, Can. Naturalist, n.s., vol. 6, p. 221.

1872, Am. J. Sci., 3rd ser., vol. 3, p. 359.

Davidson, T. and King, W., Quart. J. Geol. Soc. London, vol. 30, p. 156, pl. 17, figs. 5-8.

Guelph formation, Middle Silurian, Hespeler, Ontario.

Moorefieldella parva Warren

Syntypes 8918, a

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 54, pl. 6, figs. 9, 10.

Rundle formation, Pennsylvanian ?, Stoney Squaw Mountain, Alberta.

Multicostella platys see *Orthis platys*

Nisusia alberta (Walcott)

Hypotype 8232

Walcott, C. D.,

1908, Can. Alpine J., vol. 1, No. 2, p. 245, pl. 1, fig. 4a.

1912, Monog. U.S. Geol. Surv., vol. 51, p. 726, pl. 100, fig. 3d.

Middle Cambrian, Mount Stephen near Field, British Columbia.

Nothorthis delicatula Ulrich and Cooper

Syntypes 9067, a-g

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 106, pl. 17C, figs. 6-14.

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 315, pl. 38D, figs. 21-29 (lectotype 9067e, paratypes 9067,a-d, f, g).

Erratic in lower part Levis formation, Lower Ordovician, Levis, Quebec.

Nudirostra albertensis (Warren)

Hypotypes 11237, 11241

McLaren, D. J.,

1954, "Western Canada Sedimentary Basin", Am. Assoc. Petrol. Geol., p. 179, pl. 1, figs. 14-18.

1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, figs. 13-15.

Mount Hawk formation, Upper Devonian, northeast flank of Roche Miette, Jasper Park, Alberta.

Nudirostra athabascensis (Kindle)

Hypotype 11232

McLaren, D. J.,

1954, "Western Canada Sedimentary Basin", Am. Assoc. Petrol. Geol., p. 178, pl. 1, figs. 25-27.

1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 200, pl. 8, figs. 4-7.

Flume formation, Upper Devonian, near highway on Morro Peak, Athabasca Valley in Jasper Park, Alberta.

Nudirostra athabascensis (Kindle)

Hypotype 13820

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 200, pl. 8, figs. 8-10.

Flume formation, Upper Devonian, Morro Peak, Jasper Park, Alberta.

Nudirostra gibbosa seversoni McLaren

Holotype 10016; paratype 10017

McLaren, D. J.,

1954, "Western Canada Sedimentary Basin", Am. Assoc. Petrol. Geol., p. 180, pl. 1, figs. 4-8.

1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 4-6.

Palliser formation, Upper Devonian, Mount Coleman, Banff Park, Alberta.

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Nudirostra gibbosa walcotti (Merriam)

Hypotypes 10012, 10014

McLaren, D. J., "Western Canada Sedimentary Basin", Am. Assoc. Petrol. Geol., p. 180, pl. 1, figs. 9-13.

Alexo formation, Upper Devonian, top of Prospect Mountain near Mountain Park, and 200 feet from base on Proposal Mountain, south end of Medicine Lake, Jasper Park, Alberta.

Nudirostra insculpta McLaren

Holotype 11245

McLaren, D. J.,

1954, "Western Canada Sedimentary Basin", Am. Assoc. Petrol. Geol., p. 178, pl. 1, figs. 22-24.

1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 198, pl. 7, figs. 25-27.

Perdrix equivalent, Upper Devonian, ridge on south side Winnifred Pass, Alberta.

Nudirostra utahensis ventricosa (Haynes)

Hypotype 11210

McLaren, D. J.,

1954, "Western Canada Sedimentary Basin", Am. Assoc. Petrol. Geol., p. 180, pl. 1, figs. 1-3.

1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 1-3.

Costigan member, Palliser formation, Upper Devonian, Mount Coleman, Banff Park, Alberta.

Nudirostra walcotti (Merriam)

Hypotype 13800

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 24-26.

Alexo formation, Upper Devonian, Prospect Mountain near Mountain Park, Alberta.

Obolella chromatica Billings

Hypotypes 395c, i, j

Billings, E., 1876, Am. J. Sci. Arts, 3rd. ser., vol. 11, p. 176, figs. 1-3.

Walcott, C. D.,

1886, U.S. Geol. Surv., Bull. 30, p. 110, figs. 9, 10.

1912, Monog. U.S. Geol. Surv., vol. 51, p. 591, pl. 54, fig. 1f.

Lower Cambrian, L'Anse au Loup, Strait of Belle Isle, Labrador, Newfoundland.

Obolella (*Kutorgina*) *cingulata* Billings

Syntypes 384a, f, h, i

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 8, figs. 7-9 (384a, f).

1861, Geol. Vermont, vol. 2, p. 948, figs. 347-349.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 8, figs. 8-10.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 284, figs. 287a, b.

Lower Cambrian, L'Anse au Loup, Strait of Belle Isle, Labrador, Newfoundland.

Obolella circe Billings

Syntypes 385, a-c

Billings, E.,

1871, Can. Naturalist, n.s., vol. 6, p. 219.

1872, Am. J. Sci., 3rd ser., vol. 3, p. 357.

Lower Cambrian, Trois Pistoles, Quebec.

Obolella gemma Billings

Syntypes 386, a-d, f, 387, a-f

Billings, E.,

1871, Can. Naturalist, n.s., vol. 6, p. 218, fig. 5.

1872, Am. J. Sci., 3rd ser., vol. 3, p. 357, fig. 5.

Lower Cambrian, St. Simon and Bic, Rimouski co., Quebec.

Obolella ida Billings

Syntypes 8229, a-e

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 71, fig. 63a.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 71, fig. 63a.

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Elkania ida,* Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 563, pl. 51, figs. 4, a-c.

Obolella ? *misera* Billings

Syntypes 232, a

Billings, E.,

1872, Can. Naturalist, n.s., vol. 6, p. 470.

1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 69.

Middle Cambrian, Chapel Arm, Trinity Bay, Newfoundland.

Obolella pretiosa Billings

Syntypes 324, a, b, 744, a-f

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 68, figs. 61a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 68, figs. 61a, b.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 230, figs. 239a, b.

Middle Cambrian (Sillery), Chaudiere River and Cape Rouge, Quebec.

Obolellina canadensis see *Obolus canadensis*

Obolellina galtensis see *Obolus galtensis*

Obolellina magnifica see *Obolus canadensis*

Obolus belli see *Lingula belli*

Obolus canadensis Billings

Syntypes 1150, a-d

Billings, E.,

1858, Can. Naturalist Geol., vol. 3, p. 441, figs. 20-23.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 189, figs. 20-23.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 142, fig. 75.

Black River (Leray-Rockland beds), Middle Ordovician, Fourth Chute of Bonnechère River, Renfrew co., Ontario.

=*Obolellina canadensis,*

Billings, E., 1871, Can. Naturalist, n.s., vol. 6, p. 222; 1872, ibid., p. 326, figs. 1-5.

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 230, pl. 24E, fig. 24 (holotype 1150).

=*Dinobolus canadensis,*

Davidson, T. and King, W., 1874, Quart. J. Geol. Soc. London, vol. 30, p. 162, pl. 19, fig. 7.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 16, pl. 1, fig. 24 (holotype 1150, paratype 1150a).

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Obolus canadensis Billings

Syntypes 1161, a-d

Billings, E.,

1858, Can. Naturalist Geol., vol. 3, p. 441, fig. 19.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 189, fig. 19.

Black River (Leray-Rockland beds), Middle Ordovician, Paquette Rapids, Ottawa River.

=*Obolellina magnifica,*

Billings, E., 1872, Can. Naturalist, n.s., vol. 6, p. 329, fig. 7.

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 231, pl. 24F, fig. 25 (paratype 1161b).

=*Dinobolus magnificus,*

Davidson, T. and King, W., 1874, Quart. J. Geol. Soc. London, vol. 30, p. 164, pl. 19, fig. 8.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 17, pl. 1, figs. 26, 27, (holotype 1161, paratypes 1161a-d).

Obolus cyane see *Lingula cyane*

Obolus galtensis Billings

Holotype 2818a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 168, fig. 152.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 168, fig. 152.

Guelph formation, Middle Silurian, Galt, Ontario.

=*Obolellina galtensis,* Billings, E., 1872, Can. Naturalist, n.s., vol. 6, p. 329, fig. 6.

=*Rhinobolus galtensis,* Whiteaves, J. F., 1895, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 2, p. 59, pl. 15, fig. 2.

Obolus ? *murrayi* Billings

Holotype 548

Billings, E., 1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 362.

Walcott, C. D., 1912, Monog. U.S. Geol. Surv., vol. 51, p. 405, pl. 15, fig. 12.

Loose, Lower Ordovician, Maiden Arm, Hare Bay, Newfoundland.

Onniella paquettensis Sinclair

Holotype 9798

Sinclair, G. W., 1945, Can. Field-Naturalist, vol. 59, p. 73, pl. 2, figs. 2, 3.

Black River, Middle Ordovician, Paquette Rapids, Ottawa River.

Onychoplecia longirostris see *Camarella longirostra*

Öpikina ampla Wilson

Holotype 8977

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 190, pl. 2, fig. 26.

1946, Geol. Surv., Canada, Bull. 8, p. 89, pl. 6, fig. 29.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, lot 13, con. 12, Goulbourn tp., Ontario.

Öpikina auriculata Wilson

Holotype 13235

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 190, pl. 2, fig. 17.

1946, Geol. Surv., Canada, Bull. 8, p. 89, pl. 6, fig. 17.

Cobourg beds, Ottawa formation, Middle Ordovician, Research Council laboratories, Sussex Street, Ottawa, Ontario.

Öpikina gloucesterensis Wilson
Holotype 8978
Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 191, pl. 2, fig. 19.
1946, Geol. Surv., Canada, Bull. 8, p. 89, pl. 6, fig. 20.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, lots 3-5, con. 3, R. F., Gloucester tp., Ontario.

Öpikina hemispherica Wilson
Holotype 8979
Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 192, pl. 2, fig. 20.
1946, Geol. Surv., Canada, Bull. 8, p. 90, pl. 6, fig. 21.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, lot 13, con. 3, Goulbourn tp., Ontario.

Öpikina ovalis Wilson
Syntypes 6222, a
Wilson, A. E.,
1921, Geol. Surv., Canada, Mus. Bull. 33, p. 52, pl. 3, figs. 10, 11 (*Rafinesquina* sp. undet.).
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 192.
1946, Geol. Surv., Canada, Bull. 8, p. 90, pl. 8, figs. 20, 21.
Rockland beds, Ottawa formation, Middle Ordovician, loose top of Stewart quarry, Rockland, Ontario.

Öpikina platys Wilson
Holotype 8980; paratype 8981
Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 193, pl. 2, figs. 21, b.
1946, Geol. Surv., Canada, Bull. 8, p. 91, pl. 6, figs. 22, 23.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, lots 3-5, con. 3, R. F., Gloucester tp. and Merivale Road, Ottawa, Ontario.

Öpikina rugosa see *Rafinesquina rugosa*

Öpikina ? *rugosa avita* see *Rafinesquina rugosa avita*

Öpikina septata borealis Wilson
Holotype 8982
Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 195, pl. 2, fig. 15.
1946, Geol. Surv., Canada, Bull. 8, p. 92, pl. 6, fig. 15.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, hill above Sand Point, northwest of Arnprior, Ontario.

Öpikina sinclairi Wilson
Holotype 8983; paratype 8984
Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 196, pl. 2, figs. 18a, b.
1946, Geol. Surv., Canada, Bull. 8, p. 92, pl. 6, figs. 18, 19.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, Merivale Road, Ottawa, and near corner of Navan and Montreal roads, east of Ottawa, Ontario.

Öpikina ? *stonewallensis* Stearn
Holotype 10448; paratypes 10441, 10442, 11058
Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 99, pl. 10, figs. 1-4.
Stonewall formation, Upper Ordovician, highway 7, 4.2 miles north of Fisher Branch, and Stonewall quarry, Manitoba.

Öpikina subtriangularis Wilson
Holotype 8985; paratype 8986
Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 196, pl. 2, fig. 22.
1946, Geol. Surv., Canada, Bull. 8, p. 92, pl. 6, fig. 24.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, lots 3-5, con. 3, R.F., Gloucester tp., Ontario and La petite Chaudière, Val Tetreau, Quebec.

Öpikina tumida Wilson
Holotype 8987
Wilson, A. E.,
1944, Trans. Roy Soc. Can., ser. 3, vol. 38, sec. 4, p. 197, pl. 2, fig. 16.
1946, Geol. Surv., Canada, Bull. 8, p. 93, pl. 6, fig. 16.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario.

Öpikina wagneri robusta Wilson
Holotype 8988; paratype 8989
Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 198, pl. 2, figs. 25a, b.
1946, Geol. Surv., Canada, Bull. 8, p. 94, pl. 6, figs. 27, 28.
Leray-Rockland beds, Ottawa formation, Middle Ordovician, north of Orleans, and Huntley tp., Ontario.

Öpikinella affinis Wilson
Holotype 8990
Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 199, pl. 2, fig. 23.
1946, Geol. Surv., Canada, Bull. 8, p. 95, pl. 6, fig. 25.
Cobourg beds, Ottawa formation, Middle Ordovician, south end LeBreton Street, Ottawa, Ontario.

Öpikinella salmoni Wilson
Holotype 8991
Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 200, pl. 2, fig. 24.
1946, Geol. Surv., Canada, Bull. 8, p. 95, pl. 6, fig. 26.
Cobourg beds, Ottawa formation, Middle Ordovician, steamboat landing, Sussex Street, Ottawa, Ontario.

Orbiculoidea arenaria Shimer
Syntypes 4498, a
Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 31, pl. 6, figs. 5, 6.
Permian, Lake Minnewanka area, Alberta.

Orbiculoidea bella see *Crania bella*

Orbiculoidea lamellosa d'Orbigny
Hypotypes 6372, 13218
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 24, pl. 2, figs. 12, 13.
Cobourg ? and Hull or Sherman Fall beds, Ottawa formation, Middle Ordovician, Ottawa and 4 miles west of L'Orignal, Ontario.

Orbiculoidea novascotica (Ami)
Lectotype 6204
McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 49, pl. 2, figs. 21, 22.
Middle Silurian, Cape George, Nova Scotia.

Orbiculoidea subplana (Hall)
Hypotypes 4434, a, b
Williams, M. Y., 1915, Geol. Surv., Canada, Mus. Bull. 20, p. 5, pl. 1, figs. 3-5.
Eramosa member, 'Lockport' formation, Eramosa River east of Guelph, Ontario.

Orbiculoidea subplana (Hall)

Hypotype 6203

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 48, pl. 2, figs. 18, 20.

Middle Silurian, Cape George, Nova Scotia.

Orthidium gemmiculum (Billings)

Hypotypes 9070, a, b, d

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 112, pl. 16G, figs. 27-35.

Lower Ordovician, Point Levis, Quebec.

See *Orthis gemmicula*

Orthis acuminata Billings

Holotype 1045

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 440, fig. 19.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 130, figs. 59a, b.

Chazy, Middle Ordovician, Caughnawaga, La Prairie co., Quebec.

Orthis ? *apicalis* Billings

Syntypes 739, a-j

Billings, E.,

1865, "New Species of Silurian Fossils", p. 301, figs. 291a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 301, figs. 291a, b.

Erratic, Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Micromitra apicalis,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 45, pl. 1A, figs. 1-4.

Orthis ? *armanda* Billings

Syntypes 741, a-h

Billings, E.,

1865, "New Species of Silurian Fossils", p. 303, figs. 293, a-c.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 303, figs. 293, a-c.

Beekmantown, Lower Ordovician, Philipsburg, Quebec.

=*Finkelnburgia armanda,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 133 (lectotype 741d, paratypes 741, a-c).

=*Finkelnburgia philipsburgensis,* Ulrich, E. O. and Cooper, G. A., 1938, ibid., p. 142, pl. 24C, fig. 7 (holotype 741h).

Orthis aurelia Billings

Syntypes 3313, a

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 34, pl. 3, fig. 3.

Devonian (Grande Greve formation), Indian Cove, Gaspé, Quebec.

=*Gaspesia aurelia,* Clarke, J. M., 1908, Mem. N. Y. State Mus., vol. 9, pt. 1, p. 198.

Orthis battis Billings

Syntypes 747, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 185.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 185.

Levis formation, Lower Ordovician, Point Levis, Quebec

=*Mesonomia battis,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 200, pl. 42C, fig. 4 (lectotype 747a).

=*Mesonomia canadensis,* Ulrich, E. O. and Cooper, G. A., 1938, ibid., p. 200 (747).

Orthis ? *billingsi* Ulrich and Cooper

Syntypes 9066, a, b

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 104, pl. 18B, figs. 5, 6, 10, 11, 14.

Levis formation, Lower Ordovician, Levis, Quebec.

Orthis borealis Billings

Syntypes 1035a-c

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 436, figs. 14a-c.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 129, figs. 56a-c.

Chazy, Middle Ordovician, Caughnawaga, La Prairie co., Quebec.

=*Mimella borealis,* Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 469, pl. 85E, figs. 38, 39 (holotype 1035c).

Orthis corinna Billings

Syntypes 738, a-c

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 302, fig. 292.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 302, fig. 292.

Beekmantown, Lower Ordovician, Stanbridge tp., Quebec.

Orthis delicatula Billings

Syntypes 546, a-k

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 217.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 217.

Division P (Table Head series), Middle Ordovician, Portland Creek, Newfoundland.

=*Pelonomia delicatula,* Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 699.

Orthis disparalis Conrad

Hypotype 1043b

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 440, figs. 20a, b.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 130, figs. 60a, b.

Chazy, Middle Ordovician, 2 miles north of Montreal, Quebec.

Orthis electra Billings

Syntypes 740, a-i

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 79, fig. 72.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 79, fig. 72.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 231, fig. 246.

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Archaeorthis electra,* Schuchert, C. and Cooper, G. A., 1932, Mem. Peabody Mus. Nat. Hist., vol. 4, pt. 1, p. 80, pl. 6, figs. 7, 8, 16.

Orthis eudocia Billings

Syntypes 736, a-c

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 83, figs. 76a-c

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 83, figs. 76a-c.

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Hesperonomia ? eudocia,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 118 (syntypes 736a-c).

=*Trematorthis levisensis,* Ulrich, E. O. and Cooper, G. A., 1938, ibid., p. 113, pl. 16D, figs. 12-14 (holotype 736).

Orthis euryone Billings

Syntypes 753, a-g

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 79, figs. 71a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 79, figs. 71a, b.

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 100, pl. 18A, fig. 7 (753c).

Levis formation, Lower Ordovician, Point Levis, Quebec.

Orthis euryone Billings

Hypotypes 9071, a, b

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 100, pl. 18A, figs. 1-4, 8, 9.

Levis formation, Lower Ordovician, Point Levis, Quebec.

Orthis evadne Billings

Holotype 8228

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 81, figs. 74a-d.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 81, figs. 74a-d.

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Dalmanella evadne,* Hall, J. and Clarke, J. M., 1892, Pal. N.Y., vol. 8, pt. 1, pl. 5B, figs. 25, 26.

=*Pomatotrema ? evadne,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 170, pl. 34C, figs. 11-13.

Orthis flabellites Foerste

Hypotype 4515

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 6, fig. 3.

Manitoulin formation, Lower Silurian, Lavender Falls, Ontario.

Orthis gemmicula Billings

Syntypes 746, a, c

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 75, figs. 68a-c.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 75, figs. 68a-c.

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Orthidium gemmicula,* Hall, J. and Clarke, J. M., 1892, Pal. N.Y., vol. 8, pt. 1, p. 244, pl. 7A, figs. 22-25.

Orthis hippolyte Billings

Syntypes 737, a, b

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 81, figs. 73a-c?
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 81, figs. 73a-c?

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Archaeorthis hippolyte,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 96 (syntypes 737, a).

=*Orthis levisensis,* Ulrich, E. O. and Cooper, G. A., 1938, ibid., p. 100, pl. 14D, figs. 13, 14 (holotype 737b).

Orthis imperator Billings

Syntypes 1036, a

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 435, figs. 11-13.
Logan, W. E., 1865, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 129, figs. 55a-c.

Chazy (Rockcliffe member, Aylmer formation), Middle Ordovician, Hawkesbury, Ontario.

Orthis iphigenia Billings

Syntypes 1634, a-c

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 133, fig. 110.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 133, fig. 110.

Middle Ordovician (Cobourg ? beds), Ottawa, Ontario.

=*Dinorthis iphigenia,* Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 41, pl. 4, figs. 9, 10.

Orthis laurentina Billings

Hypotype 2275b

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 176, pl. 15, figs. 17, 18.

Ellis Bay formation, Upper Ordovician, Ellis Bay, Anticosti Island, Quebec.

Orthis levisensis see *Orthis hippolyte*

Orthis lucia Billings

Syntype 3289

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 35, pl. 3, figs. 4, a.

Devonian (Grande Greve formation), Indian Cove, Gaspé, Quebec.

=*Dalmanella lucia,* Clarke, J. M., 1908, N.Y. State Mus., Mem. 9, pt. 1, p. 204, pl. 44, figs. 8, 9.

Orthis (*Schizophoria*) *manitobensis* Whiteaves

Syntypes 3912, b, 3913, a, b, 3914, a, b

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 283, pl. 37, figs. 3, a, 4, 5 (3913, 3912, 3914).

Middle Devonian, Dawson Bay and Devil Point, Lake Winnipegosis, Manitoba.

Orthis maria Billings

Syntype 2271a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 137, fig. 114.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 137, fig. 114.

Upper Ordovician (Ellis Bay formation), Ellis Bay, Anticosti Island, Quebec.

Orthis marshalli Wilson

Syntypes 6751, a, b

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 24, pl. 5, figs. 1-6.

Beaverfoot formation, Upper Ordovician, east of Palliser Pass, British Columbia.

Orthis minna Billings

Syntypes 748, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 303, fig. 294.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 303, fig. 294.

Beekmantown, Lower Ordovician, Stanbridge tp., Quebec.

Orthis mycale Billings

Holotype 749

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 82, figs. 75a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 82, figs. 75a, b.

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., sp. Paper 13, p. 106, pl. 17B, figs. 4, 5.

Levis formation, Lower Ordovician, Point Levis, Quebec.

Orthis orthambonites Pander

Hypotypes 751, a, c, d, f-h

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 77, figs. 70a-c.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 77, figs. 70a-c.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 231, fig. 245.

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Orthis panderiana,*

Hall, J. and Clarke, J. M., 1892, Pal. N.Y., vol. 8, pt. 1, pl. 5 (footnote), figs. 1-3 (syntypes).

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 102, pl. 15, figs. 1, 3, 8, 9.

Orthis panderiana see *Orthis orthambonites*

Orthis platys Billings

Syntypes 1034, a, b

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 438, figs. 15a-c.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 129, figs. 54a-c.

Chazy (St. Martin formation), Middle Ordovician, Island of Montreal, Quebec.

=*Multicostella platys*, Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 421, pl. 68A, figs. 1-3 (lectotype 1034).

Orthis porcia Billings

Holotype 1044

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 439, figs. 16-18.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 130, figs. 58a-c.

Chazy (St. Martin formation), Middle Ordovician, Island of Montreal, Quebec.

=*Clitambonites porcia*, Raymond, P. E., 1911, Ann. Carnegie Mus., vol. 7, p. 248, pl. 37, figs. 15, 16.

=*Ptychopleurella porcia*, Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 389, pl. 42B, figs. 10, 11.

Orthis ruida Billings

Holotype 2273

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 42.

Upper Ordovician (Ellis Bay formation), Ellis Bay, Anticosti Island, Quebec.

=*Dalmanella ruida*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 180, pl. 16, figs. 21, 22.

Orthis sola Billings

Holotype 8134

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 12.

Upper Ordovician (Vaureal formation), Salmon River, Anticosti Island, Quebec.

=*Rhipidomella sola*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 181, pl. 17, fig. 10.

Orthis subquadrata Hall

Hypotype 1630

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 165, fig. 146.

Middle Ordovician (Cobourg ? beds), Ottawa, Ontario.

=*Dinorthis subquadrata alternata*, Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 45, pl. 4, figs. 14a, b, (holotype 1630).

Orthis tritonia Billings

Holotype 807

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 76, figs. 69a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 76, figs. 69a, b.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 231, fig. 244.

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 105, pl. 18c, figs. 12, 13.

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Pleurorthis tritonia*, Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 332, pl. 31F, figs. 28, 29.

Orthis uberis Billings

Syntypes 2272, a-d

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 42.

Upper Ordovician (Ellis Bay formation), Junction Cliff, Anticosti Island, Quebec.

=*Rhipidomella uberis*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 181, pl. 17, figs. 14, 15.

Orthis vanuxemi Hall

Hypotype 3681b

Billings, E., 1860, Can. J., n.s., vol. 5, p. 269, figs. 17-19.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 384, fig. 417a-c.

Hamilton formation, Middle Devonian, Thedford, Ontario.

Orthisina festinata Billings

Syntypes ? 393, a, b

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 9, figs. 10-12.

1861, Geol. Vermont, vol. 2, p. 949, figs. 350-352.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 10, figs. 11, 12.

Lower Cambrian, Swanton, Vermont, U.S.A.

Orthisina grandaeva Billings

Holotype 457

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 349, figs. 1g-i.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 113, figs. 21a, b.

Beekmantown (Romaine formation), Lower Ordovician, Mingan Islands, Quebec.

=*Pomonotrema grandaeva,* Twenhofel, W. H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 49, pl. 7, figs. 13, 14.

=*Pomatotrema grandaevum,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 171, pl. 35D, figs. 15, 16, 19.

Oxoplecia calhouni Wilson

Syntypes 7768, a-c

Wilson, A. E., 1913, Geol. Surv., Canada, Mus. Bull. 1, p. 81, pl. 8, figs. 1-3, text figs. 1-6.

'Base of Utica', Upper Ordovician, between Rochester and Preston Streets, Ottawa, Ontario.

Palaeoglossa ? *belli* see *Lingula belli*

Paraphorhynchus obscurum Shimer

Syntypes 4580, a, b

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 46, pl. 7, figs. 1-3.

Upper Pennsylvanian, Lake Minnewanka area, Alberta.

Parastrophia ops see *Camerella ops*

Parastrophia reversa (Billings)

Hypotype 6807

Wilson, A. E., 1914, Geol. Surv., Canada, Mus. Bull. 2, p. 135, pl. 4, fig. 36.

Upper Ordovician (Ellis Bay formation), Junction Cliff, Anticosti Island, Quebec. See *Pentamerus reversus*

Paterula ? *westoni* Clark

Hypotype 9063

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 55, pl. 3A, fig. 3.

Levis formation, Lower Ordovician, Levis, Quebec.

Pelonomia delicatula see *Orthis delicatula*

Pentamerus barrandi Billings

Syntypes 2372, a-c

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 296.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 316, figs. 327a, b.

Lower Silurian (Becscie formation), Becscie River, Anticosti Island, Quebec.

Pentamerus decussatus Whiteaves

Syntypes 8997, a, b

Whiteaves, J. F., 1891, Can. Rec. Sci., vol. 4, p. 295, pl. 3, figs. 3, 4.

Middle Silurian, foot of Grand Rapids, Saskatchewan River, Saskatchewan.

=*Conchidium decussatum*, Whiteaves, J. F., 1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 293, pl. 26, figs. 1, 2.

Kindle, E. M., 1915, Geol. Surv., Canada, Mus. Bull. 21, p. 14, pl. 2, figs. 1, 2.

Pentamerus galeatus (Dalman) var. Whiteaves

Holotype 4273

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 234, pl. 30, fig. 2.

Devonian, Ramparts, Mackenzie River, N.W.T.

=*Gypidula galeata* (Dalman) var., Whiteaves, J. F., 1898, ibid., pt. 5, p. 425.

Pentamerus oblongus Sowerby

Hypotype 5128

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 20, fig. 6.

'Lockport' (Fossil Hill) formation, Middle Silurian, Wiarton, Ontario.

Pentamerus occidentalis Hall

Hypotype 2976

Whiteaves, J. F., 1895, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 2, p. 65, pl. 9, figs. 3, a.

Guelph formation, Middle Silurian, Durham, Ontario.

Pentamerus reversus Billings

Syntypes 2281, a-c

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 295.

Upper Ordovician (Ellis Bay formation), Junction Cliff, Anticosti Island, Quebec.

Petroria rugosa Wilson

Holotype 6754; paratypes 6754a, 6755

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 28, pl. 5, figs. 15-18.

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 746, pl. 221E, figs. 29-36.

Beaverfoot formation, Upper Ordovician (Lower Ordovician), Palliser Pass and Stoddart Creek, Windermere Valley, British Columbia.

Pholidops trentonensis (Hall)

Hypotype 6374

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 26, pl. 2, fig. 1.

Sherman Fall beds, Ottawa formation, Middle Ordovician, Val Tetreau, Quebec.

Pionorthis cf. *carletona* (Twenhofel)

Hypotype 4709

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 1, fig. 7.

Stony Mountain formation, Upper Ordovician, Manitoba.

Pionorthis occidentalis Okulitch

Holotype 2043; paratype 2043a

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, p. 71, pl. 1, figs. 8-10.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Plagiorhyncha decemplicata (Sowerby)

Hypotypes 5437-5440

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 77, pl. 8, figs. 1-4.

Ross Brook formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Plagiorhyncha glassi (Davidson)

Hypotypes 5441, 5442; hypoplastotypes 5441a, b, 5442a

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 79, pl. 8, figs. 16, 17, 36; pl. 29, fig. 2.

Ross Brook formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Platyrachella rutherfordi (Warren)

Topotypes 9196-9198

Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 94, pl. 5, figs. 6a-e.

Banff formation, Carboniferous, Mount Greenock area, Alberta.

Platystrophia amoena McEwan

Hypotype 6381

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 32, pl. 3, figs. 7a, b.

Cobourg beds, Ottawa formation, Middle Ordovician, corner Fifth Avenue and Percy Street, Ottawa, Ontario.

Platystrophia amoena longicardinalis McEwan

Hypotype 6382

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 32, pl. 3, fig. 8.

Cobourg beds, Ottawa formation, Middle Ordovician, mill dam at Loch Garry, Ontario.

Platystrophia amoena robusta McEwan

Hypotype 6383

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 33, pl. 3, fig. 9.

Cobourg beds, Ottawa formation, Middle Ordovician, east half lot 21, con. 8, Cornwall tp., Ontario.

Platystrophia biforata (Schlotheim)

Hypotype 4517

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 6, figs. 4a, b.

Cabot Head formation, Cataract group, Lower Silurian, Eugenia, Ontario.

Platystrophia canadensis Sinclair

Holotype 12324

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 276, pl. 1, fig. 22.

Kirkfield formation, Middle Ordovician, Kirkfield, Ontario.

Platystrophia champlainensis McEwan

Hypotype 3243

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 19, pl. 6, figs. 6-9.

Lower Trenton, Middle Ordovician, Mile End, Montreal, Quebec.

Platystrophia champlainensis McEwan

Hypotypes 12317-12321

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 274, pl. 1, figs. 36-43.

Mile End formation, Middle Ordovician, St. Vincent de Paul, Quebec.

Platystrophia clarksvillensis Foerste

Hypotype 8508 (missing)

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 112, pl. 11, fig. 3.

Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Platystrophia egens Sinclair

Holotype 12326; paratypes 12327-12333

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 277, pl. 1, figs. 24-30.

Rosemount member, Montreal formation, Middle Ordovician, Montreal north and Riviere des Prairies, Quebec.

Platystrophia elegantula McEwan

Hypotype 6384

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 33, pl. 3, figs. 6a, b.

Cobourg beds, Ottawa formation, Middle Ordovician, lot 9, con. 4, Roxborough tp., east of Gravel Hill, Ontario.

Platystrophia extensa McEwan

Hypotype 6380

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 32, pl. 3, fig. 10.

Sherman Fall? beds, Ange gardien road, 4 miles west of L'Orignal, Ontario.

Platystrophia extensa McEwan

Hypotype 9096

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, p. 61, pl. 4, figs. 4a-c.

Liskeard formation, Ordovician, Lake Timiskaming area, Ontario.

Platystrophia felis Sinclair

Holotype 12341; paratype 12342

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 280, pl. 1, figs. 31, 32.

Sherman Fall and Lower Cobourg formations, Middle Ordovician, 3 miles north of Picton, Ontario, and near Watertown, New York, U.S.A.

Platystrophia hermitagensis McEwan

Hypotype 13221

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 31, pl. 3, fig. 5.

Cobourg beds, Middle Ordovician, near McAlpine, Ontario.

Platystrophia incerta Sinclair

Holotype 12325

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 276, pl. 1, figs. 20, 21.

Sherman Fall formation, Middle Ordovician, near Trenton, Ontario.

Platystrophia longa Sinclair

Holotype 12335; paratypes 12336-12338

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 279, pl. 1, figs. 44-47.

Middle Trenton, Middle Ordovician, near Grondines, Quebec.

Platystrophia minuta Raymond

Holotype 3242; paratype 3242a (missing)

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 20, pl. 6, fig. 10.

Lower Trenton, Middle Ordovician, Lorette, Quebec.

Platystrophia minuta Raymond

Hypotypes 12312-12315

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 273, pl. 1, figs. 50-53.

Mile End formation, Middle Ordovician, Le Page Station, Quebec.

Platystrophia minuta adulta Sinclair

Holotype 12316

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 273, pl. 1, fig. 48.

Mile End formation, Middle Ordovician, Le Page Station, Quebec.

Platystrophia moira Sinclair

Holotype 12322; hypotype 12323

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 275, pl. 1, figs. 17-19.

Kirkfield formation, Middle Ordovician, Moira River, Belleville, Ontario; Leray-Rockland beds, Middle Ordovician, Paquette Rapids, Ottawa River.

Platystrophia praecox Sinclair

Holotype 12334

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 278, pl. 1, fig. 23.

Rosemount member, Montreal formation, Middle Ordovician, Botanical Gardens quarry, Rosemount, Montreal, Quebec.

Platystrophia sera Sinclair

Holotype 12339; paratype 12340

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 279, pl. 1, figs. 33-35.

Middle Trenton, Ottawa formation, Middle Ordovician, Philemon Island, Hull, Quebec; Sherman Fall formation, Middle Ordovician, near Trenton, Ontario.

Platystrophia cf. *trentonensis* McEwan

Hypotype 12343

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 280, pl. 1, fig. 49.

Lower Trenton, Middle Ordovician, Eganville, Ontario.

Platystrophia uniplicata McEwan

Hypotypes 6376, 6378

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 31, pl. 3, figs. 1, 2.

Cobourg beds, Ottawa formation, Middle Ordovician, northeast of Dow's Lake, Ottawa, and con. 1, Roxborough tp., east of Strathmore, Ontario.

Platystrophia uxoris Sinclair

Holotype 12344; paratypes 12345-12350

Sinclair, G. W., 1946, Palaeontographica Americana, vol. 3, No. 20, p. 277, pl. 1, figs. 1-16.

Rosemount member, Montreal formation, Middle Ordovician, Montreal north, Quebec.

Plectambonites rugosus manitoulinensis Foerste

Syntypes 8557a-c

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 113, pl. 14, figs. 4a-d.

Meaford formation, Upper Ordovician, 2 miles northeast of Gore Bay, Manitoulin Island, Ontario.

Plectambonites youngi Raymond

Holotype 3250

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 24, pl. 7, figs. 7, 8.

Lowest Trenton, Middle Ordovician, above Montmorency Falls, Quebec.

Plectorthis magna Cooper and Kindle

Syntype 8855

Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 352.

Whitehead formation, Upper Ordovician, Priest's road, Percé, Quebec.

Plectorthis ottawaensis Wilson

Holotype 6375

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 28, pl. 2, figs. 5a-d.

Cobourg beds, Ottawa formation, Middle Ordovician, corner of Lorne Avenue and Maple Street, Ottawa, Ontario.

Plectorthis plicatella laurentina Wilson

Holotype 13219

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 28, pl. 2, fig. 4.

Cobourg beds, Ottawa formation, Middle Ordovician, Research Council laboratories, Sussex Street, Ottawa, Ontario.

Plectorthis pulchella Wilson

Holotype 13220

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 28, pl. 2, figs. 6a-c.

Cobourg beds, Ottawa formation, Middle Ordovician, Research Council laboratories, Sussex Street, Ottawa, Ontario.

Plectorthis ? *sinuatis* Wilson

Syntypes 6750, a

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 23, pl. 4, figs. 19-21.

Beaverfoot formation, Upper Ordovician (Lower Ordovician), ¾ mile east of Palliser Pass, British Columbia.

Pleurorthis imbecilis see *Strophomena imbecilis*

Pleurorthis tritonia see *Orthis tritonia*

Pomatotrema ? *evadne* see *Orthis evadne*

Pomatotrema grandaevum see *Orthisina grandaeva*

Pomonotrema grandaeva see *Orthisina grandaeva*

Porambonites (*Isorhynchus*) *canadensis* Cooper and Kindle

Syntype 8856

Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 353.

Whitehead formation, Upper Ordovician, Priest's road, Percé, Quebec

Porambonites ? *ottawaensis* Billings

Syntypes 1143, a-h

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 140, figs. 117a-g.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 140, figs. 117a-g.

Middle Ordovician (Leray-Rockland beds), Paquette Rapids, Ottawa River.

=*Rhynchotrema* ? *ottawaensis*, Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 121, pl. 11, figs. 9-11 (holotype 1143; paratypes 1143g, h).

=*Drepanorhyncha ottawaensis*, Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 628, pl. 128E, figs. 21-26, 28, 30, 31 (lectotype 1143g; paratypes 1143?, 1143e, h).

Productella baddeckensis Bell

Holotype 7962a (missing); paratypes 7962, b.

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 109, pl. 15, figs. 7, 8, a-c, 9.

Lower Windsor, Mississippian, Baddeck, Nova Scotia.

Productella lata Warren

Holotype 8902

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 51, pl. 4, fig. 1.

Minnewanka formation, Upper Devonian, Sulphur Mountain, Alberta.

Productella spinulicosta Hall

Hypotypes 4233, 4314

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 127, pl. 29, figs. 3, a; pl. 31, fig. 1.

Upper Devonian, Hay River 40 miles above mouth and Grand View, Mackenzie River, N.W.T.

Productella (*Strophalosia* ?) *truncata* Hall

Hypotypes 3686, a

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 112, pl. 16, figs. 1, 2.

Hamilton formation, Middle Devonian, Thedford, Ontario.

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Productella sp. F

Fig. spec. 13798

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, figs. 19, 20.

Member B, Alexo formation, Upper Devonian, ridge between Beaver and Medicine Lakes, Jasper Park, Alberta.

Productella sp.

Fig. spec. 13805

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, fig. 5.

Mount Hawk formation, Upper Devonian, eastern fault block Job Creek, Alberta.

Productus avonensis Bell

Holotype 7953; paratypes 7670 (missing), 7953a-c, 7956a, 7957, 7965, 7966a

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 120, pl. 19, figs. 15-23.

Upper Windsor, Mississippian, Kennetcook River at junction with Avon River, Murphy road at Hebert River bridge, and Murphy road 2 miles south of Scotch Village, Nova Scotia.

Productus (Linoproductus) dawsoni Beede

Hypotype 7963

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 144, pl. 17, fig. 1.

Lower Windsor, Mississippian, Brookfield, Nova Scotia.

Productus (Striatifera) cf. *latissimus* Sowerby

Hypotype 7435

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 116, pl. 18, fig. 12.

Upper Windsor, Mississippian, on Avon River, Windsor, Nova Scotia.

Productus (*Linoproductus*) *lyelli* Verneuil

Neotype 7952; hypotypes 7952a, b, d, f, h

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 111, pl. 16, figs. 1-5, 7, 8.

Lower Windsor, Mississippian, Miller quarry, Windsor, Nova Scotia.

Productus lyelli var. a Bell

Holotype 7964; paratypes 7964a, 7949

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 113, pl. 16, figs. 9-11.

Lower Windsor, Mississippian, Maccan River, Cumberland co., and first creek south of wharf, Summerville, Nova Scotia.

Productus lyelli var. b Bell

Holotype 7684

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 114, pl. 16, fig. 6.

Lower Windsor, Mississippian, Markhamville, New Brunswick.

Productus minnewankensis Shimer

Holotype 4551; paratype 4551a

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 40, pl. 1, figs. 6a-c, 7.

Lower Mississippian, Lake Minnewanka area, Alberta.

Productus (Linoproductus) semicubiculus Bell

Holotype 7951; paratypes 7947, 7961

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 114, pl. 17, figs. 4-6, a

Upper Windsor, Mississippian, Avon River bridge, Windsor, Nova Scotia.

Productus (Avonia) spinocardinata Bell

Holotype 7950; paratype 7948

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 177, pl. 17, figs. 2, a, b, 3a, b.

Upper Windsor, Mississippian, Murphy road at Hebert River, and Cogmagun River, Nova Scotia.

Productus subfasciculatus Bell

Paratypes 7955, 7958, 7959

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 115, pl. 17, figs. 7, 10, a, 11, a, b.

Upper Windsor, Mississippian, Avon River bridge, Windsor, and Murphy road at Hebert River, Nova Scotia.

Protoniella beedii Bell

Holotype 7954d; paratypes 7954, a-c

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 110, pl. 15, figs. 10, a, b, 11-14.

Upper Windsor, Mississippian, Murphy road at Hebert River, Nova Scotia.

Pseudolingula aquilina Sinclair

Holotype and paratype 1160; paratypes 9796, 9797

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 60, pl. 1, fig. 12.

Black River?, Middle Ordovician, Murray Bay and Cap à l'Aigle, Quebec.

Pseudolingula elegantula (Shaler)

Hypotype 2013a

Twenhofel, W. A., 1928, Geol. Surv., Canada, Mem. 154, p. 172, pl. 12, fig. 14.

Ellis Bay formation, Upper Ordovician, Wreck point, Anticosti Island, Quebec.

Pseudolingula ? eva see *Lingula eva*

Pseudolingula iowensis (Owen)

Hypotype 3244

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 14, pl. 5, figs. 1, 2.

Middle Trenton, Middle Ordovician, Trenton, Ontario.

Psuedolingula iowensis (Owen)

Hypotype 11099

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 61, pl. 1, figs. 6, 8, 9.

Sherman Fall formation, Middle Ordovician, Lakefield, Ontario.

Pseudolingula ? major Ruedemann

Hypotype 11258

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 62, pl. 1, figs. 13, 14.

Middle Trenton, Middle Ordovician, Grondines, Quebec.

Pseudolingula pyxidata Sinclair

Holotype 11098

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, sec. 4, p. 59, pl. 1, fig. 10.

Black River ?, Middle Ordovician, Rivière Sault à la Puce, Quebec.

Ptychopleurella porcia see *Orthis porcia*

Pugnax dawsonianus (Davidson)

Hypotypes 7481a, b, d, 7482-7484, a, 7489

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 124, pl. 9, figs. 7-14.

Lower Windsor, Mississippian, Maxner point, Miller quarry, and near Dominion Atlantic railway bridge, Windsor; McDonald's quarry near Graham's siding, Brookfield; and Stellarton, Pictou co., Nova Scotia.

Pugnax kernahani Whiteaves

Syntypes 3777, a-d

Whiteaves, J. F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 387, figs. 3a-c.

Hamilton formation, Middle Devonian, Thedford, Ontario.

Pugnax magdalena Beede

Hypotypes 7479, 7480, a

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 125, pl. 20, figs. 1, a, b, 2, a, 3, a.

Lower Windsor, Mississippian, Baddeck and Miller quarry, Windsor, Nova Scotia.

Pugnax minutus Warren

Syntype 8906

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 55, pl. 4, figs. 2-4.

Minnewanka formation, Upper Devonian, Sulphur Mountain, Alberta.

Pugnoides kakwaensis McLaren

Holotype 11246; paratype 11247

McLaren, D. J., 1954, "Western Canada Sedimentary Basin," Am. Assoc. Petrol. Geol., p. 176, pl. 1, figs. 28-32.

Flume equivalent, Upper Devonian, southeast end Ancient Wall, Jasper Park, Alberta.

=*Ladogia kakwaensis,* McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 200, pl. 8, fig. 3.

Pustula exigua Bell

Holotype 7436; paratype 7967

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 118, pl. 18, figs. 19, 20, a, b.

Upper Windsor, Mississippian, Avon River bridge, Windsor and Cogmagun River near second bridge above Burlington, Nova Scotia.

Rafinesquina alternata (Conrad)

Hypotype 8961

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 159, pl. 1, fig. 3.

1946, Geol. Surv., Canada, Bull. 8, p. 66, pl. 5, fig. 4.

Hull or Sherman Fall beds, Ottawa formation, Middle Ordovician, Ange gardien road, 4 miles west of L'Orignal, Ontario.

Rafinesquina alternata alata Wilson

Holotype 8945

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 160, pl. 1, fig. 17.

1946, Geol. Surv., Canada, Bull. 8, p. 66, pl. 5, fig. 18.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, lot 19 or 21, Front con., Clarence tp., Ontario.

Rafinesquina alternata intermedia Wilson

Holotype 8946

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 161, pl. 1, fig. 2.

1946, Geol. Surv., Canada, Bull. 8, p. 67, pl. 5, fig. 3.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, southeast of Cumberland, Ontario.

Rafinesquina alternata plana Wilson

Holotype 8948; paratype 8947

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 161, pl. 1, fig. 1.

1946, Geol. Surv., Canada, Bull. 8, p. 67, pl. 5, figs. 1, 2.

Hull and Sherman Fall beds, Ottawa formation, Middle Ordovician, quarry south side Ange gardien road, 4 miles west of L'Orignal and Aux Raisins River east of Black River station, Ontario.

Rafinesquina alternata platys Wilson

Holotype 13234

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 162, pl. 1, fig. 10.
1946, Geol. Surv., Canada, Bull. 8, p. 68, pl. 5, fig. 11.

Cobourg beds, Ottawa formation, Middle Ordovician, escarpment on Navan-Sarsfield road, Ontario.

Rafinesquina alternata pota Wilson

Holotype 8949

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 163, pl. 1, fig. 18.
1946, Geol. Surv., Canada, Bull. 8, p. 68, pl. 5, fig. 19.

Cobourg beds, Ottawa formation, Middle Ordovician, steamboat landing foot of Sussex Street, Ottawa, Ontario.

Rafinesquina alternata quadrata Wilson

Holotype 8950

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 164, pl. 1, fig. 5.
1946, Geol. Surv., Canada, Bull. 8, p. 69, pl. 5, fig. 6.

Sherman Fall or Cobourg beds, Ottawa formation, Middle Ordovician, lot 46 ? (Indian Lands), con. 7, Charlottenburgh tp., Ontario.

Rafinesquina alternata semiquadrata Wilson

Holotype 8951

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 164, pl. 1, fig. 6.
1946, Geol. Surv., Canada, Bull. 8, p. 69, pl. 5, fig. 7.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, lot 19 or 21, Front con., Clarence tp., Ontario.

Rafinesquina alternata transversa Wilson

Holotype 8952

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 165, pl. 1, fig. 11.
1946, Geol. Surv., Canada, Bull. 8, p. 69, pl. 5, fig. 12.

Hull beds, Ottawa formation, Middle Ordovician, cement quarry, Hull, Quebec.

Rafinesquina apicalis Wilson

Holotype 8954

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 167, pl. 2, fig. 2.
1946, Geol. Surv., Canada, Bull. 8, p. 71, pl. 6, fig. 2.

Cobourg beds, Ottawa formation, Middle Ordovician, between Fourth and Fifth Avenues, Ottawa, Ontario.

Rafinesquina beechhillensis McLearn

Holotype 5416; holoplastotype 5416a

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 60, pl. 4, fig. 15.

Beechhill formation, Lower Silurian, Rory McDonald brook, Arisaig, Nova Scotia.

Rafinesquina calderi Wilson

Holotype 8955

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 168, pl. 1, fig. 9.
1946, Geol. Surv., Canada, Bull. 8, p. 71, pl. 5, fig. 10.

Cobourg beds, Ottawa formation, Middle Ordovician, Major Hill Park, Ottawa, Ontario.

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Rafinesquina camerata (Conrad)

Hypotypes 3256, a, 3258

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 21, pl. 6, figs. 12, 13; pl. 7, fig. 2.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 71, pl. 7, figs. 6, 7.

Collingwood formation, Upper Ordovician, Craigleith, Ontario; Cobourg formation, Middle Ordovician, Georgina Island, Lake Simcoe, Ontario.

Rafinesquina carlottina Wilson

Holotype 6652

Wilson, A. E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 395, pl. 5, figs. 3, 4.

1946, Geol. Surv., Canada, Bull. 8, p. 70, pl. 7, figs. 8a, b.

Cobourg beds, Middle Ordovician, lot 35, con. 9, Charlottenburg tp., Ontario.

Rafinesquina deltoidea (Conrad)

Hypotype 7736

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 77, pl. 7, figs. 5a, b.

Upper Trenton, Middle Ordovician, Lachine, Quebec.

Rafinesquina equipunctata Wilson

Holotype 6637

Wilson, A. E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 394, pl. 5, figs. 1, 2.

1946, Geol. Surv., Canada, Bull. 8, p. 72, pl. 7, figs. 11a, b.

Cobourg beds, Middle Ordovician, east half of lot 35, con. 9, Charlottenburg tp., Ontario.

Rafinesquina esmondensis borealis Wilson

Holotype 8956

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 169, pl. 1, fig. 8.

1946, Geol. Surv., Canada, Bull. 8, p. 72, pl. 5, fig. 9.

Cobourg beds, Ottawa formation, Middle Ordovician, south side Lake Clear, Ontario.

Rafinesquina gibbosa Wilson

Holotype 8965

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 178, pl. 2, fig. 13.

1946, Geol. Surv., Canada, Bull. 8, p. 78, pl. 6, fig. 13.

Cobourg beds, Ottawa formation, Middle Ordovician, west end Fifth Avenue, Ottawa, Ontario.

Rafinesquina hullensis Wilson

Holotype 8957

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 170, pl. 1, fig. 19.

1946, Geol. Surv., Canada, Bull. 8, p. 73, pl. 5, fig. 20.

Hull beds, Ottawa formation, Middle Ordovician, west of Skye, Ontario.

Rafinesquina lata Whiteaves

Syntypes 4391, 6991

Whiteaves, J. F.,

1896, Can. Rec. Sci., vol. 6, p. 392.

1897, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 172, pl. 19, figs. 2, b, 3.

Ordovician (Red River formation), Lower Fort Garry and East Selkirk, Manitoba.

Rafinesquina laurentina Wilson

Holotype 6561; paratypes 6561a, 6562

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 382, pl. 3, figs. 1-3.

Upper Chazy (Aylmer formation), Middle Ordovician, Barnhart Island shaft near Cornwall, Ontario.

Rafinesquina laurentina Wilson

Holotype 8966

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 178, pl. 2, fig. 12.

1946, Geol. Surv., Canada, Bull. 8, p. 78, pl. 6, fig. 12.

Cobourg beds, Ottawa formation, Middle Ordovician, excavations for LaSalle academy, Ottawa, Ontario.

Rafinesquina lennoxensis Salmon

Hypotype 8953

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 166, pl. 1, fig. 4.

1946, Geol. Surv., Canada, Bull. 8, p. 70, pl. 5, fig. 5.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, lot 19 or 21, Front con., Clarence tp., Ontario.

Rafinesquina miodeltoidea Wilson

Holotype 8967

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 179, pl. 2, fig. 9.

1946, Geol. Surv., Canada, Bull. 8, p. 79, pl. 6, fig. 9.

Cobourg beds, Ottawa formation, Middle Ordovician, west end Fifth Avenue, Ottawa, Ontario.

Rafinesquina mucronata Foerste

Syntypes 8432, a

Foerste, A. F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 265, pl. 2, figs. 7a, b.

1924, Geol. Surv., Canada, Mem. 138, p. 115, pl. 30, figs. 6,7.

Upper Ordovician, 1 mile northwest of Vars, Ontario.

Rafinesquina mucronata Foerste

Hypotypes 8574, 8575

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 115, pl. 14, figs. 1a, b.

Upper Ordovician, Nicolet River and below dam Chambly Basin, Richelieu River, Quebec.

Rafinesquina normalis Wilson

Holotype 6653; paratype 6653a

Wilson, A. E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 395, pl. 5, figs. 5, 6.

1946, Geol. Surv., Canada, Bull. 8, p. 79, pl. 8, figs. 10, 11.

Cobourg beds, Middle Ordovician, lot C, con. 9, Cornwall tp., Ontario.

Rafinesquina normaloides Wilson

Holotype 8968; paratype 6654

Rafinesquina normalis, Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 395, pl. 5, fig. 7 (paratype 6654).

Rafinesquina normaloides, Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 181, pl. 2, fig. 5.

1946, Geol. Surv., Canada, Bull. 8, p. 80, pl. 6, fig. 5; pl. 7, fig. 3.

Cobourg beds, Ottawa formation, Middle Ordovician, Rideau Hall grounds, Ottawa, and Gravel Hill, Ontario.

Rafinesquina okulitchi Wilson

Holotype 8969

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 181, pl. 2, fig. 7.

1946, Geol. Surv., Canada, Bull 8, p. 80, pl. 6, fig. 7.

Rockland beds, Ottawa formation, Middle Ordovician, north of Orleans, Ontario.

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Rafinesquina opeongoensis Wilson

Holotype 8958

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 171, pl. 1, fig. 17.
1946, Geol. Surv., Canada, Bull. 8, p. 73, pl. 5, fig. 17.

Sherman Fall? beds, Ottawa formation, Middle Ordovician, Opeongo road west of Esmond, Ontario.

Rafinesquina orleansensis Wilson

Holotype 8959

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 171, pl. 1, fig. 13.
1946, Geol. Surv., Canada, Bull. 8, p. 74, pl. 5, fig. 14.

Rockland beds, Ottawa formation, Middle Ordovician, north of Orleans, Ontario.

Rafinesquina ottawaensis Wilson

Holotype 8970

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 182, pl. 2, figs. 14a, b.
1946, Geol. Surv., Canada, Bull. 8, p. 81, pl. 6, figs. 14a, b.

Cobourg beds, Ottawa formation, Middle Ordovician, lot 22, con. 3, Roxborough tp., Ontario.

Rafinesquina patula Wilson

Holotype 8960

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 172, pl. 1, fig. 12.
1946, Geol. Surv., Canada, Bull. 8, p. 74, pl. 5, fig. 13.

Hull or Sherman Fall beds, Ottawa formation, Middle Ordovician, Ange gardien road, 4 miles west of L'Orignal, Ontario.

Rafinesquina percensis Cooper and Kindle

Syntypes 8859

Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 356, pl. 51, fig. 36.

Whitehead formation, Upper Ordovician, Amphitheatre road, Percé, Quebec.

Rafinesquina praecursor Raymond

Holotype 3259

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 22, pl. 7, fig. 5.
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 74, pl. 5, fig. 15.

Middle Trenton, Middle Ordovician, Trenton, Ontario.

Rafinesquina praedeltoidea Wilson

Holotype 8971

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 183, pl. 2, fig. 11.
1946, Geol. Surv., Canada, Bull. 8, p. 81, pl. 6, fig. 11.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, southeast of Pakenham, Ontario.

Rafinesquina robusta Wilson

Holotype 6655; paratype 6655a

Wilson, A. E.,
1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 396, pl. 5, figs. 14-16.
1946, Geol. Surv., Canada, Bull. 8, p. 75, pl. 7, figs. 9a, b, 10.

Cobourg beds, Middle Ordovician, east half lot 9, con. 4, Roxborough tp., Ontario.

Rafinesquina rotunda Wilson

Holotype 8962

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 174, pl. 1, fig. 7.
1946, Geol. Surv., Canada, Bull. 8, p. 75, pl. 5, fig. 8.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Merivale road southeast of Carlington, Ottawa, Ontario.

Rafinesquina rugosa Wilson

Holotype 6221; paratype 6221a

Wilson, A. E., 1921, Geol. Surv., Canada, Mus. Bull. 33, p. 51, pl. 3, figs. 8, 9.

Rockland beds, Middle Ordovician, upper 10 feet of Stewart quarry, Rockland, Ontario.

=*Öpikina rugosa*, Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 91, pl. 8, figs. 22, 23.

Rafinesquina rugosa avita Wilson

Holotype 6813a (missing); paratype 6813b, c (missing), 13236, 13237

Wilson, A. E., 1932, Can. Field-Naturalist, vol. 46, No. 6, p. 138, pl. 2, figs. 6-13.

Leray-Rockland beds, Middle Ordovician, lot 10, con. 8, N. Crosby tp., and Mechanicsville, Ottawa, Ontario.

=*Öpikina ? rugosa avita*, Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 91, pl. 8, figs. 15-19.

Rafinesquina salmoni Wilson

Holotype 8972

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 184, pl. 2, fig. 8.

1946, Geol. Surv., Canada, Bull. 8, p. 82, pl. 6, fig. 8.

Cobourg beds, Ottawa formation, Middle Ordovician, Booth Street, Ottawa, Ontario.

Rafinesquina sardesoni Salmon (?)

Hypotype 8973

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 83, pl. 6, fig. 6.

Cobourg beds, Ottawa formation, Middle Ordovician, lot 21, con. 8, Cornwall tp., Ontario.

Rafinesquina semicircularis Wilson

Holotype 8974

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 185, pl. 2, fig. 4.

1946, Geol. Surv., Canada, Bull. 8, p. 83, pl. 6, fig. 4.

Sherman Fall beds, Ottawa formation, Middle Ordovician, 'Dump', Hull, Quebec.

Rafinesquina semicircularis minor Wilson

Holotype 8975

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 186, pl. 2, fig. 3.

1946, Geol. Surv., Canada, Bull. 8, p. 83, pl. 6, fig. 3.

Cobourg beds, Ottawa formation, Middle Ordovician, Indian Lands, cons. 8 and 9, Cornwall tp., Ontario.

Rafinesquina sinuata Wilson

Holotype 8976

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 187, pl. 2, fig. 10.

1946, Geol. Surv., Canada, Bull. 8, p. 84, pl. 6, fig. 10.

Cobourg ? beds, Ottawa formation, Middle Ordovician, Hull, Quebec.

Rafinesquina subcamerata Wilson

Holotype 8963

Wilson, A. E.,

1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 175, pl. 2, fig. 1.

1946, Geol. Surv., Canada, Bull. 8, p. 76, pl. 6, fig. 1.

Cobourg beds, Ottawa formation, Middle Ordovician, west end Fifth Avenue, Ottawa, Ontario.

Rafinesquina subtrigonalis Wilson

Holotype 8964

Wilson, A. E.,
1944, Trans. Roy. Soc. Can., ser. 3, vol. 38, sec. 4, p. 175, pl. 1, fig. 15.
1946, Geol. Surv., Canada, Bull. 8, p. 76, pl. 5, fig. 16.

Sherman Fall beds, Ottawa formation, Middle Ordovician, quarry 1 mile west of Finch, Ontario.

Rensselaeria delicatula Clark

Holotype 987 (missing)

Clark, T. H., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 36, sec. 4, p. 29, pl. 1, figs. 13-15.

Cranbourne formation, Lower Devonian, Range St. Thomas, St. Joseph Seigniory, Quebec.

Rensselaeria ovalis Hall

Hypotypes 3366, d, e

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 962, figs. 471a-c.

Oriskany formation, Lower Devonian, lot 50, con. 1, North Cayuga tp., Ontario.

Rensselaeria ovoides Eaton

Hypotype 3307

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 41, pl. 3, fig. 7.

Devonian (Gaspé sandstone), 2 miles west from entrance to Gaspé Basin, Quebec.
=*Rensselaeria ovoides gaspensis,* Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 164.

Reticularia septentrionalis Whiteaves

Syntypes 4400, a-c, 4401, 4402

Whiteaves, J. F.,
1904, Geol. Surv., Canada, Ann. Rept. n.s., vol. 14, 1901, p. 44F.
1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 253, pl. 27, figs. 2-5.

Silurian, falls and first rapids, Ekwan River, Ontario.

Retzia chlöe see *Athyris* (?) *chlöe*

Retzia eugenia Billings

Syntypes 3517, a

Billings, E., 1861, Can. J., n.s., vol. 6, p. 147, figs. 58a-d.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 373, figs. 395a, b.

Onondaga formation, Middle Devonian, lot 5, con. 4, Walpole tp., Ontario.

Rhinobolus galtensis see *Obolus galtensis* and *Rhynobolus galtensis*

Rhinobolus galtensis Billings var.

Holotype 3019

Whiteaves, J. F., 1895, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 2, p. 61, pl. 9, figs. 2, a.

Guelph formation, Middle Silurian, Elora, Ontario.

Rhipidomella cascadensis Warren

Syntypes 8917, a-f

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 50, pl. 6, figs. 3, 4.

Rundle formation, Pennsylvanian?, Cascade and Stoney Squaw Mountains, Alberta.

Rhipidomella hybrida (Sowerby)

Hypotype 4617

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 7, figs. 9a, b.

Cabot Head formation, Cataract group, Lower Silurian, Eugenia, Ontario.

Rhipidomella sola see *Orthis sola*

Rhipidomella uberis see *Orthis uberis*

Rhynchonella anticostiensis Billings

Syntypes 2032, a-n

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 142, figs. 119a-c.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 142, figs. 119a-c.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 211, figs. 212a-c.

Upper Ordovician (English Head formation), English Head, Anticosti Island, Quebec.

=*Rhynchotrema anticostiense,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 207, pl. 21, figs. 4-6 (2032d).

Rhynchonella ? argentea Billings

Syntypes 2516, a (missing)

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 43.

Middle Silurian (Jupiter formation), Shallop River, Anticosti Island, Quebec.

=*Camarotoechia ? argentea,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 208, pl. 21, figs. 13, 14.

Rhynchonella dryope Billings

Syntypes 3292, a-e

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 37, pl. 3A, figs. 1, a-c.

Devonian (Grande Greve formation), Grande Greve, Gaspé, Quebec.

=*Camarotoechia dryope,* Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 170.

Rhynchonella excellens Billings

Syntypes 3290, a, b

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 36, figs. 17, 18.

Devonian (Grande Greve formation), Indian Cove, Gaspé, Quebec.

=*Camarotoechia excellens,* Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 169.

Rhynchonella fringilla Billings

Syntypes 2370, a-e

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 141, fig. 118.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 141, fig. 118.

Lower Silurian (Becscie formation), Wreck Beach, Gull Cape, Anticosti Island, Quebec.

=*Camarotoechia fringilla,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 209, pl. 21, figs. 7-9 (holotype 2370a, paratypes 2370b-n).

Rhynchonella glacialis Billings

Syntypes 2371, a-z

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 143, figs. 120a, b.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 143, figs. 120a, b.

Lower Silurian (Becscie formation), Wreck Beach, Gull Cape, Anticosti Island, Quebec.

=*Camarotoechia glacialis,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 210, pl. 19, figs. 18-20 (holotype 2371).

=*Fenestriorostra glacialis,* Cooper, G. A., 1955, J. Pal., vol. 29, No. 1, p. 56.

Rhynchonella increbescens (Hall)

Hypotype 1603

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 168, figs. 153a-c.

Trenton, Middle Ordovician, Bay of Quinte, Belleville, Ontario.

Rhynchonella janea Billings

Syntypes 2279, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 43.

Upper Ordovician (Ellis Bay formation), Ellis Bay, Anticosti Island, Quebec.

=*Rhynchotrema janeum*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 207, pl. 22, figs. 20, 21.

Rhynchonella (?) *laura* Billings

Syntypes 3705, a-k

Billings, E., 1860, Can. J., n.s., vol. 5, p. 273, figs. 26-28.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 384, figs. 418a-c.

Hamilton formation, Middle Devonian, Thedford, Ontario.

Rhynchonella maudensis Whiteaves

Syntypes 4866, a-r

Whiteaves, J. F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 252, pl. 33, figs. 8a,b (1900).

'Cretaceous' (Maude formation, Lower Jurassic), south side Maude Island, Queen Charlotte Islands, British Columbia.

Rhynchonella medea Billings

Holotype 3479

Billings, E., 1860, Can. J., n. s., vol. 5, p. 271.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 370, figs. 388a, b.

Onondaga formation, Middle Devonian, lot 2, con. 3, Rainham tp., Ontario.

Rhynchonella mica Billings

Syntypes 2517, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 44.

Middle Silurian (Jupiter formation), The Jumpers, Anticosti Island, Quebec.

=*Zygospira mica*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 214, pl. 21, figs. 21, 22.

Rhynchonella nutrix Billings

Holotype 2278

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 43.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 213, pl. 23, figs. 18-20.

Upper Ordovician (Ellis Bay formation), Ellis Bay, Anticosti Island, Quebec.

Rhynchonella obesula Whiteaves

Syntype 5674

Whiteaves, J. F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 302, pl. 39, figs. 3, a.

'Cretaceous' (Yakoun formation, Upper Jurassic), south side Alliford Bay, Queen Charlotte Islands, British Columbia.

Rhynchonella orientalis Billings

Syntypes 1041, a-k, m, n

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 443, fig. 21.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 126, fig. 57.

Middle Ordovician (Mingan formation), Mingan Islands, Quebec.

Rhynchonella orthidioides Whiteaves

Holotype 5823

Whiteaves, J. F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 303, pl. 39, fig. 5.

'Cretaceous' (Yakoun formation, Upper Jurassic), east end Maude Island, Queen Charlotte Islands, British Columbia.

Rhynchonella pleiopleura Conrad
Hypotype 3293
Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 38, figs. 19, 20.
Devonian (Grande Greve formation), Indian Cove, Gaspé, Quebec.

Rhynchonella pyrrha Billings
Syntypes 2368, a-e
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 44.
Lower Silurian (Gun River formation), 1 mile east of Otter River, Anticosti Island, Quebec.
=*Camarotoechia ? pyrrha*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 211, pl. 21, figs. 10-12 (holotype 2368c).

Rhynchonella suciensis Whiteaves
Syntypes 5675, a, b
Whiteaves, J. F., 1896, Trans. Roy. Soc. Can., ser. 2, vol. 1, p. 119, pl. 3, fig. 1.
Cretaceous, Sucia Island, Straits of Georgia, British Columbia.

Rhynchonella suciensis Whiteaves
Hypotype 5873
Whiteaves, J. F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 402, pl. 51, figs. 3, a.
Cretaceous, Brennan Creek, Vancouver Island, British Columbia.

Rhynchonella tethys Billings
Syntype 3478
Billings, E., 1860, Can. J., n.s., vol. 5, p. 270, fig. 21.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 370, fig. 387b.
Middle Devonian (Onondaga formation), Woodhouse tp., Norfolk co., Ontario.

Rhynchonella vicina Billings
Syntypes 2518, a, b
Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 44.
Middle Silurian (Chicotte formation), Southwest Point, Anticosti Island, Quebec.
=*Camarotoechia vicina*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 211, pl. 19, figs. 21-23 (holotype 2518).

Rhynchopora banffensis Warren
Holotype 8919
Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 55, pl. 6, figs. 5, 6.
Rundle formation, Pennsylvanian ?, Stoney Squaw Mountain, Alberta.

Rhynchopora cascadensis Warren
Holotype 8920
Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 56, pl. 6, figs. 7, 8.
Rundle formation, Pennsylvanian ?, Stoney Squaw Mountain, Alberta.

Rhynchospira lowi Whiteaves
Syntypes 4403, a
Whiteaves, J. F., 1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 277, pl. 25, figs. 8, 9.
Silurian, Limestone rapids, Fawn River, Ontario.

Rhynchotrema ainsliei Winchell
Hypotype 6419
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 120, pl. 11, fig. 7.
Lowville beds, Ottawa formation, Middle Ordovician, Rockland, Ontario.
Rhynchotrema anticostiense see *Rhynchonella anticostiensis*

Rhynchotrema anticostiense (Billings)

Hypotype 2503

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 1, figs. 5, 6.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Rhynchotrema inaequivalve (Castelman)

Hypotype 9094

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, p. 61, pl. 4, figs. 2a-c.

Liskeard formation, Ordovician, Lake Timiskaming area, Ontario.

Rhynchotrema increbescens (Hall)

Hypotypes 1146f, 6420

Wilson, A. E.,

1926, Geol. Surv., Canada, Mus. Bull. 44, p. 21, pl. 4, fig. 5, (1146f).

1946, Geol. Surv., Canada, Bull. 8, p. 120, pl. 11, figs. 12a, b, 13.

Leray-Rockland beds and Leray beds, Ottawa formation, Middle Ordovician, Paquette Rapids and Merivale Road, Ottawa, Ontario.

Rhynchotrema increbescens (Hall)

Hypotype 9093

Hume, G. S., 1925, Geol. Surv., Canada, Mem. 145, p. 60, pl. 4, figs. 3a-c.

Liskeard formation, Ordovician, Lake Timiskaming area, Ontario.

Rhynchotrema increbescens occidens Wilson

Syntypes 6745, a, b, 6746

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 21, pl. 4, figs. 6-10.

Beaverfoot formation, Upper ? Ordovician, ¾ mile east of Palliser Pass and second creek entering Spray River, British Columbia.

Rhynchotrema intermedia Wilson

Holotype 6660

Wilson, A. E,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 400, pl. 5, figs. 8-10.

1946, Geol. Surv., Canada, Bull. 8, p. 121, pl. 11, figs. 8a-c.

Cobourg beds, Middle Ordovician, lot 32, con. 3, Kenyon tp., Ontario.

Rhynchotrema janeum see *Rhynchonella janea*

Rhynchotrema kananaskia Wilson

Holotype 6749; paratype 6749a, b

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 23, pl. 4, figs. 14-18.

Beaverfoot formation, Upper ? Ordovician, east of Palliser Pass, British Columbia.

Rhynchotrema ? ottawaensis see *Porambonites ? ottawaensis*

Rhynchotrema perlamellosum (Whitfield)

Hypotype 4721

Okulitch, V. J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 1, fig. 15.

Stony Mountain formation, Upper Ordovician, Stony Mountain, Manitoba.

Rhynchotrema perlamellosum (Whitfield)

Hypotype 8511

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 125, pl. 11, figs. 5a, b.

Upper Ordovician, bluff west of Gore Bay, Manitoulin Island, Ontario.

Rhynchotrema pisina Wilson

Holotype 6747; paratypes 6747a, 6748

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 22, pl. 4, figs. 11-13.

Beaverfoot formation, Upper Ordovician, Stoddart Creek and near Golden, British Columbia.

Rhynchotrema plicata Cooper and Kindle

Paratypes 8865, a

Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 359, pl. 52, figs. 5, 6.

Whitehead formation, Upper Ordovician, Priest's road, Percé, Quebec.

Rhynchotrema pulchellum Foerste

Syntypes 8590a-c

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 126, pl. 15, figs. 5a-c.

Upper Ordovician, southeast edge Snake Island, Lake St. John, Quebec.

Rhynchotrema ? *tamarackensis* Foerste

Holotype 6769a; paratype 6769

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 126, pl. 15, figs. 7a, b.

Sheguiandah formation, Upper Ordovician, north of Tamarack point about 10 miles southwest of Little Current, Manitoulin Island, Ontario.

Rhynchotrema windermeris Wilson

Syntypes 6744, a, b

Wilson, A. E., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 20, pl. 4, figs. 1-4.

Beaverfoot formation, Upper Ordovician, Stoddart Creek, British Columbia.

Rhynchotreta cabotensis Williams

Holotype 4622

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 120, pl. 7, figs. 11a-c.

Cabot Head formation, Cataract group, Lower Silurian, 2 miles west of Cabot Head, Ontario.

Rhynchotreta elongata usheri Brown

Holotype 9194

Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 92, pl. 5, figs. 5a-c.

Banff formation, Carboniferous, Morro Creek, Jasper Park, Alberta.

Rhynchotreta cf. *lepida* Savage

Hypotypes 4626, a, b

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 7, figs. 12, 13a, b, 14.

Cabot Head formation, Cataract group, Lower Silurian, Clay Cliffs, Cabot Head, Ontario.

Rhynchotreta williamsi Foerste

Holotype 4331

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 126, pl. 7, figs. 15a, b.

Manitoulin formation, Cataract group, Lower Silurian, Gibraltar cliff southeast of Manitowaning Bay, Manitoulin Island, Ontario.

Rhynobolus galtensis Billings

Hypotypes 2819c, 2820a

Whiteaves, J. F., 1884, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 1, p. 7, pl. 8, figs. 3, a.

Guelph formation, Middle Silurian, Durham and Hespeler, Ontario.

=*Rhinobolus galtensis*, Hall, J. and Clarke, J. M., 1892, Pal. N.Y., vol. 8, pt. 1, p. 45, pl. 4b, fig. 9 (2819c).

=*Monomerella* sp. uncertain, Whiteaves, J. F., 1895, Geol. Surv., Canada, Pal. Fossils, vol. 3, pt. 2, p. 58 (2820).

See *Obolus galtensis*

Romingerina anna (Hartt)

Neotype 7472; hypotypes 7471, 7472, b.

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 129, pl. 20, figs. 12-15.

Lower Windsor, Mississippian, near Dominion Atlantic railway bridge and Miller quarry, Windsor, Nova Scotia.

Rostricellula plena (Hall)

Hypotype 1040

Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 645, pl. 132D, figs. 19, 20.

Chazy, Middle Ordovician, Island of Montreal, Quebec.

Schellwienella kennetcookensis Bell

Holotype 7654; paratype 7942

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 107, pl. 15, figs. 5, 6.

Upper Windsor, Mississipian, mouth Kennetcook River and St. Croix River near Windsor, Nova Scotia.

Schellwienella lata Shimer

Holotype 4527; paratype 4527a

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 35, pl. 6, figs. 7, 8.

Pennsylvanian, Lake Minnewanka area, Alberta.

Schizambon ? fissus canadensis see *Siphonotreta scotica canadensis*

Schizocrania filosa (Hall)

Hypotypes 6328, 6329

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 23, pl. 2, figs. 17, 18.

Leray-Rockland and Hull beds, Ottawa formation, Middle Ordovician, near L'Orignal, Ontario and cement quarry, Hull, Quebec.

Schizocrania megumaensis McLearn

Paratype 6202; paraplastotype 6202a.

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 48, pl. 2, fig. 9.

Ross Brook formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Schizocrania minuscula Wilson

Syntypes 6371 (all on one slab)

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 24, pl. 2, figs. 25a-c.

Cobourg beds, Ottawa formation, Middle Ordovician, lot 2 ?, con. 4, Cumberland tp., Ontario.

Schizophorella arisaigensis McLearn

Paratypes 5411-5414; paraplastotypes 5411a-5414a

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 58, pl. 4, figs. 9, 11-13.

Beechhill formation, Lower Silurian, Rory McDonald brook, Arisaig, Nova Scotia.

Schizophoria sp.

Fig. spec. 13803

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 196, pl. 6, figs. 1, 2.

Mount Hawk formation, Upper Devonian, North Ram River gap, north side, Front Range, Alberta.

Schizotreta canadensis Wilson

Holotype 6373; paratype 6373a

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 25, pl. 2, figs. 14, 15.

Leray beds, Ottawa formation, Middle Ordovician, lot 2, con. 4, Cumberland tp., Ontario.

Schizotreta pelopea (Billings)

Hypotype 1655a

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 25, pl. 2, fig. 16.

Cobourg beds, Ottawa formation, Middle Ordovician, Ottawa, Ontario.

Schuchertella alterniradiata Shaler

Hypotype 2363

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 196, pl. 22, figs. 8, 9.

Jupiter formation, Middle Silurian, East Point, Anticosti Island, Quebec.

Schuchertella gamachiana Twenhofel

Syntype 2261

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 197, pl. 17, fig. 9.

Ellis Bay formation, Upper Ordovician, 1 mile east of Junction Cliff, Anticosti Island, Quebec.

Schuchertella girtyi Shimer

Holotype 4500

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 34, pl. 1, figs. 1a-c.

Upper Devonian, Lake Minnewanka area, Alberta.

Schuchertella pecten (Linnaeus)

Hypotype 5423

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 63, pl. 5, fig. 32.

Stonehouse ? formation, Middle Silurian, coast section Arisaig, Nova Scotia.

Schuchertella pictoense Bell

Syntypes 7655, a; paratypes 7463, 7655b

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 106, pl. 14, figs. 5-7.

Upper Windsor, Mississippian, East River of Pictou, Nova Scotia.

Schuchertella cf. *S. prava* (Hall)

Hypotype 13802

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 194, pl. 5, fig. 30.

Southesk formation, Upper Devonian, headwaters Job Creek, Alberta.

Siphonotreta scotica canadensis Ami

Syntype 1915c

Ami, H. M., 1887, Ottawa Naturalist, vol. 1, p. 124.

Upper Ordovician (Eastview formation), Rideau River opposite Isolation Hospital, Ottawa, Ontario.

=*Schizambon ? fissus canadensis*, Hall, J. and Clarke, J. M., 1892, Pal. N.Y., vol. 8, pt. 1, p. 115, pl. 4, figs. 34, 35.

Skenidioides ? merope Billings

Neotypes 6385, 6386

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 34, pl. 2, figs. 2, 3.

Rockland beds, Ottawa formation, Middle Ordovician, Stewart quarry, Rockland, Ontario.

Sowerbyella ? minuta Wilson

Holotype 13230; paratype 13231

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 50, pl. 3, fig. 23.

Cobourg beds, Ottawa formation, Middle Ordovician, Notre Dame cemetery, Eastview, Ontario.

Sowerbyella punctostriata Mather

Hypotype 6410

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 51, pl. 3, fig. 24.

Rockland beds, Ottawa formation, Middle Ordovician, Rockland, Ontario.

Sowerbyella sericea (Sowerby)

Hypotypes 6411, 6613

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 51, pl. 3, fig. 26.

Leray-Rockland and Cobourg beds, Ottawa formation, Middle Ordovician, Rockland and Gravel Hill, Ontario.

Sowerbyella subovalis Wilson

Holotype 6612

Wilson, A. E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 393, pl. 4, figs. 10, 11.

1946, Geol. Surv., Canada, Bull. 8, p. 52, pl. 3, figs. 25a, b.

Cobourg beds, Middle Ordovician, Gravel Hill, Ontario.

Spirifer albapinensis Hall and Whitfield

Hypotypes 4605a, b, 4606

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 49, pl. 2, figs. 12-14.

Lower Mississippian, Lake Minnewanka region, Alberta.

Spirifer albertensis Warren

Hypotypes 9192, 9193, 9195 (missing)

Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 95.

Banff formation, Carboniferous, Mount Greenock area, Alberta.

Spirifer banffensis Warren

Syntypes 8921, a

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 57, pl. 6, figs. 11, 12.

Rundle formation, Pennsylvanian?, Tunnel Mountain, Alberta.

Spirifer cascadensis Warren

Syntypes 8909, a-g

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 58, pl. 7, figs. 1, 2.

Banff formation, Mississippian, Rundle Mountain, Alberta.

Spirifer centronatus Winchell

Hypotypes 4612b-d, 4614, a, b, 4618, a

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 51, pl. 2, figs. 1-11.

Lower Mississippian, Lake Minnewanka region, Alberta.

Spirifer centronatus minnewankensis Shimer

Holotype 4630

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 52, pl. 1, figs. 8a, b.

Lower Mississippian, Lake Minnewanka area, Alberta.

Spirifer cyclopterus see *Spirifera cycloptera*

Spirifer esplanadensis Brown

Holotype 9199; paratypes 9200-9202

Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 97, pl. 5, figs. 1a-e.

Banff formation, Carboniferous, Windy Point, Mount Greenock, Alberta.

Spirifer forbesi Norwood and Pratten

Hypotype 13447

Harker, P. and Raasch, G. O., 1958, "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 7.

Livingstone formation, Mississippian, Canyon Creek, Alberta.

Spirifer greenockensis Brown

Holotype 9204; paratypes 9206, 9207

Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 98, pl. 4, figs. 5a-c.

Banff formation, Carboniferous, Windy Point, Mount Greenock, Alberta.

Spirifer cf. *increbescens* Hall

Hypotype 13444

Harker, P. and Raasch, G. O., 1958, "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 3.

Etherington formation, Mississippian, Mount Hood, Alberta.

Spirifer cf. *leidyi* Norwood and Pratten

Hypotype 13443

Harker, P. and Raasch, G. O., 1958, "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 2.

Upper beds of Rundle group, Mississippian, Tunnel Mountain, Banff, Alberta.

Spirifer minnewankensis (Shimer)

Hypotypes 10005-10007

Brown, R. A. C., 1952, Geol. Surv., Canada, Mem. 264, p. 100, pl. 4, figs. 6a-d.

Rundle formation, Carboniferous, Cobblestone Creek, Mount Greenock area, Alberta.

Spirifer cf. *missouriensis* Swallow

Hypotype 10083

Harker, P. and Raasch, G. O., 1958, "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 9.

Banff formation, Mississippian, Morro Creek, Jasper, Alberta.

Spirifer nox Bell

Holotype 7532

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 137, pl. 22, figs. 10, a, b.

Upper Windsor, Mississippian, second creek north of Avondale wharf near mouth Kennetcook River, Nova Scotia.

Spirifer onestae see *Spiriferina onestae*

Spirifer radiatus Sowerby?

Hypotype 4437

Williams, M. Y., 1915, Geol. Surv., Canada, Mus. Bull. 20, p. 6, pl. 2, fig. 1.

Eramosa member, 'Lockport' formation, Eramosa River east of Guelph, Ontario.

Spirifer rockymontanus Marcou

Hypotypes 4636, a-e

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 54, pl. 7, figs. 4-10.

Pennsylvanian, Lake Minnewanka area, Alberta.

Spirifer cf. *rowleyi* Weller

Hypotype 13448

Harker, P. and Raasch, G. O., 1958, "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 10.

Banff formation, Mississippian, Sunwapta Pass, Alberta.

Spirifer rundlensis Warren

Syntype 8908

Warren, P. S., 1927, Geol. Surv., Canada, Mem. 153, p. 59, pl. 7, fig. 9.

Rundle formation, Mississippian, Rundle Mountain, Alberta.

Spirifera cycloptera Hall

Hypotypes 3303, 3304

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 48, pl. 3A, figs. 4, a-c.

Devonian (Grande Greve formation), Percé and Grande Greve, Gaspé, Quebec. =*Spirifer cyclopterus,* Clarke, J. M., 1908, Mem. N. Y. State Mus., vol. 9, pt. 1, p. 178, pl. 32, figs. 14-17.

Spirifera disjuncta occidentalis Whiteaves

Syntypes 4241, a-c

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 222, pl. 29, figs. 5,a.

Upper Devonian, 40 miles above mouth Hay River, N.W.T.

Spirifera gaspensis Billings

Syntypes 3307, a-e

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 44, pl. 3, figs. 8, a, b (3307c).

Gaspé sandstone, Devonian, 2 miles west of entrance to Gaspé Basin, Quebec.

Spirifera mucronata (Conrad)

Hypotype 3779

Billings, E., 1861, Can. J., n.s., vol. 6, p. 254, fig. 62.

Logan, W. E., 1853, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 386, fig. 424a.

Hamilton formation, Middle Devonian, Lambton co., Ontario.

Spirifera radiata (Sowerby)

Hypotype 2521

Logan, W. E., 1853, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 317, figs. 328a, b.

Middle Silurian (Jupiter formation), The Jumpers, Anticosti Island, Quebec.

Spirifera (Martinia) richardsonii Meek

Hypotype 4155

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 287, pl. 37, fig. 7.

Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

Spirifera sculptilis ? Hall

Hypotype 3693

Billings, E., 1851, Can. J., n.s., vol. 6, p. 262, fig. 79.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 386, fig. 423.

Hamilton formation, Middle Devonian, Thedford, Ontario.

Spirifera subdecussata Whiteaves

Holotype 3694

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 114, pl. 15, figs. 3, a.

Hamilton formation, Middle Devonian, Thames River, Moraviantown, Ontario.

Spirifera superba Billings

Syntypes 3301, a-c

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 45, pl. 3A, figs. 3, a, b.

Devonian (Grande Greve formation), Indian Cove, Gaspé Bay, Quebec.

Spirifera tullia Hall var.

Syntypes 4250, 4251

Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 224, pl. 32, figs. 2, a, b (4251).

Upper Devonian, Athabasca River, opposite La Saline and first 10 miles below Clearwater, Alberta.

Spiriferella minnewankensis Shimer

Syntypes 4686, a

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 64, pl. 3, figs. 1, 2.

Mississippian, Lake Minnewanka area, Alberta.

Spiriferina borealis Whiteaves

Holotype 4733

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 128, pl. 17, fig. 1.

Triassic, Liard River about 20 miles below Devils Portage, British Columbia.

Spiriferina cf. *octoplicata* Sowerby

Hypotypes 7513, 7519

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 141, pl. 22, figs. 1, 2.

Upper Windsor, Mississippian, Avon River bridges, Windsor, and Cogmagun River, Nova Scotia.

Spiriferina onestae McLearn

Holotype 9143

McLearn, F. H., 1937, Can. Field-Naturalist, vol. 51, No. 7, p. 96, pl. 1, fig. 5.

Schooler Creek formation, Triassic, Peace River district, British Columbia.

=*Spirifer onestae,* McLearn, F. H., 1947, Geol. Surv., Canada, Paper 57-24, Appendix, pl. 7, fig. 10.

Spiriferina verneuili Bell

Syntypes 7521, a; paratypes 7520, 7522

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 139, pl. 22, figs. 6-9.

Lower Windsor, Mississippian, Miller quarry, Windsor, Riverside, and Brookfield, Nova Scotia.

Squamularia depressiplicata Shimer

Holotype 4828; paratypes 4829, a

Shimer, H. W., 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 68, pl. 5, figs. 5a-c, 6, 7.

Lower Mississippian, Lake Minnewanka area, Alberta.

Streptorhynchus cf. *minutum* (Cummings)

Hypotype 7462

Bell, W. A., 1929, Geol. Surv., Canada, Mem. 155, p. 108, pl. 15, figs. 4, a.

Upper Windsor, Mississippian, Murphy road at Hebert River, Hants co., Nova Scotia.

Streptorhynchus pandora Billings

Syntypes 3473, a

Billings, E., 1860, Can. J., n.s., vol. 5, p. 266, figs. 12, 13.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 369, figs. 384a, b.

Onondaga formation, Middle Devonian, Haldimand co., Ontario.

Stricklandia arethusa Billings

Syntypes 758, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 85, figs. 78a, b (?).

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 85, figs. 78a, b(?)

Levis formation, Lower Ordovician, Point Levis, Quebec.

=*Syntrophia arethusa,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 245, pl. 55A, figs. 1, 2.

Stricklandia brevis Billings

Holotype 2512

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 135.

Middle Silurian (Jupiter formation), Southwest Point, Anticosti Island, Quebec.

=*Stricklandinia brevis,* Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 84, pl. 6, figs. 2, a-c.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 201, pl. 23, figs. 15, 16.

Stricklandia canadensis Billings

Syntype 2692

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 135.

Clinton group, Middle Silurian, Thorold, Ontario.

=*Stricklandinia canadensis,* Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 81, pl. 7, fig. 2.

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Stricklandia gaspéensis Billings

Syntype 3047a

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 134.

Middle Silurian, l'Anse à la Vieille, Gaspé, Quebec.

=*Stricklandinia gaspeensis,* Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 83, fig. 49(?).

Stricklandia gaspéensis Billings

Hypotypes 9166, a, b (missing)

Northrop, S. A., 1939, Geol. Soc. Amer., Sp. Paper 21, p. 169, pl. 14, figs. 1, 3, 5.

La Vieille formation, Middle Silurian, railway-cut west of water-tower, Anse Cascon, Gaspé, Quebec.

Stricklandinia brevis (Billings)

Hypotype 1339e

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 201, pl. 23, fig. 17.

Jupiter formation, Middle Silurian, The Jumpers, Anticosti Island, Quebec.

Stricklandinia canadensis (Billings)

Hypotype 4684

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 9, fig. 2.

Clinton group, Middle Silurian, Grimsby, Ontario.

Stricklandinia davidsoni Billings

Hypotype 2513

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 202, pl. 21, fig. 2.

Jupiter formation, Middle Silurian, between Southwest Point and Jupiter River, Anticosti Island, Quebec.

Stricklandinia davidsoni var. Billings

Syntypes 8064, a

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, pl. 7, fig. 3a.

Middle Silurian, Southwest Point, Anticosti Island, Quebec.

=*Stricklandinia davidsoni striata,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 202, pl. 18, fig. 9 (holotype 8064; paratype 8064a).

Stricklandinia manitouensis Williams

Syntypes 5126, a, b

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 124, pl. 20, figs. 2a-c, 3.

'Lockport' (Fossil Hill) formation, Middle Silurian, plateau east of Sandfield, Manitoulin Island, Ontario.

Stricklandinia melissa Billings

Holotype 2581

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 89, pl. 7, figs. 4a, b.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 203, pl. 21, fig. 1.

Middle Silurian (Jupiter formation), Southwest Point, Anticosti Island, Quebec.

Stricklandinia salteri Billings

Syntype 2528

Billings, E.,

1868, Geol. Mag., vol. 5, p. 61, pl. 4, fig. 2a.

1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 87, pl. 7, fig. 1.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 203, pl. 21, fig. 3 (holotype).

Middle Silurian (Jupiter formation), The Jumpers, Anticosti Island, Quebec.

Stringocephalus burtini Defrance
Hypotypes 4316, a
Whiteaves, J. F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 235, pl. 29, figs. 10, 11.
Upper Devonian, Ramparts, Mackenzie River, N.W.T.

Stringocephalus burtini Defrance
Hypotypes 3940, a, 3942-3945, 3947
Whiteaves, J. F., 1892, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 93, pl. 4, figs. 2, 3, a, 4, a, 5, 6, 8, 9.
Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

Stropheodonta acanthoptera see *Strophomena acanthoptera*

Stropheodonta galatea see *Strophomena galatea*

Stropheodonta magniventer see *Strophomena magniventra*

Stropheodonta patersoni precedens see *Strophomena inequiradiata*

Stropheodonta (*Leptostrophia*) *tardifi lambtonensis* Clark
Holotype 984 (missing); paratype 985 (missing)
Clark, T. H., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 36, sec. 4, p. 24, pl. 1, figs. 1, 2.
Helderberg, Lower Devonian, rge. 6, lots 17 and 18, Lambton, Quebec.

Strophodonta interstrialis (Phillips)
Hypotype 3917
Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 286, pl. 37, fig. 6.
Devonian, small island east side Dawson Bay, Lake Winnipegosis, Manitoba.

Strophomena acanthoptera Whiteaves
Syntypes 5779, 5810
Whiteaves, J. F., 1891, Can. Rec. Sci., vol. 4, p. 294, pl. 3, figs. 1, 2.
Silurian (Cedar Lake formation), Long Point, Lake Winnipegosis, Manitoba.
=*Stropheodonta acanthoptera,* Whiteaves, J. F., 1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 4, p. 285, pl. 24, figs. 8, 9.
=*Brachyprion acanthopterus,* Stearn, C. W., 1956, Geol. Surv., Canada, Mem. 281, p. 96, pl. 11, fig. 24 (holotype 5779).

Strophomena arethusa Billings
Syntypes 2024 (all on one slab)
Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 132.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 132.
Upper Ordovician (Vaureal formation), Observation Cliff, Anticosti Island, Quebec.

Strophomena aurora Billings
Syntypes 560, a-f
Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 218, fig. 202.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 218, fig. 202.
Divisions K-N (Table Head series), Lower Ordovician, Point Rich, Newfoundland.
=*Aporthophyla ? aurora,* Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 183, pl. 380, fig. 17 (560c).

Strophomena blainvillei Billings
Syntypes 3254, a, 3308, a-c
Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 28, pl. 2, figs. 1, a, b; pl. 3, fig. 1.
Devonian (Gaspé formation), Gaspé, Quebec.
=*Leptostrophia blainvillii,* Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 237.

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Strophomena canadensis Wilson

Holotype 6220

Wilson, A. E., 1921, Geol. Surv., Canada, Mus. Bull. 33, p. 50, pl. 3, fig. 7.
Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 932, pl. 248A, fig. 1.

Chazy, Middle Ordovician, MacLaren Landing, Ontario.

Strophomena ceres Billings

Syntypes 2018, a

Billings, E.,
1860, Can. Naturalist Geol., vol. 5, p. 54.
1862, "New Species of Lower Silurian Fossils", p. 119.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 119.

Upper Ordovician (English Head formation), Carleton Point, Anticosti Island, Quebec.

=*Leptaena ? ceres,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 185, pl. 17, figs. 16, 18 (holotype 2018).

Strophomena concordensis huronensis Foerste

Syntypes 8125a-j

Foerste, A. F., 1912, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 63, pl. 11, figs. 1a-h, j, k.

Meaford formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

=*Strophomena huronensis,* Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 118, pl. 13, figs. 1a-h, j.

Strophomena deltoidea Conrad

Hypotype 1613a

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 163, p. 141.

Trenton, Middle Ordovician, Lachine, Quebec.

Strophomena expansa Wilson

Holotype 6658; paratype 6658a

Wilson, A. E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 398, pl. 6, figs. 1, 2.

Cobourg beds, Middle Ordovician, lot 21, con. 8, Cornwall tp., Ontario.

=*Strophomena extensa,* Wilson, A. E.,
1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 131.
1946, Geol. Surv., Canada, Bull. 8, p. 102, pl. 11, figs. 22, 23.

Strophomena filitexta Hall

Hypotype 7583

Wilson, A. E.,
1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 131, pl. 1, fig. 15.
1946, Geol. Surv., Canada, Bull. 8, p. 102, pl. 9, fig. 13.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, La petite Chaudière, Val Tetreau, Quebec.

Strophomena filitexta crenulata Wilson

Holotype 7573; paratype 7574

Wilson, A. E.,
1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 132, pl. 1, figs. 16-18.
1946, Geol. Surv., Canada, Bull. 8, p. 103, pl. 9, figs. 14, 15a, b.

Leray beds, Ottawa formation, Middle Ordovician, lot 3, con. 3, Gloucester tp. and La petite Chaudière, Val Tetreau, Quebec.

Strophomena filitexta obesa Wilson

Holotype 7651; paratype 7570

Wilson, A. E.,
1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 133, pl. 1, figs. 20, 21.
1946, Geol. Surv., Canada, Bull. 8, p. 103, pl. 9, figs. 17a, b, 18.

Leray beds, Ottawa formation, Middle Ordovician, Paquette Rapids, Ottawa River, and southeast of Cumberland, Ontario.

Strophomena fluctuosa Billings

Hypotype 2017 (missing)
Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 193, pl. 22, fig. 5.

English Head formation, Upper Ordovician, Carleton Point, Anticosti Island, Quebec.

Strophomena foveata Raymond

Holotype 3260
Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 23, pl. 7, fig. 4.

Trenton, Middle Ordovician, Peterborough, Ontario.

Strophomena galatea Billings

Syntype 3278
Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 20, fig. 9 (?).

Devonian (Grande Greve formation), Indian Cove, Gaspé bay, Quebec.
=*Stropheodonta galatea,* Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 188.

Strophomena hecuba Billings

Syntypes 2016, b-f
Billings, E.,
1860, Can. Naturalist Geol., vol. 5, p. 60, fig. 7.
1862, "New Species of Lower Silurian Fossils", p. 126, fig. 104.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 126, fig. 104.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 209, fig. 206.
Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 194, pl. 23, figs. 2, 3 (holotype 2016).

Upper Ordovician (English Head formation), Cape Robert, Anticosti Island, Quebec.

Strophomena huronensis see *Strophomena concordensis huronensis*

Strophomena imbecilis Billings

Syntypes 559, a, b
Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 219.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 219.

Division P (Table Head series), 4 miles northeast of Portland Creek, Newfoundland.
=*Pleurorthis imbecilis,* Cooper, G. A., 1956, Smithsonian Misc. Coll., vol. 127, p. 331 (lectotype 559b, paratype 559).

Strophomena inaequistriata Conrad

Hypotype 3471
Billings, E., 1861, Can. J., n.s., vol. 6, p. 338, figs. 113, 114.
Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 367, figs. 375a-c.

Middle Devonian (Onondaga formation), lot 49, con. 1, Oneida tp., Ontario.
=*Strophomena inequiradiata,* Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 24, figs. 13a, b.

Strophomena incurvata Shepard

Hypotypes 8068, 8069, a, b
Foerste, A. F., 1912, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 24, pl. 11, figs. 9a-c.

Black River, Middle Ordovician, La Cloche and Goat Islands, north of Little Current, Manitoulin Island, Ontario.

Strophomena inequiradiata (Hall)

Hypotype 3281

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 24, pl. 2, figs. 4, a.

Devonian (Grande Greve formation), Indian Cove, Gaspé, Quebec.

=*Brachyprion majus,* Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 190.

=*Stropheodonta patersoni precedens,* Clarke, J. M., 1908, ibid., p. 186, pl. 35, fig. 12.

Strophomena irene Billings

Holotype 3284

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 27, pl. 2, fig. 5.

Devonian (Grande Greve formation), Grande Greve, Gaspé Bay, Quebec.

=*Leptostrophia irene,* Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 193.

Strophomena irregularis Wilson

Holotype 6656; paratype 6657

Wilson, A. E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 398, pl. 5, figs. 11, 12.

1946, Geol. Surv., Canada, Bull. 8, p. 104, pl. 11, figs. 15, 16.

Cobourg beds, Middle Ordovician, lot 21, con. 8, Cornwall tp. and lot 22, con. 3, Roxborough tp., Ontario.

Strophomena julia Billings

Syntypes 2506, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 127, figs. 105a, b.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 127, figs. 105a, b.

Middle Silurian (Jupiter formation), The Jumpers, Anticosti Island, Quebec.

=*Leptaena julia,* Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 184, pl. 22, figs. 1, 2.

Strophomena magna Wilson

Holotype 7579; paratype 13238 (missing)

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 134, pl. 1, figs. 13, 14.

1946, Geol. Surv., Canada, Bull. 8, p. 104, pl. 9, figs. 11, 12.

Rockland beds, Ottawa formation, Middle Ordovician, Stewart quarry, Rockland, Ontario.

Strophomena magnifica Hall

Hypotype 3349

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 961, fig. 468.

Oriskany formation, Lower Devonian, lot 50, con. 1, north Cayuga tp., Ontario.

Strophomena magniventra Hall

Hypotypes 3280, a, b

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 22, pl. 2, figs. 2, a.

Devonian (Grande Greve formation), Indian Cove, Gaspé, Quebec.

=*Stropheodonta magniventer,* Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 184.

Strophomena ? millionensis affinis Wilson

Holotype 7586

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 135, pl. 1, figs. 5.

1946, Geol. Surv., Canada, Bull. 8, p. 104, pl. 9, fig. 5.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Cobden-Eganville road, Ontario.

Strophomena minuta Wilson

Holotype 7616; paratypes 7617, 7618

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 135, pl. 1, figs. 1-3.

1946, Geol. Surv., Canada, Bull. 8, p. 105, pl. 9, figs. 1-3.

Leray and Rockland beds, Ottawa formation, Middle Ordovician, Stewart quarry, Rockland, Ontario, and La petite Chaudière, Val Tetreau, Quebec.

Strophomena mollis Wilson

Holotype 7588

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 136, pl. 1, figs. 4.

1946, Geol. Surv., Canada, Bull. 8, p. 105, pl. 9, fig. 4.

Leray beds, Ottawa formation, Middle Ordovician, lots 3-5, con. 3, R. F., Gloucester tp., Ontario.

Strophomena neglecta James

Hypotype 8123

Foerste, A. F., 1912, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 90, pl. 11, fig. 10.

Upper Ordovician, Kagawong, Manitoulin Island, Ontario.

Strophomena nitens Billings

Syntypes 2019, a

Billings, E.,

1860, Can. Naturalist Geol., vol. 5, p. 53, fig. 1.

1862, "New Species of Lower Silurian Fossils", p. 118, fig. 97.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 118, fig. 97.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 209, fig. 208.

Upper Ordovician (English Head formation), Carleton Point, Anticosti Island, Quebec.

=*Leptaena ? nitens*, Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 186, pl. 18, fig. 14. (holotype 2019).

Strophomena nutans Meek

Hypotype 8127

Foerste, A. F.,

1912, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 68, pl. 11, fig. 8.

1924, Geol. Surv., Canada, Mem. 138, p. 118, pl. 12, fig. 2a.

Meaford formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Strophomena planumbona chambliensis Foerste

Syntypes 8404, 8405

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 118, pl. 30, figs. 4, 5.

Upper Ordovician, Chambly Canton and Huron River, Quebec.

Strophomena planumbona gerontica Foerste

Syntypes 8124, a, b

Foerste, A. F.,

1912, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 87, pl. 11, fig. 6.

1924, Geol. Surv., Canada, Mem. 138, p. 117, pl. 12, fig. 6c.

Upper Ordovician, west of Gore Bay, Manitoulin Island, Quebec.

Strophomena planumbona praecipita Wilson

Holotype 1156a

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 136, pl. 1, figs. 9, 10.

1946, Geol. Surv., Canada, Bull. 8, p. 106, pl. 9, figs. 9a, b.

Leray beds, Ottawa formation, Middle Ordovician, above Mechanicsville, Ottawa, Ontario.

Strophomena radiirecticulata Twenhofel

Hypotype 2444

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 192, pl. 17, fig. 3.

Jupiter formation, Middle Silurian, 2 miles east of Jupiter River, Anticosti Island, Quebec.

Strophomena rotundata Wilson

Holotype 7589

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 137, pl. 1, fig. 8.

1946, Geol. Surv., Canada, Bull. 8, p. 106, pl. 9, fig. 8.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, on hillock on road east from Skead road, east of Ottawa, Ontario.

Strophomena ruga Hume

Syntypes 9082, a

Hume, G. S., 1926, Geol. Surv., Canada, Mus. Bull. 44, p. 63, pl. 13, figs. 4a, b.

Upper Ordovician, La Gros point, Great Slave Lake, N.W.T.

Strophomena sulcata Verneuil

Hypotypes 8126, a

Foerste, A. F., 1912, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 102, pl. 11, figs. 2a, b.

Meaford formation, Upper Ordovician, Kagawong, Manitoulin Island, Ontario.

=*Holtedahlina sulcata,* Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 123, pl. 12, figs. 5a, b.

Strophomena thalia Billings

Syntypes 1607, a-c

Billings, E.,

1860, Can. Naturalist Geol., vol. 5, p. 59.

1862, "New Species of Lower Silurian Fossils", p. 125, fig. 103.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 125, fig. 103.

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 137, pl. 1, figs. 11, 12 (holotype 1607b, paratypes 1607, a, c).

1946, Geol. Surv., Canada, Bull. 8, p. 107, pl. 9, figs. 10a, b.

Middle Ordovician (Cobourg beds), Ottawa, Ontario.

Strophomena trilobita Owen

Hypotype 3261

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 22, pl. 7, fig. 6.

Cobourg beds, Middle Ordovician, Wellington, Ontario.

Strophomena tullia Billings

Syntypes 3285, a

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 29, pl. 2, fig. 6.

Devonian (Grande Greve formation), Mont Joli, Gaspé, Quebec.

=*Leptostrophia magnifica tullia,* Clarke, J. M., 1908, Mem. N.Y. State Mus., vol. 9, pt. 1, p. 191, pl. 37, fig. 6 (3285).

Strophomena varistriata Conrad

Hypotypes 3279, a (missing)

Billings, E., 1874, Geol. Surv., Canada, Palæoz. Fossils, vol. 2, p. 26, pl. 2, fig. 3.

Lower Helderberg, Lower Devonian, Indian Cove, Gaspé, Quebec.

Strophomena venustula Wilson

Holotype 7591; paratype 7599

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 138, pl. 1, figs. 6, 7.

1946, Geol. Surv., Canada, Bull. 8, p. 107, pl. 9, figs. 6, 7.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, lot 24, con. 7, Allumette, Quebec, and Mechanicsville, Ottawa, Ontario.

Strophomena vetusta (James)
Hypotypes 8566a, b
Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 120, pl. 14, figs. 5a, b.
Upper Ordovician, east-west road 3 miles south of Little Current, Manitoulin Island, Ontario.

Strophomena winchelli Hall
Hypotype 4382
Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 24, pl. 7, fig. 1.
Trenton, Middle Ordovician, Trenton, Ontario.

Strophonella ? decewensis Williams
Holotype 4687
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 124, pl. 13, fig. 1.
Rochester formation, Middle Silurian, DeCew Falls, Ontario.

Strophonella parva Clark
Paratype 986 (missing)
Clark, T. H., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 36, sec. 4, p. 26, pl. 1, fig. 4.
Cranbourne formation, Lower Devonian, St. Joseph Seigniory, Quebec.

Strophonella striata (Hall)
Hypotype 4629
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 6, fig. 2.
Manitoulin formation, Cataract group, Lower Silurian, Lavender Falls, Ontario.

Syntrophia arethusa see *Stricklandia arethusa*

Syntrophia calcifera see *Camerella calcifera*

Syntrophia convexa Kindle
Holotype 9373; paratype 9373a
Kindle, C. H., 1929, Can. Field-Naturalist, vol. 43, No. 7, p. 146, figs. 7-9.
Lower Ordovician (Ozarkian), Swift's ranch, 7 miles north of Jasper, Alberta.

Syntrophina cf. *S. gibbosa* Ulrich and Cooper
Hypotypes 9062, a
Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 220, pl. 47D, figs. 8, 13.
Hastings Creek formation, Lower Ordovician, about a mile a little southeast of Philipsburg, Quebec.

Syntrophina sp.
Fig. spec. 9061
Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 224, pl. 47B, fig. 4.
Hastings Creek formation, Lower Ordovician, about ½ mile east of Philipsburg, Quebec.

Tenticospirifer cyrtinaformis (Hall and Whitfield)
Hypotype 13812
McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 198, pl. 8, figs. 11-14.
Lower Mount Hawk formation, Upper Devonian, south branch of north fork of Hummingbird Creek, Alberta.

Terebratula harveyi Whiteaves
Syntypes 5875, 7439a, b
Whiteaves, J. F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 403, pl. 51, figs. 5 (5875), 6 (7439).
Upper Cretaceous, Extension mine, Nanaimo, Vancouver Island, and Texada Island, British Columbia.

Terebratula liardensis Whiteaves

Syntypes 4734, a

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, p. 130, pl. 17, figs. 2, a-c.

Triassic, 30 miles below Devil portage, Liard River, British Columbia.

Terebratula ? piriformis Suess

Hypotype 9618

Lees, E. J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 34, pl. 1, figs. 11-13.

Lewes River formation, Triassic, Laberge area, Yukon.

Terebratula robusta Whiteaves

Syntypes 4763, a, b

Whiteaves, J. F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 163, pl. 22, figs. 1, 2.

Fernie group, Jurassic, 3 miles north of Devil's Lake, Alberta.

Terebratula skidigatensis Whiteaves

Holotype 5981

Whiteaves, J. F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, p. 301, pl. 37, figs. 6, a.

Jurassic, east end Maude Island, Queen Charlotte Islands, British Columbia.

Terebratula sullivanti Hall

Hypotype 3948

Whiteaves, J. F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 291, pl. 37, fig. 10.

Devonian, small island Dawson Bay, Lake Winnipegosis, Manitoba.

=*Eunella sullivanti*, Whiteaves, J. F., 1898, ibid., vol. 1, pt. 5, p. 426.

Terebratula suttonensis Clapp and Shimer

Holotype 7810

Clapp, C. H. and Shimer, H. W., 1911, Proc. Boston Soc. Natural Hist., vol. 34, No. 12, p. 432, pl. 40, figs. 2, 3.

Sutton series, Triassic, Lake Cowichan, Vancouver Island, British Columbia.

Thomasaria rockymontana (Warren)

Hypotype 13813

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 198, pl. 8, figs. 15-18.

Mount Hawk formation, Upper Devonian, north side of the Gap, Brazeau Range, Alberta.

Trematis huronensis Billings

Syntypes 1157, a-g

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 53, figs. 59a-c.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 53, figs. 59a-c.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 159, figs. 130a-c.

Black River, Middle Ordovician, Pallideau Islands, Lake Huron, Ontario.

Trematis montrealensis Billings

Holotype 1652a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 52, fig. 57.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 52, fig. 57.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 159, fig. 128.

Trenton, Middle Ordovician, Montreal, Quebec.

Trematis ottawaensis Billings

Syntypes 1651, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 53, fig. 58.

1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 53, fig. 58.

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 159, fig. 129.

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 22, pl. 1, fig. 19 (holotype 1651).

Trenton, Middle Ordovician, Ottawa, Ontario.

Trematis ottawaensis Billings

Hypotype 6326

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 22, pl. 1, figs. 20a, b.

Hull beds, Ottawa formation, Middle Ordovician, Hull, Quebec.

Trematis ottawaensis anticostiensis Twenhofel

Holotype 2008

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 172, pl. 12, fig. 11.

English Head formation, Upper Ordovician, Makasti Bay, Anticosti Island, Quebec.

Trematis terminalis (Emmons)

Hypotype 1652

Logan, W. E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 159, fig. 127.

Trenton, Middle Ordovician, Montreal, Quebec.

Trematis terminalis (Emmons)

Hypotype 6327

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 23, pl. 1, figs. 18a, b.

Leray-Rockland beds, Ottawa formation, Middle Ordovician, Murray's quarry, L'Orignal, Ontario.

Trematorthis levisensis see *Orthis eudocia*

Trigonoglossa rosamontana Sinclair

Holotype 11297; paratypes 11298, 11299

Sinclair, G. W., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 58, pl. 1, figs. 3, 4, 7.

Rosemount member, Montreal formation, Middle Ordovician, Montreal north; Rosemount, Montreal; and St. Casimir, Portneuf co., Quebec.

Trigrammaria pulchra Wilson

Holotype 7652; paratype 7653

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 140, pl. 2, figs. 1, 2.

1946, Geol. Surv., Canada, Bull. 8, p. 108, pl. 10, figs. 1, 2.

Cobourg beds, Ottawa formation, Middle Ordovician, about 2 miles west of McAlpine, and east of boundary of Cornwall tp., con. 10, Charlottenburgh tp., Ontario.

Trigrammaria trigonalis Wilson

Holotype 7614; paratypes 7614a, b, 7637

Wilson, A. E.,

1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 141, pl. 2, figs. 7-9.

1946, Geol. Surv., Canada, Bull. 8, p. 109, pl. 10, figs. 7-9.

Cobourg beds, Ottawa formation, Middle Ordovician, west end of Fifth Avenue, and corner of Fifth Avenue and Percy Street, Ottawa, Ontario.

Trigrammaria trigonalis parva Wilson

Holotype 7656; paratype 7657

Wilson, A. E.,
1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 142, pl. 2, figs. 3, 4.
1946, Geol. Surv., Canada, Bull. 8, p. 110, pl. 10, figs. 3, 4.

Cobourg beds, Ottawa formation, Middle Ordovician, Lalonde quarry west of Alfred, and Casselman, Ontario.

Trigrammaria trigonalis prima Wilson

Holotype 7658

Wilson, A. E.,
1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 143, pl. 2, fig. 21.
1946, Geol. Surv., Canada, Bull. 8, p. 110, pl. 10, fig. 20.

Leray beds, Ottawa formation, Middle Ordovician, La petite Chaudière, west of Hull, Quebec.

Trigrammaria trigonalis tumida Wilson

Holotype 7659

Wilson, A. E.,
1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 143, pl. 2, fig. 15.
1946, Geol. Surv., Canada, Bull. 8, p. 111, pl. 10, fig. 15.

Cobourg beds, Ottawa formation, Middle Ordovician, Industrial school, Alfred, Ontario.

Trimerella acuminata Billings

Holotype 2809a

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 167, fig. 151.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 167, fig. 151.
Davidson, T. and King, W., 1874, Quart. J. Geol. Soc. London, vol. 30, p. 146, pl. 15, fig. 6.

Guelph formation, Middle Silurian, Hespeler, Ontario.

Trimerella acuminata Billings

Hypotype 2809

Davidson, T. and King, W., 1874, Quart. J. Geol. Soc. London, vol. 30, p. 146, pl. 15, figs. 7, a.

Guelph formation, Middle Silurian, Hespeler, Ontario.

Trimerella billingsi Dall

Hypotype 2810

Davidson, T. and King, W., 1874, Quart. J. Geol. Soc. London, vol. 30, p. 150, pl. 16, fig. 8.

Guelph formation, Middle Silurian, Hespeler, Ontario.

Trimerella ekwanensis Whiteaves

Syntypes 4415, a

Whiteaves, J. F.,
1904, Geol. Surv., Canada, Ann. Rept., n.s., vol. 14, 1901, p. 41F.
1906, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, p. 249, pl. 24, fig. 7; pl. 25, figs. 1, 2.

Silurian (Attawapiskat formation), falls on Ekwan River, Ontario.

=*Trimerella equanensis*, Whiteaves, J. F., 1902, Ottawa Naturalist, vol. 16, p. 141, pl. 2, figs. 1, 2; pl. 3, fig. 1.

Trimerella grandis Billings

Syntype 2803

Billings, E.,
1862, "New Species of Lower Silurian Fossils", p. 166, figs. 151a, b.
1865, Geol. Surv., Canada, Palæoz. Fossils, vol. 1, p. 166, figs. 151a, b.
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 22, figs. 4a, b.

Guelph formation, Middle Silurian, Hespeler, Ontario.

Trimerella ohioensis Meek
Hypotype 2949a
Whiteaves, J. F., 1895, Geol. Surv., Canada, Palæoz. Fossils, vol. 3, pt. 2, p. 54, pl. 10, figs. 1, a.
Guelph formation, Middle Silurian, Durham, Ontario.

Triplecella diplicata Wilson
Holotype 6659
Wilson, A. E.,
1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 400, pl. 5, fig. 13.
1946, Geol. Surv., Canada, Bull. 8, p. 117, pl. 8, fig. 5.
Cobourg beds, Middle Ordovician, lot 35, con. 9, Charlottenburgh tp., Ontario.

Triplecia cuspidata (Hall)
Hypotypes 6414, a
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 116, pl. 8, figs. 3, 4.
Rockland beds, Ottawa formation, Middle Ordovician, Rockland, Ontario.

Triplecia extans (Emmons)
Hypotype 6415
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 116, pl. 8, fig. 2.
Rockland beds, Ottawa formation, Middle Ordovician, north of Orleans, Ontario.

Triplecia nuclea (Hall)
Hypotype 13243
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 117, pl. 8, figs. 1a, b.
Cobourg beds, Ottawa formation, Middle Ordovician, Philemon Island, Hull, Quebec.

Triplesia biplicata Cooper and Kindle
Syntype 8863
Cooper, G. A., and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5, p. 358.
Whitehead formation, Upper Ordovician, Priest's road, Percé, Quebec.

Triplesia uniplicata Cooper and Kindle
Syntype 8862
Cooper, G. A. and Kindle, C. H., 1936, J. Pal., vol. 10, No. 5 p. 358.
Whitehead formation, Upper Ordovician, Priest's road, Percé, Quebec.

Tritoechia dice (Walcott)
Hypotypes 9059, a, b
Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 163, pl. 31B, figs. 17, 19-21.
Luke Hill formation, Lower Ordovician, 1 mile south of east of Philipsburg, Quebec.

Vellamo sinclairi Wilson
Holotype 13242
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 115, pl. 3, fig. 30.
Cobourg beds, Ottawa formation, Middle Ordovician, cliff at west end of Sparks Street, Ottawa, Ontario.

Vellamo trentonensis see *Clitambonites trentonensis*

Vellamo trentonensis (Raymond)
Hypotype 6413
Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 115, pl. 3, fig. 32.
Sherman Fall beds, Ottawa formation, Middle Ordovician, Castor River about 1 mile east of Embrun, Ontario.

Virgiana mayvillensis Savage
Hypotypes 4674, 4675
Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 7, figs. 20, 21.
Dyer Bay formation, Middle Silurian, South Bay and Tamarack Cove, Manitoulin Island, Ontario.

Warrenella nevadensis (Walcott)

Hypotypes 13817, 13818

McLaren, D. J., 1958, Guide Book, 8th Ann. Field Conference, Alberta Soc. Petrol. Geol., p. 198, pl. 8, figs. 31-36.

Perdrix formation, Upper Devonian, Winnifred Pass, Alberta.

Westonia linguloides (Kobayashi)

Hypotypes 9120, a, b (missing)

Ulrich, E. O. and Cooper, G. A., 1938, Geol. Soc. Amer., Sp. Paper 13, p. 56, pl. 2C, figs. 10, 14, 15.

Upper Cambrian, north side Hard Luck creek, 1.6 miles N55°W from International Boundary Monument 102, Tatonduk-Nation Rivers District, Alaska.

Whitfieldella ? cf. *angustifrons* (McCoy)

Hypotype 5447

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 88, pl. 10, figs. 22-24.

Beechhill formation, Lower Silurian, Cameron Brook, Pictou co., Nova Scotia.

Whitfieldella cataractensis Williams

Syntypes 4627, 4628, a

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, p. 121, pl. 7, figs. 16-18.

Cabot Head formation, Cataract group, Lower Silurian, Owen Sound and Stoney Creek, Ontario.

Whitfieldella ? *crassa beechhillensis* McLearn

Holotype 5444; holoplastotype 5444a; paratypes 5445, 5446; paraplastotypes 5445a, 5446a

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 87, pl. 10, figs. 14-16.

Beechhill formation, Lower Silurian, Cameron and Doctor's brooks, Arisaig, Nova Scotia.

Whitfieldella hyale (Billings)

Hypotype 2806

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 22, figs. 5a, b.

Guelph formation, Middle Silurian, Hespeler, Ontario.

Whitfieldella ? *julia* see *Athyris julia*

Whitfieldella ? *lara* see *Athyris lara*

Whitfieldella ? *solitaria* see *Athyris solitaria*

Whitfieldella sulcata (Vanuxem)

Hypotypes 5137, a

Williams, M. Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 27, figs. 4, 5.

Akron formation, Upper Silurian, ¼ mile west of Ridgemount, Ontario.

Wilsonia wilsoni stonehousensis McLearn

Holotype 5436

McLearn, F. H., 1924, Geol. Surv., Canada, Mem. 137, p. 76, pl. 8, fig. 32.

Stonehouse ? formation, Middle or Upper Silurian, loose boulder, Arisaig, Nova Scotia.

Zygospira deflecta (Hall)

Hypotype 6421

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 122, pl. 11, figs. 5a, b.

Cobourg beds, Ottawa formation, Middle Ordovician, Booth Street, Ottawa, Ontario.

Zygospira kentuckiensis James

Hypotypes 8512a, b, 8513

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 127, pl. 15, figs. 1, 2a, b.

Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario, and Nicolet River, Quebec.

Zygospira kentuckiensis var. Foerste

Holotypes 8506a-c

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 127, pl. 15, figs. 4a-c.

Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Zygospira meafordensis Foerste

Syntypes 8514, a, b

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 128, pl. 15, figs. 3a-c.

Queenston formation, Upper Ordovician, lot 24, con. 8, St. Vincent tp., about 4 miles northwest of Meaford, Ontario.

Zygospira mica see *Rhynchonella mica*

Zygospira paupera Billings

Syntypes 2454, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 46.

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 214, pl. 21, figs. 18-20 (holotype 2454).

Middle Silurian (Jupiter formation), near Jupiter River, Anticosti Island, Quebec.

Zygospira raymondi see *Zygospira uphami*

Zygospira recurvirostris (Hall)

Hypotype 6424

Wilson, A. E., 1946, Geol. Surv., Canada, Bull. 8, p. 122, pl. 11, figs. 6a, b.

Hull or Sherman Fall beds, Ottawa formation, Middle Ordovician, Brewery creek, Hull, Quebec.

Zygospira recurvirostris aequivalvis Twenhofel

Holotype 8445

Twenhofel, W. H., 1928, Geol. Surv., Canada, Mem. 154, p. 214, pl. 19, figs. 10-12.

English Head formation, Upper Ordovician, Carleton Point, Anticosti Island, Quebec.

Zygospira uphami Winchell and Schuchert

Hypotypes 3245, a-d.

Raymond, P. E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 28, pl. 8, figs. 1-5.

Collingwood formation, Upper Ordovician, Craigleith, Ontario.

=*Zygospira raymondi,* Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 128.