

This document was produced  
by scanning the original publication.

Ce document est le produit d'une  
numérisation par balayage  
de la publication originale.



**CATALOGUE OF  
TYPE INVERTEBRATE FOSSILS  
OF THE  
GEOLOGICAL SURVEY OF CANADA**

**Volume II**

**Thomas E. Bolton**

**1965**

CATALOGUE OF  
TYPE INVERTEBRATE FOSSILS  
OF THE  
GEOLOGICAL SURVEY OF CANADA

Volume II

Catalogue of type invertebrate fossils of  
the Geological Survey of Canada, Vol. I,  
*by* Thomas E. Bolton (1960)

Catalogue of types and figured specimens of  
fossil plants in the Geological Survey of  
Canada collections *by* W. A. Bell (1962)



GEOLOGICAL SURVEY  
OF CANADA

*Volume II*

CATALOGUE OF  
TYPE INVERTEBRATE FOSSILS  
OF THE  
GEOLOGICAL SURVEY OF CANADA

By  
Thomas E. Bolton

DEPARTMENT OF  
MINES AND TECHNICAL SURVEYS  
CANADA



© Crown Copyrights reserved

Available by mail from the Queen's Printer, Ottawa,  
from Geological Surveys of Canada,  
601 Booth St., Ottawa,  
and at the following Canadian Government bookshops:

OTTAWA

*Daly Building, corner Mackenzie and Rideau*

TORONTO

*Mackenzie Building, 36 Adelaide St. East*

MONTREAL

*Æterna-Vie Building, 1182 St. Catherine St. West*

WINNIPEG

*Mall Centre Bldg., 499 Portage Avenue*

VANCOUVER

*657 Granville Street*

or through your bookseller

A deposit copy of this publication is also available  
for reference in public libraries across Canada

Price: \$5.00

Catalogue No. M41-4/2

*Price subject to change without notice*

ROGER DUHAMEL, F.R.S.C.

Queen's Printer and Controller of Stationery

Ottawa, Canada

1965

## CONTENTS

	Page
Introduction.....	1
Scaphopoda.....	3
Monoplacophora.....	3
Gastropoda.....	6
Pelecypoda.....	85
Cephalopoda – Nautiloidea.....	185
Cephalopoda – Dibranchiata.....	261
Cephalopoda – Ammonoidea.....	263
Incertae sedis.....	340



## INTRODUCTION

Volume I (1960) of the *Catalogue of Type Invertebrate Fossils* listed all fossil types from Foraminifera to Brachiopoda in the Geological Survey of Canada collection as of mid-1959. Volume II of this catalogue includes all MOLLUSCA in the collection as of mid-1963.

The format of Volume II is similar to that adopted for the first volume. The original reference for each species is cited as well as subsequent reviews directly related to the forms listed. Once again no complete synonymy for each or any species is intended or attempted.

In addition to the categories *Holotype*, *Paratype*, *Syntype*, *Lectotype*, *Neotype*, *Hypotype*, and *Figured specimen (Fig. spec.)* adopted from Volume I, the secondary type terms *Plastotype* and *Topotype* are introduced. Casts of type specimens are of considerable value, both of specimens no longer available or retained in other institutions. Topotypes are described specimens collected from the type locality of a species.

All type specimens in both volumes are cited as objectively as possible. A specimen is listed as a holotype only where there was definite evidence that a single specimen was the basis for the original description of the species or where there was an original designation of such (i.e., the type). Where no original type was designated but a specimen within a type lot was figured, the present writer has attempted to identify the figured specimen within the lot, but such specimens are not cited in this catalogue as holotypes. Type designations of earlier described forms by subsequent investigations are listed wherever possible. Some fossils in the type collection bear labels showing different localities from those cited in the original description and in some instances the number of specimens in a particular syntypic lot is greater than originally listed. Such extraneous specimens are omitted from the catalogue unless they have a direct bearing on the status of the species.



## SCAPHOPODA

### *Dentalium* sp. cf. *D. antiquum* Goldfuss

Hypotypes 4023, 4024

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 311, pl. 45, figs. 1 [4023], 2 [4024].

Middle Devonian, Pentamerus Point, Lake Manitoba and Dawson Bay, Lake Winnipegosis, Manitoba.

### *Plagioglypta canna* (White)

Hypotype 4881

Harker, P. and Raasch, G.O., 1958, "Jurassic and Carboniferous of Western Canada", Am. Assoc. Petrol. Geol., pl. 1, fig. 1.

Norquay Formation, Permian, Lake Minnewanka area, Alberta.

### *Plagioglypta* sp.

Fig. specs. 13776, 13777

Harker, P., 1960, Geol. Surv., Canada, Mem. 309, p. 79, pl. 25, figs. 7, 8.

Assistance Formation, Permian, lower reaches Lyall River, Grinnell Peninsula, Northwest Devon Island, Arctic.

### ?Scaphopod species indet.

Fig. spec. 15095

Yochelson, E. in Boucot, A.J. et al., 1960, Geol. Surv., Canada, Bull. 65, p. 47, pl. 10, figs. 14, 15.

Sutherland River Formation, Upper Silurian, Douro Range, West Devon Island, Arctic.

## MONOPLACOPHORA

### *Archinacella clochensis* Foerste

Holotype 8418

Foerste, A.F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 308, pl. 2, figs. 5a, b.

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 17, pl. 1, figs. 4, 5.

Basal red shales, Middle Ordovician, La Cloche Peninsula, Ontario.

### *Archinacella clochensis* Foerste

Hypotype 9725

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 17, pl. 1, fig. 6.

Lowville beds, Ottawa Formation, Middle Ordovician, lot 2, con. 2, R.F., Gloucester tp., Ontario.

### *Archinacella estella* see *Metoptoma estella* (Gastropoda)

Mollusca

*Archinacella explanata* Wilson

Holotype 9726

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 17, pl. 1, figs. 7, 8.

Lowville beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Archinacella kagawongensis* Foerste

Syntypes 8641a, c

Foerste, A.F.,

1918, The Ottawa Naturalist, Vol. 31, No. 10, p. 122 [the types from Manitoulin Island].

1924, Geol. Surv., Canada, Mem. 138, p. 202, pl. 35, figs. 2a, b [8641a], c, d [8641c].

Kagawong Formation, Upper Ordovician, 2 miles southwest of Kagawong, Manitoulin Island, Ontario.

*Archinacella laevis* Foerste

Syntypes 8460a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 202, pl. 35, figs. 3a, b [8460a], c, d [8460b].

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

*Archinacella subrotunda* Ulrich and Scofield

Hypotype 9727

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 18, pl. 1, figs. 9, 10.

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

*Macroscenella superba* see *Metoptoma superba* (Gastropoda)

*Micropileus obesus* Wilson

Holotype 9731

Wilson, A.E.; 1951, Geol. Surv., Canada, Bull. 17, p. 20, pl. 1, figs. 11, 12.

Lowville beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Micropileus ottawanus* Wilson

Holotype 9728

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 20, pl. 1, figs. 13, 14.

Lowville beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Palaeacmaea anticostiensis* Twenhofel

Holotype 2307

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 234, pl. 25, figs. 17, 18.

Ellis Bay Formation, Upper Ordovician, Prinista Bay, Anticosti Island, Quebec.

*Palaeacmaea* (?) *cingulata* Whiteaves

Holotype 4027

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 311, pl. 43, figs. 8, a.

Middle Devonian, mouth of Red Deer River, Lake Winnipegosis, Manitoba.

*Scenella conica* Whiteaves

Syntypes 2906, a-j

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 32, pl. 5, figs. 2, a.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Scenella reticulata* Billings

Syntypes 399, a, b

Billings, E., 1872, Can. Naturalist Geol., n. ser. vol. 6, p. 479.

Walcott, C.D., 1886, U.S. Geol. Surv., Bull. 30, p. 125, pl. 12, figs. 6 [399b], a [399a].

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 309, pl. 2, figs. 5a-c [holotype 399a; paratypes 399, b].

Lower Cambrian, Topsail Head Conception Bay, Newfoundland.

*Stenothecoides* cf. *S. elongata* (Walcott)

Hypotypes 13586a, b

Rasetti, F., 1957, J. Pal., vol. 31, No. 5, p. 972, pl. 122, figs. 1, 2.

Mount Whyte Formation, Middle Cambrian, Mount Field, British Columbia.

*Tryblidium canadense* Whiteaves

Holotype 2907

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 31, pl. 5, figs. 1, a.

Guelph Formation, Middle Silurian, Hespeler, Ontario.

= *Capulus canadensis*, Whiteaves, J.F., 1895, *ibid.*, pt. 2, p. 69, pl. 11, fig. 1.

*Tryblidium erato* see *Metoptoma erato* (Gastropoda)

*Tryblidium nycteis* see *Metoptoma nycteis* (Gastropoda)

*Tryblidium* sp.

Fig. spec. 9729

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 21, pl. 1, figs. 15, 16.

Pamelia beds, Ottawa Formation, Middle Ordovician, Skead Road east of Ottawa, Ontario.

*Vallatotheca manitoulini* Foerste

Syntypes 8448, a

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 482, pl. 4, figs. 4a, b [8448].

1916, *ibid.*, vol. 18, p. 339, pl. 5, fig. 6.

1924, Geol. Surv., Canada, Mem. 138, p. 203, pl. 35, figs. 1a-c.

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 381, pl. 3, figs. 4a, b [holotype 8448; paratype 8448a].

Meaford Formation, Upper Ordovician, eastern side of Cape Smyth, 3 miles north of Wekwemikongsing, Manitoulin Island, Ontario.



## GASTROPODA

### *Acisina acutula* (Dawson)

Hypotype 7637

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 100.  
Mississippian, Maxner Point, Windsor, Nova Scotia.

### *Acmaea digitalis* Eschscholtz

Hypotype 12548

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, figs. 4a, b.  
Sunnyside Formation, Pleistocene, ditch west side Point Roberts Road, NE. ¼ sec. 10,  
tp. 5, Delta municipality, British Columbia.

### *Acmaea* sp. undet.

Fig. spec. 5773

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 130, pl.  
16, figs. 6, a.  
Upper Cretaceous, Nanaimo River, Vancouver Island, British Columbia.

### *Acroloxus radiatulus* Whiteaves

Holotype 5533

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 17,  
pl. 3, figs. 1, a.  
'Laramie' [Paskapoo Formation, Paleocene], mouth of Blindman River, tp. 39, rge. 27,  
W. 4th mer., Alberta.

### *Alvania compacta* Carpenter

Hypotype 12547

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, fig. 3.  
Sunnyside Formation, Pleistocene, ditch west side Clover Valley Road, NE. ¼ sec. 6, tp.  
9, Surrey municipality, British Columbia.

### *Amauropsis tenuistriata* Whiteaves

Syntypes 4954, a-f.

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 48, pl. 9,  
figs. 4, a [4954].  
Lower Cretaceous [Haida Formation], east side of Maude Island, Queen Charlotte Islands,  
British Columbia.

### *Amauropsis tenuistriata* Whiteaves

Hypotypes 4955, a-d

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 216,  
pl. 28, fig. 3 [4955].  
Lower Cretaceous [Jurassic?], bay east of Alliford Bay, Queen Charlotte Islands, British  
Columbia.

*Amnicola stefanssoni* Dall

Holotype 4341

Dall, W.H., 1924, in Oneill, J.J., Rept. Canadian Arctic Expedition 1913-18, vol. 11, pt. A, p. 27A, pl. 35, fig. 2.

Tertiary, 10 miles from mouth of Brock River, 15 miles south of Cape Lyon, Northwest Territories.

*Anchistoma parvulum* Whiteaves

Holotype 5541

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 19, pl. 3, figs. 2, a, b.

'Laramie' [St. Mary River Formation, Upper Cretaceous], near Rye-grass Flat, Oldman River, Alberta.

= *Paravitrea parvula*, Russell, L.S., 1929, Trans. Roy. Soc. Can., ser. 3, vol. 23, sec. 4, p. 89, pl. 1, figs. 21, 22*Anchura stenoptera* (Goldfuss)

Hypotype 5790

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 123, pl. 15, figs. 11, a.

Upper Cretaceous, 2½ miles up Nanaimo River, Vancouver Island, British Columbia.

= *Anchura callosa*, Whiteaves, J.F., 1903, *ibid.*, pt. 5, p. 358.*Anguispira russelli* Tozer

Holotype 10186

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 84, pl. 8, figs. 10 a-c.

Paskapoo Formation, Paleocene, south side Red Deer River, l.s.d. 4, sec. 4, tp. 39, rge. 26, W. 4th mer., Alberta.

*Anguispira simplex* Russell

Holotype 11610; paratypes 11611, 11612

Russell, L.S., 1955, Nat. Mus. Can., Bull. 136, p. 111, pl. 2, figs. 1-6; pl. 3, figs. 1-3; text fig. 5.

Kishenehn Formation, Upper Eocene, Flathead Valley, British Columbia.

*Anisomyon centrale* Meek

Hypotypes 5314, a-c

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 47, pl. 7, figs. 1, a [5314], 2, a [5314a].

Upper Cretaceous, Wood (Oldwives) River, Saskatchewan.

*Aplexa macerata* Russell

Holotype 9137; paratype 9137a

Russell, L.S., 1937, Trans. Roy. Soc. Can., ser. 3, vol. 31, sec. 4, p. 64, pl. 1, figs. 9, 10.

Foremost Formation, Upper Cretaceous, northwest end Tyrrell Lake, l.s.d. 14, sec. 24, tp. 5, rge. 18, W. 4th mer., Alberta.

*Aplexa ricei* Russell

Holotype 13283

Russell, L.S., 1957, Nat. Mus. Can., Bull. 147, p. 90, pl. 2, fig. 6.

Princeton Group, Middle Eocene, Vermilion Cliff, Tulameen River, west of Princeton, British Columbia.

Mollusca

*Astralites fimbriatus* Whiteaves

Syntypes 4069, 4070, a, 4071, a, 4072

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 324, pl. 42, figs. 10 [4069], a [4070], 11, a [4071]; pl. 45, fig. 6 [4069].

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 46, pl. 58, figs. 2a-c [holotype 4069a; paratypes 4070, a, 4071a].

Middle Devonian, Dawson Bay and mouth of Red Deer River, Lake Winnipegosis, Manitoba.

*Bela cretacea* Whiteaves

Syntypes 5943, a

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 355, pl. 44, fig. 6 [5943].

Upper Cretaceous, Hornby Island, Strait of Georgia, British Columbia.

*Bellerophon angustata* (Hall)

Hypotype 2911a

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 344, figs. 352a, b.

Guelph Formation, Middle Silurian, Hespeler, Ontario.

=*Tremanotus angustatus*, Williams, M.Y., 1919, *ibid.*, Mem. 111, pl. 25, fig. 10.

*Bellerophon argo* Billings

Syntypes 1262 a, b

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 167, figs. 12, 13 [1262a?].

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 146, figs. 99a, b.

Middle Ordovician [Leray-Rockland beds, Ottawa Formation], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Tropidodiscus?* *argo*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 32, pl. 4, figs. 7-9 [holotype 1262a; paratypes 1262, b].

*Bellerophon canadensis* Billings

Holotype 2136

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 18, fig. 6.

Ordovician [English Head Formation], Macasty Bay, Anticosti Island, Quebec.

=*Salpingostoma canadensis*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 247, pl. 39, fig. 3; pl. 41, fig. 9.

*Bellerophon charon* Billings

Syntypes 1249, a-c

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 169, figs. 14, 15 [1249b].

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 146, figs. 97a, b.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Tetranota charon*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 31, pl. 4, figs. 3-6 [holotype 1249b; paratypes 1249a, c].

*Bellerophon macer* Billings

Syntypes 492, a-c

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 347, fig. 335 [492a].

Beekmantown Formation, Lower Ordovician, Oxford tp., Ontario.

*Bellerophon palinurus* Billings

Syntypes 797, a-f

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 311, fig. 302 [797d].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 311, fig. 302.

Beekmantown Formation, Lower Ordovician, lot 20, rge. 6, Stanbridge tp., Quebec.

*Bellerophon parksi* Foerste

Syntypes 8490, a-h

Foerste, A.F., 1924, Geol. Surv., Canada, Mem, 138, p. 208, pl. 35, figs. 4, a-c [8490a],

d [8490d], e, f [8490c].

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Bellerophon pelops*? Hall var.

Syntypes 4055, 4057, 4058

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 317,

pl. 42, figs. 2, a[4057], 3 [4058]; pl. 45, fig. 4 [4055].

Middle Devonian [Dawson Bay Formation], Dawson Bay at Whiteaves Point and small point east of mouth of Bell River, Lake Winnipegosis, and Red Deer River 1½ miles above Lower Salt Springs, Manitoba.

*Bellerophon pelops* var.

Hypotypes 14899, 14900

McCummon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6,

p. 71, pl. 12, figs. 3, 4.

Dawson Bay Formation, Middle Devonian, north bank Red Deer River, 100 yards west of Highway 10 bridge between The Pas and Mafeking, l.s.d. 7, sec. 17, tp. 45, rge. 25, and 2 miles west of Nina Lake along road to The Narrows, Lake Manitoba, sec. 24, tp. 24, rge. 10, W. Prin. mer., Manitoba.

*Bellerophon plenus* Billings

Syntypes 3328, a, b

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 62, pl. 5,

figs. 8, a, b.

Middle Devonian [Grande Greve Formation], Indian Cove, Gaspé Bay, Quebec.

*Bellerophon* sp.

Fig. spec. 7639

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 172, pl. 30, fig. 7.

Mississippian, Avon River, about 400 feet north of fertilizer plant, Windsor, Nova Scotia.

*Binneya antiqua* Russell

Holotype 11621; paratypes 11622-11624

Russell, L.S., 1955, Nat. Mus. Can., Bull. 136, p. 112, pl. 3, figs. 7-10; text fig. 7.

Kishenehn Formation, Upper Eocene, Flathead Valley, British Columbia.

*Bucania halli* Ulrich and Scofield

Hypotype 9735

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 27, pl. 2, fig. 15.

Lowville beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, Gloucester tp., Ontario.

*Bucania punctifrons* (Emmons)

Hypotypes 9736, 9737

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 27, pl. 2, figs. 21-23.

Sherman Fall beds, Ottawa Formation, Middle Ordovician, 1½ miles west of Finch, Ontario.

Mollusca

*Bucania stigmosa?* Hall

Hypotypes 2909, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 34,  
pl. 5, figs. 3, a [2909]; pl. 8, fig. 4 [2909a].

Guelph Formation, Middle Silurian, Galt, Ontario.

=*Bellerophon shelbiensis*, Whiteaves, J.F., 1906, *ibid.*, vol. 3, pt. 4, p. 330.

*Bucania* sp.

Fig. spec. 6216

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 141, pl. 20, figs. 13, 14.  
Silurian, Arisaig, Nova Scotia.

*Bucanopsis beedii* Bell

Holotype 7638

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 172, pl. 30, fig. 9.  
Mississippian, Hants Co., Nova Scotia.

*Bucanopsis* sp.

Fig. specs. 3140, c

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 141, pl. 20, figs. 17, 20.  
Silurian, Arisaig, Nova Scotia.

*Bucanopsis* sp.

Fig. spec. 14901

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6, p.  
72, pl. 12, fig. 5.  
Dawson Bay Formation, Middle Devonian, Snake Island, Lake Winnipegosis, Manitoba.

*Buchelia tyrrellii* Whiteaves

Hypotypes 14902, 14903

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6,  
p. 73, pl. 13, figs. 6a, b.

Dawson Bay Formation, Middle Devonian, Bell River and Snake Island, Lake Winnipegosis,  
Manitoba.

*Bulimorpha maxneri* Bell

Holotype 7621; paratypes 7622, 7629

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 179, pl. 31, figs. 23-25.  
Mississippian, Maxner Point, Windsor, Nova Scotia.

*Burnesella tympana* Kobayashi

Holotype 12615

Kobayashi, T., 1955, J. Fac. Sci., Univ. Tokyo, sec. 2, vol. 9, pt. 3, p. 406, pl. 1,  
figs. 5a-c.

McKay Group, Lower Ordovician, west side McKay Creek, British Columbia.

*Calliostoma constrictum* Whiteaves

Holotype 4956

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 217,  
pl. 28, figs. 4, a.

Lower Cretaceous [Haida Formation], east end Maude Island, Queen Charlotte Islands,  
British Columbia.

*Campeoloma cypressensis* Dyer

Holotype 6679

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 11, pl. 3, fig. 7.  
Ravenscrag Formation, Paleocene, near Cypress Hills, sec. 29, tp. 8, rge. 4, W. 4th mer.,  
Alberta.

*Cameloma edmontonensis* Tozer

Holotype 10139; paratypes 10140, 10141

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 60, pl. 5, figs. 12-14.

Edmonton Formation (lower part), Upper Cretaceous, north side Kneehills Creek, NW.  $\frac{1}{4}$  sec. 7, tp. 29, rge. 21, W. 4th mer. and south side Bow River, 100 yards upstream from Coulée in sec. 5, tp. 21, rge. 22, W. 4th mer., Alberta.*Cameloma nebrascensis whitei* Russell

Hypotype 10142

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 61, pl. 5, fig. 10.

Paskapoo Formation, Paleocene, north side Little Red Deer River, l.s.d. 1, sec. 30, tp. 29, rge. 5, W. 5th mer., Alberta.

*Cameloma praecursa* Dyer

Holotype 6678

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 11, pl. 3, fig. 6.

Foremost Formation, Upper Cretaceous, near Chin Coulée, NE. corner sec. 8, tp. 7, rge. 9, W. 4th mer., Alberta.

*Cameloma vetula* var. *tenuis* Dyer

Holotype 6677

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 10, pl. 3, fig. 4.

Foremost Formation, Upper Cretaceous, NW.  $\frac{1}{4}$  sec. 1, tp. 3, rge. 12, W. 4th mer., Alberta.*Capulus corrugatus* Whiteaves

Syntype 5849

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 364, pl. 45, figs. 2, a.

Upper Cretaceous, Comox River near Comox, Vancouver Island, British Columbia.

*Cerithium harveyi* Whiteaves

Syntypes 5933, a

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 362, pl. 43, fig. 7 [5983].

Upper Cretaceous, New Vancouver Coal Co's mine, Nanaimo, British Columbia.

*Cerithium skidegatense* Whiteaves

Syntypes 4952, b, c

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 215, pl. 27, figs. 3, a [4952].

Lower Cretaceous [Haida Formation], east end Maude Island, Queen Charlotte Islands, British Columbia.

*Cerithium vancouverense* Whiteaves

Syntypes 5932, a

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 361, pl. 43, fig. 6 [5932].

Upper Cretaceous, Extension mine near Nanaimo, British Columbia.

*Chiton canadensis* Billings

Syntypes 1252, a

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 394, figs. 37a-c.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Priscochiton canadensis*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 16, pl. 1, figs. 1-3 [holotype 1252; paratype 1252a].

Mollusca

*Cinulia pusilla* Whiteaves

Syntypes 4957, a-e

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 217, pl. 28, figs. 5, a [4957].

Lower Cretaceous [Haida Formation], South Island, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Cinuliopsis typica* Whiteaves

Holotype 5795

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 131, pl. 16, figs. 7, a,b.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Cirsotrema tenuisculptum* Whiteaves

Holotype 5768

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 127, pl. 16, figs. 3, a-c.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Clathrospira conica* Ulrich and Scofield

Hypotype 9761

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 57, pl. 7, figs. 1, 2.

Cobourg beds, Ottawa Formation, Middle Ordovician, corner of Maple and Lorne Avenues, Ottawa, Ontario.

*Clathrospira subconica* (Hall)

Hypotypes 8458 a, b, 8459, a, 8486

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 210, pl. 36, figs. 4a [8459], b [8458b].

Upper Ordovician, north end of second bluff on Nicolet River, Quebec; Clay Cliffs, Manitoulin Island, and along the hill front west of road to Cape Rich, 7 miles north of Meaford, Ontario.

*Clathrospira subconica* (Hall)

Hypotype 9762

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 57, pl. 7, fig. 3.

Leray beds, Ottawa Formation, Middle Ordovician, La petite Chaudière, Ottawa, Ontario.

*Clisospira curiosa* Billings

Syntype 782

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 186, figs. 167a, b.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 186, figs. 167a, b.

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 79, pl. 91, figs. 2, b [holotype 782].

Beekmantown Formation, Lower Ordovician, near St. Antoine de Tilly, Quebec.

*Clisospira curiosa* Billings

Hypotypes 782a,b

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 420, fig. 401.

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 79, pl. 91, figs. 2, a [paratype 782a].

Beekmantown Formation, Lower Ordovician, Philipsburg, Quebec.

*Codonocheilus striatum* Whiteaves

Syntypes 2843, a, 2844, a-s

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 17, pl. 3, fig. 3 [2844].

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 80, pl. 50, figs. 7a [holotype 2844], b [2843a], c [2843].

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

*Coelidium egregium* see *Murchisonia egregia**Coelidium hebe* see *Murchisonia hebe**Coelocaulus longispira* (Hall)

Hypotypes 2895a, 5131

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 25, figs. 1, 2.

Guelph Formation, Middle Silurian, Durham and Baptist Harbour, St. Edmund tp., Ontario.

*Coelocaulus vitellia* (Billings)

Hypotypes 2881, 2882,

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 25, figs. 4, 9.

Guelph Formation, Middle Silurian, Durham and Galt, Ontario.

*Cyclonema bellula* Billings

Syntypes 2532, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 56.

Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 249, pl. 43, figs. 9, 10 [2532a].

Middle Silurian [Jupiter Formation], The Jumpers, Anticosti Island, Quebec.

*Cyclonema bilix* var. *conicum* Miller

Hypotypes 8493a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 217, pl. 37, figs. 2a [8493a], b [8493b].

Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Cyclonema communis* Billings

Syntypes 2530, a-c

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 55.

Middle Silurian [Jupiter Formation], The Jumpers, Anticosti Island, Quebec.

= *Spirorapha* ? *communis*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 240 [holotype and cast 2530b].*Cyclonema cushingi* Ruedemann

Hypotypes 9772, a

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 78, pl. 13, figs. 9-11.

Hull beds, Ottawa Formation, Middle Ordovician, cement quarries, Hull, Quebec.

*Cyclonema decora* Billings

Holotype 2529

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 56.

Middle Silurian [Chicotte Formation], Southwest Point, Anticosti Island, Quebec.

= *Cyclonema decorum*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 249, pl. 42, figs. 10, 11.*Cyclonema hageri* Billings

Holotype 1697

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 29, fig. 27.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 29, fig. 27.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 178, fig. 169.

Trenton beds, Middle Ordovician, Smith quarries, Montreal.



*Cyclonema hallianum* Salter

Lectotype 1195; hypotype 9773

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 78, pl. 13, figs. 14, 15.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec and lot 6, con. 3, R.F., Gloucester tp., Ontario.

*Cyclonema humilis* Billings

Syntypes 2531, a-e

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 56.

Middle Silurian [Jupiter Formation], The Jumpers, Anticosti Island, Quebec.

=*Diaphorostoma humile*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 254, pl. 42, figs. 13, 14 [holotype ? 2531a].

*Cyclonema mediocris* Billings

Holotype 2461

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 56.

Middle Silurian [Jupiter Formation], 4 miles west of Southwest Point, Anticosti Island, Quebec.

=*Holopea ? mediocris*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 251, pl. 43, fig. 11.

*Cyclonema montrealensis* Billings

Syntypes 1694, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 30, fig. 28 [1694].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 30, fig. 28.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 178, fig. 170.

Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 79, pl. 13, figs. 12, 13 (holotype 1694).

Trenton beds, Middle Ordovician, Smith quarries, Montreal, Quebec.

*Cyclonema parvimedium* McLearn

Holotype 5655

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 146, pl. 21, figs. 13, 14.

Beechhill? Formation, Lower Silurian, Arisaig, Nova Scotia.

*Cyclonema percingulata* Billings

Syntypes 2534, a,b,d,

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 304.

Middle Silurian [Jupiter Formation], Southwest Point, Anticosti Island, Quebec.

*Cyclonema phaedra* Billings

Holotype 783

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 188.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 188.

Beekmantown Formation, Lower Ordovician, St. Antoine de Tilly, Quebec.

*Cyclonema semicarinata* Salter

Syntype 1208

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 27, pl. 6, figs. 2, a,b.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 145, fig. 90.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Gyronema semicarinatum*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 75, pl. 12, figs. 18-20 [holotype 1208].

*Cyclonema ? subangulatum* Hall

Hypotypes 7620, a

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 176, pl. 31, figs. 3,a,4,a.  
Mississippian, Windsor, Nova Scotia.*Cyclonema sulcatum* Hall

Hypotype 2851

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 18,  
pl. 3, fig. 5.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Cyclonema thalia* (Billings)

Hypotype 2129

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 17, fig. 5.

Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 154, pl. 42, fig. 12 [supposed holotype, but  
as original 1857 description based on small specimens from Junction Cliff region  
specimen 2129 not likely a primary type].Upper Ordovician [English Head or Vaureal Formation], Carleton Point, Anticosti Island,  
Quebec.*Cyclonema varians* Billings

Syntypes 2533, a-g

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 305.

Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 251, pl. 43, figs. 7, 8 [2533].

Middle Silurian [Chicotte Formation], Southwest Point, Anticosti Island, Quebec.

*Cyclonema* sp.

Fig. specs. 15082, 15083

Yochelson, E. in Boucot, A.J. *et al.*, 1960, Geol. Surv., Canada, Bull. 65, p. 44, pl. 9,  
figs. 19, 20.Sutherland River Formation, Upper Silurian, Camp Creek, Douro Range, West Devon Island,  
Arctic.*Cyclora turbinata* Whiteaves

Syntypes 3237, a-c

Whiteaves, J.F., 1883, Can. Naturalist Geol., n. ser., vol. 10, p. 101.

Lower Devonian, Campbellton, New Brunswick.

*Cyclora valvatiiformis* Whiteaves

Syntypes 3238, a-e

Whiteaves, J.F., 1883, Can. Naturalist Geol., n. ser., vol. 10, p. 100.

Lower Devonian, Campbellton, New Brunswick.

*Cypraea suciensis* Whiteaves

Holotype 5937

Whiteaves, J.F., 1895, Trans. Roy. Soc. Can., ser. 2, vol. 1, sec. 4, p. 127, pl. 3, fig. 5.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Cyrtolites carinatus* Miller

Hypotypes 8468a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 205, pl. 35, figs. 5a [8468a],  
b [8468b].Sheguiandah Formation, Upper Ordovician, Sheguiandah road, 3 miles southeast of Little  
Current, Manitoulin Island, Ontario.

*Cyrtolites desideratus* Billings

Syntypes (?) 2158, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 21.

Upper Ordovician [English Head (?) Formation], Macasty Bay, Anticosti Island, Quebec.

=*Phragmolites desideratus*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 247, pl. 35, fig. 4 [2158a].

*Cyrtolites insculptus* Northrop

Syntypes 9167, a, b

Northrop, S.A., 1939, Geol. Soc. Amer., Sp. Paper 21, p. 206, pl. 20, figs. 6-8.

Indian Point Formation, Middle Silurian, along shore at and east of Indian Point, Gaspé, Quebec.

*Cyrtolites ornatus* Conrad

Hypotypes 8467, a

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 203.

Meaford Formation, Upper Ordovician, Clay Cliffs 3 miles north of Wekwemikongsing, Manitoulin Island, Ontario.

*Cyrtolites pannosus* Billings

Syntypes 2145, a-d

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 20.

Upper Ordovician [English Head Formation], Carleton Point, Anticosti Island, Quebec.

=*Phragmolites pannosus*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 247, pl. 35, figs. 2, 3 [2145].

*Cyrtolites cf. subplanus* Ulrich and Scofield

Hypotype 13245

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 23, pl. 2, figs. 5, 6.

Leray beds, Ottawa Formation, Middle Ordovician, Merivale Road, Ottawa, Ontario.

*Cyrtospira cf. abbreviata* (Hall)

Hypotype 9791

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 90, pl. 12, figs. 13, 14.

Hull beds, Ottawa Formation, Middle Ordovician, Hull, Quebec.

*Cyrtospira notata* see *Subulites notatus*

*Cyrtospira parvula* see *Subulites parvulus*

*Daidia cerithioides* see *Eunema cerithioides*

*Diaphorostoma affine* see *Platystoma affinis*

*Diaphorostoma cf. carleyana* (Hall)

Hypotype 7676

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 180, pl. 31, fig. 22.

Mississippian, Murphy Road 2 miles south of Scotch Village, Nova Scotia.

*Diaphorostoma cornutum* var. *arisaigensis* McLearn

Holotype 5657

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 148, pl. 21, figs. 8-10.

Silurian, Arisaig, Nova Scotia.

*Diaphorostoma humile* see *Cyclonema humilis*

*Diaphorostoma perforatum* Whiteaves

Holotype 17733

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 52F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 261, pl. 29, figs. 7, a.

Silurian, middle rapid, Ekwan River, Ontario.

*Dimorphoptychia douglasi* Tozer

Holotype 10310; paratypes 10175 - 10177, 10198, 10308, 10309.

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 46, pl. 7, figs. 14-20.

Willow Creek (upper part) and Paskapoo Formations, Paleocene, left side Waterton River, l.s.d. 2, sec. 28, tp. 5, rge. 27, W. 4th mer. and south side Little Red Deer River, l.s.d. 15, sec. 29, tp. 29, rge. 5, W. 5th mer., Alberta.

*Dimorphoptychia mokowanensis* Tozer

Holotype 10182; paratypes 10183, 10199

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 47, pl. 7, figs. 5-7.

St. Mary River Formation, Upper Cretaceous, right side Waterton River, l.s.d. 13, sec. 36, tp. 4, rge. 28, W. 4th mer., Alberta.

*Dimorphoptychia rutherfordi* (Russell)

Hypotypes 10178-10181, 10297

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 48, pl. 7, figs. 8-11; text figs. 4a-c.

Paskapoo Formation, Paleocene, north side Little Red Deer River, l.s.d. 1, sec. 30, tp. 29, rge. 5, W. 5th mer., Alberta.

*Dimorphoptychia* sp. cf. *D. rutherfordi* (Russell)

Hypotypes 10184, 10185

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 50, pl. 7, fig. 12.

St. Mary River Formation, Upper Cretaceous, right side Waterton River, l.s.d. 13, sec. 36, tp. 4, rge. 28, W. 4th mer., Alberta.

*Discus mackenziei* Russell

Holotype 11618; paratypes 11619, 11620

Russell, L.S., 1955, Nat. Mus. Can., Bull. 136, p. 111, pl. 3, figs. 4-6; text fig. 6.

Kishenehn Formation, Upper Eocene, Flathead Valley, British Columbia.

*Ecculiomphalus atlanticus* Billings

Syntypes 617, a, b

Billings, E.,

1865, "New Species of Lower Silurian Rocks", p. 250.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 250.

Divisions F and G [St. George], Lower Ordovician, Bay St. Johns and Keppel Island, Newfoundland.

*Ecculiomphalus canadensis* Billings

Syntype 808

Billings, E., 1861, Can. Naturalist Geol., vol. 6, p. 320, fig. 4.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 232, fig. 248.

Beekmantown Formation, Lower Ordovician, lot 15, St. Armand tp., Quebec.

*Ecculiomphalus circinatus* Whiteaves

Syntypes 2883, a-d

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 35, pl. 5, figs. 4 [2883], a [2883d], b [2883b]; pl. 8, fig. 5 [2883c].

Guelph Formation, Middle Silurian, Durham, Ontario.

*Eccyliomphalus intortus* Billings

Syntypes 755, a, b

Billings, E., 1861, Can. Naturalist Geol., vol. 6, p. 320, fig. 5 [755a].

Logan, W.E., "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 232, fig. 249.  
Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Eccyliomphalus superbus* Billings

Holotype 616

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 250.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 250.

Division P [Table Head], Middle Ordovician, 2 miles northeast from Portland Creek, Newfoundland.

*Eccyliomphalus* sp.

Fig. spec. 11074

Bolton, T.E., 1958, Geol. Surv., Canada, Mem. 289, pl. 12, fig. 16.

Warton member, Amabel Formation, Middle Silurian, road-cut, Owen Sound-Chatsworth Highway, Ontario.

*Eccyliomphalus nitida* Twenhofel

Holotype 2299; paratype 2298

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 248, pl. 25, figs. 15, 16.

Ellis Bay Formation, Upper Ordovician, 1 mile south of and at Junction Cliff, Anticosti Island, Quebec

*Eccyliomphalus ottawaensis* (Billings)

Hypotypes 9764, 9765

Wilson, A.E., Geol. Surv., Canada, Bull. 17, p. 62, pl. 11, figs. 22, 23.

Cobourg beds, Ottawa Formation, Middle Ordovician, cons. 8 and 9, Indian Lands, Roxborough tp. and foot of Sussex Street, Ottawa, Ontario.

See *Ophileta ottawaensis*

*Ectomaria pagoda* see *Eunema? pagoda*

*Eobucania pulchra* Kobayashi

Holotype 12611

Kobayashi, T., 1955, J. Fac. Sci., Univ. Tokyo, sec. 2, vol. 9, pt. 3, p. 404, pl. 1, figs. 1a-f.

McKay Group, Lower Ordovician, north end of Steamboat Mountain, elevation 4,250 feet, west of Brisco, British Columbia.

*Eotomaria delia* see *Pleurotomaria delia*

*Eotomaria dryope* see *Pleurotomaria dryope*

*Eotomaria dryope* var. *plana* Wilson

Holotype 9760

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 54, pl. 9, figs. 13-15.

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

*Eotomaria durhamensis* (Whiteaves)

Hypotype 11079

Bolton, T.E., 1958, Geol. Surv., Canada, Mem. 289, p. 54, pl. 12, fig. 24.

Warton Member, Amabel Formation, Middle Silurian, 15 feet from the top of road-cut at Warton, Ontario.

See *Pleurotomaria durhamensis*

*Eotomaria larvata* see *Helicotoma larvata* and *Eotomaria rotunda*

*Eotomaria lydia* see *Pleurotomaria lydia*

*Eotomaria remotistriata* Foerste

Syntypes 8456, 8457

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 210, pl. 36, figs. 3a [8457], b [8456].

Upper Ordovician, bank of Richelieu River below dam at Chambly, Quebec, and 1½ miles northwest of Vars, Ontario.

*Eotomaria rotunda* Wilson

Holotype 6226

Wilson, A.E., 1921, Geol. Surv., Canada, Bull. 33, p. 55, pl. 4, figs. 5-7.

'Chazy' [Pamelia beds, Ottawa Formation], Middle Ordovician, MacLaren Landing, Ontario.

=*Eotomaria larvata*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 54, pl. 9, figs. 24, 25.

*Eotomaria voltumna* see *Pleurotomaria voltumna*

*Euconia amphitrite* see *Pleurotomaria amphitrite*

*Euconia etna* see *Pleurotomaria etna*

*Euconia ramseyi* see *Pleurotomaria ramseyi*

*Eunema brevispira* Whiteaves

Syntypes 4063-4065

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 320, pl. 42, figs. 6 [4064], 7 [4063].

Middle Devonian, Dawson Bay and Fishing Point, Lake Winnipegosis, Manitoba.

*Eunema cerithioides* Salter

Holotype 1206

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 30.

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 35, fig. 36.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 35, fig. 36.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, p. 145, figs. 89a, b.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Daidia cerithioides*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 74, pl. 11, figs. 15, 16.

*Eunema clathratulum* Whiteaves

Syntype 4060

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 322, pl. 42, fig. 9.

Middle Devonian, Dawson Bay at mouth of Red Deer River, Lake Winnipegosis, Manitoba.

*Eunema ? pagoda* Salter

Syntypes 1203a-g

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 30, pl. 6, fig. 5 [1203c].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Solenospira pagoda*, Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 324, pl. 42, figs. 2a, c [holotype 1203c; paratypes 1203a, b, e, f, g].

=*Ectomaria pagoda*, Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 58, pl. 7, fig. 4 [holotype 1203c; paratypes 1203a, b, e-g].

=*Eunema strigillatum*, Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 119 [paratypes 1203d, e].

*Eunema speciosum* Whiteaves

Syntypes 4066, 4067, a, b

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 320, pl. 42, fig. 5 [4066].

Middle Devonian, island in Dawson Bay, Lake Winnipegosis, Manitoba.

*Eunema strigillata* Salter

Syntypes 1202a-e

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 29, pl. 6, fig. 4.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 145, fig. 88.

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 119, pl. 41, figs. 1a, b [holotype 1202b; paratypes 1202, a, c, d].

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 73, pl. 10, figs. 8, 9 [holotype 1202b; paratypes 1202a, c-e].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Eunema subspinosum* Whiteaves

Syntypes 4061, 4062

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 321, pl. 42, fig. 48 [4061]; pl. 45, fig. 5 [4062].

Middle Devonian, Dawson Bay at first small point north of mouth Red Deer River and near Salt Point, Lake Winnipegosis, Manitoba.

*Euomphalus (Straparollus) annulatus* Phillips

Hypotypes 4044, 4046

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 324, pl. 43, figs. 1, a [4044], 2 [4046].

Middle Devonian, Pentamerus Point, Lake Manitoba and Dawson Bay, Lake Winnipegosis, Manitoba.

*Euomphalus (circularis? var.) subtrigonalis* Whiteaves

Syntypes 4048, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 326, pl. 43, fig. 4 [4048].

Upper Devonian, Snake Island, Lake Winnipegosis, Manitoba.

*Euomphalus (Straparollus) flexistriatus* Whiteaves

Holotype 4291

Whiteaves, J.F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 242, pl. 31, figs. 2, a.

Upper Devonian, The Ramparts, Mackenzie River, Northwest Territories.

*Euomphalus galtensis* Whiteaves

Syntypes 2853, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 21.

Williams, M.Y., 1919, *ibid.*, Mem. 111, pl. 25, fig. 7.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Euomphalus (Straparollus) inops* Hall

Hypotype 4289.

Whiteaves, J.F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 242, pl. 31, figs. 3, a.

Upper Devonian, The Ramparts, Mackenzie River, Northwest Territories.

*Euomphalus macrolineatus* Whitfield

Hypotype 2808

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 20, pl. 3, fig. 6.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Euomphalus manitobensis* Whiteaves

Syntypes 4173, a, 4174, a [parts of 1 specimen]

Whiteaves, J.F., 1890, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 100, pl. 6 figs. 2 [4173], a, b [4173a], 3, a [4174].

Denovian, island in Lake Winnipegosis and on Red Deer River, Manitoba.

= *Omphalocirus manitobensis*, Whiteaves, J.F., 1892, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, pt. 4, p. 327.*Euomphalus maskusi* Whiteaves

Holotype 4290; paratype 4290a

Whiteaves, J.F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 243, pl. 31, fig. 4 [4290].

Upper Devonian, Hay River 40 miles below mouth, Northwest Territories.

*Euomphalus (Phanerotinus)* sp. undet.

Fig. spec. 4043

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 325, pl. 43, figs. 3, a.

Upper Devonian, small island off Weston Point, Lake Winnipegosis, Manitoba.

*Euphemus carbonarius* var. *arenarius* Shimer

Holotype 4882

Shimer, H.W., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 79, pl. 7, fig. 13.

Carboniferous, Lake Minnewanka area, Alberta.

*Euphemus* cf. *urei* Fleming

Hypotype 7678

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 172, pl. 30, fig. 8.

Mississippian, Avon River, Nova Scotia.

*Ferrissia arionoides* Russell

Holotype 13279

Russell, L.S., 1957, Nat. Mus. Can., Bull. 147, p. 89, pl. 1, fig. 5.

Princeton Group, Oligocene, Princeton Tulameen Coal Mine dump, west of Princeton, British Columbia.

*Flemingia dispersa* (Dawson)

Hypotypes 4370, b

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 177, pl. 31, figs. 9, 10.

Mississippian, Windsor or Springhill, Nova Scotia.

*Flemingia minuta* Bell

Holotype 7681

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 178, pl. 31, figs. 11, a.

Mississippian, Springhill, Nova Scotia.

*Fulguraria navarroensis* Shumard

Hypotypes 5786, a-e

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 117, pl. 15, fig. 3a [5786].

Upper Cretaceous, Sucia Island, Washington, U.S.A.



**Mollusca**

*Fusispira angusta* Ulrich and Scofield

Hypotype 13247

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 92, pl. 16, fig. 9.  
Cobourg beds, Ottawa Formation, Middle Ordovician, Philemon Island, Hull, Quebec.

*Fusispira calcifera* see *Subulites calcifera*

*Fusispira convexa* Ulrich and Scofield

Hypotype 9101

Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, pl. 6, fig. 4.  
Liskeard Formation, Middle Ordovician, Lake Timiskaming area, Ontario.

*Fusispira elongata* Hall

Hypotype 9780

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 93, pl. 16, fig. 8.  
Cobourg beds, Ottawa Formation, Middle Ordovician, west half of lot 27, con. 3, Roxborough tp., Ontario.

*Fusispira inflata* var. *nepeana* Wilson

Holotype 9781

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 93, pl. 16, fig. 6.  
Leray-Rockland beds, Ottawa Formation, Middle Ordovician, lots G and H, con. C, R.F., Nepean tp., Ontario.

*Fusispira nobilis* Ulrich and Scofield

Hypotype 3262

Raymond, P.E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 29, pl. 8, fig. 12.  
Cobourg Formation, Middle Ordovician, Wellington, Ontario.

*Fusispira nobilis* Ulrich and Scofield

Hypotype 9100

Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, pl. 5, fig. 4.  
Liskeard Formation, Middle Ordovician, Lake Timiskaming area, Ontario.

*Fusispira nobilis* Ulrich and Scofield

Hypotype 9782

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 94, pl. 17, figs. 2, 3.  
Hull beds, Ottawa Formation, Middle Ordovician, Hull, Quebec.

*Fusispira nobilis* var. *ingens* Wilson

Holotype 9783

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 94, pl. 17, figs. 5, 6.  
Cobourg beds, Ottawa Formation, Middle Ordovician, west end of Fourth Avenue, Ottawa, Ontario.

*Fusispira nobilis* var. *medialis* Wilson

Holotype 9784

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 95, pl. 17, fig. 1.  
Cobourg beds, Ottawa Formation, Middle Ordovician, corner of Booth and Elm Streets, Ottawa, Ontario.

*Fusispira planulata* Ulrich and Scofield

Hypotype 13248

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 95, pl. 16, fig. 4.  
Sherman Fall beds, Ottawa Formation, Middle Ordovician, east side Governor Bay, Ottawa, Ontario.

*Fusispira subbrevis* var. *obesa* Wilson

Holotype 9785

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 95, pl. 16, fig. 17.

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

*Fusispira subfusiformis* (Hall)

Hypotype 9786

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 96, pl. 16, fig. 5.

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

*Fusispira subfusiformis* var. *germana* Wilson

Holotype 6668

Wilson, A.E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 404, pl. 6, figs. 10, 11.

1951, Geol. Surv., Canada, Bull. 17, p. 96, pl. 16, figs. 2, 3.

Cobourg beds, Ottawa Formation, Middle Ordovician, lot 35, con. 3, Charlottenburg tp., Ontario.

*Fusispira terebriformis* Hall

Hypotype 9787

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 99, pl. 16, fig. 1.

Hull-Sherman Fall Beds, Ottawa Formation, Middle Ordovician, between Val Tetreau and railway crossing at Hull, Quebec.

*Fusus kingii* Gabb

Hypotype 5793

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 119, pl. 15, fig. 4.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

## Genus uncertain

Fig. spec. 15073

Yochelson, E. in Boucot, A.J. et al., 1960, Geol. Surv., Canada, Bull. 65, p. 43, pl. 9, figs. 4, 5.

Sutherland River Formation, Upper Silurian, Douro Range, West Devon Island, Arctic.

## Genus and species uncertain

Fig. spec. 5924

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 371, pl. 45, fig. 9.

Upper Cretaceous, roof of coal at Nanaimo mines, Vancouver Island, British Columbia.

*Glyptepes rotundata* (Russell)

Hypotype 10164

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 77, pl. 8, figs. 1a-d.

Paskapoo formation, Paleocene, 1190 feet east of Slippery Creek on Canadian National Railways, Saunders map-area, Alberta.

*Goniobasis borealis* Dall

Syntypes 4377, 4385

Dall, W.H., 1924 in Oneill, J.J., Rept. Canadian Arctic Expedition 1913-18, vol. 11, pt. A, p. 27a, pl. 35, fig. 3 [4377].

Tertiary, 10 and 12 miles from mouth of Brock River 15 miles south of Cape Lyon, North-west Territories.

*Goniobasis eulimoides* (Meek)

Hypotypes 10281-10283

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 71, pl. 6, figs. 21, 22.

Paskapoo Formation, Paleocene, south side Pekisko Creek, l.s.d. 14, sec. 26, tp. 17, rge. 2, W. 5th mer., Alberta.

*Goniobasis judithensis* var. *minimus* Dyer

Holotype 6682

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 12, pl. 3, fig. 12.

Belly River Formation, Upper Cretaceous, Little Bow River, SE. ¼ sec. 3, tp. 12, rge. 19, W. 4th mer., Alberta.

*Goniobasis?* *multicarinata* Russell

Holotype 6799; paratype 6799a

Russell, L.S., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 41, pl. 1, fig. 9 [6799].

McMurray Formation, Lower Cretaceous, Hangingstone River, Alberta.

*Goniobasis nebrascensis* (Meek and Hayden)

Hypotype 5545

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 21, pl. 3, figs. 4, a.

St. Mary River Formation, Upper Cretaceous, St. Mary River, tp. 1, rge. 25, W. 4th mer., Alberta.

=*Goniobasis sanctamariensis*, Russell, L.S., 1932, Can. Field-Naturalist, vol. 41, No. 4, p. 81 [paratype].

*Goniobasis sanctamariensis* Russell

Holotype 6789

Russell, L.S., 1932, Can. Field-Naturalist, vol. 41, No. 4, p. 81, fig. 4.

St. Mary River Formation, Upper Cretaceous, south bank of Oldman River, SE. ¼ sec. 3, tp. 10, rge. 24, W. 4th mer., Alberta.

*Goniobasis subtortuosa* (Meek and Hayden)

Hypotype 5185

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 74, pl. 10, fig. 7.

Belly River Formation, Upper Cretaceous, South Saskatchewan River 1 mile below confluence of Bow and Oldman Rivers, Alberta.

*Goniobasis subtortuosa* mut. *tenuis* Dyer

Holotype 6680; paratype 6680a

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 11, pl. 3, figs. 9, 10.

Willow Creek Formation, Paleocene, Willow Creek, centre sec. 12, tp. 10, rge. 29, W. 4th mer., Alberta.

*Goniobasis tenuicarinata* (Meek and Hayden)

Hypotype 5551

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 22, pl. 3, figs. 5, a.

Paskapoo? Formation, Paleocene, Bow River near Jumpingpound Creek, Alberta.

*Goniobasis tenuicarinata* (Meek and Hayden) var.

Hypotypes 5548, a

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 22, pl. 3, figs. 6 [5548], a [5548a].

St. Mary River Formation, Upper Cretaceous, Pincher Creek near Pincher Creek, Alberta.

=*Goniobasis tenuicarinata* var. *whiteavesi*, Russell, L.S., 1929, Trans. Roy. Soc. Can., ser. 3, vol. 23, sec. 4, p. 83.

=*Goniobasis whittakeri*, Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 12.

*Goniobasis webbi* Dyer

Holotype 6684

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 13, pl. 3, fig. 14.

Edmonton Formation, Upper Cretaceous, sec. 8, tp. 21, rge. 22, W. 4th mer., Alberta.

*Goniobasis webbi* Dyer

Hypotypes 10160-10163

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 72, pl. 6, figs. 23-26.

Edmonton Formation (lower part), Upper Cretaceous, south side Bow River, sec. 5, tp. 21, rge. 22, W. 4th mer. and north side Kneehills Creek, NW. ¼ sec. 7, tp. 29, rge. 21, W. 4th mer., Alberta.

*Goniobasis whittakeri* Dyer

Holotype 6683

Dyer, W.S., 1930, Can. Nat. Mus., Contr. Can. Pal., Bull. 63, p. 12, pl. 3, fig. 11.

St. Mary River Formation, Upper Cretaceous, SW. ¼ sec. 29, tp. 10, rge. 24, W. 4th mer., Alberta.

*Goniobasis williamsi* Dyer

Holotype 6681

Dyer, W.S., 1930, Can. Nat. Mus., Contr. Can. Pal., Bull. 63, p. 12, pl. 3, fig. 8.

Foremost Formation, Upper Cretaceous, north of centre of sec. 1, tp. 3, rge. 12, W. 4th mer., Alberta.

*Goniobasis* sp.

Fig. specs. 10114, 10115

Russell, L.S., 1952, Nat. Mus. Can., Bull. 126, p. 132, pl. 19, figs. 14, 15 [10114], 16 [10115].

Kishenehn Formation, Upper Eocene, first outcrop on west side Flathead River north of International Boundary, British Columbia.

*Goniostrophia aciculata* (Hall)

Hypotypes 5650, 5651

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 142, pl. 20, figs. 21, 25.

Stonehouse Formation, Upper Silurian, coast section, Arisaig, Nova Scotia.

*Grangerella mcLeodensis* (Russell)

Hypotypes 10191-10194

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 50, pl. 7, figs. 1-4.

Willow Creek, Paskapoo, and Porcupine Hills Formation, Paleocene, left side Waterton River, l.s.d. 12, sec. 31, tp. 5, rge. 26, W. 4th mer.; south side North Saskatchewan River, 5,200, feet downriver from mouth of Dizzy Creek, Alexo map-area; and north side Oldman River, l.s.d. 7, sec. 36, tp. 7, rge. 1, W. 5th mer., Alberta.

*Gyraulus cyclostomus* Baker

Holotype 8038; paratypes 8038 a-c

Baker, F.C., 1934, Can. Field-Naturalist, vol. 48, No. 2, p. 37, figs. 12-14 [8038].

Interglacial, railway cut in SE. ¼ sec. 17, tp. 27, rge. 16, W. 3rd mer., Rosetown, Saskatchewan.

*Gyraulus procerus* Russell

Holotype 10109; paratypes 10110-10113

Russell, L.S., 1952, Nat. Mus. Can., Bull. 126, p. 131, pl. 19, figs. 3-13; text fig. 10.

Kishenehn Formation, Upper Eocene, Flathead Valley, British Columbia.

Mollusca

*Gyraulus?* sp.

Fig. spec. 13284

Russell, L.S., 1957, Nat. Mus. Can., Bull. 147, p. 91, pl. 2, fig. 7.

Princeton Group, Oligocene, Princeton Tulameen Coal Mine dump, west of Princeton, British Columbia.

*Gyronema brevispira* Whiteaves

Syntypes 4424, a

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 51F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 259, pl. 29, fig. 4 [4424].

Silurian, portage road at falls Ekwan River, Ontario.

*Gyronema dowlingii* Whiteaves

Holotype 4429

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 50F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 259, pl. 29, fig. 3.

Silurian, portage road at falls Ekwan River, Ontario.

*Gyronema semicarinatum* see *Cyclonema semicarinata*

*Gyronema speciosum* Whiteaves

Syntypes 4430, a

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 50F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 258, pl. 29, fig. 2 [4430].

Silurian, portage road at falls Ekwan River, Ontario.

*Gyronema* sp.

Fig. specs. 15075-15080

Yochelson, E. in Boucot, A.J. et al., 1960, Geol. Surv., Canada, Bull. 65, p. 43, pl. 9, figs. 9-14.

Sutherland River Formation, Upper Silurian, Camp Creek, Douro Range, West Devon Island, Arctic.

*Gyronema?* sp.

Fig. spec. 15081

Yochelson, E. in Boucot, A.J. et al., 1960, Geol. Surv., Canada, Bull. 65, p. 44, pl. 9, figs. 15-18.

Sutherland River Formation, Upper Silurian, Douro Range, West Devon Island, Arctic.

*Helcion giganteus?* var. *vancouverensis* Whiteaves

Holotype 5912

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 370, pl. 51, fig. 1.

Upper Cretaceous, Nanaimo River, Vancouver Island, British Columbia.

*Helcion tenuicostatus* Whiteaves

Syntype 5913

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 371, pl. 45, figs. 8, a.

Upper Cretaceous, Extension Mine near Nanaimo, Vancouver Island, British Columbia.

*Helcionella?* *carinata* Rasetti

Holotype 13582; paratypes 13583 a-c, 13584

Rasetti, F., 1957, J. Pal., vol. 31, No. 5, p. 971, pl. 122, figs. 3-8.

Mount Whyte Formation, Middle Cambrian, Mount Field, British Columbia.

*Helcionella ? insulcata* Rasetti

Holotype 13579; paratypes 13580, 13581a, b

Rasetti, F., 1957, J. Pal., vol. 31, No. 5, p. 969, pl. 122, figs. 9-14.

Mount Whyte Formation, Middle Cambrian, Mount Field, British Columbia.

*Helcionella ? sp. undet.*

Fig. spec. 13585

Rasetti, F., 1957, J. Pal., vol. 31, No. 5, p. 972, pl. 122, fig. 15.

Mount Whyte Formation, Middle Cambrian, Mount Field, British Columbia.

*Helicotoma brocki* Foerste

Holotype 8128

Foerste, A.F.,

1912, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 137, pl. 10, fig. 11; pl. 11, fig. 3

1924, Geol. Surv., Canada, Mem. 138, p. 216, pl. 34, figs. 23a, b.

Upper Ordovician, south of Kagawong, Manitoulin Island, Ontario.

*Helicotoma eucharis* Billings

Syntypes 605, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 249, figs. 234a, b [605a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 249, figs. 234a, b.

Divisions L-M [Table Head], Middle Ordovician, Table Head, Newfoundland.

*Helicotoma larvata* Salter

Syntypes 1211, a-i

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 15, pl. 2, figs.

11-13 [1121 or 1121e idealized], 14 [1121b or e].

Middle Ordovician [Leray-Rockland], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

= *Eotomaria larvata*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 54, pl. 9, figs. 20-23 [holotype 1211; paratypes 1211a-i].*Helicotoma perstriata* Billings

Holotype 464

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 356.

Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 61, pl. 10, fig. 3.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

*Helicotoma planulata* Salter

Syntypes 1210, a-e, g, h

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 14, pl. 2, figs. 5-7.

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 144, pl. 75, figs. 2a-c [holotype 1210; paratypes 1210a-e].

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 64, pl. 11, figs. 8-14 [holotype 1210; paratypes 1210e, g, h].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Helicotoma planulata* var. *muricata* Salter

Hypotype 9766

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 64, pl. 11, figs. 6, 7.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

Mollusca

*Helicotoma proserpina* Billings

Holotype 608

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 247, fig. 233.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 247, fig. 233.

Division G [St. George], Lower Ordovician, Cape Norman, Newfoundland.

*Helicotoma ? spinosa* Salter

Syntypes 1209, a

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 15, pl. 2, figs. 9, 10.

Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 65, pl. 11, figs. 1-3 [holotype 1209; paratype 1209a].

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

*Helicotoma spinosa* Salter

Hypotype 9767

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 65, pl. 11, figs. 4, 5.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Helicotoma tritonia* Billings

Holotype 607

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 247.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 247.

Division G [St. George], Lower Ordovician, Cape Norman, Newfoundland.

*Hindsia nodulosa* (Whiteaves)

Hypotype 5767

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 125, pl. 15, fig. 7.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Holopea caecistriata* McLearn

Holotype 5656

McLearn F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 147, pl. 21, fig. 1.

Middle? or Upper? Silurian, Arisaig, Nova Scotia.

*Holopea gracia* Billings

Holotype 2845

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 159.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 159.

Whiteaves, J.F.,

1884, *ibid.*, vol. 3, pt. 1, p. 18, pl. 3, fig. 4 [the type].

1895, *ibid.*, vol. 3, pt. 2, p. 95, pl. 14, fig. 3 [the type].

Guelph Formation, Middle Silurian, Galt, Ontario.

*Holopea guelphensis* Billings

Holotype 2847

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 159, fig. 143.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 159, fig. 143.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 343, fig. 351.

Bolton, T.E., 1958, *ibid.*, Mem. 289, p. 62, pl. 12, fig. 19.

Guelph Formation, Middle Silurian, Galt, Ontario.

*Holopea guelphensis* Billings

Hypotype 2848

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 25, fig. 6.

Bolton, T.E., 1958, *ibid.*, Mem. 289, p. 62, pl. 12, fig. 20.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Holopea guelphensis* Billings

Hypotypes 11075, 11076

Bolton, T.E., 1958, Geol. Surv., Canada, Mem. 289, p. 62, pl. 12, figs. 17, 18.

Wiarnton Member, Amabel Formation, Middle Silurian, road-cut Colpo village –  
Adamsville road and 15 feet below top of road-cut at Wiarnton, Ontario.*Holopea harmonia* Billings

Holotype 2849

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 158, fig. 142.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 158, fig. 142.

Guelph Formation, Middle Silurian, Galt, Ontario.

*Holopea informis* Wilson

Holotype 6606

Wilson, A.E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 386, pl. 3, figs. 7, 8.

1951, Geol. Surv., Canada, Bull. 17, p. 80, pl. 14, figs. 1, 2.

Lowville beds, Ottawa Formation, Middle Ordovician, lot 17, con. 4, Cornwall tp., Ontario.

*Holopea lavinia* Billings

Holotype 1706

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 28.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 28.

Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 80, pl. 14, fig. 16.

Middle Ordovician [Leray-Rockland beds], lot 25, con. 5, Admaston tp., Ontario.

*Holopea lavinia* var. *conica* Wilson

Holotype 9776

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 80, pl. 14, fig. 15.

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

*Holopea leiosoma* Billings

Holotype 775

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 187, fig. 168.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 187, fig. 168.

Levis Formation, Lower Ordovician, Levis, Quebec.

*Holopea media* Wilson

Holotype 9788

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 81, pl. 14, fig. 3.

Cobourg beds, Ottawa Formation, Middle Ordovician, north of Carling Avenue, between  
LeBreton and Booth Streets, Ottawa, Ontario.*Holopea* ? *mediocris* see *Cyclonema mediocris*



*Holopea nereis* Billings

Syntypes 1197, 1198, a, b, 1707

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 27.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 27.

Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 81, pl. 4, fig. 10 [1197].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec and near L'Original, Ontario.

*Holopea nereis* Billings

Hypotype 9775

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 81, pl. 14, fig. 9.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, north side of Bonnechère River east of townsite, Ontario.

*Holopea nereis* var. *spiralis* Wilson.

Holotype 9777; paratype 1197c

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 82, pl. 14, figs. 11, 12.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Allumette Island, Ottawa River, Quebec.

*Holopea nicolettensis* Foerste

Holotype 8454

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 217, pl. 36, figs. 6 a-c.

Upper Ordovician, Nicolet River, Quebec.

*Holopea obliqua* Hall

Hypotypes 1220a, 9778

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 83, pl. 14, figs. 13, 14.

Leray-Rockland and Cobourg beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Ottawa River and at cliff on Lorne Avenue, Ottawa, Ontario.

*Holopea ophelia* Billings

Syntypes 651, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 222, fig. 204 [651].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 222, fig. 204.

Division L [Table Head], Middle Ordovician, Point Rich, Newfoundland.

*Holopea ottawaensis* Wilson

Holotype 9779

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 83, pl. 14, fig. 5.

Rockland beds, Ottawa Formation, Middle Ordovician, southwest corner lot 20, con. 5, Hull, Quebec.

*Holopea ovalis* Billings

Holotype 486

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 351, fig. 2.

Beekmantown Formation, Lower Ordovician, con. 2, Godmanchester tp., Quebec.

*Holopea paludiformis* Hall

Hypotype 9774

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 84, pl. 14, figs. 18, 19.

Cobourg beds, Ottawa Formation, Middle Ordovician, lots 11 and 12, cons. 9 and 10, Clarence tp., Ontario.

*Holopea cf. proutana* Hall

Hypotypes 7625, 7626

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 177, pl. 31, figs. 7, 8.

Mississippian, near Dominion Atlantic railway bridge, Windsor, Nova Scotia.

*Holopea pyrene* Billings

Holotype 1196

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 27, fig. 26.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 27, fig. 26.

Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 84, pl. 14, fig. 4.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Holopea undulata* Wilson

Holotype 6669

Wilson, A.E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 404, pl. 6, figs. 12, 13.

1951, Geol. Surv., Canada, Bull. 17, p. 86, pl. 14, fig. 7.

Cobourg beds, Ottawa Formation, Middle Ordovician, Cameron farm southwest of Gravel Hill, Ontario.

*Holospira adventica* Russell

Holotype 11609

Russell, L.S., 1955, Nat. Mus. Can., Bull. 136, p. 109, pl. 1, fig. 7; text fig. 4.

Kishenehn Formation, Upper Eocene, Couldrey Creek, Flathead Valley, British Columbia.

*Holospira dyeri* Tozer

Holotype 10187; paratypes 10188-10190

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 82, pl. 9, figs. 6-8; text fig. 5.

St. Mary River Formation, Upper Cretaceous, right side Waterton River, l.s.d. 13, sec. 26, tp. 4, rge. 28, W. 4th mer. and northeast limb of syncline left side Waterton River, NE.

¼ sec. 2, tp. 5, rge. 28, W. 4th mer., Alberta.

*Hormotoma ? aculeata* see *Loxonema aculeata**Hormotoma amii* McLearn

Holotype 5652

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 143, pl. 20, fig. 22.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Hormotoma bellicincta* (Hall)

Hypotype 1678f

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 183, fig. 177.

Middle Ordovician, unspecified locality, Ottawa, Ontario.

=*Hormotoma trentonensis*, Raymond, P.E., 1921, *ibid.*, Mus. Bull. 31, p. 28, pl. 8, fig. 10.=*Hormotoma trentonensis* var. *crassa*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 44.*Hormotoma bellicincta* (Hall)

Hypotypes 1243, 1678b

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 40, pl. 4, fig. 16 [1243].

Leray-Rockland and Cobourg beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec and unspecified locality, Ottawa, Ontario.

*Hormotoma bellicincta* (Hall)

Hypotype 6664

Wilson, A.E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 403, pl. 6, fig. 8.  
Cobourg beds, Middle Ordovician, lot 21, con. 8, Cornwall tp., Ontario.

*Hormotoma* ? *funata* see *Murchisonia funata*

*Hormotoma gigantea* (Billings)

Hypotype 2331

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 242, pl. 13, fig. 7.  
Ellis Bay Formation, Upper Ordovician, Ellis Bay, Anticosti Island, Quebec.

*Hormotoma gracilis* see *Murchisonia (Hormotoma) gracilis*

*Hormotoma infrequens* see *Murchisonia infrequens*

*Hormotoma* cf. *H. major* (Hall)

Hypotype 9748

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 41, pl. 7, fig. 14.  
Cobourg beds, Ottawa Formation, Middle Ordovician, in quarry near Lemieux road north of Casselman, Ontario.

*Hormotoma multivolvis* see *Murchisonia multivolvis*

*Hormotoma salteri* var. *canadensis* see *Murchisonia (Hormotoma) gracilis*

*Hormotoma salteri* var. *ottawaensis* Wilson

Holotype 1678g; paratype 9749

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 42, pl. 6, figs. 3, 4.  
Cobourg beds, Ottawa Formation, Middle Ordovician, unspecified locality and base of Parliament Hill, Ottawa, Ontario.

*Hormotoma simplex* Wilson

Holotype 6665; paratype 6666

Wilson, A.E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 403, pl. 6, figs. 6, 7.

1951, Geol. Surv., Canada, Bull. 17, p. 42, pl. 4, figs. 17, 18.

Cobourg beds, Ottawa Formation, Middle Ordovician, boundary between con. 9, Cornwall tp., and con. 9, Charlottenburgh tp., and lot 22, con. 3, Roxborough tp., Ontario.

*Hormotoma simplex* Wilson

Hypotype 9750

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 42, pl. 4, fig. 19.

Cobourg beds, Ottawa Formation, Middle Ordovician, west end of Fifth Avenue, Ottawa, Ontario.

*Hormotoma simplex* var. *paquettensis* Wilson

Holotype 1221b; paratype 1221

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 43, pl. 4, figs. 20, 21.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Hormotoma subulata* (Conrad)?

Hypotype 4680

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 7, fig. 1.

Whirlpool (?) Formation, Cataract Group, Lower Silurian, Fleming's quarry, Glen William, Ontario.

*Hormotoma teretiformis* see *Murchisonia teretiformis*

*Hormotoma trentonensis* Ulrich and Scofield

Hypotype 3265

Raymond, P.E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 28, pl. 8, fig. 11.

Cobourg Formation, Middle Ordovician, Wellington, Ontario.

*Hormotoma trentonensis* Ulrich and Scofield

Hypotype 9116

Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, pl. 6, fig. 5.

Liskeard Formation, Middle Ordovician, Lake Timiskaming area, Ontario.

*Hormotoma trentonensis* (Hall)

Hypotype 9751

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 44, pl. 6, figs. 1, 2.

Cobourg beds, Ottawa Formation, Middle Ordovician, west end of Fifth Avenue, Ottawa, Ontario.

*Hormotoma* cf. *trentonensis* Ulrich and Scofield

Hypotypes 6662, 6663

Wilson, A.E., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 402, pl. 6, figs. 4, 5.

Cobourg beds, Middle Ordovician, lot 23, con. 7, Roxborough tp. and Gravel Hill, Ontario.

= *Hormotoma trentonensis* var. *crassa*, Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 44, pl. 6, fig. 6 [paratype 6662].= *Hormotoma trentonensis* var. *plana*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 45, pl. 8, fig. 4 [paratype 6663].*Hormotoma trentonensis* var. *crassa* Wilson

Holotype 9752; paratype 9753

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 44, pl. 6, figs. 5, 7.

Cobourg and Leray-Rockland beds, Ottawa Formation, Middle Ordovician, west end of Fifth Avenue, Ottawa, Ontario and Paquette Rapids, Allumette Island, Ottawa River, Quebec.  
See *Hormotoma bellicincta**Hormotoma trentonensis* var. *plana* Wilson

Holotype 9754; paratype 9755

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 45, pl. 8, figs. 1-3.

Cobourg beds, Ottawa Formation, Middle Ordovician, unspecified locality at Ottawa and Navan road about 4,130 feet north of first east-west road north of Navan, Ontario.

*Hormotoma* ? *turricula* see *Murchisonia turricula**Hormotoma* cf. *whiteavesi* Clarke and Ruedemann

Hypotype 2859b

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 25, fig. 3.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Hormotoma winnipegensis* Whiteaves

Syntype 7098

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 192, pl. 21, fig. 1.

Ordovician [Red River Formation], Little Black Island, Lake Winnipeg, Manitoba.

*Hydatina parvula* Whiteaves

Holotype 5302

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 180, pl. 24, figs. 5, a.

Upper Cretaceous, Sounding Creek, Southern Saskatchewan.

Mollusca

*Hydrobia higdoni* Russell

Holotype 9136

Russell, L.S., 1937, Trans. Roy. Soc. Can., ser. 3, vol. 31, sec. 4, p. 63, pl. 1, figs. 7, 8.

Belly River Formation, Upper Cretaceous, Milk River Valley northwest of Higdon Ranch, l.s.d. 15, sec. 17, tp. 2, rge. 7, W. 4th mer., Alberta.

*Hydrobia subcylindracea* Whiteaves

Holotype 5189; paratype 5190

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 75, pl. 10, fig. 8 [the type 5189].

Belly River Formation, Upper Cretaceous, Belly River east side of Driftwood bend and Milk River valley 5 miles below Pakowki Coulee, Alberta.

*Hypseloconus substabilis* Kobayashi

Holotype 11981

Kobayashi, T., 1938, Jap. J. Geol. Geogr., vol. 15, Nos. 3-4, p. 168, pl. 16, figs. 5a, b. McKay Group, Upper Cambrian, west of Harrogate, British Columbia.

Indeterminate forms 1 and 2

Fig. specs. 15084, 15085, 15089, 15090

Yochelson, E. in Boucot, A.J. et al., 1960, Geol. Surv., Canada, Bull. 65, p. 45, pl. 10, figs. 1-3, 8, 9.

Sutherland River Formation, Upper Silurian, Douro Range, West Devon Island, Arctic.

*Lacuna* cf. *L. solidula* Lovén

Hypotype 12552

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, fig. 8.

Sunnyside Formation, Pleistocene, ditch west side Clover Valley road, NE. ¼ sec. 6, tp. 9, Surrey municipality, British Columbia.

*Lecanospira compacta* see *Ophileta compacta*

*Lioplacodes bituminis* Russell

Holotype 6797; paratype 6797a

Russell, L.S., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 40, pl. 1, figs. 7, 8 [6797].

McMurray Formation, Lower Cretaceous, Athabasca River, SW. ¼ sec. 9, tp. 89, rge. 9, W. 4th mer., Alberta.

*Lioplacodes limnaeiformis* (Meek and Hayden)

Hypotypes 10149-10156

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 62, pl. 6, figs. 1-8.

Edmonton (lower part), St. Mary River, and Paskapoo Formations, Upper Cretaceous - Paleocene, north side Kneehills Creek, NW. ¼ sec. 7, tp. 29, rge. 21, W. 4th mer.; north side irrigation ditch south of Barons, NE. ¼ sec. 4, tp. 12, rge. 23, W. 4th mer.; south side of St. Mary River, NE. ¼ sec. 28, tp. 4, rge. 24, W. 4th mer.; right side Elbow River, NE. ¼ sec. 33, tp. 23, rge. 1, W. 5th mer.; left side Bow River, NW. ¼ sec. 32, tp. 22, rge. 29, W. 4th mer.; and north side Little Red Deer River, l.s.d. 1, sec. 30, tp. 29, rge. 5, W. 5th mer., Alberta.

*Lioplacodes nebrascensis nebrascensis* (Meek and Hayden)

Hypotypes 10157, 10158

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 63, pl. 6, figs. 18, 19.

Paskapoo Formation, Paleocene, left side Bow River, NW. ¼ sec. 32, tp. 22, rge. 29, W. 4th mer., Alberta.

*Lioplacodes nebrascensis producta* (White)

Hypotype 10159

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 64, pl. 6, figs. 20a, b.

Paskapoo Formation, Paleocene, north side Little Red Deer River, l.s.d. 1, sec. 30, tp. 29, rge. 5, W. 5th mer., Alberta.

*Lioplacodes sanctamariensis* (Russell)

Hypotypes 10143-10147

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 65, pl. 6, figs. 11-14.

St. Mary River and Edmonton (lower part) Formations, Upper Cretaceous, right side Waterton River, l.s.d. 13, sec. 36, tp. 4, rge. 28 and south side Bow River, 100 yards upstream from coulée in sec. 5, tp. 21, rge. 22, W. 4th mer., Alberta.

*Liospira americana* (Billings)

Hypotypes 2124, a, 2125, a [sectioned spec.], 2125b-e

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 236.

English Head Formation, Upper Ordovician, Macasty Bay, Anticosti Island, Quebec.

*Liospira americana* (Billings)

Hypotype 9756

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 49, pl. 9, fig. 9.

Cobourg beds, Ottawa Formation, Middle Ordovician, Percy Street, Ottawa, Ontario.

*Liospira helena* (Billings)

Hypotypes 8489, a-c

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 209.

Meaford Formation, Upper Ordovician, 2 miles southwest of Wekwemikong, Manitoulin Island, Ontario.

See *Pleurotomaria helena**Liospira marklandensis* McLearn

Holotype 5654

McLearn, F.H., Geol. Surv., Canada, Mem. 137, p. 144, pl. 20, figs. 23, 24.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Liospira micula* (Hall)

Hypotype 9757

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 50, pl. 9, figs. 1, 2.

Cobourg beds, Ottawa Formation, Middle Ordovician, lots 9 and 10, con. 7, Kenyon tp., Ontario.

*Liospira cf. micula* (Hall)

Hypotype 8464a

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 208, pl. 36, figs. 2a, b.

Upper Ordovician, loose on southeast shore Snake Island, Lake St. John, Quebec.

*Liospira parva* Wilson

Paratype 9134

Wilson, A.E., 1938, Trans. Roy. Soc. Can., ser. 3, vol. 32, sec. 4, p. 31, pl. 1, fig. 3.

Stony Mountain Formation, Upper Ordovician, Stony Mountain, Manitoba.

*Liospira perlata* see *Pleurotomaria solaroides**Liospira progne* (Billings)

Hypotype 9758

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 51, pl. 9, figs. 3, 4.

Sherman Fall beds, Ottawa Formation, Middle Ordovician, in brook between Lunenburg and North Lunenburg, Ontario.

See *Pleurotomaria progne*

*Liospira vitruvia* (Billings)

Hypotypes 9579, a

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 51, pl. 9, figs. 7, 8.

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

*Littorina scutulata* Gould

Hypotype 12553

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, fig. 9.

Newton Formation, Pleistocene, 53rd Avenue between Inverness and Sherbrooke Streets, Vancouver, British Columbia.

*Lophospira akpatokensis* see *Lophospira grandis*

*Lophospira aspera* see *Murchisonia aspera*

*Lophospira beatrice* Foerste

Syntypes 8417, a-c

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 7, p. 310, pl. 2, figs. 8a [8417],  
b [8417a].

1924, Geol. Surv., Canada, Mem. 138, p. 214, pl. 30, figs. 8a, b.

Upper Ordovician, Riviere des Hurons, Quebec.

*Lophospira belli* Foerste

Syntypes 8504, a-e

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 212, pl. 37, figs. 3a, b [8504a],  
c [8504b].

Meaford Formation, Upper Ordovician, Cape Smyth, Manitoulin Island, Ontario.

*Lophospira gamachiana* Twenhofel

Holotype 2305

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 237, pl. 25, fig. 4.

Ellis Bay Formation, Upper Ordovician, Ellis Bay, Anticosti Island, Quebec.

*Lophospira grandis* Wilson

Holotype 7111

Wilson, A.E., 1938, Trans. Roy. Soc. Can., ser. 3, vol. 32, sec. 4, p. 27, pl. 2, figs.  
2, 3.

Ordovician [Red River Formation], Stony Point [Clark Point], Lake Winnipeg, Manitoba.

=*Lophospira akpatokensis*, Wilson, A.E., 1939, *ibid.*, vol. 38, p. 131.

*Lophospira guelphica* see *Murchisonia* sp. uncertain

*Lophospira helicteres* see *Murchisonia helicteres*

*Lophospira?* *hermione* see *Murchisonia hermoine*

*Lophospira* (?) *hyacinthensis* Foerste

Syntypes 8465a-d

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 211.

Upper Ordovician, below dam at St. Hyacinthe, Quebec.

*Lophospira kindlei* Foerste

Syntypes 8505a-c

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 215, pl. 37, figs. 1a-c [8505b],  
d [8505a].

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Lophospira laticarinata* Foerste

Syntypes 8469, a-e

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 212, pl. 37, figs. 4a [8469a], b [8469b], c [8469c].

Kagawong Formation, Upper Ordovician, 2 miles southwest of Kagawong, Manitoulin Island, Ontario.

*Lophospira manitoulinensis* Foerste

Syntypes 8501, a-e, 8502, a, b

Foerste A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 213, pl. 36, figs. 5a [8501c], b [8501b], c [8501a], d [8501d].

Upper Ordovician, Clay Cliffs and 2 miles northwest of Gore Bay, Manitoulin Island, Ontario.

*Lophospira medialis* Ulrich and Scofield

Hypotype 9746

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 35, pl. 4, fig. 12.

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

*Lophospira milleri* (Miller)

Hypotype 9743

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 36, pl. 5, fig. 4.

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

*Lophospira modesta* (Billings)

Hypotype 2142

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 238, pl. 28, fig. 19 [not an 1857 cotype as specimen collected by T.C. Weston, 1865].

English Head Formation, Upper Ordovician, Macasty Bay, Anticosti Island, Quebec.

*Lophospira occidentalis* Wilson

Holotype 6758

Wilson, A.E.,

1924, Can. Field-Naturalist, vol. 38, No. 8, p. 151, pl. 2, fig. 3 [fig. 2 on plate], text fig. 2.

1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 30, pl. 7, fig. 3 [fig. 2 on plate].

Beaverfoot Formation, Upper Ordovician, on slope east of Palliser Pass, British Columbia.

*Lophospira? papillosa* see *Murchisonia papillosa**Lophospira peracuta* Ulrich and Scofield

Hypotype 9744

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 36, pl. 3, fig. 4.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Lophospira perangulata* (Hall)

Hypotype 9745

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 37, pl. 4, fig. 13.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Lophospira procris* see *Murchisonia procris**Lophospira pulchra* Williams

Holotype 4678

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, p. 123, pl. 7, figs. 22a, b. Manitoulin Formation, Cataract Group, Lower Silurian, Cataract, Ontario.



*Lophospira saffordi* Ulrich and Scofield

Hypotype 9747

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 38, pl. 5, fig. 5.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Lophospira serrulata* see *Murchisonia serrulata*

*Lophospira sybellina* see *Pleurotomaria sybellina*

*Lophospira tropidophora* (Meek)

Hypotype 8503

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 212.

Upper Ordovician, about 1 mile south of Clay Cliffs, Manitoulin Island, Ontario.

*Lophospira ventricosa* (Hall)

Hypotypes 1253, a

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 39, pl. 4, figs. 22, 23.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Loxonema aculeata* Billings

Syntypes 2463, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 55.

Middle Silurian [Jupiter Formation], near Shallop River, Anticosti Island, Quebec.

=*Hormotoma? aculeata*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 241 [types ? 2463].

*Loxonema altivolvis* Whiteaves

Syntypes 4083, 4084, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 334, pl. 45, figs. 8 [4084a], 9 [4083].

Upper Devonian, Dawson Bay, ½ mile north of mouth Bell River and southwest side of Cameron Bay, Lake Winnipegosis, Manitoba.

*Loxonema altivolvis* Whiteaves

Hypotypes 14904, 14905

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6, p. 73, pl. 13, figs. 8a, b [14905].

Dawson Bay Formation, Middle Devonian, Camperville road 3 miles south of turn and Snake Island, Lake Winnipegosis, Manitoba.

*Loxonema cingulatum* Whiteaves

Syntypes 4081, a-c

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 336, pl. 44, fig. 3 [4081, a composite].

Upper Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

*Loxonema cotteranum* Billings

Holotype 3524

Billings, E., 1861, Can. J., n. ser., vol. 6, p. 360, fig. 133.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 376, fig. 408.

Middle Devonian [Onondaga Formation], shore of Lake Erie, Dunn tp., Ontario.

*Loxonema gracillimum* Whiteaves

Holotype 4068

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 337, pl. 45, fig. 10.

Middle Devonian, Devil's Point, Lake Winnipegosis, Manitoba.

*Loxonema magnum* Whitfield var.

Holotype 2859

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 87, pl. 13, fig. 2.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Loxonema murrayana* Salter

Holotype 1189

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 31, pl. 6, fig. 6.

Wilson, A.E., 1951, *ibid*, Bull. 17, p. 91, pl. 11, fig. 17.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Loxonema priscum* (Munster)

Hypotype 4085

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 335, pl. 44, fig. 2.

Middle Devonian, Pentamerus Point, Lake Manitoba, Manitoba.

*Loxonema rochymontanum* Shimer

Holotype 5093; paratype 5093a

Shimer, H.W., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 81, pl. 4, figs. 9a, b [5093], 10 [5093a].

Mississippian, Lake Minnewanka region, Alberta.

*Loxonema* (?) *rugosum* (Billings)

Hypotype 2135

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 252, pl. 35, fig. 6.

Ellis Bay Formation, Upper Ordovician, west-end lighthouse, Anticosti Island, Quebec.

*Loxonema winnipegense* Whiteaves

Syntype 1858

Whiteaves, J.F.,

1893, Can. Rec. Sci., vol. 5, p. 326, fig.

1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 200, fig. 12.

Ordovician [Red River Formation], Stony Point, Lake Winnipeg, Manitoba.

*Loxonema?* sp.

Fig. spec. 9792

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 91, pl. 11, figs. 18, 19.

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

*Loxoplocus solutus* (Whiteaves)

Hypotypes 2956, 2984 [wax impressions only]

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 84, pl. 12, figs. 7, 8.

Guelph Formation, Middle Silurian, Elora and Belwood, Ontario.

See *Murchisonia soluta**Lymnaea oneilli* Dall

Holotype 4339

Dall, W.H., in O'Neill, J.J., 1924, Rept. Canadian Arctic Expedition 1913-18, vol. 11, pt. A, p. 27A, pl. 35, fig. 1.

Tertiary, 12 miles from mouth of Brock River, 15 miles south of Cape Lyon, Northwest Territories.

*Lymnaea vahlii saskatchewanensis* Mozley

Holotype 4332

Mozley, A., 1932, Am. Midland Naturalist, vol. 13, No. 4, p. 236, text fig. 6.

Interglacial, railway-cut SE. ¼ sec. 15, tp. 2, rge. 16, W. 3rd mer., near Beaubier, Saskatchewan.

=*Stagnicola saskatchewanensis*, Russell, L.S., 1934, Can. Field-Naturalist, vol. 48, No. 2, p. 36, text fig. 9.

*Lysis suciensis* (Whiteaves)

Hypotype 5940

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 367, pl. 45, fig. 3.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

See *Stomatia suciensis*

*Lysis suciensis* var. *carinifera* (Whiteaves)

Hypotype 5939

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 367, pl. 45, fig. 4.

Upper Cretaceous, Brennan Creek, Vancouver Island, British Columbia.

See *Stomatia suciensis* var. *carinifera*

*Lytospira mediosulcata* Kobayashi

Holotype 12617

Kobayashi, T., 1955, J. Fac. Sci., Univ. Tokyo, sec. 2, vol. 9, pt. 3, p. 408, pl. 1, figs. 7a-c.

McKay Group, Lower Ordovician, Brisco-Dogtooth area, British Columbia.

*Maclurea acuminata* Billings

Syntype 596

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 240.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 240.

Divisions K-N [Table Head], Lower Ordovician, Point Rich, Newfoundland.

*Maclurea affinis* Billings

Syntypes 598, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 238.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 238.

Division F [St. George], Lower Ordovician, Keppel Island, Newfoundland.

*Maclurea atlantica* Billings

Syntypes 1060, a-e, 1106, a, 1107a, b

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 459.

Middle Ordovician [Mingan Formation], Clearwater and Ammonite Points, Mingan Islands, Quebec.

=*Maclurites magnus*, Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 59, pl. 10, figs. 1 [1060a], 2 [1060d].

*Maclurea crenulata* Billings

Syntypes 592, a-y

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 236, figs. 22a-c [592a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 236, figs. 222a-c.

Divisions I-N [St. George-Table Head], Lower-Middle Ordovician, Table Head and Point Rich, Newfoundland.

*Maclurea emmonsii* Billings

Syntypes 601, a, 602, a  
Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 242, fig. 227b [602].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 242, fig. 227b.

Divisions I-N [St. George-Table Head], Lower-Middle Ordovician, Point Rich and Table Head, Newfoundland.

*Maclurea logani* Salter

Syntypes 1263, a-h

Salter, J.W.,

1852, Rept. 21st Meeting British Assoc. Adv. Sci. 1851, Notes and Abstracts, Trans. Sec., p. 63.

1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 7, pl. 1, figs. 2, 3 [1263g], 4-6 [1263d].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Maclurites logani*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 61, pl. 10, figs. 1, 2 [syntype 1263d], 4, 5 [syntype 1263g].

*Maclurea manitobensis* Whiteaves

Syntype 1849

Whiteaves, J.F., 1889, Trans. Roy. Soc. Can., vol. 7, sec. 4, p. 75, pl. 12.

Ordovician [Red River Formation], East Selkirk, Manitoba.

=*Maclurina manitobensis*, Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 183, pl. 65, figs. 3, 4 [holotype 1849].

*Maclurea manitobensis* Whiteaves

Hypotype 7101

Whiteaves, J.F., 1893, Can. Rec. Sci., vol. 5, p. 324, fig.

Ordovician [Red River Formation], Jack Fish Island, Lake Winnipeg, Manitoba.

=*Maclurea (Maclurina) manitobensis*, Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 194, fig. 11.

=*Maclurina manitobensis*, Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 183, pl. 65, fig. 2.

*Maclurea (Maclurina) manitobensis* Whiteaves

Hypotype 7100, a [cast and impression]

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 194, pl. 20, fig. 11.

Ordovician [Red River Formation], Little Black Island, Lake Winnipeg, Manitoba.

=*Maclurina manitobensis*, Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 183, pl. 66, figs. 1a, b.

*Maclurea matutina?* Hall

Hypotypes 482a, b

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 357, figs. 7a, b [482a].

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 115, figs. 24a, b [482a], 25a-c [482b].

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

*Maclurea oceana* Billings

Syntypes 591, a-i, 599, a, 653, a-j

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 237, figs. 223a, b [653h].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 237, figs. 223a, b.

Divisions F-H [Table Head], Lower Ordovician, Port aux Choix, Keppel Island, Table Head and Cape Norman, Newfoundland.

Mollusca

*Maclurea rotundata* Billings

Syntypes 611, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 245, figs. 231a, b [611a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 245, figs. 231a, b.

Lower Ordovician, entrance to north arm Bonne Bay, Newfoundland.

*Maclurea speciosa* Billings

Syntypes 604, a-h

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 240.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 240.

Divisions G-M [St. George-Table Head], Lower-Middle Ordovician, Point Rich, Table Head, Newfoundland.

*Maclurea sylpha* Billings

Holotype 613

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 244.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 244.

Lower Ordovician, Cape Norman, Newfoundland.

*Maclurea* sp. opercula

Fig. specs. 600, 7458, 7459

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 243, figs. 228 [7459], 229 [600], 230 [7458].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 243, figs. 228-230.

Lower Ordovician, Cape Norman and Schnv Island, Pistolet Bay [7459], Newfoundland.

*Maclurina cuneata* (Whitfield)

Hypotype 9098

Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, pl. 6, figs. 2a, b.

Liskeard Formation, Middle Ordovician, Lake Timiskaming area, Ontario.

*Maclurina manitobensis* (Whiteaves)

Hypotype 9097

Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, pl. 6, figs. 1a, b.

Liskeard Formation, Middle Ordovician, Lake Timiskaming area, Ontario.

*Maclurina manitobensis* (Whiteaves)

Hypotype 6510

Wilson, A.E., 1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 300, pl. 4, fig. 3.

Red River Formation, Ordovician, Moose Island, Lake Winnipeg, Manitoba.

*Maclurina manitobensis* var. *ovalis* Wilson

Holotype 6511

Wilson, A.E., 1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 301, pl. 4, figs. 4, 5.

Ordovician, canyon in Putnam Highlands southeast from Foxe Basin, Baffin Island, Arctic.

*Maclurites altus* Wilson

Holotype 6513

Wilson, A.E., 1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 302, pl. 5, figs. 1, 2.

Ordovician, Koukjauk River, Baffin Island, Arctic.

*Maclurites borealis* see *Maclurites? septentrionalis*

*Maclurites crassus* Ulrich and Scofield

Hypotype 9099

Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, pl. 6, figs. 3a, b.  
Liskeard Formation, Middle Ordovician, Lake Timiskaming area, Ontario.

*Maclurites logani* (Salter)

Hypotype 9763

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 61, pl. 10, fig. 3.  
Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Maclurites magnus* see *Maclurea atlantica*

*Maclurites? septentrionalis* Wilson

Holotype 6512

Wilson, A.E., 1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 302, pl. 4, figs. 6-8.

Ordovician, Koukjuak River, Baffin Island, Arctic.

=*Maclurites borealis*, Wilson, A.E., 1938, *ibid.*, vol. 32, p. 26.

*Maclurites* sp. operculum

Fig. spec. 6514, a [cast and impression]

Wilson, A.E., 1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 303, pl. 5, figs. 3-5.

Ordovician, canyon southeast of Foxe Basin, Putnam Highland, Baffin Island, Arctic.

*Macrochilina pulchella* Whiteaves

Syntypes 4075, 4076, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 340, pl. 44, figs. 6, a.

Middle Devonian, southwest shore of Dawson Bay, Lake Winnipegosis and Pentamerus Point, Lake Manitoba, Manitoba.

*Macrochilina subcostata* (Schlotheim)

Hypotypes 4073, 4074

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 338, pl. 44, figs. 4 [4074], 5 [4073].

Middle Devonian, small island southwest of Whiteaves Point, Dawson Bay and mouth of Red Deer River, Lake Winnipegosis, Manitoba.

*Macroscenella superba* see *Metoptoma superba*

*Margarita triassic* Whiteaves

Syntypes 4724, a-c

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 136, pl. 17, figs. 8, a [4724].

Triassic, Liard River, 30 miles below Devil's Portage, British Columbia.

*Mastigospira alata* (Whiteaves)

Hypotypes 6364, 6365

LaRocque, A., 1949, Univ. Michigan, Contr. Mus. Pal., vol. 7, No. 7, p. 116, pl. 1, fig. 1 [6365].

Middle Devonian, north bank of Red Deer River at Limestone Knoll 1 mile below Long Rapids and Dawson Bay, Lake Winnipegosis, Manitoba.

Mollusca

*Mastigospira alata* (Whiteaves)

Hypotype 14898

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6, p. 71, pl. 12, figs. 7a-c.

Dawson Bay Formation, Middle Devonian, south end of Lake Winnipegosis, 2 miles south of Snake Island and 2 miles west of Charlie Island, sec. 21, tp. 30, rge. 17, W. Prin. mer., Manitoba.

See *Hyolithes alatus* [Mollusca Incertae Sedis]

*Megalomphala robusta* Whiteaves

Syntypes 4421, a-f

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 48F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 257, pl. 28, figs. 9, a [4421]; pl. 29, fig. 1 [4421a].

Silurian, portage road at falls, Ekwan River, Ontario.

*Melampus athabascensis* Russell

Holotype 6800

Russell, L.S., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 42, pl. 1, figs. 11, 12.

McMurray Formation, Lower Cretaceous, Hangingstone River, Alberta.

*Melania? insculpta* Meek

Hypotype 5184

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 73, pl. 10, fig. 6.

Foremost Formation, Upper Cretaceous, below confluence of Bow and Oldman Rivers, South Saskatchewan River, Alberta.

=*Melania ? whiteavesi*, Stanton, T.W., 1905, United States Geol. Surv., Bull. 257, p. 115.

*Melania multorbis* Russell

Holotype 6798; paratypes 6798a-c

Russell, L.S., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 41, pl. 1, fig. 10 [6798].

McMurray Formation, Lower Cretaceous, Hangingstone River, Alberta.

*Melania whiteavesi* var. *nodosa* Dyer

Holotype 6686

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 13, pl. 3, fig. 16.

Brosseau [Brazeau?] Formation, Upper Cretaceous, North Saskatchewan River above Saddle Lake Creek, sec. 8, tp. 37, rge. 12, W. 4th mer., Alberta.

*Melania?* sp.

Fig. spec. 6001b

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 1, fig. 4.

Dunvegan Formation, Upper Cretaceous, south bank Peace River 14 miles above mouth Burnt Creek, Alberta.

*Mesostoma(?) intermedium* Whiteaves

Syntypes 5956, a-d

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 360, pl. 43, fig. 4.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Mesostoma(?) newcombii* Whiteaves

Holotype 5928

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 361, pl. 43, fig. 5.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Mesostoma suciense* Whiteaves

Hypotype 5930

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 359, pl. 44, fig. 7.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Metoptoma alceste* Billings

Syntypes 2138, a, b, c

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 153, figs. 133a, b(?).

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 153, figs. 133a, b(?).

Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 234, pl. 29, figs. 10, 11 [the holotype 2138].

Ordovician [English Head Formation], English Head, Anticosti Island, Quebec.

*Metoptoma anomala* Billings

Holotype 786

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 89, figs. 81a, b.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, p. 89, figs. 81a, b.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Metoptoma augusta* Billings

Holotype 785

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 88.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 88.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Metoptoma erato* Billings

Syntypes 1251, a, b

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 39.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 39.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

= *Tryblidium erato*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 21, pl. 1, figs. 17, 18 [holotype 1251].*Metoptoma estella* Billings

Syntype 2140

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 153, figs. 134a, b.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 153, figs. 134a, b.

Ordovician [English Head Formation], English Head, Anticosti Island, Quebec.

= *Archinacella estella*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 235, pl. 31, figs. 8, 9.



*Metoptoma eubule* Billings

Holotype 780

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 38.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 38.

Middle Ordovician, Philipsburg, Quebec.

*Metoptoma hyrie* Billings

Syntypes 789, a-d

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 87, figs. 79a, b [789b].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 87, figs. 79a, b.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Metoptoma instabilis* Billings

Syntypes 615, a-1

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 251, figs. 236a, b [615].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 251, figs. 236a, b.

Division L [Table Head], Middle Ordovician, Table Head, Newfoundland.

*Metoptoma melissa* Billings

Syntypes 776, a-e

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 86.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 86.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Metoptoma montrealensis* Billings

Syntypes 1048, a-e

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 394, fig. 371 [1048b].

'Chazy', Middle Ordovician, Montreal, Quebec.

*Metoptoma niobe* Billings

Holotype 781

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 37, figs. 38a, b.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 37, figs. 38a, b.

Beekmantown Formation, Lower Ordovician, Philipsburg, Quebec.

*Metoptoma nycteis* Billings

Syntypes 467, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 38, figs. 39a, b [467].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 38, figs. 39a, b.

Lower Ordovician [Romaine Formation], Eskimo Island, Mingan Islands, Quebec.

=*Tryblidium nycteis*, Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 56, pl. 9, figs. 6,7 [467].

*Metoptoma orithyia* Billings

Holotype 779

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 38, fig. 40.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 38, fig. 40.

Beekmantown Formation, Lower Ordovician, Philipsburg, Quebec.

*Metoptoma orphyne* Billings

Holotype 788

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 88.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 88.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Metoptoma quebecensis* Billings

Syntypes 784, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 308, fig. 300 [composite?].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 308, fig. 300.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Metoptoma simplex* Billings

Syntypes 468, a

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 346, fig. 334 [468].

Beekmantown Formation, Lower Ordovician, Merrickville, Ontario.

*Metoptoma superba* Billings

Holotype 1250 a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 172, fig. 155.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 172, fig. 155.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Macroskenella superba*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 19, pl. 1, figs. 19-21 [holotype 1250a].*Metoptoma trentonensis* Billings

Syntypes 1690, a-d

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 40, fig. 41.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 40, fig. 41.

Middle Ordovician, con. 4, Chevrotiere tp., Quebec.

*Metoptoma venilia* Billings

Syntypes 787, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 88, fig. 80 [787].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 88, fig. 80.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Micropyrgus camSELLi* Russell

Holotype 11614; paratype 11615

Russell, L.S., 1957, Nat. Mus. Can., Bull. 147, p. 87, pl. 1, fig. 5; pl. 2, fig. 7.

Princeton Group, Oligocene, Princeton Tulameen Coal Mine dump, west of Princeton, British Columbia.

*Mourlonia?* sp.

Fig. spec. 7628

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 173, pl. 30, figs. 10, a.

Mississippi, Maxner Point, Windsor, Nova Scotia.

*Mourlonia* sp.

Fig. spec. 15074

Yochelson, E., in Boucot, A.J., et al., 1960, Geol. Surv., Canada, Bull. 65, p. 42, pl. 9, figs. 6-8.

Sutherland River Formation, Upper Silurian, Douro Range, West Devon Island, Arctic.

Mollusca

*Murchisonia (Stegocoelia) abrupta* Bell

Holotype 7624; paratype 7624a

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 173, pl. 30, figs. 16, 17.

Mississippian, Maxner Point, Windsor, Nova Scotia.

*Murchisonia acrea* Billings

Syntypes 585, a

1865, "New Species of Lower Silurian Fossils", p. 232, fig. 216 [585].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 232, fig. 216.

Division G [St. George], Lower Ordovician, Port aux Choix, Newfoundland.

=*Turritoma acrea*, Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 375, pl. 45, figs. 3a, b [holotype 585, paratype 585a].

*Murchisonia adelina* Billings

Syntypes 584, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 232.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 232.

Division G [St. George], Cape Norman, Newfoundland.

*Murchisonia alexandra* see *Murchisonia ventricosa*

*Murchisonia anna* Billings

Syntypes 495, b-f

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 358, fig. 8a [495b].

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 119, fig. 32a.

Beekmantown Formation, Lower Ordovician, Ste. Anne, Island of Montreal, Quebec.

*Murchisonia arenaria* Billings

Holotype 494

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 359, fig. 9.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 120, fig. 33.

Beekmantown Formation, Lower Ordovician, lot 12, con. 12, Godmanchester tp., Quebec.

*Murchisonia artemesia* Billings

Syntypes 485, a

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 345, fig. 332a [485a].

Beekmantown Formation, Lower Ordovician, Kitley tp., Ontario.

*Murchisonia asper* Billings

Syntypes 1055, a

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 458.

Middle Ordovician [Mingan Formation], Mingan Islands, Quebec.

=*Lophospira aspera*, Raymond, P.E., 1908, Annals Carnegie Mus., vol. 4, Nos. 3-4, p. 189, pl. 55, fig. 2 [1055 composite].

Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 60, pl. 9, figs. 4 [1055a], 5 [1055].

*Murchisonia augustina* Billings

Syntypes 595, a-n

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 234.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 234.

Divisions H-N [St. George-Table Head], Lower-Middle Ordovician, Pistolet Bay, Newfoundland.

*Murchisonia billingsana* Miller

Hypotype 2875

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 25, fig. 8.  
Guelph Formation, Middle Silurian, Galt?, Ontario.

*Murchisonia bivittata* Hall

Hypotypes 2989, e

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 82,  
pl. 12, figs. 5, 6.  
Guelph Formation, Middle Silurian, Belwood, Ontario.

*Murchisonia catharina* Billings

Syntypes 587, a, b

Billings, E.,  
1865, "New Species of Lower Silurian Fossils", p. 231.  
1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 231.  
Division K [Table Head], Middle Ordovician, Table Head, Newfoundland.

*Murchisonia (Stegocoelia) compactoidea* Bell

Holotype 7633a; paratypes 7633, 7640

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 174, pl. 30, figs. 13-15, a.  
Mississippian, Windsor and Cumberland Co., Nova Scotia.

*Murchisonia constricta* Whiteaves

Holotype 2900

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 25,  
pl. 4, fig. 4.  
Guelph Formation, Middle Silurian, Durham, Ontario.

*Murchisonia dowlingii* Whiteaves

Syntypes 4031, 4032

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 316,  
pl. 41, fig. 8 [4031].  
Middle Devonian, Dawson Bay, 4 miles west of Salt Point and at mouth of Steep Rock River,  
Lake Winnipegosis, Manitoba.

*Murchisonia egregia* Billings

Syntypes 3324, a, b

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 58, pl. 5,  
fig. 7 [3324].  
Devonian [Grande Greve Formation], Dartmouth River, Gaspé, Quebec.  
= *Coelidium egregium*, Clarke, J.M., 1908, New York State Mus., Mem. 9, pt. 1, p. 152,  
pl. 17, figs. 29 [3324], 30 [3324a].

*Murchisonia estella* Billings

Syntypes 2893a, b

Billings, E.,  
1862, "New Species of Lower Silurian Fossils", p. 157, fig. 139.  
1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 157, fig. 139.  
Guelph Formation, Middle Silurian, Galt, Ontario.

*Murchisonia funata* Billings

Syntypes 2536a, c-e, 2379 (?)

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 55.  
Middle Silurian [Jupiter and Gun River Formations], The Jumpers and 3 miles west of  
Jupiter River, Anticosti Island, Quebec.  
= *Hormotoma* ? *funata*, Twenhofel, W.H., 1924, *ibid.*, Mem. 154, p. 241 [types 2379,  
2536].

*Murchisonia (Hormotoma) gracilis* Hall

Hypotypes 1228b, y

Salter, J., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 22 [not specimen for pl. 5, fig. 1 but part of Logan, 1845 collection].

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 183, fig. 178.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Hormotoma salteri* var. *canadensis*, Ulrich, E.O. and Scofield, W.H., 1897, Geol. Minnesota, vol. 3, pt. 2, Paleo., p. 1016.

Wilson, A.E., 1951, Geol. Surv., Canada, Bull.

17, p. 42, pl. 4, fig. 14 [paratype 1228b].

=*Hormotoma gracilis*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 41, pl. 4, fig. 15 [hypotype 1228y].

*Murchisonia gypsea* Dawson

Hypotypes 4368, 7636

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 173, pl. 30, figs. 11, 12.

Mississippian, Windsor, Nova Scotia.

*Murchisonia hebe* Billings

Syntypes 3323, a

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 57, pl. 5, fig. 6 [3323a]; text fig. 28 [3323].

Devonian [Grande Greve Formation], Indian Cove, Gaspé Bay, Quebec.

=*Coelidium hebe*, Clarke, J.M., 1908, New York State Mus., Mem. 9, pt. 1, p. 153.

*Murchisonia helicteres* Salter

Syntypes 1246, a-c

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 21, pl. 4, figs. 3, a [1246], 4 [1246c].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Lophospira helicteres*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 34, pl. 5, figs. 1-3 [1246c].

*Murchisonia hermione* Billings

Syntypes 1254, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 33, figs. 34, 35 [1254].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 33, figs. 34, 35.

Middle Ordovician [Mingan Formation], Large Island, Mingan Islands, Quebec.

=*Lophospira? hermoine*, Twenhofel, W.H., 1958, Geol. Soc. Amer., Sp. Paper 11, p. 60, pl. 8, figs. 9, 10 [holotype 1254].

*Murchisonia hespelerensis* Whiteaves

Syntypes 2876, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 24, pl. 4, fig. 3 [2876a].

Guelph Formation, Middle Silurian, Glenelg tp. and Hespeler, Ontario.

*Murchisonia infrequens* Billings

Holotype 1053

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 457.

'Chazy', Middle Ordovician, Grand Isle near Cornwall, Ontario.

=*Hormotoma infrequens*, Raymond, P.E., 1908, Annals Carnegie Mus., vol. 4, Nos. 3-4, p. 191, pl. 55, fig. 4.

*Murchisonia jessica* Billings

Holotype 770

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 189, fig. 170.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 189, fig. 170.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Murchisonia linearis* Billings

Syntype 483

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 359, fig. 8g.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 119, fig. 31.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

*Murchisonia macrospira* Hall

Hypotype 3022

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 27, pl. 4, fig. 7a.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Murchisonia missisquoi* Billings

Syntypes 767, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 307.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 307.

Beekmantown Formation, Lower Ordovician, lot 20, rge. 6, Stanbridge tp., Quebec.

*Murchisonia modesta* Billings

Syntypes 2132, a-c

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 299.

Ordovician [English Head Formation], English Head, Anticosti Island, Quebec.

*Murchisonia multivolvis* Billings

Syntypes 2134, a

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 299.

Upper Ordovician [Vauréal Formation], west-end lighthouse, Anticosti Island, Quebec.

=*Hormotoma multivolvis*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 242.*Murchisonia myllita* Billings

Holotype 2879

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 157, fig. 140.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 157, fig. 140.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Murchisonia papillosa* Billings

Syntypes 2303, a, b

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 301.

Upper Ordovician [Ellis Bay Formation], 1 mile east of Junction Cliff, Anticosti Island, Quebec.

=*Lophospira? papillosa*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 238, pl. 45, figs. 5-7 [2303].

Mollusca

*Murchisonia procris* Billings

Holotype 1241

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 34.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 34.

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

=*Lophospira procris*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 37, pl. 5, figs. 6, 7.

*Murchisonia serrulata* Salter

Syntypes 1245, a, b

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 20, pl. 7, fig.

1 [composite?].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Lophospira serrulata*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 38, pl. 5, figs. 8, 9 [holotype 1245].

*Murchisonia simulatrix* Billings

Syntypes 583, a-l

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 232, fig. 218 [583a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 232, fig. 218.

Divisions H-N [St. George-Table Head], Lower-Middle Ordovician, Table Head, etc., Newfoundland.

*Murchisonia soluta* Whiteaves

Syntypes 2902 a-c, 2903

Whiteaves, J.F., Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 28, pl. 4, figs. 8 [2902c], a [2903].

Guelph Formation, Middle Silurian, Durham and Elora, Ontario.

=*Loxoplocus solutus*, Whiteaves, J.F., 1895, *ibid.*, pt. 2, p. 84.

*Murchisonia sororcula* Billings

Syntypes 581, a-g

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 233, fig. 220 [581a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 233, fig. 220.

Divisions H-M [St. George-Table Head], Lower-Middle Ordovician, Table Head and Point Rich, Newfoundland.

*Murchisonia sylvia* Billings

Syntypes 768, a-e

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 190.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 190.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Murchisonia teretiformis* Billings

Syntypes 2127, a

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 298.

Upper Ordovician [English Head Formation], Carleton Point, Anticosti Island, Quebec.

=*Hormotoma teretiformis*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 243 [specimens from original Richardson, 1856 collection].

*Murchisonia tropidophora* Whiteaves

Holotype 2904

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 29, pl. 7, figs. 5, a.

Guelph Formation, Middle Silurian, Durham, Ontario.

= *Loxoplocus solutus*, Whiteaves, J.F., 1895, *ibid.*, pt. 2, p. 84.*Murchisonia turbinata* Schlotheim var.

Syntypes 4028, 4029, b

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 315, pl. 41, fig. 7 [4029]; pl. 45, fig. 3 [4028].

Middle Devonian, island in southern Dawson Bay and north of Steep Rock River, Lake Winnipegosis, Manitoba.

*Murchisonia turricula* Billings

Syntypes 2535, a, b

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 301.

Middle Silurian [Jupiter Formation], The Jumpers, Anticosti Island, Quebec.

= *Hormotoma? turricula*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 243, pl. 42, figs. 8, 9 [2535a].*Murchisonia turritiformis* Hall

Hypotype 2890

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 26, pl. 4, fig. 5.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Murchisonia turritiformis* Hall

Hypotype 2991

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 84, pl. 12, fig. 4.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Murchisonia ventricosa* Hall

Hypotypes 1242, a-g

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 23, pl. 5, fig. 2 [1242].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

= *Murchisonia alexandra*, Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 172.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 172.

= *Omospira alexandra*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 48, pl. 9, figs. 16-19 [holotype 1242; paratypes 1242b, g].*Murchisonia xanthippe* Billings

Holotype 2880

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 155, fig. 137.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 155, fig. 137.

Guelph Formation, Middle Silurian, Galt, Ontario.

*Murchisonia* sp. undet.

Fig. spec. 2902

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 29, pl. 4, fig. 9.

Guelph Formation, Middle Silurian, Durham, Ontario.



*Murchisonia* sp. uncertain

Fig. specs. 2878, a-d

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 79, pl. 12, fig. 3 [2878b].

Guelph Formation, Middle Silurian, Durham, Ontario.

=*Lophospira guelphica*, Whiteaves, J.F., 1906, *ibid.*, pt. 4, p. 331.

*Murchisonia* sp.

Fig. spec. 14749

Fagerstrom, J.A., 1961, J. Pal., vol. 35, No. 1, p. 38, pl. 12, fig. 29.

Formosa reef limestone, Middle Devonian, east side Teeswater River bridge, 2½ miles southeast of Formosa, Ontario.

*Murchisonia* sp. 1

Fig. specs. 15096-15098

Yochelson, E. in Boucot, A.J. et al., 1960, Geol. Surv., Canada, Bull. 65, p. 45, pl. 20, figs. 16-19.

Sutherland River Formation, Upper Silurian, Douro Range, West Devon Island, Arctic.

*Murchisonia* sp. 2

Fig. specs. 15091-15094

Yochelson, E. in Boucot, A.J. et al., 1960, Geol. Surv., Canada, Bull. 65, p. 46, pl. 10, figs. 10-13.

Sutherland River Formation, Upper Silurian, Douro Range, West Devon Island, Arctic.

*Natica aleutica* Dall

Hypotype 12554

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, fig. 10.

Sunnyside Formation, Pleistocene, ditch west side Clover Valley Road, NE. ¼ sec. 6, tp. 9, Surrey municipality, British Columbia.

*Naticonema* sp.

Fig. spec. 14894

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6, p. 70, pl. 12, fig. 2.

Souris River Formation, Upper Devonian, along east boundary sec. 21, tp. 32, rge. 19, W. Prin. mer., Manitoba.

*Naticopsis hartti* Bell

Holotype 7634; paratypes 7634a, 7635

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 179, pl. 31, figs. 16-18.

Mississippian, Windsor, Nova Scotia.

*Naticopsis howi* Dawson

Hypotypes 7630-7632

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 178, pl. 31, figs. 12, 13, a, 15.

Mississippian, Windsor and Brookfield, Nova Scotia.

*Naticopsis inornata* Whiteaves

Holotype 4078; paratypes 4077, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 333, pl. 43, fig. 14 [the type 4078].

Middle Devonian, small island in Dawson Bay, Lake Winnipegosis, Manitoba.

*Naticopsis manitobensis* Whiteaves

Syntypes 4079, a-c

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 332, pl. 45, fig. 7 [4079].

Middle Devonian, Pentamerus Point, Lake Manitoba, Manitoba.

*Nerinaea dispar?* Gabb var.

Syntype 5927

Whiteaves, J.F., 1895, Trans. Roy. Soc. Can., ser. 2, vol. 1, sec. 4, p. 127, pl. 3, figs. 4, a

Upper Cretaceous, Hombly Island, Strait of Georgia, British Columbia.

*Nerinaea maudensis* Whiteaves

Syntypes 4963, b-i

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 214, pl. 27, figs. 2, a [4963], c [4963b], d [4963c].

Lower Cretaceous [Haida Formation], east end Maude Island, Queen Charlotte Islands, British Columbia.

*Odostomia (Evalea) barkleyensis* Bartsch

Hypotype 12550

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, fig. 6.

Sunnyside Formation, Pleistocene, ditch west side Clover Valley road, NE. ¼ sec. 6, tp. 9, Surrey municipality, British Columbia.

*Odostomia (Evalea) columbiana* Dall and Bartsch

Hypotype 12556

Wagner, F.J.E., Geol. Surv., Canada, Bull. 52, pl. 1, fig. 12.

Unit J, Pleistocene, cut on railway about 500 yards due east of Deep Bay, Vancouver Island, British Columbia.

*Odostomia(?) inornata* Whiteaves

Holotype 5922

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 366, pl. 43, fig. 8.

Upper Cretaceous, 10 to 12 miles up Nanaimo River, Vancouver Island, British Columbia.

*Odostomia ("Amaura") cf. O. ("A") martensi* Dall and Bartsch

Hypotype 12557

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, fig. 13.

Unit C, Pleistocene, Dashwood sea-cliffs north of first railway crossing on Island highway east of Dunsmuir, British Columbia.

*Odostomia ("Amaura") sillana* Dall and Bartsch

Hypotype 12551

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, fig. 7.

Nicomekl Formation, Pleistocene, excavation southwest of intersection Elgin - McLellan roads, NW. ¼ sec. 3, tp. 2, Surrey municipality, British Columbia.

*Oenopota alaskensis* Dall

Hypotype 12546

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, fig. 2.

Nicomekl Formation, Pleistocene, excavation southeast of intersection Elgin - McLellan roads, NW. ¼ sec. 3, tp. 2, Surrey municipality, British Columbia.

*Omospira alexandra* see *Murchisonia alexandra**Omphalocirrus manitobensis* (Whiteaves)

Hypotypes 4176, 4177

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 327, pl. 43, figs. 6, a [4176], 7 [4177].

Devonian, Whiteaves Point and mouth of Bell River, Dawson Bay, Lake Winnipegosis, Manitoba.

See *Euomphalus manitobensis*

*Omphalocirrus? manitobensis* (Whiteaves)

Hypotype 14897

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6,  
p. 70, pl. 12, figs. 8a, b.

Dawson Bay Formation, Middle Devonian, Snake Island, Lake Winnipegosis, Manitoba.

Opercula gastropoda

Fig. spec. 3007a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 33,  
pl. 3, fig. 11(?); pl. 7, fig. 7.

Guelph Formation, Middle Silurian, Elora, Ontario.

Opercula multispiral

Fig. specs. 3009, a, c

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 97,  
pl. 15, figs. 5, a[3009c], 6 [3009, a].

Guelph Formation, Middle Silurian, Elora, Ontario.

Opercula paucispiral

Fig. spec. 3006, a [obverse and reverse].

Whiteaves, J.F.,

1891, Can. Rec. Sci., vol. 4, p. 406, fig. 1.

1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 96, pl. 14, fig. 6.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Ophileta? bella* Billings

Syntypes 774, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 310, figs. 301a-c [774b].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 310, figs. 301a-c.

Beekmantown Formation, Lower Ordovician, lot 20, rge. 6, Stanbridge tp., Quebec.

*Ophileta compacta* Salter

Syntypes 472, a-g

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 16.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 115, fig. 23 b [472c].

Beekmantown Formation, Lower Ordovician, near Beauharnois, Quebec.

=*Lecanospira compacta*, Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 169,  
pl. 76, figs. 3a-c [holotype 472d, paratypes 472c, j].

*Ophileta? disjuncta* Billings

Syntypes 471, a-c

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 344, figs. 331 a[471b], b [471a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 344, figs. 331a, b.

Beekmantown Formation, Lower Ordovician, lot 3, con. 4, Oxford tp., Ontario.

*Ophileta nerine* Billings

Syntypes 610, a-c

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 245.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 245.

Division F [St. George], St. Johns Bay, Newfoundland.

*Ophileta ottawaensis* Billings

Holotype 1698

Billings, 1860, Can. Naturalist Geol., vol. 5, p. 166.

Middle Ordovician [Cobourg beds], Ottawa, Ontario.

=*Eccyliomphalus ottawaensis*, Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 62, pl. 11, figs. 20, 21.*Oreohelix angulifera* (Whiteaves)

Hypotype 10165

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 78, pl. 8, figs. 3a-c.

St. Mary River Formation, Upper Cretaceous, right side Castle River, l.s.d. 5, sec. 35, tp. 6, rge. 1, W. 5th mer., Alberta.

See *Patula angulifera**Oreohelix* sp. cf. *O. megarche* Cockerell and Henderson

Hypotypes 10306, 10307

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 80, pl. 8, figs. 6a-c, 7.

Paskapoo Formation, Paleocene, south side Little Red Deer River, l.s.d. 15, sec. 29, tp. 29, rge. 5, W. 5th mer., Alberta.

*Oreohelix* ? *obtusata* (Whiteaves)

Hypotypes 10170, 10171

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 80, pl. 8, figs. 8a-c, 9a, b.

St. Mary River Formation, Upper Cretaceous, right side Castle River, l.s.d. 5, sec. 35, tp. 6, rge. 1, W. 5th mer. and south side St. Mary River north side of dam spillway, SW. ¼ sec. 12, tp. 5, rge. 24, W. 4th mer., Alberta.

See *Patula obtusata**Oreohelix thurstoni* (Russell)

Hypotypes 10166, 10167

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 79, pl. 8, figs. 4a-b, 5a-c.

Paskapoo and Willow Creek (upper part) Formations, Paleocene, Calgary and north side Oldman River, l.s.d. 10, sec. 35, tp. 7, rge. 1, W. 5th mer., Alberta.

*Orthonychia costata* Warren

Syntypes 8922, a, b

Warren, P.S., 1927, Geol. Surv., Canada, Mem. 153, p. 60, pl. 7, figs. 5, 6 [8922].

Rundle Formation, Pennsylvanian, Stoney Squaw Mountain, Alberta.

*Orthonychia obtusa* Whiteaves

Syntypes 4423, a

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 51F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 260, pl. 29, figs. 5 [4423a], a [4423].

Silurian, foot of portage road Ekwan River, Ontario.

*Oxydiscus giganteus* Twenhofel

Holotype 2137

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 245, pl. 25, figs. 11, 12.

English Head Formation, Upper Ordovician, Macasty Bay, Anticosti Island, Quebec.

*Oxydiscus perstriatus* Foerste

Holotype 8060

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 205, pl. 38, figs. 5a, b.

Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Mollusca

*Ozarkispira leo* Walcott

Hypotype 12616

Kobayashi, T., 1955, J. Fac. Sci., Univ. Tokyo, sec. 2, vol. 9, pt. 3, p. 408, pl. 1, figs. 6a-c.

McKay Group, Lower Ordovician, Brisco-Dogtooth area, British Columbia.

*Palliseria robusta* Wilson

Syntypes 6757 [2 specimens cemented together]

Wilson, A.E.,

1924, Can. Field-Naturalist, vol. 38, No. 8, p. 150, pl. 1, figs. 1, 2; pl. 2, figs. 1, 2 [fig. 3 on plate].

1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 30, pl. 6, figs. 1, 2; pl. 7, figs. 1, 2 [fig. 3 on plate].

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 233, pl. 67, figs. 1a-f [holotype and paratype].

Beaverfoot Formation, Upper Ordovician [Lower Ordovician], Palliser Pass, British Columbia.

*Palliseria robusta* Wilson

Hypotypes 13428-13432

Yochelson, E.L., 1957, J. Pal., vol. 31, No. 3, p. 648, figs. 1-5.

Lower Ordovician, 760 feet below Mount Wilson quartzite west slope of Nigel Peak, Jasper National Park, Alberta.

*Paracochloceras suessi* Mojsisovics

Hypotype 17016

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, figs. 4a, b.

Bonanza Group, Upper Triassic, Walters Island, west coast of Vancouver Island, British Columbia.

*Paravitrea parvula* see *Anchistoma parvulum*

*Patula angulifera* Whiteaves

Holotype 5538

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 18, pl. 2, figs. 6, a, b.

'Laramie' [St. Mary River Formation, Upper Cretaceous], Pincher Creek near town of Pincher Creek, Alberta.

=*Oreohelix angulifera*, Russell, L.S., 1929, Trans. Roy. Soc. Can., ser. 3, vol. 23, sec. 4, p. 85, pl. 1, fig. 10.

*Patula obtusata* Whiteaves

Syntypes 5539, 5540, a-d

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 18, pl. 2, figs. 7, a, b [5539].

'Laramie' [St. Mary River Formation, Upper Cretaceous], Oldman River 12 miles below MacLeod and 2 miles above Rye-grass flat, Alberta.

=*Oreohelix obtusata*, Russell, L.S., 1929, Trans. Roy. Soc. Can., ser. 3, vol. 23, sec. 4, p. 84 [type 5539a].

*Perissolax brevisrostris* Gabb

Hypotype 5792

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 356, pl. 43, fig. 3.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Phanerotrema occidens* (Hall)

Hypotypes 11077, 11078

Bolton, T.E., 1958, Geol. Surv., Canada, Mem. 289, p. 54, pl. 12, figs. 22-24.

Warton Member, Amabel Formation, Middle Silurian, 1½ feet down from top of road-cut, Warton, Ontario.

*Phaneta (?) decorata* Whiteaves

Syntypes 5920, a, b

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 369, pl. 45, figs. 6, a [5920a], 7 [5920].

Upper Cretaceous, roof of coal in Nanaimo Mines, Vancouver Island, British Columbia.

*Phragmolites compressus* Conrad

Hypotype 1257

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 29, pl. 2, figs. 17, 18.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Phragmolites desideratus* see *Cyrtolites desideratus**Phragmolites pannosus* see *Cyrtolites pannosus**Physa copei* White

Hypotypes 5524, a, b

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 14, pl. 2, figs. 4 [5524], a [5524a].

'Laramie' [St. Mary River Formation, Upper Cretaceous], Gooseberry Canyon, St. Mary River near Magrath, Alberta.

= *Physa canadensis* var. *parvaturris*, Russell, L.S., 1926, Trans. Roy. Soc. Can., ser. 3, vol. 20, sec. 4, p. 216.*Physa copei* var. *canadensis* Whiteaves

Syntypes 5529, a, c

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 14, pl. 2, figs. 5 [5529], a [5529c], b [5529a].

'Laramie' [St. Mary River Formation, Upper Cretaceous], Pincher Creek, Alberta.

= *Physa canadensis* var. *ampla*, Russell, L.S., 1926, Trans. Roy. Soc. Can., ser. 3, vol. 20, sec. 4, p. 217 [5529a].= *Physa canadensis* var. *tenuis*, Russell, L.S., 1926, *ibid.*, p. 216 [5529c].*Physa lacteana* Russell

Holotype 8851

Russell, L.S., 1935, Trans. Roy. Soc. Can., ser. 3, vol. 29, sec. 4, p. 119, pl. 1, fig. 7.

Upper Member, Milk River Formation, Upper Cretaceous, southeast side Deadhorse Coulee, l.s.d. 13, sec. 33, tp. 1, rge. 11, W. 4th mer., Alberta.

*Physa saxarubrensis* Russell

Holotype 13280; paratype 13281

Russell, L.S., 1957, Nat. Mus. Can., Bull. 147, p. 89, pl. 2, figs. 1-4.

Princeton Group, Middle Eocene, Vermilion Cliff, Tulameen River west of Princeton, British Columbia.

*Physa* sp.

Fig. spec. 13282

Russell, L.S., 1957, Nat. Mus. Can., Bull. 147, p. 90, pl. 2, fig. 5.

Princeton Group, Oligocene, Princeton Tulameen Coal Mine dump, west of Princeton, British Columbia..

*Planorbis paucivolvis* Whiteaves

Syntypes 5170, a

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 71, pl. 10, fig. 5 [5170].

Foremost Formation, Upper Cretaceous, Oldman River near junction with Bow River, Alberta.

*Platyceras compactum* Whiteaves

Syntype 4422

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 52F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 260, pl. 29, fig. 6.

Silurian, portage road at falls Ekwan River, Ontario.

*Platyceras (Orthonychia) conicum* Hall

Hypotype 3720

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 117, pl. 16, fig. 4.

Hamilton Formation, Middle Devonian, near Thedford, Ontario.

*Platyceras* sp. cf. *P. erectum* (Hall)

Hypotype 14750

Fagerstrom, J.A., 1961, J. Pal., vol. 35, No. 1, p. 39, pl. 13, fig. 2.

Formosa reef limestone, Middle Devonian, small outcrop on south side of Teeswater River, lot 2, con. 3, Gulcross tp., Ontario.

*Platyceras (Orthonychia) parvulum* Whiteaves

Syntypes 4093, 4129, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 331, pl. 43, figs. 9 [4129], 10 [4129a], 11 [4093].

Middle Devonian, small islands north and southwest of Whiteaves Point, Dawson Bay, Lake Winnipegosis, Manitoba.

*Platyceras?* *perplexa* Wilson

Holotype 9730

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 22, pl. 2, figs. 1, 2.

Cobourg beds, Ottawa Formation, Middle Ordovician, west of dam at Alexandria, Ontario.

*Platyceras primaevum* Billings

Holotype 398

Billings, E., 1872, Can. Naturalist Geol., n. ser., vol. 6, p. 220.

Lower Cambrian, Bic, Rimouski Co., Quebec.

*Platyceras quinquesinuatum* Ulrich

Hypotypes 3719, a, b.

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 117, pl. 15, figs. 5 [3719a], 6 [3719b]; pl. 16, fig. 5 [3719a].

Hamilton Formation, Middle Devonian, near Thedford, Ontario.

*Platyostoma affinis* Billings

Syntype 3325

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 60, pl. 5, fig. 2.

Devonian [Grande Greve Formation], Indian Cove Gaspé Bay, Quebec.

=*Diaphorostoma affine*, Clarke, J.M., 1908, New York State Mus., Mem. 9, pt. 1, p. 149.

*Platystoma plicatum* Whiteaves

Hypotype 3722

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 118, pl. 16, fig. 6.

Hamilton Formation, Middle Devonian, Bosanquet tp., Ontario.

*Platystoma tumidum* Whiteaves

Syntypes 4092, a-c

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 331, pl. 43, fig. 12 [4092].

Middle Devonian, Pentamerus Point, Lake Manitoba, Manitoba.

=*Platystoma whiteavesi*, Miller, S.A., 1897, Second Suppl. N. American Geol. Pal., p. 769.*Platyschisma?* *dubium* Dawson

Hypotypes 7619, a

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 175, pl. 31, figs. 1, a,b, 2.

Mississippian, Windsor, Nova Scotia.

*Plectonotus trilobatus* (Sowerby)

Hypotypes 3138, 5649

McLeam, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 140, pl. 20, figs. 18, 32.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Pleurolinnaea mclearni* Tozer

Holotype 10295; paratype 10200 [missing], 10296, 10313

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 73, pl. 9, figs. 12-14.

Edmonton (lower part), Willow Creek, and St. Mary River Formations, Upper Cretaceous, north side Bow River, SW. ¼ sec. 9, tp. 21, rge. 22; left side Pincher Creek, l.s.d. 5, sec. 22, tp. 6, rge. 30; and right side Waterton River, l.s.d. 13, sec. 36, tp. 4, rge. 28, W. 4th mer., Alberta.

*Pleurolinnaea tenuicosta* (Meek and Hayden)

Hypotype 10168

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 74, pl. 9, fig. 15.

Paskapoo Formation, Paleocene, west slope Wallace Mountain, east fork Bruce River, Swan Hills district, Alberta.

*Pleurotomaria abrupta* Billings

Holotype 480

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 354.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

=*Trochonema abruptum*, Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 62, pl. 8, fig. 16 [fig. 17 =*T. tricarinatum*].*Pleurotomaria agarista* Billings

Syntypes 576, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 230.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 230.

Division H [St. George], Lower Ordovician, Table Head, Newfoundland.

*Pleurotomaria agava* Billings

Syntypes 1687, a-c

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 170, fig. 153 [1687a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 170, fig. 153.

Middle Ordovician, Lac Ouareau River, Quebec.



*Pleurotomaria amphitrite* Billings

Holotype 1225

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 32.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 32.

Middle Ordovician [Mingan Formation], south end of Large Island, Mingan Islands, Quebec.

=*Euconia amphitrite*, Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 63.

*Pleurotomaria arabella* Billings

Holotype 478

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 343, fig. 330.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 343, fig. 330.

Beekmantown Formation, Lower Ordovician, Kitley tp., Ontario.

*Pleurotomaria arachne* Billings

Syntypes 1223, a-e

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 31, fig. 32 [composite? or enlarged?].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 31, fig. 32.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Trochonemella? arachne*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 76, pl. 12, figs. 15, 16 [holotype 1223a, paratype 1223].

*Pleurotomaria arkonensis* Whiteaves

Syntypes 3787, a.

Whiteaves, J.F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 401, pl. 48, figs. 12, a [3787].

Hamilton Formation, Middle Devonian, Bartlett Mills, Lambton Co., Ontario.

*Pleurotomaria calcifera* Billings

Syntypes 476, a

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 352, figs. 5a-c.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 117, figs. 27a-c.

Beekmantown Formation, Lower Ordovician, near Beauharnois, Quebec.

*Pleurotomaria calyx* Billings

Syntypes 1057, a-c

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 454, figs. 30, 31 [1057], 32 [1057b].

Billings, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 132, figs. 62a-c.

'Chazy', Middle Ordovician, Island of Montreal, Quebec.

=*Raphistoma stamineum*, Raymond, P.E., 1908, Annals Carnegie Mus., vol. 4, Nos. 3-4, p. 180.

*Pleurotomaria canadensis* Billings

Syntypes 474, b, c, 489, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 342, fig. 328c [474?].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 342, fig. 328c.

Beekmantown Formation, Lower Ordovician, lot 3, con. 4, Oxford tp., Ontario.

*Pleurotomaria crevieri* Billings

Syntypes 1059, a, b

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 456, figs. 33-35 [1059b].

'Chazy', Middle Ordovician, St. Dominique, Bagot co., Quebec.

= *Raphistoma stamineum*, Raymond, P.E., 1908, Annals Carnegie Mus., vol. 4, Nos. 3-4, p. 180.*Pleurotomaria cryptata* Billings

Syntype 2462

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 54.

Middle Silurian [Jupiter Formation], near Shallop River, Anticosti Island, Quebec.

= *Spirorapha cryptata*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 239, pl. 47, fig. 7.*Pleurotomaria cyclostoma* Whiteaves

Syntypes 2867, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 23, pl. 3, figs. 12, a[2867].

Guelph Formation, Middle Silurian, Durham, Ontario.

*Pleurotomaria delia* Billings

Holotype 3326

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 61, pl. 5, fig. 3.

Devonian [Grande Greve Formation], Grande Greve, Gaspé Bay, Quebec.

= *Eotomaria delia*, Clarke, J.M., 1908, New York State Mus., Mem. 9, pt. 1, p. 151, pl. 16, figs. 6, 7.*Pleurotomaria deiopeia* Billings

Holotype 2866

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 155.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 155.

Whiteaves, J.F., 1895, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 2, p. 75, pl. 12, figs. 1, a.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Pleurotomaria docens* Billings

Syntype 1058

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 452, figs. 27-29.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 132, figs. 63a-c.

'Chazy', Middle Ordovician, near L'Orignal, Ontario.

*Pleurotomaria dryope* Billings

Syntypes 1224, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 170, figs. 154a, b [1224].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 170, figs. 154a, b.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

= *Eotomaria dryope*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 53, pl. 9, figs. 10-12 [holotype 1224, paratype 1224a].*Pleurotomaria durhamensis* Whiteaves

Holotype 2868

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 24, pl. 4, fig. 2.

Guelph Formation, Middle Silurian, Durham, Ontario.

= *Eotomaria durhamensis*, Bolton, T.E., 1958, *ibid.*, Mem. 289, p. 54, pl. 12, fig. 25.

Mollusca

*Pleurotomaria elora* Billings

Hypotype 2901

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 154, fig. 135.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 154, fig. 135.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 343, fig. 348.

Guelph Formation, Middle Silurian, Galt, Ontario.

*Pleurotomaria elora* Billings

Hypotypes 2982, 2982k, 1 [cast and mould]

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 74,  
pl. 11, figs. 5 [2982k,1], 6 [2982].

Guelph Formation, Middle Silurian, Boyne tp., Ontario.

*Pleurotomaria etna* Billings

Syntypes 565, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 226.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 226.

Division G [St. George], Lower Ordovician, Cape Norman and Table Head, Newfoundland.

=*Euconia etna*, Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 117, pl. 35,  
fig. 4b [paratype 565].

*Pleurotomaria eugenia* Billings

Syntypes 1215, a-c

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 30, figs. 29-31 [1215a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 30, figs. 29-31.

Middle Ordovician, Campement d'Ours Island, Lake Huron, Ontario.

*Pleurotomaria galtensis* Billings

Syntypes 2870, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 154, fig. 136 [composite].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 154, fig. 136.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 343, fig. 349.

Guelph Formation, Middle Silurian, Galt, Ontario.

*Pleurotomaria galtensis* Billings

Hypotype 2986, a, b, g [cast and mould]

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 75,  
pl. 11, fig. 7.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Pleurotomaria goniostoma* Whiteaves

Syntypes 4163a, 4164, a, b [1 specimen, mould and cast]

Whiteaves, J.F., 1890, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 99, pl. 6, fig. 1.

Middle Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

*Pleurotomaria halei* Hall var.

Syntypes 2981, a-d, f-h

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 73,  
pl. 10, figs. 2, a [2981].

Guelph Formation, Middle Silurian, Durham, Ontario.

*Pleurotomaria harpya* Billings

Holotype 580, a [parts of 1 specimen]

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 227.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 227.

Division G [St. George], Lower Ordovician, Cape Norman, Newfoundland.

*Pleurotomaria helena* Billings

Syntypes 2122, a-c

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 165, fig. 8 [2122c].

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

=*Liospira helena*, Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 209, pl. 36, figs. 1a-c [2122c].Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 236, pl. 46, figs. 4, 5 [2122 - Ellis Bay Formation, Prinista Bay, Anticosti Island, Quebec].*Pleurotomaria hyale* Billings

Syntypes 579, a-c

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 228.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 228.

Division F [St. George], Lower Ordovician, Keppel Island and Port aux Choix, Newfoundland.

*Pleurotomaria immatura* Billings

Syntype 1046

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 454.

'Chazy', Middle Ordovician, Island of Montreal, Quebec.

*Pleurotomaria infranodosa* Whiteaves

Syntypes 4041, 4042

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 313, pl. 41, figs. 2, a [4041], 3 [4042].

Middle Devonian, Pentamerus Point, Lake Manitoba and about 2 miles west of Salt Point, Dawson Bay, Lake Winnipegosis, Manitoba.

*Pleurotomaria laurentina* Billings

Syntypes 488, a

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 354, figs. 6 a, b [488a].

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 117, figs. 28a, b.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

*Pleurotomaria lydia* Billings

Holotype 3329

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 62, pl. 5, figs. 4, a.

Devonian [Grande Greve Formation], Indian Cove, Gaspé Bay, Quebec.

=*Eotomaria lydia*, Clarke, J.M., 1908, New York State Mus., Mem. 9, pt. 1, p. 151, pl. 16, figs. 3, 4.*Pleurotomaria(?) margaritoides* Whiteaves

Holotype 7080, a[cast and mould]

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 190, pl. 20, fig. 10.

Ordovician [Red River Formation], Inmost Island, Kinnow Bay, Lake Winnipeg, Manitoba.

*Pleurotomaria miser* Billings

Syntype 479

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 354.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

*Pleurotomaria missisquoi* Billings

Syntypes 760, a, b, 809, a, b, 810

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 191.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 191.

Levis and Beekmantown Formations, Lower Ordovician, Point Levis, St. Armand tp., and Philipsburg, Quebec.

*Pleurotomaria normani* Billings

Holotype 578

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 228, fig. 212.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 228, fig. 212.

Division G [St. George], Lower Ordovician, Cape Norman, Newfoundland.

*Pleurotomaria numeria* Billings

Syntypes 577, a-d

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 229, figs. 213a, b [composite?].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 229, figs. 213a, b.

Division G [St. George], Lower Ordovician, Cape Norman, Newfoundland.

*Pleurotomaria pauper* Billings

Syntypes 1056, a-c

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 457.

'Chazy', Middle Ordovician, Grenville tp., Quebec.

=*Raphistoma stamineum*, Raymond, P.E., 1908, Annals Carnegie Mus., vol. 4, Nos. 3-4, p. 180.

*Pleurotomaria princessa* Billings

Holotype 3225

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 59, text fig. 29.

Devonian [Cape Bon Ami beds], between Cape Rosier and Cape Gaspé, Gaspé, Quebec.

=*Poleumita princessa*, Clarke, J.M., 1908, New York State Mus., Mem. 9, pt. 1, p. 115, pl. 16, figs. 9, 10.

*Pleurotomaria progne* Billings

Syntype 1688, a-c

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 163, fig. 6.

Middle Ordovician [Cobourg? beds], unspecified locality, Ottawa, Ontario.

=*Liospira progne*, Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 51, pl. 9, figs. 5, 6 [holotype 1688a].

*Pleurotomaria quebecensis* Billings

Syntypes 762, a-g

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 190, figs. 172 [762c?], 174 [762b].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 190, figs. 172, 174.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Pleurotomaria ramsayi* Billings

Holotype 477

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 351, figs. 3, 4.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 117, figs. 26a, b.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

=*Euconia ramseyi*, Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 63, pl. 8, figs. 13, 15.*Pleurotomaria rotundispira* Billings

Syntypes 761, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 191.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 191.

Beekmantown Formation, Lower Ordovician, Philipsburg [per label attached to specimens in Billings handwriting], Quebec.

*Pleurotomaria selecta* Billings

Syntypes 588, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 224, fig. 208 [588].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 224, fig. 208.

Division H-L [St. George-Table Head], Lower-Middle Ordovician, Table Head, Newfoundland.

*Pleurotomaria solaroides* Hall

Hypotype 2871

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 341, figs. 347a, b.

Guelph Formation, Middle Silurian, Galt, Ontario.

=*Liospira perlata*, Williams, M.Y., 1919, *ibid.*, Mem. 111, pl. 24, figs. 1a, b.*Pleurotomaria spenceri* Whiteaves

Holotype 4033; paratypes 4034, 4035, a, 4036

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 341, pl. 41, figs. 4, a, b [4033]; pl. 43, fig. 13 [4035]; pl. 46, fig. 1 [4034].

Middle Devonian, Western shore, mouth of Red Deer River, and a small island in Dawson Bay, Lake Winnipegosis, and Pentamerus Point, Lake Manitoba, Manitoba.

*Pleurotomaria sponsa* Billings

Syntypes 589, a-e

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 226.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 226.

Division N [Table Head], Middle Ordovician, Table Head, Newfoundland.

*Pleurotomaria stokesiana* Whiteaves

Syntypes 7079, a

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 190, pl. 20, figs. 9, a [7079].

Ordovician [Red River Formation], west shore of Lake Winnipeg opposite north end of Selkirk Island, Manitoba.

*Pleurotomaria subconica* Hall

Hypotype 1693c

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 180, fig. 174.

Middle Ordovician, St. Joseph Island, Lake Huron, Ontario.

*Pleurotomaria supracingulata* Billings

Syntypes 1686, a

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 302.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 181, fig. 175 [1686].  
Middle Ordovician, St. Joseph Island, Lake Huron, Ontario.

*Pleurotomaria sybillina* Billings

Syntypes 2300, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 54, fig. 19 [2300a].

Upper Ordovician [Ellis Bay Formation], Junction Cliff, Anticosti Island, Quebec.

=*Lophospira sybillina*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 239, pl. 47, figs. 5, 6 [holotype 2300].

*Pleurotomaria townsendii* Whiteaves

Syntype 2939

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 77, pl. 15, fig. 9.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Pleurotomaria valeria* Billings

Holotype 2865

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 169.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 169.

Whiteaves, J.F., 1884, *ibid.*, vol. 3, pt. 1, p. 23, pl. 4, fig. 1.

Guelph Formation, Middle Silurian, Galt, Ontario.

*Pleurotomaria valeria* Billings

Hypotypes 2864a, b, 2979b

Whiteaves, J.F.,

1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 23, pl. 4, fig. 1a [2864b].

1895, *ibid.*, vol. 3, pt. 2, p. 71, pl. 11, figs. 2 [2864a], 3 [2979b].

Guelph Formation, Middle Silurian, Durham and Belwood, Ontario.

*Pleurotomaria velaris* Whiteaves

Holotype 2980

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 72, pl. 11, figs. 4, a.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Pleurotomaria? viola* Billings

Holotype 2863

Billings, E.,

1865, "New Species of Lower Silurian Rocks", p. 169.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 169.

Whiteaves, J.F., 1895, *ibid.*, vol. 3, pt. 2, p. 76, pl. 12, fig. 2.

Guelph Formation, Middle Silurian, Galt, Ontario.

*Pleurotomaria virgo* Billings

Holotype 566

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 224, fig. 207

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 224, fig. 207.

Divisions H-L [St. George-Table Head], Lower-Middle Ordovician, Table Head, Newfoundland.

*Pleurotomaria virguncula* Billings

Syntypes 590, a-j

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 225, fig. 209 [590c].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 225, fig. 209.

Divisions H-L [St. George-Table Head], Lower-Middle Ordovician, Table Head, Newfoundland.

*Pleurotomaria vitruvia* Billings

Syntypes 1217, a-c

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 171.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 171.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Pleurotomaria voltumna* Billings

Holotype 3330

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 61, pl. 5, figs. 5, a.

Devonian [Grande Greve Formation], Grande Greve, Gaspé, Quebec.

= *Eotomaria voltumna*, Clarke, J.M., 1908, New York State Mus., Mem. 9, pt. 1, p. 150, pl. 16, figs. 1, 2.*Pleurotomaria* sp. undet.

Fig. spec. 4038

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 313, pl. 42, fig. 1.

Middle Devonian, Pentamerus Point, Lake Manitoba, Manitoba.

*Poleumita discors* (Sowerby)

Hypotype 9164

Northrop, S.A., 1939, Geol. Soc. Amer., Sp. Paper 21, p. 213, pl. 21, fig. 7.

La Vieille Formation, Middle Silurian, Black Cape section, Gaspé, Quebec.

*Poleumita princessa* see *Pleurotomaria princessa**Polygyra parvula* (Whiteaves)

Hypotypes 10172-10174

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 81, pl. 9, figs. 9-11.

St. Mary River and Willow Creek (lower part) Formations, Upper Cretaceous, right side Pincher Creek, l.s.d. 4, sec. 22, tp. 6, rge. 30, W. 4th mer.; south side Oldman River, l.s.d. 9, sec. 6, tp. 10, rge. 1, W. 5th mer.; and right side Waterton River, l.s.d. 13, sec. 36, tp. 4, rge. 28, W. 4th mer., Alberta.

*Polygyra venerabilis* Russell

Holotype 9138

Russell, L.S., 1937, Trans. Roy. Soc. Can., ser. 3, vol. 31, sec. 4, p. 65, pl. 1, figs. 11-13.

Belly River Formation, Upper Cretaceous, north crest of Milk River Valley south of Comrey, l.s.d. 2, sec. 3, tp. 2, rge. 6, W. 4th mer., Alberta.

*Polytropis durhamensis* Whiteaves

Syntypes 2987, a, b

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 91, pl. 14, figs. 1 [2987], 2 [2987b].

Guelph Formation, Middle Silurian, Edge Mills near Durham, Ontario.



Mollusca

*Polytropis parvulus* Whiteaves

Holotype 2999

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 92, pl. 13, figs. 10, a.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Polytropis sulcatus* (Hall)

Hypotypes 2998, a [plaster casts only]

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 89, pl. 13, figs. 9, a.

Guelph Formation, Middle Silurian, Belwood, Ontario.

*Porcellia manitobensis* Whiteaves

Syntypes 4053, 4054

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 318, pl. 42, figs. 4, a [4054].

Middle Devonian, small island in Dawson Bay, Lake Winnipegosis and Pentamerus Point, Lake Manitoba, Manitoba.

*Potamides tenuis* Gabb

Hypotype 5762

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 121, pl. 15, figs. 8, a, b.

Upper Cretaceous, northwest side Hornby Island, British Columbia.

*Priscochiton canadensis* see *Chiton canadensis*

*Procrucibulum* ? sp.

Hypotype 14751

Fagerstrom, J.A., 1961, J. Pal., vol. 35, No. 1, p. 39, pl. 12, fig. 19.

Formosa reef limestone, Middle Devonian, north end of new road-cut 2½ miles north of Formosa, Ontario.

*Propebela quadra* (Dall)

Hypotype 12545

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, fig. 1.

Newton Formation, Pleistocene, 53rd Avenue between Inveness and Sherbrooke Streets, Vancouver, British Columbia.

*Pseudocolumna haydeniana* (Cockerell)

Hypotype 10148

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 86, pl. 9, figs. 4a, b.

Paskapoo Formation, Paleocene, Calgary, Alberta.

*Pseudocolumna spitzia* Tozer

Holotype 10284; paratypes 10285, 10286

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 87, pl. 9, figs. 1-3.

Edmonton and Willow Creek (lower part) Formations, Upper Cretaceous, north side Highwood River, l.s.d. 12, sec. 11, tp. 18, rge. 2 and left side Castle River, l.s.d. 13, sec. 35, tp. 6, rge. 1, W. 5th mer., Alberta.

*Pseudophorus tectiformis* Whiteaves

Holotype 4094

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 330, pl. 44, figs. 1, a.

Middle Devonian, 2 miles west of Salt Point, Dawson Bay, Lake Winnipegosis, Manitoba.

*Pterotheca angusta* Raymond

Holotype 3266

Raymond, P.E., 1921, Geol. Surv., Canada, Mus. Bull. 31, p. 29, pl. 8, fig. 8.  
Cobourg Formation, Middle Ordovician, Collingwood, Ontario.*Pterotheca cf. attenuata* Hall

Hypotype 8406

Foerste, A.F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 312, pl. 2, fig. 3.  
Basal red shale, Middle Ordovician, western shore of La Cloche Peninsula, Lake Huron,  
Ontario.= *Pterotheca clochensis*, Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 218,  
pl. 30, fig. 3.*Pterotheca expansa* (Emmons)

Hypotypes 1255, a

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 33, pl. 2, figs. 19, 20.  
Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette  
Island, Ottawa River, Quebec.*Pterotheca harviei* Foerste

Holotype 8584

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 219, pl. 26, fig. 6.  
Lorraine Formation, Upper Ordovician, Yamaska River 2 miles northwest of St. Hughes,  
Quebec.*Pterotheca pentagona* Foerste

Holotype 2155; hypotype 8409

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 313, pl. 2, figs. 1, 2.

1924, Geol. Surv., Canada, Mem. 138, p. 220, pl. 30, figs. 1, 2.

Lorraine Formation, Upper Ordovician, Richelieu River near Chambly and Nicolet River  
southwest of Ste. Monique, Quebec.*Ptychospirina* sp.

Fig. spec. 14893

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6,  
p. 69, pl. 12, figs. 1a-c.Dawson Bay Formation, Middle Devonian, north bank Red Deer River, 100 yards west of  
Highway 10 bridge between The Pas and Mafeking, l.s.d. 7, sec. 17, tp. 45, rge. 25,  
W. Prin. mer., Manitoba.*Pupa* sp. indet.

Fig. spec. 6687

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 14, pl. 3, fig. 13.  
St. Mary River Formation, Upper Cretaceous, Nobleford, Alberta.*Pycnomphalus solarioides* (Hall)

Hypotypes 2995, b, f, g, 3002, a-c

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 88,  
pl. 13, figs. 3, a[2995], 4 [3002c], 5 [3002b], 7 [2995b], 8 [2995f].

Guelph Formation, Middle Silurian, Durham and Belwood, Ontario.

*Raphistoma aperta* Salter

Syntypes 1213, a-f

Salter, J.W., 1865, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 12, pl. 2, fig.  
4 [1213c idealized].

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

= *Raphistomina aperta*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 66, pl. 12, figs. 1,  
2 [lectotype 1213], 3 [hypotype 1213f].

*Raphistoma distincta* Wilson

Syntypes 6227, a

Wilson, A.E., 1921, Geol. Surv., Canada, Bull. 33, p. 56, pl. 4, figs. 8-11.

Pamelia beds, Middle Ordovician, MacLaren Landing, Ontario.

=*Raphistomina distincta*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 68, pl. 12, figs. 22-24 [6227].

*Raphistoma lapicida* Salter

Syntypes 1212, a-e

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, pt. 12, pl. 2, figs. 1-3.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Raphistomina lapicida*, Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 296, pl. 19, figs. 1a, b [holotype 1212; paratypes 1212a-e].

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 68, pl. 12, figs. 10, 11 [holotype? 1212a; paratype 1212].

*Raphistoma stamineum* see *Pleurotomaria calyx*, *P. crevieri*, *P. pauper*.

*Raphistoma tyrrellii* Whiteaves

Syntypes 4050, 4051, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 314, pl. 41, figs. 5, a [4051], 6, a, b [4050].

Upper Devonian, small point ½ mile north of mouth of Steep Rock River and about 2 miles west of Salt Point, southwestern shore Dawson Bay, Lake Winnipegosis, Manitoba.

*Raphistoma* sp.

Fig. spe cs. 9375, a

Kindle, C.H., 1929, Can. Field-Naturalist, vol. 43, No. 7, p. 146, figs. 11, 12.

'Ozarkian' [Lower Ordovician], Swift's ranch 7 miles north of Jasper, British Columbia.

*Raphistomina aperta* var. *ampla* Wilson

Holotype 9768a; paratype 9768

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 67, pl. 12, figs. 4-6.

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

*Raphistomina distincta* (Wilson)

Hypotype 9769

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 68, pl. 12, fig. 21.

Pamelia beds, Ottawa Formation, Middle Ordovician, Dowler farm quarry for Rideau Canal, Ottawa, Ontario.

See *Raphistoma distincta*

*Raphistomina lapicida* see *Raphistoma lapicida*

*Raphistomina sinclairensis* Kobayashi

Holotype 12612; paratype 12613 (missing)

Kobayashi, T., 1955, J. Fac. Sci., Univ. Tokyo, sec. 2, vol. 9, pt. 3, p. 405, pl. 1, figs. 2a-c, 3.

McKay Group, Lower Ordovician, 3.1 miles north of Sinclair Creek, British Columbia.

*Raphistomina sinclairensis* var. *acuta* Kobayashi

Holotype 12614

Kobayashi, T., 1955, J. Fac. Sci., Univ. Tokyo, sec. 2, vol. 9, pt. 3, p. 406, pl. 1, figs. 4a, b.

McKay Group, Lower Ordovician, north of first stream from the east, north of Brisco Trail, Brisco-Dogtooth area, British Columbia.

*Reesidella* sp. cf. *R. protea* (Yen)

Hypotypes 10279, 10280, 10770-10772

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 69, pl. 5, figs. 5-9.

St. Mary River and Willow Creek (lower part) Formations, Upper Cretaceous, right side Pincher Creek, l.s.d. 16, sec. 16, tp. 6, rge. 30, W. 4th mer.; railway-cut at Nobleford, SE. ¼ sec. 3, tp. 12, rge. 23, W. 4th mer.; right side Castle River, l.s.d. 5, sec. 35, tp. 6, rge. 1, W. 5th mer.; right side Waterton River, l.s.d., 14 sec. 18, tp. 5, rge. 27, W. 4th mer.; and north side Oldman River, east side of small gully entering river in NE. ¼ sec. 25, tp. 10, rge. 25, W. 4th mer., Alberta.

*Rhytophorus* (?) *glaber* Whiteaves

Syntypes 5166, a-h

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 69, pl. 10, fig. 4a[5166].

Upper Cretaceous, near junctions with Bow River, Belly River, Alberta.

*Rhytophorus* ? *caurinus* McLearn

Holotype 6192

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 125, pl. 23, fig. 5.

Dunvegan Formation, Upper Cretaceous, 5 miles below mouth of Racing Creek, west bank Smoky River, Alberta.

*Rissoina albertensis* Landes

Holotype 9363; paratypes 9363 a, b

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 163, pl. 6, figs. 4-6.

Pakowki Formation, Upper Cretaceous, Bear Gulch, l.s.d. 2, sec. 18, tp. 2, rge. 9, W. 4th mer., Alberta.

*Salpingostoma billingsi* Wilson

Holotype 1259; paratype 9738

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 28, pl. 3, figs. 1-3.

Leray beds, Ottawa Formation, Middle Ordovician, Front con., Cumberland tp., Ontario and Allumette Island, Ottawa River, Quebec.

*Salpingostoma boreale* Whiteaves

Syntypes 4420, a

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 49F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 258, pl. 28, figs. 10 [4420], 11 [4420a].

Silurian, rapids below falls, Ekwon River, Ontario.

*Salpingostoma canadensis* see *Bellerophon canadensis**Salpingostoma expansum* (Hall) var.

Hypotypes 1705, 9739

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 28, pl. 3, figs. 5-7.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Front con., Cumberland tp. and lot 3, con. 3, RF., Gloucester tp., Ontario.

*Salpingostoma* (?) *lata* Foerste

Syntypes 8491, a-c, 8492 e-i

Foerste, A.F., Geol. Surv., Canada, Mem. 138, p. 207, pl. 35, figs. 6a [8491], b [8491b], c [8491a].

Kagawong Formation, Upper Ordovician, 2 miles southwest of Wekwemikong and 3 miles north of Wekwemikong, Manitoulin Island, Ontario.

*Salpingostoma soperi* Wilson

Holotype 6509

Wilson, A.E., 1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 299, pl. 4, figs. 1, 2.

Ordovician, canyon in Putnam Highlands southeast of Foxe Basin, Baffin Island, Arctic.

*Scalaria albensis* (?) d'Orbigny

Hypotype 4951

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 50, pl. 9, fig. 5.

Lower Cretaceous [Haida Formation], Queen Charlotte Islands, British Columbia.

=*Scalaria clementina*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 287.

*Serrifusus dakotensis* var. *vancouverensis* Whiteaves

Holotype 5794

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 119, pl. 15, fig. 5.

Upper Cretaceous, northwest side Homby Island, British Columbia.

*Sinuities bilobatus* var. *corrugatus* (Hall)

Hypotypes 9733, 9734

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 24, pl. 2, figs. 7-10.

Sherman Fall and Cobourg beds, Ottawa Formation, Middle Ordovician, C.P.R. cutting south of Aylmer Road, Quebec and unknown locality.

*Sinuities cancellatus* (Hall)

Hypotype 1260

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 25, pl. 2, figs. 11, 12.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Sinuities cancellatus* var. *angularis* Wilson

Holotype 1700c

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 25, pl. 2, fig. 13.

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

*Sinuities cancellatus* var. *liratus* Wilson

Hypotype 9732

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 26, pl. 2, fig. 14.

Cobourg beds, Ottawa Formation, Middle Ordovician, Parliament Hill, Ottawa, Ontario.

*Solariella (radiatula?* var.) *occidentalis* Whiteaves

Syntypes 5918, a, b, 5919, a

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 368, pl. 45, figs. 5, a [5918].

Upper Cretaceous, Brennan Creek and Nanaimo River, Vancouver Island, British Columbia.

*Solenospira pagoda* see *Eunema ? pagoda*

*Spirorapha? communis* see *Cyclonema communis*

*Spirorapha cryptata* see *Pleurotomaria cryptata*

*Stagnicola newmarchi* Russell

Hypotype 10116

Russell, L.S., 1952, Nat. Mus. Can., Bull. 126, p. 129, pl. 18, figs. 10, 11.

Kishenehn Formation, Upper Eocene, about 1.4 miles north of International Boundary, Flathead River, British Columbia.

*Stagnicola saskatchewanensis* see *Lymnaea vahlii saskatchewanensis*

*Stagnicola tulameenensis* Russell

Holotype 11616; hypotype 11617

Russell, L.S., 1957, Nat. Mus. Can. Bull. 147, p. 88, pl. 1, figs. 2-4.

Princeton Group, Middle Oligocene, Vermilion Cliff, Tulameen River west of Princeton, British Columbia.

*Stomatia suciensis* Whiteaves

Syntypes 5771, a-d

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 128, pl. 16, fig. 4 [5771].

Upper Cretaceous, Sucia Island, Washington, U.S.A.

=*Lysis suciensis*, Whiteaves, J.F., 1903, *ibid.*, pt. 5, p. 367.

*Stomatia suciensis* var. *carinifera* Whiteaves

Syntypes 5772, a-d

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 128, pl. 16, fig. 5 [5772].

Upper Cretaceous, Sucia Island, Washington, U.S.A.

=*Lysis suciensis* var. *carinifera*, Whiteaves, J.F., 1903, *ibid.*, pt. 5, p. 367.

*Straparollina asperostriata* see *Straparollus asperostriatus*

*Straparollina circe* see *Straparollus circe*

*Straparollina daphne* (Billings)

Hypotype 2856

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 25, fig. 5.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Straparollina eurydice* see *Straparollus eurydice*

*Straparollina obtusa* Whiteaves

Syntypes 4095, 4096, a, 4097, 4098, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 328, pl. 42, figs. 12, a [4095], 13 [4097].

Middle Devonian, small island in southern part of Dawson Bay, Lake Winnipegosis and Pentamerus Point, Lake Manitoba, Manitoba.

*Straparollina pelagica* Billings

Syntypes 568, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 223, fig. 205 [568a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 223, fig. 205.

Knight, J.B., 1941, Geol. Soc. Amer., Sp. Paper 32, p. 337, pl. 52, figs. 6a, b [holotype 568a; paratype 568].

Divisions G-H [St. George], Lower Ordovician, Pistolet Bay and Cape Norman, Newfoundland.

*Straparollus asperostriatus* Billings

Syntypes? 1201, a [Billings states only one specimen collected]

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 162.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Straparollina asperostriata*, Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 59, pl. 7, figs. 10-12.

Mollusca

*Straparollus circe* Billings

Holotype 1200

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 161, figs. 1-3.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog. p. 144, figs. 85a-c.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Straparollina circe*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 60, pl. 7, figs. 5-7.

*Straparollus crenulatus* Whiteaves

Syntypes 2807, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 21, pl. 3, figs. 8 [2807], a, b [2807a].

Guelph Formation, Middle Silurian, Durham, Ontario.

*Straparollus daphne* Billings

Syntypes 2855, a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 160, fig. 145 [2855].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 160, fig. 145.

Guelph Formation, Middle Silurian, Galt, Ontario.

*Straparollus eurydice* Billings

Syntypes 1199, a

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 162, figs. 4, 5.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 144, figs. 86a, b.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Straparollina eurydice*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 60, pl. 7, figs. 8, 9 [holotype 1199; paratype 1199b - no 1199f specimen].

*Straparollus minutus* de Koninck

Hypotypes 7623, a, 7675

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 175, pl. 30, figs. 18, 19, 21.

Mississippian, Maxner Point, Windsor, Nova Scotia.

*Straparollus (Straparollus) subtrigonalis* (Whiteaves)

Hypotypes 14895, 14896

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6, p. 70, pl. 12, figs. 6a, b; pl. 13, fig. 7.

Dawson Bay Formation, Middle Devonian, Snake Island, Lake Winnipegosis, Manitoba.

*Strophostylus amplus* Whiteaves

Syntypes 4426, a, b

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 53F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 262, pl. 30, figs. 1, a [4426].

Silurian, portage road at falls Ekwan River, Ontario.

*Strophostylus cf. cyclostoma* Hall

Hypotype 4679

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 7, fig. 23.

Manitoulin Formation, Cataract Group, Lower Silurian, gorge on Twentymile Creek, Jordan, Ontario.

*Strophostylus* (?) *elevatus* (Hall)

Hypotypes 11072, 11073

Bolton, T.E., 1958, Geol. Surv., Canada, Mem. 289, p. 54, pl. 12, figs. 14, 15.

Warton Member, Amabel Formation, Middle Silurian, 1.5 feet below top of road-cut, Warton, Ontario.

*Strophostylus filicinctus* Whiteaves

Syntypes 4419, a, b

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 54F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 263, pl. 30, figs. 4 [4419], 5 [4419a], 6 [4419b].

Silurian, portage road at falls Ekwan River, Ontario.

*Strophostylus inflatus* Whiteaves

Syntypes 4427, a, b, c

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 53F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 262, pl. 30, figs. 2 [4427], 3 [4427a].

Silurian, portage road at falls Ekwan River, Ontario.

*Subulites acutus* Wilson

Holotype 6667

Wilson, A.E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 403, pl. 6, fig. 9.

1951, Geol. Surv., Canada, Bull. 17, p. 87, pl. 15, fig. 3.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, creek bed east of Mille Roches quarries, Ontario.

*Subulites calcifera* Billings

Holotype 493

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 360, fig. 10.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 120, fig. 34.

Lower Ordovician [Romaine Formation], Mingan Island, Quebec.

=*Fusispira calcifera*, Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 64, pl. 8, fig. 11.*Subulites canadensis* Ulrich and Scofield

Hypotype 9789

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 87, pl. 15, fig. 9.

Lowville beds, Ottawa Formation, Middle Ordovician, quarry one-quarter mile southeast of intersection Green Creek and Montreal Road, east of Ottawa, Ontario.

*Subulites compactus* Whiteaves

Holotype 2841b

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 16, pl. 3, fig. 2; pl. 7, fig. 6.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Subulites compactus*? Whiteaves var.

Syntypes 2841a, c-h

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 96, pl. 14, figs. 4 [2841d], 5 [2841c].

Guelph Formation, Middle Silurian, Durham, Ontario.



*Subulites daphne* Billings

Holotype 567

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 223, fig. 206.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 223, fig. 206.

Division L [Table Head], Middle Ordovician, Point Rich, Newfoundland.

*Subulites ellisensis* Twenhofel

Holotype 2295

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 253, pl. 26, fig. 7.

Ellis Bay Formation, Upper Ordovician, Bear Point, Anticosti Island, Quebec.

*Subulites gloucesterensis* Wilson

Holotype 1192

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 88, pl. 15, fig. 8.

Leray beds, Ottawa Formation, Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Subulites notatus* Billings

Syntypes 2296, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 54.

Upper Ordovician [Ellis Bay Formation], at or 1 mile east of Junction Cliff, Anticosti Island, Quebec.

=*Cyrtospira notata*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 253, pl. 50, fig. 10 [2296].

*Subulites parvulus* Billings

Syntypes 1190, a, b

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 36.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 36.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Cyrtospira parvula*, Wilson, A.E., 1951, *ibid.*, Bull. 17, p. 90, pl. 12, fig. 12 [lectotype 1190a].

*Subulites psyche* Billings

Syntypes 777, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 188, fig. 169 [777b].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 188, fig. 169.

Beekmantown Formation, Lower Ordovician, St. Antoine de Tilly, Quebec.

*Subulites regularis* Ulrich and Scofield

Hypotypes 9790, 13246

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 89, pl. 15, figs. 4, 5.

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

*Subulites richardsoni* Billings

Syntype 2117

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog., 1853-56, p. 306.

Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 253, pl. 49, fig. 7.

Upper Ordovician [English Head Formation], Carleton Point, Anticosti Island, Quebec.

## Subulitid gastropod, genus uncertain

Fig. specs. 15086-15088

Yochelson, E., in Boucot, A.J., *et al.*, 1960, Geol. Surv., Canada, Bull. 65, p. 46, pl. 10, figs. 4-7.

Sutherland River Formation, Upper Silurian, Douro Range, West Devon Island, Arctic.

*Surcula raricostata* Gabb var.

Syntype 5783

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 116, pl. 15, figs. 2, a.

Upper Cretaceous, Homby Island, British Columbia.

=*Surcula (raricostata?* var.) *hornbyensis*, Whiteaves, J.F., 1903, *ibid.*, pt. 5, p. 355.*Surcula suciensis* Whiteaves

Syntypes 5784, a, b

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 115, pl. 15, figs. 1, a [5784].

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Tetranota bidorsata* (Hall)

Hypotypes 9740, a

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 30, pl. 4, figs. 1, 2.

Leray beds, Ottawa Formation, Middle Ordovician, Val Tetreau, Quebec.

*Tetranota charon* see *Bellerophon charon**Tetranota sexcarinata* Ulrich and Scofield

Hypotypes 9741, a

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 31, pl. 4, figs. 10, 11.

Leray? beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Thaumastus limnaeiformis* Meek and Hayden

Hypotype 5543

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 20, pl. 3, fig. 3.

Paleocene [Paskapoo Formation], Rosebud River, tp. 27, rge. 25, W. 4th mer., Red Deer River, Alberta.

*Tremanotus angustatus* see *Bellerophon angustata**Triodopsis buttsi* Russell

Holotype 11606; paratypes 11607, 11608

Russell, L.S., 1955, Nat. Mus. Can., Bull. 136, p. 108, pl. 1, figs. 1-6; text fig. 3.

Kishenehn Formation, Upper Eocene, Flathead Valley, British Columbia.

*Trochactaeon cylindriaceus* Stoliczka

Hypotype 4958

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 218, pl. 28, fig. 6.

Cretaceous [Haida Formation], west of Alliford Bay, Queen Charlotte Islands, British Columbia.

*Trochactaeon semicostatus* Whiteaves

Syntypes 5916, a, b, c

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 354, pl. 44, fig. 5 [5916].

Upper Cretaceous, roof of coal New Vancouver Coal Company's mine, Nanaimo, Vancouver Island, British Columbia.

*Trochonema abruptum* see *Pleurotomaria abrupta*

*Trochonema coxi* Wilson

Paratypes 9139, a

Wilson, A.E., 1938, Trans. Roy. Soc. Can., ser. 3, vol. 32, sec. 4, p. 33, pl. 3, figs. 3, 4.

Ordovician [Red River Formation], Clark Harbour, Lake Winnipeg, Manitoba.

*Trochonema inornatum* Whiteaves

Holotype 2905

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 19, pl. 3, fig. 7.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Trochonema tricarinata* Billings

Holotype 473

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 356.

Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 62, pl. 8, fig. 17 [fig. 16 = *T. abruptum*].

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

*Trochonema umbilicata* (Hall)

Hypotype 1699

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 180, fig. 172.

Middle Ordovician, Ottawa, Ontario.

*Trochonema umbilicatum* (Hall)

Hypotype 9144

Wilson, A.E., 1938, Trans. Roy. Soc. Can., ser. 3, vol. 32, sec. 4, p. 34, pl. 3, fig. 5.

Middle Ordovician, La Cloche Island, Lake Huron, Ontario.

*Trochonema umbilicata* (Hall)

Hypotypes 1205, a, b

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 27.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec [Logan 1845 collection].

=*Trochonema umbilicatum* var. *canadensis*, Ulrich, E.O. and Scofield, W.H., 1897, Geol. Minnesota, vol. 3, pt. 2, Paleo., p. 1048.

=*Trochonema umbilicatum* var. *canadense*, Wilson, A.E., 1938, Trans. Roy. Soc. Can., ser. 3, vol. 32, sec. 4, pl. 3, fig. 6 [hypotype 1205].

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 71, pl. 13, figs. 7, 8.

*Trochonema umbilicatum* (Hall)

Hypotype 9770

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 70, pl. 13, figs. 3, 4.

Cobourg beds, Ottawa Formation, Middle Ordovician, lot 22, con. 3, Roxborough tp., Ontario.

*Trochonemella ? arachne* see *Pleurotomaria arachne*

*Trochonemella ? montrealensis* Okulitch

Hypotype 9771

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 77, pl. 12, fig. 17.

Lowville beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Tropidodiscus? argo* see *Bellerophon argo*

*Tropidodiscus? disculus* (Billings)

Neotype 9742

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 32, pl. 4, figs. 24, 25.

Cobourg beds, Ottawa Formation, Middle Ordovician, foot of Sussex Street, Ottawa, Ontario  
[original specimen from Black River of Lake St. John, Quebec].

*Tryblidium nycteis* see *Metoptoma nycteis*

"*Turbo*" *ferniensis* Frebold

Holotype 12895; paratype 12896

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 68, pl. 30, fig. 3; pl. 31, figs. 4a, b.

Femie Group, Upper Jurassic, Cascade River below Bankhead and Brickyard quarries at Blairmore, Alberta.

*Turbo shumardi* de Verneuil

Hypotype 3727

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 116,  
pl. 16, fig. 3.

Hamilton Formation, Middle Devonian, Bosanquet tp., Lambton co., Ontario.

*Turricula mccanni* Shimer

Holotype 17744

Shimer, H.W., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 87, pl. 9, fig. 5.

'Upper Triassic', east side of Pearson Creek, Bridge River map-area, British Columbia.

*Turritoma acrea* see *Murchisonia acrea*

*Valvata bicincta* Whiteaves

Syntypes 5570, a-c

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 25, pl. 3, figs. 8, a, b [5570].

'Upper Cretaceous' [Paskapoo Formation, Paleocene], mouth of Blindman River, tp. 39, rge. 27, W. 4th mer., Alberta.

*Valvata bicincta* Whiteaves

Hypotypes 10304, 10305

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 70, pl. 5, figs. 4a, b.

Paskapoo Formation, Paleocene, right side Blindman River, SW. ¼ sec. 10, tp. 40, rge. 1, W. 5th mer., Alberta.

*Valvata filosa* Whiteaves

Syntype 5568

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 25,  
pl. 3, figs. 7, a.

St. Mary River Formation, Upper Cretaceous, Pincher Creek, Alberta.

*Valvata filosa* Whiteaves

Hypotypes 10301, 10302

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 70, pl. 5, figs. 1, 2.

St. Mary River and Willow Creek (lower part) Formations, Upper Cretaceous, north side irrigation ditch south of Barons, NE. ¼ sec. 4, tp. 12, rge. 23, W. 4th mer. and left side Castle River, l.s.d. 13, sec. 35, tp. 6, rge. 1, W. 5th mer., Alberta.

Mollusca

*Valvata* sp. cf. *V. subumbilicata* (Meek and Hayden)

Hypotype 10303

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 71, pl. 5, fig. 3.

Paskapoo Formation, Paleocene, right side Blindman River, SW.  $\frac{1}{4}$  sec. 10, tp. 40, rge. 1, W. 5th mer., Alberta.

*Vanikora pulchella* Whiteaves

Holotype 4953

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 215, pl. 27, figs. 4, a.

Cretaceous [Haida Formation], east end Maude Island, Queen Charlotte Islands, British Columbia.

*Velatella rectistriata* Dyer

Holotype 6685

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 13, pl. 4, figs. 2, 3.

Foremost Formation, Upper Cretaceous, north side Oldman River in SW.  $\frac{1}{4}$  sec. 23, tp. 11, rge. 18, W. 4th mer., Alberta.

*Viviparus conradi* (Meek and Hayden)

Hypotype 8853 [missing]

Russell, L.S., 1935, Trans. Roy. Soc. Can., ser. 3, vol. 29, sec. 4, p. 119, pl. 1, fig. 6.

Milk River Formation, Upper Cretaceous, Deadhorse Coulee, NW.  $\frac{1}{4}$  sec. 33, tp. 1, rge. 11, W. 4th mer., Alberta.

*Viviparus crickmayi* Dyer

Holotype 6674

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 8, pl. 3, fig. 3.

Willow Creek Formation, Paleocene, Willow Creek, centre sec. 12, tp. 10, rge. 27, W. 4th mer., Alberta.

*Viviparus leai* (Meek and Hayden)

Hypotype 10134, 10311

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 51, pl. 4, figs. 4a, b, 6.

Paskapoo Formation, Paleocene, north side Red Deer River, l.s.d. 4, sec. 24, tp. 38, rge. 26, W. 4th mer. and west slope Wallace Mountain, east fork Bruce River, Swan Hills district, Alberta.

*Viviparus mokowanensis* Tozer

Holotype 10298; paratypes 10299, 10300

Tozer, E.T., Geol. Surv., Canada, Mem. 280, p. 52, pl. 3, figs. 13a, b, 14.

St. Mary River (basal member) Formation, Upper Cretaceous, south side Oldman River, NE.  $\frac{1}{4}$  sec. 31, tp. 9, rge. 23; sec. 27, tp. 3, rge. 27; and right side Belly River, SW.  $\frac{1}{4}$  sec. 3, tp. 4, rge. 27, W. 4th mer., Alberta.

*Viviparus murrayensis* Russell

Holotype 6796; paratype 6796a

Russell, L.S., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 39, pl. 1, figs. 5, 6.

McMurray Formation, Lower Cretaceous, Hangingstone River, Alberta.

*Viviparus nidaga* Dyer

Holotype 6675

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 9, pl. 3, fig. 1.

Belly River Formation, Upper Cretaceous, northwest side Chin Coulee, sec. 32, tp. 6, rge. 10, W. 4th mer., Alberta.

*Viviparus planolater* Russell

Hypotypes 10132, 10133

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 43, pl. 4, figs. 7, 8a, b.

Paskapoo Formation, Paleocene, south side Little Red Deer River, l.s.d. 15, sec. 29, tp. 29, rge. 5, W. 5th mer., Alberta.

*Viviparus prudentius prudentius* White

Hypotypes 10287-10289

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 54, pl. 3, figs. 7-9.

St. Mary River Formation, Upper Cretaceous, right side Pincher Creek, l.s.d. 4, sec. 22, tp. 6, rge. 30, W. 4th mer., Alberta.

*Viviparus prudentius willovens* Tozer

Holotype 10129; paratypes 10130, 10131

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 55, pl. 3, figs. 10-12.

Edmonton and Willow Creek (lower part) Formations, Upper Cretaceous, north side Highwood River, l.s.d. 12, sec. 11, tp. 18, rge. 2; left side Castle River, l.s.d. 11, sec. 2, tp. 7, rge. 1; and left side Jumpingpound Creek at boundary l.s.d. 3 and 4, sec. 29, tp. 25, rge. 4, W. 5th mer., Alberta.

*Viviparus raynoldsanus* Meek and Hayden

Hypotype 10135

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 55, pl. 4, figs. 9a, b.

Paskapoo Formation, Paleocene, right side Blindman River, SW. ¼ sec. 10, tp. 40, rge. 1, W. 5th mer., Alberta.

*Viviparus retusus* (Meek and Hayden)

Hypotypes 10136, 10137

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 56, pl. 4, figs. 1, 2.

Paskapoo Formation, Paleocene, north side Little Red Deer River, l.s.d. 1, sec. 30, tp. 29, rge. 5 and right side Elbow River, NE. ¼ sec. 33, tp. 23, rge. 1, W. 5th mer., Alberta.

*Viviparus tasgina* Dyer

Holotype 6676

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 10, pl. 3, fig. 5.

Edmonton Formation, Upper Cretaceous, Blackfoot crossing Bow River, sec. 8, tp. 21, rge. 21, W. 4th mer., Alberta.

*Viviparus tasgina* Dyer

Hypotypes 10290-10294

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 57, pl. 4, figs. 10-14.

Edmonton (lower part) Formation, Upper Cretaceous, north side Kneehills Creek, NW. ¼ sec. 7, tp. 29, rge. 21 and north side Bow River, SW. ¼ sec. 9, tp. 21, rge. 22, W. 4th mer., Alberta.

*Viviparus trochiformis* (Meek and Hayden)

Hypotype 10138

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 58, pl. 4, fig. 3.

Paskapoo Formation, Paleocene, south side Red Deer River, l.s.d. 4, sec. 4, tp. 39, rge. 26, W. 4th mer., Alberta.

Mollusca

*Viviparus westoni* Tozer

Holotype 10122; paratypes 10123-10127

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 58, pl. 3, figs. 1-6.

St. Mary River and Edmonton (lower part) Formations, Upper Cretaceous, right side Pincher Creek, l.s.d. 4, sec. 22, tp. 6, rge. 30, W. 4th mer.; right side Castle River, l.s.d. 5, sec. 35, tp. 6, rge. 1, W. 5th mer.; south side Bow River 100 yards upstream from coulée in sec. 5, tp. 21, rge. 22; railway-cut at Nobleford, SE.  $\frac{1}{4}$  sec. 3, tp. 12, rge. 23; and St. Mary River 300 yards upstream from boundary of sec. 27, tp. 5, rge. 23, W. 4th mer., Alberta.

*Zygopleura cara* (Dawson)

Hypotype 7627a

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 179, pl. 31, fi g. 20.  
Mississippian, Windsor, Nova Scotia.

## PELECYPODA

### *Actinopterella* ? *tessellata* Wilson

Holotype 1659a; paratypes 1659,b, 11578, 11604

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 56, pl. 7, figs. 8–11.

Hull or Sherman Fall beds, Ottawa Formation, Middle Ordovician, lot 26, con. 5, Osnabruck tp.; bed of Aux Raisins River near Black River Station; Ange Gardien road, about 4 miles west of L'Orignal, Ontario.

### *Alectryonia informis* McLearn

Holotype 6058

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 44, pl. 4, fig. 6.

Lille Member, Femie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

### *Alectryonia mcevoyi* McLearn

Holotype 6059

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 44, pl. 3, fig. 5.

Lille Member, Femie Group, Jurassic, north slope Bluff Mountain, Alberta.

### *Allodesma* ? *umbonata* Wilson

Holotype 6225; paratype 6225a

Wilson, A.E., 1921, Geol. Surv., Canada, Bull. 33, p. 54, pl. 4, fig. 4.

Aylmer limestone, Chazy (= Pamela), Middle Ordovician, first terrace above farmhouse to right of road up from the dock at MacLaren Landing, Ontario.

= *Vanuxemia* ? sp., Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 51, pl. 5, fig. 1.

### *Allorisma albertense* Shimer

Holotype 4864

Shimer, H.W., 1926, Geol. Surv. Canada, Contr. Can. Pal., Bull. 42, p. 77, pl. 4, figs. 8a–d.

Mississippian, Lake Minnewanka region, Alberta.

### *Ambonychia affinis* Ulrich

Hypotype 11579

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 57, pl. 8, fig. 11.

Cobourg beds, Ottawa Formation, Middle Ordovician, corner Fifth Avenue and Percy Street, Ottawa, Ontario.

### *Ambonychia amygdalina* Hall

Hypotype 11580

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 58, pl. 8, fig. 14.

Leray beds, Ottawa Formation, Middle Ordovician, La petite Chaudière, Val Tetreau, Quebec.

### *Ambonychia nitida* Billings

Holotype 2458

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 50, figs. 17a,b.

Middle Silurian [Jupiter Formation], near Jupiter River, Anticosti Island, Quebec.

= *Mytilarca nitida*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 233, pl. 31, figs. 6, 7.



*Ambonychia orbicularis* (Emmons)

Hypotype 11581

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 58, pl. 8, fig. 12.

Cobourg beds, Ottawa Formation, Middle Ordovician, excavation for 401 Fourth Avenue, Ottawa, Ontario.

*Ambonychia radiata* Hall

Hypotype 2109b

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 215, fig. 219 (?).

Upper Ordovician, Cape Smyth, Lake Huron, Ontario.

See *Byssonychia borealis*.

*Ambonychia septentrionalis* Whiteaves

Holotype 4428

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 46F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 255, pl. 28, fig. 5.

Silurian, portage road at falls Ekwan River, Ontario.

*Ambonychia superba* Billings

Holotype 2287

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 50, fig. 16.

Upper Ordovician [Ellis Bay Formation], Junction Cliff, Anticosti Island, Quebec.

=*Clionychia* (?) *superba*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 231.

*Ambonychia undulata* (Whitfield)

Hypotypes 17732, a

Whiteaves, J.F.,

=1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 46F.

=1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 254, pl. 28, fig. 4 [17732].

Silurian, foot of portage road, Ekwan River, Ontario.

*Amphicoelia leidyi* Hall

Hypotype 5129

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 22, fig. 6.

Guelph Formation, Middle Silurian, 4 miles west of Warton, Ontario.

*Amusium lenticulare* Whiteaves

Syntype 4998

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 242, pl. 32, fig. 5.

Lower Cretaceous [Haida Formation], north shore of Cumshewa Inlet, Moresby Island, British Columbia.

*Anatina* cf. *punctata* Stanton

Hypotype 6090

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 56, pl. 9, fig. 11.

Fernie Group, Jurassic, railway-cut north slope Grassy Mountain, Alberta.

*Anatina* (*Cercomya*) *semiradiata* Whiteaves

Syntype 5987

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 288, pl. 37, fig. 4.

'Middle Cretaceous' [Yakoun Formation, Upper Jurassic], east end Maude Island, Queen Charlotte Islands, British Columbia.

*Anatina subcylindracea* Whiteaves

Syntypes 5899,a

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 374, pl. 45, fig. 11, [5899].

Upper Cretaceous, Brennan Creek, Vancouver Island, British Columbia.

*Anatina sulcatina* Shumard

Hypotypes 5745,a

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 139, pl. 17, figs. 5,a.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Anodonta argillensis* Russell

Holotype 6766; paratype 6766a

Russell, L.S., 1932, Trans. Roy. Can. Inst., vol. 18, pt. 2, p. 340, pl. 1, fig. 3. Whitemud Formation, Upper Cretaceous, near centre of sec. 25, tp. 3, rge. 25, W. 2nd mer., Big Muddy Valley, Saskatchewan.

*Anodonta johnsoni* Russell

Holotype 8852

Russell, L.S., 1935, Trans. Roy. Soc. Can., ser. 3, vol. 29, sec. 4, p. 119, pl. 1, fig. 5. Upper member Milk River Formation, Upper Cretaceous, NW. 1/4 sec. 33, tp. 1, rge. 11, W. 4th mer., Deadhorse Coulee, Alberta.

*Anodonta macconnelli* Russell

Holotype 6765; paratypes 6765a, b

Russell, L.S., 1932, Trans. Roy. Can. Inst., vol. 18, pt. 2, p. 340, pl. 1, figs. 1, 2. Whitemud Formation, Upper Cretaceous, SE. 1/4 sec. 12, tp. 8, rge. 29, W. 2nd mer., east side of Lake of the Rivers, Saskatchewan.

*Anodonta propatoris* ? White

Hypotype 5205

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 58, pl. 9, figs. 2,a.

Upper Cretaceous [Pale beds, Belly River Formation], near Bulls Head, Alberta.

*Anodontophora* ? *klingszutusensis* McLearn

Holotype 9255

McLearn, F.H., 1946, Geol. Surv., Canada, Paper 46-25, App., p. 1, pl. 2, fig. 3.

Pardonet beds, Upper Triassic, west side peak. Klingzut Mountain, north of Pocketknife, British Columbia.

*Anodontopsis affinis* Whiteaves

Holotype 3992

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 303, pl. 40, fig. 6.

Devonian [Winnipegosan Formation], Devils Point, Lake Winnipegosis, Manitoba.

*Anodontopsis concinna* Whiteaves

Syntypes 2836, 2837

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 12, pl. 2, fig. 4 [2837]; pl. 7, figs. 4 [2837],a [2836].

Guelph Formation, Middle Silurian, Galt and Durham, Ontario.

*Anodontopsis ventricosa* Billings

Syntype 3319

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 55, figs. 24, 25.

Devonian [Grande Greve Formation], Indian Cove, Gaspé, Quebec.

*Anomia albertensis* McLearn

Holotype 6081

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 52, pl. 7, figs. 6, 7.

Fernie Group, Jurassic, drift between two cement quarries, Blairmore, Alberta.

*Anomia columbiana* Crickmay

Holotype 9683; paratype 9692

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 53, pl. 14, figs. 4-6.  
Upper Jurassic, Billhook Creek at 3100' elevation, 4 miles west of Harrison Lake, British Columbia.

*Anomia flemingi* Meek

Syntype 5345

Meek, F.B.,

1859, in Hind, H.Y., Rept. Prog.; Assiniboine and Saskatchewan Exploring Expedition, p. 183, pl. 1, fig. 2.

1860, in Hind, H.Y., Narrative of the Canadian Red River Exploring Expedition of 1857 and of the Assiniboine and Saskatchewan Exploring Expedition of 1855, vol. 2, p. 334, fig.

Upper Cretaceous, Little Souris River, Manitoba.

*Anomia linensis* Whiteaves

Syntypes 5984 [3 moulds on one shell]

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 301, pl. 39, fig. 2.

Lower Cretaceous [Haida Formation], Lina Island, Queen Charlotte Island, British Columbia.

*Anomia perstrigosa* Whiteaves

Syntypes 5482, a, b

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 4, pl. 1, fig. 2 [5482].

St. Mary River Formation, Upper Cretaceous, Upper Belly River 23 miles above mouth of Waterton River, Alberta.

*Anomia vancouverensis* Gabb

Hypotype 5676 [missing]

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 175, pl. 20, fig. 5.

'Upper Cretaceous', Trent River, Vancouver Island, British Columbia.

*Anthracomya arenacea* Dawson

Hypotype 12396

Woodward, H. 1918, Geol. Mag., vol. 10, p. 465, fig. 1.

Caboniferous [Pictou Group], Donkin Pit No. 6, Glace Bay Mines, Cape Breton Island, Nova Scotia.

*Arca (Nemodon) cumshewensis* see *Grammatodon inornatus*

*Arca (Nemodon) simillima* see *Nemodon fischeri*

*Arctica limpidiana* McLearn

Holotype 7420; paratype 7421

McLearn, F.H.,

1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 150, pl. 2, figs. 3-5.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, fig. 12 [7421].

Clearwater Formation, Lower Cretaceous, east bank Athabasca River 3 miles below Brulé Rapids, Alberta.

*Arctica* sp.

Fig. spec. 9716

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 5, fig. 7.  
Gates Formation, Lower Cretaceous, left bank at Gates, British Columbia.

*Arisaigia placida* (Billings)

Hypotype 5610

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 109, pl. 14, fig. 16.  
Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.  
See *Cytherodon* ? *placidus*

*Arisaigia placida* var. *socialis* (Billings)

Hypotypes 5611, 5612

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 109, pl. 14, figs. 15, 18.  
Stonehouse Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Arisaigia postornata* McLearn

Holotype 5608

McLearn, F.H.,

1918, Am. J. Sci., 4th ser., p. 139.

1924, Geol. Surv., Canada, Mem. 137, p. 108, pl. 14, fig. 19.

McAdam Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Astarte appressa* Gabb

Hypotype 14258

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, fig. 21.  
Bonanza Group, Upper Triassic, between Kyuquot Channel and Esperanza Inlet, Vancouver Island, British Columbia.

*Astarte barbara* Crickmay

Holotype 9677

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 54, pl. 15, fig. 6.  
Lower Cretaceous, 350 yards from shore, 1400 yards north of mouth of Deer Creek and 350 yards from shore west side of Harrison Lake, British Columbia.

*Astarte carlottensis* see *Astarte packardii**Astarte conradiana* Gabb

Hypotypes 5693,a

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 160,  
pl. 18, figs. 5,a.  
Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Astarte conradiana* var. *tuscan*a Gabb

Hypotype 5694

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 160,  
pl. 18, fig. 6.  
Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Astarte harrisonensis* Crickmay

Holotype 9699

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 54, pl. 15,  
figs. 4, 5.  
Upper Jurassic, talus on small creek 1 mile east of Billhook Creek at 1500' elevation,  
Harrison Lake, British Columbia.

*"Astarte" natosini* McLearn

Holotype 6349

McLearn, F.H.,

1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 7, pl. 1, fig. 6.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 2, fig. 4.

McMurray Formation, Lower Cretaceous, Athabasca River, Alberta.

*Astarte packardi* White

Hypotypes 4929,a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 229,  
pl. 30, figs. 6,a,b.

'Middle Cretaceous' [Yakoun Formation, Upper Jurassic], east side of Alliford Bay, Queen  
Charlotte Islands, British Columbia.

=*Astarte carlottensis*, Whiteaves, J.F., 1889, *ibid.*, Contr. Can. Pal., vol. 1, pt. 2,  
p. 154.

*Astarte portana* McLearn

Holotype 9567

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 5, figs. 1, 2.

1948, *ibid.*, App., p. 2, pl. 5, figs. 1, 2.

Gates Formation, Lower Cretaceous, at Gates, British Columbia.

*Asthenodonta westoni* Whiteaves

Syntypes 7733,a-c.

Whiteaves, J.F., 1893, Trans. Roy. Soc. Can., vol. 11, sec. 4, pl. 1, figs. 1, 2.

Carboniferous, south of Joggins, Nova Scotia.

*Aucella acutistriata* Crickmay

Holotype 9656; paratype 9656a.

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 46, pl. 9, fig. 2.

Peninsula Group, Lower Cretaceous, 1,200 yards north of mouth of Deer Creek and 350  
yards from shore west side Harrison Lake, British Columbia.

*Aucella ex gr. bronni* Rouiller

Hypotype 12905

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 68, pl. 38, figs. 4a,b.

Fernie Group, Oxfordian, Upper Jurassic, Carbondale River, Alberta.

*Aucella canadiana* Crickmay

Holotype 9654; paratype 9655

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 47, pl. 10,  
figs. 3-5.

Peninsula Group, Lower Cretaceous, 1,200 yards north of mouth of Deer Creek and 350  
yards from shore west side Harrison Lake, British Columbia.

*Aucella cascadiensis* Crickmay

Holotype 9657; paratype 9659

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 47, pl. 10, figs. 1, 2.

Peninsula Group, Lower Cretaceous, 1,200 yards north of mouth of Deer Creek and 350  
yards from shore west side Harrison Lake, British Columbia.

*Aucella catamorpha* Crickmay

Holotype 9653

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 46, pl. 9, fig. 5.

Peninsula Group, Lower Cretaceous, west side of small bay on south-west shore of the  
Peninsula, Harrison Lake, British Columbia.

*Aucella gigas* Crickmay

Holotype 9664

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 49, pl. 11, figs. 4-6.

Peninsula Group, Lower Cretaceous, southwest shore of the Peninsula, 200 yards from south end, Harrison Lake, British Columbia.

*Aucella harrisonensis* Crickmay

Holotype 9672; paratype 9663

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 48, pl. 11, figs. 1-3.

Peninsula Group, Lower Cretaceous, southwest shore of the Peninsula, 200 yards north of Lonetree Island, Harrison Lake, British Columbia.

*Aucella kwoiekensis* Crickmay

Holotype 9662

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 48, pl. 10, figs. 6,7.

Peninsula Group, Lower Cretaceous, left bank little brook entering from west, 1,450 yards north of mouth of Deer Creek, 235 yards from shore Harrison Lake, British Columbia.

*Aucella mosquensis* ? Von Buch

Hypotype 4898

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 74, pl. 10, figs. 3,a.

'Middle Cretaceous', Skidegate channel west of Alliford Bay, Queen Charlotte Islands, British Columbia.

*Aucella spasskensoides* Crickmay

Holotype 9652; paratype 9651

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 47, pl. 9, figs. 3,4.

Peninsula Group, Lower Cretaceous, west side of small bay on south-west shore of the Peninsula, Harrison Lake, British Columbia.

*Aucellina* ? *dowlingi* McLearn

Holotype 9556

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 5, fig. 3.

1948, *ibid.*, App., p. 1, pl. 5, fig. 3.

Buckinghorse Formation, Lower Cretaceous, 8½ miles west of bridge, Sikanni River, British Columbia.

*Avicula elliptica* Hall

Hypotype 1659a

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 170, fig. 155(?).

Middle Ordovician [Sherman Fall beds], lot 26, con. 5, Osnabrook tp., Ontario.

See *Actinopterella tessellata*

*Avicula hermione* Billings

Holotype 1658

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 40, fig. 42.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 40, fig. 42.

Middle Ordovician, Montreal, Quebec.

Mollusca

*Avicula (Oxytoma) mcconnelli* see *Pteria (Oxytoma) cornueliana* and *Oxytoma mucronata*

*Avicula (Oxytoma) whiteavesi* see *Oxytoma mucronata*

*Aviculomyalina* ? *williamsi* McLearn

Holotype 8764; paratypes 8769, 8774

McLearn, F.H., 1941, Can. Field-Naturalist, vol. 55, No. 3, p. 31, pl. 1, figs. 10-12.  
Triassic [Grey beds], Pardonet Hill, Peace River Foothills, British Columbia.

*Aviculomyalina williamsi* McLearn

Hypotype 9510

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, p. 14, pl. 1, fig. 4.  
Grey beds, Upper Triassic, east end Pardonet Hill, Peace River Foothills, British Columbia.

*Aviculopecten lyelli* Dawson

Hypotypes 4361, a-c, 7553, a, b, 7554, 7587, 7590

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 164, pl. 27, figs. 9-15; pl. 28,  
figs. 1-3.

Lower Windsor, Mississippian, Miller's quarry and near Dominion Atlantic railway bridge,  
Windsor, and Brookfield, Nova Scotia.

*Aviculopecten lyelliformis* Bell

Holotype 7559; paratype 7560

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 165, pl. 29, figs. 1, 2.

Lower Windsor, Mississippian, near Dominion Atlantic railway bridge, Windsor, Nova Scotia.

*Aviculopecten subquadratus* Bell

Syntypes 7555, a, 7592, 7593, a, b, 7594

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 166, pl. 28, figs. 4-9, 11.

Lower Windsor, Mississippian, Miller's quarry and Maxner Point, Windsor, Nova Scotia.

*Aviculopecten* cf. *tenuis* Hall

Hypotype 14892

McCannon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6,  
p. 68, pl. 11, fig. 16.

Dawson Bay Formation, Middle Devonian, 2 miles west of Nina Lake along road to The  
Narrows, Lake Manitoba, sec. 24, tp. 24, rge. 10, W. Prin. mer., Manitoba.

*Axinopsida serricata* (Carpenter)

Hypotype 12558

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, figs. 14a, b.

Nicomekl Formation, Pleistocene, excavation southeast of intersection Elgin and McLellan  
Roads, NW. 1/4 sec. 3, tp. 2, Surrey municipality, British Columbia.

*Barbatia micronema* Meek

Hypotype 9812

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 2, fig. 9.

Dunvegan Formation, Upper Cretaceous, east bank of Peace River 10 miles below mouth of  
Montagneuse River, northwestern Alberta.

*Brachydontes athabaskaensis* McLearn

Holotype 5403; paratype 5404

McLearn, F.H.,

1919, Geol. Surv., Canada, Mus. Bull. 29, p. 12, pl. 5, figs. 1, 2.

1945, *ibid.*, Paper 44-17, 2nd Edition, pl. 3, fig. 14 [5404].

Clearwater Formation, Lower Cretaceous, Brulé Rapids, north bank Athabasca River, Alberta.

*Brachydontes multilinigera* Meek

Hypotype 9807

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 2, fig. 8.  
 Dunvegan Formation, Upper Cretaceous, Peace River(?), Alberta.

*Buchia concentrica* (Sowerby)

Hypotypes 13905, a

Frebold, H., 1959, Geol. Surv., Canada, Bull. 53, p. 28, pl. 8, figs. 4, 5.  
 Fernie Group, Upper Jurassic, Llama Mountain, Kvass Flats area, Alberta.

*Buchia concentrica* var. *erringtoni* (Gabb)

Hypotype 17012

Jeletzky, J.A., 1963, Palaeontology, vol. 6, pt. 1, pl. 21, figs. 8a-f.  
 Eldorado Group, lower part, Upper Jurassic, north side of a pass 1 3/4 miles northwest of  
 Peak of Sheba, Tyaughton Lake area, British Columbia.

*Buchia mosquensis* (Buch)

Hypotypes 17008, 17009

Jeletzky, J.A., 1963, Palaeontology, vol. 6, pt. 1, pl. 21, figs. 3, 4.  
 Upper Jurassic, south side creek falling into Husky Channel about 3/4 mile south of top  
 of Mount Gifford, east slope Aklavik Range, Richardson Mountains, District of  
 Mackenzie.

*Buchia piochii* var. *russiensis* (Pavlow)

Hypotypes 17010, 17011

Jeletzky, J.A., 1963, Palaeontology, vol. 6, pt. 1, pl. 21, figs. 5a-e, 7a, b.  
 Mould Bay Formation, Upper Jurassic, float at Mould Bay, lat. 76°16'30"N, long. 119°27'9"W,  
 Prince Patrick Island, Arctic.

*Buchiola dilata* Kindle

Holotype 7970

Kindle, E.M., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 6, pl. 1, fig. 7.  
 Simpson shale, Upper Devonian, Mackenzie River 5 miles above Rabbitskin River, North-  
 west Territories.

*Buchiola retriostrata* Von Buch

Hypotypes 7969, a, b

Kindle, E.M., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 5, pl. 1, figs. 4-6.  
 Simpson shale, Upper Devonian, Mackenzie River 5 miles above Rabbitskin River, North-  
 west Territories.

*Byssonychia borealis* Foerste

Syntypes 2109a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 165, pl. 27, figs. 2a-c.  
 Upper Ordovician, Cape Smyth, Lake Huron, Ontario.

*Byssonychia grandis* Ulrich

Hypotype 2120

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 166, pl. 27, fig. 4.  
 Upper Ordovician, Nottawasaga Bay, Ontario.

*Byssonychia hyacinthensis* Foerste

Holotype 6777; paratype 6777a

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 163, pl. 43, figs. 1, 2.  
 'Lorraine', Upper Ordovician, northern end of exposures below dam, St. Hyacinthe, Quebec.



Mollusca

*Byssonychia radiata* (Hall)

Hypotypes 8517b, c

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 164, pl. 27, figs. 3a, b.  
'Lorraine', Upper Ordovician, one mile south of Clay Cliffs, Manitoulin Island, Ontario.

*Byssonychia radiata* var. *walkeri* Wilson

Holotype 6756

Wilson, A.E., 1926, Geol. Surv., Canada, Bull. 44, p. 29, pl. 5, figs. 19, 20.  
Beaverfoot Formation, Upper Ordovician, head of Windermere Creek, British Columbia.

*Byssonychia richmondensis* Ulrich

Hypotype 8515a

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 167, pl. 27, figs. 1a, b.  
Kagawong Formation, Upper Ordovician, east of Barrie Island bridge, Manitoulin Island, Ontario.

*Byssonychia vera* Ulrich

Hypotype 11582

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 59, pl. 8, fig. 1.  
Sherman Fall beds, Ottawa Formation, Middle Ordovician, C.P.R. cutting south of Aylmer road, Hull, Quebec.

*Callista* (*Dosiniopsis*) *deweyi* (Meek and Hayden)

Hypotypes 5280, a-e, 5281, a-d

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 42,  
pl. 6, figs. 4 [5280], 5 [5281], a [5281a].  
Upper Cretaceous, hill south of Big Plume Creek and Bull's Head, Alberta.

*Camptonectes* cf. *bellistriatus* (Meek)

Hypotype 6072

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 47, pl. 5,  
figs. 4, 5,  
Ferne Group, Jurassic, talus in creek north of Blairmore, Alberta.

*Camptonectes curvatus* (Geinitz)

Hypotype 4890

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 242,  
pl. 32, fig. 4.  
'Middle Cretaceous' [Yakoun Formation, Jurassic], east end Maude Island, Queen Charlotte  
Islands, British Columbia.

*Camptonectes matonabbei* McLearn

Holotype 7413; paratype 7414

McLearn, F.H., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 146, pl. 2,  
figs. 11-13.  
Clearwater Formation, Lower Cretaceous, above Brulé Rapids, Athabasca River, Alberta.

*Camptonectes* sp.

Fig. spec. 6071

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 47, pl. 5,  
fig. 6.  
Lille Member, Ferne Group, Jurassic, north of Bluff Mountain, Alberta.

*Carbonicola arctica* Lambe

Syntype 10001

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. Bemier, Appendix A, p. 483.  
Carboniferous, beach on point north of Chevallier Bay, Liddon Gulf, Melville Islands,  
Arctic.

*Cardinia* aff. *regularis* Torquem

Hypotypes 13716–13718, a

Frebald, H., 1959, Geol. Surv., Canada, Bull. 49, p. 9, pl. 2, figs. 1–4.

Lower Jurassic, coquina bed on ridge northeast of Parks station, Salmo area, British Columbia.

*Cardiopsis tenuicostata* Whiteaves

Syntypes 4015, 4016

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 307, pl. 40, figs. 1, 2.

Devonian, Dawson Bay 2 miles west of Salt Point and mouth of Red Deer River, Lake Winnipegosis, Manitoba.

'*Cardium*'? *saxitilis* McLearn

Holotype 9509; paratype 9509a

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47–14, App., p. 2, pl. 1, figs. 5, 6.

Grey beds, Upper Triassic, Pardonet Hill, Peace River Foothills, Alberta.

*Cardium tumidulum* Whiteaves

Syntypes 4873, a–f

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 249, pl. 33, figs. 4, a.

'Middle Cretaceous' [Maude Formation, Jurassic], south side Maude Island, Queen Charlotte Islands, British Columbia.

*Cardium (Ethmocardium) ursaniense* Landes

Holotype 9359; paratype 9359a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 156, pl. 5, figs. 10–12.

Pakowki Formation, Upper Cretaceous, Bear Gulch, l.s.d. 3, sec. 6, tp. 2, rge. 9, W. 4th mer., Alberta.

*Caritodens demissa* (Conrad)

Hypotypes 8429, 8433

Foerste, A.F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 269, pl. 1, fig. 10; pl. 3, fig. 11.

Upper Ordovician, Huron River and Chambly, Quebec.

= *Pterinea (Caritodens) demissa*, Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 161, pl. 29, fig. 10; pl. 31, fig. 12.*Cassianella beyrichi* var. *crickmayi* McLearn

Holotype 9431; paratypes 9430, 9432–9434

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 99, pl. 1, figs. 5–9.

Tyaughton Group, Triassic, Tyaughton Creek valley, British Columbia.

*Cassianella lingulata* Gabb

Hypotype 14249

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62–19, p. 26, pl. 12, figs. 1a, b.

Bonanza Group, Upper Triassic, Malksope Inlet, west coast of Vancouver Island, British Columbia.

*Chlamys mcconnelli* McLearn

Holotype 6068; paratype 6067

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 46, pl. 5, figs. 1, 9.

Lille Member, Fernie Group, Jurassic, railway section south slope of Grassy Mountain, Alberta.

*Claraia clarai* (Emmrich)

Hypotype 14196

Tozer, E. T.,

1961, Geol. Surv., Canada, Mem. 316, p. 98, pl. 28, fig. 3.

1962, *ibid.*, Paper 62-19, p. 4, pl. 1, fig. 3.

Sulphur Mountain Member, Spray River Formation, Lower Triassic, Brazeau River, Alberta.

*Claraia stachei* Bittner

Hypotype 14195

Tozer, E. T., 1961, Geol. Surv., Canada, Mem. 316, p. 97, pl. 28, fig. 2.

Blind Fiord Formation, Lower Triassic, south side Bunde Fiord, Axel Heiberg Island, Arctic.

*Claraia stachei* Bittner

Hypotypes 14228, 14229

Tozer, E. T., 1962, Geol. Surv., Canada, Paper 62-19, p. 4, pl. 1, figs. 1, 2.

Grayling Formation, Lower Triassic, north side of Liard River opposite mouth of Toad River, British Columbia.

*Claraia* cf. *stachei* Bittner

Hypotype 17748

McLearn, F. H., 1945, Geol. Surv., Canada, Paper 45-28, App., pl. 1, fig. 1.

Grayling Formation, Lower Triassic, east side of Toad River at junction with Liard River, British Columbia.

*Cleidophorus albionensis* Bolton

Holotype 11594

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, p. 72, pl. 12, fig. 12.

Grimsby Formation, Cataract Group, Lower Silurian, Albion Falls, Ontario.

*Cleidophorus major* Bolton

Holotype 11597

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, p. 73, pl. 12, fig. 10.

Grimsby Formation, Cataract Group, Lower Silurian, road-cut escarpment section, Hamilton, Ontario.

*Cleidophorus minor* Bolton

Holotype 11595

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, p. 73, pl. 12, fig. 11.

Grimsby Formation, Cataract Group, Lower Silurian, road-cut escarpment section, Hamilton, Ontario.

*Cleidophorus wentworthensis* Bolton

Holotype 11596

Bolton, T. E., 1958, Geol. Surv., Canada, Mem. 289, p. 73, pl. 12, fig. 13.

Grimsby Formation, Cataract Group, Lower Silurian, road-cut escarpment section, Hamilton, Ontario.

*Clidophorus brevis* Foerste

Syntypes 8586a, b.

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 141, pl. 16, figs. 9a, b.

Upper Ordovician, below dam at St. Hyacinthe, Quebec.

*Clidophorus postvolutus* Foerste

Syntypes 8476a, b

Foerste, A. F., 1924, Geol. Surv., Canada, Mem. 138, p. 140, pl. 16, figs. 8a, b.

Upper Ordovician, Nicolet River and Yamaska River, 1.5 miles northwest of St. Hugues, Quebec.

*Clidophorus praevolutus* Foerste

Holotype 2079; paratype 8427a, b  
Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 303, pl. 1, figs. 6, 12.

1924, Geol. Surv., Canada, Mem. 138, p. 139, pl. 29, figs. 6a, b, 12.

Upper Ordovician, Richelieu River, near Chambly and Huron River, Quebec.

*Clidophorus tamarackensis* Foerste

Holotype 6770

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 139, pl. 43, fig. 8.

Sheguiandah Formation, Upper Ordovician, north of Tamarack Point, Manitoulin Island, Quebec.

*Clinocardium ciliatum* (Fabricius)

Hypotypes 12555, 12559

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, figs. 11, 15.

Newton Formation, Pleistocene, Drayton Harbor and Semiahmoo Road, NW. 1/4 sec. 11, tp. 40N, rge. 1W, Whatcom co., Washington, U.S.A.

*Clinopistha* (?) *antiqua* Whiteaves

Holotype 7065

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 185, pl. 20, fig. 6.

Ordovician [Red River Formation], Inmost or Birch Island, Lake Winnipeg, Manitoba.

*Clionychia curta* Foerste

Syntypes 8475, 8588a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 162, pl. 26, figs. 4a-c.

Upper Ordovician, St. Hyacinthe, Quebec.

*Clionychia subundata* Ulrich

Hypotype 11584

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 61, pl. 9, fig. 4.

Leray beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Ottawa River.

*Clionychia* (?) *superba* see *Ambonychia superba**Clionychia undata* (Emmons)

Hypotype 11583

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 61, pl. 9, fig. 5.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Clisocolus cordatus* (Meek and Hayden)

Hypotypes 5705, a, b

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 157, pl. 18, figs. 3 [5705b], a [5705], b [5705].

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Colpomya faba* (Emmons)

Hypotype 1166

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 72, pl. 9, fig. 7.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Colpomya faba-pusilla* Foerste

Hypotypes 8430, a

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 276.

1924, Geol. Surv., Canada, Mem. 138, p. 172, pl. 30, fig. 11 [8430a].

Upper Ordovician, Chambly, Quebec.

*Colpomya?* sp.

Fig. spec. 6785

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 174, pl. 43, fig. 3.

Kagawong Formation, Upper Ordovician, 2 miles southwest of Kagawong on road to Gore Bay, Manitoulin Island, Ontario.

*Conocardium blumenbachii* Billings

Syntypes 455, a

Billings, E., 1859, Can. Naturalists Geol., vol. 4, p. 350.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 113, figs. 22a, b [455].

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

=*Euchasma blumenbachi*, Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 55, pl. 11, figs. 1 [455a], 2 [455].

*Conocardium elegantulum* Billings

Holotype 2537

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 53.

Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 232, pl. 29, figs. 5, 6.

Bolton, T.E., 1958, *ibid.*, Mem. 289, p. 62, pl. 12, figs. 8, 9.

Middle Silurian [Chicotte Formation], Southwest Point, Anticosti Island, Quebec.

*Conocardium elegantulum* Billings

Hypotype 11071

Bolton, T.E., 1958, Geol. Surv., Canada, Mem. 289, p. 62, pl. 12, fig. 7.

Warton Member, Amabel Formation, Middle Silurian, road-cut Owen Sound-Chatsworth Highway, Ontario.

*Conocardium immaturum* Billings

Syntype 1180a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 41, fig. 43.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 41, fig. 43.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 143, fig. 83.

Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 63, pl. 8, fig. 5 [lectotype 1180a].

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

*Conocardium ohioense* Meek

Hypotype 14748

Fagerstrom, J.A., 1961, J. Pal., vol. 35, No. 1, p. 36, pl. 12, fig. 4.

Formosa reef limestone, Middle Devonian, road-cut 2 1/2 miles north of Formosa, Ontario.

*Conocardium paquettense* Wilson

Holotype 11585

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 63, pl. 8, fig. 6.

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

*Corbicula dowlingi* McLearn

Holotype 6191

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 125, pl. 23, figs. 1, 2.

Dunvegan Formation, Upper Cretaceous, 5 miles below mouth of Montagneuse River, west bank of Peace River, Alberta.

*Corbicula obliqua* Whiteaves

Syntypes 5510-5513

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 8, pl. 1, figs. 4, a [5510], b [5512].

Upper Cretaceous, Rye-Grass flat, Oldman River; Bow River, 8 miles west of Blackfoot Crossing; upper Belly River, 22 miles above mouth of Waterton River; Little Bow River, opposite mouth of Snake Valley, Alberta.

*Corbicula occidentalis* (Meek and Hayden)

Hypotype 5506

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 7, pl. 1, figs. 3, a.

St. Mary River Formation, Upper Cretaceous, Rye-Grass flat, Oldman River, Alberta.

*Corbicula?* sp.

Fig. spec. 9712

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 11, fig. 8.

Second sandstone, Sikanni Formation, Lower Cretaceous, 10,000 feet east of highway bridge, Buckingham River, British Columbia.

*Corbula confiniensis* Russell

Holotype 9135; paratype 9135a

Russell, L.S., 1937, Trans. Roy. Soc. Can., ser. 3, vol. 31, sec. 4, p. 62, pl. 1, figs. 5-7.

Belly River Formation, Upper Cretaceous, north side Milk River valley near International Border, Alberta.

*Corbula lacteana* Landes

Holotype 9360, a [two valves of one specimen]; paratypes 9360b, c

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 161, pl. 5, figs. 1-4.

Pakowki Formation, Upper Cretaceous, Bear Gulch, l.s.d. 4, sec. 30, tp. 2, rge. 9, W. 4th mer., Alberta.

*Corbula minima* d'Orbigny

Hypotype 5742

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 138, pl. 17, fig. 4a.

Upper Cretaceous, northwest side Hornby Island, British Columbia.

*Corbula munda* McLearn

Holotype 6092; paratype 6093

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 58, pl. 9, figs. 1, 2, 5.

Fernie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

*Corbula* cf. *nematophora* Meek

Hypotypes 9803, 9805, 9806

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 2, figs. 4-6.

Dunvegan Formation, Upper Cretaceous, Flat Creek above junction east fork Pine River, British Columbia and 5 miles below mouth of Montagneuse River, west bank Peace River, Alberta.

Mollusca

*Corbula? onestae* McLearn

Holotype 9032; paratypes 9032a, b, 9033

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 75, pl. 14, figs. 1-4.

Blairmore Group, Lower Cretaceous, Hillcrest and Lyon Creek, Alberta.

*Corbula? palliseri* McLearn

Holotype 9034

McLearn, F.H.,

1929, Nat. Mus. Can., Bull. 58, p. 75, pl. 14, fig. 5.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, p. 1, fig. 2.

Blairmore Group, Lower Cretaceous, Lyon Creek, Alberta.

*Corbula perangulata* Whiteaves

Syntypes 5516, a-c

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 9,  
pl. 1, figs. 5, a [5516], b [5516b]; pl. 2, fig. 1 [5516a].

St. Mary River Formation, Upper Cretaceous, Rye-Grass flat, Oldman River, Alberta.

*Corbula pyriformis* var. *dunveganensis* McLearn

Holotype 9809; paratype 9810

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 2, figs. 1, 2.

Dunvegan Formation, Upper Cretaceous, Peace River about 12 miles above Dunvegan,  
and north bank below Dunvegan about 12 miles above mouth of Vermilion Creek, Alberta.

*Corbula sprouli* Warren

Syntypes 8737, a, b

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, sec. 4, p. 89, pl. 2, figs.  
11-13.

Belly River Formation, Upper Cretaceous, Outlook, Saskatchewan.

*Corbula ursaniensis* Landes

Holotype 9361; paratype 9361a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 161, pl. 5, figs. 5, 6.

Pakowki Formation, Upper Cretaceous, Bear Gulch, l.s.d. 2, sec. 18, tp. 2, rge. 9, W.  
4th mer., Alberta.

*Cosmogoniophora bellula* (Billings)

Hypotype 5631

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 132, pl. 18, fig. 10.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

See *Goniophora bellula*

*Cosmogoniophora bellula* var. *elongata* McLearn

Holotype 5632

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 133, pl. 18, fig. 11.

Stonehouse (?) Formation, Upper Silurian, Arisaig, Nova Scotia.

*Crenella maylandensis* Landes

Holotype 9350; paratype 9350a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 148, pl. 3, figs. 1, 2.

Foremost Formation, Upper Cretaceous, near mouth of Pakowki Coulee, Alberta.

*Crenella* (?) *parvula* Whiteaves

Syntypes 5203, a

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 57,  
pl. 9, fig. 1.

Pale beds, Belly River Formation, Upper Cretaceous, Milk River ridge, Alberta.

*Ctenodonta abrupta* Billings

Syntypes 1173, a, b

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 46, figs. 4a–c.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 46, figs. 4a–c [1173b].

Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 21, pl. 2, figs. 3–5 [holotype 1173b; paratype 1173a].

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

*Ctenodonta abrupta* Billings

Hypotype 11558

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 21, pl. 2, fig. 6.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Ctenodonta albertina* Ulrich

Hypotypes 8470, a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 134, pl. 16, figs. 7a–c.

Ordovician, loose blocks on Snake Island, Lake St. John, Quebec.

*Ctenodonta angela* Billings

Syntypes 570, a–g

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 221, fig. 203 [570].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 221, fig. 203.

Division M [Table Head], Middle Ordovician, Table Head, Newfoundland.

*Ctenodonta astartaeformis* Salter

Syntypes 1172, a–c

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Remains, dec. 1, p. 39, pl. 8, fig. 7 [1172c].

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 175, figs. 164a, b [1172].Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 21, pl. 2, figs. 3–5 [holotype 1172c; paratypes 1172, a, b].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Ctenodonta chambliensis* Foerste

Syntypes 8471, 8472

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 136, pl. 16, figs. 5a, b.

Upper Ordovician, Richelieu River west of dam at Chambly and Nicolet River, Quebec.

*Ctenodonta cingulata* var. *gorönsis* Foerste

Holotype 8484

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 138, pl. 16, fig. 1.

Kagawong Formation, Upper Ordovician, 2 miles northwest of Gore Bay, Manitoulin Island, Ontario.

*Ctenodonta compressa* Ulrich

Hypotype 11557

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 22, pl. 2, fig. 15.

Leray beds, Ottawa Formation, Middle Ordovician, Val Tetreau, Quebec.



*Ctenodonta contracta* Salter

Syntypes 1171, a-n

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Remains, dec. 1, p. 37, pl. 8, figs. 4[1171f], 5[1171b].

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 175, figs. 160a,b.

Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 23, pl. 2, figs. 7-9 [holotype 1171b; paratypes 1171c,k].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Tancrediopsis cuneata*, McAlester, A.L., 1963, Postilla Yale Peabody Mus. Natural Hist, No. 74, p. 5, figs. 17, 19, 20, 34, 35, 39-43, 46, 54, 60, 61, 65-67, 69, 70, 72, 73, 75, 76, 80.

*Ctenodonta hullensis* Wilson

Holotype 11559

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 24, pl. 2, fig. 23.

Sherman Fall beds, Ottawa Formation, Middle Ordovician, C.P.R. cutting south of Ayler road, Hull, Quebec.

*Ctenodonta hyacinthensis* Foerste

Holotype 8586b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 136, pl. 16, fig. 6.

Upper Ordovician, below dam at St. Hyacinthe, Richelieu River, Quebec.

*Ctenodonta iphigenia* Billings

Hypotypes 8479, 8480

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 133, pl. 16, figs. 2a,b.

Kagawong Formation, Upper Ordovician, 2 miles northeast of Gore Bay, north of Manitowaning and Clay Cliffs, Manitoulin Island, Ontario.

*Ctenodonta levata* (Hall)

Hypotypes 11560, a

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 25, pl. 2, figs. 10-13.

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

*Ctenodonta logani* Salter

Syntypes 1181, a-d

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Remains, dec. 1, p. 36, pl. 8, fig. 3 [1181].

Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 25, pl. 2, figs. 24 [paratype 1181a], 25 [holotype 1181].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Ctenodonta lorrainensis* Foerste

Hypotype 2083

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 137.

Upper Ordovician, Richelieu River near Chambly, Quebec.

*Ctenodonta machaeiformis* (Hall)

Hypotype 2708

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

Red beds, Cabot Head Formation, Cataract Group, Lower Silurian, Flamboro West, Ontario.

*Ctenodonta cf. madisonensis* Ulrich

Hypotypes 8482a, c, 8483a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 135, pl. 16, figs. 3a [8483b], b [8483a], 4a [8482a], b [8482b] [*C. cf. madisonensis*].

Sheguiandah Formation, Upper Ordovician, half a mile south of and at Clay Cliffs, Manitoulin Island, Ontario.

*Ctenodonta nasuta* (Hall)

Hypotypes 1182a, e

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Remains, dec. 1, p. 35, pl. 8, figs. 1, 2 [1182a].

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 176, figs. 166a, b [1182e].Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 26, pl. 2, figs. 19, 20 [1182a].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Ctenodonta parvidens* Raymond

Hypotype 6805

Whiteaves, J.F., 1908, Ottawa Naturalist, vol. 22, No. 6, p. 113, pl. 3, fig. 16.

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 27, pl. 2, fig. 18.

Middle Ordovician [Pamelia ? beds], Hogsback, Ottawa, Ontario.

*Ctenodonta silicula* Wilson

Holotype 11561

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, pl. 2, fig. 14.

Sherman Fall beds, Ottawa Formation, Middle Ordovician, Governor Bay, Rockcliffe Park, Ontario.

*Ctenodonta subovata* Whiteaves

Holotype 4417

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 47F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 256, pl. 27, figs. 9, a.

Silurian, portage road at falls Ekwon River, Ontario.

*Ctenostreon gikshanensis* McLearn

Holotype 7700; paratypes 7700a, b

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 91, pl. 19, figs. 3, 4.

Hazelton Group, Jurassic, cliff about 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Cucullaea livingstonensis* McLearn

Holotype 6045

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 39, pl. 2, fig. 7.

Ferne Group, Jurassic, railway-cut south of Grassy Mountain, Alberta.

*Cucullaea ponderosa* Whiteaves

Holotype 6196

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 294, pl. 38, figs. 1, a.

'Cretaceous' [Yakoun Formation, Upper Jurassic], east end of Maude Island, Queen Charlotte Islands, British Columbia.

*Cucullaea (Idonearca) truncata* Gabb

Hypotype 5682

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 165, pl. 19, fig. 2.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Cucullaea* sp.

Fig. specs. 13366, 13373, 13374

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 12, pl. 2, fig. 6; pl. 3, figs. 7, 8.  
Wilkie Point Formation, Jurassic, 3 3/4 miles northeast of Mould Bay weather station, Prince Patrick Island, Arctic.

*Cuneamya arata* (Hall)

Hypotypes 5452, 5453

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 97, pl. 10, figs. 13, 27.  
Stonehouse Formation, Upper Silurian, Stonehouse Creek and coast section, Arisaig, Nova Scotia.

*Cuneamya embrunensis* Wilson

Holotype 13433

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 16, pl. 1, fig. 10.  
Lowville beds, Ottawa Formation, Middle Ordovician, about 1/2 mile south of river at Embrun, Ontario.

*Cuneamya scapha* var. *brevior* Foerste

Holotype 8407

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 307, pl. 2, fig. 12.

1924, Geol. Surv., Canada, Mem. 138, p. 132, pl. 30, fig. 12.

Upper Ordovician, Huron River, near St. Jean Baptiste, Quebec.

*Cuneamya* sp.

Fig. spec. 11555

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 17, pl. 1, fig. 11.  
Cobourg beds, Ottawa Formation, Middle Ordovician, dam at Alexandria, Ontario.

*Cuspidaria suciensis* Whiteaves

Holotype 5900

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 376, pl. 46, fig. 2.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Cuspidaria variabilis* Warren

Syntypes 8735, a

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, sec. 4, p. 88, pl. 2, figs. 8, 9.

Bearpaw Formation, Upper Cretaceous, on Notukeu Creek near Ponteix and 3 miles west of Tilney, Saskatchewan.

*Cymatocyclas diocis* Dall

Holotype 4380

Dall, W.H., 1924, in O'Neill, J.J., Rept. Canadian Arctic Expedition, 1913-18, vol. 11, pt. A, p. 28A, pl. 35, fig. 9.

Tertiary, 12 miles up Brock River, 15 miles south of Cape Lyon, District of Mackenzie.

*Cymatonata lenior* Foerste

Holotype 8422

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 290, pl. 1, fig. 9.

1924, Geol. Surv., Canada, Mem. 138, p. 176, pl. 29, fig. 9.

Upper Ordovician, Huron River, Quebec.

*Cymatonata pholadis* (Conrad)

Hypotype 2085

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 291, pl. 1, fig. 14.

1924, Geol. Surv., Canada, Mem. 138, p. 175, pl. 29, fig. 14.

Upper Ordovician, Chambly, Quebec.

*Cymbophora ashburneri* see *Mactra* (*Cymbophora?*) *warrenana**Cymbophora ashburnerii* (Gabb)

Hypotype 5733

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 141,

pl. 17, fig. 8.

Cretaceous, Sucia Island, Washington, U.S.A.

*Cypricardella acadica* Bell

Hypotype 7615

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 170, pl. 30, figs. 5, a, b.

Mississippian, Avon River or Scotch Village, Nova Scotia.

*Cypricardella bellistriata* (Conrad)

Hypotypes 4021, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 308,

pl. 40, figs. 4 [4021a], 5 [4021].

Devonian, Point Wilkins, Dawson Bay, Lake Winnipegosis, Manitoba.

*Cypricardella producta* Whiteaves

Holotype 4012

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 309,

pl. 40, fig. 8.

Devonian, mouth of Steep Rock River, Dawson Bay, Lake Winnipegosis, Manitoba.

*Cypricardinia distincta* Billings

Syntypes 3320, a-c

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 56, figs.

26 [3320], 27 [3320a].

Devonian [Grande Grève Formation], Indian Cove, Gaspé, Quebec.

*Cypricardinia planulata* (?) Conrad var.

Syntype 4010

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 309,

pl. 40, fig. 3.

Devonian, Devils Point, Lake Winnipegosis, Manitoba.

*Cypricardinia* sp.

Fig. specs. 14888, 14889

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Br., Publ. 59-6, p. 65, pl. 11, figs. 7a, b, 8a-c.

Dawson Bay Formation, Middle Devonian, 2 miles west of Nina Lake along road to The Narrows, Lake Manitoba, sec. 24, tp. 24, rge. 10, W. Prin. mer., and Snake Island, Lake Winnipegosis, Manitoba.

*Cyprimeria lens* Gabb

Hypotypes 5723, 5724, a-c

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 152, pl. 17, figs. 15, a.

Cretaceous, Hornby and Sucia Islands, Strait of Georgia, British Columbia and Washington, U.S.A.

=*Flaventia hornbyensis*, Anderson, F.M., 1958, Geol. Soc. Amer., Mem. 71, p. 134.

*Cyprina* (?) *anthracicola* Whiteaves

Syntype 5903

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils. vol. 1, pt. 5, p. 382, fig. 26.

Cretaceous, Number 1 shaft, Nanaimo, British Columbia.

*Cyprina denmanensis* Whiteaves

Holotype 5902

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 380, fig. 25.

Cretaceous, west side of Denman Island, Strait of Georgia, British Columbia.

*Cyprina?* cf. *iddingsi* Stanton

Hypotype 6094

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 57, pl. 9, fig. 3. Fernie Group, Jurassic, railway-cut south slope of Grassy Mountain, Alberta.

*Cyprina occidentalis* Whiteaves

Holotype 5000

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 227, text fig. 10.

'Cretaceous' [Yakoun Formation, Upper Jurassic], south side of Alliford Bay, Queen Charlotte Islands, British Columbia.

*Cyprina ovata* var. *alta* Whiteaves

Syntypes 5347, a

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 40, pl. 5, fig. 3 [5347].

Upper Cretaceous, St. Mary River near mouth Belly River, Alberta.

*Cyprina subtrapeziformis* Whiteaves

Syntypes 5261, a-j

Whiteaves, J.F.,

1887, Geol. Surv., Canada, Ann. Rept., n.ser., vol. 2, p. 155E.

1889, *ibid.*, Contr. Can. Pal., vol. 1, pt. 2, p. 176, pl. 24, figs. 2[5261], a[5261a], b[5261b]

Upper Cretaceous, Battle River, tp. 46, rge. 4, W. 4th mer., Alberta.

*Cyrtodonta acutumbona* Billings

Holotype 2293

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 49.

Upper Ordovician [Ellis Bay Formation], one mile east of Junction Cliff, Anticosti Island, Quebec.

= *Vanuxemia acutumbona*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 227, pl. 24, fig. 14.*Cyrtodonta affinis* Ulrich

Hypotype 13434

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 30, pl. 3, fig. 7.

Lowville beds, Ottawa Formation, Middle Ordovician, quarry west side Merivale Road, Ottawa, Ontario.

*Cyrtodonta affinis* var. *minuta* Wilson

Holotype 11563, paratypes 11563a,b

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 30, pl. 3, fig. 6.

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

*Cyrtodonta angusta* Wilson

Holotype 11564; paratype 11564a

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 31, pl. 3, figs. 1, 2.

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

*Cyrtodonta?* *anticostiensis* Billings

Syntypes 2090, a-f

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 14.

Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 226, pl. 24, fig. 11 [2090].

Upper Ordovician [English Head Formation], English Head, Anticosti Island, Quebec.

*Cyrtodonta breviscula* Billings

Holotype 1051

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 446.

Whiteaves, J.F., 1905, Ottawa Naturalist, vol. 22, No. 6, p. 107, pl. 3, fig. 3.

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 31, pl. 3, figs. 4, 5.

Middle Ordovician [Pamelia beds], Skead Road, Ottawa, Ontario.

*Cyrtodonta canadensis* Billings

Syntypes 1177, a, 1179

Billings, E.,

1858, Can. Naturalist Geol., vol. 3, p. 434, figs. 9 [1179], 10 [1177], 11 [1177a].

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 182, figs. 8-11.

Logan, W.E., 1863, "Geology of Canada" *ibid.*, Rept. Prog., p. 148, fig. 106 [1177].Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 32, pl. 5, figs. 15, 16 [holotype 1177; paratype 1177a].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Ottawa River; Pointe Claire, Quebec, or Fourth Chôte of Bonnechère River, Grattan tp., Ontario.

= *Cyrtodonta grattanensis*, Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 35, pl. 3, figs. 19, 20 [holotype 1179].*Cyrtodonta caplanensis* Northrop

Holotype 9157

Northrop, S.A., 1939, Geol. Soc. Amer., Sp. Paper 21, p. 198, pl. 17, fig. 27.

Clemville Formation, Middle Silurian, St Alphonse-de-la-Rivière Caplan, Quebec.

*Cyrtodonta clochensis* Foerste

Syntypes 8410, a

Foerste, A.F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 297, pl. 2, figs. 6a, b.  
Red shales, Middle Ordovician, a few feet above the railroad level, along western shore of  
La Cloche Peninsula, Ontario.

*Cyrtodonta cordiformis* Billings

Syntype 1674

Billings, E.,

1858, Can. Naturalist Geol., vol. 3, p. 437.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 185.

Logan, W.E., 1863, "Geology of Canada", ibi d., Rept. Prog., p. 147, figs. 103a, b.  
Middle Ordovician, St. Josephs Island, Ontario.

*Cyrtodonta(?) cornwallia* Wilson

Holotype 6661

Wilson, A.E.,

1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 401, pl. 6, fig. 3.

1956, Geol. Surv., Canada, Bull. 28, p. 33, pl. 3, fig. 3.

Sherman Fall beds, Middle Ordovician, con. 5, Osnabruck tp., Ontario.

*Cyrtodonta exigua* Foerste

Syntypes 8453a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 144, pl. 19, figs. 3a-d.  
Upper Ordovician, at top of the hill along an east and west road, 2 miles northwest of  
Gore Bay, Manitoulin Island, Ontario.

*Cyrtodonta glabella* (Ulrich)

Hypotype 11535

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 33, pl. 3, fig. 14.

Leray beds, Ottawa Formation, Middle Ordovician, Val Tetreau, Quebec.

*Cyrtodonta grattanensis* see *Cyrtodonta canadensis*

*Cyrtodonta harrietta* Billings

Syntype (?) 2089

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 149, fig. 129.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 149, fig. 129.

Twenhofel, W.H., 1928, ibi d., Mem. 154, p. 227, pl. 24, fig. 10 [holotype].

Upper Ordovician [English Head Formation], English Head, Anticosti Island, Quebec.

*Cyrtodonta hindi* Billings

Holotype 2080

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 151, figs. 131a, b.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 151, figs. 131a, b.

Logan, W.E., 1863, "Geology of Canada", ibid., Rept. Prog., p. 214, figs. 218a, b.  
Upper Ordovician, near Toronto, Ontario.

=*Whitella hindi*, Foerste, A.F., 1924, ibi d., Mem. 138, p. 154, pl. 21, figs. 4a-c.

*Cyrtodonta huronensis* Billings

Syntypes 1176, a-e

Billings, E.,

1858, Can. Naturalist Geol., vol. 3, p. 432, figs. 3, 4.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 180, figs. 3, 4.

Logan, W.E., 1863, "Geology of Canada", ibid., Rept. Prog., p. 147, figs. 102a, b.

Wilson, A.E., 1956, ibi d., Bull. 28, p. 35, pl. 3, figs. 15, 16 [1176,a].

Middle Ordovician, island off Point Palladeau, Lake Huron, Ontario.

*Cyrtodonta kingstonensis* see *Cyrtodonta* sp.

*Cyrtodonta leucothea* Billings

Syntypes 1188, a, b

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 46, fig. 49.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 46, fig. 49 [1188].

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 143, fig. 82.

Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 36, pl. 3, figs. 8–10 [holotype 1188; paratypes 1188a, b].

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

*Cyrtodonta mediocris* Wilson

Holotype 13435

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 36, pl. 4, fig. 11.

Leray beds, Ottawa Formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario.

*Cyrtodonta modesta* Wilson

Holotype 1183a; paratype 1183b

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 37, pl. 3, fig. 18.

Leray beds, Ottawa Formation, Middle Ordovician, La petite Chaudière, Ontario.

*Cyrtodonta obtusa* (Hall)

Hypotypes 1187b, e

Billings, E.,

1858, Can. Naturalist Geol. vol. 3, p. 436, figs. 13, 14 [1187b].

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 184, figs. 13, 14.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 147, figs. 101a, b.

Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 37, pl. 5, figs. 13, 14.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Cyrtodonta ovalis* Foerste

Holotype 8499

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 143, pl. 19, fig. 2.

Kagawong Formation, Upper Ordovician, 4 miles southwest of Little Current, Manitoulin Island, Ontario.

*Cyrtodonta oviformis* Ulrich

Hypotype 11536

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 38, pl. 3, fig. 17.

Leray beds, Ottawa Formation, Middle Ordovician, La petite Chaudière, Quebec.

*Cyrtodonta* ? *planumbona* Wilson

Holotype 6223; paratype 6223a

Wilson, A.E.

1921, Geol. Surv., Canada, Bull. 33, p. 52, pl. 4, figs. 1, 2.

1956, *ibid.*, Bull. 28, p. 39, pl. 4, figs. 14, 15.

Middle Ordovician [Pamelia beds], MacLaren Landing, Ottawa, Ontario.

*Cyrtodonta* ? *plebeia* Billings

Syntypes 2091, a–c

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 14, figs. 2a–c [2091a].

Upper Ordovician [English Head Formation], Carleton Point, Anticosti Island, Quebec.

=*Whiteilla plebeia*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 228, pl. 24, figs. 15, 16 [holotype 2091a].



Mollusca

*Cyrtodonta ponderosa* Billings

Syntype 2081

Billings, E.

1862, "New Species of Lower Silurian Fossils", p. 150.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 150.

Foerste, A.F., 1924, *ibid.*, Mem. 138, p. 142, pl. 18, figs. 1a-c; pl. 38, figs. 1a,b [type specimen].

Upper Ordovician, Cape Smyth, Manitoulin Island, Ontario.

*Cyrtodonta ponderosa* Billings

Hypotype 8552

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 142, pl. 18, figs. 2a-c.

Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Cyrtodonta ponderosa* var. *perobliqua* Foerste

Syntypes 8498a-d

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 143, pl. 18, fig. 3; pl. 19, figs. 1a-c.

Upper Ordovician, 2 miles southwest of Kagawong on road to Gore Bay, Manitoulin Island, Ontario.

*Cyrtodonta* ? *pudica* Wilson

Holotype 13436

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 39, pl. 5, fig. 12.

Lowville beds, Ottawa Formation, Middle Ordovician, in quarry west of Merivale Road, Ottawa, Ontario.

*Cyrtodonta rocklandensis* Wilson

Holotype 11537; paratype 11537a

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 39, pl. 4, fig. 7.

Leray beds, Ottawa Formation, Middle Ordovician, 10 feet above base at Rockland, Ontario.

*Cyrtodonta rugosa* Billings

Syntypes 1186,a,b

Billings, E.

1858, Can. Naturalist Geol., vol. 3, p. 432, figs. 1, 2 [1186].

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 179, figs. 1, 2.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 148, figs. 104a,b.

Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 40, pl. 4, figs. 5, 6 [holotype 1186; paratypes 1186a, b].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Cyrtodonta septentrionis* Hume

Syntypes 9083,a

Hume, G.S., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 63, pl. 13, figs. 5a-c.

Upper Ordovician, north arm Great Slave Lake, District of Mackenzie.

*Cyrtodonta simplex* Wilson

Holotype 11565; paratype 11565a

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 41, pl. 4, figs. 12, 13.

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

*Cyrtodonta spinifera* Billings

Syntypes 1185, a-c

Billings, E.,

1858, *Can. Naturalist Geol.*, vol. 3, p. 435, fig. 12 [1185b].1858, *Geol. Surv., Canada, Rept. Prog.* 1857, p. 183, fig. 12.Wilson, A.E., 1956, *ibid.*, *Bull.* 28, p. 41, pl. 4, figs. 2-4 [holotype 1185b; paratypes 1185a, c].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Cyrtodonta* cf. *subangulata* (Hall)

Hypotype 11566

Wilson, A.E., 1956, *Geol. Surv., Canada, Bull.* 28, p. 42, pl. 4, fig. 10.

Leray beds, Ottawa Formation, Middle Ordovician, La petite Chaudière, Quebec.

*Cyrtodonta subcarinata* Billings

Syntype 1184

Billings, E.,

1858, *Can. Naturalist Geol.*, vol. 3, p. 433, figs. 5, 6.1858, *Geol. Surv., Canada, Rept. Prog.* 1857, p. 181, figs. 5, 6.Logan, W.E., 1863, "Geology of Canada", *ibid.*, *Rept. Prog.*, p. 148, fig. 105.Wilson, A.E., 1956, *ibid.*, *Bull.* 28, p. 43, pl. 4, figs. 8, 9 [holotype 1184].

Middle Ordovician [Leray beds], Pointe Claire, Quebec.

*Cyrtodonta* ? *subquadrata* Wilson

Holotype 11567; paratype 11568

Wilson, A.E., 1956, *Geol. Surv., Canada, Bull.* 28, p. 43, pl. 4, fig. 1.

Lowville and Leray beds, Ottawa Formation, Middle Ordovician, lots 3 and 4, con. III, R.F., Gloucester tp., Ontario.

*Cyrtodonta?* *ungulata* Billings

Holotype 2108

Billings, E., 1866, *Geol. Surv., Canada, Cat. Sil. Fossils Anticosti*, p. 15, figs. 3a, b.

Upper Ordovician [English Head? Formation], Macasty Hill, Anticosti Island, Quebec.

=*Vanuxemia ungulata*, Twenhofel, W.H., 1928, *ibid.*, *Mem.* 154, p. 227, pl. 24, figs. 12, 13.*Cyrtodonta* sp.

Fig. spec. 5392

Wilson, A.E., 1916, *Ont. Bur. Mines*, vol. 25, pt. 3, pl. 1, fig. 8.

Pamelia beds, Middle Ordovician, Shannonville, Ontario.

=*Cyrtodonta kingstonensis*, Wilson, A.E., 1956, *Geol. Surv., Canada, Bull.* 28, p. 35,

pl. 3, fig. 11 [holotype 5392].

*Cytherdon?* *placidus* Billings

Holotype 3128

Billings, E., 1874, *Geol. Surv., Canada, Palaeoz. Fossils*, vol. 2, pt. 1, p. 137, pl. 8, fig. 10.

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

=*Arisaigia placida*, McLeam, F.H., 1924, *ibid.*, *Mem.* 137, p. 109, pl. 14, fig. 13.*Cytherdon?* *placidus* var. Billings

Syntypes 3127, a-d

Billings, E., 1874, *Geol. Surv., Canada, Palaeoz. Fossils*, vol. 2, pt. 1, p. 138, pl. 8, fig. 11 [3127].

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

Mollusca

*Cytherdon? socialis* Billings

Syntypes 3126, a–e

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 138, pl. 8, fig. 12 [3126].

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Daonella elegans* McLearn

Holotype 9537

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47–24, App., p. 1, pl. 4, fig. 2.

Tozer, E.T., 1962, *ibid.*, Paper 62–19, p. 19, pl. 6, fig. 4.

'Dark siltstones', Triassic, 6 miles west of Mount Withrow, Sikanni Chief River, British Columbia.

*Daonella frami* Kittl

Topotype 14205; hypotypes 14206, 14207

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 103, pl. 29, figs. 1–3.

Lower shale member, Blaa Mountain Formation, Middle Triassic, Blaa Mountain, Ellesmere Island; Schei Point Formation, Middle Triassic, Bjerne Peninsula, Ellesmere Island and north coast Table Island, Arctic.

*Daonella nitanae* McLearn

Holotype 8773

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 7, p. 96, pl. 1, fig. 11.

1947, Geol. Surv., Canada, Paper 47–24, App., pl. 4, fig. 1.

Tozer, E.T., 1962, *ibid.*, Paper 62–19, p. 14, pl. 6, fig. 3.

'Dark siltstones', Triassic, Beattie Hill, Peace River Foothills, British Columbia.

*Dellopecten occidentalis* var. *latiformis* Shimer

Holotype 4863, a [mould and cast]; paratype 4863b

Shimer, H.W., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 76, pl. 7, figs. 11a, b, 12.

'Permian', Lake Minnewanka area, Alberta.

*Dicerocardium* n. sp. near *himilayense* Stol.

Hypotype 9622

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 37, pl. 2, fig. 5.

Lewes River Group, Triassic, Laberge area, Yukon.

*Dicranodonta dowlingi* McLearn

Holotype 5395; paratype 5407

McLearn, F.H.,

1919, Geol. Surv., Canada, Mus. Bull. 29, p. 9, pl. 3, figs. 3–5.

1945, *ibid.*, Paper 44–17, 2nd Edition, pl. 8, figs. 1 [5407], 2 [5395].

Peace River Formation, Lower Cretaceous, Peace River 2 1/2 miles above mouth, Alberta.

*Edmondia hartti* Dawson

Hypotypes 7548, a, 7611

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 155, pl. 26, figs. 21–23.

Mississippian, Avon River bridge, Windsor, Nova Scotia.

*Edmondia rudis* M'Coy

Hypotypes 4360, 7543, a, 7609, 7610

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 155, pl. 25, figs. 14–18.

Mississippian, Brookfield and Miller's Quarry, Windsor, Nova Scotia.

*Edmondia? vetusta* Whiteaves

Syntypes 7068, a-n, 7069a-g

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 187, pl. 20, fig. 8 [7068].

Ordovician [Red River Formation], Inmost Island, Kinow Bay, Lake Winnipeg, Manitoba.

*Elliptio salissiensis* Russell

Holotype 10101

Russell, L.S., 1952, Nat. Mus. Can., Bull. 126, p. 126, pl. 17, figs. 1-3; text fig. 5. Kishenehn Formation, Upper Eocene, Flathead Valley, British Columbia.

*Endodesma gesneri* see *Modiolopsis gesneri**Endodesma minusculum* Wilson

Holotype 11590

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 78, pl. 8, fig. 7. Sherman Fall beds, Ottawa Formation, Middle Ordovician, Brewery Creek, Hull, Quebec.

*Endodesma orthonotum* (Meek & Worthen)

Hypotype 13441

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 79, pl. 8, fig. 9. Leray beds, Ottawa Formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario.

*Endodesma sinclairi* Wilson

Holotype 11591

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 79, pl. 8, fig. 8. Leray beds, Ottawa Formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario.

*Entolium aucellarum* Crickmay

Holotype 9695

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 52, pl. 14, fig. 3. Peninsula Group, Lower Cretaceous, west side of small bay on southwest shore of the Peninsula, Harrison Lake, British Columbia.

*Entolium hertleini* Crickmay

Holotype 9693; paratype 9700

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 52, pl. 14, fig. 1. Jurassic, at an altitude of 2,100 feet on a small brook which enters Deer Creek from the north at 1,700 feet, Harrison Lake area, British Columbia.

*Entolium irenense* McLearn

Holotype 7410; paratype 7411

McLearn, F.H., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 144, pl. 1, figs. 9, 10. 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, fig. 15 [7410]. Peace River Formation, Lower Cretaceous, 4 miles above Tar Island, Peace River; Clearwater Formation, 6 miles above Point Brule, Athabasca River, Alberta.

*Entolium leachi* McLearn

Holotype 6073; paratype 6074

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 48, pl. 5, figs. 3, 11. Fernie Group, Jurassic, drift between the two cement quarries at Blairmore and railway-cut south slope Grassy Mountain, Alberta.

Mollusca

*Entolium vulcanicum* Crickmay

Holotype 9694

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 52, pl. 14, fig. 2.  
Jurassic, 1,820 yards north of Harrison River point, west shore of Harrison Lake, British  
Columbia.

*Euchasma blumenbachi* see *Conocardium blumenbachii*

*Euchasma blumenbachia* (Billings)

Hypotype 572

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 361, figs. 348a, b.  
Divisions G, H [St. George], Lower Ordovician, Port aux Choix, Newfoundland.

*Fusconaia danae* (Meek and Hayden)

Hypotype 13475

Liberty, B.A., 1953, Proc. Geol. Assoc. Can., vol. 6, pt. 1, p. 52, pl. 1, fig. 1.  
Belly River [Foremost] Formation, Upper Cretaceous, St. Mary River-Todd Creek, south-  
east corner NE. 1/4 sec. 3, tp. 2, rge. 17, W. 4th mer., Alberta.

*Fusconaia deweyanus* (Meek and Hayden)

Hypotype 5493e

Liberty, B.A., 1953, Proc. Geol. Assoc. Can., vol. 6, pt. 1, p. 54, pl. 1, fig. 5.  
Upper Cretaceous, Bow River near East Arrowwood River, Alberta.

*Fusconaia subspatulatus* (Meek and Hayden)

Hypotype 5496

Liberty, B.A., 1953, Proc. Geol. Assoc. Can., vol. 6, pt. 1, p. 53, pl. 1, fig. 4.  
Upper Cretaceous, Little Bow River, Alberta.

*Gervillia ferrieri* McLeam

Holotype 6046; paratypes 6047, 6048

McLeam, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 40, pl. 1,  
fig. 1; pl. 2, fig. 6; pl. 3, fig. 10.

Fernie Group, Jurassic, talus in creek north of Blairmore; shale quarries; and from drift  
between two cement quarries at Blairmore, Alberta.

*Gervillia?* cf. *inflata* Schaff

Hypotype 9631

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 42, pl. 4, fig. 2.  
Laberge Group, Jurassic, Laberge area, Yukon.

*Gervillia newcombei* Whiteaves

Holotype 5983

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 297,  
pl. 39, fig. 1.

'Cretaceous' [Yakoun Formation, Upper Jurassic], north side Maude Island, Queen  
Charlotte Islands, British Columbia.

*Gervillia recta* var. *borealis* Whiteaves

Syntypes 5247, 5248, 5278

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 35,  
pl. 4, figs. 2 [5247], a [5248], b [5276].

Upper Cretaceous, Belly River near and west of mouth of St. Mary River; South Saskatchewan  
River opposite Swift Current Creek; and Lome Crossing of Red Deer River, Alberta.

*Gervillia stantoni* McLearn

Holotype 5669

McLearn, F.H., 1920, Can. Field-Naturalist, vol. 34, No. 3, p. 55, pl., fig. 1.

Badheart sandstone, Smoky River Formation, Upper Cretaceous, west bank of Smoky River about 2 1/2 miles below Puskwaskau River, Alberta.

*Gervillia* n. sp. (a)

Holotype 9630

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 41, pl. 4, fig. 1.

Laberge Group, Jurassic, Laberge area, Yukon.

*Glossites manitobensis* Whiteaves

Holotype 4014,a [Cast and mould]

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 310, pl. 40, fig. 7.

Devonian, Pentamerus Point, Lake Manitoba, Manitoba.

*Goniomya* aff. *heteropleura* Agassiz

Hypotype 13719

Frebold, H., 1959, Geol. Surv., Canada, Bull. 49, p. 10, pl. 2, fig. 5.

Lower Jurassic, coquina bed on ridge northeast of Parks station, Salmo area, British Columbia.

*Goniomya matonabbei* McLearn

Holotype 7415

McLearn, F.H., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 147, pl. 1, fig. 8.

Clearwater formation, Lower Cretaceous, talus just below Pteropod Creek, Athabasca River, Alberta.

*Goniomya* cf. *v-scripta* (Sowerby)

Hypotypes 13396, 13397

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 14, pl. 6, figs. 8, 9.

Wilkie Point formation, Jurassic, 1 mile east of Wilkie Point, Prince Patrick Island, Arctic.

*Goniophora bellula* Billings

Syntypes 3124,a-c

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 136, pl. 8, fig. 9 [3124].

Upper Silurian [Stonehouse formation], Arisaig, Nova Scotia.

= *Cosmogoniophora bellula*, McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 132, pl. 18, fig. 13 [holotype 3124].*Goniophora carinata* (Hall)

Hypotype 1167

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 76, pl. 9, fig. 20.

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

*Goniophora consimilis* Billings

Syntype 3125

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 135, pl. 8, fig. 8.

McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 129, pl. 17, fig. 1 [holotype].

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Goniophora consimilis* Billings

Hypotypes 5627, 5628

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 129, pl. 18, figs. 1–3; pl. 29, fig. 10.

Stonehouse Formation, Upper Silurian, Stonehouse Creek, Arisaig, Nova Scotia.

*Goniophora crassa* Whiteaves

Syntypes 2828,a, 2829,a–c, 2830,a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 9, pl. 2, figs. 3 [2828a],a [2829],b [2829a],c [2828].

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

*Goniophora mediocris* Billings

Syntypes 3314,a

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 50, fig. 21 [3314a].

Devonian [Grande Greve Formation], Indian Cove and Grande Greve, Gaspé, Quebec.

*Goniophora mediocris* Billings

Hypotype 3123

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 137, pl. 9, fig. 1.

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Goniophora mediocris* Billings

Hypotype 5629

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 130, pl. 18, figs. 4, 5; pl. 29, fig. 13.

Stonehouse (?) Formation, Upper Silurian, Arisaig, Nova Scotia.

*Goniophora ottawaensis* Wilson

Holotype 11589

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 76, pl. 9, figs. 21, 22.

Cobourg beds, Ottawa Formation, Middle Ordovician, Fifth Avenue, Ottawa, Ontario.

*Goniophora perangulata* Hall var.

Syntypes 3959, 3972

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 299, pl. 39, figs. 1,a.

Devonian, Dawson Bay, two miles west of Salt Point and on one of the small islands east of Salt Point, Lake Winnipegosis, Manitoba.

*Goniophora tethys* see *Sanguinolites tethys*

*Goniophora transiens* Billings

Syntypes 3122,a hypotype 5630

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 134, pl. 8, fig. 7 [3312].

McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 131, pl. 18, figs. 7 [3122a], 8 [5630]; pl. 29, fig. 8 [3122a].

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Grammatodon* (?) *iltasyoucoensis* Whiteaves

Holotype 4770

Whiteaves, J.F., 1878, Geol. Surv., Canada, Rept. Prog. 1876–77, p. 153.

Cretaceous, Iltasyouco River (Fraser River), British Columbia.

*Grammatodon inornatus* (Meek and Hayden)

Hypotypes 4914,a-d, 4915

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 235, pl. 31, figs. 8 [4915], a.

'Cretaceous' [Yakoun Formation, Upper Jurassic], south side of Alliford Bay; bay east of Alliford Bay; and north shore of Cumshewa Inlet, Queen Charlotte Islands, British Columbia.

= *Arca* (*Nemodon*) *cumshewensis*, Whiteaves, J.F., 1900, *ibid.*, Mesoz. Fossils, vol. 1, pt. 4, p. 294.= *Parallelodon* (*Nanonavis*) *cumshewensis*, Reinhart, P.W., 1937, *J. Pal.*, vol. 11, No. 3, p. 173 [lectotype 4915; paratypes 4914a-d].*Grammysia acadica* Billings

Syntypes 3130, a, b

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 140, pl. 9, figs. 4 [3130], a [3130b].

Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Grammysia arcuata* ? Conrad var.

Syntypes 3713, 3714

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 116, pl. 15, fig. 4 [3713].

Hamilton Formation, Middle Devonian, Bosanquet tp. and near Thedford, Ontario.

*Grammysia canadensis* Billings

Syntype 3315

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 51, pl. 4, fig. 3.

Devonian [Gaspé sandstone], Gaspé, Quebec.

*Grammysia remota* Billings

Holotype 3129; hypotype 5456

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 139, pl. 9, fig. 2.

McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 94, pl. 11, figs. 1-4.

Upper Silurian [Stonehouse Formation], mouth of Stonehouse Creek, Arisaig, Nova Scotia.

*Grammysia rustica* Billings

Syntypes 3132,b

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 139, pl. 9, fig. 3.

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Grammysia* ? *speciosa* see *Orthononta* ? *speciosa**Grammysia triangulata* (Salter)

Hypotype 5455

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 93, pl. 11, fig. 5.

Stonehouse ? Formation, Upper Silurian, Arisaig, Nova Scotia.

*Grammysia unilira* McLearn

Holotype 5454

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 92, pl. 10, fig. 25.

McAdam Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.



Mollusca

*Gresslya* aff. *abducta* (Phillips)

Hypotype 13425

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 14, pl. 16, fig. 4.

Wilkie Point Formation, Jurassic, 1 mile east of Wilkie Point, Prince Patrick Island, Arctic.

*Gresslya* cf. *rotundata* (Phillips)

Hypotype 13367

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 14, pl. 2, fig. 7.

Wilkie Point Formation, Jurassic, west of Disappointment Point, west side of Intrepid Inlet, Prince Patrick Island, Arctic.

*Gryphaea cadominensis* Warren

Hypotype 12894

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, pl. 28, fig. 3.

Rock Creek Member, Fernie Group, Middle Jurassic, Whitehorse River about 4 miles north of Mountain Park, Alberta.

*Gryphaea chakii* McLearn

Holotype 8770

McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 7, p. 96, pl. 1, fig. 8.

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 20, pl. 9, fig. 6.

Schooler Creek Formation, Triassic, Pardonet Hill, Peace River Foothills, British Columbia.

*Gryphaea impressimarginata* McLearn

Holotype 6060; paratypes 6061-6063

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 44, pl. 4, figs. 1-5.

Fernie Group, Jurassic, railway-cut south slope Grassy Mountain; talus in creek north of Blairmore; north bank Castle River; and drift between the two cement quarries at Blairmore, Alberta.

*Gryphaea impressimarginata* McLearn

Hypotype 12909

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, pl. 40, fig. 3.

Fernie Group, Upper Jurassic, near Adanac Strip Mine, Alberta.

*Gryphaea nebrascensis* Meek & Hayden

Hypotypes 4891, 4892

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 244, pl. 32, figs. 2, b [4892], a [4891].

'Cretaceous' [Yakoun Formation, Upper Jurassic], Alliford Bay and east end of Maude Island, Queen Charlotte Islands, British Columbia.

=*Gryphaea persimilis*, Whiteaves, J.F., 1900, *ibid.*, Mesoz. Fossils, vol. 1, pt. 4, p. 300.

*Gryphaea nebrascensis* Meek and Hayden

Hypotype 13906

Frebold, H., 1959, Geol. Surv., Canada, Bull. 53, p. 28, pl. 8, fig. 6.

Fernie Group, Upper Jurassic, Rocky River, Miette area, Alberta.

*Gryphaea rockymontana* Warren

Hypotypes 12870, 12871

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, pl. 15, figs. 3, 4.

Fernie Group, Lower Jurassic, Crow Phosphate Mine, British Columbia.

*Haidaia billhookensis* Crickmay

Holotype 9681, a [mould and plaster cast]

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 49, pl. 12, fig. 1.

Upper Jurassic, talus at 3,400 foot elevation on Billhook Creek, Harrison Lake, British Columbia.

*Haidaia packardi* Crickmay

Holotype 9682, a [mould and plaster cast]; paratype 9686

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 50, pl. 12, figs. 2, 3.

Upper Jurassic, talus at 3,400 foot elevation on Billhook Creek, Harrison Lake, British Columbia.

*Haidaia statluensis* Crickmay

Holotype 9673c, d [mould and plaster cast]; paratypes 9673, a, b [moulds and plaster casts]

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 50, pl. 12, figs. 4-6.

Upper Jurassic, 3,600 foot elevation, Billhook Creek, Harrison Lake, British Columbia.

*Halobia occidentalis* Whiteaves

Holotype 4722; paratypes 4722a, b

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 135, pl. 17, figs. 5 [4722], 6 [4722a].

Triassic [Toad Formation], about 25 miles below Devil's Portage, Liard River, British Columbia.

= *Pseudomonotis occidentalis*, Tozer, E.T., 1961, *ibid.*, Mem. 316, p. 98, pl. 28, figs. 10 [4722], 12 [4722a].*Halobia pacalis* McLearn

Holotypes 8804; paratype 8800

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 111, pl. 3, figs. 7, 8.

Triassic [Pardonet beds], talus east of Cascade Creek, Pardonet Hill and Twin Spruce Gully, West Brown Spur, Peace River Foothills, British Columbia.

*Halobia symmetrica* var. *lata* McLearn

Holotype 8809

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 111, pl. 3, fig. 1.

Triassic [Pardonet beds], West Brown Spur, Twin Spruce Gully, Peace River Foothills, British Columbia.

*Halobia zitteli* Lindstrom

Hypotype 14208

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 104, pl. 29, fig. 4.

Schei Point Formation, Upper Triassic, Bjorne Peninsula, Ellesmere Island, Arctic.

*Hiatella (Saxicava) arctica* Linnaeus

Hypotype 13619

Wilson, A.E., 1957, Can. Field-Naturalist, vol. 70, No. 1, pl. 5, fig. 8.

Pleistocene, Secour's gravel pit, northeast side, Vankleek Hill, Ontario.

*Hoernesia? woyoniana* McLearn

Holotype 8768

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 7, p. 96, pl. 1, fig. 10.

1947, Geol. Surv., Canada, Paper 47-24, App., pl. 7, fig. 6 [*H. woyoniana*].Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 19.

Grey beds, Triassic, Peace River Foothills, British Columbia.

Mollusca

*Hoernesia woyoniana* McLearn

Hypotype 9597

McLearn, F.H.,

1947, Geol. Surv., Canada, Paper 47-24, App., pl. 7, fig. 7 [numbered 9553].

1948, *ibi d.*, Paper 46-1, 2nd Edition, Supp., p. 3 [number 9597 substituted].

Grey beds, Triassic, Beattie Hill, Peace River Foothills, British Columbia.

*Honeymania elongata* McLearn

Holotype 5606; paratype 5607

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 112, pl. 13, figs. 22-24.

McAdam Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Honeymania planimarginata* McLearn

Holotype 5604; paratype 5605

McLearn, F.H.,

1918, Am. J. Sci., 4th ser., vol. 45, p. 139.

1924, Geol. Surv., Canada, Mem. 137, p. 112, pl. 13, figs. 19-21.

McAdam Formation, Middle Silurian, McAdam Creek, Arisaig, Nova Scotia.

*Ilionia(?) costulata* Whiteaves

Holotype 2832; paratypes 2831, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 15,  
pl. 2, fig. 5 [2832].

Guelph Formation, Middle Silurian, Durham and Elora, Ontario.

*Ilionia galtensis* Whiteaves

Syntypes 2834, a, 2835, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 15,  
pl. 3, figs. 1, a [2835], b [2834].

Guelph Formation, Middle Silurian, Durham and Galt, Ontario.

*Ilionia? parvula* Whiteaves

Syntypes 8745, a

Whiteaves, J.F., 1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 288,  
pl. 28, figs. 7, 8.

Silurian, Long Point, Lake Winnipegosis, Manitoba.

*Inoceramus albertensis* McLearn

Holotype 6107

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 123, pl. 20,  
figs. 3, 4.

Smoky River Formation, Upper Cretaceous, east bank Smoky River, 1 1/2 miles below  
Puskwaskau River, Alberta.

*Inoceramus athabaskensis* McLearn

Holotype 8937; paratype 8938

McLearn, F.H.,

1943, Can. Field-Naturalist, vol. 57, Nos. 2-3, p. 44.

1945, Geol. Surv., Canada, Paper 45-27, pl. 6, fig. 1 [8938].

LaBiche shale, Upper Cretaceous, Athabasca River 2 1/2 miles below and west bank just  
above Stoney Rapids, Alberta.

*Inoceramus athabaskensis* McLearn

Hypotypes 9811, 9817

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 2, fig. 10 [9811]; pl. 5,  
fig. 1 [9817].

Dunvegan Formation, Upper Cretaceous, Monkman Pass, British Columbia.

*Inoceramus barabini* var. *inflatiformis* Douglas

Holotype 8929

Douglas, R.J.W., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 36, sec. 4, p. 63, pl. 2, fig. 3.

Bearpaw Formation, Upper Cretaceous, Boxelder Creek, Saskatchewan.

*Inoceramus barabini* var. *magniumbonatus* Douglas

Holotype 8930

Douglas, R.J.W., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 36, sec. 4, p. 63, pl. 1, fig. 1.

Bearpaw Formation, Upper Cretaceous, Boxelder Creek, Saskatchewan.

*Inoceramus cadottensis* McLearn

Holotype 6343

McLearn, F.H.,

1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 5, pl. 2, fig. 3.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 7, fig. 3.

Lower sandstone, Peace River Formation, Lower Cretaceous, 20 miles below mouth Cadotte River, Peace River, British Columbia.

*Inoceramus cadottensis* var. *altifluminis* McLearn

Holotype 8935; paratype 8936

McLearn, F.H.,

1943, Can. Field-Naturalist, vol. 57, Nos. 2-3, p. 43.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 6, fig. 4 [8935].

Fort St. John Formation, Lower Cretaceous, talus in Deep Creek, Peace River Canyon, British Columbia.

*Inoceramus canadensis* Meek

Syntypes 5344, a

Meek, F.B.,

1859, in Hind, H.Y., Rept. Prog.; Assiniboine and Saskatchewan Exploring Expedition, p. 183, pl. 1, figs. 4 [5344a], 5 [5344].

1860, in Hind, H.Y., Narrative of the Canadian Red River Exploring Expedition of 1857 and of the Assiniboine and Saskatchewan Exploring Expedition of 1858, vol. 2, p. 335, 2 figs. p. 336.

Upper Cretaceous, Little Souris River, Manitoba.

*Inoceramus corpulentus* McLearn

Holotype 6108; paratype 6109

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 123, pl. 21, figs. 5-7.

Smoky River Formation, Upper Cretaceous, at rapids above railway bridge east bank of Smoky River, Alberta.

*Inoceramus coulthardi* McLearn

Holotype 6104

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 121, pl. 21, figs. 1-4.

Badheart Formation, Upper Cretaceous, talus 35 miles above mouth of Little Smoky River, Alberta.

Mollusca

*Inoceramus dowlingi* McLearn

Holotype 5398; paratype 5399

McLearn, F.H.,

1919, Geol. Surv., Canada, Mus. Bull. 29, p. 11, pl. 3, figs. 7, 8.

1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 142.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, fig. 5 [5399].

Clearwater Formation, Lower Cretaceous, 14 miles below Brule Rapids, Athabasca River, Alberta.

*Inoceramus dunveganensis* McLearn

Holotype 6106

McLearn, F.H.,

1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 122, pl. 20, fig. 5.

1945, *ibi d.*, Paper 45-27, pl. 4, fig. 1.

Dunvegan Formation, Upper Cretaceous, about 6 miles west of mouth of Brule River, north bank Peace River, Alberta.

*Inoceramus dunveganensis* McLearn

Hypotype 9813

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 2, fig. 11.

Dunvegan Formation, Upper Cretaceous, Peace River opposite mouth of Spirit River, Alberta.

*Inoceramus dunveganensis* var. *mcconnelli* Warren

Hypotype 9814

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 3, fig. 2.

Dunvegan Formation, Upper Cretaceous, Foothills belt south of Wapiti River, Alberta.

*Inoceramus dunveganensis* var. McLearn

Holotype 9816

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 4, fig. 2.

Dunvegan Formation, Upper Cretaceous, Peace River opposite mouth of Spirit River, Alberta.

*Inoceramus fibrosus* (Meek and Hayden) var.

Hypotypes 16465-16467

Jeletzky, J.A., 1962, J. Pal., vol. 36, No. 5, p. 1011, pl. 141, figs. 4-6.

Upper part of Bearpaw Formation, Upper Cretaceous, sec. 31, tp. 7, rge. 3, W. 4th mer., Medicine Lodge Coulee, Alberta.

*Inoceramus fibrosus* (Meek and Hayden) f. *typ.*

Hypotype 16468

Jeletzky, J.A., 1962, J. Pal., vol. 36, No. 5, p. 1011, pl. 141, figs. 7A, B.

Upper part of Bearpaw Formation, Upper Cretaceous, SE.1/4 sec. 7, tp. 8, rge. 3, W. 4th mer., Medicine Lodge Coulee, Alberta.

*Inoceramus fragilis* var. *prairiensis* McLearn

Holotype 8941

McLearn, F.H., 1943, Can. Field-Naturalist, vol. 57, Nos. 2-3, p. 44.

Bighorn Formation, Upper Cretaceous, west branch Prairie Creek, Alberta.

*Inoceramus furnivali* Douglas

Holotype 8927

Douglas, R.J.W., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 36, sec. 4, p. 62, pl. 3.

Bearpaw Formation, Upper Cretaceous, Boxelder Creek, Saskatchewan.

*Inoceramus leylandensis* McLearn

Holotype 8939

McLearn, F.H., 1943, Can. Field-Naturalist, vol. 57, Nos. 2-3, p. 44.

Bighorn Formation, Upper Cretaceous, 1 1/2 miles southeast of Leyland Station, Alberta.

*Inoceramus leylandensis* var. *bighornensis* McLearn

Holotype 8940

McLearn, F.H., 1943, Can. Field-Naturalist, vol. 57, Nos. 2-3, p. 44.

Bighorn Formation, Upper Cretaceous, 1 1/2 miles southeast of Leyland Station, Alberta.

*Inoceramus lucifer* Eichwald

Hypotypes 13416, 13417, 13423

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 15, pl. 14, figs. 1a-c, 2; pl. 15, fig. 2; pl. 16, figs. 1, 2.

Wilkie Point Formation, Jurassic, 10 miles north of Cape Canning, east side of Intrepid Inlet, Prince Patrick Island, Arctic.

*Inoceramus lundbreckensis* McLearn

Holotype 9037; paratype 9037a

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 77, pl. 15, fig. 4; pl. 16, fig. 2.

Alberta Formation, Upper Cretaceous, north bank of Crowsnest River, west of Lundbreck and SW. 1/4 sec. 27, tp. 7, rge. 2, W. 5th mer., Alberta.

*Inoceramus* cf. *lundbreckensis* McLearn

Hypotype 9038

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 78, pl. 17, fig. 1.

Allison Formation, Upper Cretaceous, 100 feet above base of section, Gulch Creek, Alberta.

*Inoceramus mclearnii* Douglas

Holotype 8925

Douglas, R.J.W., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 36, sec. 4, p. 60, pl. 2, fig. 1.

Bearpaw Formation, Upper Cretaceous, McShane Creek, Saskatchewan.

*Inoceramus mcshaniensis* Douglas

Holotype 8926

Douglas, R.J.W., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 36, sec. 4, p. 61, pl. 2, fig. 2.

Bearpaw Formation, Upper Cretaceous, McShane Creek, Saskatchewan.

*Inoceramus moresbyensis* Whiteaves

Syntype 5002

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 240, fig. 11.

Lower Cretaceous [Haida Formation], north shore of Cumshewa Inlet, Moresby Island, British Columbia.

*Inoceramus nahwisi* McLearn

Holotype 6344

McLearn, F.H., 1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 7, pl. 2, fig. 1.

Shaftesbury Formation, Lower Cretaceous, Peace River, British Columbia.

= *Posidonomya nahwisi*, McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 10, fig. 1.

*Inoceramus nahwisi* var. *goodrichensis* McLearn

Holotype 8943; paratype 8944

McLearn, F.H., 1943, Can. Field-Naturalist, vol. 57, Nos. 2-3, p. 45.

Goodrich Formation, Lower Cretaceous, Hulcross Creek, Pine River Valley, British Columbia.

=*Posidonomya nahwisi* var. *goodrichensis*, McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 10, fig. 3 [8944].

*Inoceramus nahwisi* var. *moberliensis* McLearn

Holotype 8945

McLearn, F.H., 1943, Can. Field-Naturalist, vol. 57, Nos. 2-3, p. 46.

Goodrich Formation, Lower Cretaceous, Coal Creek south of Peace River Canyon, British Columbia.

=*Posidonomya nahwisi* var. *moberliensis*, McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 10, fig. 7.

*Inoceramus obliquiformis* McLearn

Holotype 6049

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 41, pl. 3, fig. 9.

Fernie Group, Jurassic, talus in creek north of Blairmore, Alberta.

*Inoceramus palliseri* Douglas

Holotype 8928

Douglas, R.J.W., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 36, sec. 4, p. 62, pl. 1, fig. 2.

Bearpaw Formation, Upper Cretaceous, Boxelder Creek, Saskatchewan.

*Inoceramus pontoni* McLearn

Holotype 6103

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 121, pl. 20, figs. 1, 2.

Badheart Formation, Upper Cretaceous, talus 35 miles above mouth of Little Smoky River, Alberta.

*Inoceramus pontoni* var. *dolosoniensis* McLearn

Holotype 8942

McLearn, F.H., 1943, Can. Field-Naturalist, vol. 57, Nos. 2-3, p. 45.

Badheart Formation, Upper Cretaceous, below mouth of Puskwaskau River, Smoky River, Alberta.

*Inoceramus quatsinoensis* Whiteaves

Holotype 4743

Whiteaves, J.F., 1883, Trans. Roy. Soc. Can., vol. 1, sec. 4, p. 84, fig. 3.

Cretaceous, Forward Inlet, Quatsino Sound, Vancouver Island, British Columbia.

*Inoceramus rutherfordi* Warren

Hypotype 9815

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 3, fig. 1.

Dunvegan Formation, Upper Cretaceous, branch of Cowlick Creek, Alberta.

*Inoceramus saskatchewanensis* Warren

Syntypes 8742, a

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, sec. 4, p. 83, pl. 3, figs. 10-12.

Belly River Formation, Upper Cretaceous, Outlook, Saskatchewan.

*Inoceramus selwyni* McLearn

Holotype 6105

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 122, pl. 21, figs. 8, 9.

Badheart Formation, Upper Cretaceous, talus 2 1/2 miles below Puskwaskau River, Smoky River, Alberta.

*Inoceramus* spp.

Hypotypes 13418, 13420, 13422, 13424, 13427

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 16, pl. 14, fig. 3; pl. 15, figs. 1, 4; pl. 16, fig. 3; pl. 17, figs. 1a,b, 3.

Wilkie Point Formation, Jurassic, 10 miles north of Cape Canning, east side Intrepid Inlet, Prince Patrick Island, Arctic.

*Integricardium (Onestia) onestae* (McLearn)

Hypotypes 8003, 8004

McLearn, F.H., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 152, pl. 2, figs. 8, 9.

Clearwater Formation, Lower Cretaceous, east bank Athabasca River, 3 miles below Brulé Rapids, Alberta.

See *Laevicardium onestae**Ischyrodonta* (?) *mantoulinensis* Foerste

Holotype 8495

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 148, pl. 23, fig. 10.

Kagawong Formation, Upper Ordovician, 2 miles southwest of Kagawong, Manitoulin Island, Ontario.

*Ischyrodontona unionoides* var. *westonensis* Foerste

Syntypes 2074, 2088

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 147, pl. 23, figs. 11, 12a,b.

Upper Ordovician, Weston, Ontario.

*Kefersteinia subovata* see *Megalodon subovatus**Laevicardium onestae* McLearn

Holotype 6345

McLearn, F.H., 1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 7, pl. 1, fig. 1.

Clearwater Formation, Lower Cretaceous, east bank Athabasca River, 3 miles below Brulé Rapids, Alberta.

=*Integricardium (Onestia) onestae*, McLearn, F.H., 1933, *ibid.*, vol. 27, p. 152, pl. 2, fig. 10.=*Onestia onestae*, McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, fig. 9.*Laevicardium suciense* Whiteaves

Syntype 5713

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 154, pl. 18, fig. 2.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Lampsilis dalyi* Russell

Holotype 10102; paratype 10103

Russell, L.S., 1952, Nat. Mus. Can., Bull. 126, p. 127, pl. 13, fig. 4; text fig. 6.

Kishenehn Formation, Upper Eocene, Flathead Valley, British Columbia.



Mollusca

*Laternula albertensis* Landes

Holotype 9354

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 149, pl. 4, fig. 9.

Pakowki Formation, Upper Cretaceous, Verdigris Coulee, SE. 1/4 sec. 29, tp. 3, rge. 15,  
W. 4th mer., Alberta.

*Legumen nappii* McLearn

Holotype 9040

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 79, pl. 16, fig. 1.

Allison Formation, Lower Cretaceous, 185 feet above base of section, Gulch Creek, Alberta.

*Leptodesma acadica* (Beede)

Hypotypes 7581, 7582, 7683

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 160, pl. 26, figs. 3-5.

Mississippian, Windsor (?), Nova Scotia and from east dump Manganese Mine, Markhamville,  
New Brunswick.

*Leptodesma borealis* Beede

Hypotype 7578

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 159, pl. 26, fig. 20.

Mississippian, Nova Scotia.

*Leptodesma dawsoni* (Beede)

Hypotypes 7577,a

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 159, pl. 26, figs. 1, 2.

Mississippian, Nova Scotia.

*Leptodesma demus* Hall (var.)

Holotype 4280

Whiteaves, J.F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 240,  
pl. 32, fig. 7.

Devonian, first 10 miles below mouth of Clearwater River, Athabasca River, Alberta.

*Leptodesma jason* Hall

Hypotypes 4281,a

Whiteaves, J.F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 240,  
pl. 32, fig. 8 [4821].

Devonian, Athabasca River, opposite La Saline, Alberta.

*Leptodesma ? shubenacadiensis* (Dawson)

Hypotype 7585

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 161, pl. 26, fig. 7.

Mississippian, Nova Scotia.

*Leptodesma subrhomboidea* McLearn

Paratype 5619

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 118, pl. 14, fig. 1.

Ross Brook Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Leptodesma* sp.

Fig. spec. 7584

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 162, pl. 26, fig. 6.

Mississippian, Windsor, Nova Scotia.

*Leptodomus canadensis* Billings

Holotype 3318

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 54, pl. 5, fig. 1 [*Lithodomus*].

Devonian [Grande Greve Formation], Indian Cove, Gaspé Bay, Quebec.

*Leptosolen albertensis* Landes

Holotype 9362; paratype 9362a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 160, pl. 6, figs. 1, 2.

Bearpaw Formation, Upper Cretaceous, near Manyberries, sec. 30, tp. 5, rge. 4, W. 4th mer., Alberta.

*Lima albertensis* McLearn

Holotype 6075; paratypes 6076,a

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 48, pl. 5, figs. 7, 8; pl. 6, fig. 4.

Femie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

*Lima (Limatula) childerhosei* McLearn

Holotype 8788

McLearn, F.H., 1941, Can. Field-Naturalist, vol. 55, No. 3, p. 32, pl. 1, fig. 8.

Triassic [Grey beds], Pardonet Hill, Peace River Foothills, British Columbia.

*Lima* aff. *compressa* Terquem

Hypotype 13732

Frebold, H., 1959, Geol. Surv., Canada, Bull. 49, p. 10, pl. 4, fig. 3.

Lower Jurassic, coquina bed on ridge northeast of Parks station, Salmo area, British Columbia.

*Lima dowlingi* McLearn

Holotype 6079

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 51, pl. 6, figs. 2, 3.

Lille Member, Fernie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

*Lima nappii* McLearn

Holotype 8784

McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 9, p. 131, pl. 1, fig. 7.

Triassic [Pardonet beds], talus on ledge at falls below Jewitt Spur on Peace River, Peace River Foothills, British Columbia.

*Lima perobliqua* Whiteaves

Syntype 4786

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 165, pl. 22, fig. 3.

'Cretaceous' [Ferne Group, Jurassic], 3 miles north of Devil's Lake, Alberta.

*Lima* ? *poyana* McLearn

Holotype 8772

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 7, p. 96, pl. 1, fig. 9.

1947, Geol. Surv., Canada, Paper 47-14, pl. 1, fig. 7.

Grey beds, Upper Triassic, Pardonet Hill, Peace River Foothills, British Columbia.  
=*Mysidioptera poyana*, Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 18, pl. 8, fig. 2.

Mollusca

*Lima (Plagiostoma)* sp. near *rigidula* Phil.

Fig. spec. 9626

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 39, pl. 3, fig. 4.  
Lewes River Formation, Triassic, Laberge area, Yukon.

*Lima (Plagiostoma)* sp. near *semicircularis* Goldfuss

Fig. spec. 9628

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 40, pl. 3, fig. 6.  
Lewes River Formation, Triassic, Laberge area, Yukon.

*Lima stantoni* McLearn

Holotype 6077a; paratype 6077

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 49, pl. 6,  
figs. 1, 5.  
Fernie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

*Lima suciensis* Whiteaves

Syntypes 5891,a,b, 5892

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 399,  
pl. 51, fig. 2 [5891].  
Upper Cretaceous, Sucia and Texada Islands, Strait of Georgia, British Columbia and  
Washington, U.S.A.

*Lima tizglensis* McLearn

Holotype 7701

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 92, pl. 20,  
fig. 1.  
Hazelton Group, Jurassic, talus at foot of cliff about 1 mile southeast of Silver Lake,  
Hudson Bay Mountain, British Columbia.

*Lima whiteavesi* McLearn

Holotype 6078

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 50, pl. 6,  
fig. 6.  
Lille Member, Fernie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

*Lima (Plagiostoma)* sp. indet.

Fig. spec. 9627

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 40, pl. 3, fig. 5.  
Lewes River Formation, Triassic, Laberge area, Yukon.

*Linearia formosa* ? (Meek and Hayden)

Hypotype 5226

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 177,  
pl. 24, fig. 3.  
Upper Cretaceous, Sounding Creek, tp. 30, rge. 8, W. 4th mer., Alberta.

*Liopistha glabra* Warren

Holotype 8736

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, sec. 4, p. 87, pl. 2, fig. 10.  
Belly River Formation, Upper Cretaceous, Outlook, Saskatchewan.

*Liromytilus attenuatus* see *Modiomorpha attenuata*

*Lithodomus maudensis* Whiteaves

Syntypes 4906,a-c

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 237, pl. 32, figs. 6,a [4906].

'Cretaceous' [Yakoun Formation, Jurassic], east end Maude Island, Queen Charlotte Islands, British Columbia.

*Lithodomus nitidus* Whiteaves

Syntypes 5896,a-d

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 395, pl. 48, fig. 3 [5896].

Upper Cretaceous, Nanaimo Mines, Nanaimo, British Columbia.

*Lithophagus poolii* (Dawson)

Neotype 7602; hypotypes 7552,a-c, 7602a, 7603

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 170, pl. 29, figs. 12-18.

Mississippian, Miller's quarry, Windsor, Nova Scotia.

*Lucina* ? *goodrichensis* McLearn

Holotype 9569

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 10, fig. 6.

1948, *ibid.*, App., p. 2.

Goodrich Formation, Lower Cretaceous, Peace River east of Young Creek, Alberta.

*Lucina occidentalis* Billings

Holotype 3967

Billings, E.,

1859, *in* Hind, H.Y., Rept. Prog.; Assiniboine and Saskatchewan Exploring Expedition, p. 187, figs 1b,c.1860, *in* Hind, H.Y., Narrative of the Canadian Red River Exploring Expedition of 1857 and of the Assiniboine and Saskatchewan Exploring Expedition of 1858, vol. 2, p. 298, figs. b, c [p. 297].

Devonian, Snake Island, Lake Winnipegosis, Manitoba.

= *Paracyclas elliptica* var. *occidentalis*, Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 305, pl. 39, fig. 8.*Lyrodesma acuminatum* Ulrich

Hypotypes 1163a,f

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 64, pl. 9, figs. 18, 19.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Lyrodesma huguesensis* Foerste

Holotype 6779

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 171, pl. 43, fig. 7.

Upper Ordovician, Yamaska River about 1 1/2 miles below St. Hugues, Quebec.

*Lyrodesma major* (Ulrich)

Hypotype 6778

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 171, pl. 43, fig. 6.

Upper Ordovician, Chambly Canton, Quebec.

*Lyrodesma postplanum* Foerste

Holotype 6786

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 168, pl. 43, fig. 10.

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

Mollusca

*Lyrodosma poststriatum* (Emmons)

Hypotype 2077

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 169, pl. 25, figs. 10a,b.  
Upper Ordovician, Weston, Ontario.

*Lyrodosma poststriatum* var. *elongatum* Stewart

Hypotype 6783

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 170, pl. 43, fig. 9.  
Upper Ordovician, Humber River, Ontario.

*Macoma balthica* (Linnaeus)

Hypotype 13620

Wilson, A.E., 1957, Can. Field-Naturalist, vol. 70, No. 1, pl. 5, fig. 9.  
Pleistocene, sandpits at Uplands, Ottawa, Ontario.

*Macoma inconspicua* (Broderip and Sowerby)

Hypotype 12560

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, figs. 17a, b.  
Recent, ditch on south side Raith road, 0.3 mile west of Boundary Bay, NW. 1/4 sec.  
11, tp. 5, Delta municipality, British Columbia.

*Macrodon pygmaeus* Whiteaves

Syntypes 3989, a, 3990

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 299,  
pl. 39, figs. 2 [3990], 3 [3989].  
Devonian, Devil's Point, southeast and southwest sides Dawson Bay, Lake Winnipegosis,  
Manitoba.

*Macrodon (Catella?) tyaughtonae* McLearn

Holotype 9426

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 99, pl. 1, fig. 1.  
Tyaughton Group, Triassic, 7,500 feet north of Tyaughton Creek about 9,000 feet northwest  
of mouth of Camp Creek, British Columbia.

*Mactra?* *epidema* Dall

Holotype 4384

Dall, W.H., 1924, in O'Neill, J.J., Rept. Canadian Arctic Expedition 1913-18, vol. 11,  
pt. A, p. 28A, pl. 35, fig. 12.  
Tertiary, 10 miles up Brock River, 15 miles south of Cape Lyon, District of Mackenzie.

*Mactra (Cymbophora?) warrenana* Meek and Hayden

Hypotypes 5736, a-d

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 142,  
pl. 17, fig. 9; pl. 19, figs. 3 [5736], a [5736b].  
Upper Cretaceous, Sucia Island, Washington, U.S.A.  
=*Cymbophora ashburneri*, Whiteaves, J.F., 1903, *ibid.*, pt. 5, p. 374.

*Malayomaorica malayomaorica* (Krumbeck)

Hypotypes 17006, 17007

Jeletzky, J.A., 1963, Palaeontology, vol. 6, pt. 1, pl. 21, figs. 1a-g, 2a-f.  
Upper Jurassic, northeast coast of Heteri Promontory, Kawhia Harbour, North Island, New  
Zealand.

*Martesia carinifera* Whiteaves

Hypotypes 4946e

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 219, pl. 29, fig. 2a [burrows].

Lower Cretaceous [Haida Formation], Bear Skin Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Martesia mcevoyi* McLearn

Holotype 9035; paratypes 9035a, b

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 75, pl. 15, figs. 1-3.

Upper Cretaceous, 1,360 feet above base Crowsnest River section, Alberta.

*Martesia(?) parvula* Whiteaves

Holotype 5911, a [cast and impression]

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 372, pl. 45, fig. 10.

Upper Cretaceous, Extension Mine near Nanaimo, Vancouver Island, British Columbia.

*Martesia tumidifrons* Whiteaves

Holotype 5300; paratype 5301

Whiteaves, J.F.,

1887, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 2, p. 157E.

1889, *ibid.*, Contr. Can. Pal., vol. 1, pt. 2, p. 179, pl. 25, figs. 1, a, 2.

Upper Cretaceous, North Saskatchewan River, tp. 54, rge. 2, W. 4th mer., Alberta.

*Matheria tener* Billings

Syntypes 1670, a-d

Billings, E.,

1858, Can. Naturalist Geol., vol. 3, p. 440, figs. 18b [1670b?], c, d [1670].

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 188, figs. 18b-d.

Logan, W.E., 1863 "Geology of Canada", *ibid.*, Rept. Prog., p. 147, figs. 100b-d.

Middle Ordovician, Blue Point (Pointe Bleu), Lake St. John, Quebec.

*Mclearnia mclearni* Crickmay

Holotype 9701; paratype 9688

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 45, pl. 8, fig. 4; pl. 9, fig. 1.

'Lower Cretaceous', 350 yards from shore and 1,400 yards north of Deer Creek, Harrison Lake, British Columbia.

*Meekia sella* see *Periploma cuspidatum**Megalodon canadensis* Shimer

Holotype 17745

Shimer, H.W., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 87, pl. 9, fig. 3.

'Upper Triassic', east side Pearson Creek, Bridge River map-area, British Columbia.

*Megalodon subovatus* Whiteaves

Syntypes 4153, a, b, 4154

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 97, pl. 5, figs. 2, a [4153], 3, a [4154].

Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

= *Kefersteinia subovata*, Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 302.

Mollusca

*Megalodon?* n. sp. Lees

Holotype 9621

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 36, pl. 2, figs. 3, 4.

Lewes River Formation, Triassic, Laberge area, Yukon.

*Megalomus canadensis* Hall

Hypotypes 2827, 5130

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 23, figs. 1a, b, 2.

Guelph Formation, Middle Silurian, Elora and Cabot Head, Ontario.

*Megalomus compressus* Nicholson and Hinde

Hypotype 2824

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 10, fig. 1.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Megalomus* sp.

Fig. spec. 2825

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 11, fig. 2.

Guelph Formation, Middle Silurian, Hespeler, Ontario.

*Meleagrina amygdaloidea* Whiteaves

Holotype 4921

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 78, pl. 10, fig. 4.

Lower Cretaceous [Haida Formation], Skidegate Channel west of Alliford Bay, Queen Charlotte Islands, British Columbia.

*Meleagrinnella antiqua* Tozer

Holotype 14209; paratypes 14210–14213

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 104, pl. 29, figs. 6–9.

Heiberg Formation, Upper Triassic, Bjorne Peninsula and west coast Raanes Peninsula, Ellesmere Island, and Buchanan Lake, Axel Heiberg Island, Arctic.

*Melina mytiloides* (?) (Lamarck)

Hypotypes 4996, a–c

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 80, figs. 8a–d.

'Cretaceous' [Yakoun Formation, Jurassic], west of Alliford Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

=*Melina skidegatensis*, Whiteaves, J.F., 1884, *ibid.*, pt. 3, p. 239.

*Modiolodon aylmerense* Wilson

Holotype 11588

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 71, pl. 5, fig. 11.

Pamelia beds, Ottawa Formation, Middle Ordovician, road north from small park in Aylmer beyond Sowter House, Quebec.

*Modiolodon?* *haesitans* Wilson

Holotype 11546

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 71, pl. 5, fig. 10.

Leray or Rockland beds, Ottawa Formation, Middle Ordovician, Vankleek Hill, Ontario.

*Modiolodon poststriatus* Foerste

Holotype 8428

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 294, pl. 1, fig. 7.

1924, Geol. Surv., Canada, Mem. 138, p. 176, pl. 29, fig. 7.

Upper Ordovician, along the railway and then 1/2 mile northward along the road, 1 mile west of Vars, Ontario.

*Modiolopsis adrastia* Billings

Syntype 1168

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 45.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 45.

Middle Ordovician, St. Josephs Island, Lake Huron, Ontario.

*Modiolopsis angustifrons* Whiteaves

Holotype 7060

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 183, pl. 20, fig. 4.

Ordovician [Red River Formation], Lower Fort Garry, Manitoba.

*Modiolopsis borealis* Foerste

Syntypes 8485a, 8488b,c,d,h.

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 178, pl. 23, fig. 5 [8485a]; pl. 24, figs. 4c [8488h], d [8488b], e [8488c], f [8488d].

Upper Ordovician, 3/4 mile south of Clay Cliffs, Manitoulin Island, Ontario.

*Modiolopsis borealis* var. *postdeclivis* Foerste

Syntype 8488f

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 179, pl. 24, fig. 5a.

Upper Ordovician, 3/4 mile south of Clay Cliffs, Manitoulin Island, Ontario.

*Modiolopsis brevantica* Foerste

Holotype 8450

Foerste, A.F.,

1916, Denison Univ. Bull., J. Sci. Lab., vol. 18, p. 332, pl. 5, figs. 1a, b.

1924, Geol. Surv., Canada, Mem. 138, p. 182, pl. 23, figs. 4a-c.

Meaford Formation, Upper Ordovician, Cape Smyth, Manitoulin Island, Ontario.

*Modiolopsis compacta* Wilson

Holotype 6224

Wilson, A.E.,

1921, Geol. Surv., Canada, Bull. 33, p. 53, pl. 4, fig. 3.

1956, *ibid.*, Bull. 28, p. 65, pl. 9, fig. 15.

Pamelia beds, Middle Ordovician, west of MacLaren Landing, Ontario.

*Modiolopsis concentrica* var. *chambliensis* Foerste

Holotype 8563a

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 181, pl. 24, fig. 1.

Upper Ordovician, below dam Richelieu River, Chambly Canton, Quebec.

*Modiolopsis* ? *dubia* Wilson

Holotype 11543

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 66, pl. 9, fig. 14.

Leray beds, Ottawa Formation, Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.



*Modiolopsis exilis* Billings

Syntypes 3099,a

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 132, pl. 8, figs. 5,a.

McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 125, pl. 18, fig. 17; pl. 19, fig. 16.

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Modiolopsis exilis* Billings

Hypotype 5634

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 125, pl. 18, fig. 14.

Stonehouse Formation, Upper Silurian, Stonehouse field, Arisaig, Nova Scotia.

*Modiolopsis fabaeformis* Raymond

Hypotype 6806

Whiteaves, J.F., 1908, Ottawa Naturalist, vol. 22, p. 110, pl. 3, fig. 8.

Middle Ordovician, Hogsback, Ottawa, Ontario.

*Modiolopsis gesneri* Billings

Syntypes 1665,a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 43, figs. 45a,b.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 43, figs. 45a,b.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 172, figs. 157a,b.

Middle Ordovician [Cobourg ? beds], Ottawa, Ontario.

=*Endodesma gesneri*, Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 77, pl. 8, fig. 10 [holotype 1665; paratype 1665a].

*Modiolopsis hyacinthensis* Foerste

Holotype 8473

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 177, pl. 23, fig. 7.

Upper Ordovician, below dam at St. Hyacinthe, Quebec.

*Modiolopsis kelsoensis* Williams

Syntypes 2709, 4681

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, p. 123, pl. 8, figs. 3, 5.

Grimby Formation, Cataract Group, Lower Silurian, lot 11, con. 1, Flamboro West and near Kelso, Ontario.

*Modiolopsis latouri* McLearn

Holotype 6034

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 128, pl. 19, fig. 2.

Ross Brook Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Modiolopsis maia* Billings

Holotype 1663; paratype 1663a

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 44, figs. 46a,b [1663].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 44, figs. 46a,b.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 143, figs. 80a,b.

Middle Ordovician, Blue Point [Pointe Bleue], Lake St. John, Quebec.

*Modiolopsis* cf. *maia* Billings

Hypotype 13438

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 67, pl. 9, fig. 8.

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

*Modiolopsis manitoulinensis* Foerste

Holotype 8485b; paratypes 8485c, 8494a,b.

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 180, pl. 23, figs. 1a [8494a], b [8494b], 6a [8485b], b [8485c].

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Modiolopsis meafordensis* Foerste

Holotype 2068; paratypes 8487a,b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 180, pl. 24, figs. 2, 3a,b.

Upper Ordovician, Cape Rich and southwest of Little Current, Manitoulin Island, Ontario.

*Modiolopsis minuscula* Wilson

Holotype 13439

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 68, pl. 9, fig. 10.

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

*Modiolopsis miser* Twenhofel

Holotype 2377

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 232, pl. 24, fig. 1.

Jupiter Formation, Middle Silurian, near Jupiter River, Anticosti Island, Quebec.

*Modiolopsis nais* Billings

Holotype 1165

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 45, figs. 47a, b.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 45, figs. 47a, b.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 143, figs. 81a, b.

Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 69, pl. 9, figs. 12, 13.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Modiolopsis nais* Billings

Hypotype 11544

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 69, pl. 9, fig. 11.

Leray beds, Ottawa Formation, Middle Ordovician, west end of lot K, con. A, R.F., Nepean tp., Ontario.

*Modiolopsis nana* Ulrich

Hypotype 11586

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 69, pl. 9, fig. 9.

Sherman Fall beds, Ottawa Formation, Middle Ordovician, CPR cutting south of Aylmer road, Hull, Quebec.

*Modiolopsis parviuscula* Billings

Syntype 1050

Billings, E.,

1859, Can. Naturalist Geol., vol. 4, p. 446.

1859, *in* Hind, H.Y., Rept. Prog.; Assiniboine and Saskatchewan Exploring Expedition, p. 186.

Whiteaves, J.F., 1908, Ottawa Naturalist, vol. 22, p. 106, pl. 3, fig. 1.

'Chazy', Middle Ordovician, near Cornwall, Ontario.

*Modiolopsis postplicata* Foerste

Holotype 8424

Foerste, A.F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 284, pl. 1, fig. 4.

Upper Ordovician, Huron River, Quebec.

=*Orthodesma* (?) *postplicatum*, Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 191, pl. 29, fig. 4.

Mollusca

*Modiolopsis rhomboidea* Hall

Hypotype 5635

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 126, pl. 19, fig. 4.  
Upper Silurian [Stonehouse ? Formation], Arisaig, Nova Scotia.

*Modiolopsis rhomboidea* var. *eurymyellaformis* McLearn

Holotype 5636

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 127, pl. 19, fig. 7.  
Stonehouse ? Formation, Upper Silurian, Arisaig, Nova Scotia.

*Modiolopsis rhomboidea* var. *subnasuta* (Hall)

Hypotype 5637

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 127, pl. 19, fig. 1.  
Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Modiolopsis rocklandia* Wilson

Holotype 13440

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 70, pl. 9, fig. 17.  
Leray beds, Ottawa Formation, Middle Ordovician, Stewart quarry, Rockland, Ontario.

*Modiolopsis ruda* Billings

Syntypes 3101, a,b

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 133, pl. 8,  
fig. 6.  
Upper Silurian. [Stonehouse Formation], Arisaig, Nova Scotia.

*Modiolopsis striata* Billings

Syntype 2286

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 48.  
Upper Ordovician [Ellis Bay Formation], Junction Cliff, Anticosti Island, Quebec.  
=*Pterinea* (?) *striata*, Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 230, pl. 29, fig. 8  
[holotype 2286].

*Modiolopsis varia* Billings

Syntypes 3215, 3216,a

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 56.  
Devonian [Grande Greve Formation], Indian Cove and Grand to Little Portage, Gaspé,  
Quebec.  
=*Modiomorpha varia*, Clarke, J.M., 1908, New York State Mus., Mem. 9, pt. 1, p. 160,  
pl. 22, figs. 1 [3216], 2 [3215], 3 [3216a].

*Modiolopsis vera* Foerste

Syntypes 8494c-e, 8518a-c

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 182, pl. 23, figs. 2a-c, 3a-d.  
Meaford and Kagawong Formations, Upper Ordovician, Clay Cliffs and 2 miles southwest  
of Kagawong, Manitoulin Island, Ontario.

*Modiolopsis* sp.

Fig. spec. 6033

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 128, pl. 19, fig. 3.  
Ross Brook Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Modiolus ahsisi* McLearn

Holotype 8767

McLearn, F.H.,  
1937, Can. Field-Naturalist, vol. 51, No. 7, p. 96, pl. 1, fig. 2.  
1947, Geol. Surv., Canada, Paper 47-24, App., pl. 7, fig. 1.  
Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 18.  
Grey beds, Triassic, Beattie Hill, Peace River Foothills, British Columbia.

*Modiolus ahsisi* var. *stelcki* McLearn

Holotype 8760

McLearn, F.H., 1939, Can. Field-Naturalist, vol. 53, No. 8, p. 120, pl. 1, fig. 4.

Triassic [Pardonet beds], north side Peace River, Peace River Foothills, British Columbia.

*Modiolus archisikanni* McLearn

Holotype 9561

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 12, fig. 4.

1948, *ibid.*, App., p. 1.

Third sandstone, Sikanni Formation, Lower Cretaceous, Long Hill 5 miles south of Trutch Mountain, British Columbia.

*Modiola dawsoni* Bell

Holotype 7561; paratypes 7562, 7600, 7601

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 169, pl. 29, figs. 6-9.

Mississippian, Windsor, Nova Scotia.

*Modiola (Brachydontes) dichotoma* Whiteaves

Syntypes 5252, a, b

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 37, pl. 4, figs. 3, a.

Upper Cretaceous, St. Mary River near its confluence with Belly River, Alberta.

*Modiolus frankensis* McLearn

Holotype 6085; paratype 6086

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 53, pl. 7, figs. 1, 2.

Fernie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

*Modiola hartii* Bell

Holotype 7564; paratype 7564a

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 168, pl. 29, figs. 10, 11.

Mississippian, Avon River Bridge, Windsor, Nova Scotia.

*Modiola mandannaense* Lees

Holotype 9632

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 43, pl. 4, fig. 3.

Laberge Group, Jurassic, Laberge area, Yukon.

*Modiola persistens* Whiteaves

Syntype 5985

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 296, pl. 37, fig. 5.

'Cretaceous' [Yakoun Formation, Jurassic], east side Maude Island, Queen Charlotte Islands, British Columbia.

*Modiolus rosii* McLearn

Holotype 6083; paratype 6084

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 53, pl. 8, fig. 1; pl. 9, fig. 12.

Fernie Group, Jurassic, railway-cut south slope Grassy Mountain and cement shale quarries, Blairmore, Alberta.

*Modiola aff. scalpra* (Goldfuss)

Hypotype 9634

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 44, pl. 4, fig. 5.  
Laberge Group, Jurassic, Laberge area, Yukon.

*Modiolus silentiensis* McLearn

Holotype 6190; paratype 6112

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 125, pl. 23,  
figs. 3, 4.

Dunvegan Formation, Upper Cretaceous, 4 to 6 miles west of mouth of Brûlé River, north  
bank Peace River, Alberta.

*Modiolus silentiensis* McLearn

Hypotype 9804

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 2, fig. 3.

Dunvegan Formation, Upper Cretaceous, 4 miles above mouth of Burnt Creek, south bank  
Peace River, Alberta.

*Modiola siskiyouensis* Gabb

Hypotype 5895

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 394,  
pl. 48, fig. 2.

Upper Cretaceous, Brennan Creek, Vancouver Island, British Columbia.

*Modiola tenuisculpta* Whiteaves

Syntype 5063

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 188,  
pl. 26, figs. 2, a.

Cretaceous, Swan River, tp. 37, rge. 26, W. Prin. Mer., Manitoba.

*Modiolus via-alaska* McLearn

Holotype 9560

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 12, fig. 3.

1948, *ibid.*, App., p. 1.

Third sandstone, Sikanni Formation, Lower Cretaceous, south bank Sikanni Chief River  
at highway-cut, British Columbia.

*Modiolus wrighti* Warren

Holotype 8732

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, sec. 4, p. 87, pl. 2, fig. 2.

Bearpaw Formation, Upper Cretaceous, Qu'Appelle Valley, sec. 26, tp. 21, rge. 28, W.  
2nd mer., Saskatchewan.

*Modiomorpha attenuata* Whiteaves

Holotype 4144

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 96, pl. 5, figs. 1, a.  
Devonian, southeast side of Dawson Bay, Lake Winnipegosis, Manitoba.

=*Liromytilus attenuatus*, La Rocque, A., 1950, Univ. Michigan, Contr. Mus. Pal.,  
vol. 7, No. 10, p. 295, pl. 7, figs. 1, 2.

*Modiomorpha compressa* Whiteaves

Syntypes 3998, 3999, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 296,  
pl. 38, figs. 8 [3999], 9 [3998].

Devonian, western shore and Whiteaves Point, Dawson Bay, Lake Winnipegosis, Manitoba.

*Modiomorpha inornata* Billings

Holotype 3316

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 52, pl. 4, fig. 4.

Devonian [Gaspé sandstone], York River, Gaspé, Quebec.

*Modiomorpha parvula* Whiteaves

Syntypes 3996, a-e

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 297, pl. 38, fig. 11 [3996].

Devonian, western shore of Dawson Bay, Lake Winnipegosis, Manitoba.

*Modiomorpha tumida* Whiteaves

Syntypes 3997, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 296, pl. 38, figs. 10, a [3997].

Devonian, small island off Weston Point, southwest side of Lake Winnipegosis, Manitoba.

*Modiomorpha varia* see *Modiolopsis varia**Monotis callazonensis* Westermann

Holotype 15723

Westermann, G.E.G., 1962, J. Pal., vol. 36, No. 4, p. 770, pl. 113, figs. 8a, b.

Upper Pardonet Formation, Schooler Creek Group, Triassic, along construction trail Pine River Bridge section 49 miles west of Chettwynd on Hart Highway, British Columbia.

*Monotis? ireneana* McLearn

Holotype 8762

McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 9, p. 131, pl. 1, fig. 6.

Triassic [Pardonet beds], talus north side Peace River, Peace River Foothills, British Columbia.

*Monotis montini* McLearn

Holotype 8765

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 7, p. 96, pl. 1, fig. 6.

1947, Geol. Surv., Canada, Paper 47-24, pl. 7, fig. 2.

Grey beds, Upper Triassic, Beattie Hill, Peace River Foothills, British Columbia.

*Monotis ochotica* (Keyserling)

Hypotypes 14218-14227

Tozer, E.T.,

1961, Geol. Surv., Canada, Mem. 316, p. 106, pl. 30, figs. 1-10.

1962, *ibid.*, Paper 62-19, p. 26, pl. 12, fig. 23 [14224].

Heiberg Formation, Upper Triassic, near Wolf Fiord, Axel Heiberg Island [14218-14220]; west coast of Raanes Peninsula, Ellesmere Island [14221, 14222]; and near Mount Nicolay, Cornwall Island [14223-14227], Arctic.

*Monotis ochotica posteroplana* Westermann

Holotype 15724

Westermann, G.E.G., 1962, J. Pal., vol. 36, No. 4, p. 777, pl. 114, fig. 9.

Upper Pardonet Formation, Schooler Creek Group, Upper Triassic, railroad-cut Pine River Bridge section 49 miles west of Chettwynd on Hart Highway, British Columbia.

Mollusca

*Monotis ovalis* Whiteaves

Holotype 4728

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 132, pl. 17, fig. 4.

Triassic [Toad Formation], Liard River about 25 miles below Devil's Portage, British Columbia.

=*Pseudomonotis occidentalis*, Tozer, E.T.,

1961, *ibid.*, Mem. 316, p. 98, pl. 28, fig. 9.

1962, *ibid.*, Paper 62-19, p. 8, pl. 3, fig. 9.

*Monotis scutiformis pinensis* Westermann

Holotype 15721; paratype 15722

Westermann, G.E.G., 1962, J. Pal., vol. 36, No. 4, p. 757, pl. 112, figs. 10a, b, 11.

Upper Pardonet Formation, Schooler Creek Group, Upper Triassic, road-cut Pine River Bridge section 49 miles west of Chettwynd on Hart Highway, British Columbia.

*Monotis subcircularis* Gabb

Hypotypes 4731, a

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 131, pl. 17, figs. 3, a.

Triassic, Peace River a few miles above Fossil Point, British Columbia.

*Monotis subcircularis* Gabb

Hypotype 14265

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, fig. 22.

Upper Triassic, east side of Donjek River, 7 miles south of Wade Creek, Kluane Lake area, Yukon.

'*Murraia*' *fabensis* McLearn

Holotype 9558

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 2, fig. 3.

1948, *ibid.*, App., p. 1.

Luscar Formation, Lower Cretaceous, Upper Beans Creek, Alberta.

*Murraia naiadiformis* Russell

Holotype 6795; paratype 6795a

Russell, L.S., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 2, pl. 1, figs. 2-4.

McMurray Formation, Lower Cretaceous, Hangingstone River, Alberta.

*Mya arenaria* Linné

Hypotype 12561

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, pl. 1, figs. 19a, b.

Nicomekl Formation, Pleistocene, excavation southeast of intersection Elgin and McLellan roads, NW. 1/4 sec. 3, tp. 2, Surrey municipality, British Columbia.

*Myalina mississippiensis* Shimer

Holotype 4858; paratypes 4858a-d

Shimer, H.W., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 75, pl. 4, figs. 2-7.

Mississippian, Lake Minnewanka region, Alberta.

*Myoconcha amnipacis* McLearn

Holotype 8795; paratype 8797

McLearn, F.H., 1941, Can. Field-Naturalist, vol. 55, No. 3, p. 33, pl. 1, figs. 1, 2.

Upper Triassic, Mahaffy Cliffs, Peace River Foothills, British Columbia.

*Myoconcha cauriniensis* McLearn

Holotype 8761

McLearn, F.H., 1939, Can. Field-Naturalist, vol. 53, No. 8, p. 120, pl. 1, fig. 6.  
Upper Triassic [Grey beds], north side Peace River, Peace River Foothills, British Columbia

*Myoconcha curionii* var. *chenekai* McLearn

Holotype 8794

McLearn, F.H., Can. Field-Naturalist, vol. 55, No. 3, p. 32, pl. 1, fig. 4.  
Upper Triassic [Grey beds], Pardonet Hill, Peace River Foothills, British Columbia.

*Myoconcha curionii* var. *montipetraea* McLearn

Holotype 8790

McLearn, F.H., 1941, Can. Field-Naturalist, vol. 55, No. 3, p. 32, pl. 1, fig. 5.  
Upper Triassic [Grey beds], Pardonet Hill, Peace River Foothills, British Columbia.

*Myophoria adornata* McLearn

Holotype 9438; paratype 9439 [missing]

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 101, pl. 2, figs. 1-3.  
Tyaughton Group [Pardonet Formation], Upper Triassic, ridge at head of Grizzly Creek, Tyaughton Creek valley, British Columbia.  
= "*Myophoria*" *adornata*, Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, fig. 14 [9438].

*Myophoria cairnesi* McLearn

Holotype 9440

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 101, pl. 2, figs. 4, 5.  
Tyaughton Group [Pardonet Formation], Upper Triassic, ridge at head of Grizzly Creek, Tyaughton Creek valley, British Columbia.  
= "*Myophoria*" *cairnesi*, Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, fig. 15.

*Myophoria columbiana* McLearn

Holotype 9443; paratype 9445

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 100, pl. 2, figs. 11-13.  
Tyaughton Group [Pardonet Formation], Upper Triassic, ridge east of south end of Spruce Lake at an elevation of about 6,090 feet, British Columbia.

*Myophoria (Elegantinia) grahami* McLearn

Holotype 8776

McLearn, F.H., 1941, Can. Field-Naturalist, vol. 55, No. 3, p. 31, pl. 1, fig. 9.  
Upper Triassic [Pardonet beds], Pardonet Hill, Peace River Foothills, British Columbia.

*Myophoria heslingtonensis* var. *regalis* McLearn

Holotype 9252; paratype 9253

McLearn, F.H., 1946, Geol. Surv., Canada, Paper 46-25, App., p. 1, pl. 2, figs. 4, 5.  
Pardonet Formation, Upper Triassic, first or west gully, Mount Wright, north side of Halfway River, 35-40 miles west of Alaska Highway, British Columbia.

*Myophoria laeta* McLearn

Holotype 9250

McLearn, F.H., 1946, Geol. Surv., Canada, Paper 46-25, App., p. 1, pl. 1, fig. 4.  
Pardonet Formation, Upper Triassic, upper 30 feet of section in north bank of Sikanni Chief River east of Chicken Creek, British Columbia.



Mollusca

*Myophoria laeta* var. *eminens* McLearn

Holotype 9251

McLearn, F.H., 1946, Geol. Surv., Canada, Paper 46-25, App., p. 1, pl. 1, fig. 3.  
Pardonet Formation, Upper Triassic, Sikanni Chief River below mouth of Chicken Creek,  
British Columbia.  
= "*Myophoria*" *laeta* var. *eminens*, Tozer, E.T., 1962, *ibid.*, p. 22, pl. 10, fig. 4.

*Myophoria morigera* McLearn

Holotype 8813

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 112, pl. 3, fig. 6.  
Upper Triassic, Dry Canyon shoulder, Peace River Foothills, British Columbia.

*Myophoria silentiana* McLearn

Holotype 8758

McLearn, F.H.,  
1939, Can. Field-Naturalist, vol. 53, No. 8, p. 118, pl. 1, fig. 2.  
1940, *ibid.*, vol. 54, No. 8, p. 112, pl. 4, fig. 3.  
Upper Triassic, talus Peace River Foothills, British Columbia.

*Myophoria silentiana* var. *placida* McLearn

Holotype 8812

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 112, pl. 4, fig. 2.  
Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, fig. 3.  
Upper Triassic [Grey beds], Dry Canyon shoulder, Peace River Foothills, British Columbia.

*Myophoria silentiana* var. *schooleri* McLearn

Holotype 8810

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 112, pl. 4, fig. 1.  
Upper Triassic [Grey beds], Dry Canyon shoulder, Peace River Foothills, British Columbia.

*Myophoria suttonensis* Clapp and Shimer

Holotype 7811

Clapp, C.H., and Shimer, H.W., 1911, Proc. Boston Soc. Natural Hist., vol. 34, No. 12,  
p. 433, pl. 41, figs. 12-14.  
Sutton "series", Upper Triassic, Lake Cowichan, Vancouver Island, British Columbia.

"*Myophoria*" *suttonensis* Clapp and Shimer

Hypotypes 14255, 14256

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, figs. 8, 9a, b.  
Sutton Formation, Upper Triassic, Cowichan Lake, Vancouver Island, British Columbia.

*Myophoria urbana* McLearn

Holotype 9506

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., p. 2, pl. 1, fig. 3.  
Pardonet Formation, Upper Triassic, McLay Spur between Schooler Creek and Black Rock  
Rapids, Peace River Foothills, British Columbia.

*Myophoria zeballos* McLearn

Holotype 9442; paratype 9441

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 101, pl. 2, figs. 6-8.  
Triassic, Bonanza Group, Zeballos area, Vancouver Island and Tyaughton Group, Tyaughton  
Creek 3/4 mile above Spruce Lake Creek, British Columbia.

"*Myophoria*" sp.

Fig. spec. 14257

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 13, fig. 10.  
Sutton Formation, Upper Triassic, Cowichan Lake, Vancouver Island, British Columbia.

*Mysidioptera poyana* see *Lima?* *poyana*

*Mytilarca canadensis* Billings

Holotype 3321

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 52, figs. 2, a.  
Devonian [Grande Greve Formation], Gaspé, Quebec.

*Mytilarca inflata* Whiteaves

Syntype 4007

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 293,  
pl. 38, figs. 6, a.  
Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

*Mytilarca nitida* see *Ambonychia nitida*

*Mytilarca nitida* Billings

Syntype 3322

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 53, figs.  
22, 23.  
Devonian [Grande Greve Formation], Indian Cove, Gaspé Bay, Quebec.

*Mytilarca pernoides* Whiteaves

Holotype 4418

Whiteaves, J.F.,  
1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 47F.  
1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 255, pl. 27, fig. 8.  
Silurian, portage road at falls, Ekwan River, Ontario.

*Mytilus edulis* linnaeus

Hypotype 13617

Wilson, A.E., 1957, Can. Field-Naturalist, vol. 70, No. 1, pl. 5, fig. 6.  
Pleistocene, Foster sandpit near Uplands, Ottawa, Ontario.

*Mytilus (Pharomytilus)* near *glendayi* Weir

Hypotype 9633

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 43, pl. 4, fig. 4.  
Laberge Group, Jurassic, Laberge area, Yukon.

*Mytilus lanceolatus* Sowerby

Hypotype 4904

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 236,  
pl. 31, figs. 7, a.  
Lower Cretaceous [Haida Formation], Shingle Bay, Skidegate Inlet, Queen Charlotte  
Islands, British Columbia.

*Mytilus otiosus* McLearn

Holotype 9507

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., p. 2, pl. 1, fig. 2.  
Grey beds, Upper Triassic, Pardonet Hill, Peace River Foothills, British Columbia.

*Mytilus?* *shulapsensis* McLearn

Holotype 9444

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 102, pl. 2, figs. 9, 10.  
Triassic, Tyaughton Creek, 3/4 mile above Spruce Lake Creek, British Columbia.

*Nemodon canadensis* Landes

Holotype 9345; paratype 9345a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 135, pl. 1, figs. 1-3.

Bearpaw Formation, Upper Cretaceous, near Manyberries, sec. 30, tp. 5, rge. 4, W. 4th mer., Alberta.

*Nemodon fischeri* d'Orbigny

Hypotypes 4913, a-c

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 234, pl. 31, fig. 5 [4913].

'Cretaceous' [Yakoun Formation, Upper Jurassic], east end of Maude Island, Queen Charlotte Islands, British Columbia.

=*Arca* (*Nemodon*) *simillima*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 293.

=*Parallelodon* (*Gilbertwhitea*) *simillima*, Reinhart, P.W., 1937, J. Pal., vol. 11, No. 3, p. 173 [holotype 4913].

*Nemodon mcconnelli* McLearn

Holotype 5396

McLearn, F.H., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 10, pl. 3, fig. 6.

Peace River Formation, Lower Cretaceous, Peace River 3 miles below Tar Island, Alberta.

*Nemodon vancouverensis* (Meek)

Hypotypes 5684, a

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 163, pl. 19, figs. 1, a.

Upper Cretaceous, Blunden Point, Vancouver Island, British Columbia.

=*Parallelodon* (*Nanonavis*) *whiteavesi*, Reinhart, P.W., 1937, J. Pal., vol. 11, No. 3, p. 172 [syntypes 5684, a].

=*Parallelodon* (*Nanonavis*) *nanainoensis*, Anderson, F.M., 1958, Geol. Soc. Amer., Mem. 71, p. 94.

*Nucula assiniboensis* Landes

Holotype 9343; paratypes 9343a, 9344

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 131, pl. 1, figs. 4-6.

Pakowki and Foremost Formations, Upper Cretaceous, Bear Gulch, NW. 1/4 sec. 20, tp. 1, rge. 9, W. 4th mer., Alberta.

*Nucula athabaskensis* McLearn

Holotype 6348; hypotypes 7406-7408

McLearn, F.H.,

1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 7, pl. 1, fig. 5.

1933, *ibid.*, vol. 27, p. 141, pl. 1, figs. 11-15.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, figs. 6 [6348], 7 [7406], 8 [7407].

Clearwater Formation, Lower Cretaceous, talus below Brule Rapids; 3 miles below Brule Rapids; north bank 3 miles above Crooked Rapids; and talus north bank 1 mile above Algar Creek, Athabasca River, Alberta.

*Nucula arisaigensis* McLearn

Holotype 5458; paratype 5459

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 98, pl. 12, figs. 1-3, 7.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Nucula dowlingi* McLearn

Holotype 5394

McLearn, F.H., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 9, pl. 3, figs. 1, 2.  
 Fort St. John Formation, Lower Cretaceous, below King ranch, Cache Creek, north branch  
 Peace River, British Columbia.

*Nucula johanseni* Dall

Syntypes 4381, a, b

Dall, W.H., 1924, in O'Neill, J.J., Rept. Canadian Arctic Expedition 1913-18, vol. 11,  
 pt. A, p. 28A, pl. 35, figs. 10, 11.  
 Tertiary, 10 miles up Brock River, 15 miles south of Cape Lyons, District of Mackenzie.

*Nucula?* *manitobensis* Whiteaves

Syntype 3962

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 301,  
 pl. 4, fig. 1.  
 Devonian, small island off Whiteaves Point, Lake Winnipegosis, Manitoba.

*Nucula pectinata*(?) Sowerby

Hypotype 5697

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 161,  
 pl. 18, fig. 8.  
 Upper Cretaceous, lower part of Trent River, Vancouver Island, British Columbia.

*Nuculana* cf. *rostellata* (Conrad)

Hypotype 14808

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Br., Publ. 59-6,  
 p. 64, pl. 11, figs. 6a, b.  
 Dawson Bay Formation, Middle Devonian, 1 3/5 miles up Red Deer River on north bank,  
 1.s.d. 6, sec. 21, tp. 45, rge. 25, W. Prin. mer., Manitoba.

*Nuculites cawdori* (Sowerby)

Hypotypes 5472, 5474

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 103, pl. 13, figs. 1,2.  
 Stonehouse Formation, Upper Silurian, coast section, Arisaig, Nova Scotia.

*Nuculites cawdori* var. *elongatus* (Hall)

Hypotypes 5475-5480

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 104, pl. 13, figs. 6-11.  
 Stonehouse and McAdam [5478] Formations, Upper-Middle Silurian, coast section, Arisaig,  
 Nova Scotia.

*Nuculites cawdori* var. *plongatus* (Hall)

Hypotypes 3104a, 5592

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 106, pl. 13, figs. 12, 13; pl.  
 28, fig. 13.  
 Stonehouse and McAdam Formations, Upper-Middle Silurian, coast section, Arisaig, Nova  
 Scotia.

*Nuculites concentricus* (Hall)

Hypotype 5463

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 101, pl. 12, fig. 18; pl. 29,  
 fig. 11.  
 Stonehouse Formation, Upper Silurian, coast section, Arisaig, Nova Scotia.

*Nuculites concentricus* var. *subequilatus* McLearn

Holotype 5464; paratype 5465

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 103, pl. 13, figs. 25, 26.  
 Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

Mollusca

*Nuculites concentricus* var. *subovatus* (Hall)

Hypotypes 5466-5471

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 102, pl. 12, figs. 13, 16, 17;  
pl. 13, figs. 27-30; pl. 28, fig. 14; pl. 30, figs. 2, 3, 11.

Stonehouse Formation, Upper Silurian, coast section, Arisaig, Nova Scotia.

*Nuculites novascoticus* McLearn

Holotype 6032

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 106, pl. 13, fig. 15.

Stonehouse Formation, Upper Silurian, coast section, Arisaig, Nova Scotia.

*Nuculites stiliformis* Wilson

Holotype 11562

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 29, pl. 1, figs. 7, 8.

Sherman Fall beds, Ottawa Formation, Middle Ordovician, CPR. cutting south of Aylmer Road, Hull, Quebec.

*Nuculites* sp.

Fig. spec. 3965

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 302,  
pl. 39, fig. 4.

Devonian, Manitoba Island, Lake Manitoba, Manitoba.

*Onestia onestae* see *Laevicardium onestae*

*Ontaria clarkei* Beushausen

Hypotype 7971

Kindle, E.M., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 5, pl. 1, fig. 8.

Simpson shale, Upper Devonian, Mackenzie River 5 miles above Rabbitskin River, District of Mackenzie.

*Opis vancouverensis* Whiteaves

Holotype 5691

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 158, pl. 18, figs. 4, a.

Upper Cretaceous, Denman Island, Strait of Georgia, British Columbia.

*Opisthoptera fissicosta* (Meek)

Hypotypes 2111, 2112

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 167, pl. 26, figs. 1, 2.

Upper Ordovician, Cape Rich and from drift at Hamilton, Ontario.

*Orthodesma* ? *abscissum* Wilson

Holotype 11552

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 13, pl. 1, fig. 2.

Pamelia beds, Ottawa Formation, Middle Ordovician, quarry to the right of first road west of boundary between Russell and Prescott co., south of Montreal road, Ontario.

*Orthodesma affine* Whiteaves

Holotype 7061

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 184,  
pl. 20, fig. 5.

Ordovician [Red River Formation], Selkirk Island, Lake Winnipeg, Manitoba.

*Orthodesma alveolatum* Wilson

Holotype 11545

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 13, pl. 1, fig. 6.

Leray beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Orthodesma* ? *antiquum* Whiteaves

Hypotype 11532

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 14, pl. 1, fig. 4.

Pamelia beds, Ottawa Formation, Middle Ordovician, opposite old Sowter house, Aylmer, Quebec.

*Orthodesma approximatum* Foerste

Holotype 8425

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 285, pl. 1, fig. 5.

1924, Geol. Surv., Canada, Mem. 138, p. 192, pl. 29, fig. 5.

Upper Ordovician, Richelieu River at Chambly, Quebec.

*Orthodesma canaliculatum* var. *consimilis* Foerste

Holotype 8455

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 193, pl. 23, fig. 8.

Upper Ordovician, Workmans Brook, west of Meaford, Ontario.

*Orthodesma decorosum* Wilson

Holotype 11553

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 14, pl. 1, fig. 3.

Pamelia beds, Ottawa Formation, Middle Ordovician, about lot 14 on road between cons. 11 and 12, Ramsay tp., Ontario.

*Orthodesma* ? *humile* Wilson

Holotype 11554

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 15, pl. 1, fig. 1.

Sherman Fall beds, Ottawa Formation, Middle Ordovician, CPR. cutting south of Aylmer road, Hull, Quebec.

*Orthodesma* (?) *postplicatum* see *Modiolopsis postplicata*

*Orthodesma prolatum* Foerste

Holotype 2144

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 289, pl. 1, fig. 15.

1924, Geol. Surv., Canada, Mem. 138, p. 194, pl. 29, fig. 15.

Upper Ordovician, loose on beach below Becancour River, Quebec.

*Orthodesma* ? *subcarinatum* Ruedemann

Hypotype 11533

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 15, pl. 1, fig. 5.

Pamelia beds, Ottawa Formation, Middle Ordovician, Skead Road east of Research Council Laboratories, Ottawa, Ontario.

*Orthonota angulifera* ? (McCoy)

Hypotype 3120

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 132, pl. 8, fig. 13.

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Orthonota angulifera* (McCoy)

Hypotype 5641

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 136, pl. 19, fig. 10.

Stonehouse Formation, Upper Silurian, coast section, Arisaig, Nova Scotia.

*Orthonota arisaigensis* McLearn

Holotype 5639; paratype 5638

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 135, pl. 19, figs. 6, 9.

McAdam Formation, Middle Silurian, coast section and McAdam Creek near the coast, Arisaig, Nova Scotia.

*Orthonota corrugata* Whiteaves

Syntypes 4145, a

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 98, pl. 5, figs. 4, a, [4145], 5 [4145a].

Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

*Orthonota incerta* Billings

Syntypes 3119, a

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 130, pl. 8, fig. 4 [fig. 2 on plate legend].

McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 137, pl. 19, fig. 14 [holotype 3119].

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Orthonota proundulata* McLearn

Holotype 5640

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 134, pl. 19, fig. 13.

Stonehouse ? Formation, Upper Silurian, Arisaig, Nova Scotia.

*Orthonota simulans* Billings

Holotype 3117; hypotype 5642

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 131, pl. 8, fig. 2 [fig. 4 on plate legend].

McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 138, pl. 19, figs. 12 [5642], 15 [3117].

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Orthonota ? speciosa* Billings

Syntypes 3121, a

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 130, pl. 8, figs. 3, a.

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

=*Grammysia ? speciosa*, McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 95, pl. 19, fig. 17.

*Orthonota venusta* Billings

Syntypes 3118, a-d

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 129, pl. 8, fig. 1.

McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 135, pl. 19, fig. 11 [holotype 3118].

Upper Silurian [Stonehouse ? Formation], Arisaig, Nova Scotia.

*Ortonella (?) goensis* Foerste

Holotype 8497c

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 150, pl. 19, fig. 6.

Kagawong Formation, Upper Ordovician, at top of hill on an east-west road 2 miles north-west of Gore Bay, Manitoulin Island, Ontario.

*Ortonella (?) stewarti* Foerste

Holotype 8497a

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 149, pl. 19, fig. 5.

Kagawong Formation, Upper Ordovician, 2 miles southwest of Kagawong, Manitoulin Island, Ontario.

*Ortonella* (?) sp.

Hypotype 6787

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 150, pl. 43, fig. 4.

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Ostrea albertensis* Landes

Holotype 9347; paratypes 9347a, b

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 141, pl. 2, figs. 1-4.

Pakowki Formation, Upper Cretaceous, north side Milk River, SW. 1/4 sec. 29, tp. 2, rge. 9, W. 4th mer., Alberta.

*Ostrea anomioides* Meek

Hypotype 9808

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 2, fig. 7.

Dunvegan Formation, Upper Cretaceous, north bank 12 miles above mouth of Vermilion Creek below Dunvegan, Alberta.

*Ostrea atsina* McLearn

Holotype 9538

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., p. 1, pl. 7, fig. 11.

Triassic, west end Beatty Ledge, between Adams and Aylard Creek, Peace River Foothills, British Columbia.

*Ostrea dowlingi* McLearn

Holotype 6056; paratype 6056a

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 43, pl. 3, figs. 6-8.

Fernie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

*Ostrea minerensis* Landes

Holotype 9348

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 140, pl. 2, figs. 5, 6.

Foremost Formation, Upper Cretaceous, Miners Coulée, sec. 13, tp. 1, rge. 11, W. 4th mer., Alberta.

*Ostrea russelli* Landes

Holotype 9349; paratype 9349a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 139, pl. 3, figs. 3-6.

Pakowki Formation, Upper Cretaceous, 1.s.d.4, sec. 30, tp. 2, rge. 9, W. 4th mer. on west side of Bear Gulch, Alberta.

*Ostrea saxitoniana* McLearn

Holotype 9039; paratype 9039a

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 78, pl. 14, figs. 8, 9.

Allison Formation, 185 feet above base of section on Gulch Creek, Alberta.

*Ostrea skidegatensis* Whiteaves

Syntypes 4889, 4893

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 243, pl. 32, fig. 1 [4893]; text fig. 12 [4889].

'Cretaceous' [Yakoun Formation, Upper Jurassic], west of and south side of Alliford Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Ostrea weegeti* McLearn

Holotype 7702

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 92, pl. 19, fig. 5.

Hazelton Group, Jurassic, talus at foot of cliff about 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.



Mollusca

*Oxytoma blairmorensis* McLearn

Holotype 6050; paratypes 6050a, b, 6051

McLearn, F.H., 1924, *Trans. Roy. Soc. Can.*, ser. 3, vol. 18, sec. 4, p. 41, pl. 2, figs. 1–5.

Fernie group, Jurassic, drift between two cement quarries, Blairmore, and railway-cut south slope Grassy Mountain, Alberta.

*Oxytoma camSELLi* McLearn

Holotype 6341; paratype 6342

McLearn, F.H.,

1931, *Trans. Roy. Soc. Can.*, ser. 3, vol. 25, sec. 4, p. 5, pl. 1, figs. 7, 8.

1933, *ibid.*, vol. 27, p. 143, pl. 1, figs. 4, 5.

1945, *Geol. Surv., Canada, Paper 44–17, 2nd Edition*, pl. 3, fig. 13 [6342].

Peace River Formation, Lower Cretaceous, Peace River about 15 miles below mouth Cadotte River, British Columbia.

*Oxytoma cygnipes* Phillips

Hypotypes 12872–12876

Frebold, H., 1957, *Geol. Surv., Canada, Mem. 287*, p. 67, pl. 16, figs. 1–5.

Fernie Group, Lower Jurassic, top of mountain immediately south of Marble Mountain and forks of Ram River, Alberta.

*Oxytoma jacksoni* (Pompeckj)

Hypotypes 13389–13391

Frebold, H., 1958, *Geol. Surv., Canada, Bull. 41*, p. 14, pl. 6, figs. 1–3.

Wilkie Point Formation, Jurassic, Cameron Island, talus 10 miles north of Cape Canning, and east side of Intrepid Inlet, Prince Patrick Island, Arctic.

*Oxytoma kiparisovae* Tozer

Holotype 14215; paratypes 14214, 14216, 14217

Tozer, E.T., 1961, *Geol. Surv., Canada, Mem. 316*, p. 100, pl. 29, figs. 10–13.

Heiberg Formation, Upper Triassic, 14 and 6½ miles north of Eureka, Ellesmere Island, Arctic.

*Oxytoma mucronata* Meek and Hayden

Hypotypes 4871, a, 4895, 4907

Whiteaves, J.F., 1884, *Geol. Surv., Canada, Mesoz. Fossils*, vol. 1, pt. 3, p. 238, pl. 31, fig. 9 [4907]; p. 251, pl. 33, figs. 6 [4871], a [4895], b [4871a].

'Cretaceous' [Yakoun Formation, Upper Jurassic], south side Maude Island and east side Alliford Bay, Queen Charlotte Islands, British Columbia.

=*Avicula (Oxytoma) mcconnelli*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 300 [4895].

=*Avicula (Oxytoma) whiteavesi*, Whiteaves, J.F., 1900, *ibid.*, p. 298.

*Oxytoma pinania* McLearn

Holotype 9555; paratype 9708

McLearn, F.H.,

1945, *Geol. Surv., Canada, Paper 44–17, 2nd Edition*, pl. 10, fig. 4 [9708]; pl. 11, fig. 1 [9555].

1948, *ibid.*, App. p. 1.

First sandstone, Sikanni Formation, Lower Cretaceous, Halfway River at confluence with Cypress Creek; Goodrich Formation, Lower Cretaceous, mountain east of east branch Commotion Creek, south of Pine River, British Columbia.

*Oxytoma septentrionalis* (Haughton)

Hypotypes 13392–13395

Frebald, H., 1958, Geol. Surv., Canada, Bull. 41, p. 15, pl. 6, figs. 4–7.

Wilkie Point Formation, Jurassic, 1 mile east of Wilkie Point, Prince Patrick Island, Arctic.

*Oxytoma submccconnelli* McLearn

Holotype 7703

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 92, pl. 23, fig. 1.

Hazelton group, Jurassic, talus at foot of cliff about 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Oxytoma* sp.

Fig. spec. 9715

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44–17, 2nd Edition, pl. 12, fig. 9.

Fourth sandstone, Sikanni Formation, Lower Cretaceous, bank of creek entering right bank of Sikanni River, 3 miles east of bridge, British Columbia.

*Palaeocardia* ? *woodmani* McLearn

Holotype 6030

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 123, pl. 20, fig. 12.

Moodyard ? Formation, Middle Silurian, Arisaig, Nova Scotia.

*Palaeocardita glaukos* McLearn

Holotype 8798

McLearn, F.H., 1941, Can. Field-Naturalist, vol. 55, No. 3, p. 33, pl. 1, fig. 13.

Triassic [Grey beds], Pardonet Hill, Peace River Foothills, British Columbia.

*Palaeocardita nemoralis* McLearn

Holotype 9508

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47–14, App., p. 2, pl. 1, fig. 1.

Grey beds, Upper Triassic, talus Pardonet Hill, Peace River Foothills, British Columbia.

*Palaeoneilo attenuata* (Hall)

Hypotypes 5460–5462

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 98, pl. 12, figs. 8–10.

Stonehouse Formation, Upper Silurian, coast section northwest of Arisaig Brook, Arisaig, Nova Scotia.

*Palaeopecten danbyi* (McCoy)

Hypotype 5620

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 119, pl. 15, fig. 7.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Palaeopteria parvula* Whiteaves

Syntypes 7057–7059, a

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 181, pl. 20, figs. 1–3.

Ordovician [Red River Formation], Inmost Island and Reindeer Point, Lake Winnipeg, Manitoba.

*Palaeosolen amii* McLearn

Holotype 6026

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 134, p. 140, pl. 20, fig. 2.

McAdam Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Palaeosolen antigonishensis* McLearn

Holotype 6025

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 139, pl. 20, fig. 1.  
McAdam Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Palaeosolen ? hullensis* Wilson

Holotype 11550; paratype 11551

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 80, pl. 9, figs. 23–25.  
Pamelia beds, Ottawa Formation, Middle Ordovician, creek crossing road west of Fairy Lake, Hull, Quebec.

*Panenka grandis* Whiteaves

Syntypes 3600, a, 9131, a–c

Whiteaves, J.F., 1891, Can. Rec. Sci., vol. 4, p. 402, pl. 1 [3600].  
Middle Devonian [Onondaga Formation], St. Mary's, Ontario.

*Panopaea curta* Whiteaves

Holotype 5521

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 12, pl. 2, fig. 3.  
Upper Cretaceous [Edmonton Formation], mouth Threehills Creek, sec. 14, tp. 30, rge. 22, W. 4th mer., Alberta.

*Panopaea simulatrix* Whiteaves

Holotype 5518

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 11, pl. 2, figs. 2, a.  
Upper Cretaceous [Edmonton Formation], south bank Kneehills Creek, tp. 29, rge. 22, W. 4th mer., Alberta.

*Panopaea subovalis* Whiteaves

Holotype 5295

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 44, pl. 6, figs. 6, a.  
Upper Cretaceous, 4 miles south of Battle River, tp. 38, between rges. 12 and 13, W. 4th mer., Alberta.

*Panope borealis* Warren

Holotype 8730

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, sec. 4, p. 91, pl. 1, figs. 2, 3.  
Belly River Formation, Upper Cretaceous, Outlook, Saskatchewan.

*Panope ? elongatissima* see *Psilomya elongatissima*

*Panope? kissoumi* see *Pleuromya kissoumi*

*Panope mclearnii* Warren

Holotype 8731

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, sec. 4, p. 90, pl. 2, fig. 1.  
Bearpaw Formation, Upper Cretaceous, north side Frenchman River below mouth of Bates Creek, Saskatchewan.

*Paracyclas antiqua* (Goldfuss)

Hypotypes 3978, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 304, pl. 39, fig. 6 [3978].  
Devonian, southwest shore of Dawson Bay, Lake Winnipegosis, Manitoba.

*Paracyclas elliptica* Hall

Hypotypes 14862, 14863

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Br., Publ. 59-6,  
p. 65, pl. 11, figs. 9a, b, 10a, b.Dawson Bay Formation, Middle Devonian, north bank Red Deer River 100 yards west of  
Highway 10 bridge between The Pas and Mafeking, l.s.d. 7, sec. 17, tp. 45, rge. 25,  
W. Prin. mer., and Bell River, Manitoba.*Paracyclas elliptica* var. *occidentalis* (Billings)

Hypotypes 3968, 3969

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 305, pl.  
39, figs. 9, 10.

Devonian, Red Deer River, Manitoba.

*Paracyclas fletcheri* McLearn

Holotype 5644; paratypes 5643, 5645, 5646

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 139, pl. 20, figs. 7-10.

Stonehouse Formation, Upper Silurian, coast section, Arisaig, Nova Scotia.

*Paracyclas proavia* (Goldfuss) Forms A-C

Hypotypes 14864-14866

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Br., Publ. 59-6,  
p. 66, pl. 11, figs. 11, 12a, b, 13a, b.Dawson Bay Formation, Middle Devonian, Snake Island, Lake Winnipegosis, and north  
bank Red Deer River 100 yards west of Highway 10 bridge between The Pas and  
Mafeking, l.s.d. 7, sec. 17, tp. 45, rge. 25, W. Prin. mer., Manitoba.*Paracyclas* sp. undet.

Fig. specs. 3977, a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 306,  
pl. 39, figs. 5, a [3977a].Devonian, first small point north of mouth of Red Deer River, west shore Dawson Bay,  
Lake Winnipegosis, Manitoba.*Parallelidon dawsoni* Beede

Hypotype 4354, 7567, 7575, 7576

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 157, pl. 26; figs. 9-12.

Mississippian, Windsor, Brookfield and Miller Quarry, Nova Scotia.

*Parallelidon hardingi* (Dawson)

Hypotypes 7565a-d, 7566, 7571, 7572

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 156, pl. 26, figs. 13-19.

Mississippian, Maxner Point, Windsor, Nova Scotia.

*Parallelodon cardioceratanum* Crickmay

Holotype 9685

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 45, pl. 8, figs.  
1-3.Upper Jurassic, southwest shore of peninsula on west side of point that bounds the small  
bay, Harrison Lake, British Columbia.*Parallelodon (Nanonavis) cumshewensis* see *Grammatodon inornatus*

Mollusca

*Parallelodon (Gilbertwhitea) simillima* (Whiteaves)

Hypotype 8901

Reinhart, P.W., 1937, J. Pal., vol. 11, No. 3, p. 173, pl. 27, figs. 7a, b.

Yakoun Formation, Upper Jurassic, Robber Point, Maude Island, Queen Charlotte Islands, British Columbia.

See *Nemodon fischeri*

*Parallelodon (Nanonavis) whiteavesi* see *Nemodon vancouverensis*

*Paraptyx* cf. *ontario* Clarke

Hypotype 7972

Kindle, E.M., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 5, pl. 1, fig. 9.

Simpson shale, Upper Devonian, Mackenzie River 5 miles above Rabbitskin River, District of Mackenzie.

*Pecten alcesianus* McLearn

Holotype 7412

McLearn, F.H., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 145, pl. 3, fig. 3.

Clearwater Formation, Lower Cretaceous, north bank below Brule Rapids, Athabasca River, Alberta.

*Pecten assiniboiensis* Landes

Holotype 9346

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 142, pl. 3, fig. 9.

Bearpaw Formation, Upper Cretaceous, SE. 1/4 sec. 22, tp. 11, rge. 21, W. 2nd mer., Saskatchewan.

*Pecten burlingi* McLearn

Holotype 9559

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 11, fig. 7.

1948, *ibid.*, App., p. 1.

Sikanni Formation, Lower Cretaceous, float on Green Creek entering Sikanni Chief River 3 miles east of highway bridge, British Columbia.

*Pecten cadwalladerensis* McLearn

Holotype 9429; paratypes 9427, 9428, 9435

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 102, pl. 1, figs. 2-4, 10.

Triassic, Castle Creek at an approximate elevation of 6,300 feet, and Tyaughton Creek 3/4 mile above Spruce Lake Creek, British Columbia.

*Pecten carlottensis* Whiteaves

Syntypes 4867, a-1

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 251, pl. 33, fig. 7.

'Cretaceous' [Maude Formation, Jurassic], south side Maude Island, Queen Charlotte Islands, British Columbia.

*Pecten chiwanae* McLearn

Holotype 8786

McLearn, F.H., 1941, Can. Field-Naturalist, vol. 55, No. 3, p. 32, pl. 1, fig. 7.

Triassic [Grey beds], Mahaffy Cliffs, Peace River Foothills, British Columbia.

*'Pecten'?* *dishinni* McLearn

Holotype 8815

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 112, pl. 3, fig. 4.  
Triassic [Grey beds], talus Dry Canyon shoulder, Peace River Foothills, British Columbia.

*'Pecten'?* *dishinni* var. *kaska* McLearn

Holotype 8814

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 112, pl. 3, fig. 1.  
Triassic [Grey beds], Kerr Spur, Peace River Foothills, British Columbia.

*Pecten (Variamussium) klushaense* Lees

Syntypes 9624, a

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 39, pl. 3, figs. 1, 2.  
Lewes River Group, Triassic, Laberge area, Yukon.

*Pecten meekanus* see *Syncyclonema meekiana**Pecten nihanianus* McLearn

Holotype 8782

McLearn, F.H., 1939, Can. Field-Naturalist, vol. 53, No. 8, p. 118, pl. 1, fig. 1.  
Triassic [Pardonet beds], north side Peace River, Peace River Foothills, British Columbia.

*Pecten nihanianus* var. *dresseri* McLearn

Holotype 8783

McLearn, F.H., 1939, Can. Field-Naturalist, vol. 53, No. 8, p. 120, pl. 1, fig. 9.  
Triassic [Pardonet beds], Parle Pas Rapids, Peace River Foothills, British Columbia.

*Pecten otianus* McLearn

Holotype 8779

McLearn, F.H., 1939, Can. Field-Naturalist, vol. 53, No. 8, p. 120, pl. 1, fig. 8.  
Triassic [Pardonet beds], north side Peace River, Peace River Foothills, British Columbia.

*Pecten pontiamnis* McLearn

Holotype 9437; paratype 9436

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 102, pl. 1, figs. 11, 12.  
Tyaughton Group, Triassic, about 7,500 feet north of Tyaughton Creek and about 9,000 feet north-northwest of mouth of Camp Creek; and at an elevation of approximately 7,700 feet, about 1,100 feet due north of Tyaughton Creek at mouth of Camp Creek, British Columbia.

*Pecten sarsianus* McLearn

Holotype 8781; paratype 8780

McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 9, p. 131, pl. 1, figs. 1, 2.  
Triassic, Peace River Foothills, British Columbia.

*Pecten?* *sarsiana* McLearn

Holotype 9539; paratype 9540

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., p. 1, pl. 7, figs. 3, 4.  
Grey beds, Upper Triassic, 3 miles east of Aylord Creek, 1 mile north of Peace River, British Columbia.

=*Pecten tetsa*, McLearn, F.H., 1948, *ibid.*, Paper 46-1, 2nd Edition, Supp., p. 3.

*Pecten sasuchan* McLearn

Holotype 8787

McLearn, F.H., 1941, Can. Field-Naturalist, vol. 55, No. 3, p. 32, pl. 1, fig. 6.  
Triassic [Grey beds], Pardonet Hill, Peace River Foothills, British Columbia.

*Pecten silentiensis* McLearn

Holotype 6110

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 124, pl. 22, figs. 1, 2; pl. 23, fig. 8.

Badheart Formation, Upper Cretaceous, Smoky River 4 miles below Badheart River, 1 1/2 miles below Puskwaskau River, Alberta.

*Pecten tranquillianus* McLearn

Holotype 8778

McLearn, F.H., 1939, Can. Field-Naturalist, vol. 53, No. 8, p. 120, pl. 1, fig. 7.

Triassic [Grey beds], Beattie Cliff, Peace River Foothills, British Columbia.

*Pecten tyaughtonae* McLearn

Holotype 9448; paratypes 9446, 9447

McLearn, F.H., 1942, Can. Field-Naturalist, vol. 56, No. 7, p. 102, pl. 2, figs. 14-16.

Tyaughton Group, Triassic, at an approximate elevation of 7,700 feet about 1,100 feet due north of Tyaughton Creek at mouth of Camp Creek, and north of Spruce Lake Creek, British Columbia.

*Pecten (Variamussium) yukonense* Lees

Holotype 9625

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 38, pl. 3, fig. 3.

Lewes River Group, Triassic, Laberge area, Yukon.

*Pecten (Camptonectes)* sp.

Fig. spec. 13421

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 16, pl. 15, fig. 3.

Wilkie Point Formation, Jurassic, 10 miles north of Cape Canning, east side Intrepid Inlet, Prince Patrick Island, Arctic.

*Pecten* sp. indet.

Fig. specs. 13723, 13724

Frebold, H., 1959, Geol. Surv., Canada, Bull. 49, p. 11, pl. 2, figs. 9, 10.

Lower Jurassic, Coquina bed on ridge northeast of Parks station, Salmo area, British Columbia.

*Pectunculus veatchii* (Gabb)

Hypotype 5881

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 391, pl. 47, fig. 4.

Upper Cretaceous, Texada Island, Strait of Georgia, British Columbia.

*Periploma cuspidatum* Whiteaves

Syntypes 4949, a, b

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 220, pl. 29, figs. 4, a, b.

Lower Cretaceous [Haida Formation], west side Maude Island, Queen Charlotte Islands, British Columbia.

=*Meekia sella*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 291.

*Periploma johnseni* Landes

Holotype 9353; paratype 9353a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 150, pl. 4, figs. 4, 5.

Foremost Formation, Upper Cretaceous, Milk River, SE. 1/4 sec. 21, tp. 2, rge. 7, W. 4th mer., Alberta.

*Periploma suborbiculatum* Whiteaves

Holotype 5744

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 138, pl. 17, fig. 6.

Upper Cretaceous, Nanaimo River, Vancouver Island, British Columbia.

*Perna weelaupensis* McLearn

Holotype 7704

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 92, pl. 19, figs. 1, 2.

Hazelton Group, Jurassic, talus at foot of cliff about 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Pharus* sp.

Fig. spec. 9719

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 12, fig. 7.

Fourth sandstone, Sikanni Formation, Lower Cretaceous, right bank Sikanni River, 3 miles east of Alaska Highway bridge, British Columbia.

*Pholadomya cupressensis* Landes

Holotype 9352; paratype 9352a

Landes, E.W., 1940, Geol. Surv., Canada, Mem. 221, p. 152, pl. 4, figs. 1-3.

Eastend Formation, Upper Cretaceous, Cypress Hills, SE. 1/4 sec. 7, tp. 8, rge. 3, W. 4th mer., Alberta.

*Pholadomorpha pholadiformia* var. *divaricata* (Hall and Whitfield)

Hypotype 2071

Foerste, A.F., 1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 279, pl. 2, fig. 14.

Upper Ordovician, Huron River, Quebec.

= *Pholadomorpha divaricata*, Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 197, pl. 30, fig. 14.*Pholadomorpha pholadiformis* (Hall)

Hypotype 8416

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 277, pl. 2, fig. 16.

1924, Geol. Surv., Canada, Mem. 138, p. 197, pl. 30, fig. 16.

Upper Ordovician, Gorrel Point 2 miles northeast of Gore Bay, Manitoulin Island, Ontario.

*Pholadomorpha chambliensis* Foerste

Holotype 2069

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 281, pl. 1, fig. 8.

1924, Geol. Surv., Canada, Mem. 138, p. 198, pl. 29, fig. 8.

Upper Ordovician, Chambly, Quebec.

*Phenacocyclas antiqua* (Goldfuss)

Hypotypes 14890, 14891

McCammon, H., 1960, Manitoba Dept. Mines Nat. Res., Mines Br., Publ. 59-6, p. 68, pl. 11, figs. 14, 15a, b.

Dawson Bay Formation, Middle Devonian, north bank Red Deer River 100 yards west of Highway 10 bridge between The Pas and Mafeking, l.s.d. 7, sec. 17, tp. 45, rge. 25, W. Prin. mer., and south end of Lake Winnipegosis 12 miles south of Snake Island and 2 miles west of Charlie Island, sec. 21, tp. 30, rge. 17, W. Prin. mer., Manitoba,



Mollusca

*Pholadomya donacina* var. near *elongata* Goldfuss

Hypotype 9637

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 45, pl. 5, fig. 3.  
Laberge Group, Jurassic, Laberge area, Yukon.

*Pholadomya donacina* var. *obliquitruncata* Goldfuss

Hypotype 9636

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 45, pl. 5, figs. 1, 2.  
Laberge Group, Jurassic, Laberge area, Yukon.

*Pholadomya mclearni* Landes

Holotype 9355

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 152, pl. 4, figs. 6, 7.  
Lea Park Formation, Upper Cretaceous, north side North Saskatchewan River, 1 1/2 miles west of Old Fort George, Alberta.

*Pholadomya nitanae* McLearn

Holotype 9036

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 76, pl. 14, fig. 7.  
Alberta Formation, Upper Cretaceous, Crowsnest River Section, Alberta.

*Pholadomya ovuloides* Whiteaves

Holotype 4930

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 59, pl. 9, fig. 9.  
'Cretaceous' [Yakoun Formation, Upper Jurassic], south side of Alliford Bay, Queen Charlotte Islands, British Columbia.

*Pholadomya vancouverensis* Whiteaves

Syntypes 4793, a

Whiteaves, J.F., 1883, Trans. Roy. Soc. Can., vol. 1, sec. 4, p. 83, fig. 2[4793].  
Cretaceous, Jackass Mountain, British Columbia.

*Phthonia?* *semiradiata* (Hall)

Hypotypes 5602, 5603

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 91, pl. 13, figs. 17, 18.  
Stonehouse Formation, Upper Silurian, Stonehouse field, Arisaig, Nova Scotia.

*Phthonia* sp.

Fig. specs. 14806, 14807

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Br., Publ. 59-6, p. 64, pl. 11, fig. 5.  
Dawson Bay Formation, Middle Devonian, 2 miles west of Nina Lake along road to The Narrows, Lake Manitoba, sec. 24, tp. 24, rge. 10, W. Prin. mer., Manitoba.

*Pinna calamitoides* Shumard

Hypotype 17751, a [parts of one specimen]

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 167, pl. 20, figs. 1a, b.  
Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Pinna curvimarginata* McLearn

Holotype 5397

McLearn, F.H., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 10, pl. 4, fig. 1.  
Peace River Formation, Lower Cretaceous, Peace River, 14 miles below Browns, Alberta.

*Pinna dolosoniensis* McLearn

Holotype 6102

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 120, pl. 23, fig. 9.

Badheart Formation, Upper Cretaceous, 1 1/2 miles below Puskwaskau River, east bank Smoky River, Alberta.

*Pinna hagi* McLearn

Holotype 9553

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 12, fig. 5.

1948, *ibid.*, App., p. 1.

Third sandstone, Sikanni Formation, Lower Cretaceous, highway-cut south bank Sikanni Chief River, British Columbia.

*Pisidium squamula* Russell

Holotype 6793

Russell, L.S., 1932, Can. Field-Naturalist, vol. 46, No. 4, p. 81, figs. 3a, b.

St. Mary River Formation, Upper Cretaceous, north side Oldman River, sec. 11 or 12, tp. 10, rge. 2, W. 5th mer., Alberta.

*Plagiostoma blairmorensis* McLearn

Holotype 6080; paratype 6080a

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 51, pl. 7, figs. 3-5.

Lille Member, Fernie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

*Plagiostoma hazeltonense* McLearn

Holotype 7705; paratypes 7705a-d

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 94, pl. 21, fig. 1; pl. 22, figs. 1-5.

Hazelton Group, Jurassic, talus at foot of cliff 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Plagiostoma* sp.

Fig. specs. 13419, 13426

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 16, pl. 14, fig. 4; pl. 16, fig. 2.

Triassic?, 3 1/2 miles north of Salmon Point, Prince Patrick Island, Arctic.

*Plesielliptio brachyopisthus* (White)

Hypotypes 10320, 10321

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 39, pl. 1, figs. 3, 4.

Edmonton Formation, Upper Cretaceous, left side Little Red Deer River, l.s.d. 4, sec. 1, tp. 29, rge. 6, W. 5th mer., Alberta.

*Plesielliptio priscus* (Meek and Hayden)

Hypotypes 10318, 10319

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 40, pl. 2, figs. 1, 2.

Ravenscrag Formation, Paleocene, west branch Calf Creek, NE. 1/4 sec. 5, tp. 8, rge. 22, W. 3rd mer., Saskatchewan; Paskapoo Formation, Paleocene, north side Little Red Deer River, l.s.d. 1, sec. 30, tp. 29, rge. 5, W. 5th mer., Alberta.

*Pleuromya*(?) *carlottensis* Whiteaves

Holotype 4943a

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 57, pl. 9, fig. 8.

'Cretaceous' [Yakoun Formation, Upper Jurassic], Alliford Bay, Queen Charlotte Islands, British Columbia.

=*Pleuromya papyracea* var *carlottensis*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 289.

Mollusca

*Pleuromya (Myacites) cf. gregarius* (Zeiten?)

Hypotype 9638

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 45, pl. 5, figs. 4, 5.  
Laberge Group, Jurassic, Laberge area, Yukon.

*Pleuromya harrisonensis* Crickmay

Holotype 9684

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 53, pl. 15, figs. 1-3.

Lower Cretaceous, southeast shore of Peninsula, Harrison Lake, British Columbia.

*Pleuromya kissoumi* McLearn

Holotype 9562

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 10, fig. 8.

1948, *ibid.*, App., p. 1.

Goodrich Formation, mountain east of east branch of Commotion Creek, British Columbia.

=*Panope? kissoumi*, Imlay, R.W., 1961, U.S. Geol. Surv., Prof. Paper 335, p. 46, pl. 5, fig. 8 [plaster replica].

*Pleuromya laevigata* see *Pleuromya (subcompressa ? var.) laevigata*

*Pleuromya ? nidovana* McLearn

Holotype 8775

McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 9, p. 131, pl. 1, fig. 3.

Triassic [Pardonet, beds], talus on ledge at falls below Jewett Spur on Peace River, Peace River Foothills, British Columbia.

*Pleuromya obtusiprorata* McLearn

Holotype 6087; paratype 6087a

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 54, pl. 8, figs. 2-4.

Fernie Group, Jurassic, drift between the two cement quarries, Blairmore, Alberta.

*Pleuromya papyracea* var. *carlottensis* see *Pleuromya subcompressa* var. *carlottensis* and *Pleuromya(?) carlottensis*

*Pleuromya peacensis* McLearn

Holotype 9541

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., p. 1, pl. 7, fig. 12.

Grey beds, Triassic, south side Beattie Hill below first ledge on high trail, Peace River, British Columbia.

*Pleuromya pearsonensis* Shimer

Holotype 17746

Shimer, H. W., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 86, pl. 9, fig. 2.

'Upper Triassic', east side Pearson Creek, Bridge River map-area, British Columbia.

*Pleuromya postculminata* McLearn

Holotype 6089

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 55, pl. 9, fig. 6.

Fernie Group, Jurassic, loose from railway-cut south slope Grassy Mountain, Alberta.

*Pleuromya sikanni* McLearn

Holotype 9563

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 12, fig. 1.

1948, *ibid.*, App., p. 1.

Third sandstone, Sikanni Formation, Lower Cretaceous, highway-cut Sikanni River, British Columbia.

*Pleuromya* sp. aff. *simplex* Warren

Hypotypes 13375, 13376

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 13, pl. 3, figs. 9, 10.

Wilkie Point Formation, Jurassic, east side of Landing Lake and 11 miles north of Cape Canning, east side Intrepid Inlet, Prince Patrick Island, Arctic.

*Pleuromya subcompressa* Meek

Hypotype 4943

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 222, pl. 29, fig. 6.

'Cretaceous' [Yakoun Formation, Upper Jurassic], south side Alliford Bay, Queen Charlotte Islands, British Columbia.

=*Pleuromya papyracea* var. *carlottensis*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 289.*Pleuromya subcompressa* var. *carlottensis* Whiteaves

Hypotypes 4940, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 223, pl. 29, figs. 7 [4940], a [4940a].

'Cretaceous' [Yakoun Formation, Upper Jurassic], south side Alliford Bay, Queen Charlotte Islands, British Columbia.

=*Pleuromya papyracea* var. *carlottensis*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 289.*Pleuromya* (*subcompressa* ? var.) *laevigata* Whiteaves

Syntypes 4937, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 224, pl. 30, figs. 1 a[4937], b, c[4937a].

'Cretaceous' [Yakoun Formation, Upper Jurassic], south side Alliford Bay, Queen Charlotte Islands, British Columbia.

=*Pleuromya laevigata*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 289.*Pleuromya subcompressa* var. *laevigata* Whiteaves

Hypotype 4874

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 249, pl. 33, fig. 3.

'Cretaceous', south side Maude Island, Queen Charlotte Islands, British Columbia.

=*Pleuromya laevigata*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 289.*Pleuromya summiornata* McLearn

Holotype 6088

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 54, pl. 9, fig. 7.

Femie Group, Jurassic, talus, creek north of Blairmore, Alberta.

*Pleuromya triasina* McLearn

Holotype 9542; paratype 9543

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., p. 1, pl. 7, figs. 8, 9.

Grey beds, Triassic, Beattie Hill, Peace River Foothills, British Columbia.

*Pleuromya yukonense* Lees

Holotype 9639

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 44, pl. 5, figs. 6, 7.  
Laberge Group, Jurassic, Laberge area, Yukon.

*Pleuromya wickendeni* McLearn

Holotype 9564

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 10, fig. 2.

1948, *ibid.*, App., p. 2.

Goodrich Formation, Lower Cretaceous, Pine River, east of fault east of Young Creek,  
British Columbia.

*Pleurophorus kissoumi* McLearn

Holotype 8777

McLearn, F.H., 1939, Can. Field-Naturalist, vol. 53, No. 8, p. 120, pl. 1, fig. 5.  
Triassic, north side Peace River, Peace River Foothills, British Columbia.

*Plicatula perimbricata* Gabb

Hypotypes 14252-14254

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 63-19, p. 26, pl. 12, figs. 5-7.

Bonanza Group, Upper Triassic, west shore of Victoria Lake and island in Kyuquot Bay,  
west coast of Vancouver Island; Tyaughton Group, Upper Triassic, ridge east of south  
end of Spruce Lake, Tyaughton Lake area, British Columbia.

*Posidonia aranea* Tozer

Holotype 14202; paratypes 14203, 14204

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 102, pl. 28, figs. 13-15.

Blind Fiord Formation, Lower Triassic, near mouth south side of Otto Fiord and between  
Hare and Otto Fiords, 15 miles northwest of mouth Hare Fiord, Ellesmere Island,  
Arctic.

*Posidonia mimer* Oeberg

Hypotype 14201

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 101, pl. 28, fig. 6.

Blind Fiord Formation, Lower Triassic, between Hare and Otto Fiords, 5 miles northwest  
of entrance to Hare Fiord, Ellesmere Island, Arctic.

*Posidonomya nahwisi* McLearn

Hypotype 9705

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 9, fig. 1.

Shaftsbury Formation, Lower Cretaceous, east of Cache Creek, Peace River, Alberta.  
See *Inoceramus nahwisi*

*Posidonomya nahwisi* (transitional to var. *goodrichensis*) McLearn

Hypotype 9704

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 9, fig. 2.

Shaftsbury Formation, Lower Cretaceous, east of Cache Creek, Peace River, Alberta.

*Posidonomya nahwisi* var. *goodrichensis* McLearn

Hypotypes 9710, 9713, 9717

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 11, figs. 4  
[9713], 5 [9710]; pl. 12, fig. 2 [9717].

Sikanni Formation, Lower Cretaceous, talus in creek entering Sikanni Chief River, 3 miles  
east of highway bridge; 1 mile south of forks of Cypress and Halfway Rivers; and at  
milepost 163, Alaska Highway, British Columbia.

See *Inoceramus nahwisi* var. *goodrichensis*

*Posidonomya nahwisi* var. *moberliensis* see *Inoceramus nahwisi* var. *moberliensis*

*Protocardia alcesiana* McLearn

Holotype 8001; paratype 8002

McLearn, F.H.,

1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 151, pl. 2, figs. 14–16.

1945, Geol. Surv., Canada, Paper 44–17, 2nd Edition, pl. 3, figs. 3 [8002], 4 [8001].

Clearwater Formation, Lower Cretaceous, talus, 14 miles below Brule Rapids, and north of Atkinson Creek, Athabasca River, Alberta.

*Protocardia borealis* Whiteaves

Syntypes 5267, a–d, 5268

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 41, pl. 6, figs. 1, a [5267], 2, a [5267a], 3 [5268].

Upper Cretaceous, St. Mary River near Belly River; Ross Coulee near Medicine Hat; near Irvine Station, CPR., Alberta; and South Saskatchewan River near Swift Current, Saskatchewan.

*Protocardium hillanum* (Sowerby)

Hypotype 4934

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 228, pl. 30, fig. 5.

Cretaceous [Yakoun Formation, Upper Jurassic], east end Maude Island, Queen Charlotte Islands, British Columbia.

=*Protocardia subsimile*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 290.

*Protocardia schucherti* McLearn

Holotype 6097; paratype 6096

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 57, pl. 9, figs. 4, 10.

Fernie Group, Jurassic, talus in creek between the two cement quarries and on creek north of Blairmore, Alberta.

*Protocardia striatula* (Phillips)

Hypotype 13377, 13378

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 13, pl. 3, figs. 11, 12.

Wilkie Point Formation, Jurassic, 11 miles north of Cape Canning, east side of Intrepid Inlet, and 3 3/4 miles northeast of Mould Bay weather station, Prince Patrick Island, Arctic.

*Protocardia subquadrata* (Evans and Shumard)

Hypotype 5263

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 41, pl. 5, figs. 4, a.

Upper Cretaceous, Bulls Head, Alberta.

*Protocardia subsimile* see *Protocardium hillanum*

*Protocardia* sp. undet.

Fig. spec. 4872

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 250, pl. 33, fig. 5.

'Cretaceous', south side Maude Island, Queen Charlotte Islands, British Columbia.

*Pseudamusium debertianum* (Dawson)

Hypotypes 7595, 7596, a

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 168, pl. 29, figs. 3–5.

Mississippian, Nova Scotia.

*Pseudamusium simplex* (Dawson)

Hypotypes 4364, f, 7557, a, 7597, 7598

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 167, pl. 28, figs. 13-18.

Mississippian, Dominion Atlantic Railway Bridge, Windsor, and unspecified localities, Nova Scotia.

*Pseudomonotis boreas* (Oeberg)

Hypotypes 14199, 14200

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 99, pl. 28, figs. 4, 5.

Blind Fiord Formation, Lower Triassic, between Hare and Otto Fiords, 5 miles northwest of entrance to Hare Fiord, Ellesmere Island, Arctic.

*Pseudomonotis ferniensis* McLearn

Holotype 6054; paratypes 6053, a

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 42, pl. 3, figs. 1-4.

Fernie Group, Jurassic, talus creek north of Blaimore and railway-cut south slope Grassy Mountain, Alberta.

*Pseudomonotis occidentalis* (Whiteaves)

Hypotypes 14197, 14198

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 98, pl. 28, figs. 7, 8.

Blind Fiord Formation, Lower Triassic, south side Bunde Fiord, Axel Heiberg Island, Arctic.

See *Halobia occidentalis*, *Monotis ovalis*, and *Pseudomonotis ovalis* var. *kindli*.

*Pseudomonotis ovalis* (Whiteaves)

Hypotype 9599

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., pl. 1, fig. 4.

Toad Formation, Lower Triassic, northeast side Toad River 2 1/2 miles up from junction with Liard River, British Columbia.

*Pseudomonotis ovalis* var. *kindli* McLearn

Holotype 9478; paratype 9598

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., p. 2, pl. 1, figs. 5, 6.

Toad Formation, Lower Triassic, north side Liard River 2 miles north of mouth of Toad River, British Columbia.

=*Pseudomonotis occidentalis*, Tozer, E.T.,

1961, *ibid.*, Mem. 316, p. 98, pl. 28, fig. 11 [9598].

1962, *ibid.*, Paper 62-19, p. 8, pl. 3, figs. 8 [9478], 10 [9598].

*Pseudomonotis subcircularis* (Gabb)

Hypotypes 9620, a

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 35, pl. 2, figs. 1, 2.

Lewes River Group, Triassic, Laberge area, Yukon.

*Psiloconcha sinuata* var. *borealis* Foerste

Holotype 8411; paratypes 2087, 8412

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 296, pl. 2, figs. 9a-c.

1924, Geol. Surv., Canada, Mem. 138, p. 196, pl. 30, figs. 9a, b, 10.

Upper Ordovician, Huron and Nicolet Rivers, Quebec.

*Psiloconcha subovalis* Ulrich

Hypotype 8408

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 295, pl. 2, figs. 15a, b.

1924, Geol. Surv., Canada, Mem. 138, p. 195, pl. 30, figs. 15a, b.

Upper Ordovician, Huron River, Quebec.

*Psilococoncha* sp.

Fig. spec. 11534

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 19, pl. 1, fig. 9.

Pamelia beds, Ottawa Formation, Middle Ordovician, Skead Road, Ottawa, Ontario.

*Psilomya elongatissima* McLearn

Holotype 7419

McLearn, F.H., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 149, pl. 3, fig. 2.

Clearwater Formation, Lower Cretaceous, north bank just below Brule Rapids, Athabasca River, Alberta.

= *Panope? elongatissima*, Imlay, R.W., 1961, U.S. Geol. Surv., Prof. Paper 335, p. 46, pl. 5, fig. 10 [plaster replica].*Psilomya peterondi* McLearn

Holotype 7417; paratype 7418

McLearn, F.H., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 148, pl. 2, figs. 6, 7; pl. 3, fig. 1.

Clearwater Formation, Lower Cretaceous, talus above Brule Rapids, and on shore north of Atkinson Creek, Athabasca River, Alberta.

*Pteria? collipiana* McLearn

Holotype 8759

McLearn, F.H., 1939, Can. Field-Naturalist, vol. 53, No. 8, p. 118, pl. 1, fig. 3.

Triassic [Grey beds], Peace River Foothills, British Columbia.

*Pteria (Oxytoma) corneuiliana* (d'Orbigny)

Hypotypes 4764, a-f.

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 166, pl. 23, figs. 1 [4764], a [4764a], b [4764b].

'Cretaceous' [Fermie Group, Jurassic], 3 miles north of Devil's Lake, Alberta.

*Pteria (Pseudoptera) fibrosa* (Meek and Hayden) var.

Hypotype 5242

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 32, pl. 4, fig. 1.

Upper Cretaceous, Bow River near Horseshoe Bend, Saskatchewan.

*Pteria? laksel* McLearn

Holotype 8763

McLearn, F.H., 1941, Can. Field-Naturalist, vol. 55, No. 3, p. 31, pl. 1, fig. 3.

Triassic [Pardonet beds], McLay Spur, Peace River Foothills, British Columbia.

*Pteria notukeuensis* Warren

Syntypes 8733, 8743, a

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, sec. 4, p. 84, pl. 2, figs. 3-5.

Bearpaw Formation, Upper Cretaceous, north side of Frenchman River below mouth of Bates Creek and Notukeu Creek near Ponteix, Saskatchewan.

*Pteria via-media* McLearn

Holotype 9554

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 11, fig. 6.

1948, *ibid.*, App., p. 1.

Second sandstone, Sikanni Formation, Lower Cretaceous, Halfway River at confluence with Cypress Creek, British Columbia.



Mollusca

*Pterinea amii* McLearn

Holotype 6039

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 116, pl. 17, fig. 5.  
Stonehouse ? Formation, Upper Silurian, Arisaig, Nova Scotia.

*Pterinea bellilineata* Billings

Holotype 2107

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 15.  
Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 228 [pl. 29, fig. 9 is not the type].  
Upper Ordovician [Ellis Bay Formation], White Cliff, Ellis Bay, Anticosti Island, Quebec.

*Pterinea cancellata* (Hall)

Hypotype 5616

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 115, pl. 14, fig. 12.  
Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Pterinea curiosa* Billings

Holotype 2460

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 51, figs. 18a,b.  
Twenhofel, W.H., 1928, *ibid.*, Mem. 229, pl. 32, figs. 2, 3.  
Middle Silurian [Jupiter Formation], near Jupiter River, Anticosti Island, Quebec.

*Pterinea (Caritodens) demissa* (Conrad)

Hypotype 8547b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 161, pl. 26, fig. 3.  
Upper Ordovician, Nicolet River, Quebec.  
See *Caritodens demissa*

*Pterinea?* *gesneri* McLearn

Hypotype 6038

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 117, pl. 17, fig. 4.  
Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Pterinea honeymani* (Hall)

Hypotypes 3111d, 5615, 5617

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 114, pl. 14, fig. 9; pl. 15,  
fig. 5; pl. 17, fig. 3.  
Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Pterinea lobata* Whiteaves

Syntypes 4004, 4005,a, 4006.

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 292, pl.  
38, figs. 1-4.  
Devonian, small island in, at Whiteaves Point, and western shore of Dawson Bay, Lake  
Winnipegosis, Manitoba.

*Pterinea marklandensis* McLearn

Holotype 6037

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 116, pl. 16, fig. 10.  
Stonehouse? Formation, Upper Silurian, Arisaig, Nova Scotia.

*Pterinea occidentalis* Whiteaves

Syntype 4399

Whiteaves, J.F., 1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 287, pl.  
28, fig. 3.  
Silurian, Swan Lake at head of Shoal River, Manitoba.

*Pterinea prolifica* Billings

Hypotype 2106b

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 230, pl. 34, fig. 5.  
English Head Formation, Upper Ordovician, Macasty Bay, Anticosti Island, Quebec.

*Pterinea prominiradiata* McLearn

Holotype 5618

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 114, pl. 14, fig. 11.  
McAdam Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Pterinea stonehousensis* McLearn

Paratype 6041

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 117, pl. 17, fig. 2.  
Stonehouse Formation, Upper Silurian, coast section, Arisaig, Nova Scotia.

*Pterinea* (?) *striata* see *Modiolopsis striata**Pterinea textilis*? (Hall)

Hypotype 3317

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, pl. 4, fig. 1.  
Devonian [Grande Greve Formation], Grande Greve, Gaspé, Quebec.

*Pterinea thisbe* Billings

Syntypes 2459,a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 52.  
Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 230, pl. 33, figs. 6, 7.  
Middle Silurian [Jupiter Formation], Shallop River, Anticosti Island, Quebec.

*Pterinea twenhofeli* McLearn

Holotype 6036

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 116, pl. 14, fig. 10.  
Stonehouse ? Formation, Upper Silurian, Arisaig, Nova Scotia.

*Pterinea cf. undata* (Hall)

Hypotype 2703

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 8, fig. 2.  
Grimsby Formation, Cataract Group, Lower Silurian, Flamboro, Ontario.

*Pterinea varistriata* Billings

Syntypes 2289,a,b

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 50.  
Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 231.  
Upper Ordovician [Ellis Bay Formation], Ellis Bay, Anticosti Island, Quebec.

*Pterinopecten* sp.

Fig. spec. 7556

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 166, pl. 28, fig. 12.  
Mississippian, Stellarton, Pictou co., Nova Scotia.

*Pteronitella altiformis* McLearn

Holotype 5626

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 122, pl. 15, fig. 6.  
Upper Silurian, Arisaig, Nova Scotia.

*Pteronitella* (?) *beechhillensis* McLearn

Holotype 6213

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 122, pl. 16, fig. 2.  
Beechhill Formation, Lower Silurian, Rory McDonald Brook, Arisaig, Nova Scotia.

*Pteronitella curta* Billings

Syntypes 3135, a; hypotype 5625

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 143, pl. 9, fig. 6 [3135].

McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 121, pl. 15, fig. 2 [5625]; pl. 28, fig. 8 [holotype 3135a].

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Pteronitella oblonga* Billings

Syntypes 3134, a

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 143, pl. 9, fig. 7 [3134].

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Pteronitella venusta* Billings

Syntypes 3133, a; hypotypes 5621, 5622

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 142, pl. 9, figs. 5 [3133], a [3133a],

McLearn, F.H., 1924, *ibid.*, Mem. 137, p. 119, pl. 15, figs. 1, 3, 4.

Upper Silurian [Stonehouse Formation], Arisaig, Nova Scotia.

*Pteronitella venusta* var. *oblonga* (Billings)

Hypotypes 5623, 5624

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 120, pl. 16, figs. 5, 7.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Pteronitella?* sp.

Fig. specs. 6214, 6215

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, pl. 16, figs. 1, 9.

Beechhill Formation, Lower Silurian, Rory McDonald Brook, Arisaig, Nova Scotia.

*Pteronites gayensis* Dawson

Hypotypes 7682, 7752, a, c

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 162, pl. 27, figs. 1-4.

Mississippian, Boisdale, Nova Scotia and manganese pit, Markhamville, New Brunswick.

*Ptychopteria aequivalvis* Whiteaves

Holotype 4279

Whiteaves, J.F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 239, pl. 32, figs. 6, a.

Devonian, Athabasca River about 10 miles below Clearwater River, Alberta.

*Quoieccchia aliciae* Crickmay

Holotype 9691; paratype 9689

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 51, pl. 13, figs. 3-7.

Lower Cretaceous, 235 yards from shore on left bank of little brook flowing into Harrison Lake, British Columbia.

*Rhabdotophorus gracilis* Russell

Holotype 8850; paratypes 8850a, b

Russell, L.S., 1935, Trans. Roy. Soc. Can., ser. 3, vol. 29, sec. 4, p. 17, pl. 1, figs. 1-4.

Milk River Formation, Upper Cretaceous, southeast side of Deadhorse Coulee, l.s.d. 13, sec. 33, tp. 1, rge. 11, W. 4th mer., Alberta.

*Rhytimya emma* (Billings)

Hypotype 2098b

Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 233, pl. 31, fig. 5 [variously labelled holotype 2097 or 2098-v].

Upper Ordovician [English Head or Vaureal Formations], Macasty Bay, Anticosti Island, Quebec.

[Note: According to the attached printed label, this specimen was collected in 1865 by T.C. Weston at Macasty Bay, and therefore cannot be part of the original material described in 1862 from English Head.]

*Rhytimya granulosa* Wilson

Holotype 4319

Wilson, A.E., 1915, Ottawa Naturalist, vol. 29, p. 85, pl. 2, figs. 1, 2.

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 200, pl. 38, fig. 2.

Upper Ordovician, lots 20-21, cons. 7-8, nearly 2 miles west of Vars, Ontario.

*Rhytimya kagawongensis* Foerste

Syntypes 8449 a-e; hypotypes 8536, a-c

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 482, pl. 4, fig. 5 [8449a].

1924, Geol. Surv., Canada, Mem. 138, p. 200, pl. 16, figs. 10a [8449a], b [8449b].

Upper Ordovician, 2 miles southwest of Kagawong on road to Gore Bay and 1/4 mile south of Kagawong Falls, Manitoulin Island, Ontario.

*Rhytimya oehana* Ulrich

Hypotype 8423

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 307, pl. 1, fig. 11.

1924, Geol. Surv., Canada, Mem. 138, p. 199, pl. 29, fig. 11.

Upper Ordovician, Richelieu River at Chambly, Quebec.

*Rhytimya recta* Whiteaves

Holotype 7067

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, p. 186, pl. 20, fig. 7.

Ordovician [Red River Formation], Point Reindeer, Lake Winnipeg, Manitoba.

*Saffordia intermedia* Wilson

Holotype 11556

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 18, pl. 1, figs. 12, 13.

Leray beds, Ottawa Formation, Middle Ordovician, lot. 3, con. 3, R.F., Gloucester tp., Ontario.

*Sanguinolites niobe* Bell

Holotype 7535; paratype 7607

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 153, pl. 25, figs. 11, 12, a, b. Mississippian, Avon Bridge, Windsor, Nova Scotia.

*Sanguinolites parvus* Bell

Holotype 7550a; paratypes 7550, b, c, 7606, b

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 152, pl. 25, figs. 5-10.

Mississippian, Maxner Point, Windsor, Nova Scotia.

*Sanguinolites striatogranulatus* Hind

Hypotypes 7536, a, 7537, a, b, 7538, 7551, 7604, 7605

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 153, pl. 24, figs. 26-30; pl. 25, figs. 1-4.

Mississippian, Maxner Point, Avon River, Maccan River, Windsor, Nova Scotia.

*Sanguinolites tethys* Billings

Syntypes 3312,a

Billings, E., 1874, Geol. Surv., Canada, Palaeoz. Fossils, vol. 2, pt. 1, p. 50, pl. 4, figs. 5,a.

Devonian [Grande Greve Formation], Grande Greve, Gaspé, Quebec.

=*Goniophora tethys*, Clarke, J.M., 1908, New York State Mus., Mem. 9, pt. 1, p. 161 pl. 22, figs. 14-16.

*Sanguinolites* ? sp.

Fig. spec. 7608

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 154, pl. 25, fig. 13.

Mississippian, Kennetcook River, Hants co., Nova Scotia.

*Saxicava* ? *albertensis* Landes

Holotype 9364

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 163, pl. 6, fig. 3.

Pakowki Formation, Upper Cretaceous, Bear Gulch, l.s.d. 2, sec. 18, tp. 2., rge. 9, W. 4th mer., Alberta.

*Scaldia fletcheri* Bell

Holotype 7563

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 171, pl. 30, figs. 4, a.

Mississippian, Maxner Point, Windsor, Nova Scotia.

*Schizodus cheveriensis* Bell

Holotype 7547a; paratype 7547

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 164, pl. 27, figs. 7, 8.

Mississippian, Cheverie shore, Avon River, Nova Scotia.

*Schizodus fundiensis* Bell

Holotype 7546; paratype 7613

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 163, pl. 27, figs. 5,a-c, 6.

Mississippian, Miller's quarry, Windsor, Nova Scotia.

*Solecurtus (Tagelus) occidentalis* Whiteaves

Holotype 5296

Whiteaves, J.F.,

1887, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 2, p. 157E.

1889, *ibid.*, Contr. Can. Pal., vol. 1, pt. 2, p. 178, pl. 24, fig. 4.

Upper Cretaceous, Battle River, tp. 40, rge. 13, W. 4th mer., Alberta.

*Solecurtus* ? (*Azor* ?) sp.

Fig. spec. 9720

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 11, fig. 2.

First sandstone, Sikanni Formation, Lower Cretaceous, crest of Kohe Creek anticline, left bank of Halfway River, British Columbia.

*Sowteria canadensis* (Raymond)

Hypotypes 11542,a, 11603

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 55, pl. 1, figs. 14-16.

Pamelia beds, Ottawa Formation, Middle Ordovician, Skead Road east of National Research Council Laboratories and halfway to the Ottawa River, and Merivale Road, Ottawa, Ontario.

*Spathella insecta* Dawson

Hypotypes 7534, 7539, 7540

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 171, pl. 30, figs. 1-3.

Mississippian, Avon River bridge and nodular beds north of Wentworth quarry, Windsor, Nova Scotia.

*Spathella subelliptica* Whiteaves

Syntypes 3993,a

Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 298, pl. 38, fig. 12 [3993].

Devonian, second small point north of mouth of Red Deer River western shore of Dawson Bay, Lake Winnipegosis, Manitoba.

*Sphaera* cf. *whitneyi* Meek

Hypotype 17749

McLearn, F. H.,

1946, Geol. Surv., Canada, Paper 46-1, App. 2, pl. 2, fig. 2.

1948, *ibid.*, 2nd Edition, Supp., pl. 2, fig. 2.

Toad Formation, Middle Triassic, Cameron Hill, Alaska Highway, Tetsa River valley, British Columbia.

*Sphaerium aequale* Russell

Topotype 10324

Russell, L.S., 1956, Geol. Surv., Canada, Mem. 280, p. 42, pl. 2, fig. 5.

Paskapoo Formation, Paleocene, west slope Wallace Mountain, east fork Bruce River, Swan Hills district, Alberta.

*Sphaerium aquilonarium* Dall

Holotype 4378

Dall, W.H., 1924, in Oneill, J.J., Rept. Canadian Arctic Expedition 1913-18, vol. 11, pt. A, p. 28A, pl. 35, fig. 4.

Tertiary, 12 miles up Brock River, 15 miles south of Cape Lyon, District of Mackenzie.

*Sphaerium formosum* (Meek & Hayden)

Hypotype 10128

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 43, pl. 2, fig. 7.

Willow Creek Formation, Paleocene, right side Castle River, 1.s.d. 2, sec. 24, tp. 7, rge. 1, W. 5th mer., Alberta.

*Sphaerium fowleri* Russell

Topotype 10325

Russell, L.S., 1956, Geol. Surv., Canada, Mem. 280, p. 43, pl. 2, fig. 6.

Paskapoo Formation, Paleocene, right side Highwood River just below mouth of Sheep River, 1.s.d. 11, sec. 32, tp. 20, rge. 28, W. 4th mer., Alberta.

*Sphaerium gemma* Dall

Syntypes 4379,a,b

Dall, W.H., 1924, in Oneill, J.J., Rept. Canadian Arctic Expedition 1913-18, vol. 11, pt. A, p. 28A, pl. 35, figs. 5-8.

Tertiary, 12 miles up Brock River, 15 miles south of Cape Lyon, District of Mackenzie.

*Sphaerium gietzi* Tozer

Holotype 10195; paratypes 10196, 10197

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 43, pl. 2, figs. 10-12.

St. Mary River Formation, Upper Cretaceous, south side St. Mary River at southeast end of dam spillway, SW. 1/4 sec. 12, tp. 5, rge. 24, W. 4th mer. and left side Waterton River northeast limb of syncline in NE. 1/4 sec. 2, tp. 5, rge. 28, W. 4th mer., Alberta.

*Sphaerium heskethense* Warren

Hypotypes 10322, 10323

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 44, pl. 2, figs. 8, 9a,b.

Edmonton Formation, Upper Cretaceous, south side Kneehills Creek, NW. 1/4 sec. 11, tp. 29, rge. 22, W. 4th mer., Alberta.

*Sphaerium livingstonensis* Russell

Holotype 6792

Russell, L.S., 1932, Can. Field-Naturalist, vol. 46, No. 4, p. 80, fig. 2.  
St. Mary River Formation, Upper Cretaceous, north side Oldman River, Alberta.

*Sphaerium mclearnii* Russell

Holotype 6791

Russell, L.S., 1932, Can. Field-Naturalist, vol. 46, No. 4, p. 80, figs. 1a, b.  
St. Mary River Formation, Upper Cretaceous, north side Oldman River, Alberta.

*Sphaerium praecoquum* Russell

Holotype 9140; paratypes 9140a, b

Russell, L.S., 1937, Trans. Roy. Soc. Can., ser. 3, vol. 31, sec. 4, p. 61, pl. 1, figs. 1-3.  
Belly River Formation, Upper Cretaceous, northwest of Higdon ranch, Milk River valley, l.s.d. 15, sec. 17, tp. 2, rge. 7, W. 4th mer., Alberta.

*Sphaerium progrediens* Russell

Holotype 10104; paratypes 10105-10108

Russell, L.S., 1952, Nat. Mus. Can., Bull. 126, p. 128, pl. 18, figs. 1-6; text fig. 7.  
Kishenehn Formation, Upper Eocene, Flathead Valley, British Columbia.

*Sphaerium* sp.

Fig. spec. 11613

Russell, L.S., 1958, Nat. Mus. Can., Bull. 147, p. 87, pl. 1, fig. 1.  
Princeton Group, Oligocene, Princeton Tulameen Coal Mine dump west of Princeton, British Columbia.

*Syncyclonema meekiana* Whiteaves

Syntypes 4896, a-g

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 82, fig. 9 [4896, d].  
'Cretaceous' [Yakoun Formation, Upper Jurassic], Maude Island, Queen Charlotte Islands, British Columbia.  
= *Pecten meekanus*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 300.

*Tancredia americana* var. *cupressensis* Landes

Holotype 9356

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 154, pl. 4, fig. 8.  
Eastend Formation, Upper Cretaceous, Medicine Lodge Coulee, sec. 31, tp. 7, rge. 3, W. 4th mer., Alberta.

*Tancredia?* *dowlingi* see *Tellina dowlingi*

*Tancredia?* *dowlingi* var. *silentia* see *Tellina dowlingi*

*Tancredia?* *pacia* see *Tellina dowlingi*

*Tancredia stelcki* McLearn

Holotype 9568; paratype 9714

McLearn, F.H.,  
1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 10, fig. 5; pl. 12, fig. 10.  
1948, *ibid.*, App., p. 2.  
Goodrich Formation, Lower Cretaceous, north side Pine River Valley, 2 miles west of Boulder Creek; Fourth sandstone, Sikanni Formation, 5 miles east of Alaska Highway bridge over Buckinghorse River, British Columbia.

*Tancrediopsis cuneata* see *Ctenodonta contracta*

*Tellina cupressensis* Landes

Holotype 9358; paratypes 9358a, b

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 158, pl. 5, figs. 7-9.

Eastend Formation, Upper Cretaceous, Medicine Lodge Coulee, sec. 31, tp. 7, rge. 3, W. 4th mer., Alberta.

*Tellina dowlingi* McLearn

Holotype 5405; paratypes 5406, a, b

McLearn, F.H.,

1919, Geol. Surv., Canada, Mus. Bull. 29, p. 12, pl. 5, figs. 3-6.

1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 153.

Peace River Formation, Lower Cretaceous, Peace River 15 miles below mouth Cadotte River; Clearwater Formation, Athabasca River north above Brule Rapids at mouth of Atkinson Creek, Alberta.

=*Tancredia?* *dowlingi*, McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, fig. 10 [5406a].=*Tancredia?* *dowlingi* var. *silentia*, McLearn, F.H., 1945, *ibid.*, pl. 3, fig. 11 [5406].=*Tancredia?* *pacia*, McLearn, F.H., 1948, *ibid.*, App., p. 2 [holotype 5406a].*Tellina dunveganensis* McLearn

Holotype 5671

McLearn, F.H., 1920, Can. Field-Naturalist, vol. 34, No. 3, p. 55, pl., figs. 2-4.

Dunvegan Formation, Upper Cretaceous, south bank of Peace River about 4 miles west of mouth of Spirit River, Alberta.

*Tellina maylandensis* Landes

Holotype 9357; paratype 9357a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 159, pl. 5, figs. 13, 14.

Foremost Formation, Upper Cretaceous, NE.1/4 sec. 8, tp. 1, rge. 9, W. 4th mer., Alberta.

*Tellina meekiana* Whiteaves

Holotype 5730; paratype 5730a

Whiteaves, J.F., 1874, Geol. Surv., Canada, Rept. Prog. 1873-74, p. 268, pl., fig. 6.

Upper Cretaceous, Gabriola Island, Strait of Georgia, British Columbia.

*Tellina nanaimoensis* Whiteaves

Holotype 5729

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 376, pl. 46, fig. 3.

Upper Cretaceous, Nanaimo River, Vancouver Island, British Columbia.

*Tellina (Moera) peaceriverensis* McLearn

Holotype 5670

McLearn, F.H., 1920, Can. Field-Naturalist, vol. 34, No. 3, p. 55, pl., figs. 5, 6.

Dunvegan Formation, Upper Cretaceous, east bank Peace River about 10 miles below Racing Creek, Alberta.

*Tellina skidegatensis* Whiteaves

Syntypes 4932, a, b, 4939, a-d

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 225, pl. 30, figs. 2 [4939], a [4939b], b [4939a], 3 [4932].

Lower Cretaceous [Haida Formation], north side of Maude Island and Bear Skin Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.



*Thetis affinis* Whiteaves

Syntypes 4928, a-c

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 226, pl. 30, figs. 4 [4928c], a [4928a], b [4928].

Lower Cretaceous [Haida Formation], Bear Skin Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Thracia canadensis* McLearn

Holotype 6091; paratype 6091a

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 56, pl. 9, figs. 8, 9.

Fernie Group, Jurassic, railway-cut south slope Grassy Mountain, Alberta.

*Thracia kissoumi* McLearn

Holotype 7416

McLearn, F.H.,

1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 147, pl. 1, figs. 6, 7.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, fig. 16.

Peace River Formation, Lower Cretaceous, 25 miles below Cadotte River, Peace River, Alberta.

*Thracia semiplanata* Whiteaves

Syntypes 4944, a, b

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 221, pl. 29, figs. 5 [4944], a [4944a], b, c [4944b].

'Cretaceous' [Yakoun Formation, Upper Jurassic], south side Alliford Bay, Queen Charlotte Islands, British Columbia.

*Thracia stelcki* McLearn

Holotype 9565

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 11, fig. 9.

1948, *ibid.*, App., p. 2.

Imlay, R.W., 1961, U.S. Geol. Surv., Prof. Paper 335, p. 47, pl. 6, fig. 2 [plaster replica].

Second sandstone, Sikanni Formation, Lower Cretaceous, 10,000 feet east of highway bridge over Buckinghorse River, British Columbia.

*Thracia subtruncata* Meek

Hypotype 5746

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 140, pl. 17, fig. 7.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Thracia? yarwoodi* McLearn

Holotype 9566

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 12, fig. 6.

1948, *ibid.*, App., p. 2.

Third sandstone, Sikanni Formation, Lower Cretaceous, Sikanni Chief River at highway bridge, British Columbia.

*Trigonia albertaensis* McLearn

Holotype 5401; paratype 5402

McLearn, F.H.,

1919, Geol. Surv., Canada, Mus. Bull. 29, p. 11, pl. 4, figs. 3, 4.

1945, *ibid.*, Paper 44-17, 2nd Edition, pl. 8, fig. 3 [5401].

Cadotte Member, Peace River Formation, Lower Cretaceous, Peace River 18 and 8 miles below mouth Cadotte River, Alberta.

*Trigonia* aff. *costatula* Lycett

Hypotype 9635

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 42, pl. 4, fig. 6.

Laberge Group, Jurassic, Laberge area, Yukon.

*Trigonia dawsoni* Whiteaves

Syntypes 4781, a-c

Whiteaves, J.F.,

1878, Geol. Surv., Canada, Rept. Prog. 1876-77, p. 154.

1884, *ibid.*, Mesoz. Fossils, vol. 1, pt. 3, p. 231, pl. 31, fig. 1 [4781a].

'Cretaceous', Iltasyouco River, Fraser River, British Columbia.

*Trigonia dawsoni* Whiteaves

Hypotype 4927

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 231, pl. 31, fig. 1a.

'Cretaceous' [Yakoun Formation, Upper Jurassic], south side Alliford Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

=*Trigonia intermedia*, Whiteaves, J.F., 1884, *ibid.*, p. 262.*Trigonia diversicostata* Whiteaves

Syntype 4917

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 68, pl. 10, fig. 1.

Packard, E.L., 1921, Univ. Oregon Publ., vol. 1, No. 9, p. 9, pl. 3, fig. 4 [the type].

'Cretaceous' [Yakoun Formation, Upper Jurassic], Alliford Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Trigonia ferrieri* McLearn

Holotype 6064; paratype 6065

McLearn, F.H., 1924, Trans. Roy. Soc. Can., ser. 3, vol. 18, sec. 4, p. 45, pl. 5, figs. 2, 10.

Ferne Group, Jurassic, drift between two cement quarries at Blairmore and railway-cut south slope Grassy Mountain, Alberta.

*Trigonia guhsani* McLearn

Holotype 7706

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 94, pl. 20, figs. 2, 3.

Hazelton Group, Jurassic, talus at foot of cliff 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Trigonia intermedia* see *Trigonia dawsoni**Trigonia littlei* Frebald

Holotype 13720; paratypes 13721, 13722

Frebald, H., 1959, Geol. Surv., Canada, Bull. 49, p. 9, pl. 2, figs. 6a-c, 7, 8.

Lower Jurassic, coquina bed on ridge northeast of Parks station, Salmo area, British Columbia.

*Trigonia maudensis* Whiteaves

Syntype 4925

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 230, pl. 31, fig. 2.

Packard, E.L., 1921, Univ. Oregon Publ., vol. 1, No. 9, p. 29, pl. 9, fig. 2 [the type].

'Cretaceous', north side Maude Island, Queen Charlotte Islands, British Columbia.

Mollusca

*Trigonia textilis* Lees

Syntype 9623

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 37, pl. 2, figs. 6, 7.  
Lewes River Group, Triassic, Laberge area, Yukon.

*Trigonia tryoniana* Gabb

Hypotype 5834

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 161, pl. 18, fig. 7.

Upper Cretaceous, Northwest Bay, Vancouver Island, British Columbia.

*Trigonia* sp. undet.

Fig. specs. 4997, a

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 70, pl. 10, figs. 2 [4997a], a [4997].

Lower Cretaceous [Haida Formation], west of Alliford Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

=*Trigonia leana* var. *whiteavesi*, Packard, E.L., 1921, Univ. Oregon Publ., vol. 1, No. 9, p. 21, pl. 6, fig. 2 [4997].

=*Trigonia whiteavesi*, Anderson, F.M., 1958, Geol. Soc. Amer., Mem. 71, p. 111 [holotype 4997a].

*Trigonoarca tumida* Whiteaves

Holotype 4903

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 235, pl. 31, fig. 6.

'Cretaceous' [Yakoun Formation, Upper Jurassic], east end of Maude Island, Queen Charlotte Islands, British Columbia.

*Trigonodus*(?) *productus* Whiteaves

Syntypes 4723, a, b

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 135, pl. 17, figs. 7 [4723], a [4723a], b [4723b].

Triassic, 30 miles below Devil's Portage, Liard River, British Columbia.

*Trigonodus*? sp.

Fig. spec. 17750

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. 2, pl. 4, fig. 3.

1948, *ibid.*, 2nd Edition, Supp., pl. 4, fig. 3.

Toad Formation, Middle Triassic, Cameron Hill, Alaska Highway, Tetsa River valley, British Columbia.

*Tropinuculites carinatus* (Hall)

Hypotypes 5613, 5614

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 110, pl. 14, figs. 17, 20; pl. 30, fig. 10.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Turnus* (*Goniochasma*) *crockfordi* Warren

Syntypes 8734, a

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, sec. 4, p. 92, pl. 2, figs. 6, 7.

Bearpaw Formation, Upper Cretaceous, Notukeu Creek near Ponteix, Saskatchewan.

*Urnus lacombi* McLearn

Holotype 8005; paratype 8006

McLearn, F.H., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 154, pl. 2, figs. 1, 2.

Clearwater Formation, Lower Cretaceous, east bank Athabasca River 3 miles below Brule Rapids, Alberta.

*Tutcheria* cf. *densestriata* (Kömer)

Hypotype 17747 [not 17016]

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, figs. 20a, b.

Bonanza Group, Upper Triassic, near Mushroom Point, between Kyuquot Channel and Esperanza Inlet, Vancouver Island, British Columbia.

*Unio albertensis* Whiteaves

Holotype 5481

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 3, pl. 1, fig. 1.

Upper Cretaceous [St. Mary River Formation], upper Belly River 7 miles above mouth of Oldman River, Alberta.

*Unio biornatus* Russell

Holotype 6794

Russell, L. S., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 1, pl. 1, fig. 1.

McMurray Formation, Lower Cretaceous, Hangingstone River, Alberta.

=*Unio* (*Elliptio*) *biornatus*, McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 2, fig. 6.*Unio consuetus* Whiteaves

Syntype 5212

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 59, pl. 9, figs. 4,a.

Upper Cretaceous [Belly River Formation], Red Deer River, tp. 21, rge. 12, W. 4th mer., Alberta.

*Unio dowlingi* McLearn

Holotype 5400

McLearn, F.H., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 11, pl. 4, fig. 2.

Dunvegan formation, Upper Cretaceous, Peace River, 14 miles above mouth Smoky River, Alberta.

=*Unio* (*Pleurobema*) *dowlingi*, McLearn, F.H., 1945, *ibid.*, Paper 45-27, pl. 1, fig. 7.*Unio* (*Pleurobema*) *dowlingi* (McLearn)

Hypotypes 9724, 9801, 9802

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 1, figs. 5 [9801], 6 [9724], 8 [9802].

Dunvegan Formation, Upper Cretaceous, Smoky River, 3 miles below Racing Creek, Alberta.

*Unio hamili* McLearn

Holotype 9029; paratypes 9029a,b

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 73, pl. 13, figs. 1-4; pl. 14, fig. 6.

Blairmore Formation, Upper Cretaceous, on hill south of Hillcrest, Alberta.

=*Unio* (*Elliptio*) *hamili*, McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 1, figs. 3 [9029], 4, 5 [9029a].*Unio* cf. *hamili* McLearn

Hypotypes 9030,a

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 74, pl. 13, figs. 5, 6.

Blairmore Formation, Upper Cretaceous, on Lyon Creek, Alberta.

Mollusca

*Unio hubbardi* Gabb

Hypotype 4923

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 65, pl. 9, fig. 13.

Lower Cretaceous [Haida ? Formation], coal seam Cowgitz mine, Queen Charlotte Islands, British Columbia.

*Unio humei* Dyer

Holotype 6673

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 8, pl. 4, figs. 1, 4.

Belly River Formation, Upper Cretaceous, Fossil Coulée, sec. 17, tp. 4, rge. 19, W. 4th mer., Alberta.

*Unio iacombi* McLearn

Holotype 9557

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 2, fig. 1.

1948, *ibid.*, App., p. 1.

Luscar Formation, Lower Cretaceous, Walter Creek, Alberta

*Unio mclearni* Dyer

Holotype 6672

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 7, pl. 3, fig. 15.

Foremost Formation, Upper Cretaceous, SE. corner sec. 8, tp. 11, rge. 15, W. 4th mer., Alberta.

*Unio nanaimoensis* Whiteaves

Holotype 5889

Whiteaves, J.F.,

1901, Ottawa Naturalist, vol. 14, p. 178, figs. 1, a.

1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 385, figs. 27, a.

Upper Cretaceous, No. 6 pit Wellington colliery, Nanaimo, Vancouver Island, British Columbia.

*Unio natosini* McLearn

Holotype 9028; paratype 9028a

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 73, pl. 13, figs. 7, 8.

Blairmore Formation, Lower Cretaceous, Lyons Creek, Alberta.

=*Unio (Quadrula) natosini*, McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 1, figs. 7 [9028], 9 [9028a].

*Unio (Quadrula) natosini* McLearn

Hypotype 9709

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 2, fig. 2.

Luscar Formation, Lower Cretaceous, talus Suza Creek Valley, British Columbia.

*Unio* sp. cf. *U. proavitus* White

Hypotype 10316

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 38, pl. 2, fig. 4.

Willow Creek Formation, Paleocene, east side Willow Creek, l.s.d. 11, sec. 24, tp. 10, rge. 27, W. 4th mer., Alberta.

*Unio sandersoni* Warren

Hypotype 10317

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 37, pl. 1, fig. 5.

Edmonton Formation, Upper Cretaceous, north side Kneehills Creek, NW.1/4 sec. 7, tp. 29, rge. 21, W. 4th mer., Alberta.

*Unio senectus* White

Hypotype 5151

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 67, pl. 10, fig. 2.

Foremost Formation, Upper Cretaceous, South Saskatchewan River 1 mile below mouth of Bow River, Alberta.

*Unio stantoni* White

Hypotypes 10314, 10315

Tozer, E.T., 1956, Geol. Surv., Canada, Mem. 280, p. 37, pl. 1, figs. 1, 2.

Edmonton Formation, Upper Cretaceous, south side Bow River, sec. 10, tp. 21, rge. 23, and north side Kneehills Creek, NE. 1/4 sec. 12, tp. 29, rge. 22, W. 4th mer., Alberta.

*Unio subprimaevus* Dyer

Holotype 6671

Dyer, W.S., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 7, pl. 3, fig. 2.

Foremost Formation, Upper Cretaceous, South Saskatchewan River 1 mile below mouth of Bow River, Alberta.

*Unio (Elliptio) sulfuriensis* McLearn

Holotype 9723; paratypes 9721, 9722

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, pl. 1, figs. 1-3.

Dunvegan Formation, Upper Cretaceous, Thoreau Creek, Alberta.

*Unio supragibbosus* Whiteaves

Syntype 5150

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 66, pl. 10, fig. 1.

Foremost Formation, Upper Cretaceous, South Saskatchewan River 1 mile below mouth of Bow River, Alberta.

*Unio tuchiasanus* Russell

Holotype 6767; paratype 6768

Russell, L.S., 1932, Trans. Roy. Can. Inst., vol. 18, pt. 2, p. 340, pl. 1, figs. 4-6.

Ravenscrag Formation, Paleocene, Big Muddy Valley, sec. 1, tp. 1, rge. 22 and sec. 12, tp. 2, rge. 22, W. 2nd mer., Saskatchewan.

*Unio* sp.

Fig. spec. 9031

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 74, pl. 14, fig. 10.

Blairmore Formation, Lower Cretaceous, hill south of Hillcrest, Alberta.

*Vanuxemia acutumbona* see *Cyrtodonta acutumbona*

*Vanuxemia ampla* (Ulrich)

Hypotype 13437

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 44, pl. 6, fig. 11.

Hull beds, Ottawa Formation, Middle Ordovician, east side Fairy Lake, Hull, Quebec.

*Vanuxemia bayfieldi* Billings

Holotype 2084

Billings, E.,

1858, Can. Naturalist Geol., vol. 3, p. 439, fig. 17.

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 187, fig. 17.

1861, Can. J., n. ser., vol. 6, p. 356, fig. 128.

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 144, pl. 20, fig. 1.

Upper Ordovician, Bayfield Sound, Manitoulin Island, Ontario.

*Vanuxemia canadensis* Wilson

Holotype 11569; paratypes 11569a, 11570

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 45, pl. 6, figs. 7-10.

Hull or Sherman Fall beds, Ottawa Formation, Middle Ordovician, along the Ange gardien road about 4 miles west of L'Orignal and Jackson quarry near L'Orignal, Ontario.

*Vanuxemia gibbosa* Ulrich ?

Hypotype 11571

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 46, pl. 6, fig. 6.

Leray beds, Ottawa Formation, Middle Ordovician, near shore, Val Tetreau, Quebec.

*Vanuxemia inconstans* Billings

Syntypes 1174, a-c

Billings, E.,

1858, Can. Naturalist Geol., vol. 3, p. 438, figs. 15, 16 [1174c].

1858, Geol. Surv., Canada, Rept. Prog. 1857, p. 186, figs. 15, 16.

Wilson, A.E., 1956, *ibid.*, Bull. 28, p. 46, pl. 6, figs. 3, 4 [1174], 5 [1174c].

Middle Ordovician [Leray-Rockland beds], Fourth Chûte Bonnehère River, Renfrew co., Ontario.

*Vanuxemia kagawongensis* Foerste

Syntypes 8500a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 146, pl. 20, figs. 2a-d.

Meaford Formation, Upper Ordovician, Kagawong Falls, Manitoulin Island, Ontario.

*Vanuxemia montrealensis* Billings

Syntypes 1049, a

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 447, figs. 25, 26.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 131, figs. 61a, b.

Middle Ordovician, Island of Montreal, Quebec.

*Vanuxemia parvula* Whiteaves

Syntypes 6804, a

Whiteaves, J.F., 1908, Ottawa Naturalist, vol. 22, No. 6, p. 111, pl. 3, figs. 11, 12.

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 47, pl. 5, fig. 4.

Middle Ordovician [Pamelia beds], east side of falls, Hogsback, Ottawa, Ontario.

*Vanuxemia phaseola* Wilson

Holotype 11572; paratype 11572a

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 48, pl. 6, figs. 1, 2.

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

*Vanuxemia rotundata* (Hall)

Hypotype 11573

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 49, pl. 5, fig. 7.

Leray beds, Ottawa Formation, Middle Ordovician, quarry southeast of Green Creek and Montreal road, east of Ottawa, Ontario.

*Vanuxemia skeadensis* Wilson

Holotype 11574; paratype 11574a

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 49, pl. 5, figs. 2, 3.

Pamelia beds, Ottawa Formation, Middle Ordovician, hillside in grounds of National Research Council Laboratories, north of Montreal road and west of Skead Road, Ottawa, Ontario.

*Vanuxemia suberecta* Ulrich

Hypotype 11575

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 50, pl. 5, figs. 8, 9.

Leray beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Vanuxemia tomkinsi* Billings

Holotype 3518

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 375, figs. 407a, b.

Middle Devonian [Onondaga Formation], St. Mary's, Ontario.

*Vanuxemia tutrix* Wilson

Holotype 11576; paratypes 11576a, 11577

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 51, pl. 5, figs. 5, 6.

Hull or Sherman Fall beds, Ottawa Formation, Middle Ordovician, Ange gardien road about 4 miles west of L'Orignal; Leray beds, Ottawa Formation, Middle Ordovician, lots 3-4, con. 3, R.F., Gloucester tp., Ontario.

*Vanuxemia ungulata* see *Cyrtodonta? ungulata**Vanuxemia?* sp. see *Allodesma? umbonata**"Variamussium" yukonensis* Lees

Hypotypes 14250, 14251

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, figs. 2a, b, 3.

Sutton Formation, Upper Triassic, Cowichan Lake, Vancouver Island, British Columbia.

*Veniella crassa* Whiteaves

Holotype 5690

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 15, pl. 18, fig. 1.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Voisella anomala* Landes

Holotype 9351

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 142, pl. 3, figs. 7, 8.

Bearpaw Formation, Upper Cretaceous, l.s.d. 4, sec. 20, tp. 5, rge. 4, W. 4th mer., Alberta.

*Whiteavesia ? angusta* Wilson

Holotype 11547

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 73, pl. 8, fig. 2.

Leray beds, Ottawa Formation, Middle Ordovician, lot K, con. A, R.F., Nepean tp., Ontario.

*Whiteavesia ? compacta* Wilson

Holotype 11548

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 74, pl. 8, fig. 3.

Leray ? beds, Ottawa Formation, Middle Ordovician, La Petite Chaudière, Ottawa or Hull.

*Whiteavesia modioliformis* (Meek and Worthen)

Hypotype 11549

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 75, pl. 8, fig. 4.

Sherman Fall beds, Ottawa Formation, Middle Ordovician lots, 25-26, con. 3, Osnabrock tp., Ontario.



Mollusca

*Whitella complanata* Foerste

Holotype 8421

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 300, pl. 1, fig. 2.

1924, Geol. Surv., Canada, Mem. 138, p. 152, pl. 29, fig. 2.

Upper Ordovician, Huron River, Quebec.

*Whitella complanata* Foerste

Hypotype 8565

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 152, pl. 21, fig. 3 [8565].

Upper Ordovician, Nicolet River, Quebec.

*Whitella complanata moniquensis* Foerste

Syntypes 8547a, 8548

Foerste, A.F. 1924, Geol. Surv., Canada, Mem. 138, p. 153, pl. 21, figs. 1, 2.

Upper Ordovician, Nicolet River, Quebec.

*Whitella goniumbonata* Foerste

Holotype 8426

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 301, pl. 1, fig. 3.

1924, Geol. Surv., Canada, Mem. 138, p. 156, pl. 29, fig. 3.

Upper Ordovician, Huron River, Quebec.

*Whitella hindi* see *Cyrtodonta hindi*

*Whitella huguesensis* Foerste

Syntypes 8585,a

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 160, pl. 21, figs. 5a-c.

Upper Ordovician, Yamaska River, 2 miles northwest of St. Huges, Quebec.

*Whitella plebia* see *Cyrtodonta ? plebeia*

*Whitella scofieldi* Ulrich

Hypotype 11538

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 52, pl. 7, figs. 5-7.

Leray beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Whitella securiformis* Foerste

Holotype 8420

Foerste, A.F.,

1914, Denison Univ. Bull., J. Sci. Lab., vol. 17, p. 299, pl. 1, fig. 1.

1924, Geol. Surv., Canada, Mem. 138, p. 150, pl. 26, fig. 5.

Upper Ordovician, Huron River, Quebec.

*Whitella securiformis(?)* Foerste

Hypotypes 8546a, d-g

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 150, pl. 20, figs. 3a [8546a],

b [8546e], c [8546f], d [8546d], e [8546g].

Upper Ordovician, Nicolet River southwest of Ste. Monique, Quebec.

*Whitella sigmoidea* (Billings)

Hypotype 2093

Twenhofel, W.H., 1929, Geol. Surv., Canada, Mem. 154, p. 228, pl. 49, fig. 6.

Vaureal Formation, Upper Ordovician, Carleton Point, Anticosti Island, Quebec.

*Whitella subcarinata* Ulrich

Hypotype 11539

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 53, pl. 7, figs. 3, 4.

Leray beds, Ottawa Formation, Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Whitella subtruncata* (Hall)?

Hypotypes 11540, 11541

Wilson, A.E., 1956, Geol. Surv., Canada, Bull. 28, p. 54, pl. 7, figs. 1, 2.

Leray beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp. and Duntile quarry south of Carling Avenue, Ottawa, Ontario.

*Yaadia lewisagassizi* Crickmay

Holotype 9702

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 50, pl. 13, figs. 1, 2.

Lower Cretaceous, on south shore of a little point on the west side of Cascade Bay, Harrison Lake, British Columbia.

*Yoldia arata* Whiteaves

Syntype 4912

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 233, pl. 31, fig. 4 a [4912].

Lower Cretaceous [Haida Formation], South Island, Queen Charlotte Islands, British Columbia.

*Yoldia arctica* Gray

Hypotype 13618

Wilson, A. E., 1957, Can. Field-Naturalist, vol. 70, No. 1, pl. 5, fig. 7.

Pleistocene, Pointe Claire, Quebec.

*Yoldia cupressensis* Landes

Holotype 9340; paratype 9340a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 134, pl. 1, figs. 7, 8.

Eastend Formation, Upper Cretaceous, Medicine Lodge Coulee, sec. 31, tp. 7, rge. 3, W. 4th mer., Alberta.

*Yoldia diminutiva* Whiteaves

Holotype 5878

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 390, pl. 47, fig. 2.

Cretaceous, roof of coal seam, New Vancouver Coal Company mine, Nanaimo, Vancouver Island, British Columbia.

*Yoldia dowlingi* Landes

Holotype 9341; paratype 9342

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 133, pl. 1, figs. 9, 10.

Foremost Formation, north side Milk River, SE. 1/4 sec. 21, tp. 2, rge. 7, W. 4th mer.; Pakowki formation, Upper Cretaceous, Bear Gulch, NW. 1/4 sec. 20, tp. 1, rge. 9, W. 4th mer., Alberta.

*Yoldia (Yoldiella) keenae* Wagner

Holotype 13983; paratype 11605

Wagner, F.J.E., 1959, Geol. Surv., Canada, Bull. 52, p. 56, pl. 1, figs. 16a,b, 18a,b.

Sunnyside Formation, Pleistocene, NE. 1/4 sec. 10, tp. 5, Delta municipality and NE. 1/4 sec. 6, tp. 9, Surrey municipality, British Columbia.

Mollusca

*Yoldia kissoumi* McLearn

Holotype 6346; paratype 6347

McLearn, F.H.,

1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 7, pl. 1, figs. 2, 3.

1933, *ibid.*, vol. 27, p. 142, pl. 1, figs. 1, 3.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, fig. 1 [6346].

Clearwater Formation, Lower Cretaceous, Athabasca River, Alberta.

*Yoldia kissoumi* McLearn

Hypotype 7409

McLearn, F.H.,

1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 142, pl. 1, fig. 2.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, fig. 2.

Clearwater Formation, Lower Cretaceous, north shore above Brule Rapids, Athabasca River, Alberta.

*Yoldia mcconnelli* Landes

Holotype 9339; paratype 9339a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 133, pl. 1, figs. 11, 12.

Eastend Formation, Upper Cretaceous, Medicine Lodge Coulee, SE. 1/4 sec. 7, tp. 8, rge. 3, W. 4th mer., Alberta.

*Yoldia scitula* (Meek and Hayden)

Hypotype 5257

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 38 pl. 5, fig. 2.

Upper Cretaceous, 12 miles east of Whitemud River, Saskatchewan.

## CEPHALOPODA - Nautiloidea

### *Actinoceras allumettense* (Billings)

Hypotype 1833

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 85, pl. 10, figs. 3, a.

Ordovician [Red River Formation], Lower Fort Garry (St. Andrews), Manitoba.

=*Armenoceras* cf. *allumettense*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 205, pl. 33, figs. 1A, B.

=*Ormoceras* cf. *allumettense*, Teichert, C., 1933, Palaeontographica, vol. 79A, p. 172, fig. 30.

### *Actinoceras anticostiense* (Billings)

Hypotypes 2160b, 2205, a, 2562

Foerste, A.F.,

1928, in Twenhofel, W.H., Geol. Surv., Canada, Mem. 154, p. 288.

1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 227, pl. 5, figs. 1-3 [2205a].

Vauréal Formation, Upper Ordovician, near west-end lighthouse, Anticosti Island, Quebec.

See *Orthoceras anticostense*

### *Actinoceras beloitense* (Whitfield)

Hypotype 13857, a [parts of one specimen]

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 49, pl. 16, figs. 1-3.

Leray beds, Ottawa Formation, Middle Ordovician, MacLaren Landing above Ottawa, Ontario.

### *Actinoceras* cf. *beloitense* (Whitfield)

Hypotype 6369

Teichert, C., 1933, Palaeontographica, vol. 78A, p. 168, fig. 23.

Middle Ordovician [Black River Formation], island west of Lacloche Island, Lake Huron, Ontario.

### *Actinoceras bigsbyi* Bronn

Hypotype 2724

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 84, pl. 10, fig. 2.

Ordovician [Red River Formation], Black Island, Lake Winnipeg, Manitoba.

=*Kochoceras tyrrelli*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab.,

=*Kochoceras whiteavesi*, Teichert, C., 1933, Palaeontographica, vol. 78A, p. 168, fig. 24.

### *Actinoceras* cf. *bigsbyi* Bronn

Hypotype 5598

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 194, pl. 26, fig. 1.

Ordovician [Red River Formation], Clark's Point, Lake Winnipeg, Manitoba.

=*Actinoceras simplicem*, Flower, R.H., 1957, State Bur. Mines Mineral Resources, New Mexico Inst. Mining Technology, Mem. 2, p. 32.

*Actinoceras* cf. *biggsbyi* Bronn

Hypotype 1266d

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 51, pl. 17, fig. 1.

Leray beds, Ottawa Formation, Middle Ordovician, lot 4, con. 3, Fitzroy tp., Ontario.

*Actinoceras billingsi* see *Orthoceras biggsbyi*

*Actinoceras complanum* Wilson

Holotype 6759

Wilson, A.E., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 31, pl. 8, figs. 3, 4.

Beaverfoot Formation, Upper Ordovician, 3/4 mile east of Palliser Pass, British Columbia.

*Actinoceras?* *glenni* Foerste and Teichert

Hypotype 1267d

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 52, pl. 18, fig. 4; pl. 19, figs. 2, 3.

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

*Actinoceras hindii* Whiteaves

Syntypes 4191, 4192, a, 4196

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 101, pl. 6, figs. 4, a [4196], 5 [4191].

Middle Devonian [Dawson Bay Formation], Snake Island and north side of Manitou Island, Lake Winnipegosis, Manitoba.

=*Orthoceras hindii*, Whiteaves, J.F., 1892, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 4, p. 344.

*Actinoceras keewatinense* Whiteaves

Syntypes 990, 990a, b [parts of one specimen], c

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 54F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 246, pl. 30, figs. 7 [990], 8 [990a, b].

Silurian, Rainy Island, Attawapiskat River, Ontario.

=*Stokesoceras(?) keewatinense*, Foerste, A.F. and Savage, T. E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 74.

*Actinoceras(?) lambei* Foerste

Holotype 8545

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 228, pl. 42, figs. 3a,b.

Meaford Formation, Upper Ordovician, Clay Cliffs 3 miles north of Wekwemikonging, Manitoulin Island, Ontario.

*Actinoceras mutabile* Flower

Holotype 16685

Flower, R.H., 1957, State Bur. Mines Mineral Resources, New Mexico Inst. Mining Technology, Mem. 2, p. 38, pl. 2, fig. 7; pl. 4, figs. 4, 5; pl. 5, fig. 8; text figs. 4c, d.

Simard limestone, Middle Ordovician, Ste. Anne de Chicoutimi, Quebec.

*Actinoceras paquettense* Foerste and Teichert

Syntypes 6294, a

Foerste, A.F. and Teichert, C., 1930, Denison Univ. Bull., J. Sci. Lab., vol. 25, p. 248, pl. 38, figs. 3A, B [6294], C [6294a]; pl. 57, fig. 6 [6294].

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 55, pl. 22, figs. 1, 2 [holotype 6294], 3 [paratype 6294a].

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

*Actinoceras paquettense* Foerste and Teichert

Hypotype 1266a

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 55, pl. 22, fig. 4.

Leray beds, Ottawa Formation, Middle Ordovician, lot 4, con. 3, Fitzroy tp., Ontario.

*Actinoceras richardsoni* Stokes

Hypotypes 1852b, 1854, a [parts of one specimen]

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 83, pl. 9, figs. 2, a [1854a], 3, a [1852b].

Ordovician [Red River Formation], Lower Fort Garry (St. Andrews) and East Selkirk, Manitoba.

= *Selkirkoceras cuneatum*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 199, pl. 31, figs. 2A, B [holotype 1852b].= *Armenoceras richardsoni*, Foerste, A.F., 1929, *ibid.*, p. 202, pl. 32, figs. 1A, B [1854, a].*Actinoceras ruedemanni* Foerste and Teichert

Hypotype 1345, a [parts of one specimen]

Teichert, C., 1933, *Palaeontographica*, vol. 78A, p. 133, fig. 13.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 56, pl. 19, fig. 1.

Middle Ordovician [Leray beds], Pakenham, Ontario.

*Actinoceras simplicem* see *Actinoceras cf. bigsbyi**Adamsoceras billingsi* see *Ormoceras cf. allumettense**Allopiloceras canadense* see *Piloceras canadense**Allopiloceras coarctum* see *Piloceras canadense**Allumettoceras paquettense* see *Orthoceras hastatum**Allumettoceras planodorsatum* var. *carletonense* Foerste

Holotype 6835

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 126, pl. 13, figs. 10A, b.

Middle Ordovician [Leray beds], lots 3 and 4, con. 3, Gloucester tp., Ontario.

= *Allumettoceras carletonense*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 75, pl. 30, figs. 21, 22.*Allumettoceras rideauense* Foerste

Holotype 6836

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 127, pl. 22, figs. 9A, B.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 76, pl. 30, figs. 17, 18.

Middle Ordovician [Pamelia beds], Hogsback, Ottawa, Ontario.

*Allumettoceras tenerum* see *Orthoceras tener**Alpenoceras occidentale* see *Cyrtoceras occidentale**Alpenoceras sinuiferum* see *Cyrtoceras occidentale**Amphicyrtoceras darwini* see *Orthoceras darwini**Amphicyrtoceras futile* see *Orthoceras pileolum**Amphicyrtoceras futile* (Billings)

Hypotype 2464a

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 311.

Jupiter Formation, Middle Silurian, near Jupiter River, Anticosti Island, Quebec.

Mollusca

*Amphicyrtoceras grimsbyense* see *Oncoceras pettiti*

*Amphicyrtoceras pettiti* see *Oncoceras pettiti*

*Amphicyrtoceras* cf. *reedsii* Foerste

Hypotype 10427

Steam, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 117, pl. 14, figs. 2, 3.

Inwood Formation, Middle Silurian, NE. corner sec. 18, tp. 26, rge. 3, W. Prin. mer., Manitoba.

*Amphicyrtoceras williamsi* see *Poterioceras* n. sp.

*Anaspyroceras* ? *giganteum* Wilson

Holotype 13891

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 29, pl. 7, figs. 4, 5.

Leray beds, Ottawa Formation, Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Anaspyroceras* ? *paquettense* see *Spyroceras paquettense*

*Antiplectoceras shamattawaense* (Parks)

Hypotype 5034

Okulitch, V.J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 2, figs. 4, 5.

Birse Member, Stony Mountain Formation, Upper Ordovician, Stonewall quarry, Manitoba.

*Aphetoceras attenuatum* see *Lituities farnsworthi*

*Aphetoceras farnsworthi* see *Lituities farnsworthi*

*Apsidoceras elegans* Troedsson?

Hypotype 12246

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 57, text figs. 11, 12D.

Cape Phillips Formation, Upper Ordovician, eastern part of Cornwallis Island, Arctic.

*Apsidoceras insigne* Whiteaves

Holotype 2217

Whiteaves, J.F., 1889, Trans. Roy. Soc. Can., vol. 7, sec. 4, p. 82, pl. 17, figs. 1, 2.

Upper Ordovician [Stony Mountain Formation], Stony Mountain, Manitoba.

=*Wilsonoceras mccharlesi*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 184, pl. 21, fig. 1; pl. 22, fig. 1.

*Apsidoceras magnificum* see *Gyroceras (Lituities) magnificum*

*Apsidoceras magnificum* var. *major* Foerste

Syntype 2222

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 281, pl. 38, figs. 3, 4.

English Head or Ellis Bay Formation, Upper Ordovician, Whitecliff or White Cliff, Anticosti Island, Quebec.

*Apsidoceras magnificum* var. *multicameratum* Foerste

Holotype 2223

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 283, pl. 39, fig. 2.

Ellis Bay Formation, Upper Ordovician, 1 mile east of Junction Cliff, Anticosti Island, Quebec.

*Apsidoceras montrealense* Flower

Holotype 11097

Flower, R.H., 1943, J. Pal., vol. 17, No. 3, p. 258, pl. 41, figs. 1-3.

Trenton limestone, Middle Ordovician, Isle Jesus south of Terrebonne, Quebec.

*Apsidoceras quebecense* Flower

Holotype 11089; paratypes 11096, 13588

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 56, pl. 10, figs. 5, 9.

Terrebonne Formation, Middle Ordovician, Crabtree Mills and Isle St. Jean, Terrebonne, Quebec.

*Apsidoceras* sp.

Fig. spec. 8890

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 379, pl. 56, fig. 8.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Apsidoceratidae* gen. and sp. indet.

Hypotype 12252

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 62, pl. 8, fig. 4.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Arkonoceras arkonense* see *Orthoceras arkonense**Armenoceras* cf. *allumettense* see *Actinoceras allumettense**Armenoceras altosegmentatum* Foerste

Holotype 8702

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 77, pl. 11, fig. 7.

'Lockport' [Thomloe] Formation, Middle Silurian, 1 mile southeast of Thomloe, Ontario.

*Armenoceras brevidiscoideum* Foerste

Holotype 8699

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 75, pl. 11, fig. 8.

'Lockport' [Thomloe] Formation, Middle Silurian, 1 mile southeast of Thomloe, Ontario.

*Armenoceras donetti* Foerste

Hypotype 12215

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 30, text fig. 5.

Cape Phillips Formation, Silurian, Marshall Peninsula, Cornwallis Island, Arctic.

*Armenoceras gasconsense* Foerste

Holotype 6816

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 74, pl. 22, figs. 2A, B.

La Vieille Formation, Middle Silurian, 1 1/2 miles east of Gascons, Port Daniel, Quebec.

*Armenoceras* cf. *gouldense* Foerste

Hypotype 8701

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 77, pl. 11, fig. 5.

'Lockport' [Thomloe] Formation, Middle Silurian, 1 mile southeast of Thomloe, Ontario.

*Armenoceras inclinatum* Foerste and Savage

Holotype 7905i

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 67, pl. 9, fig. 4.

Silurian, southern half of west coast of Southampton Island, Arctic.



Mollusca

*Armenoceras lowi* Foerste and Savage

Holotype 7905a, m [parts of one specimen]; paratypes 7905b, c [parts of one specimen], d, e [parts of one specimen]

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 66, pl. 9, figs. 1 [7905a, m], 2 [7905b], 3 [7905d].

Teichert, C., 1933, Palaeontographica, vol. 78A, p. 151, fig. 19 [7905d].

Silurian, southern half of west coast Southampton Island, Arctic.

*Armenoceras medon* see *Orthoceras medon*

*Armenoceras ottawaense* Wilson

Holotype 13861

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 59, pl. 12, fig. 1.

Cobourg beds, Ottawa Formation, Middle Ordovician, west side of Dow's Lake, Ottawa, Ontario.

*Armenoceras pauloinclinatum* Foerste

Holotype 8699b

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 75, pl. 11, fig. 9.

'Lockport' [Thomloe] Formation, Middle Silurian, 3 miles north of Earleton, Ontario.

*Armenoceras raptor* see *Orthoceras raptor*

*Armenoceras richardsoni* see *Actinoceras richardsoni*

*Armenoceras saxosum* see *Armenoceras* sp.

*Armenoceras sedgwicki* see *Orthoceras sedgwicki*

*Armenoceras southamptonense* Foerste and Savage

Holotype 7905j, k [parts of one specimen]

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 67, pl. 9, figs. 5 [7905k], 6 [7905j].

Silurian, southern half of west coast Southampton Island, Arctic.

*Armenoceras* sp.

Fig. spec. 5072

Okulitch, V.J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 2, fig. 6.

Birse Member, Stony Mountain Formation, Upper Ordovician, Stonewall, Manitoba.

*Armenoceras* sp. see *Endoceras* sp.

*Armenoceras* sp.

Fig. spec. 7906a

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 67, pl. 13, figs. 3A,B.

Silurian, southern half of west coast Southampton Island, Arctic.

*Armenoceras* sp.

Fig. spec. 8700

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 76, pl. 11, fig. 10.

'Lockport' [Thomloe] Formation, Middle Silurian, 5 miles east of New Liskeard, lot 1, con. 1, Harris tp., Ontario.

*Armenoceras* sp.

Fig. spec. 8744

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 204.

Stony Mountain Formation, Upper Ordovician, Stony Mountain, Manitoba.

=*Armenoceras saxosum*, Foerste, A.F., 1929, *ibid.*, vol. 24, p. 325, pl. 48, fig. 1.*Ascoceras canadense* Billings

Holotype 2171

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 310.

Logan, W.E., 1866, "Geology of Canada", *ibid.*, Rept. Prog., p. 218, fig. 227.

Upper Ordovician [English Head Formation], English Head, Anticosti Island, Quebec.

=*Billingsites canadensis*, Foerste, A.F.,1928, in Twenhofel, W.H., *ibid.*, Mem. 154, p. 260 [the type 2171].

1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 225, pl. 1, figs. 1A-C.

Miller, A.K., 1932, Univ. Iowa Studies,  
Vol. 14, No. 4, p. 24, fig. 1.*Ascoceras costulatum* Whiteaves

Holotype 7142, a [parts of one specimen]

Whiteaves, J.F.,

1896, Can. Rec. Sci., vol. 6, p. 394.

1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 215, pl. 22, fig. 1.

Ordovician [Red River Formation], Black Island, Swampy Harbour, Lake Winnipeg, Manitoba.

=*Billingsites costulatum*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 157, pl. 13, figs. 1A-C.*Ascoceras townsendi* Whiteaves

Holotype 2929

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 41, pl. 6, figs. 4, a.

Guelph Formation, Middle Silurian, Durham, Ontario.

*Avaoceras* sp. see *Orthoceras sordidum**Bactrites aciculum* (Hall)

Hypotype 7973

Kindle, E. M., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 7, pl. 1, fig. 10.

Simpson shale, Upper Devonian, east bank Mackenzie River, 11 miles below Old Fort Wrigley, opposite lowest of four islands, District of Mackenzie.

*Bactrites (obliqueseptatus? var.) arkonensis* Whiteaves

Syntypes 3756, a-k

Whiteaves, J.F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 407, pl. 48, figs. 15, 16, a [3756].

Hamilton Formation, Middle Devonian, Bartlett Mills, Ontario.

*Barrandeoceras minganense* Hyatt

Syntypes 1338, a

Hyatt, A., 1894, Proc. Am. Phil. Soc., vol. 32, p. 451.

Whiteaves, J.F., 1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 309.

Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 101, pl. 23, fig. 2 [holotype 1338].

Ordovician [Mingan Formation], Large Island, Mingan Islands, Quebec.

*Barrandeoceras natator* see *Nautilus natator*

*Barrandeoceras subcostulatum* Whiteaves

Holotype 1351

Whiteaves, J.F.

1898, Ottawa Naturalist, vol. 12, No. 6, p. 121.

1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 310, fig. 38.

Black River limestone, Middle Ordovician, Wolfe Island, near Kingston, Ontario.

*Barrandeoceras vagrans* see *Gyroceras (Lituites) vagrans* and *Centrocyrtoceras vagrans*

*Bassleroceras alethes* see *Cyrtoceras alethes*

*Bassleroceras perseus* see *Orthoceras perseus*

*Beloitoceras agaricus* Flower

Holotype 16665; paratypes 16666, a

Flower, R.H., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 75, pl. 1, figs. 2, 10.

Lower Trenton, Middle Ordovician, Pont Rouge, Portneuf co., Quebec.

*Beloitoceras* cf. *agaricus* Flower

Hypotype 16667

Flower, R.H., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 75, pl. 1, fig. 7.

Lower Trenton, Middle Ordovician, Pont Rouge, Portneuf co., Quebec.

*Beloitoceras cartierense* Flower

Holotype 16668

Flower, R.H., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 76, pl. 1, fig. 5.

Lower Trenton, Middle Ordovician, Pont Rouge, Portneuf co., Quebec.

*Beloitoceras clochense* see *Phragmoceras praematurum*

*Beloitoceras huronense* see *Cyrtoceras huronense*

*Beloitoceras imitans* Flower

Holotype 16669; paratypes 16670, 16671

Flower, R.H., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 77, pl. 1, figs. 8, 9, 11.

Lower Trenton, Middle Ordovician, Pont Rouge, Portneuf co., Quebec.

*Beloitoceras isodorus* see *Cyrtoceras isodorus*

*Beloitoceras lobiferum* Flower

Holotype 11084

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 46, pl. 9, figs. 8, 9.

Trenton conglomerate, Middle Ordovician, beach below Presbyterian Church, Cap à l'Aigle, Quebec.

*Beloitoceras murrayi* see *Cyrtoceras huronense*

*Beloitoceras obesum* Wilson

Holotype 13882

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 85, pl. 34, figs. 8, 9.

Leray beds, Ottawa Formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario.

*Beloitoceras orilliense* Flower

Holotype 11085

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 47, pl. 7, fig. 4.

Gull River Formation, Middle Ordovician, Lake St. George quarry, north of Orillia, Ontario.

*Beloitoceras ottawaense* Wilson

Holotype 13880

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 86, pl. 32, figs. 1, 2.

Cobourg beds, Ottawa Formation, Middle Ordovician, west end of Fifth Avenue, Ottawa, Ontario.

*Beloitoceras percurvatum* Foerste

Holotype 2314a; paratype 2314b

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 305, pl. 49, fig. 4 [not 3814a].

Ellis Bay Formation, Upper Ordovician, 1 mile south of Junction Cliff, Anticosti Island, Quebec.

*Beloitoceras* sp.

Fig. spec. 8891

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 380, pl. 56, fig. 10.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Beloitoceras* sp.

Fig. specs. 12234, 12235

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 46, pl. 6, figs. 4, 5.

Sweet, W.C., 1959, J. Pal., vol. 33, No. 2, p. 298, pl. 42, fig. 4 [12235].

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Bickmorites barbensis* Foerste

Paratypes 6812, 6814, 6815

Foerste, A.F., 1936, Denison Univ. Bull. J. Sci. Lab., vol. 31, p. 69, pl. 14, figs. 1 [6812], 2 [6814]; pl. 15, figs. 1A, B [6815].

Gascons or Bouleaux Formation, Middle Silurian, L'Anse à la Barbe, 3 miles east of Port Daniel, Quebec.

*Bickmorites insignis* see *Trochoceras insigne**Billingsites anticostiensis* (Billings)

Neotype 2334a

Foerste, A.F.,

1928, in Twenhofel, W.H., Geol. Surv., Canada, Mem. 154, p. 259, pl. 40, fig. 5.

1928, Trans. Roy. Soc. Can., sec. 3, vol. 22, sec. 4, p. 225, pl. 1, figs. 5A, B.

Ellis Bay Formation, Upper Ordovician, Bear Point, Ellis Bay, Anticosti Island, Quebec.

= *Schuchertoceras anticostiense*, Miller, A. K., 1932, Univ. Iowa Studies, vol. 14, No. 4, p. 28, pl. 3, figs. 4, 5.*Billingsites* cf. *B. bellicinctus* Miller

Hypotype 12232

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 44, pl. 4, fig. 7.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Billingsites borealis* (Parks)

Hypotype 12230

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 42, pl. 4, figs. 3, 4.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

Mollusca

*Billingsites canadensis* see *Ascoceras canadense*

*Billingsites costulatum* see *Ascoceras costulatum*

*Billingsites deformis* (Eichwald)?

Hypotype 12231

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 43, pl. 4, figs. 1, 2.

Sweet, W.C., 1959, J. Pal., vol. 33, No. 2, p. 297, pl. 42, fig. 1.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Comwallis Island, Arctic.

*Billingsites manitoulinense* Foerste

Holotype 8452

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 221, pl. 42, figs. 1a-d.

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

=*Probillingsites manitoulinensis*, Miller, A.K., 1932, Univ. Iowa Studies, vol. 14, No. 4, p. 20, pl. 3, fig. 12.

*Billingsites newberryi* (Billings)

Hypotypes 2178, a-c, 2312a

Foerste, A.F.,

1924, Geol. Surv., Canada, Mem. 138, p. 222, pl. 38, figs. 6 [2312a], 7a, b [2178b, c].

1928, in Twenhofel, W.H., *ibid.* Mem. 154, p. 258.

1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 224, pl. 1, figs. 3A, B [2178b, c], 4A, b [2312a].

English Head and Ellis Bay Formations, Upper Ordovician, English Head and Junction Cliff, Anticosti Island, Quebec; Upper Ordovician, southside of St. Lawrence River opposite Three Rivers, Quebec [2178a].

*Blakeoceras robustum* Steam

Holotype 10484; paratype 10433

Steam, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 116, pl. 14, figs. 4-6.

Inwood Formation, Middle Silurian, south bank Grand Rapids, l.s.d. 8, sec. 17, tp. 48, rge. 13, W. Prin. mer., Manitoba.

*Byronoceras* (?) *humei* see *Poterioceras* (?) sp.

*Calhounoceras* cf. *candelabrum* Troedsson

Hypotype 7140

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 191, pl. 25, fig. 4.

Ordovician [Red River Formation], south end of Snake Island, Lake Winnipeg, Manitoba.

*Cameroceras deparcum* see *Orthoceras deparcum*

*Cameroceras wilsoni* Foerste

Holotype 6015

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 155, pl. 17, figs. 4A-D.

Red River Formation, Ordovician, Tyndall, Manitoba.

*Cameroceras* sp.

Fig. specs. 503, a

Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 79, pl. 14, figs. 2, 3 [503], 4 [503a].

Romaine Formation, Lower Ordovician, Mingan Islands, Quebec.

=*Endoceras?* *indagator*, Ulrich, E.O. *et al.*, 1944, *ibid.*, Sp. Paper 58, p. 96, pl. 50, figs. 4, 5 [503], 6 [503a].

*Campbelloceras mcgerriglei* Ulrich, Foerste, Miller and Furnish

Holotype 6066

Ulrich, E.O. *et al.*, 1942, Geol. Soc. Amer., Sp. Paper 37, p. 46, pl. 40, fig. 4.

St. Armand limestone, Lower Ordovician, Philipsburg, Quebec.

*Cassinoceras* cf. *C. grande* Ulrich and Foerste

Hypotype 624a

Ulrich, E.O. *et al.*, 1943, Geol. Soc. Amer., Sp. Paper 49, p. 39, pl. 20, figs. 3, 4.

Division H [St. George], Lower Ordovician, Schooner Island, Pistolet Bay, Newfoundland.

*Cassinoceras magister* see *Piloceras canadense**Cassinoceras triton* see *Piloceras triton**Cassinoceras wortheni* see *Piloceras wortheni**Cassinoceras* cf. *C. wortheni* (Billings)

Hypotype 624

Ulrich, E.O. *et al.*, 1943, Geol. Soc. Amer., Sp. Paper 49, p. 42, pl. 5, figs. 3, 4.

Division H [St. George], Lower Ordovician, Schooner Island, Pistolet Bay, Newfoundland.

*Catoraphiceras sordidum* see *Orthoceras sordidum**Centrotarphyceras ? imperator* see *Lituites imperator**Centrocyrtoceras* cf. *subannulatum* d'Orbigny

Hypotype 6842

Foerste, A.F.,

1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 28, figs. 2A,B.

1933, *ibid.*, vol. 28, p. 46.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 42, pl. 9, figs. 8, 9.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Centrocyrtoceras vagrans* (Billings)

Hypotype 1300a

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 35, fig. 2; 1933,

*ibid.*, vol. 28, p. 55.

Leray-Rockland beds, Middle Ordovician, La Petite Chaudière, Tetreauville, Quebec.

=*Barrandeoceras ? vagrans*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 44, pl. 12, fig. 5 [paratype].*Centrolitoceras perplexum* Flower

Holotype 13626

Flower, R.H., 1945, Am. Midland Naturalist, vol. 33, No. 3, p. 707, pl. 2, figs. 2-4.

Winnipegosis Formation, Middle Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

*Centrotarphyceras seelyi* (Whitfield)

Hypotype 6069

Ulrich, E.O. *et al.*, 1942, Geol. Soc. Amer., Sp. Paper 37, p. 49, pl. 23, figs. 1-3.

Cassin Formation, Middle Ordovician, Fort Cassin, Vermont, U.S.A.

*Characteroceras hercules* see *Nautilus hercules**Charactoceras hercules* (Billings)

Hypotype 2216

Foerste, A.F.,

1928, Geol. Surv., Canada, Mem. 154, p. 286.

1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 227, pl. 7, fig. 5.

Upper Ordovician [Ellis Bay Formation], Bear Point, Anticosti Island, Quebec [collected by T.C. Weston, 1865].

*Charactoceras normale* Wilson

Holotype 13877; paratypes 13878, 13879

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 82, pl. 25, figs. 1, 2 [13877], 3 [13879], 4 [13878].

Cobourg beds, Ottawa Formation, Middle Ordovician, Booth Street at corner of Elm Street, Ottawa, Ontario.

*Charactoceras plicatum?* (Whiteaves)

Hypotypes 7159, 7160

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 171, pl. 16, figs. 1 [7160], 2 [7159].

Red River Formation, Ordovician, east side Berens Island, Lake Winnipeg, and East Selkirk, Manitoba.

See *Eurystomites plicatus*

*Charactocerina borealis* Sweet and Miller

Holotype 12247

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 58, pl. 7, figs. 1, 2; text fig. 12C.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Charactocerina eximia* Sweet and Miller

Holotype 12248; paratype 12249

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 59, pl. 6, figs. 1, 2; pl. 8, fig. 3; text fig. 12A.

Cape Phillips Formation, Upper Ordovician, Marshall Peninsula, Cornwallis Island, Arctic.

*Charactocerina thorsteinssoni* Sweet and Miller

Holotype 12250; paratype 12251

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 61, pl. 6, fig. 3; text fig. 12B.

Cape Phillips and Cornwallis Formations, Upper Ordovician, eastern part of Little Cornwallis Island, and southwestern part of Cornwallis Island, Arctic.

*Clarkoceras lawrencense* Ulrich, Foerste and Miller

Holotype 6251, a, b [parts of one specimen and thin section]; paratype 6100

Ulrich, E.O. *et al.*, 1943, Geol. Soc. Amer., Sp. Paper 49, p. 91, pl. 44, figs. 1-3 [6251, a], 4 [6200]; pl. 45, fig. 11 [6251b]; text fig. 10 [6251b].

Levis boulders, Lower Ordovician, Point Levis and St. Joseph, Quebec.

*Clarkoceras levisense* Ulrich, Foerste and Miller

Holotype 6101; paratype 6101a

Ulrich, E.O. *et al.*, 1943, Geol. Soc. Amer., Sp. Paper 49, p. 92, pl. 21, figs. 1, 2 [6101], 3 [6101a].

Levis boulders, Lower Ordovician, Point Levis, Quebec.

*Clarkoceras mercurius* see *Cyrtocerina mercurius*

*Clitendoceras montrealense* see *Orthoceras montrealensis*

*Crateroceras* (?) *humei* see *Rizoceras* (?) sp.

*Curtoceras eatoni* (Whitfield)

Hypotype 6082

Ulrich, E.O. *et al.*, 1942, Geol. Soc. Amer., Sp. Paper 37, p. 70, pl. 51, figs. 7-9.

Cassin Formation, Middle Ordovician, Fort Cassin, Vermont, U.S.A.

*Curtoceras internastriatum* (Whitfield)

Hypotype 6095, a [specimen and thin section]

Ulrich, E.O. *et al.*, 1942, Geol. Soc. Amer., Sp. Paper 37, p. 72, pl. 49, fig. 5; pl. 50, fig. 4; text figs. 20a, b.

Cassin Formation, Lower Ordovician, Fort Cassin, Vermont, U.S.A.

*Curtoceras* ? *minganense* see *Lituities palinurus**Cyclendoceras boreale* Foerste

Holotype 7922, a [parts of one specimen]

Foerste, A.F., 1928, Denison Univ. Bull., J. Sci. Lab., vol. 23, p. 15, pl. 1, figs. 1A, B; pl. 22, figs. 2A, B.

Middle Ordovician, Port Burwell west of Cape Chidley, Newfoundland.

*Cyclendoceras intermedium* Sweet and Miller

Holotype 12213

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 28, pl. 2, fig. 1.

Cape Phillips Formation, Upper Ordovician, Marshall Peninsula, Cornwallis Island, Arctic.

*Cyclendoceras kindlei* see *Endoceras annulatum* var.*Cyclendoceras whiteavesi* Foerste

Syntype 5599

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 153, pl. 11, fig. 1.

Ordovician [Red River Formation], southeast point of Berens Island, Lake Winnipeg, Manitoba.

*Cycloceras brucense* see *Orthoceras brucensis**Cycloceras decrescens* see *Orthoceras decrescens**Cycloceras selkirkense* see *Orthoceras selkirkense**Cyptendoceras veterator* see *Orthoceras veterator**Cyptendocerina explorator* see *Orthoceras explorator**Cyrtoceras alethes* Billings

Holotype 818

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 193, figs. 177a-c.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 193, figs. 177a-c.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

=*Bassleroceras alethes*, Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 35, pl. 6, figs. 3-5.

*Cyrtoceras ammon* Billings

Syntypes 3554, a

Billings, E., 1861, Can. J., n. ser., vol. 6, p. 361.

Middle Devonian [Onondaga Formation], Rainham tp., Ontario.

*Cyrtoceras aristides* Billings

Syntypes 821, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 316.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 316.

Beekmantown [Naylor Ledge limestone] Formation, Lower Ordovician, Philipsburg, Quebec.

=*Endoceras* ? *aristides*, Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 92, pl. 47, fig. 7 [holotype 821].

=*Endoceras* ? *philipsburgense*, *ibid.*, p. 99, pl. 49, figs. 3, 4 [holotype 821a].



*Cyrtoceras billingsi* Salter

Syntypes 1299, a

Salter, J.W., 1859, Geol. Surv., Canada, Can. Org. Rem., dec. 1, p. 33, pl. 7, figs. 5 [1299], 6 [1299a].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Zitteloceras billingsi*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 27, figs. 1A,B [holotype 1299a]; 1933, *ibid.*, vol. 28, p. 79.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 94, pl. 32, figs. 12, 13 [holotype 1299a].

=*Zitteloceras hallianum*, Wilson, A.E., 1961, *ibid.*, Bull. 67, p. 95, pl. 32, fig. 14 [hypotype 1299].

*Cyrtoceras clitus* Billings

Holotype 2739

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 85, fig. 24.

Middle Silurian [Lockport Formation], Grimsby tp., Ontario.

=*Grimshyoceras clitus*, Foerste, A.F., 1934, Denison Univ. Bull., J. Sci. Lab., vol. 29, p. 130, pl. 40, figs. 2A,B.

*Cyrtoceras corydon* Billings

Holotype 2740

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 85, fig. 23.

Middle Silurian [Lockport Formation], Grimsby, Ontario.

=*Grimshyoceras corydon*, Foerste, A.F., 1934, Denison Univ. Bull., J. Sci. Lab., vol. 29, p. 132, pl. 39, figs. 3A, B.

*Cyrtoceras dictys* Billings

Syntypes 827, a-c

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 192, fig. 176 [827].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 192, fig. 176.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

=*Dyscritoceras dictys*, Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 47, pl. 10, figs. 4 [827a], 5 [827b], 6 [827], 7 [827c].

*Cyrtoceras falx* Billings

Syntypes 1298, a-c

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 314.

Salter, J.W., 1859, *ibid.*, Can. Org. Rem., dec. 1, p. 32, pl. 7, fig. 1 [1298].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Richardsonoceras* (?) *falx*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 7, figs. 1A [holotype 1298], B, C, [paratypes 1298a, c]; pl. 26, fig. 6 [holotype 1298]; 1933, *ibid.*, vol. 28, p. 93.

=*Richardsonoceras falx*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 91, pl. 34, figs. 1, 2 [holotype 1298], 3 [paratype 1298a], 4 [paratype 1298c].

=*Loganoceras regulare*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 25, figs. 2A, B [1298b]; 1933, *ibid.*, vol. 28, p. 70.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 101, pl. 35, fig. 7 [paratype 1298b].

*Cyrtoceras huronense* Billings

Syntypes 1297, a–c

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 176, figs. 158 a, b [1297c].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 176, figs. 158a, b.

Middle Ordovician, St. Joseph Island, Lake Huron, Ontario.

=*Beloitoceras huronense*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 30, figs. 3A [1297b], B [holotype 1297c], C [1297]; 1933, *ibid.*, vol. 28, p. 100.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 84, pl. 32, figs. 3, 4 [holotype 1297c].

=*Beloitoceras murrayi*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 30, figs. 5A, B [1297a]; 1933, *ibid.*, vol. 28, p. 108.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 85, pl. 32, figs. 9, 10 [holotype 1297a].

*Cyrtoceras isodorus* Billings

Holotype 1304

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 175, figs. 157a, b.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 175, figs. 157a, b.

Middle Ordovician, St. Joseph Island, Lake Huron, Ontario.

=*Beloitoceras isodorus*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 30, figs. 2A, B; 1933, *ibid.*, vol. 28, p. 106.=*Beloitoceras isodorum*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 84, pl. 32, figs. 7, 8.*Cyrtoceras juvenalis* Billings

Holotype 1721a; hypotype 1721

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 177.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 177; p. 420, figs. 400a [1721], b [1721a].

Middle Ordovician, Montreal, Quebec.

*Cyrtoceras laticurvatum* Whiteaves

Syntypes 7148, a, b, 7149, a–c, 7150, 7152, 7153.

Whiteaves, J.F.,

1896, Can. Rec. Sci., vol. 6, p. 365.

1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 224, fig. 14 [7148].

Ordovician [Red River Formation], Little Black Island, Little Tamarack Island, and point

off Moose Creek about 8 miles southwest of Whiteway Point, Lake Winnipeg, Manitoba.

=*Winnipegoceras laticurvatum*, Foerste, A.F., 1928, Contr. Mus. Pal., Univ. Michigan, vol. 3, No. 3, pt. 2, p. 56, pl. 9, figs. 1 [the type 7148], 2 [7153].

Flower, R.H. and Teichert, C., 1957, Univ. Kansas Pal. Contr., Mollusca, Art. 6, p. 78, text figs. 20A [the holotype 7153], B [7148].

=*Winnipegoceras dowlingi*, Foerste, A.F., 1928, Contr. Mus. Pal., Univ. Michigan, vol. 3, No. 3, pt. 2, p. 58, pl. 8, fig. 1 [7152].=*Cyrtogomphoceras dowlingi*, Flower, R.H. and Teichert, C., 1957, Univ. Kansas Pal. Contr., Mollusca, Art. 6, p. 62 [holotype 7152].*Cyrtoceras ligarius* Billings

Holotype 2175, a [parts of one specimen]

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 176.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 176.

Upper Ordovician, north point Drummond Island, Lake Huron.

=*Maelonoceras (Beloitoceras) ligarius*, Foerste, A.F., 1924, *ibid.*, Mem. 138, p. 229, pl. 38, fig. 8; pl. 41, fig. 2.

*Cyrtoceras lysander* Billings

Syntypes 2177b,c, g

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 161, figs. 146a [2177c?], c [2177g].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 161, figs. 146a, c.

Upper Ordovician [Meaford Formation], Clay Cliffs, Manitoulin Island, Ontario.

=*Manitoulinoceras lysander*, Foerste, A.F., 1924, *ibid.*, p. 230, pl. 41, figs. 4a, b [2177c], c-e [2177b], f [2177g].

*Cyrtoceras mccoysi* Billings

Syntypes 1073, a

Billings, E., 1859, *Can. Naturalist*, vol. 4, p. 467.

Middle Ordovician [Mingan Formation], Ammonite or Clearwater Point, Mingan Islands, Quebec.

=*Diestoceras mccoysi*, Foerste, A.F., in Twenhofel, W.H., 1938, *Geol. Soc. Amer.*, Sp. Paper 11, p. 103, pl. 20, fig. 9; pl. 21, fig. 1 [holotype 1073a].

=*Diestoceras* sp., Foerste, A.F., in Twenhofel, W.H., 1938, *ibid.*, p. 104, pl. 21, figs. 2, 3 [hypotype 1073].

*Cyrtoceras manitobense* Whiteaves

Syntypes 1878, 1879, 1883

Whiteaves, J.F., 1889, *Trans. Roy. Soc. Can.*, vol. 7, sec. 4, p. 80, pl. 13, figs. 3 [1879], 4 [1878]; pl. 15, fig. 4 [1883].

Ordovician [Red River Formation], Deer and Big [Hecla] Islands, and Bull Head, Lake Winnipeg, Manitoba.

=*Westonoceras manitobense*, Foerste, A.F.,

1928, *Contr. Mus. Pal.*, Univ. Michigan, vol. 3, No. 3, pt. 2, p. 49, pl. 5, fig. 1; pl. 11, fig. 5 [the type 1879].

1929, *Denison Univ. Bull.*, J. Sci. Lab., vol. 24, p. 220, pl. 38, fig. 2 [1883].

*Cyrtoceras metellus* Billings

Holotype 820, a [parts of one specimen]

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 191, fig. 175.

1865, *Geol. Surv., Canada, Palaeoz. Fossils*, vol. 1, p. 191, fig. 175.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

=*Dyscritoceras metellus*, Ulrich, E.O. *et al.*, 1944, *Geol. Soc. Amer.*, Sp. Paper 58, p. 46, pl. 10, figs. 1-3.

*Cyrtoceras myrice* Hall and Whitfield

Hypotypes 2922, a

Whiteaves, J.F., 1884, *Geol. Surv., Canada, Palaeoz. Fossils*, vol. 3, pt. 1, p. 39, pl. 6, figs. 3, a [2922a].

Guelph Formation, Middle Silurian, Durham, Ontario.

*Cyrtoceras occidentale* Whiteaves

Syntypes 4165, a, 4181, 4182

Whiteaves, J.F., 1890, *Trans. Roy. Soc. Can.*, vol. 8, sec. 4, p. 103, pl. 7, figs. 5, a, 6 [4181].

Middle Devonian [Winnipegosis Formation], Dawson Bay and mouth of Red Deer River, Lake Winnipegosis, Manitoba.

=*Alpenoceras occidentale*, Flower, R.H. and Teichert, C., 1957, *Univ. Kansas Pal. Contr.*, Mollusca, Art. 6, p. 111, pl. 32, figs. 1-4 [paratype 4182], 5-7 [holotype 4181]; pl. 33, figs. 7, 8 [paratype 4165a].

=*Alpenoceras sinuiferum*, Flower, R.H. and Teichert, C., 1957, *ibid.*, p. 111, pl. 33, figs. 5, 6 [holotype 4165].

*Cyrtoceras orestes* Billings

Holotype 2738

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 177.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 177.

Middle Silurian [Lockport Formation], lot 10, con. 1, W. Flamborough tp., Ontario.

*Cyrtoceras orodes* Billings

Holotype 2921

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 162.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 162.

Whiteaves, J.F., 1895, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 2, p. 103, pl. 14, figs. 7, a [the type].

Guelph Formation, Middle Silurian, Hespeler, Ontario.

=*Grimshyoceras* (?) *orodes*, Foerste, A.F., 1934, Denison Univ. Bull., J. Sci. Lab., vol. 29, p. 136, pl. 40, figs. 4A, B.*Cyrtoceras orodes* Billings

Hypotypes 3012, a

Whiteaves, J.F., 1895, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 2, p. 103, pl. 14, figs. 8, a, b [3012a], 9 [3012].

Guelph Formation, Middle Silurian, Durham, Ontario.

*Cyrtoceras postumius* Billings

Holotype 2176, a [parts of one specimen]

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 178.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 178.

Upper Ordovician [Meaford Formation], Clay Cliffs, Manitoulin Island, Ontario.

=*Manitoulinoceras postumius*, Foerste, A.F., 1924, *ibid.*, Mem. 134, p. 232, pl. 41, fig. 1.*Cyrtoceras quebecense* Whiteaves

Holotype 4411

Whiteaves, J.F.,

1898, Ottawa Naturalist, vol. 12, No. 6, p. 120.

1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 315, pl. 35, figs. 1, a.

Lower Ordovician [Levis Formation], limestone boulders at Point Levis, Quebec.

=*Quebecoceras quebecense*, Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 137, pl. 12, figs. 3, 4 [holotype 4411].*Cyrtoceras regulare* Billings

Syntypes 1296, a, b

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 314.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River and La Petite Chaudière(?), Quebec.

=*Loganoceras regulare*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 25, figs. 1A, B; 1933, *ibid.*, vol. 28, p. 70 [holotype 1296].

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 101, pl. 35, figs. 5, 6 [holotype 1296; paratype 1296b].

=*Manitoulinoceras* (?) *canadense*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 25, figs. 8A, B; 1933, *ibid.*, vol. 28, p. 127 [holotype 1296a].=*Loganoceras* ? *canadense*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 100, pl. 35, figs. 1, 2 [holotype 1296a].

*Cyrtoceras simplex* Billings

Holotype 1303

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 313.

Middle Ordovician [Leray beds], lot N, con. A, Nepean tp., Ontario.

=*Richardsonoceras simplex*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 26, figs. 1A, B; 1933, *ibid.*, vol. 28, p. 91.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 91, pl. 34, figs. 5, 6.

*Cyrtoceras sinuatum* Billings

Holotype 1302

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 315.

Middle Ordovician [Leray beds], La Petite Chaudière, Quebec.

=*Zitteloceras* (?) *sinuatum*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 27, figs. 7A, B; 1933, *ibid.*, vol. 28, p. 84.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, pl. 96, pl. 32, figs. 15, 16 [hypotype 1302].

*Cyrtoceras subturbinatum* Billings

Syntypes 1291, a

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 312.

Teichert, C., 1933, *Palaeontographica*, vol. 78A, p. 203, fig. 48 [holotype 1291].

Middle Ordovician [Mingan Formation], near Tower Rock on Large Island, Mingan Islands, Quebec.

=*Minganoceras subturbinatum*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 104, pl. 24, figs. 1–3 [holotype 1291a], 4 [1291a – figures 4 and 5 interchanged on plate].

*Cyrtoceras syphax* Billings

Holotype 819

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 194, fig. 178.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 194, fig. 178.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

=*Eremoceras syphax*, Foerste, A.F., 1921, Denison Univ. Bull., J. Sci. Lab., vol. 19, p. 263, pl. 33, figs. 2, 8A–C.

Ulrich, E.O. *et al.*, 1943, Geol. Soc. Amer., Sp. Paper 49, p. 126, pl. 59, figs. 3–6.

*Cyrtocerina mercurius* Billings

Syntypes 826, a–f

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 194, fig. 179 [826c–d lower part, 826e–f upper part].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 194, fig. 179.

Levis Formation, Lower Ordovician, Point Levis, Quebec.

=*Clarkoceras mercurius*, Foerste, A.F., 1924, Denison Univ. Bull., J. Sci. Lab., vol. 20, p. 204, pl. 41, fig. 8 [the type 826].

=*Levisoceras mercurius*, Foerste, A.F., 1925, *ibid.*, vol. 21, p. 11.

Ulrich, E.O. *et al.*, 1943, Geol. Soc. Amer., Sp. Paper 49, p. 133, pl. 62, figs. 1–4 [holotype 826, a, b – parts of one specimen].

=*Levisoceras belli*, Ulrich, E.O. *et al.*, 1943, *ibid.*, p. 134, pl. 62, figs. 5, 6 [holotype 826c, d; paratypes 826e–f].

*Cyrtocerina typica* Billings

Holotype 1301

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 178, fig. 159.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 178, fig. 159.

Foerste, A.F., 1924, Denison Univ. Bull., J. Sci. Lab., vol. 20, p. 204, pl. 41, fig. 9.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 102, pl. 26, figs. 3, 4.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Cyrtocerina* sp.

Fig. spec. 9799

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 27, pl. 8, figs. 19, 20.

Lowville beds, Middle Ordovician, Carlington, Ottawa, Ontario.

*Cyrtogomphoceras baffinense* Foerste

Hypotypes 12241, 12242a, b [parts of one specimen]

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 51, pl. 5, figs. 7, 8; text fig. 9.

Comwallis Formation, Upper Ordovician, southwestern part of Comwallis Island, Arctic.

*Cyrtogomphoceras dowlingi* see *Cyrtoceras laticurvatum**Cyrtogomphoceras intermedium* see *Oncoceras (magnum ? var.) intermedium**Cyrtogomphoceras magnum* see *Oncoceras magnum**Cyrtogomphoceras* cf. *turgidum* Troedsson

Hypotype 7144

Foerste, A.F., 1928, Michigan Univ., Contr. Mus. Pal., vol. 3, p. 65, pl. 7, fig. 4.

Red River Formation, Ordovician, north end Big Island, Lake Winnipeg, Manitoba.

*Cyrtogomphoceras whiteavesi* see *Oncoceras gibbosum**Cyrtogomphoceras whiteavesi* Miller

Hypotypes 7145, 7146

Foerste, A.F. 1928, Michigan Univ., Contr. Mus. Pal., vol. 3, p. 61, pl. 7, figs. 2 [7146], 3 [7145].

Red River Formation, Ordovician, Little Moose Island and Black Island, Swampy Harbour, Lake Winnipeg, Manitoba.

*Cyrtogomphoceras* ? sp.

Fig. spec. 13887

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 103, pl. 29, fig. 7.

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

*Cyrtonybyoceras barrandei* see *Orthoceras haesitans**Cyrtonybyoceras haesitans* see *Orthoceras haesitans**Cyrtorizoceras barbense* Foerste

Holotype 6810

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 54, pl. 10 fig. 4.

Gascons or Bouleaux Formation, Middle Silurian, L'Anse à la Barbe, Port Daniel, Quebec.

Mollusca

*Cyrtorizoceras breviradiatum* McLearn

Holotype 5582

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 160, pl. 25, figs. 9–11.  
Silurian, Arisaig, Nova Scotia.

*Cyrtorizoceras multicameratum* (Hall)

Hypotype 13885

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 98, pl. 35, fig. 8.  
Leray beds, Ottawa Formation, Middle Ordovician, Brébeuf Park, Val Tetreau, Quebec.

*Cyrtorizoceras rougense* Flower

Holotype 16672; paratype 16673

Flower, R.H., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 80, pl. 1, figs. 3, 4.  
Lower Trenton, Middle Ordovician, Pont Rouge, Portneuf co., Quebec.

*Cyrtorizoceras williamsi* see *Maelonoceras arcticameratum*

*Cyrtorizoceras* sp.

Fig. spec. 10430

Steam, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 115, pl. 15, fig. 6.  
Atikameg Formation, Middle Silurian, Mile 18, Churchill Branch of CNR, Manitoba.

*Danoceras inutile* Flower

Holotype 11086

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 54, pl. 7, figs. 2, 3.  
Gull River Formation, Middle Ordovician, Lake St. George quarry north of Orillia, Ontario.

*Dartoceras nodosum* Foerste

Holotype 6811

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 60, pl. 18, fig. 2.  
Bouleaux Formation, Middle Silurian, west side McInnis Cove, Port Daniel, Quebec.

*Dawsonoceras elegantulum* (Dawson)

Hypotype 5663

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 156, pl. 24, fig. 1; pl. 29,  
fig. 7.  
Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Deiroceras diffidens* see *Orthoceras diffidens*

*Deiroceras kindlei* Foerste

Hypotypes 13871, 13872

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 70, pl. 28, figs. 5, 6 [13872], 7  
[13871].  
Leray beds, Ottawa Formation, Middle Ordovician, Jessop Rapids, Bonnechère River and  
unknown locality in Ottawa region, Ontario.

*Deiroceras paquettense* Foerste

Holotype 6840

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 15, figs. 2 A–C;  
1933, *ibid.*, vol. 28, p. 35.  
Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 71, pl. 28, figs. 8, 9.  
Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Ottawa River.

*Deiroceras persimile* Wilson

Holotype 13873; paratype 13874

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 72, pl. 28, figs. 3 [13874], 4  
[13873].  
Leray beds, Ottawa Formation, Middle Ordovician, waterworks drain excavation at Central  
Experimental Farm, Ottawa, Ontario.

*Deiroceras pertinax* see *Orthoceras pertinax*

*Deiroceras python* see *Orthoceras python*

*Deiroceras subfusiforme* Sweet and Miller

Holotype 12218

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 34, pl. 1, figs. 9, 10; text fig. 8.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Deiroceras* sp.

Fig. spec. 16684

Flower, R.H., 1957, State Bur. Mines Mineral Resources, New Mexico Inst. Mining Technology, Mem. 2, p. 29, pl. 11, fig. 7.

Late Trenton, Middle Ordovician, Lake St. John Region, Quebec.

*Diaphoroceras belli* Ulrich, Foerste, Miller, and Unklesbay

Holotype 7812

Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 44, pl. 9, figs. 7, 8.

Levis Formation, Lower Ordovician, limestone boulder at Point Levis, Quebec.

*Diestoceras abruptum* Wilson

Holotype 13886

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 99, pl. 29, figs. 8, 9.

Cobourg beds, Ottawa Formation, Middle Ordovician, cliff at turn in Sussex Street, near Nepean Point, Ottawa, Ontario.

*Diestoceras anticostiense* Foerste

Holotype 2173

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 319, pl. 55, figs. 4, 5.

Vaureal Formation, Upper Ordovician, West Point, Anticosti Island, Quebec.

*Diestoceras apertum* see *Poterioceras apertum*

*Diestoceras arcticum* Sweet and Miller

Holotype 12238

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 48, pl. 3, fig. 1.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Diestoceras brevidomum* Foerste

Holotype 8899

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 383, pl. 54, figs. 3-5.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Diestoceras brevidomum* Foerste

Hypotype 12239

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 49, pl. 2, fig. 6.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Diestoceras cooperi* Foerste

Holotype 8898

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 382, pl. 55, figs. 3, 4.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.



*Diestoceras gaspense* Foerste

Holotype 8897

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 381, pl. 54, figs. 1, 2.  
Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Diestoceras gibbosum* Foerste

Holotype 5609

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 229, pl. 35, fig. 4.  
Red River Formation, Ordovician, Tyndall, Manitoba.

*Diestoceras lavalense* Flower

Holotype 16682

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 54, pl. 10, figs. 1, 2.  
Terrebonne Formation, Middle Ordovician, Isle St. Jean, Montreal, Quebec.

*Diestoceras mccoysi* see *Cyrtoceras mccoysi*

*Diestoceras nobile* see *Poterioceras nobile*

*Diestoceras obesum* see *Gomphoceras obesum*

*Diestoceras scalere* Foerste

Holotype 2211

Foerste, A.F.,

1925, Denison Univ. Bull., J. Sci. Lab., vol. 21, p. 326, pl. 52, fig. 1.

1928, in Twenhofel, W.H., Geol. Surv., Canada, Mem. 154, p. 317, pl. 56, fig. 1.

Teichert, C., 1933, Palaeontographica, vol. 78A, p. 212, pl. 14, fig. 48.

Vaureal Formation, Upper Ordovician, near West-End Lighthouse, Anticosti Island, Quebec.

*Diestoceras sinclairi* Flower

Holotype 9800

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 54, pl. 7, fig. 1.

Terrebonne Formation, Middle Ordovician, Terrebonne, Quebec.

*Diestoceras subglobosum* Foerste

Holotype 8900

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 383, pl. 54, fig. 6; pl. 55, fig. 2.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Diestoceras(?) whiteavesi* see *Poterioceras apertum*

*Diestoceras* sp. see *Cyrtoceras mccoysi*

*Diestoceras* (?) sp. see *Poterioceras apertum*

*Digenuoceras latum* (Foerste)

Hypotype 12237

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 47, pl. 7, fig. 3;  
pl. 8, fig. 1.

Cape Phillips Formation, Upper Ordovician, western part of Little Comwallis Island,  
Arctic.

*Diodoceras avonensis* (Dawson)

Hypotypes 4373, a, 7527, 7528

Bull, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 183, pl. 33, figs. 4-6.

Windsor Formation, Mississippian, Maxner Point, Windsor, Nova Scotia.

*Discoceras canadense* Whiteaves

Syntypes 7157, 7158

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 227, pl. 22, figs. 3, a [7157].

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 177, pl. 17, figs. 1A, B [lectotype 7157], 2 [7158].

Ordovician [Red River Formation], Commissioners Harbour and Swampy Island, Lake Winnipeg, Manitoba.

*Discosorus conoideus* Hall

Hypotypes 2743b, c

Teichert, C., 1931, Am. Mus. Natural Hist., Novitates, No. 512, p. 6, figs. 6 [2743c], 7 [2743b].

Middle Silurian [Fossil Hill Formation], Cockburn Island, Lake Huron, Ontario.

*Discosorus* (?) *earltonensis* Foerste

Holotype 8725

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 89, pl. 12, figs. 2A, B.

'Lockport' [Thornloe] Formation, Middle Silurian, 3 miles north of Earlton, Ontario.

*Discosorus* (?) *geronticus* Foerste

Holotype 8724

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 89, pl. 12, figs. 1A-C.

'Lockport' [Thornloe] Formation, Middle Silurian, 3 miles north of Earlton, Ontario.

*Discosorus humei* Foerste

Holotype 8709; paratype 8710

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 85, pl. 14, figs. 5 [8709], 6 [8710].

'Lockport' [Thornloe] Formation, Middle Silurian, lake shore 1/2 mile north of Haileybury in SE. lot 11, con. 5, Bucke tp. and northeast side Mann (Bumt) Island, Lake Timiskaming, Quebec.

*Discosorus* (?) *infelix* see *Orthoceras infelix**Discosorus troedssoni* Foerste and Savage

Holotype 7906, b [parts of one specimen]

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 76, pl. 11, figs. 2A, B.

Silurian, southern half of west coast Southampton Island, Arctic.

*Discosorus* sp.

Fig. spec. 6367

Teichert, C., 1931, Am. Mus. Natural Hist., Novitates, No. 512, p. 6, figs. 3, 5.

Silurian, locality unknown.

*Donacoceras arundineum* Foerste

Holotype 8044

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 69, pl. 10, fig. 4B.

'Lockport' [Thornloe] Formation, Middle Silurian, 3 miles north of Earlton, Ontario.

*Donacoceras percense* Foerste

Holotype 8883

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 376, pl. 55, fig. 9.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

Mollusca

*Donacoceras timiskamingense* Foerste

Holotype 8043

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 69, pl. 10, fig. 4A.

'Lockport' [Thornloe] Formation, Middle Silurian, 3 miles north of Earleton, Ontario.

*Dowlingoceras gracile* see *Poterioceras gracile*

*Dresseroceras corrugatum* Ulrich, Foerste, Miller, and Unklesbay

Holotype 7816

Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 132, pl. 66, figs. 6, 7. Levis Formation, Lower Ordovician, limestone boulder at Point Levis, Quebec.

*Dyscritoceras dictys* see *Cyrtoceras dictys*

*Dyscritoceras?* *oxfordense* see *Orthoceras veterator*

*Dyscritoceras metellus* see *Cyrtoceras metellus*

*Ectocycloceras cataline* see *Orthoceras cataline*

*Ectocycloceras cato* see *Orthoceras cato*

*Ectocyrtoceras billingi* see *Oncoceras thales*

*Ectocyrtoceras thales* see *Oncoceras thales*

*Eirodoceras* cf. *abnorme* (Hall)

Hypotype 6370

Teichert, C., 1933, Palaeontographica, vol. 78A p. 143, pl. 12, fig. 32. Middle Silurian [Fossil Hill Formation], Manitoulin Island, Ontario.

*Eirodoceras exile* Steam

Holotype 10428; paratype 11016

Steam, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 111, pl. 13, fig. 2; pl. 14, fig. 1. East Arm and Cedar Lake Formations, Middle Silurian, centre sec. 9, tp. 57, rge. 20, W. Prin. mer., MooseLake and east side of bay behind Denbeigh Point, Lake Winnipegosis, Manitoba.

*Endoceras annulatum* Hall var.

Hypotype 1840

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 77, pl. 5, figs. 1, a. Ordovician, between second and third rapids, Nelson River, Manitoba.

=*Cyclendoceras kindlei*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 152, pl. 12, fig. 2; pl. 22, fig. 2.

*Endoceras?* *aristides* see *Cyrtoceras aristides*

*Endoceras bellicinctum* Sweet and Miller

Syntypes 12210, 12211

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 26, pl. 2, figs. 2, 3.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Comwallis Island, Arctic.

*Endoceras chidleyense* Foerste

Holotype 7925

Foerste, A.F., 1928, Denison Univ. Bull., J. Sci. Lab., vol. 23, p. 13, pl. 2, fig. 1; pl. 22, figs. 1A, B.

Ordovician, Port Burwell west of Cape Chidley, Newfoundland.

*Endoceras crassisiphonatum* Whiteaves

Syntypes 1866, a [parts of one specimen], 1867, a–c [parts of one specimen], 1870, a, b [parts of one specimen].

Whiteaves, J.F., 1891, *Trans. Roy. Soc. Can.*, vol. 9, sec. 4, p. 79, pl. 6, figs. 2 [1870], 3 [1867c], 4 [1866]; pl. 7, fig. 1 [1866].

Ordovician [Red River Formation], East Selkirk and Lower Fort Garry, Manitoba.

=*Nartheoceras crassisiphonatum*, Foerste, A.F., 1929, *Denison Univ. Bull., J. Sci. Lab.*, vol. 24, p. 188, pl. 24, figs. 1A, B [lectotype 1866, a]; pl. 25, figs. 1 [1870], 2 [1867c].

*Endoceras* ? *deparcum* see *Orthoceras deparcum*

*Endoceras fulgur* see *Orthoceras propinquum*

*Endoceras* ? *glacus* see *Orthoceras glacus*

*Endoceras* ? *indagator* see *Camerocheras* sp.

*Endoceras* ? *lawrencense* Ulrich, Foerste, Miller, and Unklesbay

Holotype 6127

Ulrich, E.O. *et al.*, 1944, *Geol. Soc. Amer., Sp. Paper* 58, p. 98, pl. 53, fig. 8.

Lower Ordovician, boulder at St. Joseph east of Point Levis, Quebec.

*Endoceras* ? *logani* Ulrich, Foerste, Miller, and Unklesbay

Holotype 6849

Ulrich, E.O. *et al.*, 1944, *Geol. Soc. Amer., Sp. Paper* 58, p. 98, pl. 51, figs. 2, 3.

Lower Ordovician, limestone boulder at Point Levis, Quebec.

*Endoceras manitobense* Foerste

Syntype 6014

Foerste, A.F., 1929, *Denison Univ. Bull., J. Sci. Lab.*, vol. 24, p. 149, pl. 12, fig. 1.

Red River Formation, Ordovician, Biscuit Point Narrows, Lake Winnipeg, Manitoba.

*Endoceras microlobatum* Flower

Holotype 16686

Flower, R.H., 1958, *J. Pal.*, vol. 32, No. 3, p. 450, pl. 62, figs. 5–7.

Terrebonne Formation, Middle Ordovician, Isle Jesus, Montreal, Quebec.

*Endoceras minganense* Foerste

Holotype 1349a, b [parts of one specimen]

Foerste, A.F., *in* Twenhofel, W.H., 1938, *Geol. Soc. Amer., Sp. Paper* 11, p. 90, pl. 17, fig. 2.

Mingan Formation, Middle Ordovician, Tower Cliff on southeast point of Large Island, Mingan Islands, Quebec.

*Endoceras* ? *philipsburgense* see *Cyrtoceras arisitedes*

*Endoceras proteiforme* Hall

Hypotype 12212

Sweet, W.C. and Miller, A.K., 1957, *Geol. Surv., Canada, Bull.* 38, p. 27, pl. 1, fig. 6; text fig. 3.

Cape Phillips Formation, Upper Ordovician, Marshall Peninsula, Comwallis Island, Arctic.

*Endoceras proteiforme* Hall

Hypotypes 13832, 13833

Wilson, A.E., 1961, *Geol. Surv., Canada, Bull.* 67, p. 14, pl. 2, figs. 1, 2.

Leray-Rockland and Sherman Fall beds, Ottawa Formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario and Wright's quarry?, Hull, Quebec.

*Endoceras* (?) *rapax* see *Orthoceras rapax*

*Endoceras rapax* (Billings)

Hypotype 13834

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 15, pl. 3, fig. 1.  
Hull beds, Ottawa Formation, Middle Ordovician, Brigham's quarry, Hull, Quebec.

*Endoceras* ? *richardsoni* Ulrich, Foerste, Miller, and Unklesbay

Holotype 6634

Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 100, pl. 12, figs. 1, 2.  
Levis Formation, Lower Ordovician, limestone boulder at Point Levis, Quebec.

*Endoceras velox* see *Orthoceras velox*

*Endoceras* ? sp.

Fig. spec. 1286

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 15, pl. 4, figs. 14, 15.  
Leray-Rockland beds, Ottawa Formation, Middle Ordovician, lot 13, con. 2, Stafford tp.,  
Ontario.

*Endoceras* sp.

Fig. spec. 5647, a, b [parts of one specimen]

Foerste, A.F., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 66, pl. 14,  
figs. 1A, B.

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p.  
27, pl. 1, figs. 2A, B.

Ordovician, west side of North Arm, 10 miles northwest of Red Rock Point, Great Slave  
Lake, Northwest Territories.

=*Armenoceras* sp., Foerste, A.F., 1929, *ibid.*, vol. 24, p. 206, pl. 25, fig. 3.

*Endoceras* sp.

Fig. spec. 8566

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 220.  
Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Endocycloceras wilsonae* Ulrich, Foerste, Miller, and Unklesbay

Holotype 6126

Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 31, pl. 3, figs. 3-5.  
Levis Formation, Lower Ordovician, limestone boulder at Point Levis, Quebec.

*Endodiscosorus foerstei* Teichert

Holotype 12392

Teichert, C., 1931, Am. Mus. Natural Hist., Novitates, No. 512, p. 10, figs. 8, 9.

Flower, R.H. and Teichert, C., 1957, Univ. Kansas Pal. Contr., Mollusca, Art. 6, p.  
109, pl. 30, figs. 4, 5.

Thomloe limestone, Middle Silurian, Lake Timiskaming area, Ontario.

*Ephippiorthoceras ekwanense* see *Orthoceras ekwanense*

*Ephippiorthoceras formosum* see *Orthoceras formosum*

*Ephippiorthoceras* cf. *formosum* (Billings)

Hypotype 6017

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 164, pl. 22, figs.  
3A, B; pl. 37, figs. 3A, B.

Red River Formation, Ordovician, Tyndall southeast of East Selkirk, Manitoba.

*Ephippiorthoceras minutum* Stearn

Holotype 10431; paratype 10432

Stearn, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 113, pl. 15, figs. 2, 3 [10431].  
Stonewall Formation, Upper Ordovician, Stonewall quarry, Manitoba.*Ephippiorthoceras sieboldi* see *Orthoceras sieboldi**Ephippiorthoceras* sp.

Fig. spec. 8061

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 72, pl. 10, fig. 3.

Liskeard Formation, Ordovician, quarry one mile west of Haileybury in north end lot 9, con. 3, Bucke tp., Ontario.

*Eremoceras syphax* see *Cyrtoceras syphax**Eurystomites chidleyense* Foerste

Holotype 7932

Foerste, A.F., 1928, Denison Univ. Bull., J. Sci. Lab., vol. 23, p. 58, pl. 2, figs. 2A-C; pl. 20, fig. 1; pl. 27, figs. 2A-F.

Loose boulder, Ordovician(?), Port Burwell west of Cape Chidley, Newfoundland.

*Eurystomites ferox* see *Nautilus ferox**Eurystomites plicatus* Whiteaves

Syntype 7155, a [parts of one specimen]

Whiteaves, J.F.,

1896, Can. Rec. Sci., vol. 6, p. 395.

1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 225, pl. 22, fig. 2; text figs. 15, 16.

Ordovician [Red River Formation], Black Island, Swampy Harbour, Lake Winnipeg, Manitoba.  
= *Characteroceras* (?) *plicatum*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 171, pl. 15, figs. 1A-C [the type 7155].*Fremontoceras decursum* Wilson

Holotype 13890

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 106, pl. 33, fig. 1; pl. 34, fig. 7.  
Lowville beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.*Fremontoceras giganteum* Flower

Holotype 12351

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 57, pl. 7, fig. 10.

Terrebonne Formation, Middle Ordovician, Isle St. Jean, Terrebonne, Quebec.

*Garryoceras semiplanatum* see *Orthoceras semiplanatum**Gasconoceras* sp.

Fig. spec. 12245

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 56, pl. 8, fig. 2.  
Read Bay Formation, Upper Silurian, southeast coast of Cornwallis Island, Arctic.*Geisonoceras drummondi* see *Orthoceras drummondi*cf. *Geisonoceras drummondi* (Billings)

Hypotype 13843

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 22, pl. 5, fig. 2.

Lowville beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

Mollusca

*Geisonoceras expansum* Foerste

Holotype 8882

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 375, pl. 55, fig. 1.  
Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Geisonoceras scofieldi* Foerste

Hypotype 13842

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 23, pl. 5, figs. 3, 4.  
Hull beds, Ottawa Formation, Middle Ordovician, Hull, Quebec.

*Geisonoceras* sp.

Fig. spec. 13614

Wilson, A.E., 1957, Can. Field-Naturalist, vol. 70, No. 1, pl. 5, fig. 1.  
Eastview-Billings Formation, Upper Ordovician, Gloucester tp., Ontario.

*Geisonocerina barbensis* Foerste

Syntype 6805

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 32, pl. 4, fig. 1.  
Gascons Formation, Middle Silurian, L'Anse à la Barbe, Port Daniel, Quebec.

*Glossoceras desideratum* Billings

Holotype 2539

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 60  
Middle Silurian [Chicotte Formation], Southwest Point, Anticosti Island, Quebec.  
=*Orthoceras desideratum*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 261, pl. 40, fig. 2.

*Goldringia* sp. cf. *G. citum* (Hall)

Hypotype 14752

Fagerstrom, J.A., 1961, J. Pal., vol. 35, No. 1, p. 41, pl. 13, fig. 17.  
Formosa reef limestone, Middle Devonian, north end of road-cut 2 1/2 miles north of Formosa, Ontario.

*Gomphoceras manitobense* Whiteaves

Syntypes 4189, 17742, 17743

Whiteaves, J.F., 1890, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 102, pl. 7, fig. 7 [4189].  
Middle Devonian [Dawson Bay Formation], north end of Snake Island and Point Wilkins, Dawson Bay, Lake Winnipegosis, Manitoba.

"*Gomphoceras*" *manitobense* Whiteaves

Hypotypes 14906, 14907

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6, p. 74, pl. 13, figs. 11, 12.  
Dawson Bay Formation, Middle Devonian, western and northern shores of Snake Island, Lake Winnipegosis, Manitoba.

*Gomphoceras obesum* Billings

Holotype 2172

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 311.  
Upper Ordovician [English Head Formation], 3 miles east of Carleton Point, Anticosti Island, Quebec.  
=*Diestoceras obesum*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 315, pl. 44, fig. 7.

*Gomphoceras parvulum* Whiteaves

Syntypes 5706, a-c

Whiteaves, J.F.,

1891, Can. Rec. Sci., vol. 4, p. 298, pl. 3, figs. 5, a, b.

1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 296, pl. 35, figs. 2, a, b.

Middle Silurian [Inwood Formation], Grand Rapids, Saskatchewan River, Manitoba.

=*Mandaloceras parvulum*, Steam, C.W., 1956, *ibid.*, Mem. 281, p. 117, pl. 16, figs. 5, 6 [hypotype 5706c].*Gomphoceras subgracile* Billings

Holotype 3053

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 311.

Middle Silurian [Gascons Formation], L'Anse aux Gascons, Port Daniel, Quebec.

=*Mandaloceras subgracile*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 372, pl. 45, figs. 3A, B; pl. 46, figs. 3A, B.1936, *ibid.*, vol. 31, p. 80, pl. 22, figs. 1A-F.*Gonioceras anceps* Hall

Hypotype 13862

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 60, pl. 23, fig. 3.

Leray beds, Ottawa Formation, Middle Ordovician, Westport, Ontario.

*Gonioceras lambii* Whiteaves

Holotype 1872

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 86, pl. 11, figs. 1, a, b.

Ordovician [Red River Formation], East Selkirk, Manitoba.

=*Lambeoceras lambii*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 213, pl. 34, fig. 1.=*Lambeoceras lambei*, Teichert, C., 1933, Palaeontographica, vol. 78A, p. 125, text fig. 7.*Gonioceras minor* Flower

Holotype 13278, a [parts of one specimen]

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 31, pl. 9, fig. 3.

Long Point Group, Ordovician, Long Point, Newfoundland.

*Gonioceras occidentale* Hall

Hypotype 13863

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 62, pl. 24, fig. 1.

Leray beds, Ottawa Formation, Middle Ordovician, just below Wellington Street, Westboro, Ottawa, Ontario.

*Gonioceras paquettense* Flower

Hypotype 1305b

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 62, pl. 24, figs. 4, 5.

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

*Gorbyoceras ? latiannulatum* Wilson

Holotype 13851

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 37, pl. 10, fig. 6.

Cobourg beds, Ottawa Formation, Middle Ordovician, west end of Fifth Avenue, Ottawa, Ontario.



Mollusca

*Gorbyoceras maro* (Billings)?

Hypotype 12228

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 40, pl. 1, fig. 3.  
Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island,  
Arctic.

*Gorbyoceras perovale* Wilson

Holotype 13852

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 37, pl. 10, fig. 1.  
Cobourg beds, Ottawa Formation, Middle Ordovician, boat-landing Nepean Point, at turn  
in Sussex Street, Ottawa, Ontario.

*Gorbyoceras tetreauense* Wilson

Holotype 1274d; paratypes 1275a-c

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 38, pl. 10, figs. 2 [1275b], 3  
[1275c], 4 [1275a], 5 [1274d].  
Leray-Rockland and Leray beds, Ottawa Formation, Middle Ordovician, Paquette Rapids,  
Allumette Island and Val Tetreau, Quebec.

*Gorbyoceras* sp.

Fig. spec. 13853

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 39, pl. 10, fig. 7.  
Leray or Rockland beds, Ottawa Formation, Middle Ordovician, La Petite Chaudière, Val  
Tetreau, Quebec.

*Grimbyoceras clitus* see *Cyrtoceras clitus*

*Grimbyoceras corydon* see *Cyrtoceras corydon*

*Grimbyoceras* (?) *orodes* see *Cyrtoceras orodes*

*Grimbyoceras teucer* see *Oncoceras teucer*

*Gyroceras canadense* Whiteaves

Syntypes 4171, a, b, 4172, a [parts of one specimen]

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 106, pl. 9, figs. 1,  
a-c [4172], 2 [4171].

Middle Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

=*Hindeoceras canadense*, Flower, R.H., 1945, Am. Midland Naturalist, vol. 33, No. 3,  
p. 711.

*Gyroceras filicinatum* Whiteaves

Syntypes 4194, a-d, f-h [parts of one specimen], e

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 107.

Middle Devonian, west side Dawson Bay, at mouth Red Deer River, Lake Winnipegosis,  
Manitoba.

*Gyroceras (Lituites) magnificum* Billings

Syntypes 2220, 2215 [specimens collected by Richardson 1856 from locality specified by  
Billings]

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 307.

Upper Ordovician [Vaureal Formation], southwest of west-end lighthouse, Anticosti Island,  
Quebec.

=*Apsidoceras magnificum*, Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv.,  
Canada, Mem. 154, p. 280 [lectotype 2220].

Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 227, pl. 8, figs.  
1, 2 [2220]; pl. 11, fig. 6 [2215].

*Gyroceras numa* Billings

Holotype 3603

Billings, E., 1874, Can. Naturalist Quart. J. Sci., n. ser., vol. 7, No. 4, p. 238.

Middle Devonian [Onondaga Formation], Kilworth, Ontario.

*Gyroceras submamillatum* Whiteaves

Syntypes 4159–4161

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 107, pl. 10, figs. 1, a [4161].

Middle Devonian, Snake Island, Lake Winnipegosis and Swan Lake, Manitoba.

*Gyroceras (Lituites) vagrans* Billings

Syntype 1300

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 308.

Middle Ordovician [Leray-Rockland beds], La Petite Chaudière Rapids, Ottawa River, Ontario.

=*Barrandeoceras vagrans*, Whiteaves, J.F., 1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 311, pl. 40, figs. 1, a [the type].=*Centrocyrtoceras vagrans*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 35, fig. 1 [holotype]; 1933, *ibid.*, vol. 28, p. 55.=*Barrandeoceras?* *vagrans*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 44, pl. 12, fig. 4 [holotype 1300].*Hendersonia sola* Wilson

Holotype 9132

Wilson, A.E., 1938, Can. Field-Naturalist, vol. 52, No. 1, p. 2, pl. 1, figs. 1–4.

Basal sandstone of Liskeard Formation, Ordovician, near Ville Marie, Quebec.

=*Liskeardia sola*, Wilson, A.E., 1939, *ibid.*, vol. 53, No. 11, p. 124.*Hercocyrtoceras amator* see *Oncoceras amator**Hexameroceras inflatum* Foerste

Holotype 7404 [not 6817]

Foerste, A.F.,

1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 381.

1936, *ibid.*, vol. 31, p. 84, pl. 21, figs. 1A–E.

Gascons Formation, Middle Silurian, L'Anse à la Barbe, Port Daniel, Quebec.

*Hindeoceras canadense* see *Gyroceras canadense**Homaloceras planatum* Whiteaves

Holotype 4166

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 104, pl. 8, figs. 1, a–d.

Middle Devonian, Dawson Bay, Lake Winnipegosis, Manitoba.

*Humeoceras unguuloideum* Foerste

Holotype 8041; paratypes 8041a, b.

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 66, pl. 10, figs. 1A [8041], B [8041a]; text figs 6A [8041], B [8041b].

'Lockport' [Thomloe] Formation, Middle Silurian, lots 6 and 7, con. 6, Armstrong tp., 3 miles north of Earlton, Ontario.

*Huronia canadensis* see *Orthoceras canadense**Huronia obliqua* Stokes

Hypotype 8704

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 80, pl. 14, fig. 4.

'Lockport' [Thomloe] Formation, Middle Silurian, 1 mile southeast of Thomloe, Ontario.

Mollusca

*Huronia* cf. *paulodilatata* Foerste

Hypotype 8703

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 79, pl. 14, fig. 3.

'Lockport' [Thomloe] Formation, Middle Silurian, 5 miles east of New Liskeard, Ontario.

*Huronia* cf. *septata* Parks

Hypotype 5071

Okulitch, V.J., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, pl. 2, fig. 7.

Birse Member, Stony Mountain Formation, Upper Ordovician, Stonewall, Manitoba.

*Hyronia vertebralis* Stokes

Hypotype 2733

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 20, fig. 3.

'Lockport' [Fossil Hill] Formation, Middle Silurian, Cockburn Island, Lake Huron, Ontario.

*Huronia vertebralis* see *Orthoceras canadense*

*Huroniella inflecta* (Parks)

Hypotype 17727

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 70, pl. 11, fig. 3.

Silurian, lat. 50°07'N, long. 84°48'W, 8 miles above mouth of Pagwachuan River, Ontario.

*Huroniella persiphonata* see *Orthoceras persiphonatum*

*Huroniella timiskamingensis* Foerste

Holotype 8705

Foerste, A.F. in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 81, pl. 14, fig. 2.

'Lockport' [Thomloe] Formation, Middle Silurian, 1 mile southeast of Thomloe, Ontario.

*Huroniella* sp.

Fig. spec. 12217

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 33, text fig. 7.

Cape Phillips Formation, Ordovician (?), southwestern part of Little Cornwallis Island,

Arctic.

*Igoceras banffensis* Warren

Syntypes 8924, a

Warren, P.S., 1927, Geol. Surv., Canada, Mem. 153, p. 60, pl. 7, figs. 3, 4 [8924].

Rundle Formation, Pennsylvanian?, Stoney Squaw Mountain, Alberta.

*Igoceras compressus* Warren

Syntypes 8923, a, b

Warren, P.S., 1927, Geol. Surv., Canada, Mem. 153, p. 60, pl. 7, figs. 7, 8 [8923].

Rundle Formation, Pennsylvanian?, Stoney Squaw Mountain, Alberta.

*Kentlandoceras wilsonae* see *Orthoceras drummondii*

*Kindleoceras reversatum* Foerste

Holotype 8582

Foerste, A.F.,

1924, Geol. Surv., Canada, Mem. 138, p. 227, pl. 42, figs. 2a-c.

1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 767, pl. 16, fig. 4.

Meaford Formation, Upper Ordovician, 3 miles north of Wekwemikongsing, Manitoulin Island, Ontario.

*Kindleoceras triangulare* Foerste

Holotype 6788

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 228, pl. 43, figs. 11–14.

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Kionoceras angulatum* (Wahlenberg)

Hypotypes 3144a, 5664–5666

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 157, pl. 24, figs. 4, 5 [3144a], 6 [5665], 8 [5666]; pl. 25, fig. 1 [5664]; pl. 29, fig. 4 [5665].

Stonehouse and McAdam Formations, Upper-Middle Silurian, McAdam Brook, Arisaig, Nova Scotia.

*Kionoceras allumettense* Foerste

Holotype 6828

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 93, pl. 22, fig. 5.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 26, pl. 7, fig. 7.

Leray-Rockland beds, Middle Ordovician, Allumette Island, Ottawa River, Quebec.

*Kionoceras bellatulum* see *Orthoceras bellatulum**Kionoceras granosistriatum* McLearn

Holotype 5667

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 159, pl. 25, figs. 7, 8.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Kionoceras laqueatum* (Dawson)

Hypotype 7529

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 182, pl. 33, fig. 2.

Windsor Formation, Mississippian, Brookfield or Windsor, Nova Scotia.

*Kionoceras magnisulcatum* see *Orthoceras magnisulcatum**Kionoceras multistriatum* Foerste

Hypotype 13846

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 26, pl. 7, fig. 8. [not a paratype].

Leray or Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario.

*Kionoceras paquetense* Foerste

Holotype 6827

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 92, pl. 37, figs. 2A, B.

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

= *Kionoceras? paquetense*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 27, pl. 7, fig. 6.*Kionoceras* sp.

Fig. specs. 12221, 12222

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 37, pl. 2, figs. 4, 5.

Cape Phillips Formation, Silurian, northeast coast of Cornwallis Island, Arctic.

*Kirkoceras? missisquoi* see *Orthoceras missisquoi**Kochoceras* cf. *productum* Troedsson

Hypotype 11055

Steam, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 110, pl. 13, fig. 1; pl. 15, figs. 9, 10.

Stonewall Formation, Upper Ordovician, Stonewall quarry, Manitoba.

Mollusca

*Kochoceras tyrrelli* Foerste

Holotype 7139, a [parts of one specimen]; paratype 7139b

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 196, pl. 27, figs. 3A, B [7139]; pl. 28, fig. 1 [7139]; pl. 30, figs. 1, 2 [7139b].

Red River Formation, Ordovician, Swampy Island, Lake Winnipeg, Manitoba.

See *Actinoceras bigsbyi*.

*Kochoceras whiteavesi* see *Actinoceras bigsbyi*

*Lambeoceras baffinense* see *Lambeoceras cf. nudum*

*Lambeoceras lambii* see *Gonioceras lambii*

*Lambeoceras montrealense* Flower

Holotype 11090

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 32, pl. 8, figs. 21–23.

Terrebonne Formation, Middle Ordovician, Isle St. Jean, Terrebonne, Quebec.

*Lambeoceras cf. nudum* Troedsson

Hypotype 6841

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 24, fig. 1; 1933, *ibid.*, vol. 28, p. 44.

Middle Ordovician, Nettiling (Netchalik) Lake, southern Baffin Island, Arctic.

=*Lambeoceras baffinense*, Miller, A.K. *et al.*, 1954, Geol. Soc. Amer., Mem. 62, p. 81, pl. 46, fig. 14.

*Lavaloceras geniculatum* Flower

Holotype 16681

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 52, pl. 10, figs. 3, 4.

Terrebonne Formation, Middle Ordovician, Crabtree Mills, Quebec.

*Lawrenceoceras collinsi* Ulrich, Foerste, Miller and Unklesbay

Holotype 7405

Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 48, pl. 7, figs. 5, 6.

Levis Formation, Lower Ordovician, limestone boulder at Point Levis, Quebec.

*Leurocycloceras* (?) *orangevillense* Bolton

Holotype 11598; paratype 11069

Bolton, T.E., 1958, Geol. Surv., Canada, Mem. 289, p. 75, pl. 13, figs. 1, 2.

Fossil Hill Formation, Middle Silurian, Nottawasaga River section northeast of Orangeville, Ontario.

*Leurorthoceras ottawaense* Wilson

Holotype 13859; paratype 13860

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 77, p. 58, pl. 12, figs. 2 [13860], 3 [13859]; text fig. 3 [13859].

Cobourg beds, Ottawa Formation, Middle Ordovician, west end of Fifth Avenue and at river cliff north of Wellington Street and west of Bay Street, Ottawa, Ontario.

*Leurorthoceras* ? n. sp. A

Holotype 13858

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 77, p. 57, text fig. 2.

Pamelia beds, Ottawa Formation, Middle Ordovician, excavation on Buena Vista Road, near Acacia Avenue, Rockcliffe (Ottawa), Ontario.

*Levisoceras belli* see *Cyrtoceria mercurius*

*Levisoceras mercurius* see *Cyrtoceria mercurius*

*Liskeardia sola* see *Hendersonia sola*

*Litoceras calciferum* see *Nautilus calciferus*

*Litoceras* ? *versutum* see *Nautilus versutum*

*Lituites apollo* Billings

Syntype 504

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 25.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 25.

Lower Ordovician [Romaine Formation], north point of Quin Island northwest of Eskimo Island, Mingan Islands, Quebec.

=*Tarphyceras* (?) *apollo*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 83, pl. 14, fig. 1.

Ulrich, E.O. et al., 1942, *ibid.*, Sp. Paper 37, p. 42, pl. 17, fig. 1 [holotype].

*Lituites farnsworthi* Billings

Syntypes 861, 980

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 21, fig. 24 [861].

1861, Rept. Geol. Vermont, vol. 2, p. 958, fig. 364.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 21, fig. 24.

Logan, W.E., 1863, "Geology of Canada", *ibid.*, Rept. Prog., p. 277, fig. 283.

Lower Ordovician [Naylor Ledge limestone], near Philipsburg, Quebec.

=*Aphetoceras farnsworthi*, Ulrich, E.O. et al., 1942, Geol. Soc. Amer., Sp. Paper 37, p. 21, pl. 1, fig. 1 [holotype 861].

=*Aphetoceras attenuatum*, Ulrich, E.O. et al., 1942, *ibid.*, Sp. Paper 37, p. 18, pl. 2, fig. 4 [holotype 980 – not 6059].

*Lituites imperator* Billings

Holotype 905

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 23.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 23.

Lower Ordovician [Solomons Corners Formation], Philipsburg, Quebec.

=*Centrotarphyceras*? *imperator*, Ulrich, E.O. et al., 1942, Geol. Soc. Amer., Sp. Paper 37, p. 56 [holotype 905 – not 809].

*Lituites palinurus* Billings

Syntype (?) 496

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 25.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 25.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

=*Schroederoceras* (?) *minganense*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 87, pl. 12, fig. 1.

=*Curtoceras*? *minganense*, Ulrich, E.O. et al., 1942, *ibid.*, Sp. Paper 37, p. 74, pl. 21, fig. 1.

*Lituites pluto* Billings

Holotype 896

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 259.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 259.

Division L [Table Head], Middle Ordovician, Point Rich, Newfoundland.

Mollusca

*Loganoceras* ? *canadense* see *Cyrtoceras regulare*

*Loganoceras massasaugaense* Foerste

Holotype 7228

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 25, figs. 4A–C;  
1933, *ibid.*, vol. 28, p. 71.

Trenton, Middle Ordovician, Massasauga Point, Bay of Quinte near Belleville, Ontario.

*Loganoceras paquettense* Foerste

Syntypes 7229, a, b

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 25, figs. 5A [7229b],  
B [7229], C [7229a]; 1933, *ibid.*, vol. 28, p. 72.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 101, pl. 35, figs. 3 [paratype  
7229b], 4 [holotype 7229].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa  
River, Quebec.

*Loganoceras regulare* see *Cyrtoceras regulare* and *C. falx*

*Lowoceras imbricatum* Steam

Holotype 10429

Steam, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 118, pl. 15, fig. 11.

Inwood Formation, Middle Silurian, Grand Rapids, Manitoba.

*Lowoceras southamptonense* Foerste and Savage

Holotype 7846

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p:  
77, pl. 13, figs. 2A–C.

Flower, R.H. and Teichert, C., 1957, Kansas Univ. Paleo. Contr., Mollusca, Art. 6,  
p. 98, pl. 27, figs. 4, 5.

Silurian, southern half of west side Southampton Island, Arctic.

*Maelonoceras arcticameratum* (Hall)

Hypotype 5136

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 27, fig. 2.

Guelph Formation, Middle Silurian, Cape Hurd, Bruce Peninsula, Ontario.

=*Cyrtorizoceras williamsi*, Foerste, A.F., 1934, Denison Univ. Bull., J. Sci. Lab.,  
vol. 29, p. 123, pl. 40, fig. 5.

*Maelonoceras billingsi* see *Phragmoceras praematurum*

*Maelonoceras (Beloitoceras) ligarius* see *Cyrtoceras ligarius*

*Maelonoceras praematurum* see *Phragmoceras praematurum*

*Mandaloceras parvulum* see *Gomphoceras parvulum*

*Mandaloceras subgracile* see *Gomphoceras subgracile*

*Manitoulinoceras* (?) *canadense* see *Cyrtoceras regulare*

*Manitoulinoceras lysander* see *Cyrtoceras lysander*

*Manitoulinoceras postumius* see *Cyrtoceras postumius*

*Manitoulinoceras postumius* (Billings)

Hypotypes 8543, a–k

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 232.

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Manitoulinoceras regulare* see *Cyrtoceras regulare**Megadiscosorus crassisegmentatus* Foerste

Holotype 8726; paratype 17725

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 90, pl. 15, fig. 1 [8726].

'Lockport' [Thomloe] Formation, Middle Silurian, 3 miles north of Earlton, Ontario.

*Megadiscosorus crassisegmentatus* var. *brevior* Foerste

Holotype 8727; paratype 17726

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 91, pl. 15, fig. 2 [8727].

'Lockport' [Thomloe] Formation, Middle Silurian, 3 miles north of Earlton, Ontario.

*Megadiscosorus inopinatus* Foerste

Holotype 8728

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 92, pl. 15, fig. 3.

'Lockport' [Thomloe] Formation, Middle Silurian, 3 miles north of Earlton, Ontario.

*Megadiscosorus remotus* (Foord)

Hypotype 10426

Steam, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 112, pl. 15, fig. 1.

East Am Formation, Middle Silurian, mile 5.5, Churchill Branch CNR, Manitoba.

*Metaspyroceras* ? *acuticostatum* Wilson

Holotype 13847

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 31, pl. 8, figs. 12, 13.

Cobourg beds, Ottawa Formation, Middle Ordovician, Rochesterville, Ottawa, Ontario.

*Metaspyroceras* *gaspense* Foerste

Holotype 8885

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 377, pl. 56, fig. 6; pl. 57, fig. 4.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Metaspyroceras* *insuetum* Wilson

Holotype 13848

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 31, pl. 8, figs. 6, 7; text fig. 1.

Cobourg beds, Ottawa Formation, Middle Ordovician, boat-landing at foot of Sussex Street, Ottawa, Ontario.

*Metaspyroceras* *kindlei* Foerste

Holotype 8884; paratypes 8884a, b

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 376, pl. 56, figs. 3-5; pl. 57, figs. 1-3.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Metaspyroceras* ? *porcatum* Wilson

Holotype 13849

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 32, pl. 8, figs. 10, 11.

Cobourg beds, Ottawa Formation, Middle Ordovician, west end of Fifth Avenue, Ottawa, Ontario.

*Metaspyroceras* *rideauense* Foerste

Holotype 6832

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 114, pl. 24, figs. 4A, B.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 33, pl. 8, figs. 8, 9.

Chazy [Pamelia beds], Middle Ordovician, 'Hogsback', Ottawa, Ontario.



Mollusca

*Michelinoceras* ? *hindii* (Whiteaves)

Hypotypes 14908, 14909

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6, p. 74, pl. 13, figs. 9, 10a, b.

Dawson Bay Formation, Middle Devonian, Snake Island, Lake Winnipegosis, Manitoba.

*Michelinoceras* ? *multicameratum* (Emmons)

Hypotypes 13838, 13839, 1282a

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 19, pl. 4, figs. 11 [13839], 12 [13838], 13 [1282a].

Leray and Leray-Rockland beds, Ottawa Formation, Middle Ordovician, unspecified localities at Ottawa and in Gloucester tp., Ontario and Paquette Rapids, Allumette Island, Quebec.

*Michelinoceras* ? *ontarioense* (Foerste)

Hypotype 13840

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 20, pl. 4, figs. 6, 7.

Pamelia ? beds, Ottawa Formation, Middle Ordovician, MacLaren Landing, Ottawa River, Ontario.

See *Orthoceras ontarioense*

*Michelinoceras* ? *sociale* Hall

Hypotype 13841

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 21, pl. 4, fig. 10.

Cobourg beds, Ottawa Formation, Middle Ordovician, "corner of Lome Avenue and Elm Street", Ottawa, Ontario.

*Michelinoceras* ? sp.

Fig. spec. 12220

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 36, pl. 1, fig. 7.

Cape Phillips Formation, Silurian, northeast coast of Cornwallis Island, Arctic.

*Minganoceras subturbinatum* see *Cyrtoceras subturbinatum*

*Monomuchites costalis* Wilson

Holotype 13844; paratype 13845

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 24, pl. 5, figs. 5, 6.

Leray beds, Ottawa Formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario.

*Monomuchites decrescens* see *Orthoceras decrescens*

*Murrayoceras carletonense* Foerste

Holotype 6834

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 122, pl. 21, figs. 4A, B.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 39, pl. 11, figs. 5, 6.

Black River [Leray-Rockland beds], Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Murrayoceras carletonense* Foerste

Hypotypes 13854, 13908

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 39, pl. 11, figs. 1 [13908], 2 [13854].

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

*Murrayoceras murrayi* (Billings)

Hypotype 6833

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 121, pl. 21, fig. 2.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 40, pl. 11, fig. 3.

Black River [Leray beds], Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Murrayoceras murrayi* (Billings)

Hypotype 13855

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 40, pl. 11, fig. 4.

Lowville beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Nanno kingstonensis* Whiteaves

Hypotype 13835

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 17, pl. 4, figs. 4, 5.

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

*Narthecoceras crassisiphonatum* see *Endoceras crassisiphonatum**Narthecoceras simpsoni* (Billings)

Hypotype 6824 [not 6820]

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 189, pl. 25, fig. 5.

Red River Formation, Ordovician, Gull Harbour, Lake Winnipeg, Manitoba.

*Narthecoceras* ? sp.

Fig. spec. 12214

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 29, pl. 3, fig. 2; text fig. 4.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Nautilus calciferus* Billings

Syntype 628

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 258.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 258.

Division F or G [St. George], Lower Ordovician, Port aux Choix or Cape Norman, Newfoundland.

= *Litoceras calciferum*, Ulrich, E.O. et al., 1942, Geol. Soc. Amer., Sp. Paper 37, p. 78, pl. 40, fig. 3 [holotype].*Nautilus ferox* Billings

Holotype 513, a, b

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 351.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

= *Eurystomites* (?) *ferox*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 85, pl. 15, fig. 1= *Eurystomites ferox*, Ulrich, E.O., et al., 1942, *ibid.*, Sp. Paper, 37, p. 62, pl. 38, fig. 1.*Nautilus hercules* Billings

Holotype 2221

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 306.

Upper Ordovician [English Head Formation], Carleton Point, Anticosti Island, Quebec.

= *Charactoceras hercules*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 286.

Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 227, pl. 10, figs. 1, 2.

*Nautilus jason* Billings

Syntypes 1096, a-c

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 464.

Middle Ordovician [Mingan Formation], Clearwater Point, Mingan Islands, Quebec.

=*Plectoceras jason* Whiteaves, J.F., 1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 301, pl. 36, figs. 1 [1096], 2 [1096b,c - parts of one specimen].

Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 98, pl. 19, fig. 4 [1096a]; pl. 20, figs. 7 [1096b, c], 8 [1096a]; pl. 22, fig. 1 [1096].

*Nautilus natator* Billings

Holotype 1074

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 466.

Middle Ordovician [Mingan Formation], probably Clearwater Point, Mingan Islands, Quebec.

=*Barrandeoceras natator*, Whiteaves, J.F., 1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 308, pl. 39, figs. 1, a, b.

Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 100, pl. 22, fig. 2.

*Nautilus tyrans* Billings

Holotype 1076

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 465.

Middle Ordovician [Mingan Formation], Mingan Islands, Quebec.

=*Plectoceras tyrans*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 99, pl. 21, fig. 4.

*Nautilus versutus* Billings

Holotype 709

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 259.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 259.

Division H [St. George], Lower Ordovician, southwest side of East Arm, Bonne Bay, Newfoundland.

=*Litoceras? versutum*, Ulrich, E.O. et al., 1942, Geol. Soc. Amer., Sp. Paper 37, p. 79, pl. 52, figs. 1, 2.

*Nephriticeras liratus* (Hall)

Hypotype 3829a

Whiteaves, J.F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 408.

Middle Devonian [Hamilton Formation], Bosanquet tp., Ontario.

*Neumatoceras latilineatum* Foerste

Holotype 8892

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 380, pl. 56, fig. 13.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Neumatoceras percense* Foerste

Holotype 8894

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 380, pl. 56, fig. 14.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Neumatoceras striatum* Foerste

Holotype 8893

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 380, pl. 56, figs. 11, 12.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Neumatoceras* sp.

Fig. spec. 8895

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 381, pl. 55, fig. 8.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Nybyoceras ventrolineatum* Sweet and Miller

Holotype 12216

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 31, pl. 3, fig. 3; text fig. 6.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Oderoceras?* *edax* see *Orthoceras edax**Oncoceras amator* Billings

Holotype 2538

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 59.

Middle Silurian [Chicotte Formation], Southwest Point, Anticosti Island, Quebec.

=*Hercocyrtoceras amator*, Foerste, A.F. in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 313, pl. 40, figs. 9, 10.*Oncoceras collinsii* Foerste

Syntypes 6847, 7230

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 31, figs. 1A, B, 2A, B; 1933, *ibid.*, vol. 28, p. 110.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 87, pl. 31, figs. 5, 6 [holotype 7230], 7 [paratype 6847].

Black River [Leray beds], Middle Ordovician, Val Tetreau, Quebec and lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Oncoceras constrictum* Hall

Hypotype 1293a

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 88, pl. 31, figs. 3, 4.

Leray beds, Ottawa Formation, Middle Ordovician, La Petite Chaudière, Ottawa, Ontario.

*Oncoceras gibbosum* Whiteaves

Syntype 1877

Whiteaves, J.F., 1889, Trans. Roy. Soc. Can., vol. 7, sec. 4, p. 80, pl. 15, fig. 2 [1877].

Ordovician [Red River Formation], Pike Head, Lake Winnipeg, Manitoba.

=*Cyrtogomphoceras whiteavesi*, Foerste, A.F., 1928, Michigan Univ., Contr. Mus. Pal., vol. 3, No. 3, pt. 2, p. 61, pl. 7, fig. 1 [holotype 1877].*Oncoceras magnum* Whiteaves

Holotype 1875

Whiteaves, J.F., 1889, Trans. Roy. Soc. Can., vol. 7, sec. 4, p. 79, pl. 15, fig. 1.

Ordovician [Red River Formation], East Selkirk, Manitoba.

=*Cyrtogomphoceras magnum*, Foerste, A.F., 1928, Michigan Univ., Contr. Mus. Pal., vol. 3, No. 3, pt. 2, p. 59, pl. 6, fig. 1.*Oncoceras (magnum? var.) intermedium* Whiteaves

Holotype 7143

Whiteaves, J.F., 1897, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 3, p. 221, fig. 13.

Ordovician [Red River Formation], Black Island, Swampy Harbour, Lake Winnipeg, Manitoba.

=*Cyrtogomphoceras intermedium*, Foerste, A.F., 1928, Michigan Univ., Contr. Mus. Pal., vol. 3, No. 3, pt. 2, p. 65, pl. 8, fig. 2.

*Oncoceras minor* Flower

Holotype 16674; paratypes 16675, 16676

Flower, R.H., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 77, pl. 1, figs. 6, 12, 13.  
Lower Trenton, Middle Ordovician, Pont Rouge, Portneuf co., Quebec.

*Oncoceras orthodomum* Flower

Holotype 16677; paratype 16678

Flower, R.H., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 78, pl. 1, figs. 14, 15.  
Lower Trenton, Middle Ordovician, Pont Rouge, Portneuf co., Quebec.

*Oncoceras pauper* Foerste

Holotype 8542

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 234, pl. 41, figs. 5a, b.  
Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Oncoceras pettiti* Billings

Syntypes 2744, a-c

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 86, fig. 26  
[2744c].

Middle Silurian [Lockport Formation], Grimsby, Ontario.

=*Amphicyrtoceras pettiti*, Foerste, A.F., 1934, Denison Univ. Bull., J. Sci. Lab., vol. 29, p. 155, pl. 39, figs. 2A, B [holotype 2744; paratypes 2744a, b].

=*Amphicyrtoceras grimsbyense*, Foerste, A.F., 1934, *ibid.*, vol. 29, p. 153, pl. 38, figs. 3A, B [holotype 2744c].

*Oncoceras planidorsatum* Flower

Holotype 16679

Flower, R.H., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 79, pl. 1, figs. 16, 17.  
Middle Trenton, Middle Ordovician, Montmorency River, Quebec.

*Oncoceras?* *scalariforme* Wilson

Holotype 1295

Wilson, A.E. 1961, Geol. Surv., Canada, Bull. 67, p. 88, pl. 31, figs. 10, 11.  
Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Ottawa River  
or La Petite Chaudière, Ottawa, Ontario.

*Oncoceras tetreauvillense* Foerste

Holotype 7394

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 31, figs. 7A, B;  
1933, *ibid.*, vol. 28, p. 111.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 89, pl. 31, figs. 12, 13.

Black River [Leray beds], Middle Ordovician, Val Tetreau, Quebec.

*Oncoceras thales* Billings

Syntypes 2746, 2749

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 87.

Middle Silurian [Lockport Formation], Grimsby, Ontario.

=*Ectocyrtoceras thales*, Foerste, A.F., 1934, Denison Univ. Bull., J. Sci. Lab., vol. 29, p. 149, pl. 39, figs. 1A, B [neotype 2746].

=*E. billingsi*, Foerste, A.F., 1934, *ibid.*, vol. 29, p. 150, pl. 40, figs. 1A-C [2749].

*Oncoceras teucer* Billings

Holotype 2745

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 86, fig. 25.  
Middle Silurian [Lockport Formation], Grimsby tp., Ontario.

=*Grimshyoceras teucer*, Foerste, A.F., 1934, Denison Univ. Bull., J. Sci. Lab., vol. 29, p. 131, pl. 40, figs. 3A, B.

*Oncoceras* sp.

Fig. spec. 12233

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 45, pl. 1, fig. 4.  
Sweet, W.C., 1959, J. Pal., vol. 33, No. 2, p. 297, pl. 42, fig. 5.

Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Oncoceras* ? sp.

Fig. spec. 13881

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 90, pl. 31, figs. 8, 9.

Cobourg beds, Ottawa Formation, Middle Ordovician, Notre Dame Cemetery, Eastview, Ontario.

*Ooceras*? sp.

Fig. spec. 8896

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 381, pl. 56, fig. 9.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Oocerina canadensis* Stearn

Holotype 10423

Stearn, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 115, pl. 15, fig. 8.

Inwood Formation, Middle Silurian, Inwood quarry, Manitoba.

*Ormoceras allumettense* (Billings)

Hypotype 1265a

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 17, fig. 1B; 1933, *ibid.*, vol. 28, p. 9.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 67, pl. 27, fig. 6 [paratype – but collected by T.C. Weston, 1872].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, lower end of Allumette Island, Ottawa River, Quebec.

See *Orthoceras allumettense**Ormoceras* cf. *allumettense* Billings

Hypotype 620, a, b [parts of one specimen]

Teichert, C., 1933, *Palaeontographica*, vol. 78A, pl. 9, fig. 6.

Middle Ordovician, Table Head, Point Rich, Newfoundland.

= *Adamsoceras billingsi*, Flower, R.H., 1957, State Bur. Mines Mineral Resources, New Mexico Inst. Mining Technology, Mem. 2, p. 25.*Ormoceras brevicameratum* Foerste

Syntype 7980a

Foerste, A.F., 1928, Geol. Surv., Canada, Contr. Can. Pal., Bull. 49, p. 12, text fig. 3M [7980a].

Devonian, 2 miles northwest of Clementsvale, Bear River district, Nova Scotia.

*Ormoceras cornwallensis* Sweet and Miller

Holotype 12219

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 35, pl. 1, fig. 8.

Cape Phillips Formation, Upper Ordovician, Marshall Peninsula, Cornwallis Island, Arctic.

*Ormoceras crassum* Wilson

Holotype 13868; paratype 13869

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 68, pl. 27, fig. 7 [13868].

Lowville beds, Ottawa Formation, Middle Ordovician, lot 3, con. 3, R.F., Gloucester tp., Ontario.

*Ormoceras ellisense* Foerste

Holotype 6809

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 291, pl. 43, figs. 5, 6.

Ellis Bay Formation, Upper Ordovician, Junction Cliff, Anticosti Island, Quebec.

*Ormoceras kindlei* Foerste

Syntypes 7978, a-c

Foerste, A.F., 1928, Nat. Mus. Can., Contr. Can. Pal., Bull. 49, p. 9, text figs. 3A, A', C.

Devonian, 2 miles northwest of Clementsvale, Bear River district, Nova Scotia.

*Ormoceras lambei* Foerste

Holotype 7141; paratype 6019 [not 6837]

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 208, pl. 17, fig. 3; pl. 19, fig. 3; pl. 26, fig. 5 [6019]; pl. 33, fig. 2 [7141].

Red River Formation, Ordovician, Black Bear Island, Lake Winnipeg and Tyndall, Manitoba.

*Ormoceras* (?) *menelaus* see *Orthoceras menelaus*

*Ormoceras morrissi* Foerste

Holotype 2386

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 292, pl. 42, fig. 5; pl. 45, figs. 3, 4.

Gun River Formation, Middle Silurian, 1 mile east of Otter River, Anticosti Island, Quebec.

*Ormoceras novascoticum* Foerste

Syntypes 7979, a, b

Foerste, A.F., 1928, Nat. Mus. Can., Contr. Can. Pal., Bull. 49, p. 11, text fig. 3B [7979].

Devonian, 2 miles northwest of Clementsvale, Bear River district, Nova Scotia.

*Ormoceras obscurum* see *Ormoceras* sp.

*Ormoceras paquettense* Foerste

Syntypes 6839, a, b

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 17, fig. 5 [6839]; 1933, *ibid.*, vol. 28, p. 11.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 69, pl. 27, fig. 1 [holotype]. Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Ottawa River.

*Ormoceras* sp.

Hypotype 6366

Teichert, C., 1933, *Palaeontographica*, vol. 78A, p. 184, pl. 12, fig. 34.

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

=*Ormoceras obscurum*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 68, pl. 27, figs. 8, 9 [holotype 6366].

*Orthoceras cf. alienum* Hall

Hypotype 8042

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 68, pl. 10, fig. 2.

'Lockport' [Thomloe] Formation, Middle Silurian, 3 miles north of Earlton, Ontario.

*Orthoceras allumettense* Billings

Syntypes 1265, b-e

Billings, E.,

1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 331.

1859, Can. Naturalist Geol., vol. 4, p. 462.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, lower end of Allumette Island, Ottawa River, Quebec [1265, a, e] and lot 4, con. 3, Fitzroy tp., Ontario [1265b, c].

= *Ormoceras allumettense*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 17, figs. 1A [lectotype 1265], C [1265b], D [1265c]; 1933, *ibid.*, p. 9.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 67, pl. 27, figs. 2, 3 [paratype 1265d], 4 [paratype 1265e], 5 [lectotype 1265].

*Orthoceras anax* Billings

Syntypes 3747, a-d, 3749, a-d

Billings, E., 1874, Can. Naturalist, Quart. J. Sci., n. ser., vol. 7, No. 4, p. 238.

Whiteaves, J.F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 403.

Middle Devonian [Hamilton Formation], Bosanquet tp., Ontario.

*Orthoceras anterior* Billings

Holotype 1068

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 463.

Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 92, pl. 17, fig. 1.

Middle Ordovician [Mingan Formation], Mingan Islands, Quebec.

*Orthoceras anticostense* Billings

Syntype 2160, a [parts of one specimen]

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 316.

Upper Ordovician [English Head Formation], Carleton Point, Anticosti Island, Quebec.

= *Actinoceras anticostiense*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 288 [the type 2160].

Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 227, pl. 4, fig. 1 [2160]; pl. 11, fig. 1 [2160].

*Orthoceras antigonishense* McLearn

Holotype 5661

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 152, pl. 25, fig. 3.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Orthoceras arkonense* Whiteaves

Syntypes 3761, a

Whiteaves, J.F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 406, pl. 48, figs. 13 [3761], 14, a [3761a].

Middle Devonian [Hamilton Formation], Bartlett Mills near Arkona, Ontario.

= *Arkonoceras arkonense*, Flower, R.F., 1945, Am. Midland Naturalist, vol. 33, No. 3, p. 702.*Orthoceras atticus* Billings

Holotype 791

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 312.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 312.

Lower Ordovician [Corey limestone], on Corey farm, lot 7, rge. 8, Stanbridge tp., Quebec.

= *Oxfordoceras? atticus*, Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 71, pl. 16, figs. 1, 2.



*Orthoceras balteatum* Billings

Holotype 2162

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 318.

Upper Ordovician [English Head Formation], English Head, Anticosti Island, Quebec.

=*Spyroceras balteatum*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 274, pl. 40, fig. 6 [the type].

*Orthoceras beauportense* Whiteaves

Syntypes 4413, a

Whiteaves, J.F., 1898, Ottawa Naturalist, vol. 12, No. 6, p. 118.

Middle Ordovician, Parent's quarry, Beauport about 3 miles northeast of Quebec City, Quebec.

=*Spyroceras beauportense*, Whiteaves, J.F., 1906, Geol. Surv., Canada, Palaeozoic Fossils, vol. 3, pt. 4, p. 323, pl. 33, figs. 2, a [4413].

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 108, pl. 13, figs. 1A, B [holotype 4413].

*Orthoceras becki* Billings

Holotype 521

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 362, fig. 11a.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 121, fig. 35.

Middle Ordovician [Romaine Formation], Mingan Islands, Quebec.

=*Protocycloceras(?) becki*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 83, pl. 14, fig. 6.

Ulrich, E.O. *in al.*, 1944, *ibid.*, Sp. Paper 58, p. 81, pl. 42, fig. 9.

*Orthoceras bellatulum* Billings

Syntype 2466

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 58,

Middle Silurian [Jupiter Formation], 3 miles east of Shallop River, Anticosti Island, Quebec.

=*Kionoceras bellatulum*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 269, pl. 44, fig. 5 [lectotype 2466].

*Orthoceras bigsbyi* Stokes

Hypotype 1267b

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 149, fig. 107a.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, at lower end of Allumette Island, Ottawa River, Quebec.

=*Actinoceras billingsi*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 18, figs. 2A, B; 1933, *ibid.*, vol. 28, p. 22 [holotype].

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 52, pl. 18, figs. 1-3 [holotype 1267b].

*Orthoceras brontes* Billings

Syntypes 2573, c, d, g

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 83 [specimens No. 1 (2573c) and 3 (2573d)].

Middle Silurian [Lockport Formation], Grimsby, Ontario.

*Orthoceras brucensis* Williams

Syntypes 5132, 5235

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, p. 124, pl. 26, figs. 1a, b [5132]; pl. 27, fig. 1 [5135].

Guelph Formation, Middle Silurian, Hay Bay and Pine Tree Harbour, Bruce Peninsula, Ontario.

=*Cycloceras brucense*, Foerste, A.F., 1928, Denison Univ. Bull., J. Sci. Lab., vol. 23, p. 267, pl. 54, fig. 3 [5135]; pl. 57, fig. 5 [the type 5132 - not 5732].

*Orthoceras bucklandii* Billings

Syntypes 2542, 2542a, b [parts of one specimen]

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 330.

Middle Silurian [Chicotte Formation], Southwest Point, Anticosti Island, Quebec.

=*Sactoceras bucklandi*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 279, pl. 44, fig. 2 [the type 2542].

*Orthoceras bullatum* var. *pictoense* (Dawson)

Lectotype 5662

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 155, pl. 20, fig. 19; pl. 24, fig. 9.

Moydart Formation, Middle Silurian, coastal section, Arisaig, Nova Scotia.

*Orthoceras cadmus* Billings

Syntypes (?) 2726, a, b, d

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 83.

Middle Silurian [Lockport Formation], Grimsby tp., Ontario.

*Orthoceras canadense* Billings

Holotype 2544

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 321.

Middle Silurian [Chicotte Formation], Southwest Point, Anticosti Island, Quebec.

=*Huronia vertebralis*, Foerste, A.F., 1924, Michigan Univ., Contr. Mus. Pal., vol. 2, No. 3, p. 46, pl. 5, fig. 1.

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 158, p. 300.

=*Huronia canadensis*, Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 228, pl. 6, figs. 1A, B.

*Orthoceras cataline* Billings

Syntypes 817, a-e

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 315.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 315.

Lower Ordovician [Hastings Creek Formation], near Philipsburg, Quebec.

=*Ectocycloceras cataline*, Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 59, pl. 21, figs. 1, 2 [holotype 817d], 3, 4 [paratype 817c], 5 [paratype 817], 6 [paratype 817a].

*Orthoceras cato* Billings

Holotype 812

Billings E.,

1865, "New Species of Lower Silurian Fossils", p. 314.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 314.

Lower Ordovician [Hastings Creek Formation], near Philipsburg, Quebec.

=*Ectocycloceras cato*, Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 59, pl. 22, figs. 1, 2.

*Orthoceras chaleurensis* Foerste

Holotype 6804

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 31, pl. 5, fig. 2.

Gascons or Bouleaux Formation, Middle Silurian, L'Anse à la Barbe, Port Daniel, Quebec.

*Orthoceras cornuum* Billings

Holotype 1349

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 329.

Middle Ordovician [Mingan Formation], Tower Cliff on southeast point of Large Island, Mingan Islands, Quebec.

=*Orthoceras* (?) *cornuum*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 92, pl. 16, fig. 1 [1349].

*Orthoceras crocus* see *O. perannulatum*

*Orthoceras darwini* Billings

Holotype 2924

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 161.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 161.

Whiteaves, J.F., 1884, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 1, p. 38, pl. 6, figs. 2, a. Guelph Formation, Middle Silurian, Hespeler, Ontario.

=*Amphicyrtoceras darwini*, Foerste, A.F., 1928, Denison Univ. Bull., J. Sci. Lab., vol. 23, p. 99, pl. 14, figs. 3A, B.

*Orthoceras decrescens* Billings

Syntypes 1277, a, b [parts of one specimen], c-e [parts of one specimen]

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 337.

Middle Ordovician, La Petite Chaudière, Ottawa River.

=*Cycloceras decrescens*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 84, pl. 12, figs. 1A [1277c], B [1277], C [1277a].

=*Monomuchites decrescens*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 25, pl. 5, figs. 7 [1277], 8 [1277d].

*Orthoceras deparcum* Billings

Holotype 509

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 363, fig. 111.

Logan, W.E., 1863, "Geology of Canada", Geol. hazy, Canada, Rept. Prog., p. 121, fig. 40.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

=*Cameroceras deparcum*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 78, pl. 12, fig. 2.

=*Endoceras?* *deparcum*, Ulrich, E.O. *et al.*, 1944, *ibid.*, Sp. Paper 58, p. 94, pl. 32, fig. 2.

*Orthoceras desideratum* see *Glossoceras desideratum*

*Orthoceras diffidens* Billings

Syntypes 1065, a, b, 1095, a

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 174.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 174.

Middle Ordovician [Mingan Formation], St. Charles and 'Little Hammer' Islands, Mingan Islands, Quebec.

=*Deiroceras diffidens*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 102, pl. 20, figs. 4 [1095a], 5, 6 [lectotype 1065].

*Orthoceras drummondi* Billings

Syntypes 1271, a–d

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 173, fig. 156, [1271].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 173, fig. 156.

Black River, Middle Ordovician, near Kingston, Ontario.

= *Geisonoceras drummondi*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 81, pl. 35, figs. 4A, B [lectotype 1271], 5A, B [1271a].= *Kentlandoceras wilsonae*, Foerste, A.F., 1932, *ibid.*, vol. 27, pl. 25, figs. 6A, B [1271b, d]; 1933, *ibid.*, vol. 28, p. 74.= cf. *Geisonoceras drummondi*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 22, pl. 5, fig. 1 [holotype 1271].*Orthoceras edax* Billings

Holotype 512, a [parts of one specimen]

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 349.

Lower Ordovician, Oxford tp., Ontario.

= *Oderoceras? edax*, Ulrich, E.O. *et al.*, 1943, Geol. Soc. Amer., Sp. Paper 49, p. 51, pl. 28, figs. 7, 8.*Orthoceras ekwanense* Whiteaves

Holotype 4414

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 56F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 265, pl. 33, figs. 1, a.

Silurian [Attawapiskat Formation], portage road at falls, Ekwan River, Ontario.

= *Ehippiorthoceras ekwanense*, Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 44, pl. 4, figs. 1A, B.*Orthoceras explorer* Billings

Holotype 622, a [parts of one specimen]

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 253, figs. 238a, b

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 253, figs. 238a, b.

Division H [St. George], Lower Ordovician, Schooner Island, Pistolet Bay, Newfoundland.

= *Cyptendocerina explorer*, Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 117, pl. 59, figs. 8, 9.*Orthoceras ferum* Billings

Syntype 2319

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 22.

Upper Ordovician [Ellis Bay Formation], one mile southeast of Junction Cliff, Anticosti Island, Quebec.

= *Spyroceras ferum*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 278, pl. 40, fig. 7 [lectotype].*Orthoceras flavius* Billings

Syntype 619, a [parts of one specimen]

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 255.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 255.

Division I [St. George], Lower Ordovician, Point Rich, Newfoundland.

*Orthoceras formosum* Billings

Syntypes 2159, a

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 317.

Upper Ordovician [English Head Formation], English Head, Anticosti Island, Quebec.  
= *Ehippiorthoceras formosum*, Foerste, A.F., in Hume, G.S., 1925, *ibid.*, Mem. 145, p. 72, pl. 11, fig. 11; text fig. 7 [2159a].

Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 158, p. 270 [lectotype 2159a].  
Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 226, pl. 3, figs. 1A-C [2159a], 4A, B [2159].

*Orthoceras fulgur* see *Orthoceras propinquum*

*Orthoceras furtivum* Billings

Holotype 498

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 348, fig. 337.

Lower Ordovician, rock-cut along railroad from Brockville to Ottawa, Kitley tp., Ontario.  
= *Protocycloceras furtivum*, Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 82, pl. 17, fig. 13.

*Orthoceras gaspense* Foerste

Holotype 8879

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 374, pl. 55, figs. 10, 11.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Orthoceras glaucus* Billings

Syntypes 510, a

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 350.

Lower Ordovician, lot 3, con. 4, Oxford tp., Ontario.

= *Endoceras* ? *glaucus*, Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 95, pl. 33, figs. 8, 9 [holotype 510a], 10 [paratype 510].

*Orthoceras haesitans* Billings

Syntypes 627, a [one thin section], 721, a [parts of one specimen and one thin section]

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 254.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 254.

Division I [St. George], Lower Ordovician, Point Rich and Table Head, Newfoundland.

= *Cyrtonybyoceras haesitans*, Teichert, C., 1933, Palaeontographica, vol. 78A, p. 146, pl. 12, figs. 30 [721a], 35 [721]; text fig. 5 [holotype 721].

= *Cyrtonybyoceras barrandei*, Teichert, C., 1933, *ibid.*, vol. 78A, p. 147, pl. 12, figs. 36 [holotype 627 - not 637], 39 [627a]; text fig. 8 [627].

*Orthoceras hagersvillense* Whiteaves

Holotype 4408

Whiteaves, J.F.,

1898, Ottawa Naturalist, vol. 12, No. 6, p. 126.

1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 325, pl. 33, figs. 4, a.

Middle Devonian, Hagersville, Ontario.

*Orthoceras hastatum* Billings

Syntypes 1281, a-e

Billings, E., 1867, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 333.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Tripteroceras hastatum*, Foerste, A.F., 1924, Denison Univ. Bull., J. Sci. Lab., vol. 20, p. 232, pl. 31, figs. 3A-D [lectotype 1281a (d on plate legend); paratypes 1281 b-e].

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 78, pl. 30, figs. 7 [paratyp 1281a], 8, 9 [lectotype 1281d].

=*Tripteroceras pauquettense*, Foerste, A.F., 1924, Denison Univ. Bull., J. Sci. Lab., vol. 20, p. 233, pl. 31, figs. 2A-D [holotype 1281].=*Allumettoceras pauquettense*, Foerste, A.F., 1932, *ibid.*, vol. 27, p. 123.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 76, pl. 30, figs. 19, 20.

*Orthoceras hindii* see *Actinoceras hindii**Orthoceras huronense* Billings

Topotype 1724

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 72, pl. 10, figs. 3A, B.

Black River, Middle Ordovician, northeast side of St. Joseph Island, Lake Huron, Ontario.

*Orthoceras infelix* Billings

Syntypes 2545, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 57.

Middle Silurian [Jupiter Formation], Southwest Point, Anticosti Island, Quebec.

=*Discosorus(?) infelix*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 158, p. 302, pl. 40, fig. 8 [holotype 2545; paratype 2545a].

Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 229, pl. 7, fig. 2 [2545a].

*Orthoceras kindlei* Foerste

Holotype 8881

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 375, pl. 55, fig. 14.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Orthoceras lamarcki* Billings

Syntypes 508, a [parts of one specimen], 550, a, b,

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 362, figs. 11f-h [550].

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 121, figs. 38a-c.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec [508,a]; Beekmantown, Lower Ordovician, lot 12, con. 12, Godmanchester tp., Quebec [550, a, b].

=*Protocycloceras lamarcki*, Foerste, A.F., 1921, Denison Univ. Bull., J. Sci. Lab., vol. 19, p. 268, pl. 33, figs. 7A [550a], B [550b], C [550], D [508].

Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 82, pl. 14, fig. 5 [508,a] [holotype=550a, b].

Ulrich, E.O. *et al.*, 1944, *ibid.*, Sp. Paper 58, p. 79, pl. 40, figs. 2 [holotype 550a, b], 7 [508a], 8 [550].*Orthoceras lamarcki* Billings

Hypotypes 7456, a-c

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 347, figs. 336, a [7456a].

Beekmantown Formation, Lower Ordovician, Oxford tp., Ontario.

=*Protocycloceras lamarcki*, Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 79, pl. 40, fig. 1 [7456a].

*Orthoceras lambtonense* Whiteaves

Holotype 3748

Whiteaves, J.F., 1898, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 5, p. 404, pl. 49, figs. 1, a.

Hamilton Formation, Middle Devonian, near Thedford, Ontario.

*Orthoceras ludense* var. *camerini* McLearn

Holotype 5661

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 152, pl. 22, figs. 5, 6.

Moydart Formation, Middle Silurian, coastal section, Arisaig, Nova Scotia.

*Orthoceras iyelli* Billings

Syntypes 2165, a

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 320.

Upper Ordovician [Vauréal Formation], east of Salmon River, Anticosti Island, Quebec.

= *Sactoceras iyelli*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 280, pl. 44, fig. 3 [the type 2165].*Orthoceras magnisulcatum* Billings

Holotype 2168

Billings, E., 1856, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 330.

Upper Ordovician [English Head Formation], Carleton Point, Anticosti Island, Quebec.

= *Kionoceras magnisulcatum*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 268, pl. 40, fig. 1.*Orthoceras marklandense* McLearn

Holotype 5583

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 154, pl. 21, fig. 20.

Stonehouse? Formation, Upper Silurian, Arisaig, Nova Scotia.

*Orthoceras maro* Billings

Syntypes 1070, a–d, f

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 461.

Middle Ordovician [Mingan Formation], Mingan Islands, Quebec.

= *Spyroceras maro*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 93, pl. 18, fig. 4 [1070]; pl. 20, fig. 1 [1070c].*Orthoceras medon* Billings

Holotype 2543

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 57.

Middle Silurian [Chicotte Formation], Southwest Point, Anticosti Island, Quebec.

= *Armenoceras medon*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 296, pl. 44, fig. 6.*Orthoceras menelaus* Billings

Syntype 1288, a–c [parts of one specimen]

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 26.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 26.

Black River, Middle Ordovician, lots 5 and 6, con. 9, Tyendenaga tp., Ontario.

= *Ormoceras(?) menelaus*, Foerste, A.F., 1932, Denison Univ. Bull.; J. Sci. Lab., vol. 27, pl. 17, fig. 3; 1933, *ibid.*, vol. 28, p. 15.*Orthoceras minganense* Billings

Syntypes (?) 1279, a

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 319.

Middle Ordovician [Mingan Formation], near Tower Rock, southeast side of Large Island, Mingan Islands, Quebec.

= *Spyroceras minganense*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 96, pl. 19, fig. 3 [topotype 1279a].

*Orthoceras missisquoi* Billings

Syntypes 813, a, b

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 314, fig. 303 [813a].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 314, fig. 303.

Lower Ordovician [Hastings Creek Formation], near Philipsburg, Quebec.

= *Kirkoceras* ? *missisquoi*, Ulrich, E.O. et al., 1943, Geol. Soc. Amer., Sp. Paper 49, p. 47, pl. 26, figs. 6-8 [813b], 9 [813], 10 [holotype 813a].*Orthoceras montrealensis* Billings

Holotype 499, a [parts of one specimen]

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 363, figs. 11c-e.

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 121, figs. 37a-c.

Lower Ordovician, near St. Eustache, Two Mountains co., Quebec.

= *Clitendoceras montrealense*, Ulrich, E.O. et al., 1949, Geol. Soc. Amer., Sp. Paper 58, p. 109, pl. 25, fig. 1; pl. 26, fig. 4.*Orthoceras multicameratum* ? (Conrad).

Hypotype 7454, a, b [parts of one specimen]

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 363, fig. 11b.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

= *Orthoceras indagator*, Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 349 [?].= *Cameroceras indagator*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 77, pl. 12, figs. 4, 5.= *Endoceras* ? *indagator*, Ulrich, E.O. et al., 1944, *ibid.*, Sp. Paper 58, p. 96, pl. 50, figs. 7, 8 [holotype].*Orthoceras murrayi* Billings

Syntype 1723, a [parts of one specimen]

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 332.

Middle Ordovician, east side St. Joseph Island, Lake Huron, Ontario.

= *Murrayoceras murrayi*, Wilson, A.E., 1961, *ibid.*, Bull. 67, p. 40, pl. 9, figs. 6, 7.*Orthoceras oheron* Billings

Syntype 2725, a [parts of one specimen]

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 82 [specimen No. 1].

Middle Silurian [Lockport Formation], Grimsby tp., Ontario.

*Orthoceras ontarioense* Foerste

Syntypes 6826, a

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 76, pl. 10, figs. 4A [6826], B [6826a].

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

= *Michelinoceras* ? *ontarioense*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 20, pl. 4, figs. 8 [paratype 6826a], 9 [holotype 6826].*Orthoceras ordinatum* Billings

Syntypes 522, 522a, b [parts of one specimen]

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 350.

Lower Ordovician, Oxford tp., Ontario and near Ste. Anne-de-Bellevue, Quebec.

= *Protocycloceras ordinatum*, Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 85, pl. 42, fig. 8 [lectotype 522a, b].= *Oxfordoceras billingsi*, Ulrich, E.O. et al., 1944, *ibid.*, Sp. Paper 58, p. 70, pl. 16, fig. 3 [holotype 522].



*Orthoceras ottawaense* Billings

Syntypes 1719, 1719a, b [parts of one specimen]

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 331.

Trenton, Middle Ordovician, Chaudière Bridge, Ottawa, Ontario.

=*Sactoceras*(?) *ottawaense*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 9, fig. 4 [1719a, b]; 1933, *ibid.*, vol. 28, p. 6.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 65, pl. 26, figs. 7, 8 [paratype 1719a, b].

*Orthoceras perannulatum* Billings

Syntypes 2170, a

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 319.

Upper Ordovician [Vauréal Formation], west end, Anticosti Island, Quebec.

=*Orthoceras crocus*, Billings, E., 1866, *ibid.*, Cat. Sil. Fossils Anticosti, p. 22.

=*Spyroceras microlineatum*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 158, p. 274.

*Orthoceras percense* Foerste

Holotype 8880

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 375, pl. 55, figs. 12, 13.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Orthoceras perseus* Billings

Syntypes 814a, b, d [parts of one specimen], 814, c [parts of one specimen]

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 313.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 313.

Lower Ordovician [St. Armand limestone], near Philipsburg, Quebec.

=*Bassleroceras perseus*, Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 34, pl. 5, figs. 1–3 [lectotype 814a, b, d], 4 [paratype 814, c].

*Orthoceras persiphonatum* Billings

Syntypes 2465, a [parts of one specimen], 2541

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853–56, p. 329.

Middle Silurian [Jupiter Formation], Cormorant Point, Anticosti Island, Quebec.

=*Huroniella persiphonata*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 298, pl. 44, fig. 1 [lectotype 2465].

Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 228, pl. 6, fig. 2.  
Teichert, C., 1933, Palaeontographica, vol. 78A, p. 122, text fig. 4 and p. 153, text fig. 20 [2465].

*Orthoceras pertinax* Billings

Holotype 1276

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 175.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Deiroceras pertinax*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 15, figs. 1 A–C; 1933, *ibid.*, vol. 28, p. 36.

=*Troedssonoceras pertinax*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 74, pl. 29, figs. 2, 3.

*Orthoceras pileolum* Billings

Holotype 2387

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 58.

Middle Silurian [Jupiter Formation], 1600 paces west of Jupiter River, Anticosti Island, Quebec.

=*Amphicyrtoceras futile*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 312.

Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 230, pl. 6, fig. 4.

*Orthoceras piscator* Billings

Syntypes 614, a, b, c—d [parts of one specimen], e—g.

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 251, fig. 237 [614].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 251, fig. 237.

Divisions I, K—N [St. George and Table Head], Lower-Middle Ordovician, Point Rich, Newfoundland.

*Orthoceras priamus* Billings

Syntypes 621, a—c

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 253, figs. 239a, b [621b].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 253, figs. 239a, b.

Divisions L and M [Table Head], Middle Ordovician, Point Rich and Table Head, Newfoundland.

*Orthoceras propinquum* Billings

Holotype 2161

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853—56, p. 320.

Upper Ordovician [English Head Formation], Carleton Point, Anticosti Island, Quebec.

=*Orthoceras fulgur*, Billings, E., 1866, *ibid.*, Cat. Sil. Fossils Anticosti, p. 22.

=*Endoceras fulgur*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 257 [type specimen 2161].

Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 224, pl. 2, fig. 2.

*Orthoceras pylades* Billings

Syntypes 2729, a

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 84 [specimens No. 1 (2729a) and 2 (2729)].

Middle Silurian [Lockport Formation], East Gore, Grimsby, Ontario.

*Orthoceras python* Billings

Syntype 1722

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853—56, p. 335.

Trenton [Cobourg beds], Middle Ordovician, Ottawa, Ontario.

=*Deiroceras python*, Foerste, A.F. and Teichert, C., 1930, Denison Univ. Bull., J. Sci. Lab., vol. 25, p. 292.

Foerste, A.F., 1932, *ibid.*, vol. 27, pl. 15, figs. 4 A—C; 1933, *ibid.*, vol. 28, p. 31 [topotype 1722 — not 1727].

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 72, pl. 28, figs. 1, 2.

*Orthoceras rapax* Billings

Syntype 1355

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 176.

Black River limestone, Middle Ordovician, Kingston, Ontario.

=*Endoceras(?) rapax*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 62, pl. 7, fig. 3 [topotype 1355].

*Orthoceras raptor* Billings

Syntypes 2383, 2409 (?)

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 57.

Middle Silurian [Jupiter Formation], 3 miles west of Jupiter River, Anticosti Island, Quebec.

=*Armenoceras raptor*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 295, pl. 44, fig. 4 [lectotype 2383].

*Orthoceras remus* Billings

Holotype 2732

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 85.  
Middle Silurian [Lockport Formation], Grimsby, Ontario.

*Orthoceras repens* Billings

Syntype(?) 790

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 312.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 312.

Lower Ordovician [Naylor Ledge limestone], near Philipsburg, Quebec.

=*Protocycloceras repens*, Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 86, pl. 32, fig. 3 [holotype].

*Orthoceras sayi* Billings

Holotype 816

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 315.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 315.

Lower Ordovician [Hastings Creek Formation], near Philipsburg, Quebec.

=*Pachendoceras ? sayi*, Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 122, pl. 32, figs. 3-5.

*Orthoceras sedgwicki* Billings

Holotype 2164, a [parts of one specimen]

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 320.

Upper Ordovician [Vauréal Formation], West Point, Anticosti Island, Quebec.

=*Armenoceras sedgwicki*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 293 [the type 2164].

Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 228, pl. 4, fig. 2.

*Orthoceras sieboldi* Billings

Syntype 2219

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 23.

Upper Ordovician [Vauréal Formation], west-end lighthouse, Anticosti Island, Quebec.

=*Ephippiorthoceras sieboldi*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 273 [the type 2219].

Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 226, pl. 2, fig. 1; pl. 3, fig. 3.

*Orthoceras selkirkense* Whiteaves

Syntypes 1837, a, b [parts of one specimen], 1838

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, p. 82, pl. 8, figs. 2, a, b [1837].

Ordovician [Red River Formation], East Selkirk, Manitoba.

=*Cycloceras selkirkense*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 161, pl. 37, figs. 4A, B [lectotype 1837, a, b].

*Orthoceras selwini* Billings

Holotype 2923

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 161.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 161.

Guelph Formation, Middle Silurian, Galt, Ontario.

*Orthoceras semiplanatum* Whiteaves

Holotype 1834

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 81, pl. 8, figs. 3, a.  
Ordovician [Red River Formation], Lower Fort Garry (St. Andrews), Manitoba.=*Garryoceras semiplanatum*, Foerste, A.F., 1928, Michigan Univ., Contr. Mus. Pal.,  
vol. 3, No. 3, pt. 2, p. 42, pl. 11, figs. 7A, B.

1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 166, pl. 16, figs. 3A-C.

*Orthoceras servile* Billings

Holotype 623

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 252.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 252.

Division L [Table Head], Middle Ordovician, Point Rich, Newfoundland.

*Orthoceras shumardi* Billings

Holotype 1067, a-e [parts of one specimen]

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 460, fig. 36.

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Soc. Amer., Sp. Paper 11, p. 91, pl.  
17, fig. 3.

Middle Ordovician [Mingan Formation], Mingan Islands, Quebec.

*Orthoceras* (?) *slavense* see *Orthoceras* sp.*Orthoceras sordidum* Billings

Syntypes 511, a

Billings, E., 1859, Can. Naturalist Geol., vol. 4, p. 363, figs. 11i, k [511].

Logan, W.E., 1863, "Geology of Canada", Geol. Surv., Canada, Rept. Prog., p. 121,  
figs. 39a, b.

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

=*Catoraphiceras sordidum*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer.,  
Sp. Paper 11, p. 79, pl. 12, fig. 3 [holotype 511].Ulrich, E.O. et al., 1944, *ibid.*, Sp. Paper 58, p. 78, pl. 37, fig. 12.=*Avaoceras* sp., Ulrich, E.O. et al., 1944, *ibid.*, Sp. Paper 58, p. 43, pl. 8, fig. 9  
[hypotype 511a].*Orthoceras tener* Billings

Holotype 1287

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 174.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa  
River, Quebec.=*Allumettoceras tenerum*, Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab.,  
vol. 27, p. 124, pl. 13, figs. 11A, B.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 77, pl. 30, figs. 13-16.

*Orthoceras tityrus* Billings

Holotype 822

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 316.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 316.

Lower Ordovician, Philipsburg, Quebec.

*Orthoceras* (*Thoracoceras*) *tyrrellii* Whiteaves

Syntypes 4169, a-g, 4195

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 100, pl. 7, figs. 1, a  
[4169, g], 2, 3 [4169a], 4 [4195].Middle Devonian [Dawson Bay Formation], Dawson Bay and mouth of Red Deer River,  
Lake Winnipegosis, Manitoba.

*Orthoceras varro* Billings

Syntypes 2727, 2728

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 84.  
Middle Silurian [Lockport Formation], Grimsby and Rockwood, Ontario.

*Orthoceras velox* Billings

Syntypes 1069, a–e

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 173.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 173.

Middle Ordovician [Mingan Formation], Ammonite Point, Mingan Islands, Quebec.

=*Endoceras velox*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 89, pl. 18, figs. 1 [1069], 2 [1069a], 3 [1069b].

*Orthoceras veterator* Billings

Syntypes 497, a

Billings, E., 1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 350.

Beekmantown Formation, Lower Ordovician, Oxford tp., Ontario.

=*Cyptendoceras veterator*, Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 116, pl. 22, figs. 7, 8 [holotype 497].

=*Dyscritoceras ? oxfordense*, Ulrich, E.O. et al., 1944, ibid., Sp. Paper 58, p. 47, pl. 9, fig. 9 [holotype 497a].

*Orthoceras vindobonense* Dawson

Hypotype 4372c, 7542

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 181, pl. 31, figs. 26 [7542], 27 [4372c].

Windsor Formation, Mississippian, Windsor, Nova Scotia.

*Orthoceras walpoleense* Whiteaves

Holotype 4412

Whiteaves, J.F.,

1898, Ottawa Naturalist, vol. 12, No. 6, p. 125.

1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 324, pl. 33, fig. 3.

Onondaga Formation, Middle Devonian, lot 6, con. 14, Walpole tp., Ontario.

*Orthoceras winnipegense* Whiteaves

Syntype 1830, a [parts of one specimen]

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 82, pl. 8, figs. 4, a, b.  
Ordovician [Red River Formation], Black Island, Swampy Harbour, Lake Winnipeg, Manitoba.

=*Whiteavesites winnipegensis*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 167, pl. 13, fig. 3 [1830a]; pl. 14, figs. 1A, B [1830, a]; pl. 26, fig. 2 [1830a].

*Orthoceras xerxes* Billings

Holotype 815

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 316.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 316.

Lower Ordovician [St. Armand limestone], near Philipsburg, Quebec.

=*Protocycloceras xerxes*, Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 87, pl. 44, figs. 1–3.

*Orthoceras xiphias* Billings

Syntypes 2163, a, b

Billings, E., 1857, Geol. Surv., Canada, Rept. Prog. 1853-56, p. 318.

Upper Ordovician [Vauréal Formation], cliffs east of English Head, Anticosti Island, Quebec.

=*Triptoceras xiphias*, Foerste, A.F., in Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 303 [the type 2163].=*Triptoceras xiphias*, Foerste, A.F., 1928, Trans. Roy. Soc. Can., ser. 3, vol. 22, sec. 4, p. 229, pl. 7, figs. 4A-C [the type 2163].

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 80, pl. 30, figs. 1-3 [lectotype 2163].

*Orthoceras* sp.

Fig. spec. 6016

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 160, pl. 22, figs. 4A, B.

Red River Formation, Ordovician, East Selkirk, Manitoba.

*Orthoceras* sp.

Fig. spec. 7544

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 181, pl. 33, fig. 1.

Windsor Formation, Mississippian, mouth Kennetcook River, Nova Scotia.

*Orthoceras* sp.

Fig. spec. 9088

Foerste, A.F., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 70, pl. 14, figs. 5A, B.

Ordovician, southern part of North Arm, Great Slave Lake, Northwest Territories.

=*Orthoceras* (?) *slavense*, Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 33, pl. 7, figs. 4A, B.*Oxfordoceras* ? *atticus* see *Orthoceras atticus**Oxfordoceras billingsi* see *Orthoceras ordinatum**Oxygonioceras* (?) *latum* Foerste

Holotype 7154; paratype 7151a

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 218, pl. 18, figs. 1 [7154], 2 [7151a].

Red River Formation, Ordovician, Lake Winnipeg, Manitoba.

*Pachendoceras* ? *sayi* see *Orthoceras sayi**Paquettoceras allumettense* Foerste

Holotype 7227

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 28, fig. 10; 1933, *ibid.*, vol. 28, p. 59.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 41, pl. 9, fig. 10.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Quebec.

*Paractinoceras canadense* see *Sactoceras canadense**Paryoceras euchari* Sweet and Miller

Holotype 12243; paratype 12244

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 54, pl. 5, figs. 1-4 [12243], 5, 6 [12244]; text fig. 10.

Sweet, W.C., 1959, J. Pal., vol. 33, No. 2, p. 298, pl. 42, figs. 2 [12243], 3 [12244].

Cape Phillips Formation, Upper Ordovician, Marshall Peninsula, Cornwallis Island, Arctic.

*Phragmoceras* (?) *cameroni* see *Phragmoceras* sp.

*Phragmoceras canadense* see *Phragmoceras nestor* var. *canadense*

*Phragmoceras hector* Billings

Syntypes 2917, 2918

Billings, E.,

1862, "New Species of Lower Silurian Fossils", p. 163, figs. 147a, b [2917].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 163, figs. 147a, b.

Guelph Formation, Middle Silurian, Galt and Hespeler, Ontario.

*Phragmoceras hespelorensense* see *Phragmoceras nestor* var. *canadense*

*Phragmoceras lineolatum* Whiteaves

Syntypes 4404, a-c, 4405, a, 17734, 17735

Whiteaves, J.F.,

1904, Geol. Surv., Canada, Ann. Rept., n. ser., vol. 14, 1901, p. 57F.

1906, *ibid.*, Palaeoz. Fossils, vol. 3, pt. 4, p. 265, pl. 34, figs. 1, a [4405a], 2 [4404], 3 [4405].

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 97, pl. 20, figs. 3A, B [lectotype 4404].

Silurian [Attawapiskat Formation], below and at falls and upper rapid, Ekwan River, Ontario.

=*Protophragmoceras* (?) *boreale*, Foerste, A.F. and Savage, T.E., 1927, *ibid.*, vol. 22, p. 90, pl. 14, fig. 6 [paratype 4405].

=*Phragmoceras whiteavesi*, Foerste, A.F. and Savage, T.E., 1927, *ibid.*, vol. 22, p. 98, pl. 20, fig. 2 [holotype 4405a].

*Phragmoceras nelsoni* Stearn

Holotype 10424

Stearn, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 120, pl. 15, figs. 5, 7.

Inwood Formation, Middle Silurian, south bank Grand Rapids, l.s.d. 8, sec. 17, tp. 48, rge. 13, W. Prin. mer., Manitoba.

*Phragmoceras nestor* var. *canadense* Whiteaves

Syntypes 2919, 2920

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 39, pl. 7, figs. 1 [2920], a, b [2919].

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

=*Phragmoceras canadense*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 336, pl. 54, figs. 1A, B [holotype 2920].

=*Phragmoceras hespelorensense*, Foerste, A.F., 1929, *ibid.*, vol. 24, p. 345, pl. 58, fig. 3; pl. 60, fig. 3 [holotype 2919].

*Phragmoceras parvum* Hall and Whitfield

Hypotypes 2916, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 41, pl. 7, fig. 2 [2916].

Guelph Formation, Middle Silurian, Durham, Ontario.

=*Phragmoceras ontarioense*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 349, pl. 58, figs. 2A, B.

*Phragmoceras parvum* Hall and Whitfield

Hypotype 10425

Stearn, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 119, pl. 15, fig. 4.

Cedar Lake Formation, Middle Silurian, Anchor Point, Saskatchewan River, Manitoba.

*Phragmoceras praematurum* Billings

Syntypes 1294, a

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 173, figs. 19 [1294a], 20 [1294].  
Middle Ordovician, La Cloche Island, Lake Huron, Ontario.

=*Maelonoceras praematurum*, Hyatt, A., 1884, Proc. Boston Soc. Natural Hist., vol. 22,  
p. 280 [type Billings's fig. 19=1294a].

Foerste, A.F., 1924, Denison Univ. Bull., J. Sci. Lab., vol. 20, p. 242, pl. 39, figs.  
6A-C; pl. 41, fig. 7 [lectotype Billings's fig. 20=1294].

Foerste, A.F., 1933, *ibid.*, vol. 28, p. 89 [lectotype Billings's fig. 19=1294a].

=*Maelonoceras billingsi*, Foerste, A.F., 1924, *ibid.*, vol. 20, p. 244, pl. 39, figs. 5A-C  
[holotype 1294a].

=*Beloitoceras clochense*, Foerste, A.F., 1933, *ibid.*, vol. 28, p. 107, pl. 37, fig. 4  
[holotype 1294].

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 83, pl. 32, figs. 5, 6 [holotype  
1294].

*Phragmoceras whiteavesi* see *Phragmoceras lineolatum**Phragmoceras* sp.

Fig. spec. 9085

Foerste, A.F., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 68, pl. 14,  
figs. 2A, B.

Silurian, North Arm Great Slave Lake, Northwest Territories.

=*Phragmoceras* (?) *cameroni*, Foerste, A.F. and Savage, T.E., 1927, Denison Univ.  
Bull., J. Sci. Lab., vol. 22, p. 96, pl. 17, figs. 1A, B.

*Piloceras canadense* Billings

Syntypes 507, a-c

Billings, E., 1860, Can. Naturalist Geol., vol. 5, p. 171, fig. 16 [507].

Lower Ordovician [Romaine Formation], Mingan Islands, Quebec.

=*Trundleoceras canadense*, Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer.,  
Sp. Paper 11, p. 81, pl. 12, fig. 7 [holotype 507].

=*Allopioceras canadense*, Ulrich, E.O. *et al.*, 1943, *ibid.*, Sp. Paper 49, p. 28, pl. 6,  
figs. 1-3.

=*Piloceras acinaces*, Foerste, A.F., in Twenhofel, W.H., 1938, *ibid.*, Sp. Paper 11,  
p. 80, pl. 12, fig. 6 [holotype 507a].

Ulrich, E.O. *et al.*, 1943, *ibid.*, Sp. Paper 49, p. 22, pl. 5, fig. 11.

=*Trundleoceras coarctum*, Foerste, A.F., in Twenhofel, W.H., 1938, *ibid.*, Sp. Paper 11,  
p. 82, pl. 12, figs. 8, 9 [holotype 507b].

=*Allopioceras coarctum*, Ulrich, E.O. *et al.*, 1943, *ibid.*, Sp. Paper 49, p. 29, pl. 5,  
figs. 1, 2.

=*Cassinoceras magister*, Foerste, A.F., in Twenhofel, W.H., 1938, *ibid.*, Sp. Paper 11,  
p. 81, pl. 13, figs. 1, 2 [holotype 507c - not 407c].

Ulrich, E.O. *et al.*, 1943, *ibid.*, Sp. Paper 49, p. 40, pl. 15, figs. 1, 2.

*Piloceras triton* Billings

Syntype 631, a [parts of one specimen]

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 257.

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 257.

Divisions H and I [St. George], west side of Pistolet Bay, Newfoundland.

=*Cassinoceras triton*, Ulrich, E.O. *et al.*, 1943, Geol. Soc. Amer., Sp. Paper 49, p. 41,  
pl. 18, figs. 1, 2 [holotype 631a - not paratype 624].



*Piloceras wortheni* Billings

Syntypes 625, a, b [parts of one specimen], c, d

Billings, E.,

1865, "New Species of Lower Silurian Fossils", p. 256, figs. 240a, b [625a, b], c, d [625c].

1865, Geol. Surv., Canada, Palaeoz. Fossils, vol. 1, p. 256, figs. 240a-d.

Division H [St. George], Port aux Choix, Newfoundland.

=*Cassinoceras wortheni*, Ulrich, E.O. *et al.*, 1943, Geol. Soc. Amer., Sp. Paper 49, p. 42, pl. 13, figs. 1 [625a,b], 2, 3 [625c], 4, 5 [625d].

*Pionoceras pomponium* (Billings)

Neoholotype 6070

Ulrich, E.O. *et al.*, 1942, Geol. Soc. Amer., Sp. Paper 37, p. 64, pl. 40, figs. 1, 2. St. Armand limestone, Lower Ordovician, Philipsburg, Quebec.

*Plectoceras carletonense* Foerste

Holotype 7391

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 36, fig. 1; 1933, *ibid.*, vol. 28, p. 123.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 45, pl. 15, fig. 6.

Black River [Leray beds], Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Plectoceras halli* (Foord)

Hypotypes 1306d, e

Whiteaves, J.F., 1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 302, pl. 35, figs. 3 [1306d], 4, a [1306e].

Black River, Middle Ordovician, falls of the St. Charles River, Indian Lorette, Quebec.

*Plectoceras jason* see *Nautilus jason*

*Plectoceras lowi* Foerste

Holotype 7929

Foerste, A.F., 1928, Denison Univ. Bull., J. Sci. Lab., vol. 23, p. 54, pl. 18, fig. 1; pl. 19, fig. 1; pl. 26, fig. 2.

Loose boulders, Ordovician (?), Port Burwell, west of Cape Chidley, Newfoundland.

*Plectoceras robertsoni* (Hall)

Hypotype 13856

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 46, pl. 14, figs. 4, 5.

Leray beds, Ottawa Formation, Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Plectoceras tyrans* see *Nautilus tyrans*

*Plectoceras* (?) *undatum* (Conrad)

Hypotype 6803

Whiteaves, J.F., 1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 305, pl. 37.

Black River limestone, Middle Ordovician, sewer excavation near Queen's University, Kingston, Ontario.

*Polygrammoceras ellisense* Foerste

Hypotype 2384a

Foerste, A.F. *in* Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 265.

Gun River Formation, Middle Silurian, Gull Cape, Anticosti Island, Quebec.

*Polygrammoceras latolineatum* Foerste

Holotype 2316, a [parts of one specimen]

Foerste, A.F., in Twenhofel, W.H., 1928, Geol. Surv., Canada, Mem. 154, p. 265, pl. 29, fig. 2.

Ellis Bay Formation, Upper Ordovician, Junction Cliff, Anticosti Island, Quebec [possibly a syntype of *Orthoceras sieboldi*].*Poterioceras apertum* Whiteaves

Syntypes 1888, 1889

Whiteaves, J.F., 1889, Trans. Roy. Soc. Can., vol. 7, sec. 4, p. 78, pl. 14, figs. 2 [1888], 3 [1889].

Ordovician [Red River Formation], Swampy Island and Dog Head, Lake Winnipeg, Manitoba.

=*Diestoceras apertum*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 230, pl. 37, fig. 1 [lectotype 1888].=*Diestoceras* (?) *whiteavesi*, Foerste, A.F., 1929, *ibid.*, vol. 24, p. 226, pl. 35, fig. 3 [hypotype 1889].*Poterioceras apertum* Whiteaves

Hypotypes 1887, a

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 87, pl. 11, figs. 2 [1887], 3 [1887a].

Ordovician [Red River Formation], Black Island, Swampy Harbour, Lake Winnipeg, Manitoba.

=*Diestoceras* (?) *whiteavesi*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 226, pl. 26, fig. 4; pl. 35, fig. 2 [holotype 1887].=*Diestoceras* (?) sp., Foerste, A.F., 1929, *ibid.*, vol. 24, p. 228, pl. 35, fig. 1 [1887a].*Poterioceras gracile* Whiteaves

Holotype 1841

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 87, pl. 11, figs. 4, a, b.

Ordovician [Red River Formation], Black Island, Swampy Harbour, Lake Winnipeg, Manitoba.

=*Dowlingoceras gracile*, Foerste, A.F., 1928, Michigan Univ., Contr. Pal. Mus., vol. 3, No. 3, pt. 2, p. 43, pl. 1, fig. 5; pl. 3, figs. 2A, B.

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 170, pl. 13, figs. 2A-C.

*Poterioceras nobile* Whiteaves

Syntype 1885

Whiteaves, J.F., 1889, Trans. Roy. Soc. Can., vol. 7, sec. 4, p. 77, pl. 14, fig. 1.

Ordovician [Red River Formation], East Selkirk, Manitoba.

=*Diestoceras nobile*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 226, pl. 36, fig. 1.*Poterioceras* n. sp.

Syntypes 5133, a, 5134

Williams, M.Y., 1919, Geol. Surv., Canada, Mem. 111, pl. 26, figs. 2 [5133], 3 [5133a], 4 [5134].

Guelph Formation, Middle Silurian, pit north of Warton, Ontario.

=*Amphicyrtoceras williamsi*, Foerste, A.F., 1934, Denison Univ. Bull., J. Sci. Lab., vol. 29, p. 160, pl. 37, figs. 3A [holotype 5134], B [paratype 5133], C [paratype 5133a].*Poterioceras* sp.

Hypotypes 7541, 7545

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 184, pl. 34, figs. 3 [7541], 4 [7545].

Windsor, Mississippian, St. Croix River, Hants Co., and mouth Kennetcook River, Nova Scotia.

*Poterioceras* (?) sp.

Fig. spec. 9086

Foerste, A.F., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 69, pl. 14, figs. 3A, B.

Silurian, North Arm Great Slave Lake, Northwest Territories.

=*Byronoceras* (?) *humei*, Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 83, pl. 17, figs. 3A, B.

*Probillingsites cobourgensis* Flower

Holotype 11091; paratypes 11092–11095

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 44, pl. 9, figs. 5–7, 12, 13.

Cobourg Formation, Middle Ordovician, Cobourg, Ontario.

*Probillingsites cobourgensis* Flower

Hypotype 17537

Flower, R.H., 1963, J. Pal., vol. 37, No. 1, p. 76, pl. 11, figs. 23, 24.

Cobourg Formation, Middle Ordovician, Collingwood, Ontario.

*Probillingsites epiphaniense* Flower

Holotype 17526

Flower, R.H., 1963, J. Pal., vol. 37, No. 1, p. 79, pl. 13, figs. 6–8.

Terrebonne Formation, Middle Ordovician, sawmill 1 mile north of l'Épiphanie, Rivière St. Esprit, l'Assomption co., Quebec.

*Probillingsites foerstei* Wilson

Hypotypes 13888, 13889

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 105, pl. 35, figs. 9, 10 [13888], 11, 12 [13889].

Cobourg beds, Ottawa Formation, Middle Ordovician, Notre Dame Cemetery, Eastview, Ontario.

*Probillingsites globosus* Flower

Holotype 17527; paratype 17528

Flower, R.H., 1963, J. Pal., vol. 37, No. 1, p. 79, pl. 11, figs. 13–19.

Terrebonne Formation, Middle Ordovician, Isle Jésus and Montreal East, Quebec.

*Probillingsites minor* Flower

Holotype 17529

Flower, R.H., 1963, J. Pal., vol. 37, No. 1, p. 77, pl. 11, figs. 10–12.

Terrebonne Formation, Middle Ordovician, Isle Jésus, Montreal, Quebec.

*Probillingsites obtusus* Flower

Holotype 17530; paratypes 17531–17533

Flower, R.H., 1963, J. Pal., vol. 37, No. 1, p. 75, pl. 12, figs. 1–7, 11–17.

Terrebonne Formation, Middle Ordovician, Crabtree Mills, 1 mile north of l'Épiphanie, and National Cement quarry, Montreal East, Quebec.

*Probillingsites sinuatus* Flower

Holotype 17534; paratype 17535

Flower, R.H., 1963, J. Pal., vol. 37, No. 1, p. 78, pl. 12, figs. 8–10, 23–25.

Terrebonne Formation, Middle Ordovician, Isle Jésus and Canada Cement quarry, Montreal East, Quebec.

*Probillingsites sphaeroidalis* Flower

Holotype 17538

Flower, R.H., 1963, J. Pal., vol. 37, No. 1, p. 77, pl. 12, figs. 20–22.

Cobourg? Formation, Middle Ordovician, Ottawa?, Ontario.

*Probillingsites sutherlandi* Sweet and Miller

Holotype 12229

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 41, pl. 4, figs. 5, 6.

Cape Phillips Formation, Upper Ordovician, Marshall Peninsula, Cornwallis Island, Arctic.

*Probillingsites transversus* Flower

Holotype 17536.

Flower, R.H., 1963, J. Pal., vol. 37, No. 1, p. 78, pl. 11, figs. 7-9.

Terrebonne Formation, Middle Ordovician, sawmill 1 mile north of l'Épiphanie, Rivière St. Esprit, l'Assumption co., Quebec.

*Proclydonautilus natosini* McLearn

Holotype 9257; paratype 9260

McLearn, F.H., 1946, Geol. Surv., Canada, Paper 46-25, App., p. 1, pl. 2, figs. 1, 2. "Pardonnet beds", Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills and Sikanni Chief River below mouth of Chicken Creek, British Columbia.

*Proclydonautilus spirolobus* (Dittmar)

Hypotypes 14184, 14185

Tozer, E.T., 1961, Geol. Surv., Can., Mem. 316, p. 96, pl. 27, figs. 1a, b, 2.

Schei Point Formation, Upper Triassic, 12 miles south of Cape Malloch, Borden Island; upper Calcareous member, Blaa Mountain Formation, Upper Triassic, north coast Schei Peninsula, Axel Heiberg Island, Arctic.

*Protocycloceras furtivum* see *Orthoceras furtivum**Protocycloceras lamarcki* (Billings)

Hypotypes 626, a-e

Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 79, pl. 40, figs. 4, 5 [626e].

Division G, H [St. George], Lower Ordovician, Cape Norman, Pistolet Bay, Newfoundland. See *Orthoceras lamarcki*.*Protocycloceras lamarcki* (Billings)

Hypotypes 8378, a-n, 8766, 8996, a

Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 79, pl. 40, figs. 3 [8766], 6 [8378], 9 [8996], 10 [8996a], 11 [8378a].

Beekmantown Formation, Lower Ordovician, lots 17, 18, and 20, con. 6, Marlborough tp., Ontario.

*Protocycloceras levisense* Ulrich, Foerste, Miller and Unklesbay

Holotype 8756

Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 83, pl. 39, fig. 7.

Limestone boulder in Levis Formation, Lower Ordovician, near Point Levis, Quebec.

*Protocycloceras ordinatum* see *Orthoceras ordinatum**Protocycloceras repens* see *Orthoceras repens**Protocycloceras xerxes* see *Orthoceras xerxes**Protokionoceras ?gracile* Wilson

Syntypes 6761, 6762

Wilson, A.E., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 32, pl. 8, figs. 5 [6762], 6 [6761].

Beaverfoot Formation, Ordovician, 95, feet above base of Formation near headwaters of Windermere Creek, and 1,150 feet east of trail, Palliser Pass, British Columbia.

*Protokionoceras ? hullense* Wilson

Holotype 1863

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 28, pl. 6, figs. 1-3.  
Hull beds, Ottawa Formation, Middle Ordovician, Hull, Quebec.

*Protokionoceras imperator* Foerste

Holotype 6818

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 38, pl. 8, figs. 1, 2;  
pl. 9, fig. 1.  
Gascons Formation, Middle Silurian, L'Anse à la Barbe, Port Daniel, Quebec.

*Protokionoceras microlineatum* Foerste

Paratype 6806

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 39, pl. 7, fig. 3.  
Indian Point Formation, Middle Silurian, Indian Point, Port Daniel, Quebec.

*Protophragmoceras (?) boreale* see *Phragmoceras lineolatum*

*Ptenoceras tenuicostatum* Whiteaves

Holotype 8729

Whiteaves, J.F., 1909, Geol. Surv., Canada, App. I in Wilson, W.J., Geol. Reconnaissance of a Portion of Algoma and Thunder Bay Districts, Ontario, p. 40.  
Silurian, Nagagami River, 38 miles from mouth, Ontario.

*Quebecoceras quebecense* (Whiteaves)

Hypotypes 4411a, b [parts of one specimen], c

Ulrich, E.O. et al., 1944, Geol. Soc. Amer., Sp. Paper 58, p. 137, pl. 12, figs. 5, 6  
[paratypes 4411a, b]; pl. 13, figs. 1-3 [paratype 4411c].  
Levis Formation, Lower Ordovician, limestone boulders at Point Levis, Quebec.  
See *Cyrtoceras quebecense*

*Richardsonoceras bellatulum* Sweet and Miller

Holotype 12236

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 47, pl. 6, fig. 6.  
Cape Phillips Formation, Upper Ordovician, eastern part of Little Cornwallis Island, Arctic.

*Richardsonoceras (?) falx* see *Cyrtoceras falx*

*Richardsonoceras simplex* see *Cyrtoceras simplex*

*Richardsonoceras simplex* (Billings)

Hypotypes 7393, a, b

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 26, figs. 3-5A, B;  
1933, *ibid.*, vol. 28, p. 91.  
Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 92 [paratypes 7393, a].  
Black River [Leray beds], Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Rizoceras carletonense* Foerste

Holotype 7390

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 34, fig. 4; 1933,  
*ibid.*, vol. 28, p. 118.  
Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 97, pl. 26, figs. 1, 2.  
Black River [Leray beds], Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

*Rizoceras (?) dartae* Foerste

Holotype 6809

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 47, pl. 10, fig. 3.  
Gascons Formation, Middle Silurian, L'Anse à la Barbe, Port Daniel, Quebec.

*Rizoceras* (?) sp.

Fig. spec. 9087

Foerste, A.F., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 70, pl. 14, figs. 4A, B.

Silurian, North Arm Great Slave Lake, Northwest Territories.

= *Crateroceras* (?) *humei*, Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 85, pl. 17, figs. 4A, B.*Robsonoceras* sp.

Fig. spec. 12618

Kobayashi, T., 1955, J. Fac. Sci., Univ. Tokyo, sec. 2, vol. 9, pt. 3, p. 409, pl. 1, figs. 8a-c.

McKay Group, Lower Ordovician, headwaters Pinnacle Creek, Brisco Range, 4.5 miles northeast of Brisco, British Columbia.

*Rudolfoceras kindlei* Ulrich, Foerste, Miller and Unklesbay

Holotype 7366

Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 57, pl. 20, figs. 1-3. Limestone boulder in Levis Formation, Lower Ordovician, Point Levis, Quebec.*Rudolfoceras levisense* Ulrich, Foerste, Miller and Unklesbay

Holotype 6520, a [parts of one specimen]; paratype 6520b

Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 57, pl. 18, figs. 1, 2 [6520, a], 3, 4 [6520b].

Limestone boulders in Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Rudolfoceras subarcuatum* Ulrich, Foerste, Miller and Unklesbay

Holotype 7400d; paratypes 7400, a [parts of one specimen], b, c, e

Ulrich, E.O. *et al.*, 1944, Geol. Soc. Amer., Sp. Paper 58, p. 58, pl. 16, figs. 8 [7400e], 9, 10 [7400d].

Limestone boulders in Levis Formation, Lower Ordovician, Point Levis, Quebec.

*Sactoceras bucklandi* see *Orthoceras bucklandi**Sactoceras canadense* Whiteaves

Holotype 1839

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 9, sec. 4, p. 85, pl. 10, figs. 1, a-c.

Ordovician [Red River Formation], Swampy or Berens Island, Lake Winnipeg, Manitoba.

= *Paractinoceras canadense*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 210, pl. 14, fig. 2; pl. 26, figs. 3A, B.*Sactoceras josephianum* Foerste

Hypotype 13864

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 64, pl. 26, fig. 9.

Leray beds, Ottawa Formation, Middle Ordovician, Gloucester tp., Ontario.

*Sactoceras lyelli* see *Orthoceras lyelli**Sactoceras manitoulinense* Foerste

Holotype 8539a; paratype 8539b

Foerste, A.F.,

1924, Geol. Surv., Canada, Mem. 138, p. 224, pl. 39, figs. 4a [8539a], b [8539b].

1930, Michigan Univ., Contr. Mus. Pal., vol. 3, No. 6, p. 128, pl. 2, fig. 2 [8539a].

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Sactoceras marginale* Stearn

Holotype 10479; paratype 10480

Stearn, C.W., 1956, Geol. Surv., Canada, Mem. 281, p. 112, pl. 13, fig. 3 [10479].  
East Arm Formation, Middle Silurian, northeast bay of Big Island, Moose Lake, Manitoba.

*Sactoceras* (?) *ottawaense* see *Orthoceras ottawaense*

*Sactoceras* ? *ottawaense* (Billings)

Hypotypes 13865, 13867

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 65, pl. 26, figs. 5 [13867],  
6 [13865].

Pamelia and Leray-Rockland beds, Ottawa Formation, Middle Ordovician, township road  
between Eardley Road and Ottawa River north of Aylmer and Paquette Rapids, Allu-  
mette Island, Quebec.

*Sactoceras* ? cf. *pictolineatum* Foerste

Hypotype 13866

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 66, pl. 29, fig. 1.

Leray beds, Ottawa Formation, Middle Ordovician, Mechanicsville, Ottawa, Ontario.

*Sactoceras scrutatum* Foerste

Syntypes 8045, a

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 70, pl. 11,  
figs. 1 [8045], 2 [8045a].

'Lockport' [Thornloe] Formation, Middle Silurian, 3 miles north of Earlton, Ontario.

*Sactoceras vadocameratum* Foerste

Syntypes 8060, a

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 71, pl. 11,  
figs. 3 [8060], 4 [8060a].

'Lockport' [Thornloe] Formation, Middle Silurian, 3 miles north of Earlton, Ontario.

*Sactoceras westonense* Foerste

Holotype 2174

Foerste, A.F.,

1924, Geol. Surv., Canada, Mem. 138, p. 226, pl. 39, fig. 5; pl. 40, fig. 2.

1930, Michigan Univ., Contr. Pal. Mus., vol. 3, No. 6, p. 129, pl. 2, fig. 1.

Lorraine Formation, Upper Ordovician, Weston, Ontario.

*Sactoceras* (?) sp.

Fig. spec. 8541

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 226, pl. 41, fig. 6.

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Schroederoceras* (?) *minganense* see *Lituities palinurus*

*Schroederoceras vagum* Foerste

Holotype 1107

Foerste, A.F., in Twenhofel, W.H., 1938, Geol. Soc. Amer., Sp. Paper 11, p. 88,  
pl. 23, fig. 1.

Mingan Formation, Middle Ordovician, Ammonite Point, possibly Trilobite Bay, Mingan  
Islands, Quebec.

*Schuchertoceras logani* (Cooper)

Hypotypes 8889, a

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 379, pl. 55, figs. 5-7.

Whitehead Formation, Upper Ordovician, Grande Coupé, Gaspé, Quebec.

*Schuchertoceras newberryi* (Billings)

Hypotype 17741

Furnish, W.M. and Glenister, B.F., 1964, *Treatise on Invertebrate Paleontology*, pt. K, Mollusca 3, p. K 267, fig. 189.3.

Allen Bay Formation, Upper Ordovician, Douro Range, Camp Creek, West Devon Island, Arctic.

*Selkirkoceras cuneatum* see *Actinoceras richardsoni**Selkirkoceras tyndallense* Foerste

Holotype 5653, a [parts of one specimen]

Foerste, A.F., 1929, *Denison Univ. Bull., J. Sci. Lab.*, vol. 24, p. 201, pl. 31, figs. 1A–D.

Red River Formation, Ordovician, Tyndall, Manitoba.

*Spyroceras allumettense* Foerste

Syntypes 6830, a

Foerste, A.F., 1932, *Denison Univ. Bull., J. Sci. Lab.*, vol. 27, p. 100, pl. 11, figs. 8A, B [6830], 9 [6830a].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

= '*Spyroceras*' *allumettense*, Wilson, A.E., 1961, *Geol. Surv., Canada, Bull.* 67, p. 34, pl. 8, figs. 4 [6830a], 5 [6830].*Spyroceras anticostiense* Foerste

Paratype 6808

Foerste, A.F., 1928, *Geol. Surv., Canada, Mem.* 154, p. 277, pl. 37, fig. 5.

English Head Formation, Upper Ordovician, English Head, Anticosti Island, Quebec.

'*Spyroceras*' *arcuoliratum* (Hall)

Hypotype 1283c

Wilson, A.E., 1961, *Geol. Surv., Canada, Bull.* 67, p. 35, pl. 8, figs. 2, 3.

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Quebec.

*Spyroceras balteatum* see *Orthoceras balteatum**Spyroceras beauportense* see *Orthoceras beauportense**Spyroceras chamblienne* Foerste

Holotype 8568

Foerste, A.F., 1924, *Geol. Surv., Canada, Mem.* 138, p. 222, pl. 39, fig. 3; pl. 40, fig. 1.

Upper Ordovician, south bank of Richelieu River several hundred yards below dam at Chambly Canton, Quebec.

*Spyroceras cylindratum* Foerste

Paratypes 6829, a

Foerste, A.F., 1932, *Denison Univ. Bull., J. Sci. Lab.*, vol. 27, p. 97, pl. 11, figs. 6A, B [6829], 7A–C [6829a].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

= '*Spyroceras*' *cylindratum*, Wilson, A.E., 1961, *Geol. Surv., Canada, Bull.* 67, p. 35, pl. 9, figs. 1–3 [hypotype 6829].



'*Spyroceras*' *cylindratum* Foerste

Hypotype 1283e

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 35, pl. 9, figs. 4, 5.

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

*Spyroceras danielense* Foerste

Holotype 6808

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 43, pl. 19, figs. 2A, B.

Indian Point Formation, Middle Silurian, L'Anse à la Barbe, Port Daniel, Quebec.

*Spyroceras ferum* see *Orthoceras ferum*

*Spyroceras fritzi* Foerste

Holotype 6000

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 163, pl. 37, fig. 2. Red River Formation, Ordovician, Ballhead, Lake Winnipeg, Manitoba.

*Spyroceras hammelli* (Foerste)

Hypotypes 2167a, 8537a

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 222, pl. 39, figs. 1a [2167a], b [8537a]; pl. 40, fig. 3 [2167a].

Meaford Formation, Upper Ordovician, Cape Smyth and Clay Cliffs, Manitoulin Island, Ontario.

*Spyroceras intermedium* Wilson

Holotype 6763

Wilson, A.E., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 33, pl. 8, fig. 7. Beaverfoot Formation, Upper Ordovician, 95 feet above base of formation near headwaters of Windermere Creek, British Columbia.

*Spyroceras liratum* Foerste

Holotype 8887

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 378, pl. 56, fig. 2; pl. 57, fig. 6. Whitehead Formation, Upper Ordovician, Grande Coupe, Gaspé, Quebec.

*Spyroceras microlineatum* see *Orthoceras perannulatum*

*Spyroceras minganense* see *Orthoceras minganense*

*Spyroceras?* *nodosum* Sweet and Miller

Holotype 12223

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 38, pl. 1, fig. 5. Cape Phillips Formation, Upper Ordovician, Marshall Peninsula, Cornwallis Island, Arctic.

*Spyroceras orientale* Foerste

Holotype 6807

Foerste, A.F., 1936, Denison Univ. Bull., J. Sci. Lab., vol. 31, p. 43, pl. 6, fig. 2; pl. 13, fig. 3.

Indian Point Formation, Middle Silurian, Indian Point, Port Daniel, Quebec.

*Spyroceras paquettense* Foerste

Syntypes 6831, a

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 103, pl. 12, fig. 10 [6831].

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

=*Anaspyroceras* ? *paquettense*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 29, pl. 7, figs. 1, 2 [holotype 6831], 3 [paratype 6831a].

*Spyroceras parksi* Foerste

Syntypes 8538, a, b

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 223, pl. 39, fig. 2; pl. 40, fig. 4 [8538].

Meaford Formation, Upper Ordovician, Clay Cliffs, Manitoulin Island, Ontario.

*Spyroceras percense* Foerste

Holotype 8886

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 377, pl. 56, fig. 1; pl. 57, fig. 5. Whitehead Formation, Upper Ordovician, Grande Coupe, Gaspé, Quebec.

*Spyroceras* ? *subglabrum* Foerste

Holotype 8888

Foerste, A.F., 1936, J. Pal., vol. 10, No. 5, p. 379, pl. 56, fig. 7. Whitehead Formation, Upper Ordovician, Grande Coupe, Gaspé, Quebec.

*Spyroceras* sp.

Fig. spec. 12224–12227

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 39, pl. 1, figs. 1, 2; pl. 6, fig. 7.

Cornwallis [12224] and Cape Phillips Formations, Ordovician, 8 miles southeast of head of Read Bay [12224] and Marshall Peninsula, Cornwallis Island, Arctic.

'*Spyroceras*' sp.

Fig. spec. 13850

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 36, pl. 8, fig. 1. Cobourg beds, Ottawa Formation, Middle Ordovician, west end of Fifth Avenue, Ottawa, Ontario.

*Stereotoceras canadense* Flower

Holotype 13625

Flower, R.H., 1950, Paleontographica Americana, vol. 3, No. 24, p. 17, pl. 5, figs. 1–3.

Onondaga Formation, Middle Devonian, Walpole tp., Ontario.

*Stereotoceras lentiexpansum* Flower

Holotype 3829

Flower, R.H., 1950, Paleontographica Americana, vol. 3, No. 24, p. 19, pl. 3, fig. 4; pl. 4, fig. 1; pl. 6, figs. 4, 5.

Hamilton Formation, Middle Devonian, Bosanquet tp., Ontario.

*Stokesoceras* cf. *engadinense* Foerste

Hypotype 2743

Teichert, C., 1931, Am. Mus. Natural Hist., Novitates, No. 512, p. 6, fig. 4. Middle Silurian [Fossil Hill Formation], Cockburn Island, Lake Huron, Ontario.

*Stokesoceras* cf. *engadinense* Foerste

Hypotype 8707

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 83, pl. 15, fig. 6.

'Lockport' [Thornloe] Formation, Middle Silurian, 1 mile southeast of Thornloe, Harley tp., Ontario.

*Stokesoceras* (?) *keewatinense* see *Actinoceras keewatinense*

*Stokesoceras perobliquum* Foerste

Holotype 8708

Foerste, A.F., in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 84, pl. 11, fig. 6.

'Lockport' [Thornloe] Formation, Middle Silurian, lake shore 5 miles east of southern end of New Liskeard, lot 5, con. 1, Harris tp., Ontario.

*Stokesoceras cf. perobliquum* Foerste

Hypotype 7847

Foerste, A.F. and Savage, T.E., 1927, Denison Univ. Bull., J. Sci. Lab., vol. 22, p. 73, pl. 13, figs. 4A, B.

Silurian, southern half west side Southampton Island, Arctic.

*Stokesoceras cf. romingeri* Foerste

Hypotype 8706

Foerste, A.F. in Hume, G.S., 1925, Geol. Surv., Canada, Mem. 145, p. 82, pl. 15, fig. 7.

'Lockport' [Thornloe] Formation, Middle Silurian, 3 miles east of Earlton, Armstrong tp., Ontario.

*Streptoceras heros* Billings

Syntype 2747

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 89, fig. 28 (lower).

Foerste, A.F., 1934, Denison Univ. Bull., J. Sci. Lab., vol. 29, p. 164, pl. 41, figs. 1A, B [holotype 2747].

Lockport Formation, Middle Silurian, Grimsby, Ontario.

*Streptoceras janus* Billings

Syntype 2748

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 88, fig. 28 (upper).

Foerste, A.E.,

1926, Denison Univ. Bull., J. Sci. Lab., vol. 21, p. 334, pl. 47, figs. 1A-C.

1934, *ibid.*, vol. 29, p. 162 [holotype].

Lockport Formation, Middle Silurian, Grimsby, Ontario.

*Stroboceras hartti* (Dawson)

Hypotypes 4374a, b, 7549

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 182, pl. 33, figs. 3, a, b [7549]; pl. 34, figs. 1 [4374a], 2 [4374b].

Windsor, Mississippian, Windsor, Nova Scotia.

*Tarphyceras* (?) *apollo* see *Lituites apollo*

*Tetragonoceras gracile* Whiteaves

Holotype 4190

Whiteaves, J.F., 1891, Trans. Roy. Soc. Can., vol. 8, sec. 4, p. 105, pl. 8, figs. 2, a, b.

Middle Devonian [Dawson Bay Formation], Dawson Bay, near mouth of Steeprock River, Lake Winnipegosis, Manitoba.

*Thoracoceras erro* McLearn

Holotype 5668; paratype 5581

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 159, pl. 25, figs. 5, 6.

Stonehouse Formation, Upper Silurian, Arisaig, Nova Scotia.

*Triendoceras montrealense* Flower

Holotype 16687

Flower, R.H., 1958, J. Pal., vol. 32, No. 3, p. 453, pl. 60, fig. 2.

Chazyan, Middle Ordovician, quarries on outskirts of Montreal, Quebec.

*Tripteroceceras hastatum* see *Orthoceras hastatum**Tripteroceceras hastatum* (Billings)

Hypotype 6837

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, p. 131, pl. 13, fig. 8.

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 78, pl. 30, fig. 6.

Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.

*Tripteroceceras ? lautum* Wilson

Holotype 13876

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 79, pl. 30, figs. 10–12.

Cobourg beds, Ottawa Formation, Middle Ordovician, corner of Percy Street and Fifth Avenue, Ottawa, Ontario.

*Tripteroceceras paquettense* see *Orthoceras hastatum**Tripteroceceras* cf. *planoconvexum* Hall

Hypotype 6838

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 22, figs. 2A, B.

Black River [Leray-Rockland beds], Middle Ordovician, lot 4, con. 3, R.F., Gloucester tp., Ontario.

=*Tripteroceceras planoconvexum*, Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 79, pl. 30, figs. 4, 5.*Tripteroceceras xiphias* see *Orthoceras xiphias**Triptoceras xiphias* see *Orthoceras xiphias**Trochoceras desplainense* McChesney

Hypotype 2915

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 36, pl. 5, fig. 5.

Guelph Formation, Middle Silurian, Hespeler, Ontario.

*Trochoceras insigne* Whiteaves

Syntypes 2780, 2781

Whiteaves, J.F.,

1898, Ottawa Naturalist, vol. 12, p. 124.

1906, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 4, p. 282, pl. 41 [2781].

Upper Ordovician [Stonewall Formation], Stonewall quarry, Manitoba.

=*Bickmorites insignis*, Stearn, C.W., 1956, *ibid.*, Mem. 281, p. 121, pl. 13, fig. 4 [holotype 2781]; pl. 16, fig. 8 [paratype 2780].*Trochoceras mccharlesi* Whiteaves

Holotype 1873

Whiteaves, J.F., 1889, Trans. Roy. Soc. Can., vol. 7, sec. 4, p. 81, pl. 16, figs. 1, 2.

Ordovician [Red River Formation], East Selkirk, Manitoba.

=*Wilsonoceras mccharlesi*, Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 180, pl. 19, fig. 1; pl. 20, fig. 1.

*Trocholites multicostatus* (Whitfield)

Hypotype 2913b

Whiteaves, J.F., 1884, Geol. Surv., Canada, Palaeoz. Fossils, vol. 3, pt. 1, p. 36, pl. 6, figs. 1, a.

Guelph Formation, Middle Silurian, Elora, Ontario.

*Trocholitoceras juvenicostatum* Ulrich, Foerste, Miller and Furnish

Syntype 6248

Ulrich, E.O. et al., 1942, Geol. Soc. Amer., Sp. Paper 37, p. 82, pl. 56, fig. 3 [not 2267].

St. Armand limestone, Lower Ordovician, about 1 1/2 miles east of Philipsburg, Quebec.

*Trocholitoceras walcotti* Hyatt

Hypotype 6195

Ulrich, E.O. et al., 1942, Geol. Soc. Amer., Sp. Paper 37, p. 80, pl. 8, fig. 1 [not 2267].

St. Armand limestone, Lower Ordovician, about 1 1/2 miles east of Philipsburg, Quebec.

*Troedssonoceras pertinax* (Billings)

Hypotypes 13870, 13875

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 74, pl. 29, figs. 4, 5 [13870], 6 [13875].

Leray-Rockland beds, Ottawa Formation, Middle Ordovician, Paquette Rapids, Allumette Island, Quebec and unspecified locality in Ottawa, Ontario.

*Trundleoceras canadense* see *Piloceras canadense*

*Trundleoceras coarctum* see *Piloceras canadense*

*Vaginoceras* (?) *eccentricum* Wilson

Holotype 6760

Wilson, A.E., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 32, pl. 8, fig. 2.

Beaverfoot Formation, Ordovician, 1/2 mile east of Palliser Pass, British Columbia.

*Vaginoceras multitubulatum* (Hall)

Hypotypes 13836, 1289, 13837

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 18, pl. 3, fig. 2 [13837]; pl. 4, figs. 1 [1289], 2, 3 [13836].

Leray and Leray-Rockland beds, Ottawa Formation, Middle Ordovician, old quarry, Experimental Farm, Ottawa, Ontario and Paquette Rapids, Ottawa River.

*Westonoceras greggi* Roy?

Hypotype 12240

Sweet, W.C. and Miller, A.K., 1957, Geol. Surv., Canada, Bull. 38, p. 50, pl. 6, fig. 8.

Cape Phillips Formation, Ordovician, east part of Little Cornwallis Island, Arctic.

*Westonoceras manitobense* see *Cyrtoceras manitobense*

*Westonoceras manitobense* (Whiteaves)

Hypotype 6013

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 222, pl. 38, fig. 3 [not 6829].

Red River Formation, Ordovician, between Big and Little Grindstone Points, Lake Winnipeg, Manitoba.

*Westonoceras nelsonense* Foerste

Holotype 7147

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 223, pl. 38, fig. 1.

Nelson Formation, Ordovician, second rapids on Nelson River, Manitoba.

*Whiteavesites winnipegensis* see *Orthoceras winnipegense*

*Whitfieldoceras gracile* Flower

Holotype 12352

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 43, pl. 7, figs. 5, 6.  
Sherman Fall Formation, Middle Ordovician, Lakefield, Ontario.

*Whitfieldoceras trentonense* Foerste

Hypotype 13883

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 93, pl. 18, figs. 5, 6.  
Leray beds, Ottawa Formation, Middle Ordovician, Hogsback, Ottawa, Ontario.

*Wilsonoceras mccharlesi* see *Trochoceras mccharlesi* and *Apsidoceras insigne*

*Wilsonoceras mccharlesi* (Whiteaves)

Hypotype 6018

Foerste, A.F.,  
1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 182, pl. 23, fig. 1; pl. 39, fig. 1.  
1934, *ibid.*, vol. 29, p. 191, pl. 42, fig. 1.  
Red River Formation, Ordovician, Tyndall, Manitoba.

*Winnipegoceras dowlingi* see *Cyrtoceras laticurvatum*

*Winnipegoceras laticurvatum* see *Cyrtoceras laticurvatum*

*Winnipegoceras? obesum* Flower

Holotype 16683

Flower, R.H. and Teichert, C., 1957, Univ. Kansas Pal. Contr., Mollusca, Art. 6, p. 82, pl. 14, figs. 1-3.  
Terrebonne Formation, Middle Ordovician, Ruisseau Rouge, northwest of Crabtree Mills, Quebec.

*Winnipegoceras* (?) sp.

Fig. spec. 5633

Foerste, A.F., 1929, Denison Univ. Bull., J. Sci. Lab., vol. 24, p. 217, pl. 16, fig. 6 [not 5648].  
Red River Formation, Ordovician, bay between Cat Head and McBeth Point, Lake Winnipeg, Manitoba.

*Zitteloceras billingsi* (Salter)

Hypotypes 1299b, c

Foerste, A.F., 1932, Denison Univ. Bull., J. Sci. Lab., vol. 27, pl. 27, figs. 2A, B [1299c], 8 [1299b]; 1933, *ibid.*, vol. 28, p. 79.  
Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 94 [paratypes].  
Middle Ordovician [Leray-Rockland beds], Paquette Rapids, Allumette Island, Ottawa River, Quebec.  
See *Cyrtoceras billingsi*

*Zitteloceras* cf. *clarkeanum* Flower

Hypotype 16680

Flower, R.H., 1945, Can. Field-Naturalist, vol. 59, No. 3, p. 80, pl. 1, fig. 1.  
Lower Trenton, Middle Ordovician, Pont Rouge, Portneuf co., Quebec.

*Zitteloceras depressum* Wilson

Holotype 13884

Wilson, A.E., 1961, Geol. Surv., Canada, Bull. 67, p. 94, pl. 32, figs. 17, 18.  
Sherman Fall ? beds, Ottawa Formation, Middle Ordovician, unspecified locality in Ottawa area.

Mollusca

*Zitteloceras hallianum* see *Cyrtoceras billingsi*

*Zitteloceras hitzi* (Foerste)

Hypotype 8544

Foerste, A.F., 1924, Geol. Surv., Canada, Mem. 138, p. 233, pl. 41, figs. 3a, b.  
Kagawong Formation, Upper Ordovician, 2 miles southwest of Kagawong on road to Gore Bay, Manitoulin Island, Ontario.

*Zitteloceras* (?) *sinuatum* see *Cyrtoceras sinuatum*

*Zitteloceras terranovicum* Flower

Holotype 11087; paratype 11088

Flower, R.H., 1952, J. Pal., vol. 26, No. 1, p. 51, pl. 8, figs. 11, 12.  
Long Point Group, Ordovician, Western Newfoundland.

## CEPHALOPODA - Dibranchiata

*Actinocamax manitobensis* see *Belemnitella manitobensis*

*Actinocamax manitobensis* var. *lawrencii* Jeletzky

Holotype 9671

Jeletzky, J.A., 1950, Geol. Surv., Canada, Bull. 15, p. 11, pl. 2, figs. 1a-c.

Assiniboine Member, Favel Formation, Upper Cretaceous, right bank, Assiniboine River northwest of Treheme, Manitoba.

*Actinocamax* sp. aff. *strelensis* (Fritsch and Schloenbach)

Hypotypes 9670, a-d

Jeletzky, J.A., 1950, Geol. Surv., Canada, Bull. 15, p. 12, pl. 3, figs. 1 [9670a], 4a-c [9670].

Assiniboine Member, Favel Formation, Upper Cretaceous, Duck Mountain, 4 miles from Cowan Station, Manitoba.

=*Actinocamax manitobensis* var. *spicularis*, Jeletzky, J.A., 1961, J. Pal., vol. 35, No. 3, p. 514 [holotype 9670].

See *Belemnitella manitobensis*

*Actinosepia canadensis* Whiteaves

Holotype 5379; paratypes 5379a-c

Whiteaves, J.F., 1897, Can. Rec. Sci., vol. 7, No. 8, p. 459, pl. 2.

Upper Cretaceous, South Saskatchewan River opposite mouth of Swift Current Creek, Saskatchewan.

*Aulacoceras carlottense* Whiteaves

Syntype 4749

Whiteaves, J.F.,

1887, Geol. Surv., Canada, Ann. Rept. 1886, p. 109B.

1889, *ibid.*, Contr. Can. Pal., vol. 1, pt. 2, p. 149, pl. 19, fig. 6.

Triassic, Houston Stewart Channel, Queen Charlotte Islands, British Columbia.

*Belemnitella manitobensis* Whiteaves

Syntypes 5064-5066

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 189, pl. 26, figs. 3, a, b [5064].

Upper Cretaceous, Ochre River, Reding Mountain; Vermilion River, tp. 24, rge. 20, W. Prin. mer.; east bank Assiniboine River a short distance below mouth of Little Souris River; Assiniboine River, sec. 36, tp. 8, rge. 11, W. Prin. mer.; South Duck River, tp. 34, rge. 23, W. Prin. mer.; and Swan River, tp. 35, rge. 29, W. Prin. mer., Manitoba.  
=*Actinocamax manitobensis*, Jeletzky, J.A., 1950, *ibid.*, Bull. 15, p. 4, pl. 1, figs. 2a-c [lectotype 5066].

=*Actinocamax* ? sp. indet., Jeletzky, J.A., 1950, *ibid.*, Bull. 15, p. 4, [5064].

=*Actinocamax* ? sp. aff. *strelensis*, Jeletzky, J.A., 1950, *ibid.*, Bull. 15, pp. 4, 12, pl. 3, fig. 5 [5065].



*Belemnites densus* Meek and Hayden

Hypotype 4980

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 194, pl. 22, fig. 1.

Cretaceous [Haida Formation], south side of Skidegate Channel, Queen Charlotte Islands, British Columbia.

=*Belemnites assimilis*, Whiteaves, J.F., 1900, *ibid.*, Mesoz. Fossils, vol. 1, pt. 4, p. 268.

*Belemnites* sp. undet.

Fig. spec. 4982a

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 11, pl. 1, figs. 1, b; text fig. 1.

Cretaceous, west of Alliford Bay, Skidegate Channel, Queen Charlotte Islands, British Columbia.

=*Belemnites assimilis*, Whiteaves, J.F., 1900, *ibid.*, Mesoz. Fossils, vol. 1, pt. 4, p. 268.

*Cylindroteuthis baculus* Crickmay

Holotype 9660; paratype 17752

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 65, pl. 23, figs. 3, 4.

Cretaceous [Peninsula Formation], 350 yards from shore and 1400 yards north of mouth of Deer Creek, Harrison Lake, British Columbia.

*Cylindroteuthis themis* Crickmay

Holotype 9658

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 65, pl. 23, figs. 1, 2.

Jurassic [Harrison Lake Formation], 1820 yards north of Harrison River point, on west shore of Harrison Lake, British Columbia.

*Pachyteuthis eocretacicus* Crickmay

Holotype 9661

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 66, pl. 23, fig. 5.

Lower Cretaceous [Peninsula Formation], 350 yards from shore and 1400 yards north of mouth of Deer Creek, Harrison Lake, British Columbia.

## CEPHALOPODA - Ammonoidea

### *Acanthinites cf. eusebii* Diener?

Hypotype 13489

McLearn, F.H., 1960, Geol. Surv., Canada, Mem. 311, p. 53, pl. 19, figs. 1a, b.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

### *Acanthoceras spiniferum* (Whiteaves)

Hypotypes 5015, 5993

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 273, pl. 35, figs. 2 [5015], 3, a [5993].

Cretaceous [Haida Formation], east end of Maude Island, Queen Charlotte Islands, British Columbia.

### *Acrochordiceras (Paracrochordiceras) americanum* McLearn

Holotype 6475

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 3, pl. 5, fig. 1.

1948, *ibid.*, 2nd Edition, p. 25, pl. 5, fig. 1.

Toad Formation, Middle Triassic, east of mile-post 378, Alaska Highway, Cameron Hill, Tetsa Valley, British Columbia.

### *Acrochordiceras (?) carlottense* Whiteaves

Syntypes 4717, a.

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 141, pl. 19, fig. 1 [4717].

'Triassic', Houston Stewart Channel, Queen Charlotte Islands, British Columbia.

### *Agassiceras cf. scipionianum* (d'Orbigny)

Hypotype 11212

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 10, pl. 14, figs. 1a-c.

Lower Jurassic, elevation 6,680 feet on Last Creek tributary, Tyaughton Lake area, British Columbia.

### *Allochionites cf. woodwardi* (Mojsisovics)

Hypotype 14310

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 24, pl. 11, figs. 5a-c.

Pardonet Formation, Upper Triassic, 7 miles southwest of mouth of Needham Creek, Halfway River area, British Columbia.

### *Allochionites* sp.

Fig. specs. 12570, 12571, 12573

McLearn, F.H., 1960, Geol. Surv., Canada, Mem. 311, p. 43, pl. 2, figs. 1a, b, 2a, b; pl. 3, fig. 6.

Pardonet Formation, Upper Triassic, talus north bank Sikanni Chief River below mouth of Chicken Creek and talus at and near XXIII, in Western Gully, Pardonet Hill, British Columbia.

Mollusca

*Ammonites barnstoni* Meek

Holotype 4811

Meek, F.B., in Hinde, H.Y., 1859, Report of Progress on the Assiniboine and Saskatchewan Exploring Expedition, p. 184, pl. 2, figs. 1-3.

'Lower Cretaceous' [Jurassic], Mackenzie River, District of Mackenzie.

*Ammonites brewerii* Gabb

Hypotype 4984

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 21, pl. 1, figs. 3, a.

Cretaceous [Haida Formation], west of Alliford Bay, Queen Charlotte Islands, British Columbia.

*Ammonites carlottensis* Whiteaves

Holotype 5010

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 38, pl. 6; text fig. 5.

'Cretaceous', Queen Charlotte Islands, British Columbia.

*Ammonites crenocostatus* Whiteaves

Holotype 4987

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 45, pl. 9, figs. 2, a.

Cretaceous [Haida Formation], Bear Skin Bay (?), Queen Charlotte Islands, British Columbia.

*Ammonites filicinctus* Whiteaves

Syntype 4988

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 43, pl. 2, figs. 2, a-c.

Cretaceous [Haida Formation], Cumshewa Bay (?), Queen Charlotte Islands, British Columbia.

*Ammonites indra* Forbes

Hypotype 5851

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 105, pl. 13, fig. 2.

Upper Cretaceous [Lambert Formation], northwest side Hornby Island, British Columbia.  
=*Pseudophyllites indra*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 57.

*Ammonites jukesii?* Sharpe

Hypotype 5800

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 111, pl. 13, figs. 3, a, b.

Upper Cretaceous [Denman Formation], Norris Rock near Hornby Island, British Columbia.  
=*Gaudryceras denmanense*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 57 [paratype].

*Ammonites laperousianus* Whiteaves

Holotype 4960

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 39, pl. 3, fig. 3.

Cretaceous, Queen Charlotte Islands, British Columbia.

*Ammonites loganianus* (?) Whiteaves Form A

Holotype 4964

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 29, pl. 4, figs. 2, a.

"Cretaceous" [Yakoun Formation, Jurassic], Skidegate Channel [Richardson Bay, south side of Maude Island], Queen Charlotte Islands, British Columbia.

= *Stephanoceras oblatum*, Whiteaves, J.F., 1884, *ibid.*, pt. 3, p. 209.= *Defonticeras oblatum*, McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 16, pl. 15, fig. 1.*Ammonites loganianus* (?) Whiteaves Form B

Holotype 4966

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 30, pl. 8, figs. 1, a.

Upper Cretaceous, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Ammonites newberryanus* Meek

Hypotype 5842

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 109, pl. 14, fig. 1.

Upper Cretaceous [Qualicum Formation], Northwest Bay, Vancouver Island, British Columbia.

= *Pachydiscus multisulcatus*,Whiteaves, J.F., 1903, *ibid.*, pt. 5, p. 349 [paratype?].Usher, J.L., 1952, *ibid.*, Bull. 21, p. 81.= *Canadoceras whiteavesi*, Anderson, F.M., 1958, Geol. Soc. Amer., Mem. 71, p. 233.*Ammonites perezianus* Whiteaves

Holotype 5007

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 19, pl. 2, figs. 1, a.

Cretaceous [Haida Formation], Skidegate Channel west of Alliford Bay, Queen Charlotte Islands, British Columbia.

*Ammonites richardsonii* Whiteaves

Holotype 5013

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 32, pl. 5, figs. 1, 2.

"Cretaceous" [Yakoun Formation, Jurassic], Mackenzie Bay, Skidegate Channel, Queen Charlotte Islands, British Columbia.

= *Zemistephanus richardsoni*, McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 19.*Ammonites selwynianus* Whiteaves

Syntypes 5803, a-d

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 104, pl. 13, figs. 1, a [composite-5830b?].

Upper Cretaceous [Cedar District Formation], Sucia Island, Washington, U.S.A.

= *Schluteria selwyniana*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 63, pl. 5, figs. 3, 4 [lectotype 5803b].*Ammonites skidegatensis* Whiteaves

Holotype 5011

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 34, pl. 7, fig. 1; text fig. 4.

"Cretaceous" [Yakoun Formation, Jurassic], Skidegate Inlet, Queen Charlotte Islands, British Columbia.

= *Stephanoceras skidegatense*, McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 54, pl. 1, fig. 2; pl. 2, fig. 3; pl. 3, figs. 8, 9 [holotype 5011].

*Ammonites stoliczkanus* var. *spiniferus* Whiteaves

Syntypes 5014, a-e

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 24, pl. 3, fig. 1 [5014b]; pl. 4, fig. 1 [5014]; text fig. 2 [5014a].

Cretaceous [Haida Formation], west Alliford Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

=*Acanthoceras spiniferum*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 273.

*Ammonites timotheanus* Mayor

Hypotype 4978

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 41, pl. 3, figs. 2, a.

Cretaceous [Haida Formation], west of Alliford Bay, Queen Charlotte Islands, British Columbia.

*Ammonites* gen. et sp. indet.

Fig. spec. 13904

Frebold, H., 1959, Geol. Surv., Canada, Bull. 53, p. 27, pl. 8, fig. 3.

Fernie Group, Jurassic, Carbondale River, Alberta.

*Ammonites* sp. indet.

Fig. spec. 15137

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 6, pl. 2, fig. 3.

Upper (?) Jurassic, about 14 miles from mouth Bell River, west side Porcupine River, Yukon.

*Ammonite* gen. et sp. indet. 1, 2

Fig. specs. 15267, 15268

Frebold, H. and Little, H.W., 1962, Geol. Surv., Canada, Bull. 81, pp. 13, 14, pl. 1, figs. 11, 13.

Archibald Formation, Lower Jurassic, 0.7 mile east of northeast end of ridge west of Archibald Creek and Query Creek road 0.8 mile south from Highway 3A, Salmo area, British Columbia.

*Ammonites* gen. et sp. indet.

Fig. specs. 14714, 14717, 14718

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 26, pl. 8, figs. 3-5.

Middle Jurassic, south slope Grassy Mountain, north of Blairmore, Alberta.

*Amoeboceras* sp. indet.

Fig. specs. 15129-15131

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 22, pl. 3, figs. 2, 3; pl. 18, fig. 3.

Mould Bay Formation, Upper Jurassic, west of Leffingwell Crags, Mackenzie King Island, Arctic.

*Anscardioceras perrini* Crickmay

Holotype 9687

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 58, pl. 17, figs. 1, 2.

Upper Jurassic, southwest shore of The Peninsula, Harrison Lake, British Columbia.

*Anagymnites involutus* var. *via-alaska* McLearn

Holotype 6446

McLearn, F.H., 1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 3, pl. 7, fig. 1. Toad Formation, Middle Triassic, talus west of mile-post 375, Alaska Highway, Tetsa Valley, British Columbia.

=*Anagymnites via-alaska*, McLearn, F.H., 1948, *ibid.*, 2nd Edition, p. 16, Supp., p. 1, pl. 7, fig. 1.

*Anakashmirites borealis* Tozer

Holotype 14077; paratypes 14072-14076, 14078

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 63, pl. 14, figs. 1a-c, 2a, b, 4a-c, 5, 6a-c.

Blind Fiord Formation, 1,700 feet above base, Lower Triassic, between Hare and Otto Fiords, 5 miles northwest of entrance to Hare Fiord, west coast Ellesmere Island, Arctic.

*Anawasatchites merrilli* McLearn

Holotype 9471

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., p. 1, pl. 3, figs. 3-5. Toad Formation, Lower Triassic, north side Liard River 2 miles north of mouth of Toad River, British Columbia.

*Anawasatchites tardus* McLearn

Holotype 9470

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., p. 1, pl. 3, figs. 1, 2. Toad Formation, Lower Triassic, north side Liard River 2 miles north of mouth of Toad River, British Columbia.  
= *Wasatchites tardus*, Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 10, pl. 4, fig. 1.*Ancyloceras remondi* (Gabb)

Hypotypes 4961, a

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 212, pl. 28, figs. 2, a [4961].

Cretaceous [Haida Formation], north shore Cumshewa Inlet, Queen Charlotte Islands, British Columbia.

*Anisoceras cooperi* (Gabb)

Hypotype 5960

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 336, pl. 43, fig. 1.

Upper Cretaceous, northwest side of Hornby Island, Strait of Georgia, British Columbia.  
= *Didymoceras whiteavesi*, Anderson, F.M., 1958, Geol. Soc. Amer., Mem. 71, p. 196.*Anisoceras cooperi* (Gabb)

Hypotype 10063

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 107, pl. 29, fig. 1.

Upper Lambert Formation, Upper Cretaceous, between Phipps and Manning Points, Hornby Island, Strait of Georgia, British Columbia.

*Anisoceras subcompressum* (Forbes)

Hypotype 5962

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 338, pl. 45, figs. 1, a, b.

Upper Cretaceous [Trent River Formation], Puntledge River, Vancouver Island, British Columbia.

*Anisoceras vancouverense* (Gabb)

Hypotype 5959

Whiteaves, J.F., 1895, Can. Rec. Sci., vol. 6, No. 6, p. 313, pl. 2.

Upper Cretaceous, Hornby Island, Strait of Georgia, British Columbia.

Aptychi with *Harpoceras* cf. *H. exaratum* Young and Bird

Fig. specs. 15298-15300

Frebald, H. and Little, H.W., 1962, Geol. Surv., Canada, Bull. 81, p. 17, pl. 2, figs. 7-9. Hall Formation, Lower Jurassic, road cut on old mine road above administration building, Arlington Mine, Salmo area, British Columbia.

*Arcestes? selwyni* McLearn

Holotype 9047

McLearn F.H., 1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 17, pl. 1, fig. 5.

'Dark siltstones', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.  
=*Nitanoceras selwyni*, McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App.,  
pl. 3, figs. 1-3.

"*Arcestes*" sp.

Fig. spec. 13494

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 110, pl. 20, figs. 2a, b.

Pardonet Formation, Upper Triassic, talus near XIX, west end of Pardonet Hill, Peace River Foothills, British Columbia.

*Arcticoceras ishmae* (Keyserling)

Hypotypes 15119-15122

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 15, pl. 10, fig. 3; pl. 13, figs. 1a, b; pl. 14, figs. 1, 3a, b.

Wilkie Point Formation, Middle Jurassic, east side Intrepid Inlet, 11 and 12 miles north of Cape Canning, Prince Patrick Island, Arctic.

*Arcticoceras kochi* Spath

Hypotypes 15116-15118

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 16, pl. 9, fig. 3; pl. 12, figs. 1a, b; pl. 16, fig. 2.

Middle Jurassic, about 19 miles downstream from mouth Bell River and north of confluence with Bell River, Porcupine River, Yukon.

*Arctoasteroceras jeltzkyi* Frebold

Holotype 14623; paratypes 14624-14630

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 14, pl. 2, figs. 1-5; pl. 3, figs. 1-3.

Lower Jurassic, about 2 miles south of Bug Lake and Bug Creek, Aklavik Range, District of Mackenzie.

*Arctoasteroceras?* sp. indet.

Fig. spec. 14622

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 15, pl. 1, figs. 4a, b.

Lower Jurassic, about 2 miles south of Bug Lake and Bug Creek, Aklavik Range, District of Mackenzie.

*Arctocephalites elegans* Spath

Hypotypes 15108, 15109, 15111-15115

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 10, pl. 9, fig. 1; pl. 10, figs. 1a, b, 2; pl. 11, figs. 1-4.

Middle Jurassic, Richardson Mountains; Porcupine River between Bell and Old Crow Rivers; about 19 miles downstream from mouth Bell River, northwest shore Porcupine River; and about 14 miles below mouth Bell River, west side Porcupine River, Yukon.

*Arctocephalites* cf. *A. ornatus* Spath

Hypotype 15110

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 11.

Middle Jurassic, about 19 miles downstream from mouth Bell River, northwest shore Porcupine River, Yukon.

*Arctocephalites?* sp. indet. 1 and 2

Fig. specs. 13400, 13402, 13403

Frebald, H., 1958, Geol. Surv., Canada, Bull. 41, p. 9, pl. 7, fig. 3; pl. 8, figs. 2a, b, 3a-c.

Wilkie Point Formation, Middle Jurassic, talus 3 miles S30°E Mould Bay weather station, Prince Patrick Island, Arctic.

*Arctocephalites?* sp. indet.

Fig. spec. 15107

Frebald, H., 1961, Geol. Surv., Canada, Bull. 74, p. 12.

Middle Jurassic, about 19 miles downstream from mouth of Bell River, northwest shore Porcupine River, Yukon.

*Arctoceras* cf. *blomstrandii* (Lindstrom)

Fig. specs. 14294, 14304.

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 8, pl. 3, figs. 4, 5.

"Toad-Grayling" Formation and Sulphur Mountain Member, Spray River Formation, Lower Triassic, Needham Creek, 2 miles west of junction with Graham River, Halfway River area, British Columbia and Mystery Lake, Miette area, Alberta.

*Arctoceras oebergi* (Mojsisovics)

Hypotypes 14064-14071

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 68, pl. 15, figs. 1-5; pl. 16, figs. 2-4.

Blind Fiord Formation, Lower Triassic, between Hare and Otto Fiords, 5 miles northwest of entrance to Hare Fiord, west coast of Ellesmere Island, Arctic.

= *Arctoceras blomstrandii*, Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 8, pl. 3, figs. 6a, b [14069], c [14065].*Arctosirenites canadensis* Tozer

Holotype 14136; paratypes 14119-14135, 14137-14140

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 82, pl. 24, figs. 1-5; pl. 25, figs. 1-11.

Blaa Mountain Formation, Upper Triassic, cliffs southeast side of Buchanan Lake, Axel Heiberg Island, Arctic.

*Arctosirenites canadensis* Tozer

Hypotypes 14312, 14313

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 16, pl. 7, figs. 2a, b, 3a, b.

Upper Triassic, "Mount Kindle", mile-post 427, Alaska Highway, British Columbia.

*Arctosirenites* sp. indet.

Fig. specs. 14141, 14142

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 84, pl. 24, figs. 6a, b.

Blaa Mountain and Schei Point Formations, Upper Triassic, Buchanan Lake, Axel Heiberg Island and southwest limb Goose Point anticline, Bjorne Peninsula, Ellesmere Island, Arctic.

*Arietites* sp. indet.

Fig. spec. 11222

Frebald, H., 1951, Geol. Surv., Canada, Bull. 18, p. 4, pl. 3, figs. 2a, b.

Lower Jurassic, 1,000 yards from mouth of Spruce Lake Creek, Tyaughton Lake area, British Columbia.



*Arietites* sensu lato gen. et sp. indet.

Fig. specs. 14618-14621

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 13, pl. 1, figs. 1-3a, b.

Lower Jurassic, near head of second northern tributary to Rat River, Richardson Mountains, District of Mackenzie [14618]; north side of Marie Bay 11 miles west of its head, Melville Island; and southern part of central Borden Island, Arctic [14620].

*Arkelloceras mclearni* Frebold

Holotype 13410; paratypes 13411-13415

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 11, pl. 12, figs. 1-3; pl. 13, figs. 1-3.

Wilkie Point Formation, Middle Jurassic, 10 miles north of Cape Canning, east side of Intrepid Inlet, Prince Patrick Island, Arctic.

*Arkelloceras mclearni* Frebold

Hypotype 15142

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 8, pl. 4, figs. 3a, b.

Wilkie Point Formation, Middle Jurassic, 11 and 12 miles north of Cape Canning, east side of Intrepid Inlet, Prince Patrick Island, Arctic.

*Arkelloceras tozeri* Frebold

Holotype 13404; paratypes 13405-13409

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 10, pl. 9, figs. 1-3; pl. 10, figs. 1a-c, 2a, b; pl. 11, figs. 1a-c, 2a, b.

Wilkie Point Formation, Middle Jurassic, 10 miles north of Cape Canning, east side of Intrepid Inlet, Prince Patrick Island, Arctic.

*Arkelloceras tozeri* Frebold

Hypotypes 15140, 15141, 15143, 15241

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 8, pl. 3, fig. 1; pl. 4, figs. 1, 2a, b; pl. 5, figs. 1a-c.

Wilkie Point Formation, Middle Jurassic, 11 and 12 miles north of Cape Canning, east side of Intrepid Inlet, Prince Patrick Island, Arctic.

*Arnioceras* n. sp. near *humboldti* Hyatt

Syntypes 9641, a, b

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 46, pl. 6, figs. 5-7.

Laberge Group, Jurassic, east side of western branch of Mandanna valley near its southern end, Laberge area, Yukon.

*Arnioceras?* sp. indet. 1

Fig. specs. 12868, 12869

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 45, pl. 14, fig. 1; pl. 15, fig. 1.

Fernie Group, Lower Jurassic, Cuthead Creek 17 miles north of Minnewanka Park Warden station, Alberta.

*Arnioceras (Melanhippites)* sp. indet.

Fig. specs. 13712, 13713

Frebold, H., 1959, Geol. Surv., Canada, Bull. 49, p. 6, pl. 1, figs. 1, 2.

Lower Jurassic, elevations 3,700 and 4,100 feet, west side of Archibald Creek, Salmo area, British Columbia.

*Arnioceras* sp. indet.

Fig. specs. 13714, 13715, 13731 [missing]

Frebold, H., 1959, Geol. Surv., Canada, Bull. 49, p. 6, pl. 1, figs. 3, 4a, b; pl. 4, fig. 2.

Lower Jurassic, coquina bed on ridge northeast of Parks station, Salmo area and west of Independence Creek, Caribou Creek area, 6 miles northeast of Burton, British Columbia.

*Arniotites kwakiutlanus* Crickmay

Hypotypes 15270-15279

Frebald, H. and Little, H.W., 1962, Geol. Surv., Canada, Bull. 81, p. 15, pl. 1, figs. 1-10.

Archibald Formation, Lower Jurassic, Query Creek road 0.9 mile south of Highway 3A and top of ridge between Archibald and Divide Creeks between 4,825 and 4,774 feet elevation, 4,000 feet east of Archibald Creek and 1.5 miles due south of Highway 3A, Salmo area, British Columbia.

*Arniotites vancouverensis* see *Celtites* (?) *vancouverensis**Arniotites* sp. uncertain

Fig. spec. 4740

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 147, pl. 19, fig. 3.

'Triassic' [Jurassic], Robson Island in Forward Inlet, British Columbia.

*Arniotites* or *Celtites* sp. uncertain

Fig. spec. 4747

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 147, pl. 19, fig. 4.

'Triassic' [Jurassic], Forward Inlet, British Columbia.

*Asklepioceras delicatum* McLearn

Holotype 9550

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 26, App., p. 2, pl. 4, figs. 6, 7.

'Dark siltstones', Middle Triassic, 6 miles west of Mount Withrow, Sikanni Chief River, British Columbia.

*Asklepioceras glaciense* McLearn

Holotype 8808

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 4, p. 51, pl. 2, fig. 11.

1947, Geol. Surv., Canada, Paper 47-24, p. 26, App., pl. 6, fig. 10.

Schooler Creek Formation, Triassic, East Glacier Spur, Peace River Foothills, British Columbia.

*Asklepioceras glaciense* McLearn

Hypotype 9536

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 26, App., pl. 6, figs. 11-13.

'Grey beds', Triassic, west slope East Glacier Spur, Peace River Foothills, British Columbia.

*Asklepioceras laurenci* McLearn

Holotype 8805

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 4, p. 51, pl. 2, figs. 1, 2.

1947, Geol. Surv., Canada, Paper 47-24, p. 26, App., pl. 6, figs. 8, 9.

Schooler Creek Formation, Triassic, East Glacier Spur, Peace River Foothills, British Columbia.

*Asklepioceras laurenci* McLearn

Hypotypes 9533-9535

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 26, App., pl. 6, figs. 4-7.

'Grey beds', Triassic, west slope East Glacier Spur, Peace River Foothills, British Columbia.

*Asklepioceras mahaffii* McLearn

Holotype 9551; paratype 9552

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 26, App., p. 2, pl. 6, figs. 1-3.

'Grey beds', Triassic, west slope East Glacier Spur, Peace River Foothills, British Columbia.

*Asteroceras cf. stellare* Sowerby

Hypotype 11211

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 11, pl. 13, figs. 2a, b.

Lower Jurassic, 2 miles above Spruce Lake Creek, Tyauthton Creek, British Columbia.

*Baculites chicoensis* Trask

Hypotype 5796a

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 96, pl. 26, figs. 1-4.

Cedar District Formation, Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Baculites compressus* var. *ornatus* Robinson

Holotype 9070; paratype 9071

Robinson, H.R., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 51, pl. 1, figs. 1-4.

Bearpaw Formation, Upper Cretaceous, south side Little Boxelder Coulee, sec. 16, tp. 11, rge. 29, W. 3rd mer., Saskatchewan.

*Baculites crickmayi* Williams

Syntype 9665

Williams, M.Y., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 3, pl. 1, fig. 1; pl. 2, figs. 1-3.

Bearpaw Formation, Upper Cretaceous, north side of Cypress Hills, Alberta.

*Baculites mclearni* Landes

Holotype 9366; paratype 9366a

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 165, pl. 7, figs. 1-3.

Pakowki Formation, Upper Cretaceous, Bear Gulch, NW.  $\frac{1}{4}$  sec. 20, tp. 1, rge. 9, W. 4th mer., Alberta.

*Baculites minerensis* Landes

Holotype 9365

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 166, pl. 6, figs. 7, 8.

Pakowki Formation, Upper Cretaceous, small coulee about 1 mile east of Miners Coulee, NW.  $\frac{1}{4}$  sec. 20, tp. 1, rge. 9, W. 4th mer., Alberta.

*Baculites natosini* Robinson

Holotype 9119

Robinson, H.R., 1945, Trans. Roy. Soc. Can., ser. 3, vol. 39, sec. 4, p. 52, pl. 1, figs. 5, 6.

Bearpaw Formation, Upper Cretaceous, McShane Creek, sec. 13, tp. 9, rge. 27, W. 3rd mer., Saskatchewan.

*Baculites occidentalis* Meek

Hypotypes 5952, a, b

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 98, pl. 28, fig. 1 [5952a].

Lambert Formation, Upper Cretaceous, Hornby Island, Strait of Georgia, British Columbia.

*Badiotites carlottensis* Whiteaves

Holotype 4748

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 148, pl. 19, fig. 5.

Triassic, south side Houston Stewart Channel nearly opposite Rose Harbour, Queen Charlotte Islands, British Columbia.

*Beudanticeras affine* see *Desmoceras affine*

*Beudanticeras cf. affine* (Whiteaves)

Hypotype 9707

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 5, fig. 6.

Moosebar Formation, Lower Cretaceous, Cascade Creek, north of Chinaman Lake, Alberta.

*Beudanticeras cf. glabrum* (Whiteaves)

Hypotype 5030

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 4, figs. 2, 3.

Clearwater Formation, Lower Cretaceous, Peace River 25 miles below Cadotte River, Alberta.

*Beyrichites deleeni* McLearn

Holotype 6479; paratype 6480

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 2, pl. 1, fig. 5; pl. 2, fig. 3.

1948, *ibid.*, 2nd Edition, p. 26, pl. 1, fig. 5; pl. 2, fig. 3.

Toad Formation, Middle Triassic, talus at mile-post 376 + 450 feet, Alaska Highway, Tetsa River Valley, British Columbia.

*Bostrychoceras columbianum* see *Heteroceras conradi*

*Bostrychoceras elongatum* (Whiteaves)

Hypotype 10062, 10067

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 105, pl. 28, fig. 4.

Haslam Formation, Upper Cretaceous, Elkhorn Creek, Vancouver Island, British Columbia.

See *Heteroceras conradi* and *H. elongatum*

*Buchiceras? cornutum* Whiteaves

Syntypes 5039 [8008], d

Whiteaves, J.F., 1885, Trans. Roy. Soc. Can., vol. 2, sec. 4, p. 239.

Lower Cretaceous, near Fort St. John, Peace River, British Columbia.

=*Neogastrolites cornutum*, McLearn, F.H., 1931, *ibid.*, ser. 3, vol. 25, sec. 4, p. 7.

=*Neogastrolites cornutus*, McLearn, F.H., 1933, *ibid.*, ser. 3, vol. 27, p. 22, pl. 2, fig. 4 [lectotype 5039d].

=*Neogastrolites selwyni*, McLearn, F.H., 1933, *ibid.*, p. 24, pl. 2, fig. 3; pl. 3, fig. 1 [holotype 5039].

Reese, J.B., and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 58, pl. 11, figs. 16, 20.

*Buchites hilaris* var. *dawsoni* McLearn

Holotype 8825

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 4, p. 49, pl. 1, figs. 4, 5.

Schooler Creek [Pardonet] Formation, Upper Triassic, talus block west side of Juvavites Gully between XI and XII, Pardonet Hill, Peace River Foothills, British Columbia.

=*Thisbites dawsoni*, McLearn, F.H., 1960, Geol. Surv., Canada, Mem. 311, p. 63, pl. 6, figs. 1a, b.

*Buckmaniceras buckmani* Crickmay

Holotype 9674

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 62, pl. 20, figs. 1-4.

Upper Jurassic [Mysterious Creek Formation], elevation 3,100 feet, Billhook Creek, 4 miles west of Harrison Lake, British Columbia.

*Cadoceras brooksi* Crickmay

Holotype 9679

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 57, pl. 16, figs. 3-5.

Upper Jurassic [Mysterious Creek Formation], Deer Creek  $\frac{1}{4}$  mile from mouth, west side of Harrison Lake, British Columbia.

*Cadoceras crassum* Madsen

Hypotypes 15124, 15125

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 17, pl. 14, fig. 2; pl. 17, fig. 1.

Middle or Upper Jurassic, about 32 miles northwest of Aklavik and about 19 miles downstream from mouth of Bell River, northwest shore of Porcupine River, Yukon.

*Cadoceras* cf. *C. freboldi* Spath

Plastotype 15123

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 18, pl. 15, figs. 1a, b.

Upper Jurassic, Porcupine River, Yukon.

*Cadoceras lillei* Frebold

Holotype 12902

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 60, pl. 34, figs. 1a, b; pl. 35, fig. 1.

Femie Group, Upper Jurassic, upper part of *Corbula munda* beds, south slope Grassy Mountain, north of Blairmore, Alberta.

=*Paracephalites glabrescens*, Frebold, H., 1963, *ibid.*, Bull. 93, p. 9.

*Cadoceras muelleri* Imlay

Hypotype 12903

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 60, pl. 36, fig. 1; pl. 37, fig. 1.

Femie Group, Upper Jurassic, upper part of *Corbula munda* beds, south slope Grassy Mountain, north of Blairmore, Alberta.

=*Paracephalites hashimotoi*, Frebold, H., 1963, *ibid.*, Bull. 93, p. 11.

*Cadoceras?* aff. *C. pseudishmae* Spath

Hypotype 15138

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 20, pl. 16, fig. 1.

Middle (?) Jurassic, about 19 miles downstream from mouth Bell River, northwest shore of Porcupine River, Yukon.

*Cadoceras* sp. indet. 2

Fig. spec. 12904

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 62, pl. 38, fig. 3.

Femie Group, Upper Jurassic, *Corbula munda* beds, south slope Grassy Mountain, north of Blairmore, Alberta.

=*Paracephalites hashimotoi*, Frebold, H., 1963, *ibid.*, Bull. 93, p. 11.

*Cadoceras* sp. indet.

Fig. specs. 15126, 15127

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, pp. 19, 21, pl. 17, fig. 3; pl. 18, fig. 1; pl. 19, figs. 1a, b.

Upper (?) Jurassic, about 32 miles northwest of Aklavik, District of Mackenzie and loose in river bed, mid-eastern part of Cornwall Island, Arctic.

*Cardioceras* (*Scarburgiceras*) *alphacordatum* Spath

Hypotypes 13892, 13894

Frebold, H. et al., 1959, Geol. Surv., Canada, Bull. 53, p. 20, pl. 1, figs. 1a, b; pl. 2, fig. 1.

Femie Group, Upper Jurassic, Rocky River, Miette map-area, Alberta.

*Cardioceras canadense* Whiteaves

Holotype 7437 a-d

Whiteaves, J.F., 1903, *Ottawa Naturalist*, vol. 17, No. 4, p. 65, figs. 1, a.Frebold, H., 1957, *Geol. Surv., Canada, Mem. 287*, p. 62, pl. 34, figs. 2a, b.

Jurassic, 2 ¼ miles N 70° E of Fernie near Morrissey(?), British Columbia.

*Cardioceras mountjoyi* Frebold

Holotype 13895; paratypes 13896-13898

Frebold, H. et al., 1959, *Geol. Surv., Canada, Bull. 53*, p. 22, pl. 3, figs. 1-3; pl. 4, figs. 1a, b.

Fernie Group, Upper Jurassic, Rocky River ½ mile south of Nashan Creek, Miette map-area, Alberta.

*Cardioceras mountjoyi* var. *robusta* Frebold

Holotype 13899

Frebold, H. et al., 1959, *Geol. Surv., Canada, Bull. 53*, p. 23, pl. 4, figs. 2a, b.

Fernie Group, Upper Jurassic, Rocky River opposite Makwa ridge, Miette map-area, Alberta.

*Cardioceras* (sensu lato) sp. indet. 2 and 3.

Fig. specs. 13903, 13893

Frebold, H. et al., 1959, *Geol. Surv., Canada, Bull. 53*, p. 27, pl. 1, fig. 2 [13893]; pl. 8, fig. 2 [13903].

Fernie Group, Upper Jurassic, Cuthead Creek road 19 miles north of Minnewanka Park Warden cabin, Banff, Alberta.

*Cardioceras* (*Scarburgiceras*?) sp. indet.

Fig. specs. 13901, 13902, 13907

Frebold, H. et al., 1959, *Geol. Surv., Canada, Bull. 53*, p. 24, pl. 7, fig. 2; pl. 8, figs. 1a, b; pl. 9, fig. 1.

Fernie Group, Upper Jurassic, Rocky River west of Makwa ridge, Miette map-area, Alberta.

*Cardioceras* (*Scarburgiceras*) sp. indet. aff. *C. mirum* Arkell

Fig. spec. 15128

Frebold, H., 1960, *Geol. Surv., Canada, Bull. 74*, p. 22, pl. 18, fig. 2.

Savik(?) Formation, Upper Jurassic, 3 miles southwest of Buchanan Lake, Axel Heiberg Island, Arctic.

*Catacoeloceras polare* (Frebold)

Hypotypes 14644, 14645

Frebold, H., 1960, *Geol. Surv., Canada, Bull. 59*, p. 18, pl. 5, figs. 7a, b, 8.

Lower Jurassic, Fosheim Peninsula east of Eureka weather station, Ellesmere Island, Arctic.

*Celtites*(?) *vancouverensis* Whiteaves

Syntypes 4735, b

Whiteaves, J.F., 1887, *Geol. Surv., Canada, Ann. Rept. 1886*, p. 110B.

Triassic, Crescent Inlet, Moresby Island, Queen Charlotte Islands, British Columbia.

= *Arniotites vancouverensis*, Whiteaves, J.F., 1889, *ibid.*, *Contr. Can. Pal.*, vol. 1, pt. 2, p. 146, pl. 19, fig. 2 [the type 4735].'*Ceratites*' *hayesi* McLeam

Holotype 6478

McLeam F.H.,

1946, *Geol. Surv., Canada, Paper 46-1, App. II*, p. 2, pl. 1, fig. 2.1948, *ibid.*, 2nd Edition, p. 35, pl. 1, fig. 2.

Middle Triassic, north side Alaska Highway east of mile-post 378, Tetsa Valley, British Columbia.

*"Ceratites" hayesi* McLearn

Hypotype 14232

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 12, pl. 5, figs. 1a-c.  
Toad Formation, Middle Triassic, Liard River 8 miles southwest of mouth of Toad River,  
British Columbia.

*'Ceratites' hayesi* var. *angulatus* McLearn

Holotype 6476

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 2.

1948, *ibid.*, 2nd Edition, p. 35.

Middle Triassic, talus east of mile-post 378, Alaska Highway, Cameron Hill, Tetsa Valley,  
British Columbia.

*'Ceratites' hayesi* var. *pinguis* McLearn

Holotype 6477

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 2.

1948, *ibid.*, 2nd Edition, p. 35.

Middle Triassic, talus north side Alaska Highway east of mile-post 378, Tetsa Valley,  
British Columbia.

*Chondroceras allani* (McLearn) var.

Hypotype 12893

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 53, pl. 27, figs. 2a, b.  
Fernie Group, Middle Jurassic, Ribbon Creek, Alberta.

*Chondroceras marshalli* (McLearn) var.

Hypotypes 12891, 12892

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 54, pl. 25, figs. 3a, b; pl. 26,  
figs. 2a, b.

Fernie Group, Middle Jurassic, Ribbon Creek, Alberta.

*Choristoceras suttonensis* Clapp and Shimer

Holotype 7813

Clapp, C.H. and Shimer, H.W., 1911, Proc. Boston Soc. Natural Hist., vol. 34, No. 12,  
p. 434, pl. 40, figs. 4, 6.

Sutton Formation, Upper Triassic, Lake Cowichan, Vancouver Island, British Columbia.

*Choristoceras?* sp.

Fig. spec. 13488

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 72, pl. 19, figs. 3a, b.

Pardonet Formation, Upper Triassic, between XI and XII on west side of Juvavites Gully,  
Pardonet Hill, Peace River Foothills, British Columbia.

*Coeloceras* aff. *desplacei* (d'Orbigny)

Hypotypes 13365, 13368

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 4, pl. 2, fig. 5; pl. 3, fig. 1,  
2a, b.

Wilkie Point Formation, Lower Jurassic, 3¼ miles northeast of Mould Bay weather station,  
Prince Patrick Island, Arctic.

*Coeloceras spinatum* Frebold

Holotype 13361; paratypes 13362-13364

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 3, pl. 2, figs. 1-4.

Wilkie Point Formation, Lower Jurassic, 3¼ miles northeast of Mould Bay weather station,  
Prince Patrick Island, Arctic.

*Coroniceras bisulcatum* (Bruguière)

Hypotypes 11240, 11242-11244

Frebald, H., 1951, Geol. Surv., Canada, Bull. 18, p. 9, pl. 6, fig. 3 [11242]; pl. 9, fig. 11 [11244]; pl. 10, fig. 1 [11244]; pl. 12, fig. 1 [11240]; pl. 13, fig. 1 [11243].

Lower Jurassic, 2½ miles east and about ½ mile north of northwest corner of lake and elevation 6,680 feet on Last Creek tributary, Tyaughton Lake area, British Columbia.

*Cranocephalites borealis* (Spath)

Hypotypes 15101-15104

Frebald, H., 1961, Geol. Surv., Canada, Bull. 74, p. 12, pl. 1, figs. 1-4.

Middle Jurassic, loose at base of and about 120-130 yards upstream from 100-foot cliff, south side, west end Bug Creek Canyon, Aklavik Range, District of Mackenzie.

*Cranocephalites vulgaris* Spath

Hypotypes 13398, 13399, 13401

Frebald, H., 1958, Geol. Surv., Canada, Bull. 41, p. 8, pl. 7, figs. 1a-c, 2; pl. 8, figs. 1a-c.

Wilkie Point Formation, Middle or Upper Jurassic, talus 3 miles S 30° E of Mould Bay weather station, Prince Patrick Island, Arctic.

*Cranocephalites warreni* Frebold

Holotype 15105; paratypes 15135, 15136

Frebald, H., 1961, Geol. Surv., Canada, Bull. 74, p. 14, pl. 2, figs. 1a, b, 2a, b, 4.

Middle Jurassic, about 120-130 yards downstream from and loose at base of 100-foot cliff, south side, west end Bug Creek Canyon, Aklavik Range, District of Mackenzie.

*Cranocephalites?* sp. indet.

Fig. spec. 15106

Frebald, H., 1961, Geol. Surv., Canada, Bull. 74, p. 15.

Middle Jurassic, near headwaters of Little Bell River, about 8 miles north of Summit Lake, Yukon.

*Cyclocektites* cf. *arduini* (Mojsisovics)

Hypotype 17015

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, figs. 16a, b.

Sutton Formation, Upper Triassic, Lake Cowichan, Vancouver Island, British Columbia.

*Cyrtopleurites magnificus* McLeam

Holotype 9414

McLeam, F.H.,

1939, Trans. Roy. Soc. Can., ser. 3, vol. 33, sec. 4, p. 55, pl. 1, fig. 5.

1961, Geol. Surv., Canada, Mem. 311, p. 48, pl. 4, figs. 1a, b.

Upper Triassic [Pardonet Formation], west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Cyrtopleurites magnificus* McLeam

Hypotype 12578

McLeam, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 48, pl. 4, fig. 2.

Pardonet Formation, Upper Triassic, talus block in Tepee Rocks Coulee, Peace River Foothills, British Columbia.

*Cyrtopleurites* sp.

Fig. specs. 12576, 12577

McLeam, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 47, pl. 3, figs. 4a, b, 5.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill and near IX about 50 feet east of Juvavites Gully, Peace River Foothills, British Columbia.



*Dactylioceras commune* (Sowerby)

Hypotypes 14641-14643

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 18, pl. 5, figs. 4-6.

Wilkie Point and Jaeger Formations, Lower Jurassic, southern peninsula, south coast of Borden Island and loose along Jaeger River, Cornwall Island, Arctic.

*Dactylioceras commune* (Sowerby) var. a

Hypotypes 13355, 13357-13360

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 2, pl. 1, figs. 2, 4-7.

Wilkie Point Formation, Lower Jurassic, 1 mile north and 3 miles southeast of Mould Bay weather station, Prince Patrick Island, Arctic.

*Dactylioceras commune* (Sowerby) var. a

Hypotype 13354

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 2, pl. 1, fig. 1.

Lower Jurassic, Whitby, England.

*Dactylioceras commune* (Sowerby) var. b

Hypotype 13356

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 3, pl. 1, figs. 3a, b.

Wilkie Point Formation, Lower Jurassic, 1 mile north of Mould Bay weather station, Prince Patrick Island, Arctic.

*Dactylioceras kanense* McLearn

Holotype 9051

McLearn, F.H.,

1930, Trans. Roy. Soc. Can., sec. 3, vol. 24, sec. 4, p. 4, pl. 1, fig. 2.

1932, *ibid.*, vol. 26, sec. 4, p. 59, pl. 3, fig. 5; pl. 4, figs. 1, 2.

Maude Formation, Lower Jurassic, Whiteaves Bay, Queen Charlotte Islands, British Columbia.

*Dactylioceras kanense* McLearn

Hypotypes 6484-6487

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 59, pl. 4, figs. 3-7, 9; pl. 5, figs. 6-9.

Maude Formation, Lower Jurassic, Whiteaves Bay, Queen Charlotte Islands, British Columbia.

*Dactylioceras cf. kanense* McLearn

Hypotype 6488

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 62, pl. 5, fig. 11.

Maude Formation, Lower Jurassic, Whiteaves Bay, Queen Charlotte Islands, British Columbia.

*Dactylioceras* sp. indet.

Fig. specs. 15285-15290

Frebold, H. and Little, H.W., 1962, Geol. Surv., Canada, Bull. 81, p. 19, pl. 3, figs. 6, 7; pl. 4, figs. 6-9.

Hall Formation, Lower Jurassic, road cut at Keystone Mine and loose on lower dump Arlington Mine, Salmo area, British Columbia.

*Daphnites (Silenticeras) hatae* McLearn

Holotype 9043

McLearn, F.H., 1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 16, pl. 1, fig. 3.

Schooler Creek Formation, Middle Triassic, Beattie Ledge, Peace River, British Columbia.

=*Silenticeras hatae*, McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 9, p. 128, pl. 1, fig. 12.

1947, Geol. Surv., Canada, Paper 47-24, App., pl. 5, figs. 6-8.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 5.*Daphnites (Phormedites?) stelcki* McLearn

Holotype 8832

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 4, p. 50, pl. 2, figs. 9, 10.

Schooler Creek [Pardonet] Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Hypisculites stelcki*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 109, pl. 18, figs. 9a, b.*Dawsonites canadensis* see *Trachyceras canadense**Daxatina (=Dawsonites) canadensis* (Whiteaves)

Hypotype 14234

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 14, pl. 6, figs. 12a, b.

Liard Formation, Middle Triassic, Tetsa River area, British Columbia.

*Defonticeras colnetti* McLearn

Holotype 9012

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 15, pl. 13, figs. 4, 5.

Yakoun Formation, Jurassic, Richardson Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Defonticeras defontii* McLearn

Holotype 9009

McLearn, F.H.,

1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 72, pl. 1, fig. 3.

1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 13, pl. 12, figs. 1-3.

Yakoun Formation, Jurassic, talus Richardson Bay, south side of Maude Island, Queen Charlotte Islands, British Columbia.

*Defonticeras ellsi* McLearn

Holotype 9013

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 16, pl. 13, figs. 2, 3; pl. 14, fig. 1.

Yakoun Formation, Jurassic, Richardson Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Defonticeras marchandi* McLearn

Holotype 9011

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 14, pl. 12, figs. 4, 5.

Yakoun Formation, Jurassic, talus Richardson Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Defonticeras maudense* McLearn

Holotype 9010

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 14, pl. 13, fig. 1; pl. 14, figs. 2, 3.

Yakoun Formation, Jurassic, talus Richardson Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Defonticeras oblatum* see *Ammonites loganians(?)* Form A

*Defonticeras?* sp.

Fig. spec. 9014

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 17, pl. 11, fig. 3.  
Yakoun Formation, Jurassic, Richardson Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Desmoceras affine* Whiteaves

Syntypes 5020, 5024

Whiteaves, J.F., 1893, Trans. Roy. Soc. Can., vol. 10, sec. 4, p. 113, pl. 8 [5020];  
pl. 11, figs. 1, a [5024].

Peace River Sandstone, Lower Cretaceous, Peace River 22 miles below and 25 miles above Battle River, Alberta.

=*Beudanticeras affine*, McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 4, fig. 1 [5020].

*Desmoceras affine* var. *glabrum* (Whiteaves)

Hypotype 5029

Whiteaves, J.F., 1893, Trans. Roy. Soc. Can., vol. 10, sec. 4, p. 115, pl. 9.

Peace River Sandstone, Lower Cretaceous, Peace River 20 miles below Cadotte River, Alberta.

See *Placenticeras glabrum*

*Desmoceras (Puzozia) dawsoni* see *Haploceras beudanti*

*Desmoceras (Puzozia) planulatum?* Sowerby var.

Hypotype 5996

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 282,  
pl. 36, fig. 2; pl. 37, fig. 2.

Cretaceous [Haida Formation], Maple Island, Queen Charlotte Islands, British Columbia.

*Didymites* sp.

Fig. spec. 14307

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 24, pl. 11, figs. 2a, b.

Pardonet Formation, Upper Triassic, tributary of Graham River, 10 miles southeast of Christina Falls, Halfway River area, British Columbia.

*Didymoceras whiteavesi* see *Anisoceras cooperi*

*Dimorphites pardonetiensis* (McLearn)

Hypotype 12602

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 92, pl. 16, figs. 1a-c.

Pardonet Formation, Upper Triassic, east of Cascades Creek, Pardonet Hill, British Columbia.

See *Juvavites (Dimorphites?) pardonetiensis*

*Diplomoceras notabile* Whiteaves

Holotype 10064

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 335,  
pl. 4, figs. 4, a, b.

Usher, J.L., 1952, *ibid.*, Bull. 21, p. 109, pl. 29, fig. 2.

Upper Cretaceous [Lambert Formation], northwest side Hornby Island, British Columbia.

*Diplomoceras notabile* Whiteaves

Hypotype 10065

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 109, pl. 30, fig. 1.

Lambert Formation, Upper Cretaceous, Hornby Island, between Shingle Spit and Savoie's Wharf, British Columbia.

*Diplomoceras(?) subcompressum* (Forbes)

Hypotype 10066

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 110, pl. 29, fig. 3.

Trent River Formation, Upper Cretaceous, Puntledge River, Vancouver Island, British Columbia.

*Discophyllites cf. ebneri* (Mojsisovics)

Hypotype 17014

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 16, pl. 7, figs. 6a, b.

Kunga Formation, Upper Triassic, west shore of Huston Inlet, Moresby Island, British Columbia.

*Discotropites cf. acutus* (Mojsisovics)

Hypotype 12596

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 74, pl. 8, figs. 8a, b.

Pardonet Formation, Upper Triassic, talus below Jewitt Spur, north bank Peace River, British Columbia.

*Discotropites cf. mojsvarensis* Smith

Hypotypes 14237, 14238

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, figs. 6a, b, 7.

Upper Triassic, "Mount Kindle", mile-post 427, Alaska Highway, and King Salmon Mountain, Tulsequah area, British Columbia.

*Discotropites sandlingensis* (Hauer)

Hypotype 12595

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 73, pl. 8, fig. 7.

Pardonet Formation, Upper Triassic, above Pine Creek on north bank of Peace River, British Columbia.

*Discotropites* sp.

Fig. spec. 14239

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, figs. 8a, b.

Upper Triassic, "Mount Kindle", mile-post 427, Alaska Highway, British Columbia.

*Distichites canadensis* see *Distichites loidli* var. *canadensis**Distichites cf. celticus* Mojsisovics

Hypotype 13492

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 69, pl. 21, fig. 5.

Pardonet Formation, Upper Triassic, west slope Black Bear Ridge, Peace River, British Columbia.

*Distichites gethingi* McLearn

Holotype 8849

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 8, p. 116, pl. 2, fig. 4.

1961, Geol. Surv., Canada, Mem. 311, p. 68, pl. 6, figs. 7a, b.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 22, pl. 10, figs. 5a, b.

Pardonet Formation, Upper Triassic, west slope Black Bear Ridge, Peace River Foothills, British Columbia.

*Distichites cf. hacqueti* Mojsisovics

Hypotype 12592

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 72, pl. 7, fig. 2.

Pardonet Formation, Upper Triassic, talus west slope of Black Bear Ridge, Peace River Foothills, British Columbia.

*Distichites loidli* var. *canadensis* McLearn

Holotype 8816

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 4, p. 50, pl. 2, fig. 6.  
Schooler Creek [Pardonet] Formation, Upper Triassic, west slope Black Bear Ridge,  
Peace River Foothills, British Columbia.

=*Distichites canadensis*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 70,  
pl. 7, fig. 3.

*Distichites* cf. *megacanthus* Mojsisovics

Hypotype 12590

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 69, pl. 7, figs. 4a, b.  
Pardonet Formation, Upper Triassic, west slope Black Bear Ridge, Peace River Foothills,  
British Columbia.

*Distichites* cf. *mesacanthus* Diener

Hypotype 12591

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 69, pl. 7, fig. 5.  
Pardonet Formation, Upper Triassic, above XX, west end Pardonet Hill, Peace River  
Foothills, British Columbia.

*Distichites palliseri* McLearn

Holotype 9505

McLearn, F.H.,

1947, Geol. Surv., Canada, Paper 47-14, App., p. 2, pl. 5, figs. 10, 11.  
1961, *ibid.*, Mem. 311, p. 71, pl. 7, figs. 1a-c.

Pardonet Formation, Upper Triassic, west slope Black Bear Ridge, Peace River Foothills,  
British Columbia.

*Dorsoplanites* sp. indet. ex gr. *D. panderi* Michalski

Fig. spec. 15133

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 23, pl. 17, fig. 2.  
Deer Bay Formation, Upper Jurassic, Reptile Creek, 14 miles north of Eureka weather  
station, Slidre Fiord area, Ellesmere Island, Arctic.

*Dorsoplanites* sp. indet.

Fig. spec. 15134

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 23, pl. 20, fig. 1.  
Deer Bay Formation, Upper Jurassic, Reptile Creek, 14 miles north of Eureka weather  
station, Slidre Fiord area, Ellesmere Island, Arctic.

*Drepanites hyatti rutherfordi* (McLearn)

Hypotypes 12575, 13493

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 46, pl. 3, figs. 10a, b; pl. 21,  
fig. 6.

Pardonet Formation, Upper Triassic, just west of south face of McLay Spur, Peace River  
Foothills, British Columbia.

*Drepanites hyatti rutherfordi* (McLearn)

Hypotype 14248

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 22, pl. 10, figs. 1a, b.  
Pardonet Formation, Upper Triassic, Halfway River area, lat. 56°28'N, long. 122°53'W,  
British Columbia.

*Drepanites rutherfordi* McLearn

Holotype 8817

McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 7, p. 98, pl. 1, fig. 13.

Schooler Creek [Pardonet] Formation, Upper Triassic, just west of south face of McLay Spur, Peace River Foothills, British Columbia.

= *Drepanites hyatti rutherfordi*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 46, pl. 3, fig. 11.*Dunveganoceras cf. albertense* Warren

Hypotype 9819

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-27, p. 3, pl. 5, fig. 2.

Kaskapau Formation, Upper Cretaceous, north side Peace River, Alberta.

*Echioceras sensu lato* sp. indet.

Fig. specs. 14638-14640

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 17, pl. 5, figs. 1-3.

Lower Jurassic, south side Bug Creek Canyon, Aklavik Range, District of Mackenzie.

*Epigonoceras epigonum* (Kossmat)

Hypotypes 10015-10017

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 55, pl. 2, figs. 6, 7; pl. 3, fig. 1.

Haslam Formation, Upper Cretaceous, Brannan Creek, Vancouver Island, British Columbia.

*Episculites browni* see *Isculites browni**Episculites corpulentus* see *Isculites corpulentus**Episculites ornatus* see *Isculites ornatus**Episculites teres* see *Isculites teres**Erycites cf. E. howelli* (White)

Hypotype 15139

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 7, pl. 5, fig. 2.

Middle Jurassic, about 12 miles west-southwest of south end of Bonny Lake, on south bank of second southerly confluent of Johnston Creek, south of Bonny Lake, Yukon.

*Euflemingites romunduri* Tozer

Holotype 14051; paratypes 14049, 14050, 14191-14194

Tozer, E.T.,

1961, Geol. Surv., Canada, Mem. 316, p. 51, pl. 12, figs. 2-5.

1962, *ibid.*, Paper 62-19, p. 6, pl. 3, figs. 7a, b [14051], c [14191].

Blind Fiord Formation, Lower Triassic, between Hare and Otto Fiords, 5 miles northwest of entrance to Hare Fiord, west coast Ellesmere Island, Arctic.

*Eupachydiscus haradai usheri* see *Pachydiscus haradai**Fanninoceras bodegae* McLearn

Holotype 6518

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 80, pl. 9, figs. 7-9.

Maude Formation, Lower Jurassic, Ellis Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Fanninoceras carlottense* see *Sphenodiscus requienianus?*

*Fanninoceras dolmagii* McLearn

Holotype 6519

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 75, pl. 5, figs. 4, 5.

Maude Formation(?), Lower Jurassic, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Fanninoceras fannini* McLearn

Holotype 9054

McLearn, F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 4, pl. 1, fig. 3.

1932, *ibid.*, vol. 26, sec. 4, p. 72, pl. 8, figs. 1-3.

Maude Formation, Lower Jurassic, Ells Bay, south side of Maude Island, Queen Charlotte Islands, British Columbia.

*Fanninoceras fannini* McLearn

Hypotypes 6493-6495

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 72, pl. 7, figs. 7, 8; pl. 8, figs. 4-8.

Maude Formation, Lower Jurassic, Ells Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Fanninoceras kunea* see *Schloenbachia propinqua*

*Fanninoceras kunea* McLearn

Hypotype 6670

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 77.

Maude Formation, Lower Jurassic, Ells Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Fanninoceras kunea* var. *crassum* McLearn

Holotype 6496; paratype 6517

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 78, pl. 9, figs. 1-4.

Maude Formation, Lower Jurassic, Ells Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Fanninoceras kunea* var. *latum* McLearn

Holotype 9058

McLearn, F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 5, pl. 2, fig. 3.

1932, *ibid.*, vol. 24, sec. 4, p. 78, pl. 9, figs. 5, 6.

Maude Formation, Lower Jurassic, Ells Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Fanninoceras lowrii* McLearn

Holotype 9055

McLearn F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 5, pl. 1, fig. 6.

1932, *ibid.*, vol. 26, sec. 4, p. 79, pl. 9, figs. 10, 11.

Maude Formation(?), Lower Jurassic, Ells Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Flemingites?* sp. indet.

Fig. specs. 14176, 14177

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 50, pl. 12, figs. 1a-c.

Blind Fiord Formation, Lower Triassic, between Hare and Otto Fiords, 5 miles northwest of entrance to Hare Fiord, west coast of Ellesmere Island, Arctic.

*Frechites kindli* McLearn

Holotype 6693

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 4, pl. 4, fig. 4.

1948, *ibid.*, 2nd Edition, p. 34, pl. 4, fig. 4.

Toad Formation, Middle Triassic, Four Mile Creek, branch of Muskwa River, British Columbia.

*Frechites* sp.

Fig. spec. 14189

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 33, pl. 22, figs. 4a, b.

Schei Point Formation, Middle Triassic, north summit of Exmouth Island, Arctic.

*Frogdenites?* cf. *profectus* Buckman

Hypotype 9015

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 18, pl. 12, fig. 6.

Yakoun Formation, Middle Jurassic, Richardson Bay, south side Maude Island, Queen Charlotte Islands, British Columbia.

*Gastrolites allani* McLearn

Holotype 6337

McLearn, F.H.,

1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 5, pl. 1, fig. 10.

1933, *ibid.*, vol. 27, sec. 4, p. 18, pl. 1, figs. 6-8.

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 56, pl. 8, figs. 10-12.

Imlay, R.W., 1961, *ibid.*, Prof. Paper 335, p. 62, pl. 16, figs. 9, 10.

Peace River Formation, Lower Cretaceous, 20 miles below mouth of Cadotte River, Peace River, British Columbia.

*Gastrolites anguinus* McLearn

Holotype 6338

McLearn, F.H.,

1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 5, pl. 1, fig. 11.

1933, *ibid.*, vol. 27, sec. 4, p. 20, pl. 2, figs. 1, 2.

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 56, pl. 8, figs. 17, 18.

Imlay, R.W., 1961, *ibid.*, Prof. Paper 335, p. 62, pl. 16, figs. 7, 8.

Peace River Formation, Lower Cretaceous, 8 miles below mouth Cadotte River, Peace River, British Columbia.

*Gastrolites canadensis* see *Hoplites canadensis**Gastrolites canadensis* (Whiteaves) var.

Hypotype 7428

McLearn, F.H., 1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 16, pl. 1, figs. 1-3.

Lower Cretaceous [Peace River Formation], 5 or 6 miles below mouth of Cadotte River, Peace River, British Columbia.

*Gastrolites kingi* McLearn

Holotype 6340

McLearn, F.H.,

1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 5, pl. 1, fig. 9.

1933, *ibid.*, vol. 27, sec. 4, p. 19, pl. 3, figs. 4, 5.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 6, figs. 2, 3.

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 56, pl. 8, figs. 3, 4.

Imlay, R.W., 1961, *ibid.*, Prof. Paper 335, p. 61, pl. 17, figs. 22, 23.

Fort St. John Shale, Lower Cretaceous, south side Peace River Canyon just above mouth of Deep Creek, British Columbia.



Mollusca

*Gastrolites kingi* McLearn

Hypotypes 13678-13680

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 56, pl. 8, figs. 5-9, 13, 14.

Cadotte Member, Peace River Formation, Lower Cretaceous, Peace River opposite mouth of Cadotte River, NE. ¼ sec. 13, tp. 89, rge. 21, W 5th mer., Alberta.

*Gastrolites spiekeri* McLearn

Holotype 6339

McLearn, F.H.,

1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 5, pl. 2, fig. 2.

1933, *ibid.*, vol. 27, sec. 4, p. 21, pl. 3, figs. 2, 3.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 8, fig. 4.

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 56, pl. 9, figs. 1, 2.

Peace River Formation, Lower Cretaceous, 8 miles below mouth Cadotte River, Peace River, British Columbia.

=*Paragastrolites spiekeri*, Imlay, R.W., 1961, *ibid.*, Prof. Paper 335, p. 62, pl. 19, figs. 4, 5.

*Gastrolites stantoni* McLearn

Holotype 6336

McLearn, F.H.,

1931, Trans. Roy. Soc. Can., ser. 3, vol. 25, sec. 4, p. 5, pl. 1, fig. 4.

1933, *ibid.*, vol. 27, sec. 4, p. 17, pl. 1, figs. 9, 10.

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 56, pl. 8, figs. 15, 16.

Imlay, R.W., 1961, *ibid.*, Prof. Paper 335, p. 62, pl. 17, figs. 7, 8.

Peace River Formation, Lower Cretaceous, 15 miles below mouth of Cadotte River, west bank Peace River, British Columbia.

*Gaudryceras denmanense*, see *Ammonites jukesii* and *Lytoceras jukesii*

*Gaudryceras* sp.

Fig. spec. 10028

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 60.

Lambert Formation, Upper Cretaceous, Hornby Island between Shingle Spit and Savoie's wharf, British Columbia.

*Gleviceras?* sp. indet.

Fig. specs. 14636, 14637

Frebald, H., 1960, Geol. Surv., Canada, Bull. 59, p. 17, pl. 4, figs. 6a-c.

Lower Jurassic, about 2 miles south of Bug Lake and Bug Creek, Aklavik Range, District of Mackenzie.

*Goliathiceras* cf. *crassum* (Reeside)

Hypotype 13900

Frebald, H. et al., 1959, Geol. Surv., Canada, Bull. 53, p. 25, pl. 5, fig. 1; pl. 6, fig. 1; pl. 7, figs. 1a, b.

Fernie Group, Upper Jurassic, Rocky River, Miette map-area, Alberta.

*Goniatites* sp.

Fig. spec. 4294

Whiteaves, J.F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 245, pl. 31, fig. 5.

Upper Devonian, Hay River 40 miles above mouth, District of Mackenzie.

=*Manticoceras* aff. *M. sinuosum*, Miller, A.K., 1938, Geol. Soc. Amer., Sp. Paper 14, p. 116, pl. 27, figs. 6, 7.

*Gonionotites belli* see *Juvavites (Gonionotites) belli*

*Gonionotites clavatus* (McLearn)

Hypotype 12598

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 96, pl. 13, fig. 1.

Pardonet Formation, Upper Triassic, between XI and XII, Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

See *Juvavites clavatus*

*Gonionotites fuscus* (McLearn)

Hypotype 12603

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 99, pl. 15, figs. 1a, b.

Pardonet Formation, Upper Triassic, talus block west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

See *Juvavites (Gonionotites) fuscus*

*Gonionotites gethingi* see *Juvavites (Gonionotites) gethingi*

*Gonionotites* cf. *italicus* Gemmellaro

Hypotype 13483

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 94, pl. 20, fig. 3.

Pardonet Formation, Upper Triassic, at about XI, Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

*Gonionotites rarus* see *Juvavites (Gonionotites) rarus*

*Gonionotites* cf. *rarus* (McLearn)

Hypotype 13485

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 98, pl. 20, figs. 1a, b.

Pardonet Formation, Upper Triassic, at III east of Cascades Creek, Pardonet Hill, Peace River Foothills, British Columbia.

*Gonionotites spiekeri* see *Juvavites (Gonionotites) spiekeri*

*Grammoceras?* sp. indet.

Fig. specs. 14674-14676

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 23, pl. 12, figs. 5-7.

Lower Jurassic, east side Black Top Ridge, east of Eureka weather station, Fosheim Peninsula, Ellesmere Island, Arctic.

*Guembelites clavatus* (McLearn)

Hypotype 14247

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 20, pl. 9, figs. 7a, b.

Pardonet Formation, Upper Triassic, Pine River area, lat. 55°45'N, long. 122°52'W, British Columbia.

*Guembelites* sp.

Fig. spec. 12599

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 90, pl. 12, figs. 2a, b.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Guhsania bella* McLearn

Holotype 7710

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 98, pl. 25, fig. 1.

Hazelton Group, Middle Jurassic, talus, cliff about 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Guhsania ramata* McLearn

Holotype 7711

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 99, pl. 22, figs. 6, 7.

Hazelton Group, Middle Jurassic, talus, cliff about 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Gymnites hagi* McLearn

Holotype 6447

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 1, pl. 1, fig. 4.

1948, *ibid.*, 2nd Edition, p. 15, pl. 1, fig. 4.

Toad Formation, Middle Triassic, talus west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Gymnites hollandi* McLearn

Holotype 6448

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 3, pl. 6, fig. 1.

1948, *ibid.*, 2nd Edition, p. 16, pl. 6, fig. 1.

Toad Formation, Middle Triassic, 2 miles below mouth of Toad River, Liard River, British Columbia.

*Gymnotoceras beachi* McLearn

Holotype 6692

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 4, pl. 5, fig. 5.

1948, *ibid.*, 2nd Edition, p. 29, pl. 5, fig. 5.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 12, pl. 5, figs. 2a-c.

Toad Formation, Middle Triassic, about 8 miles south of mile-post 371, Alaska Highway, British Columbia.

*Gymnotoceras columbianum* McLearn

Holotype 6691

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 2, pl. 3, fig. 7.

1948, *ibid.*, 2nd Edition, p. 31, pl. 3, fig. 7.

Toad Formation, Middle Triassic, west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Gymnotoceras helle* McLearn

Holotype 9593; paratype 9592

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 32, pl. 10, fig. 7.

Toad Formation, Middle Triassic, talus, on Cameron Hill east of mile-post 378 and west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Gymnotoceras helle* McLearn

Hypotype 14233

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 12, pl. 5, figs. 3a-c.

Toad Formation, Middle Triassic, near mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Gymnotoceras ino* McLearn

Holotype 9594

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 33, Supp., p. 2.

Toad Formation, Middle Triassic, Cameron Hill east of mile-post 378, Alaska Highway, Tetsa River Valley, British Columbia.

*Gymnotoceras liardense* McLearn

Holotype 9485

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 4, pl. 5, fig. 3.

1948, *ibid.*, 2nd Edition, p. 30, pl. 5, fig. 3.

Toad Formation, Middle Triassic, Sheep Creek south of mile-post 363, Alaska Highway, British Columbia.

*Gymnotoceras moderatum* McLearn

Holotype 9596

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 34, pl. 10, fig. 10.

Toad Formation, Middle Triassic, west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Gymnotoceras varium* McLearn

Holotype 9595

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 33, Supp., p. 2, pl. 11, figs. 5, 6.

Toad Formation, Middle Triassic, west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Gymnotoceras wrighti* McLearn

Holotype 9484

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 4, pl. 5, fig. 4.

1948, *ibid.*, 2nd Edition, p. 32, pl. 5, fig. 4.

Toad Formation, Middle Triassic, talus on Cameron Hill east of mile-post 378, Alaska Highway, Tetsa River Valley, British Columbia.

*Gyrophioceras?* sp. indet.

Fig. spec. 15269

Frebold, H. and Little, H.W., 1962, Geol. Surv., Canada, Bull. 81, p. 14, pl. 1, fig. 12.

Archibald Formation, Lower Jurassic, road-cut Query Creek road 0.7 mile south of Highway 3A, Salmo area, British Columbia.

*Halorites* cf. *americanus* Hyatt

Hypotype 14262

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, figs. 17a, b.

Lewes River Group, Upper Triassic, near summit of Povoas Mountain, Laberge area, Yukon.

*Hamites cylindraceus*(?) Defrance

Hypotype 5799

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 113, pl. 14, figs. 2, a.

Upper Cretaceous [Cedar District Formation], Sucia Island, Washington, U.S.A.

=*Hamites obstrictus*, Whiteaves, J.F., 1903, *ibid.*, vol. 1, pt. 5, p. 334.=*Diplomoceras?* sp., Usher, J.L., 1952, *ibid.*, Bull. 21, p. 111.*Hamites*(?) *glaber* Whiteaves

Syntypes 4962, a, b

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 213, pl. 24, figs. 2 [4962], a, c [4962a], b [4962b].

Cretaceous, north shore Cumshewa Inlet, Queen Charlotte Islands, British Columbia.

Mollusca

*Hamites obstrictus* Jimbo

Hypotype 5958

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 334, pl. 44, fig. 3.

Usher, J.L., 1952, *ibid.*, Bull. 21, p. 100, pl. 26, fig. 7.

Upper Cretaceous [Lambert Formation], northwest Hornby Island, British Columbia.

*Hamites(?)* sp. undet.

Fig. spec. 4989

Whiteaves, J.F., 1876, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 1, p. 48, pl. 9, fig. 3.

Lower Cretaceous, Queen Charlotte Islands, British Columbia.

*Hannaoceras* sp.

Fig. spec. 12593

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 72, pl. 8, fig. 9.

Pardonet Formation, Upper Triassic, just west of south face of McLay Spur, Peace River, British Columbia.

*Hannaoceras* sp.

Fig. spec. 14236

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, figs. 5a, b.

Upper Triassic, Open Bay, Quadra Island, British Columbia.

*Haploceras beudanti* (Brongniart) Form A

Syntype 4969

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 205.

Cretaceous, Bear Skin Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

=*Desmoceras (Puzozia) dawsoni* var., Whiteaves, J.F., 1900, *ibid.*, vol. 1, pt. 4, p. 286.

*Haploceras beudanti* (Brongniart) Form B

Syntypes 4992, b-g

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 205, pl. 26, figs. 1, a [4992].

Cretaceous [Haida Formation], north shore Cumshewa Inlet, Queen Charlotte Islands, British Columbia.

=*Desmoceras (Puzozia) dawsoni*, Whiteaves, J.F., 1900, *ibid.*, vol. 1, pt. 4, p. 286, pl. 37, fig. 3.

*Haploceras cumshewaense* Whiteaves

Holotype 4973

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 208, pl. 24, fig. 1.

Cretaceous [Haida Formation], north shore Cumshewa Inlet, Queen Charlotte Islands, British Columbia.

*Haploceras planulatum* (Sowerby)

Hypotype 4974

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 207, pl. 28, fig. 1.

Cretaceous [Haida Formation], north shore Cumshewa Inlet, Queen Charlotte Islands, British Columbia.

*Harpoceras allifordense* McLearn

Holotype 9053

McLearn, F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 4, pl. 2, fig. 1.

1932, *ibid.*, vol. 26, sec. 4, p. 65, pl. 5, figs. 1-3.

Maude Formation, Lower Jurassic, Whiteaves Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Harpoceras* cf. *exaratum* Young and Bird

Hypotypes 12877, 12879, 12880

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 47, pl. 17, fig. 1; pl. 18, figs. 2, 3.

Ferne Group, Lower Jurassic, Canyon Creek, Moose Mountain area, Alberta.

*Harpoceras* aff. *exaratum* Young and Bird

Hypotype 13725

Frebold, H., 1959, Geol. Surv., Canada, Bull. 49, p. 7, pl. 3, fig. 1.

Elise Formation, Lower Jurassic, highway between Hall and Porto Rico, Nelson area, British Columbia.

*Harpoceras* cf. *exaratum* Young and Bird

Hypotype 14646

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 19, pl. 5, fig. 9.

Wilkie Point Formation, Lower Jurassic, southern peninsula, south coast of Borden Island, Arctic.

*Harpoceras* cf. *H. exaratum* Young and Bird

Hypotypes 15291-15297

Frebold, H. and Little, H.W., 1962, Geol. Surv., Canada, Bull. 81, p. 17, pl. 2, figs. 1-6; pl. 3, fig. 5.

Hall Formation, Lower Jurassic, a few yards northwest of and from road-cut on old mine road above administration building Arlington Mine, Salmo area, British Columbia.

*Harpoceras maurelli* McLearn

Holotype 9052

McLearn, F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 4, pl. 1, fig. 5.

1932, *ibid.*, vol. 26, sec. 4, p. 63, pl. 7, figs. 4-6.

Maude Formation, Lower Jurassic, Whiteaves Bay, Queen Charlotte Islands, British Columbia.

*Harpoceras propinquum* (Whiteaves)

Hypotypes 6490, 6491

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 66, pl. 6, figs. 1, 2; pl. 7, fig. 3.

Maude Formation, Lower Jurassic, Whiteaves Bay, Queen Charlotte Islands, British Columbia.

See *Schloenbachia propinqua**Harpoceras* sp.

Fig. spec. 6489

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 66, pl. 7, figs. 1, 2r

Maude Formation, Lower Jurassic, Whiteaves Bay, Queen Charlotte Islands, British Columbia.

*Harpoceras* sensu lato sp. indet.

Fig. specs. 13726-13729

Frebold, H., 1959, Geol. Surv., Canada, Bull. 49, p. 7, pl. 3, figs. 2-5.

Elise Formation, Lower Jurassic, highway between Hall and Porto Rico, Nelson area, British Columbia.

*Hauericeras gardeni* (Baily)

Hypotype 10029

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 61, pl. 5, figs. 1, 2.

Haslam Formation, Upper Cretaceous, Elkhorn Creek, Vancouver Island, British Columbia.

*Helictites decorus* McLearn

Holotype 8824

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 4, p. 49, pl. 2, figs. 4, 5.

1961, Geol. Surv., Canada, Mem. 311, p. 61, pl. 6, figs. 9a, b.

Schooler Creek [Pardonet] Formation, Upper Triassic, talus west slope Black Bear Ridge, Peace River Foothills, British Columbia.

*Helictites decorus* McLearn?

Hypotype 12586

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 63, pl. 5, figs. 5a, b.

Pardonet Formation, Upper Triassic, talus west slope Black Bear Ridge, Peace River Foothills, British Columbia.

*Helictites decorus* var. *obesus* McLearn

Holotype 8822

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 4, p. 50, pl. 1, fig. 12.

Pardonet Formation, Upper Triassic, west slope Black Bear Ridge, Peace River Foothills, British Columbia.

=*Helictites decorus*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 61, pl. 6, fig. 8.

*Helictites decorus* var. *transitionis* McLearn

Holotype 8823

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 4, p. 50, pl. 2, figs. 7, 8.

Pardonet Formation, Upper Triassic, west slope Black Bear Ridge, Peace River Foothills, British Columbia.

=*Helictites decorus*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 61, pl. 6, figs. 10a, b.

*Helictites* cf. *subgeniculatus* Mojsisovics

Hypotypes 12584, 12585

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 60, pl. 5, figs. 3a, b, 4a, b.

Pardonet Formation, Upper Triassic, west slope Black Bear Ridge, Peace River Foothills, British Columbia.

*Helictites* sp.

Fig. spec. 14309

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 24, pl. 11, figs. 4a, b.

Pardonet Formation, Upper Triassic, 7 miles southwest of mouth of Needham Creek, Halfway River area, British Columbia.

*'Heraclites'(?)* *equisitus* McLearn

Holotype 9496; paratype 9497

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App, p. 1, pl. 5, figs. 1-4.

Pardonet Formation, Upper Triassic, talus west end Pardonet Hill, Peace River Foothills, British Columbia.

=*Thetidites exquisitus*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 77, pl. 8, figs. 4a, b, 5a, b.Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 22, pl. 10, figs. 3a, b [9497].*Heteroceras conradi* (Morton)

Hypotypes 5837, a-c

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 100, pl. 12, figs. 1 [5837], a [5837a], 2, a [5837c], 3 [5837b].

Upper Cretaceous [Haslam Formation], Maple Bay, Vancouver Island, British Columbia.

=*Bostrychoceras elongatum*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 105. [paratypes 5837, a-c].=*Bostrychoceras columbianum*, Anderson, F.M., 1958, Geol. Soc. Amer., Mem. 71, p. 205.*Heteroceras elongatum* Whiteaves

Syntype 5806

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 331, pl. 44, fig. 2.

Upper Cretaceous, Hornby Island [probably Trent River Formation, Comox basin, Vancouver Island], Strait of Georgia, British Columbia.

=*Bostrychoceras elongatum*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 105, pl. 28, fig. 3 [lectotype].*Heteroceras hornbyense* Whiteaves

Syntypes 5805, a

Whiteaves, J.F.,  
1895, Can. Rec. Sci., vol. 6, No. 6, p. 316.

1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 332, pl. 42, fig. 1.

Upper Cretaceous [Lambert Formation], northwest side of Hornby Island, Strait of Georgia, British Columbia.

=*Nostoceras hornbyense*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 103 [lectotype 5805; paratype 5805a].*Heteroceras hornbyense* Whiteaves

Hypotypes 5805b, 5827

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 332, pl. 42, figs. 3 [5805b], 4 [5827].

Upper Cretaceous [Lambert Formation], Hornby Island, Strait of Georgia, British Columbia.

=*Nostoceras hornbyense*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 103 [paratype].*Heteroceras perversum* Whiteaves

Holotype 5805c

Whiteaves, J.F., 1895, Can. Rec. Sci., vol. 6, No. 6, p. 317.

Upper Cretaceous [Lambert Formation], Hornby Island, Strait of Georgia, British Columbia.

=*Heteroceras hornbyense*, Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 332, pl. 42, fig. 2.=*Nostoceras hornbyense*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 103 [paratype].*Hildoceraceae* gen. et sp. indet.

Fig. specs, 15301-15304

Frebald, H. and Little, H.W., 1962, Geol. Surv., Canada, Bull. 81, p. 18, pl. 3, figs. 1-4.

Hall Formation, Lower Jurassic, lower dump Arlington Mine, Salmo area, British Columbia.



*Himavatites burlingi* McLearn

Holotype 9504

McLearn, F.H.,

1947, Geol. Surv., Canada, Paper 47-14, App., p. 2, pl. 6, figs. 1, a.

1961, *ibid.*, Mem. 311, p. 52, pl. 4, figs. 9a, b.

Pardonet Formation, Upper Triassic, Little Parle Pas Rapids, Peace River, British Columbia.

*Himavatites canadensis* McLearn

Holotype 8847

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 8, p. 115, pl. 3, fig. 3.

1961, Geol. Surv., Canada, Mem. 311, p. 52, pl. 4, figs. 5a, b.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 24, pl. 11, figs. 7a, b.

Pardonet Formation, Upper Triassic, talus block on west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Himavatites columbianus* McLearn

Holotype 9411

McLearn, F.H.,

1939, Trans. Roy. Soc. Can., ser. 3, vol. 33, sec. 4, p. 55, pl. 1, fig. 1.

1961, Geol. Surv., Canada, Mem. 311, p. 51, pl. 5, fig. 7.

Pardonet Formation, Upper Triassic, talus near XXII, just west of Monotis Gully, west end Pardonet Hill, Peace River Foothills, British Columbia.

*Himavatites columbianus* McLearn

Hypotype 9265

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-25, App. p. 1, pl. 1, figs. 1, 2.

1961, *ibid.*, Mem. 311, p. 51, pl. 5, figs. 6a, b.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 22, pl. 10, figs. 9a, b.

Pardonet Formation, Upper Triassic, north bank Sikanni Chief River below mouth of Chicken Creek, British Columbia.

*Himavatites multiauritus* McLearn

Holotype 9503

McLearn, F.H.,

1947, Geol. Surv., Canada, Paper 47-14, App., p. 2, pl. 6, figs. 5, 6.

1961, *ibid.*, Mem. 311, p. 50, pl. 4, figs. 8a, b.

Pardonet Formation, Upper Triassic, talus high on west slope of Black Bear Ridge, Peace River Foothills, British Columbia.

*Himavatites* cf. *watsoni* Diener

Hypotypes 12579, 12580

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 49, pl. 4, figs. 6, 7.

Pardonet Formation, Upper Triassic, talus high on west slope of Black Bear Ridge, Peace River Foothills, British Columbia.

*Hollandites?* *humi* McLearn

Holotype 9482

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 3, pl. 4, fig. 1.

1948, *ibid.*, 2nd Edition, p. 28, pl. 4, fig. 1.

Toad Formation, Middle Triassic, talus McTaggart Creek, south side Sikanni Chief River, west slope Hage Mountain, British Columbia.

*Hollandites? mcconnelli* McLearn

Holotype 9481

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 3, pl. 4, fig. 2.

1948, *ibid.*, 2nd Edition, p. 27, pl. 4, fig. 2.

Toad Formation, Middle Triassic, 300 yards west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Hollandites? spivaki* McLearn

Holotype 9483

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 3, pl. 5, fig. 2.

1948, *ibid.*, 2nd Edition, p. 28, pl. 5, fig. 2.

Toad Formation, Middle Triassic, talus blocks, Cameron Hill, Alaska Highway, British Columbia.

*Homerites semiglobosus* (Hauer)

Hypotype 14235

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, figs. 4a, b.

Upper Triassic, "Mount Kindle", mile-post 427, Alaska Highway, British Columbia.

*Homoisomites poecilochotomus* Crickmay

Holotype 9697; paratypes 9690, 9696

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 63, pl. 21, figs. 2 [9697], 3 [9690], 4 [9696].

Lower Cretaceous [Brokenback Hill Formation], southeast shore of the Peninsula, Harrison Lake, British Columbia.

=*Neocraspedites stantoni*, Crickmay, C.H., 1962, Article 8: Gross Stratigraphy of Harrison Lake Area, British Columbia, private publ.*Hongkongites cf. angulatoides* Quenstedt

Hypotypes 17679-17681

Buckman, S.S., in Williams, M.Y., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, p. 112, pl. 1, fig. 1b.

Tolo Channel Formation, Lower Jurassic, north shore of Tolo Channel, Hong Kong.

*Hongkongites hongkongensis* (Grabau)

Hypotypes 17682-17684

Buckman, S.S., in Williams, M.Y., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, p. 112, pl. 1, figs. 2, 3, 5.

Tolo Channel Formation, Lower Jurassic, north shore Tolo Channel, Hong Kong.

*Hongkongites n. sp.?*

Syntypes 17685, 17686

Buckman, S.S., in Williams, M.Y., 1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, p. 112, pl. 1, fig. 4.

Tolo Channel Formation, Lower Jurassic, north shore Tolo Channel, Hong Kong.

*Hoplites canadensis* Whiteaves

Syntype 7430

Whiteaves, J.F., 1893, Trans. Roy. Soc. Can., vol. 10, sec. 4, p. 118, pl. 11, figs. 3, a. Lower Cretaceous [Peace River Formation], Peace River, 20 miles below Cadotte River mouth, British Columbia.

=*Gastrolites canadensis*, McLearn, F.H., 1933, *ibid.*, ser. 3, vol. 27, sec. 4, p. 15, pl. 1, figs. 4, 5 [holotype 7430].

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 7, figs. 1, 2.

Imlay, R.W., 1961, U.S. Geol. Surv., Prof. Paper 335, p. 62, pl. 17, figs. 1, 2.

*Hoplites haidaquensis* Whiteaves

Holotype 5991

Whiteaves, J.F., 1893, Can. Rec. Sci., vol. 5, p. 444, pl. 7, figs. 2, a, b.

Upper Cretaceous [Haida Formation], Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Hoplites mcconnelli* Whiteaves

Syntype 4800

Whiteaves, J.F., 1893, Trans. Roy. Soc. Can., vol. 10, p. 117, pl. 11, figs. 2, a, b.

Lower Cretaceous, Burnt Rapid, Athabasca River, Alberta.

*Hoplites newcombii* Whiteaves

Holotype 5990

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 281, pl. 37, figs. 1, a.

"Cretaceous" [Yakoun Formation, Middle Jurassic], south side Alliford Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

=*Toricelliceras newcombii*, McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 12, pl. 5, figs. 2-4.

*Hoplites yakounensis* Whiteaves

Syntype 5992

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 280, pl. 36, figs. 1, a, b.

Cretaceous [Haida Formation], east end Maude Island, Queen Charlotte Islands, British Columbia.

*Hoplitoplacenticerias vancouverense* (Meek)

Hypotypes 5846 a, 10059

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 93, pl. 25, figs. 1, 2.

Cedar District Formation, Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Hoplotropites* cf. *auctus* Dittmar

Hypotypes 14241, 14242

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, figs. 10, 11a, b.

Upper Triassic, "Mount Kindle", mile-post 427, Alaska Highway, British Columbia.

'*Hungarites*' *boreas* McLearn

Holotype 9856

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 22, Supp., p. 2, pl. 11, figs. 3, 4.

Toad Formation, Middle Triassic, south bank Liard River, 2 miles downstream from mouth of Toad River, British Columbia.

'*Hungarites*' *bufonis* McLearn

Holotype 9588; paratype 9589

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 24, Supp., p. 2, pl. 10, figs. 4-6.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 12, pl. 5, figs. 7a, b.

Toad Formation, Middle Triassic, south bank Liard River, 2 miles downstream from mouth of Toad River, British Columbia.

'*Hungarites*' *caurus* McLearn

Holotype 9585

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 22, Supp., p. 1, pl. 11, figs. 1, 2.

Toad Formation, Middle Triassic, south bank Liard River, 2 miles downstream from mouth of Toad River, British Columbia.

*'Hungarites' dawsoni* McLearn

Holotype 9587

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 23, Supp., p. 2, pl. 10, figs. 8, 9.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 12, pl. 5, figs. 6a, b.

Toad Formation, Middle Triassic, Sheep Creek at 8 miles south of mile-post 363, Alaska Highway, Tetsa River Valley, British Columbia.

*'Hungarites' mackenzii* McLearn

Holotype 9584

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 22, Supp., p. 1, pl. 12, fig. 3.

Toad Formation, Middle Triassic, Sheep Creek at 8 miles south of mile-post 363, Alaska Highway, Tetsa River Valley, British Columbia.

*'Hungarites' nahwisi* McLearn

Holotype 9590

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 24, Supp., p. 2, pl. 12, figs. 4, 5.

Toad Formation, Middle Triassic, south bank Liard River, 2 miles downstream from mouth of Toad River, British Columbia.

*'Hungarites' ovinus* McLearn

Holotype 9591

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 24, Supp., p. 2, pl. 12, figs. 1, 2.

Toad Formation, Middle Triassic, Sheep Creek about 8 miles south of mile-post 363, Alaska Highway, Tetsa River Valley, British Columbia.

*Hypisculites stelcki* see *Daphnites (Phormedites?) stelcki**Imlayoceras mieltense* Frebold

Holotype 14707; paratypes 14694, 14708

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 20, pl. 8, figs. 1a-c, 2; pl. 9, fig. 1; pl. 10, fig. 1; pl. 11, fig. 1.

Middle Jurassic, Grey beds at Rocky River, Miette area and north end of De Smet Range, Rock Lake area, Alberta.

*Indoclionites?* sp.

Fig. specs. 13496-13498

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 45, pl. 21, figs. 2-4.

Pardonet Formation, Upper Triassic, Rapide-qui-ne-parle-pas, Peace River, British Columbia.

*Indojuvavites cf. angulatus* (Diener)

Hypotype 12601

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 92, pl. 12, figs. 5a, b.

Pardonet Formation, Upper Triassic, west of shallow gully at south end McLay Spur, Peace River, British Columbia.

*Isculites browni* McLearn

Holotype 9409

McLearn, F.H., 1939, Trans. Roy. Soc. Can., ser. 3, vol. 33, sec. 4, p. 52, pl. 1, fig. 3.

Pardonet Formation, Upper Triassic, high on west slope Black Bear Ridge, Peace River Foothills, British Columbia.

= *Episculites browni*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 107, pl. 18, figs. 4a, b.

*Isculites browni* McLearn

Hypotype 9513

- McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, p. 12, App., pl. 4, fig. 7.  
Pardonet Formation, Upper Triassic, high on west slope of Black Bear Ridge, Peace River Foothills, British Columbia.  
= *Episculites browni*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 107, pl. 18, fig. 3.

*Isculites corpulentus* McLearn

Holotype 9494

- McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 4, figs. 9, 10.  
Pardonet Formation, Upper Triassic, high on west slope of Black Bear Ridge, Peace River Foothills, British Columbia.  
= *Episculites corpulentus* McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 109, pl. 18, figs. 5a, b.  
Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 22, pl. 10, fig. 7.

*Isculites ornatus* McLearn

Holotype 9492

- McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 5, figs. 5, 6.  
Pardonet Formation, Upper Triassic, high on west slope Black Bear Ridge, Peace River Foothills, British Columbia.  
= *Episculites ornatus*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 108, pl. 18, figs. 7a, b.  
Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 22, pl. 10, figs. 8a, b.

*Isculites schooleri* McLearn

Holotype 9046

- McLearn, F.H.,  
1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 17, pl. 1, fig. 6.  
1947, Geol. Surv., Canada, Paper 47-24, App., pl. 3, figs. 11, 12.  
Schooler Creek Formation, Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Isculites schooleri* McLearn

Hypotype 9528

- McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., pl. 3, fig. 10.  
Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Isculites schooleri* var. *parvus* McLearn

Holotype 8793

- McLearn, F.H.,  
1937, Can. Field-Naturalist, vol. 51, No. 7, p. 98, pl. 1, fig. 7.  
1947, Geol. Surv., Canada, Paper 47-24, App., pl. 3, fig. 7.  
Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Isculites schooleri* var. *parvus* McLearn

Hypotype 9527

- McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., pl. 3, figs. 8, 9.  
Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Isculites teres* McLearn

Holotype 9493

- McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 4, fig. 8.  
Pardonet Formation, Upper Triassic, talus high on west slope of Black Bear Ridge, Peace River Foothills, British Columbia.  
= *Episculites teres*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 108, pl. 18, figs. 6a, b.  
Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 22, pl. 10, fig. 6.

*Itinsaites itinsae* McLearn

Holotype 9020

McLearn, F.H.,

1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 73, pl. 1, fig. 7.

1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 26, pl. 15, figs. 2, 3.

Yakoun Formation, Middle Jurassic, southernmost of Channel Islands, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Jovites borealis* Tozer

Holotype 14112; paratypes 14107-14111, 14113-14115

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 86, pl. 26, figs. 2-7.

Blaa Mountain and Schei Point Formations, Upper Triassic, southeast side Buchanan Lake 5 miles from outlet, Axel Heiberg Island, and loose, Cape Ursula, Table Island [14115], Arctic.

*Jovites cf. bosnensis* Mojsisovics

Hypotype 14314

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 16, pl. 7, figs. 4a, b.

Upper Triassic, "Mount Kindle", mile-post 427, Alaska Highway, British Columbia.

*Jovites richardsi* Tozer

Holotype 14118; paratypes 14116, 14117

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 88, pl. 27, figs. 6-8.

Schei Point Formation, Upper Triassic, 1 mile south of Lyall Point, Cameron Island, Arctic.

*Juvavites (Gonionotites) belli* McLearn

Holotype 8834

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 114, pl. 1, fig. 5.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Gonionotites belli*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 95, pl. 14, figs. 2a-c.*Juvavites biornatus* McLearn

Holotype 8838

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 4, p. 48, pl. 1, fig. 11.

1961, Geol. Surv., Canada, Mem. 311, p. 82, pl. 11, figs. 4a, b.

Schooler Creek [Pardonet] Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Juvavites bococki* McLearn

Holotype 8831

McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 7, p. 98, pl. 1, fig. 14.

Schooler Creek [Pardonet] Formation, Upper Triassic, talus block on south bank Peace River, at Little Parle Pas Rapids, British Columbia.

=*Malayites bococki*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 104, pl. 17, figs. 1a, b.*Juvavites (Anatomites) cf. brocchii* Mojsisovics

Hypotype 12597

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 88, pl. 12, figs. 6a, b.

Pardonet Formation, west slope of west spur Brown Hill, Peace River, British Columbia.

*Juvavites (Malayites) butleri* McLearn

Holotype 8840

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 114, pl. 2, fig. 5.

Pardonet Formation, Upper Triassic, talus west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Malayites butleri*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 101, pl. 17, figs. 6a, b.

*Juvavites (Griesbachites) caurinus* McLearn

Holotype 9489

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 2, fig. 6.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Juvavites (Anatomites) humi*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 88, pl. 12, figs. 4a, b.

*Juvavites clavatus* McLearn

Holotype 9408

McLearn, F.H., 1939, Trans. Roy. Soc. Can., ser. 3, vol. 33, sec. 4, p. 51, pl. 1, fig. 6.

Pardonet Formation, Upper Triassic, near XI in Juvavites Gully, Pardonet Hill, British Columbia.

=*Gonionotites clavatus*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 96, pl. 13, figs. 2a, b.

*Juvavites concretus* McLearn

Holotype 8818; paratype 8819

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 113, pl. 1, figs. 3, 4.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Juvavites magnus*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 83, pl. 9, fig. 2; pl. 10, figs. 2a, b.

*Juvavites custi* McLearn

Holotype 8821

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 113, pl. 2, fig. 2.

Pardonet Formation, Upper Triassic, talus block above XI, east of Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

=*Malayites custi*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 103, pl. 17, figs. 3a-c.

*Juvavites (Anatomites) cf. edithae* Mojsisovics

Hypotype 13484

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 90, pl. 19, figs. 6a, b.

Pardonet Formation, Upper Triassic, near XI in Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

*Juvavites (Gonionotites) fuscus* McLearn

Holotype 8835

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 114, pl. 1, fig. 1.

Pardonet Formation, Upper Triassic, talus block near V, near Cascade Creek, Pardonet Hill, Peace River Foothills, British Columbia.

=*Gonionotites fuscus*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 99, pl. 16, figs. 3a, b.

*Juvavites (Gonionotites) gethingi* McLearn

Holotype 9490; paratype 9491

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 3, figs. 4, 5.

Pardonet Formation, Upper Triassic, at about XI, west side Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

= *Gonionotites gethingi*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 93, pl. 13, figs. 3, 4a, b.*Juvavites (Anatamites) humi* McLearn

Holotype 8799

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 9, p. 130, pl. 1, fig. 4.

1961, Geol. Surv., Canada, Mem. 311, p. 88, pl. 11, figs. 2a-c.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Juvavites (Anatamites) humi* McLearn

Hypotype 9511

McLearn, F.H.,

1947, Geol. Surv., Canada, Paper 47-14, App., pl. 2, fig. 5.

1961, *ibid.*, Mem. 311, p. 88, pl. 12, figs. 3a, b.

Pardonet Formation, Upper Triassic, Pardonet Hill, Peace River Foothills, British Columbia.

*Juvavites (Anatamites) cf. hyatti* (Smith)

Hypotype 14245

Tozer, E.T., 1963, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, figs. 14a, b.

Upper Triassic, "Mount Kindle", mile-post 427, Alaska Highway, British Columbia.

*Juvavites (Anatamites) cf. knowltoni* Smith

Hypotype 14244

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, figs. 13a, b.

Upper Triassic, "Mount Kindle", mile-post 427, Alaska Highway, British Columbia.

*Juvavites mackenzii* McLearn

Holotype 8829

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 9, p. 130, pl. 1, fig. 5.

1961, Geol. Surv., Canada, Mem. 311, p. 86, pl. 11, figs. 1a, b.

Pardonet Formation, Upper Triassic, Peace River Foothills, British Columbia.

*Juvavites magnus* McLearn

Holotype 8837

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 4, p. 48, pl. 1, fig. 8.

1961, Geol. Surv., Canada, Mem. 311, p. 83, pl. 9, figs. 1a-c.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 20, pl. 9, figs. 5a-c.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Juvavites mclayi* McLearn

Holotype 8792

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 8, p. 113, pl. 3, fig. 10.

1961, Geol. Surv., Canada, Mem. 311, p. 85, pl. 11, figs. 5a, b.

Pardonet Formation, Upper Triassic, west end McLay Spur, Peace River Foothills, British Columbia.



*Juvavites mertoni* McLearn

Holotype 8828; paratype 8796

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 9, p. 130, pl. 1, figs. 14, 15.

1961, Geol. Surv., Canada, Mem. 311, p. 85, pl. 8, figs. 1a-c, 2.

Pardonet Formation, Upper Triassic, talus on south bank of Peace River at Little Parle Pas Rapids, British Columbia.

*Juvavites (Malayites) parvus* McLearn

Holotype 8843

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 115, pl. 2, fig. 1.

Pardonet Formation, Upper Triassic, talus block at XIII, west of Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

=*Malayites parvus*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 102, pl. 18, figs. 1a, b.

*Juvavites (Dimorphites?) pardonetiensis* McLearn

Holotype 8833

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 4, p. 48, pl. 1, fig. 13.

Schooler Creek [Pardonet] Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Dimorphites pardonetiensis*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 92, pl. 16, figs. 2a, b.

*Juvavites (Gonionotites) rarus* McLearn

Holotype 8830

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 114, pl. 3, fig. 5.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Gonionotites rarus*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 97, pl. 15, figs. 3a-c.

*Juvavites (Gonionotites) rarus* McLearn

Hypotype 9512

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., pl. 2, fig. 7.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Gonionotites rarus*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 97, pl. 15, figs. 2a, b.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 20, pl. 9, figs. 4a, b.

*Juvavites schoolerensis* McLearn

Holotype 9488

McLearn, F.H.,

1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 2, figs. 3, 4.

1961, *ibid.*, Mem. 311, p. 86, pl. 11, figs. 3a, b.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Juvavites selwyni* McLearn

Holotype 8820

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 8, p. 113, pl. 2, fig. 3.

1961, Geol. Surv., Canada, Mem. 311, p. 87, pl. 10, figs. 1a, b.

Pardonet Formation, Upper Triassic, near X, Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

*Juvavites (Gonionotites) spiekeri* McLearn

Holotype 8807

McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 9, p. 130, pl. 1, fig. 13.

Schooler Creek [Pardonet] Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

= *Gonionotites spiekeri*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 94, pl. 14, figs. 1a-c.*Juvavites subinterruptus* Mojsisovics

Hypotype 9629

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 40, pl. 3, fig. 7.

Lewes River Group, Triassic, low on east side Lewes valley, 10 miles north of Lake Laberge, Yukon.

*Juvavites cf. subinterruptus* Mojsisovics

Hypotype 13482

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 87, pl. 20, figs. 4a, b.

Pardonet Formation, Upper Triassic, talus at V, Cascade Creek, Pardonet Hill, Peace River Foothills, British Columbia.

*Juvenites canadensis* Tozer

Holotype 14079

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 60, pl. 13, figs. 3a-d.

Blue Fiord Formation, Lower Triassic, between Hare and Otto Fiords, 5 miles northwest of entrance to Hare Fiord, west coast of Ellesmere Island, Arctic.

*Juvenites crassus* Tozer

Holotype 14081; paratypes 14080, 14082-14084

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 60, pl. 13, figs. 4-7.

Blind Fiord Formation, Lower Triassic, between Hare and Otto Fiords, 5 miles northwest of entrance to Hare Fiord, west coast of Ellesmere Island, Arctic.

*Juvenites needhami* Tozer

Holotype 14292

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 8, pl. 3, figs. 2a-c.

"Toad-Grayling Formation", Lower Triassic, Needham Creek, 2 miles west of junction with Graham River, Halfway River area, British Columbia.

*Kanastephanus altus* McLearn

Holotype 9018

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 24, pl. 16, figs. 4-6.

Yakoun Formation, Middle Jurassic, Mackenzie Bay, north side Maude Island, Queen Charlotte Islands, British Columbia.

*Kanastephanus canadensis* McLearn

Holotype 9019

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 25, pl. 15, figs. 4, 5.

Yakoun Formation, Middle Triassic, Mackenzie Bay, north side Maude Island, Queen Charlotte Islands, British Columbia.

*Kanastephanus crickmayi* McLearn

Holotype 9016

McLearn, F.H.,

1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 73, pl. 1, figs. 5, 6.

1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 22, pl. 16, figs. 7, 8.

Yakoun Formation, Middle Triassic, Mackenzie Bay, north side Maude Island, Queen Charlotte Islands, British Columbia.

*Kanastephanus mackenzii* McLearn

Holotype 9017

McLearn, F.H., 1929, Nat. Mus. Con., Contr. Can. Pal., Bull. 54, p. 23, pl. 16, figs. 1-3.

Yakoun Formation, Middle Triassic, Mackenzie Bay, north side Maude Island, Queen Charlotte Islands, British Columbia.

*Keplerites (Seymourites) mcevoyi* see *Yakounites mcevoyi*

*Keplerites (Seymourites)* sp. indet.

Fig. spec. 12900

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 64, pl. 33, figs. 2a, b.

Fernie Group, Upper Jurassic, Gold Creek road, south slope of Grassy Mountain, Alberta.

*Keplerites* aff. *K. mclearni* Imlay

Hypotype 14703

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 25.

Middle Jurassic, Grey beds on Rocky River, west of Makwa Ridge, Miette area west half, Alberta.

*Keplerites* cf. *K. rockymontanus* Imlay

Hypotype 14713

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 25, pl. 12, fig. 1.

Middle Jurassic, depth 1,310 to 1,315 feet, Esterhazy Shaft, Saskatchewan.

*Keplerites* aff. *K. tychonis* Ravn

Hypotype 14715

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 25, pl. 9, fig. 3.

Middle Jurassic, south slope Grassy Mountain, north of Blairmore, Alberta.

*Keplerites* sp. indet. a-c.

Fig. specs. 14706, 14711, 14716

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 24, pl. 9, fig. 2; pl. 10, fig. 4; pl. 11, fig. 3.

Middle Jurassic, *Gryphaea* bed on Adanac Strip mine road; Grey beds in an east tributary to Rocky River just south of Miette map-area; and on Rocky River, west of Makwa Ridge, Miette area west half, Alberta.

*Kosmoceras (Gulielmiceras) knechteli* Imlay

Hypotype 14696

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 23, pl. 10, fig. 3.

Middle Jurassic, depth 1,310 to 1,315 feet, Esterhazy Shaft, Saskatchewan.

*Lecanites beattii* McLearn

Holotype 9500

McLearn, F.H.,

1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 4, fig. 6.

1961, *ibid.*, Mem. 311, p. 47, pl. 3, figs. 9a, b.

Pardonet Formation, Upper Triassic, just west of south face of McLay Spur, Peace River Foothills, British Columbia.

*Lecanites mundus* McLearn

Holotype 9498; paratype 9499

McLearn, F.H.,

1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 4, figs. 2-5.

1961, *ibid.*, Mem. 311, p. 46, pl. 3, figs. 7a-c, 8.

Pardonet Formation, Upper Triassic, just west of south face of McLay Spur, Peace River Foothills, British Columbia.

*Leioceras opalinum* (Reinecke)

Hypotypes 13379-13386

Frebald, H., 1958, Geol. Surv., Canada, Bull. 41, p. 6, pl. 4, figs. 1-6; pl. 5, figs. 1, 2.

Wilkie Point Formation, Middle Jurassic, 1 mile east of Wilkie Point, Prince Patrick Island, Arctic.

*Leioceras opalinum* (Reinecke)

Hypotypes 14648-14651

Frebald, H., 1960, Geol. Surv., Canada, Bull. 59, p. 25, pl. 6, figs. 1-4; pl. 7, fig. 1.

Wilkie Point Formation, Middle Jurassic, north side of Marie Bay, Melville Island, Arctic.

*Leiophyllites ? kindli* McLearn

Holotype 6443

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 1, pl. 2, fig. 4.

1948, *ibid.*, 2nd Edition, p. 12, Supp., pl. 2, fig. 4.

Toad Formation, Middle Triassic, south bank Liard River, 2 miles downstream, from mouth of Toad River, British Columbia.

*Lemuroceras belli* McLearn

Holotype 9570

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 3, figs. 17, 18.

1948, *ibid.*, App., p. 2.

Loon River Formation, Lower Cretaceous, Loon River at south end Buffalo Head Hills, Alberta.

=*Subarcthoplites belli*, Imlay, R.W., 1961, U.S. Geol. Surv., Prof. Paper 335, p. 60, pl. 16, figs. 13-16.*Lemuroceras cf. indicum* Spath

Hypotype 9706

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 5, fig. 4.

Buckinghorse Formation, Lower Cretaceous, Sikanni River, 1½ miles below locks and about 10 miles west of Alaska Highway, British Columbia.

*Lemuroceras irenense* McLearn

Holotype 9571

McLearn, F.H.,

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 5, fig. 5.

1948, *ibid.*, App., p. 2.

Moosebar Formation, Lower Cretaceous, left bank Peace River west of Steamboat Island, British Columbia.

*Lilloettia imlayi* Frebald

Holotype 12897; paratype 12901

Frebald, H., 1957, Geol. Surv., Canada, Mem. 287, p. 56, pl. 32, figs. 1a, b; pl. 33, figs. 3a, b.

Ferne Group, Upper Jurassic, Gold Creek road, west side of south slope of Grassy Mountain, north of Blairmore, Alberta.

=*Warrenoceras imlayi*, Frebald, H., 1963, *ibid.*, Bull. 93, p. 16.

*Lilloettia lilloetensis* Crickmay

Holotype 9680, 9698 [parts of one specimen]

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 62, pl. 18, figs. 1, 2 [9680], 3, 4 [9698].

Upper Jurassic [Mysterious Creek Formation], 3,100 feet elevation, Billhook Creek, a tributary to Mysterious Creek from the north, 4 miles from mouth of Mysterious Creek, Harrison Lake area, British Columbia.

*Lilloettia mertonyarwoodi* Crickmay

Holotype 9676

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 62, pl. 19, figs. 1, 2.

Upper Jurassic [Mysterious Creek Formation], 3,100 feet elevation, Billhook Creek, a tributary to Mysterious Creek from the north, 4 miles from mouth of Mysterious Creek, Harrison Lake area, British Columbia.

*Lilloettia?* sp. indet.

Fig. spec. 12899

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 57, pl. 33, fig. 1.

Fernie Group, Upper Jurassic, Daisy Creek Summit, Livingstone Range, Alberta.

*Lobites pacianus* McLearn

Holotype 8789

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 7, p. 96, pl. 1, fig. 15.

1947, Geol. Surv., Canada, Paper 47-24, App., pl. 2, fig. 10.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, figs. 7a, b.

Schooler Creek Formation, Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Lobites pacianus* McLearn

Hypotypes 9524, 9525

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., pl. 2, figs. 7-9.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 8 [9524].

'Dark siltstone', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Longobardites canadensis* McLearn

Holotype 6449; paratype 6450

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 1, pl. 3, figs. 1, 5, 6.

1948, *ibid.*, 2nd Edition, p. 19, Supp., pl. 3, figs. 1, 5, 6.

Toad Formation, Middle Triassic, talus west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

=*Longobardites nevadanus*, Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 12, pl. 5, figs. 9a, b [6450].

*Longobardites canadensis* McLearn

Hypotype 9581

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 19, Supp., pl. 10, fig. 3.

Toad Formation, Middle Triassic, talus 450 feet west of mile-post 376, Alaska Highway, Tetsa River Valley, British Columbia.

*Longobardites intornatus* McLearn

Holotype 6466

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 1, pl. 1, fig. 1.

1948, *ibid.*, 2nd Edition, p. 20, Supp., pl. 1, fig. 1; pl. 11, figs. 7, 8.

Toad Formation, Middle Triassic, talus near mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Longobardites intornatus* McLearn

Hypotype 9582

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 20, Supp., pl. 11, figs. 9, 10.

Toad Formation, Middle Triassic, talus west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Longobardites larvalis* McLearn

Holotype 9583

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 20, Supp., p. 1, pl. 9, figs. 3, 4.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 12, pl. 5, figs. 8a, b.

Toad Formation, Middle Triassic, west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Longobardites mctaggarti* McLearn

Holotype 6475

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 2, pl. 2, fig. 5.

1948, *ibid.*, 2nd Edition, Supp., pl. 2, fig. 5.

Toad Formation, Middle Triassic, northeastern British Columbia.

=*'Hungarites' mctaggarti*, McLearn, F.H., 1948, *ibid.*, 2nd Edition, p. 21, Supp., pl. 10, figs. 1, 2.*Longobardites nevadanus* see *Longobardites canadensis**Ludwigia m'clintocki* (Haughton)

Hypotypes 13387, 13388

Frebald, H., 1958, Geol. Surv., Canada, Bull. 41, p. 7, pl. 5, figs. 3a, b, 4a, b.

Wilkie Point Formation, Middle Jurassic, 1 mile east of Wilkie Point, Prince Patrick Island, Arctic.

*Lytoceras batesi* (Trask)

Hypotype 4976

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 202, pl. 27, fig. 1.

Cretaceous [Haida Formation], Bear Skin Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Lytoceras jukesi* (Sharpe)

Hypotypes 5854, a, b, 10027

Whiteaves, J.F., 1895, Trans. Roy. Soc. Can., ser. 2, vol. 1, p. 129, pl. 2, figs. 1 [5854], 2 [5854a].

Upper Cretaceous [Lambert Formation], middle of east side of Denman Island, British Columbia.

=*Lytoceras (Gaudryceras) denmanense*, Whiteaves, J.F., 1901, Ottawa Naturalist, vol. 15, p. 32 [syntypes].=*Gaudryceras denmanense*, Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 59, pl. 4, figs. 1 [lectotype 5854], 2 [paratype 5854a].

*Lytoceras sacya* (Forbes)

Hypotype 5006

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 203, pl. 25.

Upper Cretaceous [Haida Formation], Bear Skin Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia.

*Malayites* cf. *antipatris* Diener

Hypotype 12606

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 102, pl. 16, figs. 4a, b.

Pardonet Formation, Upper Triassic, talus a little northwest of III, Pardonet Hill, Peace River Foothills, British Columbia.

*Malayites bococki* (McLearn)

Hypotype 12608

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 104, pl. 17, fig. 2.

Pardonet Formation, Upper Triassic, talus block south bank Peace River at Little Parle Pas Rapids, British Columbia.

See *Juvavites bococki*

*Malayites butleri* (McLearn)

Hypotype 12605

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 101, pl. 17, fig. 5.

Pardonet Formation, Upper Triassic, talus near V, upper part Cascades Creek, Pardonet Hill, Peace River Foothills, British Columbia.

See *Juvavites (Malayites) butleri*

*Malayites custi* see *Juvavites custi*

*Malayites dawsoni* McLearn

Holotype 8836

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 9, p. 130, pl. 1, fig. 16.

1961, Geol. Surv., Canada, Mem. 311, p. 100, pl. 17, figs. 8a, b.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 20, pl. 9, fig. 2.

Pardonet Formation, Upper Triassic, talus on north bank Peace River near Jewitt Fault, British Columbia.

*Malayites dawsoni* McLearn

Hypotype 12604

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 100, pl. 17, fig. 7.

Pardonet Formation, Upper Triassic, talus on ledge north bank Peace River below Jewitt Spur, British Columbia.

*Malayites parvus* (McLearn)

Hypotypes 12607, 13486

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 102, pl. 18, fig. 2; pl. 20, figs. 5a, b.

Pardonet Formation, Upper Triassic, talus block at XIII west of Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

See *Juvavites (Malayites) parvus*

*Manticoceras cordiforme* Miller

Holotype 2393

Miller, A.K., 1938, Geol. Soc. Amer., Sp. Paper 14, p. 82, pl. 21, figs. 2-4.

"Bosworth sandstone", Upper Devonian, oil well at Oil Creek, 45 miles northwest of Norman, Carcajou Mountain, Mackenzie River, District of Mackenzie.

*Manticoceras delphiensis* (Kindle)

Paratypes 5343, a-d

Miller, A.K., 1938, Geol. Soc. Amer., Sp. Paper 14, p. 83.

New Albany shale, Upper Devonian, about ¼ mile east of Delphi, Indiana, U.S.A.

*Manticoceras kindlei* Miller

Syntypes 5275a-r

Miller, A.K., 1938, Geol. Soc. Amer., Sp. Paper 14, p. 91, pl. 14, figs. 10, 11 [5275a,b].

New Albany Shale, Upper Devonian, about ¼ mile east of Delphi, Indiana, U.S.A.

*Manticoceras septentrionale* Miller

Holotype 5139

Miller, A.K., 1938, Geol. Soc. Amer., Sp. Paper 14, p. 102, pl. 23, figs. 1, 2; text fig. 19.

"Bosworth sandstone", Upper Devonian, delta of Oil Creek, 45 miles northwest of Norman, Carcajou Mountain, Mackenzie River, District of Mackenzie.

*Manticoceras* aff. *M. sinuosum* see *Goniatites* sp.*Manticoceras unduloconstrictum* Miller

Holotype 5346

Miller, A.K., 1938, Geol. Soc. Amer., Sp. Paper 14, p. 123, pl. 22, figs. 7-9.

New Albany shale, Upper Devonian, about ¼ mile east of Delphi, Indiana, U.S.A.

*Meekoceras gracilitatis* White

Hypotypes 14052-14063

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 65, pl. 15, fig. 6; pl. 17, figs. 1-3; pl. 18, figs. 4-6.

Blind Fiord Formation, Lower Triassic, between Hare and Otta Fiords, 4 miles northwest of entrance to Hare Fiord, west coast Ellesmere Island, Arctic and Montello, Nevada, U.S.A. [14059].

*Metacarnites* sp.

Fig. spec. 13491

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 54, pl. 19, fig. 4.

Pardonet Formation, Upper Triassic, talus block west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Metacephalites metastatus* Buckman

Holotype 6098

Buckman, S.S., 1929, Nat. Mus. Can., Bull. 58, p. 11, pl. 3, figs. 1-4.

Femie Group, Upper Jurassic, talus from railway cut, south slope Grassy Mountain, north of Blairmore, Alberta.

= *Paracephalites metastatus*, Frebald, H., 1963, Geol. Surv., Canada, Bull. 93, p. 12.*Metalegoceras* sp.

Fig. spec. 13775

Harker, P., 1960, Geol. Surv., Canada, Mem. 309, p. 77, pl. 25, figs. 4-6; text fig. 9.

Assistance Formation, Permian, lower reaches Lyaal River, Grinnell Peninsula, northwest Devon Island, Arctic.

*Micocephalites concinnus* Buckman

Holotype 6099; paratypes 8604, 8605

Buckman, S.S., 1929, Nat. Mus. Can., Bull. 58, p. 15, pl. 3, figs. 5, a-8 [6099], 9, a, 10 [8605], 11, a [8604].

Femie Group, Upper Jurassic, talus from railway cut, south slope Grassy Mountain, north of Blairmore, Alberta.



*Miccocephalites laminatus* Buckman

Holotype 8602

Buckman, S.S., 1929, Nat. Mus. Can., Bull. 58, p. 14, pl. 1, figs. 4, a, 5.

Fernie Group, Upper Jurassic, talus from railway cut, north slope Grassy Mountain, north of Blairmore, Alberta.

*Miccocephalites miccus* Buckman

Holotype 8603

Buckman, S.S., 1929, Nat. Mus. Can., Bull. 58, p. 15, pl. 1, figs. 6, a, 7.

Fernie Group, Upper Jurassic, talus from railway cut, south slope Grassy Mountain, north of Blairmore, Alberta.

*Mojsisovicsites (Stikinoceras) kerri* see *Stikinoceras kerri*

*Nathorstites mcconnelli* (Whiteaves)

Hypotypes 9522, 9523

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., pl. 2, figs. 4-6.

'Dark siltstones', Middle Triassic, Beattie Ledge just above Beattie ranch, Peace River, British Columbia.

See *Popanoceras mcconnelli*

*Nathorstites mcconnelli* (Whiteaves)

Hypotypes 14167-14170

Tozer, E.T.,

1961, Geol. Surv., Canada, Mem. 315, p. 91, pl. 22, figs. 5-8.

1962, *ibid.*, Paper 62-19, p. 14, pl. 6, figs. 17a, b [14170].

Blaa Mountain Formation, Middle Triassic, 15 miles northwest of entrance to Hare Fiord, northwest coast Ellesmere Island [14167, 14168], Schei Point Formation, Middle Triassic, north coast Table Island, Arctic [14169]; and 4 miles west of Mount Wright, Halfway River, British Columbia [14170].

*Nathorstites mcconnelli* var. *lenticularis* (Whiteaves)

Hypotypes 9520, 9521

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., pl. 2, figs. 1-3.

'Dark siltstones', Middle Triassic, Beattie Ledge, Peace River, British Columbia.

=*Nathorstites mcconnelli*, Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 16 [9520].

See *Popanoceras mcconnelli* var. *lenticulare*

*Nautilus campbelli* Meek

Hypotypes 5804, a [parts of one specimen], b.

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 99, pl. 11, figs. 2 [5804], a, b [5804b].

Upper Cretaceous, Sucia Island, Washington, U.S.A. and north side Hornby Island, Strait of Georgia, British Columbia.

*Nautilus suciensis* Whiteaves

Syntype 5847

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 97, pl. 11, figs. 1, a.

Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Nautilus suciensis* Whiteaves var.

Hypotype 5016

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 197, pl. 21.

Upper Cretaceous [Haida Formation], Skidegate Inlet 1¼ miles southwest of Welcome Point, Queen Charlotte Islands, British Columbia.

=*Nautilus (Cymatoceras) carlottensis*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 269.

*Neocraspedites stantoni* see *Homolosomes poecilochotomus**Neogastrolites americanus* var. A Reeside and Cobban

Hypotypes 13632, 13633

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 101, pl. 49, figs. 5, 6.

Fort St. John Group, Lower Cretaceous, ridge between head of Ziggy Creek and Muskeg River, west half Adams Lookout map-area, Alberta.

*Neogastrolites americanus* var. C Reeside and Cobban

Hypotype 13634

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 106, pl. 52, figs. 22, 26.

Fort St. John Group, Lower Cretaceous, ridge between headwaters of Ziggy Creek and Muskeg River, west half Adams Lookout map-area, Alberta.

*Neogastrolites americanus* var. D Reeside and Cobban

Hypotype 13635

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 108, pl. 53, fig. 23.

Fort St. John Group, Lower Cretaceous, ridge between headwaters of Ziggy Creek and Muskeg River, west half Adams Lookout map-area, Alberta.

*Neogastrolites cornutus* (Whiteaves)

Hypotype 8007

McLearn, F.H.,

1933, Trans. Roy. Soc. Can., ser. 3, vol. 27, sec. 4, p. 23, pl. 4, fig. 1.

1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, pl. 9, fig. 3.

Fort St. John Shale, Lower Cretaceous, north bank Peace River, 4 miles east of Cache Creek, British Columbia.

= *Neogastrolites cornutus* var. E, Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 67, pl. 10, fig. 4.See *Buchiceras?* *cornutum**Neogastrolites* cf. *cornutus* (Whiteaves)

Hypotype 9711

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44-17, 2nd Edition, App., pl. 11, fig. 3.

First sandstone, Sikanni Formation, Lower Cretaceous, near where Kobe Creek anticline crosses Halfway River, left bank, a few miles below mouth of Graham River, British Columbia.

*Neogastrolites cornutus* var. E Reeside and Cobban

Hypotypes 13674-13677

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 67, pl. 9, figs. 3-5, 7, 8; pl. 10, figs. 2, 3.

Fort St. John Group, Lower Cretaceous, Cameron River one mile above mouth, Wapiti-Murray Rivers area, 2 miles west of long. 120°30' W, British Columbia.

*Neogastrolites cornutus* var. D Reeside and Cobban

Hypotype 13673

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 67, pl. 10, fig. 1.

Fort St. John Group, Lower Cretaceous, junction of Cameron and Halfway Rivers, British Columbia.

*Neogastrolites maclearni* var. A Reeside and Cobban

Hypotypes 13636–13644

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 112, pl. 56, figs. 7–20; pl. 57, figs. 1–3.

Fort St. John Group, Lower Cretaceous, Pearl Creek about 1,900 feet from junction with Sulphur River, Grande Cache map-area, Alberta.

*Neogastrolites maclearni* var. B Reeside and Cobban

Holotype 13645; hypotypes 13646–13651

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, pp. 111, 114, pl. 57, figs. 4–8, 11–15, 17, 18, 22, 23.

Fort St. John Group, Lower Cretaceous, Pearl Creek about 1,900 feet from junction with Sulphur River, Grande Cache map-area, Alberta.

*Neogastrolites maclearni* var. C Reeside and Cobban

Hypotypes 13652–13657

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 115, pl. 58, figs. 1–5, 7–11, 15, 16.

Fort St. John Group, Lower Cretaceous, Pearl Creek about 1,900 feet from junction with Sulphur River, Grande Cache map-area, Alberta.

*Neogastrolites maclearni* var. D Reeside and Cobban

Hypotypes 13658–13665

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 116, pl. 58, figs. 17–28.

Fort St. John Group, Lower Cretaceous, Pearl Creek about 1,900 feet from junction with Sulphur River, Grande Cache map-area, Alberta.

*Neogastrolites maclearni* var. E Reeside and Cobban

Hypotypes 13666–13671

Reeside, J.B. and Cobban, W.A., 1960, U.S. Geol. Surv., Prof. Paper 355, p. 116, pl. 33, figs. 2–7, 10–12; text fig. 27a.

Fort St. John Group, Lower Cretaceous, Pearl Creek about 1900 feet from junction with Sulphur River, Grande Cache map-area, Alberta.

*Neogastrolites selwyni* see *Buchiceras?* *cornutum*

*Neogastrolites?* sp.

Fig. spec. 9718

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 44–17, 2nd Edition, App., pl. 12, fig. 8.

Fourth sandstone, Sikanni Formation, Lower Cretaceous, right bank Sikanni River 3 miles east of bridge, British Columbia.

*Neophylloceras lambertense* Usher

Holotype 5811a; paratype 10011

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 50, pl. 1, figs. 1–3 [5811a].

Lambert Formation, Upper Cretaceous, Hornby Island, British Columbia.

*Neophylloceras ramosum* (Meek)

Hypotype 5811

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 49, pl. 1, figs. 4, 5.

Lambert Formation, Upper Cretaceous, Hornby Island, British Columbia.

*Nitanoceras leve* McLearn

Holotype 9544

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47–24, App., p. 1, pl. 3, fig. 6.

'Dark siltstone', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Nitanoceras selwyni* (McLearn)

Hypotype 9526

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., pl. 3, figs. 4, 5.  
 'Dark siltstone', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.  
 See *Arcestes? selwyni*

*Nostoceras hornbyense* (Whiteaves)

Hypotypes 10061, 10069

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 103, pl. 27, figs. 1, 2; pl. 28,  
 fig. 2.  
 Lambert Formation, Upper Cretaceous, northwest side and Manning Point, Hornby Island,  
 British Columbia.

*Olcostephanus (Astieria) deansii* Whiteaves

Holotype 5989

Whiteaves, J.F., 1893, Can. Rec. Sci., vol. 5, p. 442, pl. 7, figs. 1, a.  
 Upper Cretaceous [Haida Formation], Skidegate Inlet, Queen Charlotte Islands, British  
 Columbia.

*Olcostephanus longianianus* (Whiteaves)

Hypotype 4810

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 211, pl.  
 23, fig. 1.  
 "Cretaceous" [Upper Jurassic], Segutlat Lake, Salmon [Fraser] River, British Columbia.

*Olcostephanus loganianus* (Whiteaves)

Hypotypes 5012, b

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 211, pl.  
 23, fig. 1a [5012].  
 "Cretaceous" [Yakoun Formation, Upper Jurassic], south side Alliford Bay, Queen Char-  
 lotte Islands, British Columbia.  
 =*Seymourites loganianus*, McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal.,  
 Bull. 54, p. 6 [holotype 5012 - not part of original 1876 material however as col-  
 lected by G.M. Dawson 1878].  
 =*Yakounoceras ingrahami*, McLearn, F.H., 1929, *ibid.*, p. 9, pl. 7, figs. 1, 2 [holotype  
 5012b].

*Olcostephanus quatsinoensis* Whiteaves

Holotype 4799

Whiteaves, J.F., 1883, Trans. Roy. Soc. Can., vol. 1, sec. 4, p. 82, text fig. 1.  
 Lower Cretaceous, Forward Inlet, Vancouver Island, British Columbia.

*Olenikites canadensis* Tozer

Holotype 14094; paratypes 14093, 14095

Tozer, E.T.,  
 1961, Geol. Surv., Canada, Mem. 316, p. 73, pl. 18, figs. 1-3; text figs. 9a, b.  
 1962, *ibid.*, Paper 62-19, p. 10, pl. 4, figs. 1a-c [14094].  
 Blind Fiord Formation, Lower Triassic, south side Otta Fiord near mouth, Ellesmere  
 Island, Arctic.

*Ophiceras commune* Spath

Hypotypes 14030-14032

Tozer, E.T.,  
 1961, Geol. Surv., Canada, Mem. 316, p. 48, pl. 9, figs. 1a, b, 2a, b.  
 1962, *ibid.*, Paper 62-19, p. 4, pl. 1, figs. 6a, b [14030].  
 Blind Fiord Formation, Lower Triassic, south coast between Bunde and Bukken Fiords,  
 Axel Heiberg Island, Arctic.

*Otoceras boreale* Spath

Hypotypes 14014-14029

Tozer, E.T.,

1961, Geol. Surv., Canada, Mem. 316, p. 45, pl. 6, figs. 1-3; pl. 7, figs. 1-3; pl. 8, figs. 1-4; text fig. 7.

1962, *ibid.*, Paper 62-19, p. 4, pl. 1, figs. 7 [14026], 8 [14020].

Blind Fiord Formation, Lower Triassic, between Hare and Otta Fiords, 14 miles northwest of entrance to Hare Fiord, west coast Ellesmere Island; south side Bunde Fiord [14026] and unnamed island between Bunde and Bukken Fiords [14028, 14029], Axel Heiberg Island, Arctic.

*Oxynoticeras oxynotum* (Quenstedt)

Hypotypes 14631-14633

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 16, pl. 4, figs. 1-3.

Lower Jurassic, about 2 miles south of Bug Lake and Bug Creek, Aklavik Range, District of Mackenzie.

*Oxynoticeras* sp. indet.

Fig. specs. 14634, 14635

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 16, pl. 4, figs. 4, 5.

Lower Jurassic, about 2 miles south of Bug Lake and Bug Creek, Aklavik Range, District of Mackenzie.

*Pachydiscus binodatus* Whiteaves

Holotype 5838

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 347, pl. 49, figs. 1, a; text fig. 23.

Usher, J.L., 1952, *ibid.*, Bull. 21, p. 86, pl. 21, figs. 1, 2.

Upper Cretaceous [Trent River Formation], Puntledge [Comox] River, Vancouver Island, British Columbia.

*Pachydiscus buckhami* Usher

Holotype 5947; paratypes 10054, 10055

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 89, pl. 23, figs. 1-5.

Trent River and Haslam Formations, Upper Cretaceous, Puntledge [Comox] River and Elkhorn Creek, Vancouver Island, British Columbia.

*Pachydiscus elkhornensis* Usher

Holotype 10056; paratype 10057

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 90, pl. 24, figs. 1, 2.

Haslam Formation, Upper Cretaceous, Elkhorn Creek, Vancouver Island, British Columbia.

*Pachydiscus haradai* Jimbo

Hypotype 5848

Whiteaves, J.F., 1895, Trans. Roy. Soc. Can., ser. 2, vol. 1, p. 132, pl. 3, fig. 6.

Upper Cretaceous [Haslam Formation], Nanaimo River 10 miles from mouth, Vancouver Island, British Columbia.

=*Pachydiscus* (= *Eupachydiscus*?) *haradai*, Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 73, pl. 12, figs. 2-4.

=*Eupachydiscus haradai* var. *usher*, Matsumoto, T., 1959, Mem. Fac. Sci. Kyushu Univ., ser. D, Geol., Sp. Vol. I, pt. 2, p. 34 [holotype].

*Pachydiscus* (=Eupachydiscus?) *haradai* Jimbo

Hypotypes 10042-10045

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 73, pl. 13, figs. 1-3 [10042].

Haslam Formation, Upper Cretaceous, north fork, third waterfall above mouth and north bank immediately downstream from mouth of north fork, Haslam Creek; 300 feet upstream from former suspension cable and south bank opposite lower end of rocky island, Nanaimo River, Vancouver Island, British Columbia.

*Pachydiscus* (*haradai*? var.) *perplicatus* Whiteaves

Holotype 5852

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 346, pl. 48, fig. 1; text fig. 22.

Upper Cretaceous [Trent River Formation], Puntledge [Comox] River, Vancouver Island, British Columbia.

= *Pachydiscus* *perplicatus*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 77, pl. 12, fig. 1.*Pachydiscus* *multisulcatus* Whiteaves

Holotype 5856

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 349, pl. 50; text fig. 24.

Usher, J.L., 1952, *ibid.*, Bull. 21, p. 81, pl. 16, fig. 1.

Upper Cretaceous [Qualicum Formation], Northwest Bay, Vancouver Island, British Columbia.

See *Ammonites newberryanus**Pachydiscus* *multisulcatus* Whiteaves

Hypotypes 5842, b, 10050

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 81, pl. 16, figs. 2-4 [10050].

Upper Cretaceous [Qualicum Formation], Northwest Bay, Vancouver Island, British Columbia.

*Pachydiscus* *nevesii* Whiteaves

Holotype 5853; paratype 10053

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 342, pl. 47 fig. 1 [the type]; text fig. 21.

Usher, J.L., 1952, *ibid.*, Bull. 21, p. 87, pl. 22, figs. 1, 2 [lectotype 5853].

Upper Cretaceous [Nanaimo Group], James Island, north of Victoria, Vancouver Island, British Columbia and Sucia Island, Washington, U.S.A.

*Pachydiscus* (*Canadoceras*) *newberryanus* (Meek)

Hypotypes 10030-10032; plastotype 10033

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 65, pl. 6, figs. 4-7; pl. 7, fig. 1; pl. 8, figs. 1, 2.

Haslam and Cedar District Formations, Upper Cretaceous, North Pender Island and Nanaimo District, Vancouver Island, British Columbia.

*Pachydiscus* *otacodensis* (Stoliczka)

Hypotype 5850

Whiteaves, J.F., 1903, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 5, p. 340, pl. 46, fig. 1; text fig. 20.

Upper Cretaceous [Lambert Formation], northwest side Hornby Island, British Columbia.

= *Pachydiscus* *otacodensis*, Usher, J.L., 1952, *ibid.*, Bull. 21, p. 85, pl. 19, fig. 1; pl. 20, figs. 1, 2.

Mollusca

*Pachydiscus ootacodensis* (Stoliczka)

Hypotypes 10051, 10052

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 85, pl. 17, figs. 1-5, pl. 18, fig. 1.  
Lambert Formation, Upper Cretaceous, between small streams 1,100 feet east of Manning Point and Boulder Point, and at Boulder Point, Hornby Island, British Columbia.

*Pachydiscus perplicatus* Whiteaves

Hypotypes 10046-10049

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 77, pl. 13, figs. 4-6; pl. 14, figs. 1-3; pl. 15, figs. 1, 2.  
Trent River Formation, Upper Cretaceous, south bank Puntledge [Comox] River, 0 to 19 chains below powerhouse; Browns River 300 feet upstream from mouth; and Trent River below "The Falls", Vancouver Island, British Columbia.

*Pachydiscus suciaensis* (Meek)

Hypotypes 5840, 10034-10039

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 68, pl. 9, figs. 1-11; pl. 10, figs. 1-3.  
Lambert Formation, Upper Cretaceous, northwest side; between Shingle Spit and Savoie's wharf; and Manning Point, Hornby Island, British Columbia.

*Pachydiscus* sp. cf. *P. haradai* Jimbo

Hypotype 5949

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 77.  
?Haslam Formation, Upper Cretaceous, Shopland near Maple Bay, Vancouver Island, British Columbia.

*Pachydiscus* sp. cf. *P. jacquoti* Seunes

Hypotype 5839

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 72, pl. 11, figs. 1-3.  
Cedar District Formation, Upper Cretaceous, Sucia Island, Washington, U.S.A.

*Pachyprotychites strigatus* see *Protychites strigatus*

*Pamphagosirenites* cf. *pamphagus* (Dittmar)

Hypotype 17013

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 16, pl. 7, figs. 5a-c.  
Quatsino Formation, Upper Triassic, Izard Point, west coast of Vancouver Island, British Columbia.

*Paracadoceras harveyi* Crickmay

Holotype 9675

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 55, pl. 16, figs. 1, 2.  
Upper Jurassic [Mysterious Creek Formation], Deer Creek, 700 yards from mouth, northwest side Harrison Lake, British Columbia.

*Paracephalites glabrescens* Buckman

Holotype 8601

Buckman, S.S., 1929, Nat. Mus. Can., Bull. 58, p. 10, pl. 1, figs. 1-3; pl. 2; figs. 4-6.  
Ferne Group, Upper Jurassic, talus from railway cut, south slope Grassy Mountain, north of Blairmore, Alberta.

*Paracephalites glabrescens* Buckman

Hypotypes 14695, 14705, 14719

Frebald, H., 1963, Geol. Surv., Canada, Bull. 93, p. 9, pl. 1, figs. 1a-c; pl. 2, figs. 1, 3a, b.

Fernie Group, Middle Jurassic, eastern side of south slope Grassy Mountain, north of Blairmore, Alberta and Grey beds on lumber road south of Fording River bridge, 13 miles north of Natal, British Columbia.

*Paracephalites hashimotoi* Frebald

Holoplastotype 14374; paratype 14697; hypotype 14701

Frebald, H., 1963, Geol. Surv., Canada, Bull. 93, p. 11, pl. 3, figs. 1a, b; pl. 4, fig. 1. Middle Jurassic, upper *Corbula munda* beds on Adanac Strip mine road, Alberta and Grey beds on lumber road south of Fording River bridge, 13 miles north of Natal, British Columbia.*Paracephalites jucundus* Buckman

Holotype 8600

Buckman, S.S., 1929, Nat. Mus. Can., Bull. 58, p. 8, pl. 2, figs. 1-3.

Fernie Group, Upper Jurassic, talus from railway cut, south slope Grassy Mountain, north of Blairmore, Alberta.

*Paracephalites metastatus* (Buckman)

Hypotype 14700

Frebald, H., 1963, Geol. Surv., Canada, Bull. 93, p. 12, pl. 1, fig. 2; pl. 2, fig. 2.

Middle Jurassic, Grey beds south side Cairn Pass, west side of Front Range, Jasper Park, Alberta.

*Paragastrolites liardense* see *Placenticeras* (*Perezianum*? var.) *liardense**Parajuvavites* cf. *buddhaicus* Mojsisovics

Hypotype 14306

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 24, pl. 11, figs. 6a, b.

Bonanza Group, Upper Triassic, Amos Island off west coast of Vancouver Island, British Columbia.

*Parajuvavites* sp.

Fig. spec. 12600

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 91, pl. 12, figs. 1a, b.

Pardonet Formation, Upper Triassic, very high on west slope of Black Bear Ridge, Peace River Foothills, British Columbia.

*Paranorites sverdrupi* Tozer

Holotype 14277; paratype 14283

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 6, pl. 2, figs. 4a-c, 5a, b.

Blind Fiord Formation, Lower Triassic, north side Otto Fiord, Ellesmere Island, Arctic; "Toad-Grayling" Formation, Lower Triassic, Needham Creek, Halfway River area, British Columbia.

*Parapopanoceras medium* McLearn

Holotype 9577; paratype 9578

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 10, Supp., p. 1, pl. 8, figs. 1-3.

Toad Formation, Middle Triassic, Cameron Hill and talus north side east of mile-post 378, Alaska Highway, Tetsa River Valley, British Columbia.



*Parapopanoceras normale* McLearn

Holotype 9574; paratype 9575

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 10, Supp., p. 1, pl. 8, figs. 7, 8; pl. 9, figs. 5, 6.

Toad Formation, Middle Triassic, Cameron Hill, east of mile-post 378, and talus west of mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Parapopanoceras obesum* McLearn

Holotype 9576

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 10, Supp., p. 1, pl. 8, figs. 5, 6.

Toad Formation, Middle Triassic, north shore Liard River, 1,000 feet below first rapids, 11 miles west of Toad River, British Columbia.

*Parapopanoceras selwyni* McLearn

Holotype 9579; paratype 9580

McLearn, F.H., 1948, Geol. Surv., Canada, Paper 46-1, 2nd Edition, p. 11, Supp., p. 1, pl. 9, figs. 7-9.

Toad Formation, Middle Triassic, talus Cameron Hill and north side east of mile-post 378, Alaska Highway, Tetsa River Valley, British Columbia.

*Parapopanoceras tetsa* McLearn

Holotype 6440

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 1, pl. 2, fig. 6.

1948, *ibid.*, 2nd Edition, p. 9, Supp., pl. 2, fig. 6; pl. 9, fig. 1.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 12, pl. 5, figs. 5a, b.

Toad Formation, Middle Triassic, talus near mile-post 375, Alaska Highway, Tetsa River Valley, British Columbia.

*Parapopanoceras tetsa* var. *praematurum* McLearn

Holotype 6441

McLearn, F.H., 1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 1, pl. 3, fig. 2.

Toad Formation, Middle Triassic, near mile-post 378, Alaska Highway, Tetsa River Valley, British Columbia.

=*Parapopanoceras praematurum*, McLearn, F.H., 1948, *ibid.*, 2nd Edition, p. 11, Supp., p. 1, pl. 3, fig. 2; pl. 8, fig. 4.

*Parathisbites sineus* McLearn

Holotype 9495

McLearn, F.H.,

1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 4, fig. 1.

1961, *ibid.*, Mem. 311, p. 67, pl. 6, figs. 11a, b.

Pardonet Formation, Upper Triassic, talus block east of and higher than XX, west end Pardonet Hill, Peace River Foothills, British Columbia.

*Parathisbites sineus* McLearn

Hypotype 12589

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 67, pl. 6, fig. 12.

Pardonet Formation, Upper Triassic, talus block east of and higher than XX, west end Pardonet Hill, Peace River Foothills, British Columbia.

*Paratrachyceras aylardi* McLearn

Holotype 9549

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 22, App., p. 2, pl. 8, figs. 1, 2.

Liard Formation, Middle Triassic, talus near mile-post 386.5, Alaska Highway, Tetsa River Valley, British Columbia.

*Paratrachyceras caurinum* McLearn

Holotype 9548

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 23, App., p. 1, pl. 7, fig. 13.

'Grey beds', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Paratrachyceras (Meginoceras) meginiae* see *Sirenites (Meginoceras) meginiae**Paratrachyceras sutherlandi* McLearn

Holotype 9547

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 22, App., p. 1, pl. 5, fig. 9.

'Dark siltstones', Middle Triassic, talus west flank of Carbon Range, Prophet River basin, British Columbia.

*Paratrachyceras tetsa* McLearn

Holotype 9545; paratype 9546

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 23, App., p. 1, pl. 4, figs. 3, 4; pl. 8, fig. 3.

Liard Formation and 'Dark siltstones', Middle Triassic, talus near mile-post 386.5, Alaska Highway, Tetsa River Valley and Hage Creek, south side of Sikanni Chief River, west slope of Mount Hage, British Columbia.

*Pavlovia?* sp. indet.

Fig. spec. 15132

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 24, pl. 21, fig. 1.

Deer Bay Formation, Upper Jurassic, Reptile Creek, over 1 mile north of Eureka weather station, Slidre Fiord area, Ellesmere Island, Arctic.

*Pearylandites* sp.

Fig. spec. 14188

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 361, p. 33, pl. 22, figs. 3a, b.

Schei Point Formation, Middle Triassic, north summit of Exmouth Island, Arctic.

*Peltoceras occidentale* Whiteaves

Holotype 5825

Whiteaves, J.F., 1907, Ottawa Naturalist, vol. 21, No. 5, p. 81, text figs. a-c.

Fermie Group, Jurassic, Rocky Mountain Park, Red Deer River, Alberta.

= *Porpoceras* cf. *subarmatum*, Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 15, pl. 6, figs. 4a, b.*Perisphinctes(?)* sensu lato sp. indet.

Fig. specs. 15281-15284

Frebold, H. and Little, H.W., 1962, Geol. Surv., Canada, Bull. 81, p. 19, pl. 4, figs. 1-5.

Hall Formation or Rossland Group, Middle and Upper(?) Jurassic, 50 feet north of switch-back on Kelly Creek road, 3.6 miles above old mill at elevation of 4,350 feet, Salmo area British Columbia.

*Peronoceras* cf. *subarmatum* Young and Bird

Hypotype 12878

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 46, pl. 18, fig. 1.

Fermie Group, Lower Jurassic, opposite George Creek Valley, Alberta.

*Phylloceras columbianum* Crickmay

Holotype 9678

Crickmay, C.H., 1930, Nat. Mus. Can., Contr. Can. Pal., Bull. 63, p. 64, pl. 22, figs. 1-3.

Upper Jurassic [Agassiz Prairie Formation], southwest point of The Peninsula, Harrison Lake, British Columbia.

*Phylloceras* sp. indet.

Fig. spec. 10012

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 52.

Trent River Formation, Upper Cretaceous, north bank Browns River, 27 chains above junction with Puntledge [Comox] River, Vancouver Island, British Columbia.

*Phylloceras* sp. indet.

Fig. spec. 15146

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 6, pl. 5, fig. 3.

Middle Jurassic, on Porcupine River north of confluence with Bell River, Yukon.

*Phyllopachyceras forbesianum* (d'Orbigny)

Hypotypes 5812, 10013, 10014

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 52, pl. 2, figs. 1-5.

Lambert Formation, Upper Cretaceous, north side and between Phipps and Manning Points, Hornby Island, British Columbia.

*Pinacoceras* sp.

Fig. spec. 13495

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 111, pl. 21, fig. 1.

Pardonet Formation, Upper Triassic, above XX, west end Pardonet Hill, Peace River Foothills, British Columbia.

*Placenticerias glabrum* Whiteaves

Holotype 5028

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 172, pl. 24, figs. 1, a, b.

Lower Cretaceous, Peace River a few miles below Fort Vermilion, Alberta.

*Placenticerias (Perezianum? var.) liardense* Whiteaves

Syntypes 4808, a-e

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 158, pl. 20, figs. 1 [4808], 2 [4808a].

Lower Cretaceous, Liard River below Old Fort Halkett, British Columbia.

=*Paragastrolites liardense*, Imlay, R.W., 1961, U.S. Geol. Surv., Prof. Paper 335, p. 63, pl. 19, figs. 11, 13.

*Placenticerias occidentale* Whiteaves

Holotype 5040

Whiteaves, J.F.,

1887, Geol. Surv., Canada, Ann. Rept. 1886, n. ser., vol. 2, p. 133B.

1889, *ibid.*, Contr. Can. Pal., vol. 1, pt. 2, p. 155, pl. 21, fig. 1.

Cretaceous, K-uk River, coast of British Columbia.

*Placites* sp.

Fig. spec. 12610

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 111, pl. 18, fig. 8.

Pardonet Formation, Upper Triassic, very high on west slope of Black Bear Ridge, Peace River Foothills, British Columbia.

*Pleydellia?* sp. indet.

Fig. specs. 14665, 14666, 14671-14673, 14677

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 23, pl. 9, figs. 5, 6; pl. 12, figs. 2-4.

Jaeger Formation, Middle Jurassic, 2 miles east of Success Point, Cameron Island, Arctic.

*"Polymorphites"* cf. *senescens* Buckman

Hypotypes 11219-11221

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 19, pl. 15, figs. 5a-d.

Middle Jurassic, Troitsa Peak, Whitesail Lake area, British Columbia.

*Ponteixites gracilis* Warren

Holotype 8740; paratypes 8741, a, b.

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, p. 96, pl. 3, figs. 5-9.

Bearpaw Formation, Upper Cretaceous, 3 miles west of Tilney, Saskatchewan.

*Ponteixites robustus* Warren

Holotype 8738; paratype 8739

Warren, P.S., 1934, Trans. Roy. Soc. Can., ser. 3, vol. 28, p. 95, pl. 3, figs. 1-4.

Bearpaw Formation, Upper Cretaceous, Notukeu Creek near Ponteix, Saskatchewan.

*Popanoceras mcconnelli* Whiteaves

Syntypes 4716, a-m, 4720, a, b, d

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 138, pl. 18, figs. 2, a [4716], b [4716a].

Middle Triassic [Liard Formation], Liard River about 30 and 25 miles below Devil Point, British Columbia.

= *Nathorstites mcconnelli*, McLearn, F.H., 1947, *ibid.*, Paper 47-24, App., pl. 8, figs. 7, 8 [holotype 4716].*Popanoceras mcconnelli* var. *lenticulare* Whiteaves

Syntypes 4721, a-c

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 140, pl. 18, figs. 3, a [4721].

Middle Triassic [Liard Formation], Liard River about 30 miles below Devil Point, British Columbia.

= *Nathorstites mcconnelli* var. *lenticularis*, McLearn, F.H., 1947, *ibid.*, Paper 47-24, App., pl. 8, figs. 4, 5 [holotype 4721].*'Prionites'* *hollandi* McLearn

Holotype 9469

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., p. 1, pl. 2, fig. 8.

Toad Formation, Lower Triassic, north side Liard River 2 miles north of mouth of Toad River, British Columbia.

## Prionitid indet.

Fig. specs. 14090, 14091

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 72, pl. 20, figs. 2a, b, 3a, b.

Blind Fiord Formation, Lower Triassic, south side Bunde Fiord, Axel Heiberg Island, Arctic.

## Prionitid indet.

Fig. spec. 14092

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 72, pl. 20, figs. 1a, b.

Toad Formation, Lower Triassic, Liard River 2 miles below mouth of Toad River, British Columbia.

= *Wasatchites?* sp., Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 10, pl. 4, figs. 3a, b.

Mollusca

*Prionolobus plicatus* Tozer

Holotype 14047; paratype 14048

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 47, pl. 20, figs. 4, 5.

Blind Fiord Formation, Lower Triassic, south side Bunde Fiord, Axel Heiberg Island, Arctic.

=*Prionolobus heibergensis*, Tozer, E.T., 1962, J. Pal., vol. 36, No. 5, p. 1228.

*Prionotropis caurinus* McLearn

Holotype 6193

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 42, p. 126, pl. 23, figs. 6, 7.

Kaskapau Formation, Upper Cretaceous, cliff on east bank Smoky River just above mouth of Little Smoky River, Alberta.

*Procerites engleri* Frebold

Holotype 12906; paratype 12907

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 65, pl. 39, fig. 1; pl. 40, figs. 1a, b.

Fernie Group, Upper Jurassic, above railway section on south slope Grassy Mountain, north of Blairmore, Alberta.

*Procerites?* sp. indet.

Fig. specs. 12908, 12910–12918

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, pp. 65, 66, pl. 40, figs. 2a, b; pl. 41, figs. 1–9.

Fernie Group, Upper Jurassic, south slope Grassy Mountain, north of Blairmore, and southwest of Isola Peak, Alberta.

*Procladiscites* cf. *P. martini* (Smith)

Hypotypes 14171, 14172

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 89, pl. 22, figs. 9, 10a-c.

Blaa Mountain Formation, Middle Triassic, 15 miles northwest of entrance to Hare Fiord, Nansen Sound, northwest coast Ellesmere Island, Arctic.

*Proptychites candidus* Tozer

Holotype 14044; paratypes 14045, 14046

Tozer, E.T.,

1961, Geol. Surv., Canada, Mem. 316, p. 57, pl. 11, figs. 1a-c.

1962, *ibid.*, Paper 62–19, p. 6, pl. 2, fig. 3.

Blind Fiord Formation, Lower Triassic, south side Bunde Fiord, Axel Heiberg Island, Arctic.

*Proptychites* cf. *candidus* Tozer

Hypotype 14285

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62–19, p. 6, pl. 2, figs. 2a-c.

"Toad-Grayling" Formation, Lower Triassic, 3 miles south of Mount Laurier, Halfway River area, British Columbia.

*Proptychites strigatus* Tozer

Holotype 14042; paratypes 14033–14041, 14043

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 55, pl. 9, fig. 3; pl. 10, figs. 1, 2; pl. 11, figs. 2–4.

Blind Fiord Formation, Lower Triassic, south side Bunde Fiord, Axel Heiberg Island, Arctic.

*Prospiringites spathi* Frebold

Hypotypes 14085, 14086

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 58, pl. 13, figs. 1, 2.

Blind Fiord Formation, Lower Triassic, between Hare and Otto Fiords, 5 miles northwest of entrance to Hare Fiord, west coast Ellesmere Island, Arctic.

*Protrachyceras sikanianus* McLearn

Holotype 9044

McLearn, F.H., 1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 16, pl. 1, fig. 1.

'Dark siltstones', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

= *Protrachyceras sikanianum*, McLearn, F.H.,1943, *ibid.*, vol. 37, sec. 4, p. 53, pl. 1, figs. 10-12.

1947, Geol. Surv., Canada, Paper 47-24, p. 20, App., pl. 1, figs. 4, 5.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, figs. 9a, b.*Protrachyceras sikanianum* McLearn

Hypotypes 1491-1494

McLearn, F.H.,

1943, Trans. Roy. Soc. Can., ser. 3, vol. 37, sec. 4, p. 53, pl. 1, figs. 1-3, 7-9, 13-16.

1947, Geol. Surv., Canada, Paper 47-24, p. 20, App., pl. 1, figs. 2, 3 [1494].

'Dark siltstones', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Protrachyceras sikanianus* var. *zauwae* McLearn

Holotype 9045

McLearn, F.H., 1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 17, pl. 1, fig. 4.

'Dark siltstone', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

= *Protrachyceras sikanianum* var. *zauwae*, McLearn, F.H., 1943, *ibid.*, vol. 37, sec. 4, p. 56, pl. 2, figs. 1-4.= *Protrachyceras zauwae*, McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 21, App., pl. 1, fig. 1.*Protrachyceras* sp. indet.

Fig. spec. 14190

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 75, pl. 21, figs. 1a, b.

Schei Point Formation, Middle Triassic, southwest limb Goose Point anticline, Bjorne Peninsula, Ellesmere Island, Arctic.

*Pseudogastrioceras fortieri* Harker

Holotype 13772; paratypes 13773, 13774

Harker, P., 1960, Geol. Surv., Canada, Mem. 309, p. 74, pl. 25, figs. 3-5; pl. 25, figs. 1-3; text figs. 8A, B.

Assistance Formation, Permian, lower reaches Lyall River, Grinnell Peninsula, Northwest Devon Island, Arctic.

*Pseudolioceras* aff. *compactile* (Simpson)

Hypotypes 13369-13372

Frebold, H., 1958, Geol. Surv., Canada, Bull. 41, p. 5, pl. 3, figs. 3-6.

Wilkie Point Formation, Lower Jurassic, 3¼ miles northeast and south of Mould Bay weather station; 12 miles north of Cape Canning, east side Intrepid Inlet, Prince Patrick Island; and Strand Fiord, Axel Heiberg Island, Arctic.

*Pseudolioceras m'clintocki* (Houghton)

Hypotypes 14652-14660, 14662-14664

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 20, pl. 8, figs. 1-9; pl. 9, figs. 2-4.

Wilkie Point Formation, Middle Jurassic, loose about 9 miles east of west coast of Mackenzie King Island, Arctic.

*Pseudolioceras* cf. *m'clintocki* (Haughton)

Hypotypes 14661, 14667-14670

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 21, pl. 9, fig. 1; pl. 10, fig. 1; pl. 11, figs. 1-3; pl. 12, fig. 1.

Wilkie Point Formation, Middle Jurassic, loose about 9 miles east of west coast of Mackenzie King Island and north side Marie Bay, Melville Island, Arctic.

*Pseudolioceras* sp. indet. B

Fig. spec. 14647

Frebold, H., 1960, Geol. Surv., Canada, Bull. 59, p. 22, pl. 5, fig. 10.

Lower or Middle Jurassic, north of Rat River and east of Summit Lake, Richardson Mountains, District of Mackenzie.

*Pseudophyllites* *indra* (Forbes)

Hypotypes 10018-10026

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 57, pl. 3, figs. 2-13.

Lambert Formation, Upper Cretaceous, Manning Point and north side Hornby Island, British Columbia.

*Pseudosageceras* *multilobatum* Noetling

Hypotypes 14173-14175

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 44, pl. 13, figs. 8, 9a, b.

Blind Fiord Formation, Lower Triassic, 5 miles northwest of entrance to Hare Fiord, northwest Ellesmere Island, Arctic.

*Pseudoschloenbachia* *brannani* Usher

Holotype 10058

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 92, pl. 24, figs. 3, 4.

Haslam Formation, Upper Cretaceous, Brannan Creek, Vancouver Island, British Columbia.

*Pseudosirenites* *pardoneti* see *Sirenites* *pardoneti* and *S. inaequioronatus*

*Pseudosirenites* *pressus* see *Sirenites* *pressus*

*Psiloceras* *canadense* Frebold

Holotype 11206; paratypes 11206a-g

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 3, pl. 1, figs. 1-6; pl. 2, fig. 1; pl. 3, fig. 1.

Lower Jurassic,  $\frac{1}{4}$  mile above Spruce Lake Creek, Tyaughton Creek, British Columbia.

cf. *Psiloceras* *erugatus* (Bean)

Hypotypes 9640, a, b

Lees, E.J., 1934, Trans. Roy. Can. Inst., vol. 20, pt. 1, p. 46, pl. 6, figs. 1, 2, 4.

Laberge Group, Jurassic, Laberge area, Yukon.

*Pterotoceras* *caurinum* McLearn

Holotype 9412

McLearn, F.H.,

1939, Trans. Roy. Soc. Can., ser. 3, vol. 33, sec. 4, p. 56, pl. 1, fig. 2.

1961, Geol. Surv., Canada, Mem. 311, p. 54, pl. 5, figs. 1a, b.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Pterotoceras* *caurinum* McLearn

Hypotype 12581

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 54, pl. 4, fig. 3.

Pardonet Formation, Upper Triassic, Peace River Foothills, British Columbia.

*Pterotoceras caurinum* var. *arctum* McLearn

Holotype 8846

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 115, pl. 3, fig. 2.

Pardonet Formation, Upper Triassic, west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Pterotoceras caurinum*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 54, pl. 4, fig. 4.*Pterotoceras caurinum* var. *elegantulum* McLearn

Holotype 9413

McLearn, F.H., 1939, Trans. Roy. Soc. Can., ser. 3, vol. 33, sec. 4, p. 56, pl. 1, fig. 4.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Pterotoceras caurinum*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 54, pl. 5, fig. 2.*Ptychites nanuk* Tozer

Holotype 14099; paratypes 14096-14098, 14100-14106

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 93, pl. 21, figs. 2-10; text figs. 10a-c.

Schei Point Formation, Middle Triassic, southwest limb of Goose Point anticline, Bjorne Peninsula, Ellesmere Island, Arctic.

*Ptychites* cf. *P. trochlaeformis* (Lindstrom)

Hypotypes 14186, 14187

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 93, pl. 22, figs. 1a, b, 2a, b.

Schei Point Formation, Middle Triassic, north summit of Exmouth Island, Arctic.

*Ptychites wrighti* McLearn

Holotype 6442

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, Supp. App. II, p. 3, pl. 4, fig. 5.

1948, *ibid.*, 2nd Edition, p. 12, Supp., pl. 4, fig. 5.

Toad Formation, Middle Triassic, west slope Hage Mountain, McTaggart Creek, Sikanni Chief River valley, British Columbia.

*Ptychoceras vancouverense* Whiteaves

Syntypes 5798, a-h

Whiteaves, J.F., 1879, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 2, p. 113, pl. 14, figs. 3 [5798], a [5798a].

Usher, J.L., 1952, *ibid.*, Bull. 21, p. 101, pl. 26, figs. 5, 6 [lectotype 5798].

Upper Cretaceous [Trent River Formation], Trent River, Vancouver Island, British Columbia.

*Rhabdoceras suessi* Hauer

Hypotypes 14263, 14264

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 26, pl. 12, figs. 18, 19a-c.

Lewes River Group, Upper Triassic, near summit of Povoas Mountain, Laberge area, Yukon.

*Rhacophyllites zetteli* Mojsisovics

Hypotype 14178

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 96, pl. 26, figs. 1a-d.

Blaa Mountain Formation, Upper Triassic, 9 miles southwest of Eureka weather station, Ellesmere Island, Arctic.



*Rhacophyllites* sp.

Fig. spec. 13490

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 38, pl. 19, figs. 2a, b.  
Pardonet Formation, Upper Triassic, Rapide-qui-ne-parle-pas, Peace River, British Columbia.

*Rhacophyllites* sp.

Fig. spec. 14305

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 24, pl. 11, figs. 1a, b.  
Bonanza Group, Upper Triassic, north shore of Esperanza Inlet, west coast of Vancouver Island, British Columbia.

*Rhaeboceras whiteavesi* Landes

Holotype 9367

Landes, R.W., 1940, Geol. Surv., Canada, Mem. 221, p. 174, pl. 6, fig. 9; pl. 7, fig. 4;  
pl. 8.

Bearpaw Formation, Upper Cretaceous, Pothole Creek, SW. ¼ sec. 34, tp. 2, rge. 22, W. 4th mer., Alberta.

*Sagenites gethingi* McLearn

Holotype 8806

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 7, p. 98, pl. 1, fig. 12.

1947, Geol. Surv., Canada, Paper 47-24, App., pl. 3, figs. 15, 16.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 10.

Schooler Creek Formation, Middle Triassic, north side Beattie Ledge, Peace River Foothills, British Columbia.

*Sagenites gethingi* McLearn

Hypotypes 9529, 9530

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, App., pl. 3, figs. 13, 14;  
pl. 4, fig. 5.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 11 [9529].

'Dark siltstones', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Sagenites* sp.

Fig. spec. 13487

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 106, pl. 19, figs. 5a, b.

Pardonet Formation, Upper Triassic, talus Tepee Rocks Coulee, Peace River, British Columbia.

*Sandlingites* cf. *idae* Mojsisovics

Hypotypes 12567, 12568

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 42, pl. 2, figs. 4a, b, 5a, b.

Pardonet Formation, Upper Triassic, talus block Tepee Rocks Coulee, Peace River, British Columbia.

*Sandlingites?* sp.

Fig. spec. 12569

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 43, pl. 2, figs. 3a, b.

Pardonet Formation, Upper Triassic, above XX at west end of Pardonet Hill, Peace River, British Columbia.

*Saxitoniceras allani* McLearn

Holotype 9021

McLearn, F.H.,

1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 72, pl. 1, fig. 4.

1928, Geol. Surv., Canada, Contr. Can. Pal., Bull. 49, p. 21, pl. 8, figs. 1, 2.

Fernie Group, Jurassic, headwaters of Sheep Creek, Alberta.

*Saxitoniceras marshalli* McLearn

Holotype 9022

McLearn, F.H., 1928, Geol. Surv., Canada, Contr. Can. Pal., Bull. 49, p. 22, pl. 8, figs. 3, 4.

Ferne Group, Jurassic, headwaters of Sheep Creek, Alberta.

*Scaphites (Hoploscaphites) nicolletii* (Morton)

Hypotype 16464

Jeletzky, J.A., 1962, J. Pal., vol. 36, No. 5, p. 1014, pl. 141, figs. 1A-D.

Trail City Member, Fox Hills Sandstone, Upper Cretaceous, east side McLaughlin-Little Eagle Road, 2.3 miles south of turn off from Highway 12, Corson co., South Dakota, U.S.A.

*Scaphites subglobosus* Whiteaves

Syntypes 5339, a-c

Whiteaves, J.F., 1885, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 1, p. 52, pl. 7, fig. 3; pl. 8, figs. 1, a [5339], 2, a [5339a].

Upper Cretaceous [Bearpaw Formation], Old Wives Creek, tp. 10, rge. 11, W. 3rd mer., Saskatchewan.

*Scaphites ventricosus* var. *saxitonianus* McLearn

Holotype 9041; paratype 9041a

McLearn, F.H., 1929, Nat. Mus. Can., Bull. 58, p. 77, pl. 18, figs. 1-3; pl. 19, figs. 1, 2.

Upper Cretaceous, Crowsnest River, Alberta.

*Schloenbachia borealis* Whiteaves

Syntype 9703

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 160, pl. 21, fig. 5.

Jurassic [Laberge Group], Rink Rapids, Lewes River, Yukon.

*Schloenbachia gracilis* Whiteaves

Holotype 4809 [4759]

Whiteaves, J.F., 1889, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 2, p. 171, pl. 23, figs. 2, a.

Middle Jurassic, 3 miles north of Devils Point, Lake Minnewanka, British Columbia.

= *Sonninia gracilis*, Frebold, H., 1957, *ibid.*, Mem. 287, p. 48, pl. 19, figs. 1a, b.*Schloenbachia propinqua* Whiteaves

Syntypes 4876, c, 4877, 6492 [4877a]

Whiteaves, J.F.,

1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 247.

1900, *ibid.*, pt. 4, pl. 33, figs. 2, a [4877], b [4876], c [6492].

"Cretaceous" [Maude Formation, Lower Jurassic], Ells Bay, south side Maude Island and east side of South [Whiteaves] Bay, Queen Charlotte Islands, British Columbia.

= *Harpoceras propinquum*, McLearn, F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 4 [lectotype 4877].

1932, *ibid.*, vol. 26, sec. 4, p. 66, pl. 6, figs. 3, 4.= "*Harpoceras*" sp., McLearn, F.H., 1932, *ibid.*, vol. 26, sec. 4, p. 70, pl. 3, fig. 1 [6492].= *Fanninoceras kunea*, McLearn, F.H.,1930, *ibid.*, vol. 24, sec. 4, p. 5, pl. 2, fig. 4 [holotype 4876c].1932, *ibid.*, vol. 26, sec. 4, p. 77, pl. 8, figs. 11, 12.

*Schlotheimia (Scammoceras) cf. acuticosta* Buckman

Hypotype 11231

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 6, pl. 4, figs. 1a-c.

Lower Jurassic, elevation 6,425 feet, Last Creek tributary, Tyaughton Lake map-area, British Columbia.

*Schlotheimia(?)* sp. indet

Fig. specs. 11233-11235

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 7, pl. 4, figs. 2-4.

Lower Jurassic, elevation 6,160 and 6,220 feet, Last Creek tributary, Tyaughton Lake map-area, British Columbia.

*Schlotheimia* sp. indet.

Fig. spec. 11238

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 5, pl. 3, figs. 3a, b.

Lower Jurassic, right bank Spruce Lake Creek 1,000 yards from mouth, Tyaughton Lake map-area, British Columbia.

*Schluteria selwyniana* (Whiteaves)

Hypotypes 5809, b

Usher, J.L., 1952, Geol. Surv., Canada, Bull. 21, p. 63, pl. 6, figs. 1-3 [5809b].

Trent River Formation, Upper Cretaceous, north side Denman Island, ½ mile south of Village Point, British Columbia.

See *Ammonites selwynianus*

*Seymourites loganianus* see *Olcostephanus loganianus*

*Seymourites multus* McLearn

Holotype 9001

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 7, pl. 3, fig. 2.

Yakoun Formation, Upper Jurassic, northeast shore Maude Island, Queen Charlotte Islands, British Columbia.

*Seymourites plenus* see *Yakounites plenus*

*Silenticeras hatae* McLearn

Hypotype 9532

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 25, App., pl. 5, fig. 5.

Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 6.

'Dark siltstones', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia. See *Daphnites (Silenticeras) hatae*

*Sirenites costatus* Tozer

Holotype 14143; paratypes 14144-14147

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 80, pl. 24, figs. 10, 11a, b.

Blaa Mountain Formation, Upper Triassic, cliff southeast side Buchanan Lake, 5 miles from outlet, Axel Heiberg Island, Arctic.

*Sirenites inaequicornatus* McLearn

Holotype 9502

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., p. 2, pl. 6, fig. 3.

Pardonet Formation, Upper Triassic, Black Bear Ridge, Peace River Foothills, British Columbia.

=*Pseudosirenites pardoneti*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 40, pl. 2, fig. 8.

*Sirenites (Meginoceras) meginiae* (McLearn)

Hypotypes 8811, 8841, 8842

McLearn, F.H.,

1937, Can. Field-Naturalist, vol. 51, No. 9, p. 128, pl. 1, figs. 8-10.

1947, Geol. Surv., Canada, Paper 47-24, p. 24, App., pl. 5, fig. 3 [8811].

Schooler Creek Formation, Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

= *Paratrachyceras (Meginoceras) meginiae*, Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 14 [8811].See *Steinmannites (Meginoceras) meginiae**Sirenites meginiae* (McLearn)

Hypotype 9531

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 24, App., pl. 5, fig. 4.

'Dark siltstone', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

*Sirenites nabeschi* McLearn

Holotype 9410

McLearn, F.H.,

1939, Trans. Roy. Soc. Can., ser. 3, vol. 33, sec. 4, p. 53, pl. 1, fig. 7.

1961, Geol. Surv., Canada, Mem. 311, p. 38, pl. 1, figs. 4a, b.

Pardonet Formation, Upper Triassic, talus Cascades Creek, Pardonet Hill, Peace River Foothills, British Columbia.

*Sirenites nabeschi* McLearn

Hypotypes 12562-12565

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 38, pl. 1, figs. 1-3a, b, 5.

Pardonet Formation, Upper Triassic, talus at V on Cascades Creek; at XII on Juvavites Gully; at III east of Cascades Creek; and between X and XI on Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

*Sirenites nanseni* Tozer

Holotype 14161; paratypes 14151-15160, 14162-14166

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 77, pl. 23, figs. 1-8; pl. 24, figs. 12-16.

Blaa Mountain Formation, Upper Triassic, 15, 7, and 22 miles northwest of entrance to Hare Fiord, and southeast side of Otto Fiord 2 miles from mouth, northwest coast Ellesmere Island; Schei Point Formation, Upper Triassic, mouth of Bay Fiord, east side Hat Island [14166], Arctic.

*Sirenites pardoneti* McLearn

Holotype 8844; paratype 8845

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 8, p. 115, pl. 1, fig. 2; pl. 4, fig. 4.

Pardonet Formation, Upper Triassic, west slope Black Bear Ridge, Peace River Foothills, British Columbia.

= *Pseudosirenites pardoneti*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 40, pl. 1, figs. 6a, b; pl. 2, figs. 7a-c.Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 22, pl. 10, figs. 2a, b [8845].*Sirenites pressus* McLearn

Holotype 9501

McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-14, App., p. 1, pl. 5, fig. 7.

Pardonet Formation, Upper Triassic, talus west slope Black Bear Ridge, Peace River Foothills, British Columbia.

= *Pseudosirenites pressus*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 41, pl. 2, figs. 6a, b.

Mollusca

*Sirenites senticosus* (Dittmar)

Hypotypes 14148-14150

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 75, pl. 24, figs. 7-9.

Schei Point Formation, Upper Triassic, summit of cliffs at Cape Ursula, Table Island and 14 miles south of Cape Malloch, Borden Island, Arctic.

*Sirenites* cf. *senticosus* (Dittmar)

Hypotype 14240

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, fig. 9.

Upper Triassic, near summit of "Sheep Mountain", 12 miles south of Rapid of the Drowned on Liard River, British Columbia.

*Sonninia gracilis* see *Schloenbachia gracilis*

*Sonninia hansonii* McLearn

Holotype 7707

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 95, pl. 23, figs. 2, 3.

Hazelton Group, Middle Jurassic, talus from cliff about 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Sonninia* sp. indet.

Fig. specs. 12882 [4809c], 12883 [4809e], 12884 [4809d], 12885 [4809b]

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 49, pl. 19, figs. 2a, b; pl. 20, figs. 1-3.

Femie Group, Middle Jurassic, 3 miles north of Devils Point, Lake Minnewanka, Alberta.

*Sonninia* (?) sp. indet.

Fig. spec. 13730

Frebold, H., 1959, Geol. Surv., Canada, Bull. 49, p. 8, pl. 4, figs. 1a, b.

Middle Jurassic, south side Barrett Creek, about 2.7 miles southwest of Porto Rico, Salmo area, British Columbia.

*Sonninites silveria* McLearn

Holotype 7708

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 96, pl. 24, fig. 3.

Hazelton Group, Middle Jurassic, talus from cliff about 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Sonninites skawaki* McLearn

Holotype 7709

McLearn, F.H., 1926, Geol. Surv., Canada, Contr. Can. Pal., Bull. 44, p. 97, pl. 24, figs. 1, 2.

Hazelton Group, Middle Jurassic, talus from cliff about 1 mile southeast of Silver Lake, Hudson Bay Mountain, British Columbia.

*Sphenodiscus maudensis* Whiteaves

Holotype 4979

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 200, pl. 22, figs. 3, a, b.

Upper Cretaceous [Haida ? Formation], east point Maude Island, Queen Charlotte Islands, British Columbia.

*Sphenodiscus requienianus?* (d'Orbigny)

Hypotype 4878

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 248, pl. 22, figs. 4, a.

"Cretaceous" [Maude Formation, Lower Jurassic], south side Maude Island [Ells Bay], Queen Charlotte Islands, British Columbia.

=*Fanninoceras carlottense*, McLearn, F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 4 [holotype].

1932, *ibid.*, vol. 26, sec. 4, p. 76, pl. 8, figs. 9, 10.*Spiroceras carlottense* Whiteaves

Syntype 5004a-c

Whiteaves, J.F., 1884, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 3, p. 198.

Cretaceous [Haida Formation], north shore Cumshewa Inlet, Queen Charlotte Islands, British Columbia.

=*Turrilites carlottensis*, Whiteaves, J.F., 1900, *ibid.*, pt. 4, p. 271 [smallest specimen the type = 5004c].*Steinmannites (Meginoceras) meginiae* McLearn

Holotype 9042

McLearn, F.H., 1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 16, pl. 1, figs. 7, 8.

'Dark siltstone', Middle Triassic, Beattie Ledge, Peace River Foothills, British Columbia.

=*Sirenites (Meginoceras) meginiae*, McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 9, p. 128, pl. 1, fig. 1 [9042].=*Sirenites meginiae*, McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p. 24, App., p. 5, figs. 1, 2 [9042].=*Paratrachyceras (Meginoceras) meginiae*, Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 14, pl. 6, fig. 15.*Steinmannites* sp.

Fig. spec. 12572

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 44, pl. 2, figs. 9a, b.

Pardonet Formation, Upper Triassic, west side Klingzut Mountain, British Columbia.

*Steinmannites* sp.

Fig. spec. 14308

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 24, pl. 11, figs. 3a, b.

Pardonet Formation, Upper Triassic, 7 miles southwest of mouth of Needham Creek, Halfway River area, British Columbia.

*Stemmatoceras albertense* McLearn

Hypotype 12887

Frebald, H., 1957, Geol. Surv., Canada, Mem. 287, p. 50, pl. 21, figs. 2a, b; pl. 23, figs. 1a-c.

Rock Creek Member, Fernie Group, Middle Jurassic, Ribbon Creek, Alberta.

*Stephanoceras caamoni* McLearn

Holotype 9056

McLearn, F.H., 1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 5, pl. 2, fig. 2.

Yakoun Formation, Middle Jurassic, Logan Island, Skidegate Inlet, British Columbia.

=*Stephanoceras caamanoi*, McLearn, F.H., 1932, *ibid.*, vol. 26, sec. 4, p. 55, pl. 2, fig. 2; pl. 3, fig. 7; pl. 3, fig. 8.

*Stephanoceras* ex. gr. *skidegatense* (Whiteaves)

Hypotypes 12886, 12889

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 49, pl. 21, fig. 1; pl. 22, fig. 2; pl. 25, fig. 2.

Rock Creek Member, Fernie Group, Livingstone Gap and Snake Indian Valley, Alberta.

See *Ammonites skidegatensis*

*Stephanoceras skidegatense* var. *laperousii* McLearn

Holotype 6482

McLearn, F.H., 1942, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 54, pl. 1, fig. 1; pl. 3, fig. 3.

Yakoun Formation, Middle Jurassic, Richardson Bay, Maude Island, Queen Charlotte Islands, British Columbia.

*Stephanoceras yakounense* McLearn

Holotype 9057

McLearn, F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 5, pl. 1, fig. 1.

1932, *ibid.*, vol. 26, sec. 4, p. 56, pl. 2, fig. 1; pl. 3, figs. 2, 6.

Yakoun Formation, Middle Jurassic, Logan Island, Queen Charlotte Islands, British Columbia.

*Stephanoceras yakounense* McLearn

Hypotype 6483

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 56, pl. 3, fig. 4; pl. 5, fig. 10.

Yakoun Formation, Middle Jurassic, Skidegate Inlet, British Columbia.

*Stephanoceras* sp. indet.

Fig. spec. 12888

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 50, pl. 22, figs. 1a, b.

Rock Creek Member, Fernie Group, Middle Jurassic, Snake Indian Valley, Alberta.

*Stikinoceras kerri* McLearn

Holotype 9048

McLearn, F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 3, p. 17, pl. 1, fig. 2.

1947, Geol. Surv., Canada, Paper 47-14, p. 13, App., pl. 2, figs. 1, 2.

1961, *ibid.*, Mem. 311, p. 58, pl. 3, figs. 2a-c.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Mojsisovicsites (Stikinoceras) kerri*, Tozer, E.T., 1962, *ibid.*, Paper 62-19, p. 20, pl. 9, figs. 1a, b.

*Stikinoceras kerri* McLearn

Hypotype 12574

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 58, pl. 3, fig. 3.

Pardonet Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Stikinoceras robustum* McLearn

Holotype 8839

McLearn, F.H., 1937, Can. Field-Naturalist, vol. 51, No. 7, p. 98, pl. 1, fig. 4.

Schooler Creek [Pardonet] Formation, Upper Triassic, west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

=*Stikinoceras kerri*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 58, pl. 3, figs. 1a, b.

*Styrites columbianus* McLearn

Holotype 8827

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 4, p. 48, pl. 1, fig. 3.

1947, Geol. Surv., Canada, Paper 47-14, p. 12, App., pl. 3, fig. 1.

Pardonet Formation, Upper Triassic, at XII, west side Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

=*Tropiceltites columbianus*, McLearn, F.H., 1961, *ibid.*, Mem. 311, p. 76, pl. 8, figs. 6a, b.*Styrites ireneanus* McLearn

Holotype 8826

McLearn, F.H.,

1940, Can. Field-Naturalist, vol. 54, No. 4, p. 48, pl. 1, figs. 1, 2.

1947, Geol. Surv., Canada, Paper 47-14, p. 12, App., pl. 3, figs. 2, 3.

1961, *ibid.*, Mem. 311, p. 75, pl. 8, figs. 3a, b.

Pardonet Formation, Upper Triassic, at XII, west side Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

*Teloceras dowlingi* McLearn

Holotype 9050

McLearn, F.H.,

1930, Trans. Roy. Soc. Can., ser. 3, vol. 24, sec. 4, p. 2.

1932, *ibid.*, vol. 26, sec. 4, p. 112, pl. 1; pl. 5, figs. 2, 3.

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 51, pl. 24, figs. 1a, b.

Fernie Group, Middle Jurassic, Kananaskis River [Ribbon Creek], British Columbia.

*Teloceras itinsae* McLearn

Holotype 6481

McLearn, F.H., 1932, Trans. Roy. Soc. Can., ser. 3, vol. 26, sec. 4, p. 51, pl. 10, figs. 1, 2.

Yakoun Formation, Middle Jurassic, talus Mackenzie Bay, northwest shore Maude Island, Queen Charlotte Islands, British Columbia.

*Thetidites exquisitus* see '*Heraclites*'? *exquisitus**Thisbites charybdis* (Gemmellaro)

Hypotype 14330

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 64, pl. 7, fig. 6.

Pardonet Formation, Upper Triassic, talus block between X and XI, Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

*Thisbites charybdis* var. *custi* McLearn

Holotype 8801

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 4, p. 49, pl. 1, figs. 6, 7.

Schooler Creek [Pardonet] Formation, Upper Triassic, between XI and XII, west side Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

=*Thisbites custi*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 65, pl. 6, figs. 5a, b.*Thisbites charybdis* var. *ireneanus* McLearn

Holotype 8802; paratype 8791

McLearn, F.H., 1940, Can. Field-Naturalist, vol. 54, No. 4, p. 49, pl. 1, figs. 9, 10; pl. 2, fig. 3.

Schooler Creek [Pardonet] Formation, Upper Triassic, at XII, Juvavites Gully, Pardonet Hill, Peace River Foothills, British Columbia.

=*Thisbites custi*, McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 65, pl. 6, figs. 3a, b [8802].=*Thisbites charybdis*, McLearn, F.H., 1961, *ibid.*, p. 64, pl. 6, fig. 6 [8791].



*Thisbites custi* (McLearn)

Hypotype 12588

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 65, pl. 6, fig. 4.  
Pardonet Formation, Upper Triassic, talus at XII, west side Juvavites Gully, Pardonet Hill,  
Peace River Foothills, British Columbia.

*Thisbites dawsoni* (McLearn)

Hypotype 12587

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 63, pl. 6, fig. 2.  
Pardonet Formation, Upper Triassic, talus block between XI and XII, west side Juvavites  
Gully, Pardonet Hill, Peace River Foothills, British Columbia.  
See *Buchites hilaris* var. *dawsoni*

*Thisbites* cf. *pyrami* (Gemmellaro)

Hypotype 13481

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 67.  
Pardonet Formation, Upper Triassic, between XI and XII, Juvavites Gully, Pardonet Hill,  
Peace River Foothills, British Columbia.

"*Tibetites*" sp.

Fig. specs. 12582, 12583

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 57, pl. 5, figs. 8, 9a, b.  
Pardonet Formation, Upper Triassic, talus south bank Peace River at Little Parle Pas  
Rapids, British Columbia.

*Tmetoceras regleyi* Dumortier

Hypotypes 11213-11218

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 18, pl. 15, figs. 1-4  
Middle Jurassic, north ridge Troitsa Peak, Whitesail Lake area, British Columbia.

*Toricelliceras newcombii* see *Hoplites newcombii*

*Toricellites?* *spinosum* Frebold

Holotype 14709; paratype 14710

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 22, pl. 10, fig. 2; pl. 11, figs.  
2a-c.  
Middle Jurassic, Grey beds south side Cairn Pass, west side of Front Range, Jasper Park,  
Alberta.

*Trachyceras canadense* Whiteaves

Holotype 4718

Whiteaves, J.F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 142, pl. 18,  
figs. 4, a, b.  
Triassic [Liard Formation], Liard River about 25 miles below Devils Portage, British  
Columbia.  
=*Dawsonites canadensis*, McLearn, F.H., 1947, Geol. Surv., Canada, Paper 47-24, p.  
25, App., pl. 8, fig. 6.

*Trachyceras* sp.

Fig. spec. 14311

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 16, pl. 7, figs. 1a, b.  
Upper Triassic, "Sheep Mountain", 12 miles south of Rapid of the Drowned on Liard River,  
British Columbia.

*Trachysagenites herbichi* (Mojsisovics)

Hypotype 14246

Tozer, E.T., 1962, Geol. Surv., Canada, Paper, 62-19, p. 18, pl. 8, figs. 15a, b.  
 Quatsino Formation, Upper Triassic, Ououkinsh Inlet, west coast of Vancouver Island,  
 British Columbia.

*Tropiceltites columbianus* see *Styrites columbianus**Tropites johnsoni* Smith

Hypotype 14243

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 18, pl. 8, figs. 12a, b.  
 Upper Triassic, Iskut River area, British Columbia.

*Tropites* cf. *morani* Smith

Hypotypes 14179-14182

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 85, pl. 27, figs. 3-5.  
 Schei Point Formation, Upper Triassic, 1 mile south of Lyall Point, Cameron Island, Arctic.

*Tropites* sp.

Fig. spec. 12594

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 73, pl. 8, figs. 10a, b.  
 Pardonet Formation, Upper Triassic, bed at V, high on Cascades Creek, Pardonet Hill,  
 Peace River Foothills, British Columbia.

*Turrilites carlottensis* (Whiteaves)

Hypotype 5004

Whiteaves, J.F., 1900, Geol. Surv., Canada, Mesoz. Fossils, vol. 1, pt. 4, p. 271, pl.  
 34.

Lower Cretaceous, Bearskin Bay, Queen Charlotte Islands, British Columbia.

See *Spiroceras carlottense*

*Ussurites arthaberi* var. *cameroni* McLearn

Holotype 6694; paratype 6445

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 1, pl. 1, fig. 3; pl. 2, fig. 1.

1948, *ibid.*, 2nd Edition, p. 13, Supp., pl. 1, fig. 3; pl. 2, fig. 1.

Toad Formation, Middle Triassic talus west of mile-point 375, Alaska Highway, Tetsa River  
 Valley, British Columbia.

*Ussurites muskwa* McLearn

Holotype 6444

McLearn, F.H.,

1946, Geol. Surv., Canada, Paper 46-1, App. II, p. 1, pl. 3, figs. 3, 4.

1948, *ibid.*, 2nd Edition, p. 13, Supp., pl. 3, figs. 3, 4.

Toad Formation, Middle Triassic, east of mile-post 378, Alaska Highway, Tetsa River  
 Valley, British Columbia.

*Vermiceras latisulcatum* (Quenstedt)

Hypotype 11239

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 8, pl. 7, figs. 1a, b; pl. 8, figs.  
 1a, b.

Lower Jurassic, Last Creek, Tyaughton Lake area, British Columbia.

*Vermiceras scylla* (Reynès)

Hypotypes 11223-11230, 11236

Frebold, H., 1951, Geol. Surv., Canada, Bull. 18, p. 7, pl. 5, figs. 1-7; pl. 6, figs. 1, 2.

Lower Jurassic, ½ mile east of Gate Creek and 1 mile south of Spruce Lake, Tyaughton  
 Lake area, British Columbia.

*Vredenburghites* sp.

Fig. spec. 12556

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 42, pl. 1, fig. 7.

Pardonet Formation, Upper Triassic, XV, on south bank Peace River at Little Parle Pas Rapids, Peace River, British Columbia.

*Waldthausenites* cf. *leophanis* Diener

Hypotype 12609

McLearn, F.H., 1961, Geol. Surv., Canada, Mem. 311, p. 106, pl. 17, figs. 4a, b.

Pardonet Formation, Upper Triassic, talus west slope of west spur of Brown Hill, Peace River Foothills, British Columbia.

*Warrenoceras?* *crassicostatum* (Imlay)

Hypotypes 14698, 14704

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 18, pl. 3, figs. 2, 3.

Middle Jurassic, Grey beds south side Cairn Pass, west side of Front Range, Jasper Park, Alberta.

*Warrenoceras henryi* (Meek and Hayden)

Hypotypes 14688-14692

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 14, pl. 5, figs. 1, 2a, b; pl. 6, fig. 1; pl. 7, figs. 1-3.

Middle Jurassic, Grey beds in Ram Pass 2½ miles north of Mount Stornoway, Rock Lake area and south side Cairn Pass, west side of Front Range, Jasper Park, and *Gryphaea* bed on Grassy Mountain, north of Blairmore, Alberta.

*Warrenoceras imlayi* (Frebold)

Hypotypes 14687, 14720

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 16, pl. 6, fig. 3 [14720].

Middle Jurassic, *Gryphaea* bed on Grassy Mountain, north of Blairmore and Grey beds in Ram Pass 2½ miles north of Mount Stornoway, Rock Lake area, Alberta.

*Warrenoceras?* *loveanum* (Imlay)

Hypotype 14699

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 19, pl. 3, fig. 4; pl. 10, fig. 5.

Middle Jurassic, Grey beds south side Cairn Pass, west side of Front Range, Jasper Park, Alberta.

*Warrenoceras rierdonense* (Imlay)

Hypotype 14693

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 17, pl. 6, fig. 2.

Middle Jurassic, south side Cairn Pass, west side of Front Range, Jasper Park, Alberta.

*Warrenoceras* cf. *W. rierdonense* (Imlay)

Hypotype 14702

Frebold, H., 1963, Geol. Surv., Canada, Bull. 93, p. 18.

Middle Jurassic, *Gryphaea* bed on Gold Creek road, south slope Grassy Mountain, north of Blairmore, Alberta.

*Warrenoceras wabasnense* (Kindle)

Syntype 5388

Miller, A.K., 1938, Geol. Soc. Amer., Sp. Paper 14, p. 61, pl. 14, fig. 14.

New Albany shale, Upper Devonian, ¼ mile east of Delphi, Indiana, U.S.A.

=*Archoceras wabashense*, House, M.R., 1962, J. Pal., vol. 36, No. 2, p. 266.

*Wasatchites canadensis* McLearn

Holotype 9472; paratype 9473

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., p. 1, pl. 2, figs. 1-3.

Toad Formation, Lower Triassic, north side Liard River, 2 miles north of mouth of Toad River, British Columbia.

*Wasatchites meeki* var. *deleeni* McLearn

Holotype 9474

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., p. 2, pl. 2, figs. 4-6.

Toad Formation, Lower Triassic, north side Liard River, 2 miles north of mouth of Toad River, British Columbia.

*Wasatchites procurvus* McLearn

Holotype 9475

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., p. 2, pl. 2, fig. 7.

Toad Formation, Lower Triassic, north side Liard River, 2 miles north of mouth of Toad River, British Columbia.

*Wasatchites tardus* (McLearn)

Hypotypes 14087-14089

Tozer, E.T.,

1961, Geol. Surv., Canada, Mem. 316, p. 71, pl. 19, figs. 1-3.

1962, *ibid.*, Paper 62-19, p. 10, pl. 4, figs. 2a, b [14087].

Blind Fiord Formation, Lower Triassic, south side Bunde Fiord, Axel Heiberg Island, Arctic.

See *Anawasatchites tardus**Wasatchites?* sp. see Prionitid indet.*Xenoceltites* cf. *hannai* Matthews

Hypotype 9600

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., pl. 1, fig. 7.

Toad Formation, Lower Triassic, north side Liard River, 2 miles north of mouth of Toad River, British Columbia.

*Xenoceltites robertsoni* McLearn

Holotype 9476

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., p. 2 pl. 1, figs. 8, 9.

Toad Formation, Lower Triassic, north side Liard River, 2 miles north of Toad River, British Columbia.

*Xenoceltites subevolutus* Spath

Hypotype 14183

Tozer, E.T., 1961, Geol. Surv., Canada, Mem. 316, p. 53, pl. 16, figs. 1a, b.

Blind Fiord Formation, Lower Triassic, south side of Bunde Fiord, Axel Heiberg Island, Arctic.

*Xenoceltites subevolutus* Spath

Hypotype 14303

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 8, pl. 3, figs. 1a, b.

"Toad-Grayling" Formation, Lower Triassic below junction of Graham River and Horn Creek, Halfway River area, British Columbia.

*Xenoceltites warreni* McLearn

Holotype 9477

McLearn, F.H., 1945, Geol. Surv., Canada, Paper 45-28, App., p. 2, pl. 1, figs. 2, 3.

Toad Formation, Lower Triassic, north side Liard River, 2 miles north of mouth of Toad River, British Columbia.

*Xenoceltites warreni* McLearn

Hypotype 14231

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 8, pl. 3, figs. 3a, b.  
Toad Formation, Lower Triassic, Toad River, 2 miles above Liard River, British Columbia.

*Xenocephalites cf. bearpawensis* Imlay

Hypotype 12898

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 58, pl. 32, figs. 2a, b.  
Fernie Group, Upper Jurassic, Gold Creek road, south slope Grassy Mountain, Alberta.

*Xenodiscoides cf. radians* Waagen

Hypotype 14269

Tozer, E.T., 1962, Geol. Surv., Canada, Paper 62-19, p. 6, pl. 2, figs. 1a-c.  
Grayling Formation, Lower Triassic, Dunedin River 4½ miles north of mile-post 384, Alaska Highway, British Columbia.

*Yakounites mcevoyi* McLearn

Holotype 5018

McLearn, F.H., 1928, Geol. Surv., Canada, Contr. Can. Pal., Bull. 49, p. 20, pl. 4, figs. 1, 2.  
Fernie Group, Jurassic, Ribbon Creek, Kananaskis River, Alberta.  
= *Kepplerites (Seymourites) mcevoyi*, Frebold, H., 1957, *ibid.*, Mem. 287, p. 63, pl. 35, figs. 2a, b.

*Yakounites plenus* McLearn

Holotype 9000

McLearn, F.H., 1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 71, pl. 1, fig. 1.  
Yakoun Formation, Upper Jurassic, northeast shore Maude Island, Queen Charlotte Islands, British Columbia.  
= *Seymourites plenus*, McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 5, pl. 1, fig. 1; pl. 2, figs. 1, 2.

*Yakounoceras abruptum* McLearn

Holotype 9003

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 9, pl. 5, fig. 1; pl. 6, figs. 1, 2.  
Yakoun Formation, Upper Jurassic, northeast shore Maude Island, Queen Charlotte Islands, British Columbia.

*Yakounoceras gitinsi* McLearn

Holotype 9002

McLearn, F.H.,  
1927, Trans. Roy. Soc. Can., ser. 3, vol. 21, sec. 4, p. 72, pl. 1, fig. 2.  
1929, Nat. Mus. Can., Contr. Pal., Bull. 54, p. 8, pl. 3, fig. 1; pl. 4, fig. 1; pl. 8, fig. 5.  
Yakoun Formation, Upper Jurassic, northeast shore Maude Island, Queen Charlotte Islands, British Columbia.

*Yakounoceras ingrahami* see *Olcostephanus loganianus*

*Yakounoceras torrensi* McLearn

Holotype 9004

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 10, pl. 8, figs. 3, 4.  
Yakoun Formation, Upper Jurassic, northeast shore Maude Island, Queen Charlotte Islands, British Columbia.

*Zemistephanus crickmayi* Frebold

Holotype 12890

Frebold, H., 1957, Geol. Surv., Canada, Mem. 287, p. 52, pl. 25, fig. 1; pl. 26, fig. 1; pl. 27, fig. 1.

Rock Creek Member, Fernie Group, Middle Jurassic, Ribbon Creek, Alberta.

*Zemistephanus funteri* McLearn

Holotype 9007

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 20, pl. 10, fig. 1. Yakoun Formation, Middle Jurassic, northeast side Mackenzie Bay, northwest shore Maude Island, Queen Charlotte Islands, British Columbia.

*Zemistephanus richardsoni* (Whiteaves)

Hypotype 9006

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 19, pl. 9, figs. 1, 2; pl. 10, fig. 2.

Yakoun Formation, Middle Jurassic, northeast side Mackenzie Bay, northwest shore Maude Island, Queen Charlotte Islands, British Columbia.

See *Ammonites richardsoni**Zemistephanus vancouveri* McLearn

Holotype 9008

McLearn, F.H., 1929, Nat. Mus. Can., Contr. Can. Pal., Bull. 54, p. 20, pl. 11, figs. 1, 2.

Yakoun Formation, Middle Jurassic, northeast side Mackenzie Bay, northwest shore Maude Island, Queen Charlotte Islands, British Columbia.

*Zetoceras thorsteinssoni* Frebold

Holotype 15144; paratype 15145

Frebold, H., 1961, Geol. Surv., Canada, Bull. 74, p. 5, pls. 6-8; pl. 9, fig. 1.

Wilkie Point Formation, Middle Jurassic, east side Intrepid Inlet, 11 and 12 miles north of Cape Canning, Prince Patrick Island, Arctic.

## INCERTAE SEDIS

### *Climacoconus quadratus* (Walcott)

Hypotypes 17710–17712

Sinclair, G.W., 1942, *Annals Carnegie Mus.*, vol. 29, Art. 10, p. 226, pl. 3, figs. 2–5.  
Tetreauville Formation, Middle Ordovician, Pointe aux Trembles, Montreal East, and  
Tetreauville, Quebec.

### *Climacoconus rallus* Sinclair

Holotype 17713

Sinclair, G.W., 1942, *Annals Carnegie Mus.*, vol. 29, Art. 10, p. 228, pl. 2, figs. 11, 12.  
'Upper Chazy', Middle Ordovician, quarry south side Provincial Highway 18, 2 miles south  
of Terrebonne, Quebec.

### *Conularia alternistriata* Shimer

Holotype 5111

Shimer, H.W., 1926, *Geol. Surv., Canada, Contr. Can. Pal.*, Bull. 42, p. 84, pl. 4, fig. 11.  
Mississippian, Lake Minnewanka, Alberta.

### *Conularia asperata* Billings

Holotype 2156

Billings, E., 1866, *Geol. Surv., Canada, Cat. Sil. Fossils Anticosti*, p. 21.  
Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 255, pl. 27, fig. 10.  
Upper Ordovician [English Head Formation], Macasty Bay, Anticosti Island, Quebec.

### *Conularia asperata* Billings

Hypotypes 7133, 7135

Whiteaves, J.F., 1897, *Geol. Surv., Canada, Palaeoz. Fossils*, vol. 3, pt. 3, p. 201,  
pl. 21, figs. 2 [7133], a [7135].  
Ordovician [Red River Formation], Cat Head, Lake Winnipeg, Manitoba.

### *Conularia esclavensis* Hume

Holotype 9084

Hume, G.S., 1926, *Geol. Surv., Canada, Contr. Can. Pal.*, Bull. 44, p. 64, pl. 13,  
figs. 6a, b.  
Ordovician, North Arm, Great Slave Lake, District of Mackenzie.

### *Conularia honeymani* McLearn

Holotype 3143

McLearn, F.H., 1924, *Geol. Surv., Canada, Mem.* 137, p. 38, pl. 1, figs. 9, 10.  
Moydart Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

### *Conularia niagarensis* Hall?

Hypotype 4440

Williams, M.Y., 1915, *Geol. Surv., Canada, Mus. Bull.* 20, p. 7, pl. 2, fig. 4.  
Eramosa Member, Niagara [Amabel] Formation, railroad cut southeast of  
Eramosa River crossing, east of Guelph, Ontario.

*Conularia planicostata* Dawson

Hypotypes 7672, a

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 98, pl. 32, figs. 1, 2.

Mississippian, Windsor, Nova Scotia.

*Conularia salinensis* Whiteaves

Holotype 4292

Whiteaves, J.F., 1891, Geol. Surv., Canada, Contr. Can. Pal., vol. 1, pt. 3, p. 244,  
pl. 32, figs. 9, a.

Upper Devonian, Athabasca River opposite La Saline, Alberta.

*Conularia sorrocula* Beede

Hypotype 7580

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 100, pl. 32, figs. 3, a.

Mississippian, Brookfield, Nova Scotia.

*Conularia splendida* Billings

Holotype 2157

Billings, E., 1866, Geol. Surv., Canada, Cat. Sil. Fossils Anticosti, p. 21.

Twenhofel, W.H., 1928, *ibid.*, Mem. 154, p. 256, pl. 27, fig. 9.

Upper Ordovician [English Head Formation], Carleton Point, Anticosti Island, Quebec.

*Conularia* cf. *tenius* Slater

Hypotypes 7715, a

Bell, W.A., 1929, Geol. Surv., Canada, Mem. 155, p. 100, pl. 32, figs. 4, 5.

Mississippian, Hants co., Nova Scotia.

*Conularia trentonensis* Hall

Hypotype 3255

Raymond, P.E., 1921, Geol. Surv., Canada, Mus. Bull. 31, pl. 8, fig. 9.

"Collingwood" Formation, Upper Ordovician, Craigeith, Ontario.

*Conularia trentonensis* Hall

Hypotypes 1726, 9793

Wilson, A.E., 1951, Geol. Surv., Canada, Bull. 17, p. 100, pl. 18, figs. 1, 2.

Hull or Cobourg beds, Ottawa Formation, Middle Ordovician, Vankleek Hill and Arthur Street, Ottawa, Ontario.

*Conularia twenhofeli* McLearn

Holotype 6008

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 37, pl. 1, figs. 13, 14.

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

*Conularia?* sp.

Fig. spec. 4441

Williams, M.Y., 1915, Geol. Surv., Canada, Mus. Bull. 20, p. 8, pl. 2, fig. 5.

Eramosa Member, Niagara [Amabel] Formation, Middle Silurian, railroad cut southeast of Eramosa River crossing, east of Guelph, Ontario.

*Conularina irrasa* Sinclair

Holotype 17714

Sinclair, G.W., 1942, Annals Carnegie Mus., vol. 29, Art. 10, p. 223, pl. 1, figs. 1-3.

'Upper Chazy', Middle Ordovician, quarry 1/4 mile east of Village Belanger near Cap St. Martin, north of Montreal, Quebec.



*Conularina raymondi* Sinclair

Holotype 17715

Sinclair, G.W., 1942, *Annals Carnegie Mus.*, vol. 29, Art. 10, p. 223, pl. 2, fig. 3.  
'Upper Chazy', Middle Ordovician, Cap St. Martin, north of Montreal, Quebec.

*Conularina triangulata* (Raymond)

Hypotypes 17716, 17717

Sinclair, G.W., 1942, *Annals Carnegie Mus.*, vol. 29, Art. 10, p. 220, pl. 1, figs. 4-7, 9, 10.  
'Upper Chazy', Middle Ordovician, about 2 miles south of Terrebonne and Village Belanger, north of Montreal, Quebec.

*Hyclithes Alatus* Whiteaves

Syntypes 4099, a, b, 4100

Whiteaves, J.F., 1892, *Geol. Surv., Canada, Contr. Can. Pal.*, vol. 1, pt. 4, p. 342, pl. 46, figs. 2 [4099a], 3 [4099], 4 [4099b].  
Middle Devonian [lower Manitoban Formation], north side of Manitou Island and Dawson Bay, Lake Winnipegosis, Manitoba.  
=*Mastigospira alata*, LaRocque, A., 1949, *Univ. Michigan, Contr. Mus. Pal.*, vol. 7, No. 7, p. 116, pl. 1, figs. 3 [4100], 4 [4099a].  
McLaren, D.J., et al., 1962, *Geol. Surv., Canada, Paper 62-4*, p. 22, pl. 10, fig. 9 [4099a].

*Hyclithes americanus* Billings

Syntypes 396, a-g, 397, a-c

Billings, E.,  
1872, *Can. Naturalist Quart. J. Sci.*, n. ser., vol. 6, p. 215, figs. 2a, b.  
1872, *Am. J. Sci.*, ser. 3, vol. 3, p. 353, figs. 2a, b.  
Shaw, A.B., 1955, *J. Pal.*, vol. 29, No. 5, p. 786 [holotype 396g; paratypes 396a-f, 397a-c].  
Lower Cambrian, St. Simon, Rimouski co. and Bic Harbour, Quebec.

*Hyclithes billingsi* see *Salterella obtusa*

*Hyclithes cecrops* Walcott

Hypotype 16866

Norford, B.S., 1962, *Geol. Surv., Canada, Paper 62-14*, p. 8, pl. 2, fig. 12.  
Middle Cambrian, Windsor Mountain, southwest Alberta.

*Hyclithes communis* Billings

Syntypes 403, a-m, 404, a-e

Billings, E.,  
1872, *Can. Naturalist Quart. J. Sci.*, n. ser., vol. 6, p. 214, figs. 1a, b [403c?].  
1872, *Am. J. Sci.*, ser. 3, vol. 3, p. 353, figs. 1a, b.  
Walcott, C.D., 1886, *U.S. Geol. Surv., Bull.* 30, p. 136, pl. 14, fig. 3c [403m].  
Lower Cambrian, Bic Harbour and St. Simon, Rimouski co., Quebec.

*Hyclithes dartae* Northrop

Holotype 9155; paratype 9156

Northrop, S.A., 1937, *Geol. Soc. Amer., Sp. Paper 21*, p. 217, pl. 25, fig. 7.  
Bouleaux and Gascons Formations, Middle Silurian, shore of Anse McGinnis and north of St. Godfroi, Port Daniel, Quebec.

*Hyclithes forbesi* (Sharpe)

Hypotype 5658

McLearn, F.H., 1924, *Geol. Surv., Canada, Mem.* 137, p. 149, pl. 21, fig. 7.  
Stonehouse Formation, Upper Silurian, Stonehouse Brook, Arisaig, Nova Scotia.

*Hyolithes micans* Billings

Syntypes 411, a–h

Billings, E.,

1872, *Can. Naturalist Quart. J. Sci.*, n. ser., vol. 6, p. 215, fig. 3b [411h].

1872, *Am. J. Sci.*, ser. 3, vol. 3, p. 354, fig. 3b.

Lower Cambrian, Bic Harbour and St. Simon, Rimouski co., Quebec.

=*Hyolithellus micans*, Billings, E., 1872, *Can. Naturalist Quart. J. Sci.*, n. ser., vol. 6, p. 240.

*Hyolithes princeps* Billings

Syntypes 405, a–g

Billings, E.,

1872, *Can. Naturalist Quart. J. Sci.*, n. ser., vol. 6, p. 216, figs. 4a, b.

1872, *Am. J. Sci.*, ser. 3, vol. 3, p. 355, figs. 4a, b.

Lower Cambrian, St. Simon, Rimouski co., Quebec.

*Metaconularia calderi* Sinclair

Holotype 17718

Sinclair, G.W., 1940, *Trans. Roy. Soc. Can.*, ser. 3, vol. 34, sec. 4, p. 110, pl. 3, figs. 3–5.

Cobourg Formation, Middle Ordovician, quarry in lot 61, con. 2, Sophiasburgh tp., Prince Edward co., Ontario.

*Metaconularia calderi* Sinclair

Hypotypes 9794, 9795

Wilson, A.E., 1951, *Geol. Surv., Canada, Bull.* 17, p. 102, pl. 19, figs. 1–4.

Cobourg and Sherman Fall? beds, Ottawa Formation, Middle Ordovician, Booth Street and small island below Parliament Hill, Ottawa, Ontario.

*Salterella obtusa* Billings

Syntype 406

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 18.

1865, *Geol. Surv., Canada, Palaeoz. Fossils*, vol. 1, p. 18.

1865, *Geol. Vermont*, vol. 2, p. 955.

Lower Cambrian, L'Anse au Loup, Quebec.

=*Hyolithes billingsi*, Walcott, C.D., 1886, *U.S. Geol. Surv., Bull.* 30, p. 134.

*Salterella pulchella* Billings

Syntype 407

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 18.

1865, *Geol. Surv., Canada, Palaeoz. Fossils*, vol. 1, p. 18.

1865, *Geol. Vermont*, vol. 2, p. 955.

Lower Cambrian, L'Anse au Loup, Quebec.

*Salterella pulchella* Billings

Hypotype 410

Walcott, C.D., 1886, *U.S. Geol. Surv., Bull.* 30, p. 144, pl. 13, fig. 3a.

Lower Cambrian, Point Levis, Quebec.

*Salterella rugosa* Billings

Syntypes 408, a

Billings, E.,

1861, "New Species of Lower Silurian Fossils", p. 17.

1865, *Geol. Surv., Canada, Palaeoz. Fossils*, vol. 1, p. 17.

1865, *Geol. Vermont*, vol. 2, p. 954.

Lower Cambrian, L'Anse au Loup, Quebec.

*Tentaculites canadensis* var. *obtusiformis* McLearn

Holotype 5659

McLearn, F.H., 1924, Geol. Surv., Canada, Mem. 137, p. 151, pl. 21, fig. 4.

McAdam? Formation, Middle Silurian, coast section, Arisaig, Nova Scotia.

*Tentaculites mackenziensis* Kindle

Holotype 7974

Kindle, E.M., 1919, Geol. Surv., Canada, Mus. Bull. 29, p. 6, pl. 1, fig. 11.

Upper Devonian, east bank Mackenzie River 11 miles below Old Fort Wrigley opposite lowest of four islands, District of Mackenzie.

*Tentaculites parvulus* Whiteaves

Hypotype 14803

McCammon, H., 1960, Manitoba Dept. Mines Natural Res., Mines Branch, Publ. 59-6, p. 74, pl. 13, fig. 13.

Souris River Formation, Upper Devonian, along east boundary sec. 21, tp. 32, rge. 19, W. Prin. Mer., Manitoba.

*Tentaculites* sp.

Fig. spec. 16703

McLaren, D.J., *et al.*, 1962, Geol. Surv., Canada, Paper 62-4, p. 20, pl. 9, fig. 26.

LaButte Formation Elk Point Group, Middle Devonian, west bank of Slave River close to mouth of Murdock Creek, opposite La Butte, Alberta.