CATALOGUE OF TYPES AND FIGURED SPECIMENS OF FOSSIL PLANTS IN THE GEOLOGICAL SURVEY OF CANADA COLLECTIONS

W. A. Bell

1962

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GEOLOGICAL SURVEY
OF CANADA

CATALOGUE OF TYPES AND FIGURED SPECIMENS OF FOSSIL PLANTS IN THE GEOLOGICAL SURVEY OF CANADA COLLECTIONS

By
W. A. Bell

DEPARTMENT OF
MINES AND TECHNICAL SURVEYS
CANADA

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INTRODUCTION

Fossil types are the nuclei of much palæontological and geological information. The concept of a fossil species is based upon a population of individuals centring around those specimens originally selected by the author of the species to represent its uniqueness. If he chose a single specimen to bear the name of his species it is regarded as a *holotype*; if more than one was selected, each is a *syntype* (cotype). Other specimens of the original series described and generally illustrated by the author, in order to represent more clearly certain characters or variations, are *paratypes*. Subsequent identifications of the species, whether by its author or by others, are based upon direct comparison with the original types, or more commonly upon their published descriptions and illustrations. These additional, inferred representatives of the species, when described or illustrated or both, are secondary types called *hypotypes* (plesiotypes). To the geologist they rank next in importance to the original types or standard bearers of the species, because they provide useful information on the stratigraphic range or geological time-value of the species, and, if their life span was short, they may provide data for refined correlation of scattered lithological units.

Syntypes selected originally by an author to stand for his species may later have been judged by himself or by others to embody more than a single species. When this happens, a single specimen among the syntypes may be chosen to typify the original species, and thus to take the place of a holotype; such a specimen is one kind of a *lectotype*.

In addition to type specimens, both primary and secondary, palæontologists in many instances have described and illustrated specimens that they considered not assignable to any previously defined species, but which, owing to physical imperfections or lack of sufficiently diagnostic characters, did not warrant in their opinion erection of a new specific name. Such specimens were recorded by the generic name followed by "sp.", e.g. *Sphenopteris* sp., or, if the characters displayed were more like those of one established species than of others, the resemblance might be indicated by the distinctive notation "cf.", e.g. *Sphenopteris* sp. cf. *S. dufayi* Danzé or more simply *Sphenopteris* cf. *dufayi* Danzé. Such forms may well have stratigraphic value, and for that reason are included in the present index as figured specimens; the numbers they bear belong to type-series numbers in use by the Geological Survey of Canada.

Types and figured specimens in this index include many Canadian specimens that were given specific status during the nineteenth century, at a time when it was common practice for an author not to designate as types the specimens he chose to illustrate his species. If only one specimen was illustrated the present writer treats it in the same way as a holotype, if more

than one, each member is given equal value and considered equivalent to a syntype. A few additional species erected at that time, particularly by J. W. Dawson and D. P. Penhallow, were given only brief and inadequate descriptions unaccompanied by illustrations. Such species may be considered to be invalid but they are included in the index as a matter of record, provided at least some part of the original material examined by the author of the species is still extant in the GSC collections; their inclusion may lead to avoidance of subsequent use of these specific names for corresponding genera.

Because this index will be of greatest assistance to the stratigraphic palæontologist and geologist, the plant remains are listed in alphabetical order under the various geological systems, and the microplant remains (chiefly palynological specimens) of each system are dealt with apart from the megaplants. An alphabetical listing was chosen on account of the many uncertainties that would arise in an attempted systematic biological classification.

In preparation of this catalogue the writer is indebted for helpful suggestions made to him by Dr. D. C. McGregor of the Fuels and Stratigraphy Division of the Geological Survey of Canada.

PRECAMBRIAN

Doubtful algal remains

Atikokania irreglaris Walcott

Holotype 8059d (invertebrate cat. No.)

Walcott C. D. 1912, Geol. Surv., Canada, Mem. 28, p. 19, Pl. 2, fig. 1.

Atikokan group, Ontario; Steeprock Lake.

Atikokania lawsoni Walcott

Syntypes 8059a, 8059b, 8059c, 8059e (invertebrate cat. Nos.)

Walcott C. D. 1912, Geol. Surv., Canada, Mem. 28, p. 18, Pl. 1, figs. 1-5, Pl. 2, fig. 2.

Atikokan group, Ontario; Steeprock Lake.

ORDOVICIAN

(invertebrate cat. Nos.)

Chondrites (Bythotrephis) cuneatus

Holotype 4383

Whiteaves J. F. 1897, Geol. Surv., Canada, Palæozoic Fossils, pt. 3, p. 140, Text-fig. 8.

Red River formation, Manitoba; Cat Head, Lake Winnipeg.

Chondrites gracillimus Whiteaves

Holotype 6852

Whiteaves J. F. 1897, Geol. Surv., Canada, Palæozoic Fossils, vol. 3, pt. 3, p. 141, Pl. 17, fig. 2.

Red River formation, Manitoba; Inmost (Birch) Island, Kinwow Bay, Lake Winnipeg.

Chondrites (Bythotrephis) patulus Whiteaves

Syntypes 4384, 4385, 4386

Whiteaves J. F. 1897, Geol. Surv., Canada, Palæozoic Fossils, vol. 3, pt. 3, p. 137, Text-figs. 5-7.

Red River formation, Manitoba; Inmost (Birch) Island, Kinwow Bay, Lake Winnipeg.

Girvanella? minuta (Ami)

Lectotype 13299; paratype 13299a

Sinclair G. W. 1956, Roy. Soc. Can. Trans., 3rd ser., vol. 50, sec. 4, p. 78, Pl. 2, fig. 3.

Trenton group, Quebec; Coté d'Abraham.

See *Solenopora compacta* var. *minuta* Ami

Solenopora canadensis (Foord)

Lectotypes 1561, 1561a, 1561b; paratypes (syntypes of *Tetradium peachii* var. *canadensis* Foord), 1557, 1558, 1558a-d, 1559, 1559a, 1559b, 9314; hypotypes 13305 (slide), 13306, 13307 (including slides a-c)

Sinclair G. W. 1956, Roy. Soc. Can. Trans., 3rd ser., vol. 50, sec. 4, p. 70, Pl. 1, figs. 1-4.

Trenton group, Quebec: Murray Bay; Montmorency; Montreal; Hull.

Trenton group, Ontario; Ottawa.

See *Tetradium peachii* var. *canadense* Foord

Solenopora canis Sinclair

Holotype 7218 (with slides 7218a and 7218b)

Sinclair G. W. 1956, Roy. Soc. Can. Trans., 3rd ser., vol. 50, sec. 4, p. 75, Pl. 4, figs. 1-3.

Doghead formation, Manitoba; Washow Bay, Lake Winnipeg.

Solenopora compacta (Billings)

Hypotypes 1561b and 9314 (syntypes of *Tetradium peachii* var. *canadense* Foord), 13309 (*solenopora* cf. *S. trentonensis* Brown)

Fritz M. A. 1941, Roy. Can. Instit. Trans., vol. 23, p. 157, Pl. 3, fig. 3.

Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 14, Pl. 6, figs. 5, 6.

Trenton group, Quebec: Murray Bay; Montreal.

Lowville formation, Ontario; southwest of Embrun.

pars=*Solenopora canadensis* (Foord)

pars=*Solenopora* sp. cf. *S. trentonensis* (Brown)

Solenopora compacta var. *S. minuta* Ami

Syntypes 13299, 13299a

Ami H. M. 1893, Can. Rec. Sci., vol. 5, p. 96.

Trenton group, Quebec; Coté d'Abraham, Quebec.

Solenopora dentata Sinclair

Holotype 13302 (including slides a and b); paratypes 13303 (including slides a-c), 13304

Sinclair G. W. 1956, Roy. Soc. Can. Trans., 3rd ser., vol. 50, p. 72, Pl. 3, figs. 1-3.

Laval formation (Upper Chazy), Quebec; Village Belanger, Ile Jésus.

Solenopora? *embrunensis* Wilson

Holotype 13300 and 13300a; hypotype 13301 and 13301b (slide)

Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 15, Pl. 6, figs. 3, 4.

Sinclair G. W. 1956, Roy. Soc. Can. Trans., 3rd ser., vol. 50, p. 78, Pl. 4, fig. 4.

Lowville formation, Ontario; quarry along NYC Railway tracks, southwest of Embrun.

Solenopora paquettiana Ami

Syntypes 9315, 9315a, 9315b, 9315c, 9315d, 9315e.

Ami H. M. 1892, Can. Rec. Sci., vol. 5, p. 98.

Leray-Rockland beds, Ontario; Paquette rapids, Ottawa River.

=*Solenopora*? *paquettiana* (Ami)

Solenopora? *paquettiana* (Ami)

Lectotype 9315; paratypes 9315a, 9315b, 9315c, 9315d, 9315e

Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 15, Pl. 6, figs. 1, 2.

Sinclair G. W. 1956, Roy. Soc. Can. Trans., 3rd ser., vol. 50, p. 77, Pl. 3, fig. 6.

Leray-Rockland beds, Ontario; Paquette rapids, Ottawa River.

Solenopora sp. cf. *S. trentonensis* (Brown)

Specimen 13309 (slide only)

Sinclair G. W. 1956, Roy. Soc. Can. Trans., 3rd ser., vol. 50, p. 75, Pl. 3, figs. 4-5.

Cobourg formation (Trenton group), Ontario; corner Carling Avenue and Booth Street, Ottawa.

See *Solenopora compacta* (Billings) pars

Doubtful algal remains

Bythotrephis? *chazyensis* Wilson

Holotype 6521; paratype 6521a

Wilson A. E. 1932, Roy. Soc. Can., 3rd ser., vol. 26, sec. 4, p. 377, Pl. 1, figs. 1, 2.

Chazy formation, Ontario; Maple Grove, near Cornwall.

Bythotrephis tenuis var. *B. lata* Wilson

Holotype 1460

Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 11, Pl. 3, figs. 1, 2.

Cobourg ? beds, Ontario; Ottawa.

Chaetocladus ottawaensis Wilson

Holotype 13201; paratypes 13202, 13203

Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 13, Pl. 5, figs. 1-3.

Cobourg beds, Ontario; Booth Street, Ottawa.

Clematischnia succulens (Hall)
Hypotypes 9283, 13442
Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 11, Pl. 1, figs. 4, 5.
Leray beds, Ontario; Stewart quarry, Rockland.

Licrophycus formosus Billings
Holotype 2047
Billings E. 1866, Geol. Surv., Canada, Catalogue of Silurian Fossils of island of Anticosti, p. 72.
Richmond formation, Quebec; English Head, Anticosti.

Licrophycus hiltonensis Billings
Holotype 1352
Billings E. 1865, Geol. Surv., Canada, Palæozoic Fossils, vol. 1, p. 101.
Trenton group, Ontario; Joseph Island, Lake Huron.

Licrophycus minor Billings
Lectotype 9294
Billings E. 1865, Geol. Surv., Canada, Palæozoic Fossils, vol. 1, p. 100, Text-fig. 88.
Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 12, Pl. 5, fig. 4.
Cobourg ? beds, Ontario; Ottawa.

Licrophycus ottawaense Billings
Lectotype 1454a; paratype 1372
Billings E. 1865, Geol. Surv., Canada, Palæozoic Fossils, vol. 1, p. 99, Text-fig. 87.
Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 13, Pl. 4.
Cobourg ? beds, Ontario; Ottawa.

Licrophycus robustus Billings
Holotype 2053
Billings E. 1866, Geol. Surv., Canada, Catalogue of Silurian Fossils of island of Anticosti, p. 72.
Richmond formation, Quebec; English Head, Anticosti.

Licrophycus vagans Billings
Holotype 2059
Billings E. 1866, Geol. Surv., Canada, Catalogue of Silurian Fossils of island of Anticosti, p. 72.
Richmond formation, Quebec; near west-end lighthouse, Anticosti.

Palaeophycus beauharnoisensis Billings
Syntype 528a
Billings E. 1865, Geol. Surv., Canada, Palæozoic Fossils, vol. 1, p. 98.
Beekmantown formation, Quebec; Beauharnois.

Palaeophycus beverleyensis Billings
Syntypes 434, 434a
Billings E. 1865, Geol. Surv., Canada, Palæozoic Fossils, vol. 1, p. 97, Text-fig. 86.
Potsdam sandstone (upper part), Quebec; near Beverley, Bastard township.

Palaeophycus? dichotoma Wilson
Holotype 9269
Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 9, Pl. 1, fig. 2.
Cobourg beds, Ontario; south end of LeBreton Street.

Palaeophycus funiculus Billings
Syntype 524
Billings E. 1865, Geol. Surv., Canada, Palæozoic Fossils, vol. 1, p. 98.
Beekmantown formation, Quebec; Edwardstown.

Palaeophycus obscurum Billings

Lectotype 9270; syntype 1370

Billings E. 1865, Geol. Surv., Canada, Palæozoic Fossils, vol. 1, p. 98.

Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 9, Pl. 1, fig. 1.

Cobourg beds, Ontario; Ottawa.

Palaeophycus rugosum Hall

Hypotype 9278

Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 10, Pl. 1, fig. 3.

Cobourg beds, Ontario; steamboat landing at foot of Sussex Street, Ottawa.

Palaeophycus rugosum? Hall

Hypotype ? 9281

Wilson A. E. 1948, Geol. Surv., Canada, Bull. 11, p. 10, Pl. 2, figs. 1, 2.

Cobourg beds, Ontario; foot of Sussex Street, Ottawa.

Petrophyton? floreale Sinclair

Holotypes 13308, 13308a (slide), 13308b (slide)

Sinclair G. W. 1956, Roy. Soc. Can. Trans., 3rd ser., vol. 50, p. 79, Pl. 2, figs. 1-2.

Whitehead formation, Quebec; Grande Coupe, Percé.

Rusophycus grenvillensis Billings

Syntypes 1119, 1119a-e

Billings E. 1865, Geol. Surv., Canada, Palæozoic Fossils, vol. 1, p. 101.

Chazy formation, Quebec; Grenville canal.

Tetradium peachii var. *T. canadense* Foord

Syntypes 1557, 1558, 1558a-d, 1559, 1559a, 1559b, 9314; hypotype 1560

Foord A. H. 1883, Geol. Surv., Canada, Contributions to micro-palæontology of the Cambro-Silurian rocks of Canada, p. 24, Pl. 6, Text-figs. 1-1f.

Trenton group, Quebec: Murray Bay; Montmorency; Montreal; Hull.

Trenton group, Ontario; Ottawa.

=*Solenopora canadensis* (Foord)

UPPER DEVONIAN

1. Megaplant remains

Archaeopteris gaspiensis Dawson

Syntypes 4317c, 4317f, 4317g

Dawson J. W. 1882, Geol. Surv., Canada, Pub. Fossil Plants of Erian (Devonian) and Upper Silurian Formations of Canada, Pt. 2, p. 99, Pl. 21, figs. 1-3.

Escuminac group, Quebec; Escuminac Bay.

Archaeopteris jacksoni Dawson

Hypotypes 4318b, 4318d, 4318e

Dawson J. W. 1882, Geol. Surv., Canada, Pub. Fossil Plants of Erian (Devonian) and Upper Silurian Formations of Canada, Pt. 2, p. 100, Pl. 24, figs. 15-18.

Escuminac group, Quebec; Escuminac Bay.

Caulopteris? sp. Dawson

Specimen 4322

Dawson J. W. 1882, Geol. Surv., Canada, Pub. Fossil Plants of Erian (Devonian) and Upper Silurian Formations of Canada, Pt. 2, p. 101, Pl. 24, fig. 19.

Escuminac group, Quebec; Escuminac Bay.

Cyclopteris (Platyphyllum) brownii Dawson

Hypotype 4319

Dawson J. W. 1882, Geol. Surv., Canada, Pub. Fossil Plants of Erian (Devonian) and Upper Silurian Formations of Canada, Pt. 2, p. 101, Pl. 23, figs. 11, 12.

Escuminac group, Quebec; Escuminac Bay.

Cyclopteris obtusa Lesquereux

Hypotype 4320, 4320a

Dawson J. W. 1882, Geol. Surv., Canada, Pub. Fossil Plants of Erian (Devonian) and Upper Silurian Formations of Canada, Pt. 2, p. 100, Pl. 22, figs. 6, 8.

Escuminac group, Quebec; Escuminac Bay.

Girvanella nicholsoni (Wethered)

Hypotype 13012 (slide 4335)

Konishi K. 1958, Colorado School Mines Quarterly, vol. 53, p. 102, Pl. 3, fig. 10.

Slave Point formation, Alberta; California Standard Steen River 2-22 well, lsd 2, sec. 22, tp. 117, rge. 5, W6th mer.

2. Microplant remains

Apiculatisporis elegans McGregor

Holotype 13029 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 30, Pl. 11, fig. 12.

Upper Devonian beds, Northwest Territories; Stevens Head, west coast Melville Island.

Biharisporites ellesmerensis Chaloner

Holotype 4742a (slide)

Chaloner W. G. 1959, Palæontology, vol. 1, pt. 4, p. 322, Pl. 55, fig. 2; Text-fig. 1.

Upper Devonian beds, Northwest Territories; coal from mud-flat talus, east arm Ockse Bay, Ellesmere Island.

Biharisporites ocksensis Chaloner

Syntypes 4713v and 4713z (slides)

Chaloner W. G. 1959, Palæontology, vol. 1, pt. 4, p. 324, Pl. 55, figs. 6-8.

Upper Devonian, Northwest Territories; coal seam at head of Ockse Bay, Ellesmere Island.

Biharisporites submamillarius McGregor

Holotype 13033 (slide M1-12); paratype 13034 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 33, Pl. 11, fig. 16; Pl. 12, figs. 1-3.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Calcisphaera fimbriata Williamson

Hypotypes 13006 (slide RSWD1-3335), 13018 (slide RSWD-3990)

Konishi K. 1958, Colorado School Mines Quarterly, vol. 53, p. 107, Pl. 4, figs. 12, 13, 16, 17.

Cooking Lake formation, Alberta; Redwater salt-water disposal well No. 1, lsd 12, sec. 28, tp. 57, rge. 21, W4th mer. at 3,990-ft. level.

Leduc formation (upper part), Alberta, same well as above at 3,335-ft. level.

Circumsporites melvillensis McGregor

Holotype (genotype) 13035 (slide M1-20)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 34, Pl. 12, fig. 7.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Convolutispora flexuosa forma *minor* Hacquebard

Hypotype (slide M1-16)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 34, Pl. 12, fig. 4.

Upper Devonian, Northwest Territories; Stevens Head, west coast of Melville Island.

Cyclogranisporites amplus McGregor

Holotype 13026 (slide M1-22)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 29, Pl. 11, fig. 8.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Densosporites crassus McGregor

Holotype 13041 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 36, Pl. 13, fig. 8.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Eochara wickendeni Choquette

Holotype 6633; paratypes 6634, 6635

Choquette G. B. 1956, J. Pal., vol. 30, No. 6, p. 1373; Text-fig. 1, (1-7).

Elk Point group, Alberta; Barnsdall, west Wabiskaw No. 1 well, lsd 11, sec. 17, tp. 78, rge. 2, W5th mer.; depths 5,130-5,135, 5,190-5,200.

Hymenozonotriletes inaequus McGregor

Holotype 13042 (slide M1-22)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 37, Pl. 13, fig. 5; Text-fig. 2.

Upper Devonian beds, Northwest Territories; Stevens Head, west coast of Melville Island.

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Hystricosporites delectabilis McGregor

Holotype (genotype) 13032 (slide M1-16)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 32, Pl. 11, figs. 13, 14; Text-fig. 1.

Upper Devonian beds, Northwest Territories; Stevens Head, west coast Melville Island.

Lagenicula devonica Chaloner

Holotype 47132 (slide)

Chaloner W. G. 1959, Palæontology, vol. 1, pt. 4, p. 325, Pl. 55, fig. 3.

Upper Devonian beds, Northwest Territories; coal seam at head of Ockse Bay, Ellesmere Island.

Latosporites? sp. McGregor

Specimens (slide M1-22)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 38, Pl. 13, figs. 11, 12.

Upper Devonian beds, Northwest Territories; Stevens Head, west coast Melville Island.

Leiotriletes confertus McGregor

Holotype 13020 (slide M1-22)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 27, Pl. 11, fig. 2.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Leiotriletes dissimilis McGregor

Holotype 13019 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 27, Pl. 11, fig. 1.

Upper Devonian beds, Northwest Territories; Stevens Head, west coast Melville Island.

Leiotriletes marginalis McGregor

Holotype 13021 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 28, Pl. 11, fig. 4.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Leiotriletes microdeltoides McGregor

Holotype 13022 (slide M1-22)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 28, Pl. 11, fig. 4.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Lycospora magnifica McGregor

Holotype 13036 (slide M1-12); paratypes 13037 and 13038 (forma *endoformis* slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, pp. 35, 36, Pl. 12, figs. 5, 9, 10; Pl. 13, figs. 2-4.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Lycospora pallida McGregor

Holotype 13039 (slide M1-12); paratype 13040 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 36, Pl. 12, fig. 11; Pl. 13, fig. 1.

Upper Devonian Northwest Territories; Stevens Head, west coast Melville Island.

Nikitinsporites canadensis Chaloner

Syntypes (genotype) 4713ac (slide)

Chaloner W. G. 1959, Palæontology, vol. 1, pt. 4, p. 328, Pl. 55, fig. 5; Text-fig. 4A.

Upper Devonian, Northwest Territories; from coal seam at head Ockse Bay, Ellesmere Island.

Ocksisporites maclarenii Chaloner

Holotype (genotype) 4742e (slide)

Chaloner W. G. 1959, Palæontology, vol. 1, pt. 4, p. 326, Pl. 55, fig. 1.

Upper Devonian, Northwest Territories; from coal on mud-flat talus, eastern arm of Ockse Bay, Ellesmere Island.

Parachaetetes intermedius Konishi

Holotype 13013 (slide 4247); paratype 13014

Konishi K. 1958, Colorado School Mines Quarterly, vol. 53, p. 98, Pl. 1, figs. 1-3; Pl. 2, fig. 5.

Cooking Lake formation, Alberta; Dome Consort 13-9 well, lsd 12, sec. 9, tp. 37, rge. 9, W4th mer.

Parachaetetes regularis Konishi

Holotype 13015 (slide IR76-3240)

Konishi K. 1958, Colorado School Mines Quarterly, vol. 53, p. 97, Pl. 3, fig. 9.

Leduc formation, Alberta; Imperial Redwater No. 76 well, lsd 9, sec. 32, tp. 57, rge. 21, W4th mer., at depth 3,240 feet.

Perotriletes sp. McGregor

Specimen (slide M1-14)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 35, Pl. 12, fig. 8.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Planisporites dilucidus McGregor

Holotype 13028 (slide M1-22)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 30, Pl. 11, fig. 10.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Planisporites minimus McGregor

Holotype 13027 (slide M1-22)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 29, Pl. 11, fig. 9.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Pseudochaetetes sp. Konishi

Specimen 13017

Konishi K. 1958, Colorado School Mines Quarterly, vol. 53, p. 101, Pl. 2, fig. 4.

Cairn formation, Alberta; Bailey Olds No. 1 well, lsd 2, sec. 18, tp. 31, rge. 27, W4th mer.

Punctatisporites arcticus McGregor

Holotype 13023 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 28, Pl. 11, fig. 5.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Punctatisporites putaminis McGregor

Holotype 13025 (slide M1-23)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 29, Pl. 11, fig. 7.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Punctatisporites scabratus McGregor

Holotype 13024 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 29, Pl. 11, fig. 6.

Upper Devonion, Melville Island; Stevens Head, west coast of island.

Tholisporites densus McGregor

Holotype 13043 (slide M1-12); paratype 13044 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 37, Pl. 13, figs. 6, 7.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

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Tholisporites punctatus McGregor

Holotype 13046 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 38, Pl. 13, fig. 10.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Tholisporites tenuis McGregor

Holotype 13045 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 38, Pl. 13, fig. 9.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Triangulatisporites rootsii Chaloner

Holotype 4713f (slide)

Chaloner W. G. 1959, Palæontology, vol. 1, pt. 4, p. 324, Pl. 55, fig. 4; Text-fig. 2.

Upper Devonian, Northwest Territories; from coal seam at head of Ockse Bay, Ellesmere Island.

Verrucosisporites grandis McGregor

Holotype 13031 (slide M1-22)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 31, Pl. 11, fig. 11.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Verrucosisporites variabilis McGregor

Holotype 13030 (slide M1-12)

McGregor D. C. 1960, Palæontology, vol. 3, pt. 1, p. 30, Pl. 11, fig. 15.

Upper Devonian, Northwest Territories; Stevens Head, west coast Melville Island.

Incertae sedis

"fungal filaments"

Specimen 617 (type source rock with filaments, but slides no longer available)

Fry W. L. and McLaren D. J. 1959, Geol. Surv., Canada, Bull. 48, pp. 1-9, Pl. 2, figs. 1-3; Pl. 3, figs. 1-4.

Upper Devonian limestone, Alberta; east side trail from Coral Creek and Job Creek Pass to Job Creek, about 29 miles west-southwest of Nordegg.

MISSISSIPPIAN

1. Megaplant remains

Adiantites tenuifolius (Göppert)

Hypotypes 6318, 6319, 769, 770, 771

Bell W. A. 1948, Geol. Surv., Canada, Bull. 10, Pl. 1, figs. 3, 4.

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 33, Pl. 13, fig. 5; Pl. 15, fig. 3.

Canso group (Searston beds), Newfoundland; Capeland-Stormy Point section, Codroy area.

Cheverie formation (Horton group), Nova Scotia; Avon River estuary southwesterly from bridge over Cheverie Creek.

Aneimites acadica Dawson

Hypotypes 310, 719-732, 788

Bell W. A. 1960, Mem. 314, p. 30, Pl. 8; Pl. 9, figs. 1-3; Pl. 10, figs. 1-4; Pl. 11, figs. 1-4.

Horton Bluff formation (Horton group), Nova Scotia: Harding (Angus) Brook, tributary to Gaspereau River, Kings co., N.S.; Curry (Trenholm) Brook, tributary to Gaspereau River; Kenney Brook, south of Gaspereau.

Albert formation (Horton group) New Brunswick; Downing Creek, near Dover, Westmorland co.

Kennebecasis formation (Horton group) New Brunswick; Kennebecasis Island, north shore, St. John co.

Asterocalamites scrobiculatus (Schlotheim)

Hypotypes 8212, 9559, 782, 783

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 97, Pl. 57, fig. 2; Pl. 62, fig. 1.

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 29, Pl. 7, figs. 2, 3.

Canso group, New Brunswick; Salisbury Bay, north of Cape Enrage, Albert co.

Cheverie formation (Horton group), Nova Scotia; Minas Basin, about 5,000 feet southwesterly from bridge over Cheverie Creek.

Calamites (Mesocalamites) cistiiformis Stur

Hypotypes 9436, 9932, 9937, 10792

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 128, Pl. 1, fig. 3.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 97, Pl. 54, figs. 2, 3; Pl. 56, fig. 2.

Canso group, Pictou coalfield, Nova Scotia; Middle River, directly above bridge at Union Centre.

Canso group, Nova Scotia; Inverness co., on shore about 2 miles northwards from Friar Point and 5,000 feet southwesterly from Grand Etang.

Carpolithus tenellus (Dawson).

Hypotypes 786, 787

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 37, Pl. 17, figs. 6, 7.

Horton Bluff formation (Horton group), Nova Scotia; Curry Brook, about 480 feet in direct line downstream from bridge on secondary road southwest of Wallbrook, Kings co.

Anguille (Horton) group, Newfoundland; Cape Anguille to Codroy, Codroy area.

Diplotmema adiantoides (Schlotheim)

Hypotypes 6314, 6315, 6316, 6317
Bell W. A. 1948, Pl. 2, figs. 1-4.
Searston beds (Canso group), Newfoundland; shore section from Capeland Cove to Stormy Point, Codroy area; Crabbs River, 5,500 to 8,500 feet upstream from CNR bridge.

Diplotmema patentissimum (Ettingshausen)

Hypotypes 752, 753, 754, 755, 756, 757, 758, 759
Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 36, Pl. 13, figs. 3, 4; Pl. 15, figs. 1, 2; Pl. 16, figs. 7, 9; Pl. 17, fig. 3.
Albert formation (Horton group), New Brunswick; Moosehorn Brook, Kings co., below dam, and 1½ miles above mouth of brook.
Horton Bluff formation (Horton group), Nova Scotia; Curry (Trenholm) Brook, Kings co.

Diplotmema? sp. Bell

Specimens 772, 773, 774, 775, 776
Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 40, Pl. 16, fig. 6; Pl. 17, figs. 9, 10; Pl. 18, figs. 1, 4, 5.
Codroy group, Newfoundland; Woody Cove beds on Codroy shore.

Koninckopora inflata (de Koninck)

Hypotypes 998, 999, 1000, 1001
Wood A. 1943, Quart. J. Geol. Soc. London, vol. 98, p. 212, Pl. 8, figs. 4, 5; Pl. 9, figs. 1, 4; Text-fig. 3 (p. 214).
Windsor group, Sydney coalfield, Nova Scotia; Dominion Steel Co's quarry, Pt. Edward, Cape Breton co.

Lepidodendron praelanceolatum Bell

Holotype 9800
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 88, Pl. 47, figs. 3, 5.
Point Edward formation (Canso group), Nova Scotia; Pt. Edward, Cape Breton co.

Lepidodendron sp. Bell

Specimen 708
Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 28, Pl. 7, fig. 1.
Horton Bluff formation (Horton group), Nova Scotia; Curry Brook, Kings co.

Lepidodendron volkmannianum Sternberg

Hypotypes 6320, 6321
Bell W. A. 1948, Geol. Surv., Canada, Bull. 10, p. 20, Pl. 1, figs. 1, 2.
Searston beds (Canso group) Newfoundland; section Searston to Larkin Point, St. Georges Bay area.

Lepidodendropsis corrugata (Dawson)

Hypotypes 491, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, ?704 (sporangia), ?790 (sporangium)
Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 24, Pl. 1, figs. 1-3, ?4, 5, 6; Pl. 2, figs. 1-5 ?6; Pl. 3, figs. 2, 8-10; Pl. 4. figs. 2, 4-6.
Horton Bluff formation (Horton group), Nova Scotia; Curry Brook, Harding (Angus) Brook, Barkhouse Brook.
Cheverie formation (Horton group), Nova Scotia; Avon River estuary, about 5,040 feet southwesterly from bridge over Cheverie Creek.
Albert formation (Horton group), New Brunswick; Turtle Creek, Albert co.; Moosehorn Brook; Kennebecasis formation (Horton group), New Brunswick; Kennebecasis Island.

Lepidodendropsis sp. A Bell

Specimens 706, 707

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 26, Pl. 6, figs. 1, 3.

Horton Bluff formation (Horton group), Nova Scotia; Horton bluffs, Avon River estuary.

Lepidodendropsis sp. B Bell

Specimen 709

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 27, Pl. 6, fig. 2.

Horton group, Nova Scotia; Salma Brook near Maitland.

Lepidophyllum (Lepidostrobophyllum) fimbriatum, Jongmans, Gothan and Darrah

Hypotypes 703, 710

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 27, Pl. 4, fig. 3; Pl. 6, fig. 5.

Horton Bluff formation (Horton group), Nova Scotia; Crowell Creek, about 2,900 feet upstream from CPR tracks; Horton bluffs, Avon River estuary, Kings co.

Lepidostrobophyllum sp. Bell

Specimen 718

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 28, Pl. 4, fig. 1.

Albert formation (Horton group), New Brunswick; Moosehorn Brook near mouth, Kings co.

Lepidostrobus hydei Bell

Holotype 9799

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 94, Pl. 47, fig. 1.

Point Edward formation (Canso group), Nova Scotia; Pt. Edward, Cape Breton co.

Nematophyllum sp. Bell

Specimen 789

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 30, Pl. 6, fig. 4.

Kennebecasis formation (Horton group), New Brunswick; Kennebecasis Island, Keith's beach, Saint John co.

Neuropteris sp. Bell

Specimens 9385, 9386

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 82, Pl. 36, figs. 1, 3.

West Bay formation (Canso group), Nova Scotia; west of Parrsboro harbour, at point east of Ottawa House.

Rhacopteris circularis? Walton

Hypotype ? 777

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 38.

Codroy (Windsor) group, Newfoundland; Crabbs Brook, about 1,200 feet above railway bridges.

Rhacopteris petiolata (Göppert)

Hypotype 779

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 38, Pl. 18, fig. 6.

Searston beds (Canso group), Newfoundland; Crabbs Brook, about 1,200 feet above railway bridge, Codroy area.

Rhacopteris robusta Kidston

Hypotypes 748, 749, 750, 751

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 38, Pl. 17, figs. 5, 8; Pl. 18, figs. 2, 3.

Windsor group, Sydney coalfield, Nova Scotia; Frenchvale Brook.

Sphenopteridium crassum? (Lindley and Hutton)

Hypotypes ? 325, 326, 9391

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 55, Pl. 1, figs. 1, 4, 5.

Lismore formation (Canso group), Nova Scotia; Merigomish Harbour, ½ mile east of mouth of French River.

Canso group, Nova Scotia; Inverness co., cove east of Friar Pt.

Sphenopteridium dawsoni (Stur)

Hypotypes 8629, 8631

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 55, Pl. 1, figs. 2, 3.

Canso group, Nova Scotia; Inverness co., on shore about 2 miles northward from Friar Pt. and 5,000 feet southwestward from Grand Etang.

Sphenopteridium macconochiei? Kidston

Hypotypes ? 762, 763, 764, 765, 766

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 35, Pl. 12, figs. 1, 2, 4; Pl. 13, figs. 1, 2.

Cheverie formation (Horton group), Nova Scotia; Avon River estuary, about 5,040 feet in direct line southwesterly from bridge over Cheverie Creek.

Sphenopteridium sp. Bell

Specimens 767, 768, 845

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 35, Pl. 14, figs. 1-3.

Cheverie formation (Horton group), Nova Scotia; Avon River estuary, about 5,040 feet in direct line southwesterly from bridge over Cheverie Creek.

Sphenopteris strigosa Bell

Holotype 733; paratypes 734, 736, 738, 780

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 32, Pl. 12, figs. 3, 5-9.

Albert formation (Horton group), New Brunswick; Blue Cape, east side Petitcodiac River opp. Hillsboro; Robertson Brook, Elgin.

Kennebecasis formation (Horton group), New Brunswick; Kennebecasis Island.

Anguille series (Horton group), Newfoundland; section on shore Cape Anguille to Codroy.

Telangium affine (Lindley and Hutton)

Hypotype 8994

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 57, Pl. 2, fig. 3.

Canso group, New Brunswick; Salisbury Bay, north of Cape Enrage, Albert co.

Telangium bretonensis Bell

Holotype 739; paratypes 740-746, 747(?), 778

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 39, Pl. 15, figs. 4, 5; Pl. 16, figs. 1-5, 8; Pl. 17, figs. 1, (?)4.

Windsor group, Sydney coalfield, Nova Scotia; Frenchvale Brook.

Codroy (Windsor) group, Newfoundland; Woody Cove beds, Codroy shore.

Telangium sp. cf. *T. affine* (Lindley and Hutton)

Specimens 10817, 10823

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 116, Pl. 1, figs. 4, 5.

Canso group, Nova Scotia; Lovat Brook, tributary of West River of Pictou, Pictou co., about 1 mile from junction with West River, and also about 3 miles from same junction.

Telangium sp. Bell

Specimen 781

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 40, Pl. 17, fig. 2.

Windsor group, Sydney coalfield, Nova Scotia; Frenchvale Brook.

Triphyllopteris minor Jongmans, Gothan and Darrah

Hypotype 760

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 33, Pl. 20, figs. 2, 3.

Cheverie formation (Horton group), Nova Scotia; Tennycape River, about ¼ mile above highway bridge at Tennycape.

Triphyllopteris virginiana (Meek)

Hypotypes 761, 761B

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 34, Pl. 20, figs. 2, 3.

Horton group, Nova Scotia; McPherson Lake, east of Guysboro.

2. Microplant remains

Acanthotriletes horridus Hacquebard

Holotype 4241

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 309, Pl. 1, fig. 20.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Acanthotriletes sp. A Hacquebard

Specimen 4240

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 310, Pl. 1, fig. 19.

Horton group, Nova Scotia; West Gore.

Calamospora sp. cf. *C. microrugosus* (Ibrahim)

Specimen 4142

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 12, Pl. 2, fig. 1.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Calamospora sp. cf. *C. pallidus* (Loose)

Specimen 4143

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 13, Pl. 2, fig. 2.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Camptotriletes? juglandilis Horst

Hypotype 4149

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 16, Pl. 2, fig. 8.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cincturasporites altilis Hacquebard and Barss

Holotye (genatype) 4171

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 25, Pl. 3, fig. 8.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cincturasporites appendices Hacquebard and Barss

Holotype 4173; paratype 4174

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 25, Pl. 3, figs. 10-12.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cincturasporites auritus (Waltz)
Hypotype 4165
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 23, Pl. 3, fig. 1.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cincturasporites irregularis Hacquebard and Barss
Holotype 4172
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 25, Pl. 3, fig. 9.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cincturasporites literatus (Waltz)
Hypotypes 4166, 4167, 4168
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 23, Pl. 3, figs. 2-5.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cincturasporites sp. A Hacquebard and Barss
Specimen 4176
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 26, Pl. 3, fig. 14.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cincturasporites sp. cf. *Zonotriletes stenozonalis* (Waltz)
Specimen 4170
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 24, Pl. 3, fig. 7.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cincturasporites stenozonalis magnus Hacquebard and Barss
Holotype 4175
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 26, Pl. 3, fig. 13.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cincturasporites sulcatus (Waltz)
Hypotype 4169
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 24, Pl. 3, fig. 6.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cirratriradites latitriletes Hacquebard and Barss
Holotype 4206
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 39, Pl. 5, fig. 12.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cirratriradites solaris Hacquebard and Barss
Holotype 4209; paratype 4208
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 40, Pl. 5, figs. 14, 15.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cirratriradites sp. A Hacquebard and Barss

Specimen 4207

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 41, Pl. 5, fig. 13.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cirratriradites sp. cf. *C. granulatipunctatus* Hoffmeister, Staplin and Malloy

Specimen 4204

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 39, Pl. 5, fig. 10.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cirratriradites uber Hoffmeister, Staplin and Malloy

Hypotype 4205

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 39, Pl. 5, fig. 12.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Convolutispora flexuosa Hacquebard

Holotype 4254 (forma *major*); paratypes 4255 (forma *major*), 4256 (forma *minor*)

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, pp. 311-312, Pl. 2, figs. 8-10.

Horton group, Nova Scotia; West Gore.

Convolutispora sp. type A Hoffmeister, Staplin and Malloy

Specimen 4154

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, Pl. 2, fig. 13.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Cyclogranisporites naevulus Hacquebard

Holotype 4236

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 309, Pl. 1, fig. 15.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Cyclogranisporites sp. cf. *C. pressoides* Potonié and Kremp

Specimen 4237

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 309, Pl. 1, fig. 16.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Cyclogranisporites sp. A Hacquebard

Specimen 4238

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 309, Pl. 1, fig. 17.

Horton group, Nova Scotia; West Gore.

Densosporites annulatus (Loose)

Hypotype 4185

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 30, Pl. 4, fig. 9.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Densosporites cuneiformis Hacquebard and Barss

Holotype 4186

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 31, Pl. 4, fig. 10.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Densosporites irregularis Hacquebard and Barss

Holotype 4187; paratypes 4188, 4189, 4190

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 31, Pl. 4, figs. 11-14.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Densosporites plicatus Hacquebard and Barss

Holotype 4191

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 32, Pl. 4, fig. 15.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Densosporites sp. A Hacquebard and Barss

Specimen 4193

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 33, Pl. 4, fig. 17.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Densosporites sp. B Hacquebard and Barss

Specimen 4194

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 33, Pl. 4, fig. 18.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Densosporites subserratus Hacquebard and Barss

Holotype 4192

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 32, Pl. 4, fig. 16.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Endosporites angustus Hacquebard

Holotype 4281

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 316, Pl. 3, fig. 13.

Horton group, Nova Scotia; West Gore.

Endosporites macromanifestus Hacquebard

Holotype 4282; paratype 4283

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 317, Pl. 3, figs. 14, 15.

Horton group, Nova Scotia; West Gore.

Endosporites micromanifestus Hacquebard

Holotype 4262

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 317, Pl. 3, fig. 16.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Grandispora echinata Hacquebard

Holotype 4285

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 317, Pl. 3, fig. 17.

Horton group, Nova Scotia; West Gore.

Grandispora? sp. A Hacquebard

Specimen 4286

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 317, Pl. 3, fig. 18.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Granulatisporites pipergranus Hacquebard and Barss

Holotype 4152

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 15, Pl. 2, fig. 11.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Granulatisporites pustulatus Hacquebard and Barss

Holotype 4151

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 15, Pl. 2, fig. 10.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Labiadensites attenuatus Hacquebard and Barss

Holotype (genotype) 4179; paratypes 4180, 4181, 4182

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 28, Pl. 4, figs. 3-6.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Labiadensites fimbriatus (Waltz)

Hypotype 4178

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 28, Pl. 4, fig. 2.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Labiadensites serratus Hacquebard and Barss

Holotype 4183

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 29, Pl. 4, fig. 7.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Labiadensites sp. A Hacquebard and Barss

Specimen 4184

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 30, Pl. 4, fig. 8.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Labiadensites sp. cf. *Zonotriletes duplicatus* (Naumova)

Specimen 4177

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 27, Pl. 4, fig. 1.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Leiotriletes notatus Hacquebard
Holotype 4222; paratype 4223
Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 307, Pl. 1, figs. 1, 2.
Horton group, Nova Scotia; West Gore.

Leiotriletes sp. A Hacquebard
Specimens 4224, 4225
Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 307, Pl. 1, figs, 3, 4.
Horton group, Nova Scotia; West Gore.

Leiozonotriletes insignis Hacquebard
Holotype (genotype) 4269
Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 315, Pl. 3, fig. 1.
Horton group, Nova Scotia; West Gore.

Leiozonotriletes meracus Hacquebard
Holotype 4270; paratype 4271
Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 315, Pl. 3, figs. 2, 3.
Horton group, Nova Scotia; West Gore.

Leiozonotriletes sp. cf. *Archaeozonotriletes primarius* Naumova
Specimen 4272
Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 315, Pl. 3, fig. 4.
Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Leiozonotriletes sp. A Hacquebard
Specimen 4273
Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 315, Pl. 3, fig. 5.
Horton group, Nova Scotia; West Gore.

Lepidozonotriletes aculeatus Hacquebard
Holotype 4279; paratype 4280
Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 316, Pl. 3, figs. 11, 12.
Horton group, Nova Scotia; West Gore.

Lophotriletes sp. A Hacquebard
Specimen 4239
Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 309, Pl. 1, fig. 18.
Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Lycospora micrograna Hacquebard and Barss
Holotype 4164
Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 20, Pl. 2, fig. 23.
Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Lycospora torulosa Hacquebard
Holotype 4257
Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 312, Pl. 2, fig. 11.
Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Microreticulatisporites fundatus Hoffmeister, Staplin and Malloy

Hypotype 4155

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 17, Pl. 2, fig. 14.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Microreticulatisporites sp. A Hacquebard

Specimen 4252

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 311, Pl. 2, fig. 6.

Horton group, Nova Scotia; West Gore.

Microsporites macgregori Hacquebard and Barss

Holotype 4214; paratype 4215

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 42, Pl. 6, figs. 5, 6.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Monilospora moniliformis Hacquebard and Barss

Holotype (genotype) 4202; paratype 4203

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 38, Pl. 5, figs. 8, 9.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Perianthospora crenata Hacquebard and Barss

Holotype (genotype) 4216; paratype 4217

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 44, Pl. 6, figs. 7, 8.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Pityosporites sp. A Hacquebard

Specimen 4287

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 318, Pl. 3, fig. 19.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Punctatisporites cullulosus Hacquebard and Barss

Holotype 4146

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 14, Pl. 2, fig. 5.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Punctatisporites debilis Hacquebard

Holotype 4226; paratype 4227

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 308, Pl. 1, figs. 5, 6.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Punctatisporites irrasus Hacquebard

Holotype 4228; paratype 4229

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, Pl. 1, figs. 7, 8.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Punctatisporites? *limbatus* Hacquebard

Holotype 4230; paratypes 4231, 4232

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 308, Pl. 1, figs. 9-11.

Horton group, Nova Scotia; West Gore.

Punctatisporites nahannensis Hacquebard and Barss

Holotype 4147

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 14, Pl. 2, fig. 6.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Punctatisporites nitidus Hoffmeister, Staplin and Malloy

Hypotype 4144

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 13, Pl. 2, fig. 3.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Punctatisporites pedatus Hacquebard and Barss

Holotype 4148

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 14, Pl. 2, fig. 7.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Punctatisporites planus Hacquebard

Holotype 4233

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 308, Pl. 1, fig. 12.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Punctatisporites reticulopunctatus Hoffmeister, Staplin and Malloy

Hypotype 4145

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 13, Pl. 2, fig. 4.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Punctatisporites solidus Hacquebard

Holotype 4234

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 308, Pl. 1, fig. 13.

Horton group, Nova Scotia; West Gore.

Punctatisporites sp. A Hacquebard and Barss

Specimen 4150

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 15, Pl. 2, fig. 9.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Punctatisporites viriosus Hacquebard

Holotype 4235

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 308, Pl. 1, fig. 14.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Raistrickia ampullacea Hacquebard

Holotype 4242; paratype 4243

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 310, Pl. 1, figs. 21, 22.

Horton group, Nova Scotia; West Gore.

Raistrickia baculosa Hacquebard

Holotype 4244; paratype 4245

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 310, Pl. 1, figs. 23, 24.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Raistrickia clavata Hacquebard

Holotype 4246

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 310, Pl. 1, fig. 25.

Horton group, Nova Scotia; West Gore.

Raistrickia? *gibberosa* Hacquebard

Holotype 4247

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 310, Pl. 2, fig. 1.

Horton group, Nova Scotia; West Gore.

Raistrickia pistillata Hacquebard

Holotype 4248

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 310, Pl. 2, fig. 2.

Horton group, Nova Scotia; West Gore.

Raistrickia sp. A Hacquebard

Specimen 4249

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 311, Pl. 2, fig. 3.

Horton group, Nova Scotia; West Gore.

Raistrickia sp. A Hacquebard and Barss

Specimen 4153

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 16, Pl. 2, fig. 12.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Reinschospora nahannensis Hacquebard and Barss

Holotype 4210; paratype 4211

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 41, Pl. 6, figs. 1, 2.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Reinschospora saetosus Hacquebard and Barss

Holotype 4212

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 41, Pl. 6, fig. 3.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Reinschospora sp. A Hacquebard and Barss

Specimen 4213

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 42, Pl. 6, fig. 4.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

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Reticulatisporites speciosus Hacquebard and Barss

Holotype 4158

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 18, Pl. 2, fig. 17.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Reticulatisporites varioreticulatus Hacquebard and Barss

Holotype 4156; paratype 4157

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 17, Pl. 2, figs. 15, 16.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary to South Nahanni River).

Reticulatisporites sp. cf. *R. reticulatus* Ibrahim

Specimen 4253

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 311, Pl. 2, fig. 7.

Horton group, Nova Scotia; West Gore.

Simozonotriletes intortus (Waltz)

Hypotype 4195

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 34, Pl. 5, fig. 1.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Simozonotriletes triquetris Hacquebard and Barss

Holotype 4196

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 34, Pl. 5, fig. 2.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Spinozonotriletes tenuispinus Hacquebard

Holotype 4274; paratype 4275

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 316, Pl. 3, figs. 6, 7.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Spinozonotriletes uncatus Hacquebard

Holotype 4276; paratypes 4277, 4278

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 316, Pl. 3, figs. 8-10.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Stenozonotriletes deltoides Hacquebard

Holotype 4263; paratype 4264

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 314, Pl. 2, figs. 17-18.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Stenozonotriletes extensus var. *S. major* Naumova

Hypotypes 4265, 4266

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 314, Pl. 2, figs. 19-20.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Stenozonotriletes sp. cf. *S. conspersus* Naumova

Specimen 4262

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 313, Pl. 2, fig. 16.

Horton group, Nova Scotia; West Gore.

Stenozonotriletes? sp. cf. *Zonotriletes stenozonalis* Waltz

Specimen 4267

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 314, Pl. 2, fig. 21.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Stenozonotriletes sp. A Hacquebard

Specimen 4268

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 314, Pl. 2, fig. 22.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Tendosporites rotulus Hacquebard and Barss

Holotype 4199; paratype 4200

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 36, Pl. 5, figs. 5, 6.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley west bank Jackfish River (tributary of South Nahanni River).

Tendosporites subalatus Hacquebard and Barss

Holotype 4201

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 37, Pl. 5, fig. 7.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Tendosporites subcrenatus (Waltz)

Hypotypes 4197, 4198

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 36, Pl. 5, figs. 3, 4.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Triletes cheveriensis Bell

Holotype 714; paratypes 705, 715, 716

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 29, Pl. 3, figs. 5-7; Pl. 5, fig. 3.

Cheverie formation (Horton group), Nova Scotia; east side Avon River estuary, about 5,040 feet in direct line southwesterly from bridge over Cheverie Creek.

Albert formation (Horton group), New Brunswick; Moosehorn Brook near mouth, Kings co.

Triletes glaber (Dawson)

Hypotypes 711, 712, 712A, 713, 717

Bell W. A. 1960, Geol. Surv., Canada, Mem. 314, p. 28, Pl. 3, figs. 1, 3, 4; Pl. 5, figs. 1, 2.

Horton Bluff formation (Horton group), Nova Scotia; Horton bluffs on west side Avon River estuary; Halfway River, Hants co.

Tripartites? *trivalvis* (Waltz)

Hypotype 4163

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 20, Pl. 2, fig. 22.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Triquitrites? sp. A Hacquebard and Barss

Specimen 4161

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 19, Pl. 2, fig. 20.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

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Triquitrites? sp. B Hacquebard and Barss

Specimen 4162

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 19, Pl. 2, fig. 21.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Triquitrites tendoris Hacquebard and Barss

Holotype 4159; paratype 4160

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 18, Pl. 2, figs. 18, 19.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Vallatisporites sp. A Hacquebard

Specimen 4260

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 313, Pl. 2, fig. 14.

Horton group, Nova Scotia; West Gore.

Vallatisporites sp. B Hacquebard

Specimen 4261

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 313, Pl. 2, fig. 15.

Horton group, Nova Scotia; West Gore.

Vallatisporites vallatus Hacquebard

Holotype (genotype) 4258

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 312, Pl. 2, fig. 12.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Vallatisporites verrucosus Hacquebard

Holotype 4259

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 313, Pl. 2, fig. 13.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Verrucosisporites papulosus Hacquebard

Holotype 4250; paratype 4251

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 311, Pl. 2, figs. 4, 5.

Horton group, Nova Scotia: West Gore; Blue Beach, Avon River.

Genus not determined

cf. *Azonotriletes lobophorus* Waltz

Specimen 4218

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 44, Pl. 6, fig. 9.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Spore type A

Specimen 4288

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 320, Pl. 3, fig. 20.

Horton group, Nova Scotia; West Gore.

Spore type A

Specimen 4220

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 45, Pl. 6, figs. 11, 12.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Spore type B

Specimen 4289

Hacquebard P. A. 1957, Micropaleontology, vol. 3, No. 4, p. 322, Pl. 3, fig. 21.

Horton group, Nova Scotia; West Gore.

Spore type B

Specimen 4219

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 45, Pl. 6, fig. 10.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

Incertae sedis

"Spore or plant structure"

Specimen 4221

Hacquebard P. A. and Barss M. S. 1957, Geol. Surv., Canada, Bull. 40, p. 46, Pl. 6, fig. 13.

Mississippian (upper) beds, Northwest Territories; coal seam in creek valley on west bank Jackfish River (tributary of South Nahanni River).

PENNSYLVANIAN

1. Megaplant remains

Acitheca polymorpha (Brongniart)

Hypotypes 1293, 1295, 1306, 1803, 2171

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 78, Pl. 77, figs. 5, 6; Pl. 79, fig. 3; Pl. 80, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east side of Morien Bay, roof of top Wilson or Spencer (Emery) coal seam; old Dominion No. 3 colliery, Glace Bay; shore west of Pt. Aconi, roof of 8-inch coal, about 20 feet above Upper Bonar coal seam; east shore Great Bras d'Or Channel, roof of 6-inch coal south of Table rock.

Adiantites adiantoides (Lindley and Hutton)

Hypotypes 9435, 9439

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 56, Pl. 2, fig. 1; Pl. 13, fig. 4.

Cumberland group, Springhill coalfield, Nova Scotia; East Brook tributary of Maccan River, north of East Southhampton railway station.

Adiantites bondi Kidston

Hypotypes 2696, 2898

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 40, Pl. 26, fig. 1; Pl. 27, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; east shore Great Bras d'Or Channel, south of Black Rock Point, roof of coal about 100 feet below Blackrock coal seam.

Adiantites obtusus (Dawson)

Hypotypes 104, 217, 472

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 56, Pl. 2, figs. 2, 5; Pl. 3, fig. 4.

Lancaster formation (Cumberland group), New Brunswick; fern ledges, Duck Cove, Lancaster, Saint John co.

Adiantites poolii Bell

Holotype 10924

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 115, Pl. 4, fig. 7.

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia; Stellarton area, unspecified coal mine.

Alethopteris davreuxi (Brongniart)

Hypotypes 859, 860, 861

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 41, figs. 1, 2.

Pictou group, New Brunswick; roof of coal seam at Beersville.

See *Alethopteris friedeli*

Alethopteris decurrens (Artis)

Hypotypes 9313, 9315, 9320, 9323, 11000

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 87, Pl. 40, fig. 1; Pl. 41, figs. 2, 3; Pl. 42, fig. 5; Pl. 45, figs. 5, 6.

Riversdale group, Nova Scotia: Minas Basin shore, between Moose River and Moose Creek, Parrsboro area; Inverness co. shore about ⅜ mile north of old coal mine at Chimney Corner.

Cumberland group, Nova Scotia; roof of Joggins coal seam, Joggins.

Alethopteris friedeli Bertrand

Hypotypes 2443, 3549, 4463A, 4585B
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 68, Pl. 62, figs. 2, 3, 4; Pl. 63.
Morien (Pictou) group, Sydney coalfield, Nova Scotia: Old Gowrie mine, Morien, roof of Gowrie (Phalen) coal seam; near Sydney reservoir from pit on Le Cras coal seam; unspecified beds Sydney coalfield.
=*Alethopteris davreuxi* (Brongniart)

Alethopteris grandini

Hypotypes 10818, 10819, 10824
Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 119, Pl. 6, figs. 7, 8; Pl. 10, fig. 2.
Stellarton (Pictou) group, Pictou coalfield, Nova Scotia: bore-hole N.S. Dept. Mines Record 677 at depth 673-676 feet; bore-hole N.S. Dept. Mines Record 471 at depth 188-219 feet; west of Thorburn-Ross Bridge road, St. Lawrence area.

Alethopteris hartii (Andrews)

Hypotypes 5522, 5539
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 87, Pl. 45, figs. 1, 4.
Boss Point formation (Riversdale group) Nova Scotia; north shore Malagash peninsula, north of salt mine.

Alethopteris lonchitica (Schlotheim)

Hypotypes 160, 160C, 858
Stopes M. C. 1914, Geol. Surv., Canada, Mem. 41, p. 47, Pl. 13, figs. 32, 33.
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 67, Pl. 61, fig. 5.
Bell W. A. 1963, Geol. Surv., Canada, Bull. 88, Pl. 42, fig. 4.
Cumberland group, Nova Scotia; Joggins.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of False Bay beach, about 3,500 feet south of end of sandbar.
Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Alethopteris scalariformis Bell

Holotype 2647; paratypes 2640, 2642, 2668
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 69, Pl. 62, fig. 5; Pl. 65, figs. 4-7; Pl. 66, fig. 3.
Morien (Pictou) group, Sydney coalfield, roof of Mullins coal seam at pit 4,200 feet east of crop of seam at shore Sydney Harbour.

Alethopteris serli (Brongniart)

Hypotypes 2311, 2414, 2463, 856, 857, 966
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 67, Pl. 61, figs. 6, 7; Pl. 62, fig. 1.
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 39, fig. 1; Pl. 41, fig. 4; Pl. 42, fig. 1.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Schooner Pond cove, and west of Cape Percy, roof of McRury coal seam.
Minto formation (Pictou group), New Brunswick; roof of Minto coal seam.

Alethopteris sp. Bell

Specimens 10367, 10368
Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 120, Pl. 3, figs. 3, 4.
Cumberland group, Pictou coalfield, Nova Scotia; Skinner Brook, 2,200 and 2,400 feet downstream from Gairloch road.

Alethopteris valida Boulay

Hypotypes 2289, 2296, 2665, 2666, 3522

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 68, Pl. 64; Pl. 65, figs. 1-3; Pl. 67, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east of Schooner Pond cove, roof Ross (Emery) coal seam; No. 11 colliery, Glace Bay, roof Emery coal seam; No. 4 colliery, roof of Phalen coal seam.

Alloiopteris almaensis Bell

Holotype 8569

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 75, Pl. 24, fig. 2; Pl. 71, fig. 2.

Riversdale group, New Brunswick; shore west of Alma, Albert co.

Alloiopteris (Corynepteris) coralloides (Gutbier)

Hypotype 9893

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 75, Pl. 22, fig. 4.

Riversdale group, New Brunswick; shore east of Cape Enrage, Albert co.

Alloiopteris (Corynepteris?) major Bell

Holotype 1642

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 38, Pl. 18, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore at Pt. Aconi, roof of Point Aconi coal seam.

Alloiopteris (Corynepteris) similis Sternberg

Hypotype 983

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 8, fig. 1.

Pictou group, New Brunswick; roof of coal seam at Beersville, Kent co.

Alloiopteris sp. Bell

Specimen 3050

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 38, Pl. 17, fig. 3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; bore-hole on Southwest Brook.

Alloiopteris (Corynepteris) sternbergi (Ettingshausen)

Hypotypes 9364, 9426, 9891

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 74, Pl. 23, figs. 2, 3; Pl. 24, fig. 1.

Cumberland group, Springhill coalfield, Nova Scotia; No. 2 mine, Springhill; Smith Brook, about 2 miles from junction with south branch Black River, Springhill area.

See *Corynepteris sternbergi*

Annularia acicularis (Dawson)

Hypotypes 9138, 9303, 9314, 9356, 9373, 10281, 10987

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 101, Pl. 58, figs. 2, 5; Pl. 60, fig. 6; Pl. 63, fig. 3; Pl. 64, fig. 5; Pl. 65, fig. 2; Pl. 69, fig. 5.

Lancaster formation (Cumberland group), New Brunswick; Doctor Brook, Saint John co.

Cumberland group, Nova Scotia; Joggins, section 4 Logan.

Riversdale group, New Brunswick; 1½ miles east of Alma, Chignecto Bay, Albert co.

Annularia aculeata Bell

Holotype 9325; paratypes 6530 (*Calamostachys*), 9019, 9085, 9316, 9317, 9318, 9321, 9322, 9324, 9931, 10869 (*Calamostachys*), 10990, 10992

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 101, Pl. 68, fig. 4; Pl. 60, figs. 3, 4; Pl. 62, fig. 2; Pl. 63, fig. 4; Pl. 65, figs. 1, 4; Pl. 66, figs. 1, 3; Pl. 68, figs. 1-3; Pl. 69, figs. 1, 3, 6; Pl. 74, fig. 4.

Riversdale group, Nova Scotia; shore Chimney Corner, Inverness co.

Parrsboro formation (Riversdale group), Nova Scotia; Minas Basin, between Moose River and Moose Creek, Cumberland co.
Riversdale group, New Brunswick: Chignecto Bay, 1½ miles east of Alma; shore northeast of Cape Enrage.
Cumberland group, Springhill coalfield, Nova Scotia; Leamington and No. 2 mine, Springhill.

Annularia asteris Bell
Holotype 9805
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 102, Pl. 67, fig. 3; Pl. 68, fig. 5.
Lancaster formation (Cumberland group) Nova Scotia; mouth of Tynemouth Creek, Bay of Fundy, Saint John co.

Annularia pseudostellata Potonié
Hypotypes 835, 836, 837, 838
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 45, figs. 2, 5; Pl. 47, figs. 2, 3.
Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Annularia radiata Brongniart
Hypotype 2124
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 85, Pl. 88, fig. 2.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east side Morien Bay, roof of Wilson (Emery) coal seam.

Annularia sphenophylloides (Zenker)
Hypotypes 2193, 4000, 840
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 84, Pl. 85, fig. 3; Pl. 87, fig. 1.
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 44, fig. 7.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore north of False Bay Lake, about 45 feet below Tracy coal seam.
Pictou group, New Brunswick; roof of Minto coal seam, Minto.

Annularia stellata (Schlotheim)
Hypotypes, forma *mucronata*, 2076, 2256, 2269, 310, 982; forma *longifolia* 9867
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 85, Pl. 89, fig. 2; Pl. 90, figs. 1, 2; Pl. 91, fig. 1 (pars).
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 102, Pl. 70, fig. 5.
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87.
Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore north of False Bay Lake, about 200 feet above Tracy coal seam; shore east of Schooner Pond cove, roof of McRury coal seam; Dominion No. 4 colliery, Glace Bay, roof of Phalen coal seam; Millbrook cove, Morien Bay, about 110 feet above Trunnelshed (Backpit) coal seam.
Pictou group, New Brunswick; Pollett River area.
Cumberland group, Nova Scotia; Mapleton Brook, Springhill coalfield.

Aphlebia sp. A Bell
Specimens 975, 976
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 24, fig. 1.
Minto formation (Pictou group), New Brunswick; roof Minto coal seam, Minto.

Aphlebia sp. B Bell
Specimen 977
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 26, fig. 1.
Clifton formation (Pictou group), New Brunswick; Clifton, Bay de Chaleur.

Artisia sp. Bell

Specimens 5752, 5753

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 106, Pl. 66, fig. 2; Pl. 75, fig. 7.

Cumberland group, Nova Scotia; west reef at Dennis River, Joggins section, division 3 Logan.

Riversdale group, New Brunswick; Cape Enrage, Albert co., below lighthouse.

Asolanus camptotaenia Wood

Hypotypes 3399, 3414, 3511, 797, 802, 978

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 102, Pl. 104, figs. 1-3.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 48, figs. 1-3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: south shore Point Morien, roof Gowrie (Phalen) coal seam; shore from Glace Bay bar to Macpherson Point in beds above Bouthillier coal seam.

Minto formation (Pictou group), New Brunswick; Minto.

Pictou group, New Brunswick; roof of coal at Beersville.

Asterophyllites (Calamostachys) charaeformis (Sternberg)

Hypotypes 5984, 8238, 10187, 10409

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 129, Pl. 10, fig. 3.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 103, Pl. 63, fig. 2; Pl. 68, fig. 1 (pars); Pl. 70, fig. 1.

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia; south branch Marsh Brook, near mouth.

Cumberland group, Nova Scotia: roof of coal of No. 7 mine, Springhill; roof of main coal at Joggins.

Riversdale group, Nova Scotia; west of Collingwood Corner on small tributary of south branch River Philip.

Asterophyllites equisetiformis (Schlotheim)

Hypotypes 2948, 2949, 3003, 5993, 9017, 10132

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 86, Pl. 87, figs. 3, 4; Pl. 88, fig. 1.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 103, Pl. 70, fig. 2; Pl. 71, figs. 1, 3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; roof of Spencer (Emery) coal seam, Morien Bay.

Cumberland group, Springhill coalfield, Nova Scotia: roof of coal No. 2 mine, Springhill; South Brook, tributary of Maccan River, below South Brook settlement.

Riversdale group, Nova Scotia; St. Rose, Inverness co.

Asterophyllites grandis (Sternberg)

Hypotypes 937, 938, 6554 (*Calamostachys*), 8565 (*Calamostachys*), 9134, 9135, 9376 (*Calamostachys*)

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 104; Pl. 67, fig. 5; Pl. 69, fig. 4; Pl. 70, figs. 3, 4; Pl. 72, figs. 1-4; Pl. 74, fig. 5; Pl. 75, fig. 1.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 45, fig. 3; Pl. 47, fig. 4.

Riversdale group, New Brunswick: east of Alma on shore Chignecto Bay; Cape Enrage, Albert co.

Riversdale group, Nova Scotia; between Moose Creek and Moose River, Cumberland co., Bay of Minas.

Clifton formation (Pictou group), New Brunswick; Stonehaven, Bay de Chaleur.

Asterophyllites longifolius (Sternberg)

Hypotypes 2942, 10309, 839

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 86, Pl. 92, fig. 5.

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 128, Pl. 3, fig. 5.

Bell W. A. 1963, Geol Surv, Canada, Bull 87, Pl. 45, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; Lingan shore.
Cumberland group, Pictou coalfield, Nova Scotia; Sutherland River at Ross bridge.
Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Asterotheca herdi Bell

Holotype 3828; paratypes 1335, 1343, 1349, 1400, 1402, 1413, 1424, 1601, 8380
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 72, Pl. 70, figs. 1-6; Pl. 71, figs. 1-4; Pl. 72, fig. 1.
Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of Long beach, Morien, roof Spencer (Emery) coal seam; shore east side Morien Bay, roof of top Wilson or Spencer (Emery) coal seam, and also 30 feet below same seam; roof of Mullins coal seam at McDougall pits between Northwest Brook and Bridgeport basin; roof of Mullins coal seam, from pit 4,200 feet east of crop of seam on shore Sydney Harbour; Macrae Point east of Glace Bay, about 125 feet above Phalen coal seam or 20 feet below Backpit seam.

Asterotheca miltoni (Artis)

Hypotypes 1266, 1269, 1273, 2084, 2876, 4029, 4465A
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 71, Pl. 67, figs. 2-4; Pl. 68; Pl. 69, figs. 1-3.
Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east of Schooner Pond cove, roof of McRury and roof of Ross (Emery) coal seams; shore north of False Bay Lake, about 50 feet above Tracy coal seam; shore from Lingan bar to Table Head, about 600 feet east of Cadogan Brook, in pavement beds of Harbour coal seam; Hub mine, Glace Bay, roof of Hub coal seam; shore 6,100 feet south of Point Aconi, roof of Upper Bonar coal seam.
=*Pecopteris (Asterotheca) acadica* Bell

Asterotheca robbi Bell

Syntypes 3805 (sterile), 3787 (fertile); paratypes 1148, 1154, 1155, 1159, 1175, 3804, 3805
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 74, Pl. 72, figs. 3-6; Pl. 73, figs. 1, 2; Pl. 74, fig. 1; Pl. 76, fig. 1.
Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east side Morien Bay, about 30 feet below Spencer (Emery) coal seam, and in roof of same seam; Dominion No. 4 colliery, roof Phalen coal seam; shore east of Point Aconi, roof of 8-inch coal 20 feet above Upper Bonar coal seam.
=*Pecopteris (Asterotheca) hemitelioides* Brongniart

Asterotheca sp. Bell

Specimens 1443 (sterile), 1446 (fertile)
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 76, Pl. 75, fig. 1; Pl. 77, fig. 1.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of Wadden Cove, about 300 feet above Tracy coal seam.

Bellopteris corsini Radforth and Walton

Hypotypes 889, 890, 891, 892, 893, 894, 895, 896, 898, 899, 900, 901, 902
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 27; Pl. 28, figs. 1-4; Pl. 29; Pl. 30; Pl. 31, figs. 1-3; Pl. 32, fig. 5; Pl. 33, figs. 1, 3, 4.
Minto formation (Pictou) group, New Brunswick; roof of Minto coal seam, Minto.
=*Neuropteris (Bellopteris) corsini* (Radforth and Walton).

Boweria schatzlarensis Kidston

Hypotypes 2924, 8398, 5592, 11006, 918, 919, 920, 921, 922, 923, 924, 986
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 40, Pl. 26, figs. 2, 3; Pl. 28, figs. 1, 2.
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 71, Pl. 18, fig. 3; Pl. 21, fig. 1.
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 3, figs. 1, 2; Pl. 4, figs. 1, 2; Pl. 5, figs. 1, 4; Pl. 6, figs. 1, 2.
Morien (Pictou) group, Sydney coalfield, Nova Scotia: roof of coal seam (Mullins) at McDougall pits between Northwest Brook and Bridgeport basin; shore east of Schooner Pond cove, roof of Ross (Emery) coal seam.
Cumberland group, Nova Scotia; Spicer Cove, Joggins section, unspecified beds from section 11 Fletcher.
Pictou group, New Brunswick; Beersville, roof of coal seam.

Calamites cisti Brongniart

Hypotypes 9370, 9928
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 97, Pl. 55, fig. 3; Pl. 64, fig. 1.
Cumberland group, Springhill coalfield, Nova Scotia; Leamington.
Boss Point formation (Riversdale group), New Brunswick; west shore Maringouin Peninsula, south of Hard Ledge.

Calamites discifer Weiss

Hypotype 7071
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 84, Pl. 85, fig. 2.
Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east side Morien Bay; roof of thin coal group, about 57 feet below South Head (Emery) coal seam.

Calamites extensus Weiss

Hypotype 9540
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 99, Pl. 65, fig. 3.
Riversdale group, Nova Scotia; about 4,000 feet northeasterly from Chimney Corner, Inverness co., on shore.

Calamites ramosus Artis

Hypotypes 841, 965, 3980, 9941
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 84, Pl. 86, fig. 1.
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 99, Pl. 64, fig. 1.
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 44, fig. 5; Pl. 45, fig. 6.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; Dominion No. 12 colliery, roof of Harbour coal seam.
Riversdale group, Nova Scotia; on shore, about 4,000 feet northeasterly from Chimney Corne, Inverness co.
Pictou group, New Brunswick; roof of coal seam at Beersville, Kent co.

Calamites sp. A Bell of group *Calamites varians* Sternberg

Specimens 9543, 9575
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 98, Pl. 64, figs. 2, 3.
Cumberland group, Nova Scotia: Joggins section, Cumberland co., division 4 Logan, above coal group No. 26; division 3 Logan, above coal group No. 3.

Calamites sp. B Bell of group *C. varians* Sternberg

Specimen 5754
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 99, Pl. 62, fig. 3.
Cumberland group, Springhill coalfield, Nova Scotia; South Brook, Leamington.

Calamites suckowi Brongniart

Hypotypes 957, 3093, 3094

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 83, Pl. 84, fig. 2; Pl. 87, fig. 2.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 44, fig. 6.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; unspecified beds.

Minto formation (Pictou group) New Brunswick; roof of Minto coal seam, Minto.

Calamites undulatus Brongniart

Hypotypes 9808, 9809, 9810, 9885

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 98, Pl. 55, fig. 2; Pl. 63, figs. 1, 5, 6.

Riversdale group, Nova Scotia; Minas Basin between Moose River and Moose Creek, Parrsboro area, and also east of Moose Creek.

? Cumberland group, Nova Scotia; ? division 4 Logan (locality number on specimen doubtful).

Riversdale group, New Brunswick; Chignecto Bay, near Alma, Albert co.

Calamites waldenburgensis Kidston

Hypotypes 7277, 7279

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 83, Pl. 84, fig. 3; Pl. 85, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of False Bay beach in cove about 3,500 feet south of sandbar.

Calamostachys germanica Weiss

Hypotypes 5811, 3107A

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 88, Pl. 91, fig. 1 (pars).

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 105, Pl. 74, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia, Dominion No. 4 colliery, roof of Phalen seam.

Cumberland group, Springhill coalfield, Nova Scotia; Leamington.

Calamostachys paniculata Weiss

Hypotype 10188

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 105, Pl. 74, fig. 6.

Cumberland group, Springhill coalfield, Nova Scotia; No. 7 mine, Springhill.

Calamostachys superba Weiss

Hypotypes 3018, 3022

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 87, Pl. 91, fig. 5; Pl. 92, figs. 3, 4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of Wadden Cove, in roof of 7-inch coal, about 235 feet above Tracy coal seam.

Calamostachys tuberculata (Sternberg)

Hypotypes 3015, 3109, 3111, 3429(?), 3532

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 86, Pl. 88, fig. 3; Pl. 90, figs. 3, 4(?); Pl. 91, figs. 2-4.

Morien (Pictou) group, Sydney coalfield Nova Scotia: Millbrook Cove, Morien Bay, 110 feet above Trunnelshed (Backpit) coal seam; about 2,200 feet east of Macdonald Lake, in roof McLean coal seam, about 200 feet above Tracy seam; shore east of Schooner Pond cove, in roof Ross (Emery) coal seam; Dominion No. 4 colliery, roof of Phalen coal seam; east shore Great Bras d'Or Channel, about 40 feet below Blackrock coal seam.

Cardiocarpon carinatum Bell

Syntypes 7237a, 7237b; paratype 8229

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 106, Pl. 107, figs. 1-3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; roof of Le Cras coal seam from pit at intersection of Reservoir Brook and Mira road.

Cardiocarpon cornutum Dawson

Hypotype 165

Stopes M. C. 1914, Geol. Surv., Canada, Mem. 41, p. 89, Pl. 23, fig. 60.

Lancaster formation (Cumberland group) New Brunswick; fern ledges, Duck Cove, Saint John.

=*Samaropsis cornuta* (Dawson)

Cardiocarpon sp. Bell

Specimen 8440

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 107, Pl. 105, figs. 6, 7.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore False Bay Lake, roof of Tracy coal seam.

Cordaianthus pitcairniae (Lindley and Hutton)

Hypotypes 10451, 10468, 10694, 10778

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 130, Pl. 9, figs. 1, 2; Pl. 10, figs. 5, 6.

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia: bore-hole Acadia Coal Co. 54 (map reference 30) at depth 29-37.5 feet; bore-hole Acadia Coal Company 60 (map reference 47), at depth 629 feet; McLellan Brook, 1,200 feet upstream from mouth of Steep Brook, and also 350 feet upstream from bridge on McLellan Mountain road.

=*Cordaitanthus pitcairniae* (Lindley and Hutton)

Cordaianthus spinosus (Dawson)

Hypotypes 3179, 3515, 7842

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 105, Pl. 105, figs. 2, 3; Pl. 106, figs. 3, 4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; roof Le Cras coal seam from slope 1,500 feet east of Sydney reservoir, and also from pit on same seam at intersection of Reservoir Brook and Mira road.

=*Cordaitanthus spinosus* (Dawson)

Cordaicarpus dawsoni Bell

Holotype 8431a; paratypes 8431b, 8431c, 3256, 5529, 5548

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 105, Pl. 105, fig. 4; Pl. 106, fig. 2.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 107, Pl. 76, fig. 6; Pl. 79, fig. 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of False Bay Lake, roof of Tracy seam.

Cumberland group, Nova Scotia; Spicer Cove, near mouth of Apple River.

Cordaitanthus rhabdocarpi (Dawson)

Hypotypes 945, 946, 947, 948, 949

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 52, figs. 1-3; Pl. 53, fig. 1; Pl. 54.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Cordaites principalis (Germar)

Hypotypes 184, 3150, 3528, 979

Stopes M. C. 1914, Geol. Surv., Canada, Mem. 41, p. 84, Pl. 21, fig. 53.

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 103, Pl. 105, fig. 1; Pl. 106, Fig. 1.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 55, fig. 2.

Lancaster formation (Cumberland group), New Brunswick; fern ledges, Duck Cove, Saint John.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore Sydney Harbour at Victoria Mines, roof of H. McGilvary (Phalen) coal seam; unspecified bed in Morien group.

Minto formation (Pictou group), New Brunswick; Minto.

Corynepteris sp. Bell

Specimens 5970, 5971

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 75, Pl. 25, figs. 1, 3.

Riversdale group, Nova Scotia; west of Collingwood corner on small tributary of south branch River Philip.

Corynepteris sternbergi (Ettingshausen)

Hypotype 2922

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 39.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east side of Morien Bay, roof of top Wilson or Spencer (Emery) coal seam.

Corynepteris winslovii (D. White)

Hypotypes 1659, 2897

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 39, Pl. 25, figs. 1-4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: pit on Mullins coal seam, 4,200 feet from crop of seam at shore Sydney Harbour.

Crossotheca boulayi Zeiller

Hypotypes 2103, 2111, 2113, 2114, 10697, 960, 961, 962

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 47, Pl. 36, figs. 1-4.

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 117, Pl. 6, fig. 9.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 5, figs. 2, 3; Pl. 7, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; roof of Mullins seam, from pit 4,200 feet from crop of seam on Sydney Harbour.

Stellarton (Pictou) group, Pictou coalfield Nova Scotia; roof of McKay coal seam at No. 2 mine Greenwood.

Clifton formation (Pictou group), New Brunswick; Clifton, Bay de Chaleur.

Crossotheca communis (Lesquereux)

Hypotypes 1606, 1607, 2909, 6903

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 46, Pl. 34, figs. 4, 5; Pl. 33, figs. 1-3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore north of False Bay Lake, about 50 feet above Tracy coal seam; roof of small coal (McLean seam), old slope about 2,200 feet east of Macdonald Lake, Broughton area; roof of Mullins coal seam from pit 1,300 feet eastward from crop of Mullins on Sydney Harbour.

Crossotheca compacta Bell

Holotype 1299; paratype 1603

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 48, Pl. 37, figs. 1, 2; Pl. 38, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east of Schooner Pond cove, roof of Ross (Emery) coal seam; south of Port Morien, Morien Bay, roof of Spencer (Emery) coal seam.

Crossotheca denticulata Bell

Syntypes 1475, 1475A

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 48, Pl. 37, figs. 3, 4; Pl. 38, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; east of Schooner Pond cove, roof of Ross (Emery) coal seam.

Cyclopteris sp.

Specimens 973, 974

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 32, figs. 3, 4.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Dactylotheca plumosa (Brongniart) forma *dentata*

Hypotypes 1210, 1211, 1785, 1944

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 76, Pl. 73, fig. 3; Pl. 77, figs. 3, 4; Pl. 80, figs. 1, 3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: North Black Brook, roof of thin coal about 560 feet above Tracy coal seam; shore north of False Bay Lake, about 200 feet above Tracy coal seam; Sydney Harbour, east shore, near Victoria Mines, roof of Mullins coal seam.

=*Senftenbergia dentata* (Brongniart)

Desmopteris elongata (Presl)

Hypotypes 2285, 2375

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 71, Pl. 66, figs. 4, 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of Wadden Cove, roof of 7-inch coal about 235 feet above Tracy coal seam; shore east of Schooner Pond cove, roof of Ross (Emery) coal seam.

Dicksonites pluckeneti (Schlotheim)

Hypotypes 1227, 1228, 1439

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 77, Pl. 77, fig. 2; Pl. 78, fig. 2; Pl. 79, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: east shore Morien Bay, roof of top Wilson (Emery) coal seam; Dominion No. 190 colliery, roof of Emery coal seam; shore 6,100 feet south of Point Aconi, roof of Upper Bonar coal seam.

Dicranophyllum glabrum (Dawson)

Hypotype 3077

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 106, Pl. 74, fig. 3.

Cumberland group, Nova Scotia; west beach, Pudsey Point, Apple River, Chignecto Bay, Cumberland co.

Diplotmema furcatum (Brongniart)

Hypotype 1618, 10019

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 33, Pl. 16, fig. 3; Pl. 17, fig. 1.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 70, Pl. 18, fig. 4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of False Bay Lake, between Tracy and Shoemaker coal seams.

Cumberland group, Springhill coalfield, Nova Scotia; South Brook, tributary of Maccan River, at horizon Barlow coal seam.

Diplotmema geniculatum var. *erectum* Bell

Holotype 1620

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 33, Pl. 17, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east side Morien Bay, roof of top Wilson or Spencer (Emery) coal seam.

Diplotmema subfurcatum (Dawson)

Hypotype 479

Stopes M. C. 1914, Geol. Surv., Canada, Mem. 41, p. 37, Pl. 11, fig. 26; Text-fig. 3 (p. 38).

Lancaster formation (Cumberland group), New Brunswick; fern ledges, Duck Cove, Bay of Fundy, Saint John.

Diplotmema zobeli ? (Göppert)

Hypotype? 2914

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 34, Pl. 17, fig. 4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; bore-hole on Southwest Brook, drilled by W. N. Macdonald, Sydney.

Eremopteris artemisiaefolia (Sternberg)

Hypotypes 8468, 10485, 10775, 10791

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 33, Pl. 11, fig. 6.

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 114, Pl. 4, figs. 5, 6.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of False Bay Lake from old shaft on Tracy coal seam.

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia: McCulloch Brook, 1,600 feet downstream from Truro-New Glasgow highway; bore-hole N.S. Record 429, at depth 835-845 feet.

Eupecopteris (Asterotheca) cyathea (Schlotheim)

Hypotype 1199

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 75, Pl. 76, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; east shore of Low Point, roof of Carr (Lloyd Cove) coal seam.

Eupecopteris (Senftenbergia?) obtusa Bell

Holotype 1431

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 80, Pl. 82, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; roof of coal seam (Mullins) from pits near McDougall Lake, west of Bridgeport Basin.

Gymnostrobus salisburyi (Lesquereux)

Hypotypes 10112, 10277

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 95, Pl. 61, fig. 2; Pl. 62, fig. 4.

Cumberland group, Nova Scotia: South Joggins from unspecified beds; bore-hole, depth 707 feet, at Springhill.

Gymnostrobus wilsoni Bell

Holotype 796; paratypes 798, 799, 800, 801, 934

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 51, fig. 2; Pl. 53, fig. 3; Pl. 55, figs 3-5.

Pictou group, New Brunswick; Beersville, Kent co.

Hymenophyllites quadridactylites (Gutbier)

Hypotype 1587

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 41, Pl. 26, fig. 6; Pl. 27, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; east shore Morien Bay, about 600 feet below Spencer or Wilson (Emery) coal seam.

Hymenotheca broadheadi D. White

Hypotype 1658

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 37, Pl. 24, figs. 3, 4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; roof Mullins coal seam, 4,200 feet east from crop of seam on shore Sydney Harbour.

Hymenotheca dathei Potonié

Hypotypes 1637, 1638

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 36, Pl. 20, fig. 4; Pl. 21, fig. 1; Pl. 23, figs. 4, 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of Wadden Cove, in roof of 7-inch coal, about 235 feet above Tracy coal seam.

Hymenotheca sp. Bell

Specimens 7110, 7111

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 36, Pl. 23, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore north of False Bay Lake, about 200 feet above Tracy coal seam.

55790-0—4

Lepidodendron aculeatum? Sternberg

Hypotypes ? 8558, 8562

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 90, Pl. 49, fig. 5; Pl. 50, fig. 3.

Cumberland group, Nova Scotia: Springhill, from unspecified coal mine; unspecified bed in div. 4 Logan, Joggins.

Lepidodendron bretonense Bell

Hypotypes 8666, 803, 809, 810, 811, 812

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 47, figs. 5, 6; Pl. 48, figs. 4, 6; Pl. 49, fig. 2.

Cumberland group, Springhill coalfield, Nova Scotia; Maccan River, about ½ mile west of Mapleton.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

See *Lepidodendron dichotomum* var. *bretonensis* Bell

Lepidodendron dawsoni Bell

Holotype 3520; paratypes 3347, 3523, 3525, 3538

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 94, Pl. 98, fig. 12; Pl. 99, figs. 1-4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: Dominion No. 16 colliery, roof Lingan (Phalen) seam; shore Sydney Mines, above Harbour coal seam; shore Point Aconi, roof Point Aconi coal seam.

Lepidodendron dichotomum Sternberg (pars)

Hypotype 10927

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 122, Pl. 7, fig. 4.

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia; roof six-foot coal seam, Acadia No. 3 mine, Thorburn.

Lepidodendron dichotomum var. *bretonensis* Bell

Holotype 3348; paratypes 3307, 3308, 3345, 3383, 3427, 3998, 4491

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 92, Pl. 95, figs. 5-9; Pl. 96, fig. 1; Pl. 97, fig. 4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: east of Schooner Pond cove, roof of McRury coal seam; east of Reserve Junction, on Cape Breton Electric railway, roof of Phalen coal seam; north shore of Great Bras d'Or Channel, at head of Barachois, about 2,000 feet north of New Campbellton, roof of coal seam (Sixfoot).

=*Lepidodendron bretonense* Bell

Lepidodendron jaraczewskii Zeiller

Hypotypes 8553, 8712

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 89, Pl. 51, figs. 1, 2.

Cumberland group, Springhill coal-field, Nova Scotia, roof of No. 1 coal seam, Springhill.

Pictou ? group, Nova Scotia; roof of coal seam at Kemptown.

Lepidodendron lanceolatum Lesquereux

Hypotype 9913

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 88, Pl. 48, fig. 3.

Riversdale group, Nova Scotia; north shore of Minas Basin, slightly west of mouth of Moose River, Parrsboro area.

=*Lepidodendron pictoense* Dawson

Lepidodendron lycopodioides Sternberg

Hypotypes 3305, 3315, 3978, 3999, 4003, 4423

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 93, Pl. 96, figs, 2, 3; Pl. 97, figs. 1-3; Pl. 98, fig. 13.

Lepidodendron lycopodioides Sternberg

Morien (Pictou) group, Sydney coalfield, Nova Scotia: east shore Morien Bay, about midway between Spencer (Emery) and Coalbrook coal seams; west shore Glace Bay, south of Little Glace Bay, in roof 18-inch coal, about 18 feet below Harbour seam; shore at Lingan between North Head and David Head and between Bouthillier and Harbour coal seams; shore at Point Aconi in roof of Point Aconi coal seam.
=*Lepidodendron pictoense* Dawson

Lepidodendron obovatum? Sternberg

Hypotype ? 5813
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 89, Pl. 52.
Cumberland group, Springhill coalfield, Nova Scotia; Springhill, unspecified coal mine.

Lepidodendron ophiurus (Brongniart)

Hypotypes 10401, 10448, 10449
Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 123, Pl. 7, figs. 5-7.
Stellarton (Pictou) group, Pictou coalfield Nova Scotia: McLellan Brook near mouth; bore-hole N.S. Mines Record 469, depth 1,170-1,180 feet; Potter Brook, roof of McKay coal seam.

Lepidodendron pictoense Dawson

Hypotypes 804, 805, 806, 807, 808
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 46; Pl. 49, figs. 1, 3; Pl. 50, figs. 1-3.
Clifton formation (Pictou group) Clifton, New Brunswick.
See *Lepidodendron lycopioides*
Lepidodendron lanceolatum

Lepidodendron rimosum Sternberg

Hypotype 9551
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 90, Pl. 46, fig. 2.
Cumberland group, Springhill coalfield, Nova Scotia; Springhill, unspecified coal mine.

Lepidodendron wortheni Lesquereux

Hypotypes 3514, 4063, 4084, 4098, 9027, 9301, 10232
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 94, Pl. 96, figs. 4-7.
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 90, Pl. 47, figs. 2, 4; Pl. 50, fig. 2; Pl. 54, fig. 4.
Morien (Pictou) group, Sydney coalfield, Nova Scotia: west shore Glace Bay, roof of 18-inch coal about 18 feet below Harbour seam; south shore Great Bras d'Or Channel, about 20 feet below Blackrock coal seam; shore at Point Aconi, roof Point Aconi seam.
Cumberland group, Springhill coalfield, Nova Scotia; Springhill, from one of coal mines and from bore-hole.
Cumberland group, Nova Scotia; Joggins, from unspecified bed, in section 4 Logan.

Lepidophloios laricinus Sternberg

Hypotypes 3373, 10360, 10364, 4499, 4503, 8556, 8561, 8563, 8567, 8601, 8216
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 102, Pl. 101, fig. 4.
Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 126, Pl. 8, figs. 3, 4.
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 93, Pl. 50, fig. 1; Pl. 56, fig. 1; Pl. 57, fig. 4; Pl. 58, figs. 1, 3, 4; Pl. 60, fig. 5; Pl. 61, fig. 1.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore north of Wadden Cove, roof of Coalbrook coal seam.

55790-0—4½

Lepidophloios laricinus Sternberg

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia; bore-hole, N.S. Dept. Mines Record 32, at depth 85 feet; Shale Brook, near junction with McLellan Brook.

Cumberland group, Nova Scotia; Joggins section, division 4 and lower part of division 6 Logan.

Parrsboro formation (Riversdale group), Nova Scotia; west side Parrsboro Harbour near mouth of Farrell Brook.

Lepidophyllum sp. Bell

Specimen 8207

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 96, Pl. 59, fig. 2.

Riversdale group, Nova Scotia; Harrington River, about 400 feet below falls.

Lepidostrobophyllum acuminatum (Lesquereux)

Hypotypes 10363, 10446

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 127, Pl. 8, figs. 7, 8.

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia: bore-hole, N.S. Dept. Mines Record 470, depth 607-611 feet; bore-hole, N.S. Dept. Mines Record No. 429, depth 698-700 feet.

Lepidostrobophyllum fletcheri Bell

Holotype 8589; paratypes 8215, 9502, 9508

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 96, Pl. 49, figs. 1-4.

Cumberland group, Springhill coalfield, Nova Scotia; Maccan River, about ½ mile west of Mapleton.

Lepidostrobophyllum jenneyi (D. White)

Hypotypes 3329, 3432, 7722, 7776

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 96, Pl. 98, figs. 2-5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of Long Beach, Morien, roof of Spencer (Emery) coal seam; shore east of Schooner Pond cove, roof of Ross (Emery) coal seam; Lingan shore, Sydney Harbour.

Lepidostrobophyllum lanceolatum (Lindley and Hutton)

Hypotypes 3836, 4067, 10659, 10772, 10788, 8206, 9907

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 97, Pl. 98, figs. 10, 11.

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 127, Pl. 7, fig. 3; Pl. 8, figs. 5, 6.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 96, Pl. 48, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; Dominion No. 2 colliery, Glace Bay.

Riversdale group, Nova Scotia; between Moose River and Moose Creek, Minas Basin.

Lepidostrobophyllum lanceolatum var. *constrictum* Bell

Holotype 3420; paratypes 3304, 3428

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 97, Pl. 98, figs. 7-9.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Schooner Pond cove, roof of Ross (Emery) seam and of McRury seam.

Lepidostrobophyllum majus (Brongniart)

Hypotypes 9589, 956

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 96, Pl. 53, fig. 3.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 48, fig. 5.

Lancaster formation (Cumberland group), New Brunswick; Bay of Fundy shore east of Tynemouth Creek, N.B.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Lepidostrobophyllum moyseyi? (Arber)

Hypotype ? 3500

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 97, Pl. 98, fig. 6.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; roof of Mullins seam near McDougall Lake.

Lepidostrobophyllum triangulare (Zeiller)

Hypotypes 3416, 3430

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 95, Pl. 97, figs. 5, 6.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; Point Aconi at crop Point Aconi coal seam.

=*Lepidostrobus mintoensis* Wilson

Lepidostrobus mintoensis Wilson

Holotype 7544; paratypes 7545, 7545a-c; hypotype 818

Wilson W. J. 1913, Geol. Surv., Canada, Mus. Bull. 1, p. 90, Pl. 9, figs. 3-5.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87.

Minto formation (Pictou group) New Brunswick; roof Minto coal seam, Minto.

Lepidostrobus olryi Zeiller

Hypotypes 8564, 9608, 9948

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 95, Pl. 56, fig. 3; Pl. 57, fig. 3; Pl. 60, fig. 1.

Cumberland group, Nova Scotia: roof of coal at McKinnon mine, Springhill; roof of main coal seam, Joggins.

Parrsboro formation (Riversdale group), Nova Scotia; west side Parrsboro harbour near mouth Farrell Brook.

Lepidostrobus variabilis? Lindley and Hutton

Hypotypes ? 10361, 10373, 10526, 10556, 10663, 8573

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 126, Pl. 9, figs. 3-6; Pl. 10, fig. 1.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 95, Pl. 49, fig. 6.

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia: south branch Marsh Brook, near mouth; bore-hole, N.S. Dept. Mines Record 469, at depth 293 feet; Shale Brook near junction with McLellan Brook; 850 feet north of Albion Mines, from pit on Cage coal seam.

Cumberland group, Nova Scotia; Joggins section from division 4 Logan.

Lepidostrobus sp. Bell

Specimen 3330

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 96, Pl. 98, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; roof Point Aconi coal seam at Point Aconi, N.S.

Linopteris muensteri (Eichwald)

Hypotypes 1237, 2748, 3510, 7173, 876, 877, 887, 888

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 65, Pl. 59, figs. 1-4.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 37, fig. 4; Pl. 38, figs. 1-3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of Wadden Cove, roof of 6-inch coal about 235 feet above Tracy coal seam; shore north of Wadden Cove, roof of Coalbrook coal seam; Shoemaker Cove, Mira Bay, roof of Shoemaker coal seam; roof of Mullins coal seam, from pits near Macdougall Lake, Bridgeport Basin area.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Clifton formation (Pictou group), New Brunswick; Clifton, Bay de Chaleur.

Linopteris muensteri var. *dawsoni* Bell

Holotype 2720; paratypes 2333, 2335, 2615, 2772

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 66, Pl. 59, figs. 5-8; Pl. 60, figs. 1, 2.

Linopteris muensteri var. *dawsoni* Bell

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east side Morien Bay at Baird Cove, about 600 feet below Spencer or Wilson (Emery) coal seam; doubtful beds, but seemingly between Emery and Phalen coal seams on shore east of Lingan bar.

Linopteris neuropteroides var. *major* Potonié

Hypotypes 2770, 2822, 2824, 7956

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 66, Pl. 61, figs. 1-4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: roof of Ormond coal seam from pit about 1,200 feet southeast of Sydney reservoir; roof of Gardiner coal seam from West pit.

Linopteris obliqua (Bunbury)

Hypotype 4446

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 64, Pl. 58, figs. 4, 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; unspecified beds in Morien group.

Linopteris obliqua var. *bunburii* Bell

Holotype 2762; paratypes 2761, 3984, 7052, 7052B

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 64, Pl. 60, figs. 3-7.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of Long beach, Morien, roof of Spencer (Emery) coal seam.

Lonchopteris eschweileriana Andrae

Hypotypes 2383, 2432, 7159

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 70, Pl. 65, figs. 8, 9; Pl. 66, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; Shoemaker Cove, Mira Bay, roof of Shoemaker coal seam.

Macrostachya hauchecorni Weiss

Hypotype 3097

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 88, Pl. 92, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Morien Bay, roof of top Wilson (Emery) coal seam.

Macrostachya infundibuliformis (Brongniart)

Hypotype 3100

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 88, Pl. 92, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore of Point Aconi at crop Point Aconi coal seam.

Macrostachya sp. Bell

Specimens 832, 833

Bell W A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 45, fig. 4; Pl. 47, fig. 1.

Clifton formation (Pictou group), New Brunswick; Clifton.

Marchantites sp. Bell

Specimen 3145

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 20, Pl. 1, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; debris from pit on small coal seam, about 1½ miles east of Dutch Brook settlement.

Mariopteris acuta (Brongniart)

Hypotypes 3074, 3075, 9854, 9889, 9899, 9969, 10180, 11013

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 76, Pl. 26, figs. 1-5, 7; Pl. 27, figs. 1, 3.

Mariopteris acuta (Brongniart)

Riversdale group, Nova Scotia: Inverness co., about 4,000 feet northeasterly from Chimney Corner; Inverness co., about ⅔ mile north of old coal mine at Chimney Corner; Cumberland co., Bay of Minas, between Moose River and Moose Creek.

Mariopteris carnosa Corsin

Hypotypes 868, 967, 969

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 16, fig. 1; Pl. 20, figs. 1, 2.

Clifton formation (Pictou group), New Brunswick; Clifton, Bay de Chaleur.

See *Mariopteris nervosa* pars

Mariopteris comata Bell

Holotype 9996; paratypes 9997, 9999, 10039, 10040

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 77, Pl. 27, fig. 2; Pl. 28, figs. 1-5.

Cumberland group, Springhill coalfield, Nova Scotia: South Brook, tributary to Maccan River at position Barlow coal seam; No. 3 pit on 11-foot coal seam, Springhill.

Mariopteris disjuncta Bell

Holotype 9071

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 77, Pl. 29, fig. 1.

Cumberland group, Springhill coalfield, Nova Scotia; Capt. Henry Mill's Brook, tributary to Maccan River, Mapleton.

Mariopteris grandepinnata Huth

Hypotypes 8559, 8560

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 77, Pl. 28, fig. 2; Pl. 29, fig. 3.

Lancaster formation (Cumberland group) New Brunswick; Gardiner Creek, 40 chains east of Doctor Brook, Saint John co.

Mariopteris hirsuta Corsin

Hypotypes 2774, 2775, 870, 871, 958

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 51, Pl. 41, figs. 3, 4.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 16, fig. 3; Pl. 21, fig. 4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Schooner Pond cove, roof of Ross (Emery) coal seam.

Clifton formation (Pictou group), New Brunswick; Clifton, Bay de Chaleur.

Mariopteris hirta (Stur)

Hypotypes 869, 878, 879, 880, 881, 882, 883, 884

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 13, fig. 2; Pl. 17; Pl. 18, figs. 1-3; Pl. 19, figs. 1, 2.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

See *Mariopteris nervosa* pars

Mariopteris latifolia (Brongniart)

Hypotypes 2834, 2835, 2836, 866, 872, 873, 874, 875

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 49, Pl. 39, figs. 2-4.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 13, fig. 3; Pl. 14, fig. 2; Pl. 15, figs. 1, 2; Pl. 16, fig 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Schooner Pond cove, 25 feet above Ross (Emery) coal seam.

Minto formation (Pictou group) New Brunswick; roof of Minto coal seam, Minto.

Mariopteris nervosa (Brongniart)

Hypotypes 2890, 2893, 4470e

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 49, Pl. 37, fig. 5; Pl. 39, fig. 1; Pl. 40, fig. 1.

Mariopteris nervosa (Brongniart)

Morien (Pictou) group, Sydney coalfield, Nova Scotia: south of Port Morien, Morien Bay, roof of Spencer (Emery) coal seam; Sydney coalfield, unspecified beds.

2890 and 4470e=*Mariopteris carnosa* Corsin

2893=*Mariopteris hirta* (Stur)

Mariopteris ribeyroni (Zeiller)

Hypotype 982

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 14, fig. 1.

Pictou group, New Brunswick: Pollett River, near mouth tributary from east, about ½ mile north of Pollett River settlement.

See *Mariopteris*? *ribeyroni*

Mariopteris? *ribeyroni* (Zeiller)

Hypotypes 1549, 2089, 2847, 2895, 3509, 3708, 3749, 3783

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 52, Pl. 44, figs. 1-8.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: east shore Morien Bay, roof of 4-inch coal about 220 feet below Spencer (Emery) coal seam; east shore Schooner Pond cove, roof McRury coal seam; Dominion No. 16 colliery, roof Lingan (Phalen) coal seam; Dominion No. 12 colliery, roof of Victoria (Harbour) seam; east shore Great Bras d'Or Channel, near Table Head, roof of 19-inch coal seam south of Table Head (Harbour seam group); Point Aconi, roof of Point Aconi coal seam.

=*Mariopteris ribeyroni* (Zeiller)

Mariopteris soubeirani? Zeiller

Hypotypes ? 1231, 2862, 2867

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 53, Pl. 45, figs. 3-5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east side Morien Bay, roof of top Wilson or Spencer (Emery) coal seam.

Mariopteris sp. Kidston

Specimens 8554, 8642

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 77, Pl. 29, fig. 4; Pl. 30, fig. 1.

Cumberland group, Springhill coalfield, Nova Scotia; Reid Brook, Mapleton, about ½ mile above junction with Maccan River.

Cumberland group, Joggins, coal group No. 17, division 4 Logan.

Mariopteris? sp. Bell

Specimen 2674

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 53, Pl. 45, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; about 9,200 feet easterly from junction Morrison and Mira roads, from pit on small coal seam.

Mariopteris sphenopteroides (Lesquereux)

Hypotypes 2830, 2831, 2832, 7103

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 50, Pl. 40, figs. 3-5; Pl. 41, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore north of Wadden Cove, roof of Coalbrook coal seam; shore south of Port Morien, Morien Bay, roof of Spencer (Emery) coal seam; shore east of Schooner Pond cove, roof of McRury coal seam.

Mariopteris tenuis Bell

Holotype 2904; paratypes 2901, 2902, 2906

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 51, Pl. 42; Pl. 43, figs. 1-3.

Mariopteris tenuis Bell

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of Long Beach, Morien, roof of Spencer (Emery) coal seam; shore east of Schooner Pond cove, roof of Ross (Emery) coal seam; Cape Percy, near anticlinal axis.

Megalopteris kellyi Arnold

Hypotypes 10370, 10383, 10384

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 120, Pl. 2, figs. 4-6.

Cumberland group, Pictou coalfield, Nova Scotia: Skinner Brook, about 2,200 feet downstream from Gairloch road; Middle River, west side, 1,750 feet upstream from mouth Brown Brook; McLean Brook, about 2,000 feet upstream from Thorburn road.

Myriotheca desaillyi Zeiller

Hypotypes 1662, 867

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 42, Pl. 28, figs. 3, 4.
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 8, fig. 2; Pl. 56, fig. 6.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of Long Beach, Morien, roof of Spencer (Emery) coal seam.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam Minto.

Neurocardiopteris barlowi Bell

Holotype 8570; paratypes 8571, 10857

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 78, Pl. 30, fig. 4; Pl. 31, figs. 2, 3.

Riversdale group, Nova Scotia; quarry ¾ mile west of CNR bridge over River Philip.

Neuropteris aculeata Bell

Holotype 4972; paratype 4065

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 56, Pl. 49, figs. 1, 2; Pl. 50, fig. 1.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of False Bay Lake between Tracy and Shoemaker coal seams.

=*Neuropteris pseudogigantea* Potonié

Neuropteris (Bellopteris) corsini (Radforth and Walton)

Hypotypes 889, 890, 891, 892, 893, 894, 895, 896, 898, 899, 900, 901, 902

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 27; Pl. 28, figs. 1-4; Pl. 29; Pl. 30; Pl. 31, figs 1-3; Pl 32, fig. 5; Pl. 33, figs. 1, 3, 4.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

See *Bellopteris corsini*

Neuropteris crenulata Brongniart

Hypotypes 3796, 3796A

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 61, Pl. 55, fig. 5; Pl. 56, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east side Morien Bay, between Spencer (Emery) and Gowrie (Phalen) coal seams.

Neuropteris (Mixoneura) flexuosa Sternberg

Hypotypes 1182, 1287, 1288, 2472, 4429, 7788, 4433 (forma *magna*), 4443A (forma *magna*), 4500 (forma *magna*), 905, 910

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 55, Pl. 46, figs. 6, 7; Pl. 47, figs. 1-4; Pl. 48, figs. 1, 2.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 34, fig. 2; Pl. 37, fig. 3.

Neuropteris (Mixoneura) flexuosa Sternberg

Morien (Pictou) group, Sydney coalfield, Nova Scotia: east shore Morien Bay, about 360 feet below Wilson (Emery) coal seam; Morien Bay, south of Port Morien, roof of Spencer (Emery) coal seam; west shore Morien Bay, north of Millbrook cove, roof of Trunnelshed (Backpit) coal seam; shore east of Schooner Pond cove, roof of McRury coal seam.

Pictou group, New Brunswick; Tay Creek, about 5.6 miles south of Stanley, York co.

Neuropteris gigantea Sternberg

Hypotypes 10624, 10637, 10696

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 118, Pl. 1, figs. 1, 2; Pl. 2, figs. 1-3.

Cumberland group, Pictou coalfield, Nova Scotia: Middle River, 700 feet upstream from crossing of old road that ran to Gairloch road; Skinner Brook, 1,100 feet downstream from bridge on Gairloch road.

Neuropteris heterophylla Brongniart

Hypotypes 2888, 911

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 56, Pl. 50, fig. 2.
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 33, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore north of False Bay Lake about 50 feet above Tracy coal seam.

Pictou group, New Brunswick; Napadogan map-area.

Neuropteris kosmanni ? Potonié

Hypotype ? 9159

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 82, Pl. 35, fig. 1.

Riversdale group, Nova Scotia; Minas Basin shore east of Moose Creek, Parrsboro area.

Neuropteris macrophylla Brongniart

Hypotypes 3987, 3988, 4014, 4036

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 60, Pl. 54, fig. 5; Pl. 55, figs. 2-4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: 6,100 feet south of Point Aconi, roof of Upper Bonar coal seam; Point Aconi at crop of Point Aconi coal seam.

Neuropteris (Mixoneura) obliqua (Brongniart)

Hypotypes 10445, 10447, 8213, 9023, 9290, 9291, 9292, 9293, 10965

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 118, Pl. 3, figs. 1, 2.
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 81, Pl. 34, fig. 1; Pl. 35, figs. 2, 3, 5; Pl. 36, figs. 2, 4; Pl. 37, fig. 5; Pl. 67, figs. 1, 2.

Cumberland group, Nova Scotia: Spicer Cove, near mouth Apple River; East Apple River, above small falls and about a mile upstream from bridge.

Lancaster formation (Cumberland group), New Brunswick: Bay of Fundy, east of Tynemouth Creek, Saint John co.; Tynemouth Creek; Gardner Creek, ½ mile east of Doctor Brook, Saint John co.; Rugged Head, Charlotte co.

Neuropteris (Mixoneura) ovata Hoffmann

Hypotypes 1162, 1252, 4026, 4033, 4088, 4426 (aphlebia)

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 60, Pl. 52, fig. 4; Pl. 53, fig. 3; Pl. 54, figs. 1-3; Pl. 55, fig 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east side Morien Bay, about 30 feet below Spencer (Emery) coal seam; shore 6,100 feet south of Point Aconi, roof of Upper Bonar coal seam; Point Aconi, roof of Point Aconi coal seam.

Neuropteris pseudogigantea Potonié

Hypotype 8644, 9380, 9381, 9383

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 80, Pl. 33, figs. 1, 2; Pl. 34, figs. 2, 4, 6.

Neuropteris pseudogigantea Potonié

Cumberland group, Springhill coalfield, Nova Scotia: bore-hole on Mill Brook, about 2 miles west of Springhill; East Brook, tributary to Maccan River, north of East Southampton railway station.

Lancaster formation (Cumberland group), New Brunswick; Monument Pt., McCoy Head, Saint John co.

=*Neuropteris gigantea* Sternberg

Neuropteris pseudogigantea Potonié

Hypotype 4972

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

See *Neuropteris aculeata*

Neuropteris rarinervis Bunbury

Hypotypes 3797, 4019, 4023, 4076, 903, 906, 925, 4588

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 58, Pl. 52, fig. 3; Pl. 53, figs. 1, 2; Pl. 54, fig. 4.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 32, figs. 1, 2; Pl. 35; Pl. 36, figs. 1, 3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: Millbrook cove, Morien Bay, roof of 11-inch coal about 110 feet above Trunnelshed (Backpit) coal seam; Victoria Mines, Sydney Harbour, roof of 8-inch coal 10 feet below Dan McGilvary (Emery) coal seam; Little Bras d'Or inlet; Point Aconi, roof of Point Aconi coal seam.

Clifton formation (Pictou group), New Brunswick; Clifton shore.

Pictou group, New Brunswick; roof of coal seam at Beersville.

Neuropteris retorquata Dawson

Syntypes 8130, 8130a

Dawson J. W. 1871, Geol. Surv., Canada, Fossil Plants of the Devonian and Upper Silurian Formations of Canada, p. 50, Pl. 17, fig. 197.

Cumberland group, New Brunswick; Lepreau, Saint John co.

Neuropteris scheuchzeri Hoffmann

Hypotypes 1232 (*Cyclopteris*), 1235, 3114, 3474, 3671 (forma *angustifolia*), 3773 (*Cyclopteris*), 3776, 3941, 3976, 907 (forma *angustifolia*), 908 (forma *angustifolia*), 909 (forma *angustifolia*)

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 57, Pl. 50, figs. 3, 4; Pl. 51, figs. 1-5; Pl. 52, figs. 1, 2.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 37, figs. 1, 2, 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of Wadden Cove, roof of 7-inch coal, about 235 feet above Tracy coal seam; shore north of Wadden Cove, roof of Coalbrook coal seam; west shore Morien Bay, north of Millbrook Cove, roof of Trunnelshed (Backpit) coal seam; Port Morien, loose blocks on shore; Dominion No. 10 colliery, roof of Emery coal seam; shore at Point Aconi, roof of Point Aconi coal seam.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto

Neuropteris schlehani Stur

Hypotypes 10957, 10958, 10959, 10960

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 79, Pl. 30, fig. 3; Pl. 32; Pl. 33, figs. 5, 6.

Boss Pt. formation (Riversdale group), New Brunswick; Maringouin peninsula, Shepody Bay, south of Hard Ledge.

Cumberland group, Springhill coalfield, Nova Scotia; roof of No. 1 coal seam, Springhill.

Cumberland group, Nova Scotia; coal group No. 17, division 4 Logan, Joggins.

Neuropteris smithsii Lesquereux

Hypotypes 3089, 9361, 9362, 9363, 9365

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 79, Pl. 29, fig. 2; Pl. 30, fig. 2; Pl. 31, figs. 1, 4; Pl. 33, figs. 3, 4; Pl. 67, fig. 4.

Riversdale group, Nova Scotia; Whale Cove, Inverness co., about ¼ mile south of Grey Point.

Neuropteris tenuifolia (Schlotheim)

Hypotypes 4135, 4138, 7016, 904, 972

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 54, Pl. 46, figs. 1-5.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 34, figs. 3, 4; Pl. 36, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of False Bay Lake between Tracy and Shoemaker coal seams; shore north of False Bay Lake, about 200 feet above Tracy coal seam; roof beds of Ormond coal seam, from pit south of Mira road and east of trail to Middle Lake.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Odontopteris minor Brongniart

Hypotypes 2549, 2550, 2896

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 61, Pl. 55, fig. 6; Pl. 56, figs. 2-5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east side Morien Bay, roof of top Wilson or Spencer (Emery) coal seam; West pit, roof of Gardiner coal seam.

Odontopteris subcuneata Bunbury

Hypotypes 1119, 1838, 2522, 2530, 2536, 2540, 2551, 2553, 3041, 3947, 4094, 4096

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 62, Pl. 57, figs. 1-8; Pl. 58, figs. 1-3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: east shore Morien Bay, roof of 4-inch coal about 220 feet below Spencer (Emery) coal seam, and roof of 6-inch coal 15 feet below Gowrie (Phalen) coal seam; Dominion No. 10 colliery, roof Emery seam; Dominion No. 4 colliery, roof of Phalen seam; Pt. Aconi, roof of Pt. Aconi coal seam; east shore Great Bras d'Or at Morrison Pond, above Stubbart (Hub) coal seam; shore west of Pt. Aconi, roof of 8-inch coal 20 feet above Upper Bonar coal seam.

Oligocarpia brongniarti Stur

Hypotypes 1593, 1649, 1657, 9067, 916, 917

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 42, Pl. 29; Pl. 30, figs. 1, 2.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 76, Pl. 25, figs. 2, 4.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 1, fig. 3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east side Morien Bay, between Spencer or Wilson (Emery) and Gowrie (Phalen) coal seams, and also roof of Spencer seam; shore east of Schooner Pond cove, roof of Ross (Emery) seam.

Cumberland group, Springhill coalfield, Nova Scotia; roof of No. 2 mine, Springhill.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Oligocarpia missouriensis D. White

Hypotypes 1586, 1647, 1650, 1655, 2921, 2938, 2940, 3472, 3982, 885, 913, 914, 915, 933, 980, 4451

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 43, Pl. 30, figs. 3, 4; Pl. 31, figs. 1-6; Pl. 83, figs. 1, 2; Pl. 86, figs. 2, 3.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 1, figs. 1, 2; Pl. 2, figs. 1-5; Pl. 3, fig. 4; Pl. 4, fig. 3.

Oligocarpia missouriensis D. White

Morien (Pictou) group, Sydney coalfield, Nova Scotia: Broughton, roof of Tracy seam; Morien Bay, south of Pt. Morien, roof of Spencer (Emery) coal seam; shore east of Schooner Pond cove, roof of Ross (Emery) and roof of McRury coal seams; Dominion No. 10 colliery, Reserve; Sydney Mines, roof of Harbour coal seam; Oxford Point, roof of 5-inch coal; east shore Great Bras d'Or Channel, south of Blackrock Pt., roof of coal seam about 100 feet below Blackrock seam.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Clifton formation (Pictou group), New Brunswick: Clifton, Bay de Chaleur.

See *Sphenopteris moriensis* pars

Oligocarpia sp. cf. *O. gutbieri* Göppert

Specimens 2934, 2866, 2085, 2933, 4022

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 45, Pl. 32, figs. 1-5; Pl. 33, figs. 1-3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: Point Aconi, roof of Point Aconi coal seam; shore 6,100 feet south of Point Aconi; roof of Upper Bonar coal seam.

Palaeostachya elongata (Presl) Weiss

Hypotypes 8023, 9377, 9387, 10050

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 88, Pl. 91, fig. 6.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 104, Pl. 63, fig. 3; Pl. 73, figs. 2-5.

Cumberland group, Springhill coalfield, Nova Scotia: East Brook, tributary Maccan River; South Brook, tributary Maccan River; Spicer Cove, Joggins section, sec. 11 Fletcher.

Morien (Pictou) group, Sydney coalfield, about 2,220 feet east of Macdonald Lake, in roof of McLean coal seam, about 200 feet above Tracy coal seam.

Palaeostachya striata ? Weiss

Hypotype ? 9853

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 104, Pl. 73, fig. 6.

Cumberland group, Springhill coalfield, Nova Scotia; near Orange Hall at Leamington.

Pecopteridium sullivanti (Lesquereux)

Hypotypes 862, 864, 865, 940, 941, 942, 3048

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 83, Pl. 81, fig. 5.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 40, figs. 1-5; Pl. 41, figs. 3, 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; roof of Mullins coal seam from pit near McDougall Lake, west of Bridgeport basin.

Pictou group, New Brunswick; Beersville, Kent co.

Pecopteris (Asterotheca) acadica Bell

Holotype 847; paratype 848

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 25, figs. 1-3.

Pictou group, New Brunswick; roof of coal at Beersville.

See *Asterotheca miltoni*

Pecopteris clarkii Lesquereux

Hypotypes 3057, 3058

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 82, Pl. 83, fig. 3; Pl. 84, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Schooner Pond cove, roof of Ross (Emery) coal seam.

Pecopteris (Asterotheca) hemitelioides Brongniart

Hypotype 939

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87 Pl. 21, fig. 3.

Pictou group, New Brunswick; Pollett River.

See *Asterotheca robbi*

Pecopteris (Asterotheca) miltoni Artis

Hypotypes 849, 850, 851, 852, 853, 854, 855

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 20, fig. 3; Pl. 21, figs. 1, 2; Pl. 22, figs. 1-3; Pl. 23; Pl. 24, fig. 2.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Clifton formation (Pictou group), New Brunswick; Clifton, Bay de Chaleur.

See *Asterotheca miltoni*

Pecopteris (Senftenbergia) pennaeformis Brongniart

Hypotype 981

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 26, fig. 2.

Minto formation (Pictou group), New Brunswick; Minto.

See *Senftenbergia pennaeformis*

Pecopteris pilosa (Dawson)

Hypotypes 8202, 8204, 8205, 8208 (fertile), 8211, 8218 (fertile) 8661, 10010, 10011, 10970

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 85, Pl. 13, figs. 1, 5; Pl. 39, figs. 1-4; Pl. 40, figs. 2-5; Pl. 41, figs. 1, 4; Pl. 42, figs. 1, 3, 6; Pl. 43; Pl. 44.

Cumberland group, Nova Scotia: Henry Brook, Springhill area, about ⅞ mile above junction with Maccan River; Maccan River, Springhill area, about ½ mile west of Mapleton; Spicer Cove, from beds a little below No. 28 of section 11, Fletcher.

Lancaster formation (Cumberland group), New Brunswick: Lepreau harbour, Southeast Point; Little Lepreau from Dr. Reynold's farm.

Pecopteris (Senftenbergia) plumosa (Artis) forma *crenata*

Hypotypes 3076, 9200, 9209, 9210, 9213, 9947

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 84, Pl. 38, figs. 1-4; Pl. 39, figs. 5, 6.

Cumberland group, Nova Scotia: Hewson Brook, Saltsprings, at site of old coal workings; South Branch Black River, near mouth Smith Brook; Capt. Henry Mills' Brook, Mapleton; Spicer Cove, Chignecto Bay, section 11, Fletcher.

Pecopteris (*Senftenbergia*?) sp. Bell

Specimen 9445

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 86, Pl. 42, figs. 2, 4.

Cumberland group, Springhill coalfield, Nova Scotia; No. 2 mine, Springhill.

Pecopteris sterzeliformis Bell

Holotype 2857; paratype 2861

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 81, Pl. 74, fig. 2; Pl. 75, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east side Morien Bay, between Spencer (Emery) and Gowrie (Phalen) coal seams.

Polypterocarpus sp. Bell

Specimen 8841

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 108, Pl. 76, figs. 3, 7.

Cumberland group, Springhill area, Nova Scotia; West Branch Black River at C.N. Railway ½ mile southeast of Black River railway station.

Psygmophyllum sp. Bell

Specimens 10659, 10812, 10899, 11801

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 116, Pl. 6, figs. 1-4.

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia: Acadia Coal Company's bore-hole 60 (map reference 47) at depths 1,280-1,286, 1,178 and 1,343 feet; Acadia Coal Company's bore-hole 57 (map reference 41) at depth 278 feet.

Ptychocarpus unitus (Brongniart)

Hypotypes 1370, 1379, 3112, 4466a

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 77, Pl. 72, fig. 2; Pl. 73, figs. 4-6.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of Long Beach, Morien, roof of Spencer (Emery) coal seam; Dominion No. 4 colliery, roof of Phalen seam; unspecified bed in upper part of Morien group.

Radiospermum sp. Bell

Specimen 3215

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 107, Pl. 105, fig. 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Schooner Pond cove, roof of McRury coal seam.

Radiospermum ? sp. Bell

Specimens 954, 955

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 53, figs. 2, 4.

Pictou group, New Brunswick; Napadogan map-area.

Renaultia hydei Bell

Holotype 5547; paratypes 5571, 5579, 9068, 9374, 9382

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 72, Pl. 20, fig. 4; Pl. 21, figs. 2-6; Pl. 22, fig. 6; Pl. 26, fig. 6.

Parrsboro formation (Riversdale group), Nova Scotia: west side Parrsboro Harbour near mouth Farrell Brook; Bay of Fundy shore between Moose River and Moose Creek, Parrsboro area.

Riversdale group, New Brunswick; shore Chignecto Bay, east of Alma, Albert co.

Rhabdocarpus sp. Bell

Specimens 9807, 9879

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 108, Pl. 76, figs. 5, 8, 9; Pl. 79, fig. 1.

Cumberland group, Springhill area, Nova Scotia; Smith Brook, tributary of South Branch Black River, about 4,300 feet from mouth of brook and also about 2 miles from mouth.

Rhacopteris sp. Bell

Specimen 10790

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 115, Pl. 6, figs. 5, 6

Stellarton (Pictou) group, Pictou coalfield, Nova Scotia; bore-hole N.S. Mines Record 471 at depth 447 feet.

Rhodea laqueata Bell

Holotype 5943; paratypes 5942, 9366, 9378, 5673

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 58, Pl. 3, figs. 1-3, 5, 6.

Riversdale group, Nova Scotia; Inverness co., section on shore north of creek and from Old Chimney Corner coal mine.

Rhodea sp. cf. *sparsa* Kidston

Specimen 5938

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 57, Pl. 2, fig. 4; Pl. 13, fig. 3.

Riversdale group, Nova Scotia; Inverness co., on shore about 3,600 feet northwards from old mine at Chimney Corner.

Rhodea wilsoni Bell
Holotype 3000; paratype 267
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 58, Pl. 18, figs. 5, 6.
Lancaster formation (Cumberland group), New Brunswick: McCoy Head, east of Dixon Point, Saint John co.; fern ledges, Duck Cove, Saint John.

Samaropsis ampullacea Bell
Syntypes 8432A, 8432B; paratype 8458
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 104, Pl. 104, figs. 6, 7.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of False Bay Lake, roof of Tracy coal seam.

Samaropsis baileyi (Dawson)
Hypotype 5898
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 107, Pl. 75, fig. 4.
Lancaster formation (Cumberland group), New Brunswick; Gardiner Creek, 40 chains east of Doctor Brook.

Samaropsis bisecta (Dawson)
Hypotype 971
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 51, fig. 3; Pl. 56, fig. 5.
Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Samaropsis cornuta (Dawson)
Hypotypes 3175, 7036, 950, 951
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 104, Pl. 104, figs. 4, 5.
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 56, figs. 3, 4.
Morien (Pictou) group, Sydney coalfield, Nova Scotia: Shoemaker Cove, Mira Bay, roof of Shoemaker coal seam; Cape Morien, east side Morien Bay, roof of Gowrie (Phalen) coal seam.
Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.
See *Cardiocarpon cornutum* Dawson

Samaropsis crampii (Hartt)
Hypotype 8217
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 108, Pl. 75, fig. 2.
Lancaster formation (Cumberland group), New Brunswick; Tynemouth Creek east of anticline, Saint John co.

Samaropsis ingens (Lesquereux)
Hypotypes 10337, 10338, 10566
Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 131, Pl. 3, fig. 6; Pl. 4, figs. 1, 2.
Middle River formation (Cumberland group), Nova Scotia; Pictou coalfield, Middle River, west side, 100 feet north of small tributary and 700 feet upstream from crossing of old road that ran to Gairloch road.

Samaropsis sp. Bell
Specimens 10336, 10362
Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 132, Pl. 4, figs. 3, 4.
Middle River formation (Cumberland group), Nova Scotia; Pictou coalfield, Middle River, west side, 1,750 feet upstream from mouth of Brown Brook; Skinner Brook about 1,900 feet upstream from Gairloch road.

Samaropsis wilsoni Bell
Holotype 5758; paratypes 5757, 5806, 8214
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 108, Pl. 75, fig. 3; Pl. 76, figs. 1, 2, 4.
Lancaster formation (Cumberland group), New Brunswick; McCoy Head, Bay of Fundy, Saint John co.

Saportaea dispar (Dawson)

Holotype 4427

Dawson J. W. 1868, Acadian Geology, 2nd ed., p. 480, fig. 73 (p. 244).
Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 55, fig. 1.

Clifton formation (Pictou group), New Brunswick; Clifton, Bay de Chaleur.

Selaginellites gutbieri (Göppert)

Hypotypes 3486, 7091

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 92, Pl. 95, figs. 3, 4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: Great Bras d'Or near Table Head, roof of 6-inch coal seam, about 43 feet below a 19-inch coal (Harbour group) seam; east shore Morien Bay, roof of Spencer group of seams (Emery seam equivalent).

Senftenbergia pennaeformis (Brongniart)

Hypotypes 1365, 1366, 1367, 1368, 1369

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 79, Pl. 81, figs. 1-4; Pl. 82, fig. 3.

Morien (Pictou) group, Nova Scotia; Sydney coalfield, shore north of False Bay Lake, about 200 feet above Tracy coal seam.

See *Pecopteris (Senftenbergia) pennaeformis*

Sigillaria boblayi Brongniart

Hypotypes 3449, 3449A

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 101, Pl. 103, figs. 1, 2.

Morien (Pictou) group, Nova Scotia; Sydney coalfield, west shore Great Bras d'Or, about 2,000 feet south of Cape Dauphin.

Sigillaria elegans (Sternberg)

Hypotypes 3451, 6537, 6542

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 101, Pl. 103, fig. 3.
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 91, Pl. 45, fig. 2; Pl. 46, fig. 1.

Morien (Pictou) group, Nova Scotia; Sydney coalfield, Queen pit, Sydney Mines, from roof Harbour coal seam.

Cumberland group, Nova Scotia; Joggins, from roof of Joggins Main coal seam.

Sigillaria fundiensis Bell

Holotype 8555; paratype 8557

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 92, Pl. 54, fig. 1; Pl. 55, fig. 1.

Cumberland group, Nova Scotia; roof of Main coal seam, Joggins.

Sigillaria laevigata Brongniart

Hypotypes 3413, 4549A, 10359, 10398

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 102, Pl. 103, fig. 4.
Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 124, Pl. 7, figs. 1, 2 (error in text and explanation of figures: "Lesquereux (?non Sternberg)" should read "Brongniart".

Morien (Pictou) group, Nova Scotia; Sydney coalfield, roof of Emery coal seam, Glace Bay.

Stellarton (Pictou) group, Nova Scotia; Pictou coalfield, Acadia No. 3 mine, Thorborn; bore-hole N.S. Mines Record 472 at depth 515-522 feet.

Sigillaria laevigata? Brongniart

Hypotype ? 3091

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 93, Pl. 56, fig. 4.

Cumberland group, Nova Scotia; unspecified coal mine, Springhill.

55790-0—5

Sigillaria lorwayana Dawson

Hypotypes 4352, 4392

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 99, Pl. 101, fig. 3; Pl. 102, figs. 1, 2.

Morien (Pictou) group, Nova Scotia; Sydney coalfield, roof of Emery coal seam, Glace Bay.

Sigillaria mamillaris Brongniart

Hypotype 5899

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 91, Pl. 53, fig. 1.

Cumberland group, Nova Scotia; Springhill.

Sigillaria ovata Sauveur

Hypotype 10810

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 124, Pl. 7, fig. 8.

Stellarton (Pictou) group, Nova Scotia; Pictou coalfield, McLellan Brook, 3,500 feet downstream from bridge of McLellan Mountain road.

Sigillaria reticulata Lesquereux

Hypotypes 10741, 10803

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 125, Pl. 8, figs. 1, 2.

Stellarton (Pictou) group, Nova Scotia; Pictou coalfield, bore-hole Acadia Coal Company 54 (map reference 30) at depth about 95 feet.

Sigillaria reticulata? Lesquereux

Hypotype ? 10943

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 93, Pl. 57, fig. 1.

Cumberland group, Nova Scotia; Springhill, from unspecified mine.

Sigillaria scutellata Brongniart

Hypotype 8568

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 92, Pl. 53, fig. 2.

Cumberland group, Nova Scotia; roof of coal from unspecified coal mine, Springhill.

Sigillaria tessellata (Steinhauer)

Hypotypes 4394, 4405a, 795

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 98, Pl. 100, fig. 2.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 51, fig. 4.

Morien (Pictou) group, Nova Scotia; Sydney coalfield, Glace Bay, roof of Emery coal seam.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Sigillaria tessellata var *eminens* Bell

Neotype 4395; paratypes 4395A, 3991, 4393

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 98, Pl. 100, figs. 1, 3; Pl. 101, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: roof of Emery coal seam, Glace Bay; Little Bras d'Or east of Alder Point road, roof Edwards coal seam.

=*Sigillaria tessellata*.

Sigillariostrobus ? *crépini*? Zeiller

Hypotype ? 3519

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 103, Pl. 101, fig. 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; west shore Glace Bay, south of Little Glace Bay, in roof of 18-inch coal, about 18 feet below Harbour coal seam.

Sphenophyllum cuneifolium (Sternberg)

Hypotypes 1814, 1871, 2003, 6539, 6540, 822, 823, 824, 825, 826

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 89, Pl. 92, figs. 6-8.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 105, Pl. 75, figs. 5, 6; Pl. 76, fig. 10.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 42, figs. 1-5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore north of Wadden Cove, roof of Coalbrook coal seam; roof of Mullins coal seam near Macdougall Lake, west of Bridgeport Basin.

Pictou group, Nova Scotia; west branch North River, Colchester co.

Pictou group, New Brunswick; roof of Minto coal seam, Minto.

Riversdale group, Nova Scotia: Inverness co., Chimney Corner area; about ¾ mile northwards from mouth of creek at Chimney Corner; about 3,600 feet southwards from old mine at Chimney Corner.

Sphenophyllum emarginatum Brongniart

Hypotypes 1676, 1694, 8373, 831, 834, 963, 964

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 89, Pl. 93, figs. 1-3.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 44, figs. 1-4; Pl. 56, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: roof Emery coal seam, Dominion No. 10 colliery; roof Ross (Emery) coal seam, shore east of Schooner Pond cove; roof of Mullins coal seam, New Waterford.

Clifton formation (Pictou group), New Brunswick; Clifton.

Pictou group, New Brunswick; Beersville.

Sphenophyllum majus Bronn

Hypotypes 1679, 2053, 935

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 90, Pl. 94, figs. 1, 2.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: Dominion No. 10 colliery, roof of Emery coal seam; Point Aconi, roof Point Aconi coal seam.

Pictou group, New Brunswick; Beersville, Kent co.

Sphenophyllum myriophyllum Crépin

Hypotypes 1687, 3343, 829, 830

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 90, Pl. 93, figs. 4-6.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 42, figs. 2, 3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of Wadden Cove, roof of 7-inch coal seam about 235 feet above Tracy seam; roof of small coal seam about 100 feet below Indian Cove (Backpit) coal seam, north shore of Sydney Harbour.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Sphenophyllum oblongifolium Germar and Kaulfuss

Hypotypes 1698, 1798, 1952, 2037, 3484, 3489

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 91, Pl. 94, figs. 3-7; Pl. 95, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: roof of one foot of coal, about 1,100 feet south of Table Head, Great Bras d'Or; Point Aconi, roof of Point Aconi coal seam.

Sphenophyllum trichomatosum Stur

Hypotypes 1478, 1946, 827, 828

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 90, Pl. 93, figs. 7, 8.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 42, fig. 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore north of False Bay Lake, about 50 feet above Tracy coal seam; roof of Mullins coal seam near Macdonald Lake, west of Bridgeport Basin.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

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Sphenopteris aculeata Bell

Holotype 2683

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 29, Pl. 11, fig. 5; Pl. 12, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east side Morien Bay, roof of top Wilson or Spencer (Emery) coal seam.

Sphenopteris amoenaeformis ? Kidston

Hypotypes ? 5576, 5580, 9372

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 65, Pl. 12, figs. 2, 4; Pl. 13, fig. 2.

Riversdale group, Nova Scotia; Inverness co., on shore, about 4,000 feet northeasterly from Chimney Corner.

Sphenopteris barbalata Bell

Holotype 928

Bell, W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 9, fig. 3; Pl. 10, fig. 2.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Sphenopteris brittsi Lesquereux

Hypotypes 2090, 2684

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 27, Pl. 10, figs. 4, 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: roof of LeCras coal seam near Sydney reservoir; shore east of Schooner Pond Cove, roof of Ross (Emery) coal seam.

Sphenopteris (Hymenophyllites) bronni Gutbier

Hypotype 7744

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 41, Pl. 26, figs. 4, 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; pit about 2,300 feet easterly from Homeville, roof of thin coal seam, about 150 feet below Tracy coal seam.

Sphenopteris cantiana Kidston

Hypotypes 1626, 7202

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 25, Pl. 8, figs. 2, 3; Pl. 9, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore east side Morien Bay, about 300 feet below South Head (Emery) coal seam; shore east of Schooner Pond cove, roof of McRury coal seam.

Sphenopteris (Oligocarpia ?) crenatodentata Bell

Holotype 1581; paratypes 1583, 1599, 1600

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 29, Pl. 13, figs. 1-3; Pl. 14, figs. 1, 2; Pl. 15, figs. 2, 3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of Pt. Morien, roof of Gowrie (Phalen) coal seam.

Sphenopteris cuneoliformis Bell

Holotype 5674

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 64, Pl. 7, figs. 2, 3.

Riversdale group, Nova Scotia; brook east of River Philip, near C.N. Railway station, Oxford area.

Sphenopteris deltiformis Kidston

Hypotypes 9219, 9220

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 67, Pl. 15, fig. 2; Pl. 17, fig. 4.

Cumberland group, Nova Scotia; Springhill coalfield, No. 2 mine, Springhill.

Cumberland group, Joggins, Nova Scotia; division 4 Logan, Joggins section.

Sphenopteris dixoni Kidston

Hypotype 10243 (=reverse of 10244), 10244

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 67, Pl. 14, figs. 2, 3.

Cumberland group, Nova Scotia; Springhill coalfield, bore-hole, Springhill, at depth 1,460 feet.

Sphenopteris fletcheri Bell

Holotype 9224; paratype 9064

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 68, Pl. 16, figs. 2, 6.

Cumberland group, Nova Scotia; Springhill coalfield, roof of coal of No. 2 mine, Springhill.

Sphenopteris goniopteroides Lesquereux

Hypotypes 1585, ? 6945

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 28, Pl. 11, figs. 4, ? 3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: roof of Emery seam, Dominion No. 10 colliery; pit on McPherson road, 3,800 feet south of Cow Bay road.

Sphenopteris (Renaultia) gracilis Brongniart

Hypotype 8619

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 72, Pl. 20, figs. 1, 2.

Cumberland group, Nova Scotia; Springhill coalfield, Smith Brook about 2 miles from junction with South branch Black River.

Sphenopteris haliburtoni Bell

Holotype 10340; paratype 10928

Bell W. A. 1940, Geol. Surv., Canada, Mem. 225, p. 114, Pl. 5; Pl. 10, fig. 4.

?Pictou group, Nova Scotia; Haliburton Brook, about 2,500 feet north of bridge on Pictou road.

Sphenopteris hirticula Bell

Holotype 886

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 9, figs. 1, 2, 4.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Sphenopteris (Zeilleria) hymenophylloides Kidston

Hypotypes 5598, 9217

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 72, Pl. 13, fig. 6; Pl. 20, fig. 3; Pl. 22, fig. 3.

Lancaster formation (Cumberland group), New Brunswick; McCoy Head, Saint John co.

Sphenopteris licens Bell

Holotype 11028; paratypes 5552, 11022, 11023, 11025, 11026, 11029

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 69, Pl. 16, figs. 3, 4; Pl. 17, figs. 2, 3, 5; Pl. 59, fig. 1.

Riversdale group, Nova Scotia: Inverness co., shore about 4,000 feet north of Chimney Corner; east branch River Philip, above Collingwood Corner, Oxford area.

Sphenopteris lineata Bell

Holotype 10969; paratypes 5804, 5939, 5940, 5941, 5947

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 62, Pl. 5, fig. 4; Pl. 6, fig. 6; Pl. 7, fig. 4; Pl. 10, fig. 1; Pl. 12, fig. 1.

Parrsboro formation (Riversdale group), Nova Scotia; Minas basin, Parrsboro shore, mouth of Moose River.

Riversdale group, Nova Scotia: Harrington River; River Philip, Oxford Junction, south of Racetrack Brook.

Port Hood formation (Riversdale group), Nova Scotia; Whale Cove, Inverness co., about ¼ mile south of Grey Point.

Sphenopteris minuscula Bell

Holotype 5857; paratypes 5593, 5850, 5853, 5955

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 63, Pl. 6, figs. 1, 3, 4, 5; Pl. 10, fig. 5; Pl. 11; Pl. 66, figs. 4, 5.

Riversdale group, Nova Scotia: east branch River Philip, Oxford area; between Whale Cove and Grey Point, Inverness co.

Sphenopteris missouriensis ? (Lesquereux)

Hypotypes ? 1630, 1631

Bell W. A. 1938, Geol. Surv., Canada, Mem. 251, p. 27, Pl. 10, fig. 3; Pl. 11, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of False Bay Lake, between Tracy and Shoemaker coal seams.

Sphenopteris mixta Schimper

Hypotype 5983

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 64, Pl. 8, figs. 1, 3.

Cumberland group, Nova Scotia; Springhill coalfield, roof of No. 2 coal seam, Springhill.

Sphenopteris moriensis Bell

Holotype 1579; paratypes 1575, 1576, 4488K

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 31, Pl. 18, fig. 3; Pl. 19; Pl. 20, fig. 1; Pl. 21, fig. 3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; east side Morien Bay at Baird Cove, about 600 feet below Spencer or Wilson (Emery) coal seam. Paratype 4488K=*Oligocarpia missouriensis* D. White

Sphenopteris moyseyi Kidston

Hypotype 9375

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 66, Pl. 14, fig. 4.

Lancaster formation (Cumberland group), New Brunswick; McCoy Head, Bay of Fundy, Saint John co.

Sphenopteris neuropteroides (Boulay)

Hypotypes 1460, 1465, 1466, 1467, 1474, 8484

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 23, Pl. 5, fig. 4; Pl. 6; Pl. 7; Pl. 8, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Schooner Pond Cove, roof of Ross (Emery) coal seam.

Sphenopteris nummularia Gutbier forma *dilatata*

Hypotypes 9987, 9992

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 59, Pl. 3, fig. 7; Pl. 4, figs. 1, 2.

Cumberland group, Nova Scotia; Springhill coalfield, South Brook, tributary to Maccan River, at position of Barlow coal seam.

Sphenopteris obtusiloba Brongniart

Hypotypes 10934, 10982

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 60, Pl. 4, fig. 3; Pl. 10, fig. 3.

Cumberland group, Nova Scotia: Springhill coalfield from unspecified prospecting pit for coal, Springhill; Joggins, 20 to 30 feet above coal group 26, division 4 Logan, Joggins section.

Sphenopteris oxfordensis Bell

Holotype 5568; paratype 5563

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 66, Pl. 14, figs. 1, 5, 7.

Riversdale group, Nova Scotia; east branch River Philip, Oxford area.

Sphenopteris philipensis Bell

Holotype 5987; paratypes 5595, 5962, 5988

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 64, Pl. 8, fig. 2; Pl. 9; Pl. 10, figs. 2, 4; Pl. 12, fig. 3.

Riversdale group, Nova Scotia; east branch River Philip, Oxford area.

Sphenopteris polyphylla Lindley and Hutton

Hypotypes 5775, 5778

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 61, Pl. 5, figs. 3, 5.

Riversdale group, Nova Scotia; east branch River Philip, above Collingwood Corner, Oxford area.

Sphenopteris pseudofurcata Kidston

Hypotypes 9216, 9371, 943, 944, 970

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 69, Pl. 16, figs. 1, 5.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 11, figs. 1, 3-6.

Riversdale group, Nova Scotia; between Moose River and Moose Creek, Bay of Fundy, Parrsboro area.

Minto formation (Pictou group), New Brunswick; roof of Minto coal seam, Minto.

Sphenopteris rhomboidea (Ettingshausen)

Hypotypes 11044, 11045, 11046, 11047

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 59, Pl. 3, figs. 8-10; Pl. 4, fig. 6.

Riversdale group, Nova Scotia; Minas Basin shore, east of Moose Creek, Parrsboro area.

Sphenopteris (Renaultia) rotundifolia Andrae

Hypotypes 239, 9368

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 71, Pl. 19; Pl. 20, fig. 5.

Cumberland group, Nova Scotia; Springhill coalfield, unspecified mine, Springhill.

Lancaster formation (Cumberland group), New Brunswick; Duck Cove, fern ledges, Saint John co.

Sphenopteris (Renaultia?) schatzlarensis (Stur)

Hypotypes 4449, 9929

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 67, Pl. 15, figs. 1, 3.

Cumberland group, Nova Scotia; South Joggins, from unspecified beds.

Sphenopteris sp. A Bell

Specimens 9221, 9222

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 69, Pl. 17, fig. 1; Pl. 18, fig. 1.

Cumberland group, Nova Scotia; Springhill coalfield, small tributary of Coal Mine Brook, 1¼ miles west of Springhill.

Sphenopteris sp. B Bell

Specimen 9069

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 70, Pl. 18, fig. 2.

Cumberland group, Nova Scotia; Springhill coalfield, No. 2 mine, Springhill.

Sphenopteris sp. Bell cf. *Eremopteris bilobata* D. White

Specimens 1560, 1561

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 25, Pl. 9, figs. 3-5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east side Morien Bay, roof of top Wilson or Spencer (Emery) coal seam.

Sphenopteris sp. Bell cf. *Sphenopteris dufayi* Danzé

Specimen 936

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 12, fig. 2.

Clifton formation (Pictou group), New Brunswick; Clifton, Bay de Chaleur.

Sphenopteris (Hymenotheca?) sp. Bell

Specimens 1635, 8444

Bell W. A. 1938, Geol. Surv., Canada, Mem. 251, p. 37, Pl. 23, fig. 3; Pl. 24, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore at Shoemaker Cove, 10 to 20 feet below Shoemaker coal seam; shore east of False Bay Lake, from old shaft on Tracy coal seam.

Sphenopteris sp. Bell cf. *Sphenopteris polyphylla* Zeiller

Specimens 1540, 1536, 7387

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 23, Pl. 5, figs. 1-3.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: from pit on Gardiner coal seam, about 3,600 feet west of west pit, Glace Bay; west pit on Gardiner coal seam, Glace Bay.

Sphenopteris (Zeilleria?) sp. Bell

Specimens 9351, 9622

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 74, Pl. 22, fig. 5; Pl. 23, fig. 1.

Cumberland group, Nova Scotia; north of McCarren Creek, Joggins section.

Sphenopteris spiniformis Kidston

Hypotypes 1420, 1646, 929, 930, 931, 943, 944

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 26, Pl. 10, fig. 2; Pl. 11, fig. 1.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 11, fig. 2; Pl. 12, fig. 1; Pl. 13, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore north of False Bay Lake, about 200 feet above Tracy coal seam.

Minto formation (Pictou group), New Brunswick; Minto, roof of Minto coal seam.

Clifton formation (Pictou group), New Brunswick; Clifton, Bay de Chaleur.

Sphenopteris spinulosa ? (Stur)

Hypotype ? 6960

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 26, Pl. 10, fig. 1.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; old slope about 2,200 feet east of Macdonald Lake, roof of small coal seam.

Sphenopteris stipulataeformis (Stur)

Hypotype 10174

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 66, Pl. 14, fig. 6.

Cumberland group, Nova Scotia; Springhill coalfield, No. 7 mine, Springhill.

Sphenopteris striata Gothan

Hypotypes 1524, 1555, 1556, 1558

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 22, Pl. 3, figs. 1, 2; Pl. 4, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: Shoemaker Cove, roof of coal seam; shore south of Wadden Cove, roof of 10-inch coal about 100 feet above Tracy coal seam and roof of 7-inch coal about 235 feet above Tracy seam.

Sphenopteris sulcata Bell

Holotype 11040; paratype 11041

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 63, Pl. 6, fig. 7; Pl. 7, fig. 1.

Riversdale group, New Brunswick; St. Marys Point, Chignecto Bay.

Sphenopteris suspecta D. White

Hypotypes 1562, 1563, 1564

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 30, Pl. 15, figs. 3, 4; Pl. 16, figs. 1, 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; east shore Morien Bay at Baird Cove, about 600 feet below Spencer or Wilson (Emery) coal seam.

Sphenopteris trifoliolata ? (Artis)

Hypotypes ? 9966, 9968, 9970

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 60, Pl. 4, figs. 4, 5; Pl. 5, figs. 1, 2.

Riversdale group, New Brunswick; shore 1½ miles northeast of Cape Enrage, Albert co.

Sphenopteris valida (Dawson)

Hypotypes 180, 9369

Stopes M. C. 1914, Geol. Surv., Canada, Mem. 41, p. 34, Pl. 9, fig. 21; Pl. 10, fig. 23.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 61, Pl. 5, fig. 6.

Lancaster formation (Cumberland group), New Brunswick; Duck Cove, Bay of Fundy, Saint John co.

Sphenopteris (Diplotmema) whitii Bell

Holotype 4836; paratypes 1516, 1517, 1543, 1553, 3554, 4713, 4835, 794, 932

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 20, Pl. 1, figs. 2-5; Pl. 2, figs. 1-3.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 8, fig. 3; Pl. 10, fig. 1.

Minto formation (Pictou group), New Brunswick; Minto and Clifton.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: roof of small coal seam from pit 1½ miles east of Dutch Brook settlement; shore east side Morien Bay, roof of top Wilson (Emery) coal seam; shore east of Schooner Pond Cove, roof of Ross (Emery) coal seam.

Sporangites acuminata Dawson

Hypotypes 5755, 5750, 5766

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 109, Pl. 77, figs. 1-3; Pl. 79, fig. 4.

Lancaster formation (Cumberland group), New Brunswick; shore Bay of Fundy, east of Tynemouth Creek.

Stigmaria ficoides (Sternberg)

Hypotypes 4400, 842

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 103, Pl. 105, fig. 8.

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; Cranberry Head.

Minto formation (Pictou group), New Brunswick; Minto.

Telangium ? *potieri* (Zeiller)

Hypotypes 1209, 1643, 2668, 2928, 3071

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 45, Pl. 12, fig. 2; Pl. 34, figs. 1-3; Pl. 35, fig. 4.

Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore south of Wadden Cove, about 300 feet above Tracy coal seam; shore east of Schooner Pond cove, roof of Ross (Emery) coal seam; Macrae Point east of Glace Bay, about 125 feet above Phalen coal seam; west side Great Bras d'Or Channel, about 2,000 feet north of New Campbellton, roof of coal seam (Sixfoot).

Tetrameridium caducum Potonié

Hypotype 3990

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 39, Pl. 18, fig. 2.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Schooner Pond cove, roof of Ross (Emery) coal seam.

Trigonocarpus praetextus Bell

Holotype 5886

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 109, Pl. 77, figs. 4, 5.

Riversdale group, Nova Scotia; Greville Bay, Minas Channel.

Trigonocarpus ? sp. Bell

Specimens 952, 953

Bell W. A. 1963, Geol. Surv., Canada, Bull. 87, Pl. 51 fig. 1.

Minto formation (Pictou group), New Brunswick; roof Minto coal seam, Minto.

Ulodendron sp. Bell

Specimen 4492

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 94, Pl. 47, fig. 1.

Cumberland group, Nova Scotia; Joggins, division 4 Logan.

Volkmannia? sp. Bell

Specimen 6528

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 105, Pl. 73, fig. 1.

Riversdale group, Inverness co., Nova Scotia; about 9,600 feet northwards from mouth of creek at Chimney Corner mine.

Whittleseya brevifolia D. White

Holotype (mislaid or missing); hypotypes 100 (*Whittleseya concinna* Mathew), 101 (*W. concinna* var. *lata* Mathew), 8808, 8810, 8813.

White D. 1901, Ottawa Naturalist, vol. 15, p. 104, Pl. 7, figs. 3, 3a.

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 83, Pl. 37, figs. 3, 4, 6, 7.

Riversdale group, Nova Scotia: Harrington River; east of Moose River near Moose Creek, Bay of Minas; Whale Cove, Inverness co., about ¼ mile southwards from headland lying west of Whale Cove.

Lancaster formation (Cumberland group), New Brunswick; fern ledges, Duck Cove, Saint John.

See *Whittleseya concinna* Mathew

Whittleseya concinna var. *lata* Mathew

Whittleseya concinna Mathew

Holotype 100

Mathew G. F. 1910, Roy. Soc. Canada Trans., ser. 3, vol. 3, p. 99, Pl. 6, fig. 9.

Lancaster formation (Cumberland group), New Brunswick; fern ledges, Duck Cove, Saint John.

Whittleseya brevifolia D. White

Whittleseya concinna var. *lata* Mathew

Holotype 101

Mathew G. S. 1910, Roy. Soc. Canada Trans., ser. 3, vol. 3, p. 99, Pl. 6, fig. 10.

Lancaster formation (Cumberland group), New Brunswick; fern ledges, Duck Cove, Saint John.

=*Whittleseya brevifolia* D. White

Whittleseya desiderata D. White

Hypotypes 5963, 5964, 5965

Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 83, Pl. 34, figs. 3, 5; Pl. 35, fig. 4; Pl. 37, figs. 1, 2.

Parrsboro formation (Riversdale group), Nova Scotia: West Bay, Parrsboro shore, Minas Basin; Greville Bay, Minas Basin.

Riversdale group, Nova Scotia; Inverness co., about 4.5 miles south of Friar Point.

Zeilleria avoldensis (Stur)

Hypotype 1669

Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 35, Pl. 22, fig. 5.

Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore south of False Bay Lake, between Tracy and Shoemaker coal seams.

Zeilleria delicatula (Sternberg)
Hypotypes 1640, 4450
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 34, Pl. 22, figs. 1-4.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; shore east of Schooner Pond cove, roof of Ross (Emery) coal seam.

Zeilleria frenzli (Stur)
Hypotypes 1639, 1641, 10038, 10052, 10054, 10976
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 34, Pl. 20, figs. 2, 3; Pl. 21, fig. 2.
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 73, Pl. 22, figs. 1, 2; Pl. 77, fig. 6; Pl. 78; Pl. 79, figs. 2, 3
Morien (Pictou) group, Sydney coalfield, Nova Scotia: shore north of False Bay Lake, about 200 feet above Tracy coal seam; shore north of False Bay Lake, roof of 7-inch coal, about 235 feet above Tracy coal seam.
Cumberland group, Springhill and Joggins coalfields, Nova Scotia: South Brook, tributary to Maccan River, at position Barlow coal seam; East Apple River above small falls and about a mile upstream from bridge.

Zeilleria schaumberg-lippeana (Stur)
Hypotypes 10973, 10978
Bell W. A. 1944, Geol. Surv., Canada, Mem. 238, p. 73, Pl. 23, figs. 4, 5; Pl. 24, fig. 3.
Lancaster formation (Cumberland group), New Brunswick; Bay of Fundy shore, 20 chains east of Gardiner Creek, Saint John co.
Cumberland group, Nova Scotia; East Apple River, above small falls about a mile upstream from bridge.

Zeilleria sp. Bell
Specimen 1667
Bell W. A. 1938, Geol. Surv., Canada, Mem. 215, p. 35, Pl. 22, fig. 6.
Morien (Pictou) group, Sydney coalfield, Nova Scotia; unspecified beds.

2. Microplant remains

Murospora kosankei Somers
Syntype (genotype), missing; hypotype 4139
Somers G. 1952, N.S. Res. Foundation Pub., Halifax, pp. 20-21, Text-fig. 13a.
Morien (Pictou) group (*Ptychocarpus unitus* zone), Nova Scotia; Sydney Harbour, New Waterford shore.

Murospora minima Somers
Syntype (genotype), missing; hypotype 4140
Somers G. 1952, N.S. Res. Foundation Pub., Halifax, pp. 20-21, Text-fig. 13b.
Morien (Pictou) group (*Ptychocarpus unitus* zone), Nova Scotia; Sydney Harbour, New Waterford shore.

Palaeochara acadica Bell
Syntypes 987-997
Bell W. A. 1922, Roy. Soc. Canada Trans., vol. 16, sec. 4, p. 160, Pl. 1, figs. 3-9.
Riversdale group, Nova Scotia; St. Rose, above 5-foot coal seam.

Trilobates belli Somers
Syntype (genotype), missing; hypotype 4141
Somers G. 1952, N.S. Res. Foundation Pub., Halifax, p. 22, Text-fig. 14.
Morien (Pictou) group (*Ptychocarpus unitus* zone), Nova Scotia; Sydney Harbour, New Waterford shore.

LOWER CRETACEOUS

Acrostichopteris foliosa (Fontaine)

Hypotypes 5375, 5376, 5378

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 69, Pl. 25, figs. 1, 3; Pl. 28, fig. 9.

Luscar formation (Blairmore group), Alberta; Brûlé coalfield.

Angiopteridium canmorense Dawson

Holotype 4839

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 83, fig. 2.

Kootenay formation, Alberta; Canmore.

=*Taeniopteris canmorensis* (Dawson)

Anomozamites acutiloba ? Heer

Hypotype ? 4823

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 7, Pl. 1, fig. 7.

Kootenay formation, Alberta; near Canmore.

=*Pterophyllum* sp. Bell

Antholithes horridus Dawson

Hypotype 4824

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 7.

Blairmore group (upper part), Alberta; Livingstone River.

=*Isoetites horridus* (Dawson)

Antholithes sp. Bell

Specimen 6664

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 139, Pl. 79, fig. 3.

Blairmore group (upper part), Alberta; Ma butte, 45 feet below top of group.

Antholithes sp. (Penhallow)

Specimen 5829

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 139, Pl. 80, fig. 2.

Pasayten group, British Columbia; north side Hope-Princeton highway, 1½ miles east of Chuwanten Creek, at elevation of 4,810 feet.

See *Dorstenia*? sp.

Aralia rotundata Dawson

Holotype 5116

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 14, Pl. 4, fig. 5.

Blairmore group (upper part), Alberta; Mill Creek.

=*Araliaephyllum westoni* (Dawson)

Aralia westoni Dawson

Holotype 5117

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, sec. 4, p. 14, Pl. 4, fig. 6.

Blairmore group (upper part), Alberta; Mill Creek.

=*Araliaephyllum westoni* (Dawson)

Araliaephyllum westoni (Dawson)

Holotype 5117 (*Aralia westoni* Dawson); hypotypes 4862 (*Sterculia vetustula* Dawson), 5110 (*Liquidambar integrifolium* Dawson), 5116 (*Aralia rotundata* Dawson), 5878, 5879, 5880

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 137, Pl. 81, figs. 3, 5; Pl. 83, fig. 5; Pl. 84, figs. 2, 3.

Araliaephyllum westoni (Dawson)

Blairmore group (upper part), Alberta: Mill Creek, unspecified beds; Mill Creek, 2 to 4 feet below top of group; Livingstone River

See *Aralia westoni*
Aralia rotundata
Sterculia vetustula
Liquidambar integrifolium

Aspidium frederickburgense Fontaine

Hypotype 4843

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 85, fig. 5.

Kootenay formation, Alberta; Anthracite.

=*Cladophlebis virginiensis* Fontaine forma *acuta*

Asplenium albertum Dawson

Holotype 5104

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, p. 11, Pl. 3, fig. 6.

Blairmore group (upper part), Alberta; Mill Creek.

=*Cladophlebis alberta* (Dawson)

Asplenium dicksonianum Heer

Hypotype 4815

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 5, Pl. 3, fig. 1.

Blairmore group (upper part), Alberta; Livingstone River.

=*Sphenopteris mclearni* Bell

Asplenium distans Heer

Hypotype 4816

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 5, Pl. 3, fig. 7.

Kootenay formation, Alberta; near Canmore.

=*Cladophlebis virginiensis* Fontaine forma *acuta*

Asplenium martinianum Dawson

Holotype 4814

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 5, Pl. 1, fig. 1.

Kootenay formation, British Columbia; Martin (Marten) Creek.

=*Cladophlebis virginiensis* Fontaine, forma *martiniana*

Athrotaxites berryi Bell

Holotype 5221; paratypes 5215, 5217, 5218, 5219, 6626, 6627, 6628, 6629, 6646, 6668

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 115, Pl. 58, fig. 5; Pl. 60, fig. 5; Pl. 61, fig. 5; Pl. 62, figs. 2, 3; Pl. 63, fig. 1; Pl. 64, figs. 1-5; Pl. 65, fig. 7.

Blairmore group (lower part), Alberta; east slope Ma butte, 1,220 feet and 1,250 feet above base and 630 and 600 feet below top of group.

Luscar formation (Blairmore group), Alberta: Cadomin, Brûlé coalfield, 650 feet above Cadomin conglomerate, Brûlé coalfield, unspecified location, and also 425 feet north of where Cadomin conglomerate crosses railway; Jasper Park, at Drummond's coal crop near Folding Mt.; Pine Creek, 1,200 feet upstream from old Solomon coal tunnels.

Bullhead group or Blairmore group, Alberta; in shale series below upper Bullhead rocks in an unnamed mountain forming crest of Smoky River valley, about 8 miles west of mouth of Sheep Creek and 4 miles east of Mt. Hammell.

See *Athrotaxopsis grandis*

Athrotaxopsis grandis Fontaine

Hypotypes (unnumbered, identified material abundant, but uncertain from which specimens drawings by Berry were made)

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 51, Pl. 8, figs. 4-6.

Blairmore group (lower part), Alberta; east slope Ma butte, 1,220 feet above base and 630 feet below top of group.

=*Athrotaxites berryi* Bell

Baiera longifolia Heer

Hypotype 4828

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 9, Pl. 2, fig. 5.

Kootenay formation, British Columbia; Martin (Marten) Creek.

=? *Ginkgo nana* Dawson

Baiera sp. cf. *furcata* (Lindley and Hutton)

Specimens 5328, 5329

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 84, Pl. 33, fig. 3; Pl. 37, fig. 1.

Nikanassin? formation, Alberta; Panther River.

Baiera sp. cf. *gracilis* (Bean)

Specimens 5325, 5331

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 84, Pl. 38, figs. 4, 7.

Gething formation (Bullhead group), British Columbia; south bank Peace River canyon, above Gething Creek, from lower part of formation.

Hazelton group, British Columbia; mouth of Kitsgeucla River, south side.

Brachyphyllum crassicaule Fontaine

Hypotype 5862

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 122, Pl. 72, fig. 4.

Blairmore group (upper part), Alberta; Mill Creek area.

Brachyphyllum mclearni Bell

Syntypes 171a, 173; paratypes 171c, 174a, 174c, 175, 176, 177a, 177b, 179a, 180a, 180c, 180d, 180e, 182, 183, 184a, 184c, 184d, 185a, 185b, 190a, 198a, 198c, 198e

Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 28, Pl. 15, figs. 1-11; Pl. 16, figs. 1-14; Pl. 18, fig. 10.

Mattagami group, Ontario; Mattagami River.

Capparites ? sp. Bell

Specimen 6641

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 132, Pl. 78, fig. 4.

Pasayten group, British Columbia; north side Hope-Princeton highway, 1⅓ miles east of Chuwanten Creek at elevation 4,810 feet.

Carpites (*Ginkgo*?) (Dawson)

Specimen 4859

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 87, Pl. 38, fig. 6.

Kootenay formation, Alberta; Canmore.

See *Carpolites* sp. Dawson

Carpolites sp. Dawson

Specimen 4859

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 90, Fig. 15 (pars).

Kootenay formation, Alberta; Canmore.

=*Carpites* (*Ginkgo*?) sp. (Dawson)

Caytonia canadensis (Berry)

Syntypes 4992, 4993

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 79, Pl. 30, fig. 2; Pl. 32, fig. 1.

Blairmore group (lower part), Alberta; north bank Castle River, east of Hell Gate canyon and west of cable foot-bridge, approximately 800 feet above base of group.

See *Stenorachis canadensis* Berry

Cedroxylon disjunctum Bannan and Fry

Holotype 3917

Bannan M. W. and Fry W. L. 1957, Nat. Res. Council, Canada, Can. J. Botany, vol. 35, p. 328, Pl. 1, figs. 1-5.

Christopher formation, Northwest Territories; Axel Heiberg Island, 9 miles east of western end of Strand Fiord Peninsula.

Celastrophyllum acutidens Fontaine

Hypotypes 5114 (*Laurophyllum debile* Dawson, pars), ? 5818 (*Myrica serrata* Penhallow), ? 5819 and ? 5820 (*Quercus flexuosa* ? Penhallow)

Bell W. A. 1956, Geol. Surv., Canada. Mem. 285, p. 133, Pl. 78, fig. 5; Pl. 80, fig. 4; Pl. 81, fig. 1.

Pasayten group, British Columbia; east side Chuwanten Creek canyon, about 400 yards north of International Boundary

Blairmore group (upper part), Alberta; Oldman River, above Livingstone River.

See *Laurophyllum debile* Dawson
Myrica serrata Penhallow
Quercus flexuosa ? Penhallow

Cinnamomoides ovalis (Dawson)

Syntypes 5121 and 5122 (*Paliurus ovalis* Dawson); hypotypes 5120 (*Paliurus montanus* Dawson), ? 5113 (*Cinnanomum canadense* Dawson), ? 5111 (*Macclintockia cretacea* Dawson), 5913

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 131, Pl. 78, figs. 2, 3; Pl. 82, fig. 3.

Blairmore group (upper part), Alberta: Mill Creek; Oldman River, above Livingstone River.

See *Paliurus ovalis*
Paliurus montanus
Cinnamomum canadense
Macclintockia cretacea

Cinnamomoides sp. Bell

Specimen 6640

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 132, Pl. 81, fig. 2.

Crowsnest formation, Alberta; Baker's Creek.

Cinnamomum canadense Dawson

Holotype 5113

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 13, Pl. 4, fig. 7.

Blairmore group (upper part), Alberta; Oldman River, above Livingstone River.

=?*Cinnamomoides ovalis* (Dawson)

Cladophlebis alberta (Dawson)

Holotype 5104; hypotypes 5101 (a syntype of *Dicksonia munda* Dawson), 5842, 5843

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 11, Pl. 3, fig. 5a (non fig. 5).

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 53, Pl. 11, figs. 2, 4, 6; Pl. 12, fig. 4.

Cladophlebis alberta (Dawson)

Blairmore group (upper part), Alberta; Mill Creek.
Kingsvale group, British Columbia; Kingsvale.
See *Dicksonia munda* pars

Cladophlebis (*Klukia*) *dunkeri* (Schimper)

Hypotype 5385
Radforth and Woods 1850, Can. J. Res., C 28, p. 780, Pl. 1.
Blairmore group (lower part), Alberta; York Creek, 200 feet above base and 1,650 feet below top of group.
=*Klukia canadensis* Bell

Cladophlebis falcata Fontaine

Hypotype 4841
Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 84, fig. 4.
Kootenay formation, Alberta; Anthracite.
=*Cladophlebis virginiensis* Fontaine forma *martiniana*

Cladophlebis frigida (Heer)

Hypotypes 5844, 5968
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 52, Pl. 7, fig. 1; Pl. 9, fig. 1.
Pasayten group, British Columbia: north side Hope-Princeton highway, about 1½ miles east of Chuwanten Creek, at elevation 4,810 feet.
Kingsvale group, British Columbia; Shakan Creek, 3 miles up from junction with Nicola River.

Cladophlebis heterophylla Fontaine

Hypotypes 4060, 4061, 4062, 4064, 4066, 5001
Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 39, Pl. 5, figs. 1-4a.
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 58, Pl. 14, fig. 1; Pl. 15, fig. 4; Pl. 16, fig. 1; Pl. 17, figs. 3, 4.
Kootenay formation, Alberta: Lyon Creek, about 2 miles south of Blairmore, 3 feet below top of formation; Hell Gate on Castle River, estimated about 25 feet above basal sandstone of formation; Castle River, south bank, on Carbon Hill property of Well's ranch.

Cladophlebis impressa Bell

Holotype 5764; paratypes 5739, 5763, 6577, 6647
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 57, Pl. 12, fig. 2; Pl. 13, fig. 3; Pl. 14, fig. 2; Pl. 15, fig. 1; Pl. 16, fig. 4.
Hazelton group, British Columbia: Buckley River, below Monceton; one mile northeast of Cedarville.
Jackass Mountain group, British Columbia; on road west side Fraser River, about ¼ mile south of Lytton.

Cladophlebis (*Gleichenites*?) *munda* (Dawson pars)

Lectotype 5103a and 5102 (a part of pinna of 5103a)
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 11, Pl. 3, figs. 4, 5.
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 64, Pl. 11, fig. 1.
Blairmore group (upper part), Alberta; Mill Creek.
See *Gleichenia gracilis* Dawson

Cladophlebis oerstedi (Heer)

Hypotypes 5969, 6652
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 55, Pl. 12, fig. 1; Pl. 13, fig. 4.
Kingsvale group, British Columbia; Shakan Creek, 3 miles up from junction with Nicola River.

Cladophlebis parva Fontaine

Hypotypes 4047, 4048, 4049, 4050, 4052, 5744, 6569

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 40.

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 56, Pl. 11, figs. 3, 5; Pl. 12, fig. 3; Pl. 13, figs. 1, 2; Pl. 14, fig. 3; Pl. 15, fig. 3.

Blairmore group (lower part), Alberta: north bank Castle River, east of Hell Gate Canyon and west of cable foot bridge on Carbon Hill property, in beds approximately 800 feet above base of group; Red Deer River.

Hazelton group, British Columbia; Lake Kathlyn coal mine, Smithers; Buckley River.

Cladophlebis (*Gleichenites*) *porsildi* Seward

Hypotypes 4046, 6576, 6658, 6659

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 63, Pl. 14, fig. 4; Pl. 19, fig. 4; Pl. 21, figs. 2, 3.

Blairmore group (lower part), Alberta; east slope Ma butte, about 545 feet below top of group.

Spence Bridge group, British Columbia: Thompson siding on CPR; Thompson River near junction with Nicoamen River.

Uslika formation, British Columbia: Vega Creek, 2,500 feet upstream from Aiken road crossing, longitude 125°14½′W, and latitude 56°6½′N; Vega Creek at longitude 125°15′W and latitude 56°7′N.

Cladophlebis skagitensis Penhallow

Holotype 5815

Penhallow D. P. 1907, Roy. Soc. Canada Trans. 1907, ser. 3, vol. 1, sec. 4, p. 306, fig. 2.

Pasayten group, British Columbia; east side Chuwanten Creek canyon, about 400 yards north of International Boundary.

=*Cladophlebis virginiensis* Fontaine, forma *fisheri*

Cladophlebis strictinervis (Fontaine)

Hypotypes 4053, 4054, 4055, 4057

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 53, Pl. 9, figs. 2, 3; Pl. 10, figs. 1-3.

Blairmore group (lower part), Alberta; east slope Ma butte, 1,305 feet above base of group and 545 feet below top.

Cladophlebis virginiensis Fontaine

Hypotypes 4814 (forma *martiniana*), 4816 (forma *acuta*), 4841 (forma *martiniana*), 4843 (forma *acuta*), 5815 (forma *fisheri*), 5717 (forma *acuta*), 5724 (forma *acuta*), 5725 (forma *acuta*), 5726 (forma *acuta*), 5727 (forma *acuta*), 5729 (forma *acuta*), 5730 (forma *martiniana*), 5745 (forma *martiniana*), 6571 (forma *fisheri*), 6666 (forma *acuta*)

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 50, Pl. 5, figs. 1-3; Pl. 6, figs. 3-5, 7; Pl. 7, figs. 2, 4; Pl. 9, fig. 4.

Kootenay formation, Alberta: Anthracite; Canmore.

Kootenay formation, British Columbia: Martin (Marten) Creek; Michel; Corbin.

Hazelton group, British Columbia; ridge between middle and north forks Ross Creek, Groundhog coal basin.

Pasayten group, British Columbia; east side Chuwanten Creek canyon, about 400 yards north of International Boundary.

Luscar formation (Blairmore group), Alberta: Brûlé coalfield.

See *Asplenium martinianum*
Asplenium distans
Cladophlebis falcata
Aspidium fredericksburgense

Cladophlebis (*Gleichenites*?) *waltoni* Seward

Hypotypes 5930, 5931, 5932

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 64, Pl. 18, fig. 6; Pl. 19, figs. 2, 3.

Leckie group, British Columbia; Tyaughton River area.

55790-0—6

Cladophlebis cf. *albertsii* (Dunker)

Specimens 116b, 116c, 116d, 117, 118, 120, 121, 122, 123, 124b, 127

Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 29, Pl. 17, figs. 1-11.

Mattagami group, Ontario; Mattagami River.

Cladophlebis (*Gleichenites*?) sp. Bell

Specimens 5972, 5973, 5974

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 65, Pl. 18, figs. 2, 4; Pl. 19, fig. 1.

Kingsvale group, British Columbia; 3 miles up Shakan Creek, tributary to Nicola River.

Coniopteris berryi Bell

Holotype 5357; paratypes 4997 (*Coniopteris pachyphylla* Berry pars), 5354, 5355

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 42, Pl. 7, figs. 3, 4 (non figs. 1, 2).

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 49, Pl. 3, fig. 3; Pl. 5, fig. 4; Pl. 6, fig. 6; Pl. 7, fig. 3.

Blairmore group (lower part), Alberta; east slope Ma butte, 1,220 feet above base of group and 630 feet below its top.

Luscar formation (Blairmore group), Alberta; Brûlé coalfield.

Gething formation (Blairmore group), British Columbia; north bank Peace River canyon, between Milligan pt. and Grant flat, near middle of formation.

See *Coniopteris pachyphylla* pars.

Coniopteris brevifolia (Fontaine)

Hypotypes 4840 (*Pecopteris browniana* Dawson), 4844 (*Sphenopteris latiloba*? Dawson), 4996 (*Coniopteris pachyphylla* Berry pars), 573, 574, 3997, 4005, 4006, 4010, 4015, 4017, 4018, 4040, 4041, 5364, 5367, 5379

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 47, Pl. 1, figs. 2-5; Pl. 2, figs. 1-4; Pl. 3, figs. 1, 2, 4-6; Pl. 4, fig. 4; Pl. 6, fig. 2.

Luscar formation (Blairmore group), Alberta: Brûlé coalfield; Wawa map-area; a mile south of Pocahontas, just north of Miette Mt.

Gething formation (Bullhead group), British Columbia; north bank Peace River canyon below Milligan pt., about middle of formation.

Kootenay formation, Alberta: Lyon Creek about 2 miles south of Blairmore and 3 feet below top of formation; Maple Leaf coal mine near Bellevue.

Kootenay formation, British Columbia; Corbin, below No. 6 coal mine.

Nikanassin formation, British Columbia: North Wildhay River; Hazelton on creek flowing into Skeena River.

See *Pecopteris browniana*
Sphenopteris latiloba?
Sphenolepidium sp.
Coniopteris pachyphylla pars.

Coniopteris pachyphylla (Fontaine)

Syntypes 4996, 4997

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 42, Pl. 7, figs. 1-4.

Kootenay formation, Alberta; Lyon creek about 2 miles south of Blairmore, near top of formation.

Blairmore group (lower part), Alberta; east slope Ma butte, 1,220 feet above base of group and 630 feet below its top.

pars=*Coniopteris berryi* Bell
pars=*Coniopteris brevifolia* (Fontaine)

Coniopteris yukonensis Bell

Holotype 5786; paratypes 4016, 4059, 5785, 6567, 6568

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 48, Pl. 1, fig. 6; Pl. 4, figs. 1-3, 5, 6; Pl. 6, fig. 1.

Tantalus formation, Yukon Territory; Tantalus coal mine.

Ctenis borealis (Dawson)

Holotype 5136 (*Dioonites borealis* Dawson); hypotypes 4817 (*Dioonites borealis* Dawson), 4817a, 5723, 5728

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 24, Pl. 3, fig. 37.

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 6, Pl. 1, fig. 2.

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 106, Pl. 48, fig. 3; Pl. 52, fig. 4; Pl. 53, fig. 1; Pl. 56.

Kootenay formation, British Columbia; Martin (Marten) Creek.

Kootenay formation, Alberta; Canmore, roof of Carly coal seam.

See *Dioonites borealis* Dawson

Ctenis sp. Bell

Specimen 6585

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 107, Pl. 52, fig. 3.

Luscar formation (Blairmore group), Alberta; about a mile north of Mountain Park, 200 feet above Cadomin conglomerate.

Ctenopteris insignis Fontaine

Hypotypes 5298, 5756

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 108, Pl. 52, figs. 1, 2.

Luscar formation (Blairmore group): Nordegg, Alberta; west of No. 3 coal seam, Brazeau collieries, Nordegg.

Culmites sp. (Dawson)

Specimen 4831

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 138,

Kootenay formation, Alberta; Anthracite.

See *Cyparites* sp.

Cycadeocarpus (Dioonites) columbianus Dawson

Syntypes 4883 (fruit), 4881 a and c (petioles)

Dawson J. W. 1873, Geol. Surv., Canada, Rept. Prog. 1872-73, Appendix 1, p. 69, figs. 1-11.

Haida formation, British Columbia; Skidegate Inlet, Queen Charlotte Islands.

Cycadolepis sp. Bell

Specimen 6597

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 102, Pl. 51, fig. 1.

Luscar formation (Blairmore group), Alberta; Gregg River.

Cycadolepis sp. Berry

Specimen 5297

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 44, Pl. 7, fig. 7.

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 101, Pl. 45, fig. 4.

Kootenay formation, Alberta; McGillivray ridge, from middle part of formation, about 300 feet from its top.

Cycadospadix sp. Bell

Specimen 6594

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 102, Pl. 48, fig. 2.

Gething formation (Bullhead group), British Columbia; upper Ferguson Creek (Wapiti-Murray River area).

Cyparissidium ? *gracile* ? Heer

Hypotypes ? 5846, 6642, 6643

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 118, Pl. 67, fig. 2; Pl. 68, figs. 2, 3, 6; Pl. 69, fig. 3.

Blairmore group (upper part), Alberta; York Creek below thick sandstone at first dam of Blairmore water supply system

Kingsvale group, British Columbia; Kingsvale.

55790-0—6½

Cyparites sp. Dawson
Specimen 4831
Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 91, fig. 16.
Kootenay formation, Alberta; Anthracite.
=*Culmites* sp. (Dawson)

Czekanowskia sp. Berry
Specimen 5303
Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 47, Pl. 8, figs. 1-3.
Kootenay formation, Alberta: Nez Percé Creek below dam, about 150 feet below top of formation; Lyon Creek, about 2 miles south of Blairmore, and 3 feet below top of formation; York creek, 150 feet below top of formation.
=*Czekanowskia* cf. *rigida* Heer

Czekanowskia sp. cf. *rigida* Heer
Specimens 1045, 4850, 4852, 5306, 5308, 6590
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 89, Pl. 38, fig. 5; Pl. 39, figs. 2, 4; Pl. 43, fig. 1.
Kootenay formation, Alberta: Anthracite: Nez Percé Creek below dam, about 150 feet below top of formation; Lyon Creek about 2 miles south of Blairmore, 3 feet below top of formation; York Creek, 150 feet below top of formation.
Kootenay formation, British Columbia; Coal Creek, Crowsnest pass.
Hazelton group, British Columbia: Buckley River, below Monceton; Buckley canyon between low and high level bridges, New Hazelton.
Nikanassin formation, Alberta; Redmond Creek near bend, about 3,000 feet north of limestone contact.

Desmiophyllum (Podozamites?) sp. Bell
Specimens 4829, 5863
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 124, Pl. 72, fig. 1; Pl. 73, fig. 1.
Blairmore group (upper part), Alberta: Mill Creek area; Oldman River, above North Fork (Livingstone River).

Dicksonia munda Dawson
Syntypes 5101, 5103a
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 11, Pl. 3, figs. 5, 5a.
Blairmore group (upper part), Alberta; Mill Creek.
pars=*Cladophlebis alberta* (Dawson)
pars=*Cladophlebis* (*Gleichenites*?) *munda* (Dawson)

Dicotylophyllum sp. Bell
Specimen 6644
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 138, Pl. 84, fig. 1.
Blairmore group (upper part), Alberta; Mill Creek, 2 to 4 feet below top of group.

Dictyophyllum fuchsiforme Bell
Holotype 5796; paratype 5797
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 60, Pl. 35; Pl. 36, fig. 4.
Hazelton group, British Columbia; south side Glacier gulch near Smithers, above and below coal of Lake Kathlyn.

Dioonites borealis Dawson
Holotype 5136
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, p. 24, Pl. 3, fig. 37.

Dioonites borealis Dawson

Kootenay? formation (locality unknown, but seemingly from Blairmore area, Alberta).
=*Ctenis borealis* Dawson

Dorstenia ? sp. Penhallow

Specimen 5829
Penhallow D. P. 1907, Roy. Soc. Canada Trans., ser. 3, vol. 1, sec. 4, p. 310, fig. 5.

Pasayten group, British Columbia; east side Chuwanten Creek canyon, about 400 yards north of International Boundary.
=*Antholithes* sp. (Penhallow)

Elatides curvifolia (Dunker)

Hypotypes 5229, 5230, 5231, 5232, 5233, 5234, 6605, 6606, 6607, 6608, 6609
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 110, Pl. 54, figs. 1, 3-5; Pl. 57, figs. 2-4, 6; Pl. 58, figs. 1, 4; Pl. 59, fig. 3; Pl. 60, fig. 4.

Blairmore group (lower part), Alberta; Moose Mt. area.

Luscar formation (Blairmore group), Alberta: Cadomin, Brûlé coalfield, 650 feet above Cadomin conglomerate; Brazeau collieries, Nordegg, west of No. 3 coal seam; Gregg River; junction Cabin Creek and Grey River, 100 feet above Cadomin conglomerate.

Gething formation (Bullhead group), British Columbia: creek south of Wolverine River, thought to be above a cobble conglomerate; about ¾ mile above Gething coal mine on coal claim No. 1042, about 280 feet above Grant coal seam.

Elatides splendida Bell

Holotype 6631; paratypes 5235, 5236, 5237, 5239, 5240, 5241, 5242, 5248, 5790, 6612, 6613
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 111, Pl. 59, figs. 1, 4; Pl. 60, figs. 1-3, 6; Pl. 61, figs. 1, 2, 4; Pl. 63, figs. 2, 3; Pl. 66, figs. 1, 4.

Gething formation (Bullhead group), British Columbia: creek south of Wolverine River; Dunlevy Creek at canyon about 6 miles above mouth; north branch Dunlevy Creek about 1,000 feet above junction with other branch; south bank Peace River canyon above Gething Creek, from lower part of formation; Gething mine on Peace River Canyon.

Bullhead or Blairmore group, Alberta; 100 feet above massive conglomerate in cliff east of Alberta-B.C. boundary trail where it crosses to an east-west mountain ridge north of Kakwa River Valley.

Hazelton group, British Columbia; Little Cedar River, Smithers area.

Luscar formation (Blairmore group) Alberta: Cadomin, Brûlé coalfield, 650 feet above Cadomin conglomerate; Luscar mine, Brûlé coalfield.

Elatocladus acifolia Bell

Holotype 5244; paratypes 5245, 6616
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 119, Pl. 70, fig. 2; Pl. 71, fig. 4; Pl. 74, fig. 6.

Luscar formation (Blairmore group) Alberta: Cadomin, about 100 feet above Cadomin conglomerate; junction of Cabin Creek and Grey River, in bed 100 feet above Cadomin conglomerate

Elatocladus brevifolia (Fontaine)

Hypotypes 5836 (forma *lata*), 5860 (forma *lata*), 6601, 6602, 6603, 6619 (forma *lata*)
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, pp. 109-110, Pl. 53, fig. 2; Pl. 54, figs. 2, 7; Pl. 57, fig. 1; Pl. 59, fig. 2; Pl. 60, fig. 7.

Blairmore group (lower part), Alberta; east slope Ma butte, 1,220 feet above base and 630 feet below top of group.

Kingsvale group, British Columbia: Kingsvale, and west bank Coldwater River opposite Kingsvale.

Elatocladus (*Metasequoia* ?) *smittiana* (Heer)

Hypotypes 4832 (*Sequoia smittiana* Dawson), 5222, 6603, 6670
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 116, Pl. 65, fig. 6; Pl. 66, fig. 2; Pl. 67, figs. 1, 4.
Blairmore group (lower part), Alberta: Old Man River; sec. 32, tp. 22, rge. 4, W5th. mer.; east slope Ma butte, 1,220 feet above base and 630 feet below top of group.
See *Sequoia smittiana*

Equisetites lyelli (Mantell)

Hypotypes 4838, 5748, 5749, 5751 (forma *burchardti*), 5800 (forma *burchardti*), 5801 (forma *burchardti*)
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 76, Pl. 28, figs. 5-8; Pl. 58, figs. 2, 3.
Kootenay formation, Alberta; Anthracite.
Blairmore group (lower part), Alberta; locality unknown.
Luscar formation (Blairmore group), Alberta; Cadomin, Brûlé coalfield.
Blairmore group (upper part), Alberta; Livingstone River.
Hazelton group, British Columbia; south face of Quad Mt. group.
See *Equisetum lyelli*

Equisetum lyelli Mantell

Hypotype 4838
Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 83, fig. 1.
Kootenay formation, Alberta; Anthracite.
=*Equisetites lyelli* (Mantell)

Ficus fontainii ? Berry

Hypotype ? 6637
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 127, Pl. 79, fig. 2.
Commotion formation, British Columbia; Commotion Creek, about ¾ mile above falls, in west bank below fault.

Ficus ovatifolia? Berry

Hypotypes ? 5882, 5883, 5884, 5885 (specimen of Pl. 9, fig. 1 missing)
Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 61, Pl. 9, figs. 1-5.
Blairmore group (upper part), Alberta: York Creek, about 180 feet below top of group; Ma butte, about 45 feet below top of group.
=*Ficus ovatifolia* Berry

Ficus ovatifolia Berry

Hypotypes 5882, 5883, 5884, 5885
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 126.
Blairmore group (upper part), Alberta: York Creek, about 180 feet below top of group; Ma butte about 45 feet below top of group.
See *Ficus ovatifolia*?

Fontainea grandiflora Newberry

Hypotypes 5900, 5901, 6632, 6639
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 136, Pl. 80, fig. 3; Pl. 82, fig. 1; Pl. 83, figs. 1, 6.
Blairmore group (upper part), Alberta; Mill Creek area.
Commotion Creek formation, British Columbia: Commotion Creek, ¾ mile above falls in bed 20 feet above fault; Narraway River, about 1½ miles above mouth of Torrens River.

Geinitzia? *jenneyi*? Ward

Hypotype ? 6662
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 118, Pl. 69, fig. 4.
Blairmore group (upper part), Alberta; York Creek, below dam, about 175 feet below top of group.

Ginkgo arctica Heer

Hypotype (unnumbered specimen seemingly missing)

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 48, Pl. 7, fig. 6.

Kootenay formation, Alberta; Nez Percé Creek, below dam.

=*Ginkgo nana* Dawson

Ginkgo nana Dawson

Holotype 4826; hypotypes 4818 (*Salisburia sibirica* Dawson), ? 4825 (*Salisburia lepida* Dawson), ? 4828 (*Baiera longifolio* Dawson), (*Ginkgo arctica* Berry), 5321, 5323, 6586

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 8, Pl. 2, fig. 3.

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 86, Pl. 33, fig. 2; Pl. 37, fig. 4; Pl. 38, figs. 2, 8; Pl. 72, fig. 3 (pars).

Kootenay formation, British Columbia: Martin (Marten) Creek; Coal Creek.

Kootenay formation, Alberta; Nez Percé Creek, below dam.

Nikanassin formation, Alberta; North Wildhay River.

See *Salisburia (Ginkgo) nana*
Salisburia (Ginkgo) lepida
Salisburia (Ginkgo) sibirica
Baiera longifolia
Ginkgo arctica

Ginkgo pluripartita (Schimper)

Hypotypes 575, 5317, 5318, 6587, 6588

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 85, Pl. 36, figs. 2, 3; Pl. 37, figs. 2, 3; Pl. 38, fig. 1.

Blairmore group (lower part), Alberta: Red Reer River, just east of Red Deer station

Luscar formation (Blairmore group), Alberta; in draw just north of Miette Mt., a mile south of Pocahontas.

Hazelton group, British Columbia; west bank Kispiox River at Seventeen Mile bridge.

Ginkgo sp. cf. *lepida* Heer

Specimen 5327

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 87, Pl. 37, fig. 5.

Kootenay formation, British Columbia; Corbin, from waste dump of coal mine.

Gleichenia gilbert-thompsoni Penhallow

Holotype 5808

Penhallow D. P. 1907, Roy. Soc. Canada Trans. 1907, ser. 3, vol. 1, sec. 4, p. 302, Pl. 9; 1912, Geol. Surv., Canada, Mem. 38, Appendix B, p. 813, Pl. 9.

Pasayten group, British Columbia; about 3 miles west of Pasayten River, at elevation 6,750 feet, 400 yards southeast of a 6,900-foot mountain peak, 2 miles north of International Boundary line.

=*Gleichenites nordenskiöldi* (Heer)

Gleichenia gracilis Heer

Hypotype 5102

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 11, Pl. 3, fig. 4.

Blairmore group (upper part), Alberta; Mill Creek.

=*Cladophlebis* (*Gleichenites*?) *munda* (Dawson pars)

Gleichenites giesekianus (Heer)

Hypotypes 6572, 6573, 6575

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 61, Pl. 17, figs. 1, 2; Pl. 18, fig. 5.

Gleichenites giesekianus (Heer)

Blairmore group (lower flora), Alberta; bore-hole Hudson Bay-Delhi-Cessford Well No. 21 at depth 3,304.5 feet, 1sd 7, sec. 14, tp. 25, rge. 12 W4th mer.

Uslika formation, British Columbia; Vega Creek, 2,500 feet upstream from Aiken Lake road crossing at long. 125°14½'W and lat. 56°6½'N.

Gleichenites nordenskiöldi (Heer)

Hypotypes 5733, 5734, 5768, 5769, 5773, 5774, 5808

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 62, Pl. 15, fig. 2; Pl. 16, fig. 3; Pl. 18, figs. 1, 3, 7; Pl. 19, fig. 7; Pl. 20.

Hazelton group, British Columbia: south side Glacier gulch near Smithers above and below coal of Lake Kathlyn; Hudson Bay Mt., Glacier gulch.

Pasayten group, British Columbia; about 3 miles west of Pasayten River, at elevation 6,750 feet, 400 yards southeast of a 6,900-foot mountain peak, 2 miles north of International Boundary line.

Luscar formation (Blairmore group), Alberta; Brûlé coalfield.

See *Gleichenia gilbert-thompsoni*

Glyptostrobus groenlandicus Heer

Hypotype 4833

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 9, Pl. 3, fig. 8.

Blairmore group, Alberta; Livingstone River.

=*Onychiopsis psilotoides* (Stokes and Webb)

Hydropterangium canadense (Berry)

Syntype 5003

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 83, Pl. 31, fig. 1.

Blairmore group (lower part), Alberta; east slope Ma butte, 1,305 feet above base and 600 feet below top of group.

See *Sagenopteris canadensis*

Isoetites horridus (Dawson)

Hypotype 4824

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 78.

Blairmore group (upper part), Alberta; Livingstone River.

See *Antholithes horridus*

Klukia canadensis Bell

Holotype 5383; paratypes 4045, 5382, 5386, 5387; Hypotype 5385

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 66, Pl. 19, figs. 5, 8; Pl. 21, figs. 1, 4; Pl. 22, fig. 5.

Blairmore group (lower part), Alberta; York Creek, upper part, 200 feet above base and 1,650 feet below top of group.

Luscar formation (Blairmore group), Alberta: Wawa map-area; bore-hole at Nordegg.

See *Cladophlebis (Klukia) dunkeri*

Laurophyllum debile Dawson pars

Hypotype 5114

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 13.

Blairmore group (upper part), Alberta; Oldman River, above Livingstone River.

=*Celastrophyllum acutidens* Fontaine

Laurus crassinervis Dawson

Syntype 4863

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 10, Pl. 3, fig. 3.

Blairmore group (upper part), Alberta; Livingstone River.

=*Sapindopsis angusta* (Heer)

Leptostrobus longifolius Fontaine
Hypotype 4850
Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 88, fig. 8.
Kootenay formation, Alberta; Anthracite.
=*Czekanowskia* sp. cf. *rigida* Heer

Liquidambar integrifolium Lesquereux
Hypotype 5110
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 13.
Blairmore group (upper part), Alberta; Mill Creek.
=*Araliaephyllum westoni* (Dawson)

Macclintockia cretacea Heer
Hypotype 5111
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 14, Pl. 4, fig. 3.
Blairmore group (upper part), Alberta; Oldman River above Livingstone River.
=? *Cinnamomoides ovalis* (Dawson)

Magnolia magnifica Dawson pars
Hypotype 5119
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 14.
Blairmore group (upper part), Alberta; Mill Creek.
=*Magnolia*? sp. Bell

Magnolia? sp. Bell
Specimens 5119, 6669
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 130, Pl. 30, fig. 1; Pl. 82, fig. 2.
Blairmore group (upper part), Alberta; Mill Creek.
Crowsnest formation, Alberta; Baker's Creek, lsd 6, sec. 35, tp. 4, rge. 1, W5th mer.

Menispermites potomacensis Berry
Hypotypes 5907, 6654
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 129, Pl. 70, fig. 1; Pl. 77, fig. 1.
Kingsvale group, British Columbia: Kingsvale; 3 miles up Shaken Creek, tributary to Nicola River.

Menispermites reniformis Dawson
Hypotype 5889
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 128, Pl. 78, fig. 1.
Commotion formation, British Columbia; Commotion Creek, about 150 feet northeast of falls, about 40 feet above conglomerate.

Menispermites sp. Bell
Specimen 550
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 129, Pl. 76, fig. 2.
Blairmore group (upper part), Alberta; Mill Creek, several feet below top of group.

Menispermites ? sp. Bell
Specimen 5887
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 130, Pl. 78, fig. 6.
Blairmore group (upper part), Alberta; Mill Creek area.

Myrica serrata Penhallow
Holotype 5818
Penhallow D. P. 1907, Roy. Soc. Canada Trans. 1907, ser. 3, vol. 1, sec. 4, p. 309, fig. 4.
Pasayten group, British Columbia; east side of Chuwanten Creek canyon, about 400 yards north of International Boundary, at elevation 4,200 feet.
= ? *Celastrophyllum acutidens* Fontaine

Myrtophyllum boreale Seward and Conway

Hypotype 6653

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 134, Pl. 82, fig. 4.

Kingsvale group, British Columbia; 3 miles up Shaken Creek, tributary to Nicola River.

Nageiopsis striata Bell

Holotype 5295; paratype 4998 (*Nageiopsis* sp. Berry)

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 122, Pl. 69, fig. 2; Pl. 70, fig. 3.

Blairmore group (lower part), Alberta; Castle River, north bank, east of Hell Gate canyon, approximately 800 feet above base of group.

See *Nageiopsis* sp. Berry

Nageiopsis sp. Berry

Specimen 4998

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 50, Pl. 8, fig. 7.

Blairmore group (lower part), Alberta; Castle River, north bank, east of Hell Gate canyon, approximately 800 feet above base of group.

=*Nageiopsis striata* Bell

Nelumbites sp. Bell

Specimen 6655

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 130, Pl. 71, fig. 3.

Kingsvale group, British Columbia; 3 miles up Shaken Creek, tributary to Nicola River.

Nilssonia brongniarti (Mantell)

Hypotypes 547, 5289, 5291

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 104, Pl. 47, fig. 3; Pl. 49, figs. 1, 4 (pars).

Hazelton group, British Columbia: ridge running east from Rup Mt. group; east face Quad Mt. group.

Tantalus formation, Yukon Territory; Mt. Bush, Wheaten River area.

Nilssonia canadensis Bell

Holotype 5282; paratypes 5281, 5869, 6580, 6581, 6584

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 104, Pl. 51, figs. 2-4; Pl. 52, fig. 5; Pl. 54, figs. 6, 8.

Gething formation (Bullhead group), British Columbia: south bank Peace River canyon above Gething Creek, from lower part of formation; Dunlevy Creek at canyon about 6 miles above mouth.

Kingsvale group, British Columbia; Kingsvale.

Luscar formation (Blairmore group), Alberta; Gregg River.

Nilssonia nigracollensis Wieland

Hypotypes 3293, 3294, 3295

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 103, Pl. 47, fig. 5; Pl. 49, figs. 3, 6.

Hazelton group, British Columbia; Groundhog coal basin. No. 4 of measured section of G. S. Malloch.

Nikanassin formation, Alberta; North Wildhay River.

Nilssonia pasaytensis Penhallow

Syntypes (two unnumbered specimens seemingly missing)

Penhallow D. P. 1907, Roy. Soc. Canada Trans. 1907, ser. 3, vol. 1, p. 307, fig. 3.

Pasayten group, British Columbia; east side Chuwanten Creek canyon, about 400 yards north of International Boundary.

=*Nilssonia schaumburgensis* (Dunker)

Nilssonia schaumbergensis (Dunker)

Hypotypes 5285, 5292, 5833
Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 47, Pl. 7, fig. 5. (Specimen missing and unnumbered.)
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 102, Pl. 48, fig. 1; Pl. 49, fig. 5; Pl. 51, fig. 5.
Kootenay formation, Alberta: Lyon Creek (about 2 miles south of Blairmore); roof of Carly coal seam, Canmore.
Hazelton group, British Columbia; ridge running east from Rup Mt. group.
Pasayten group, British Columbia; east side Chuwanten Creek canyon, about 400 yards north of International Boundary.
See *Nilssonia pasaytensis* Penhallow

Nilssonia sp. Bell

Specimen 5287
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 105, Pl. 49, fig. 4 (pars).
Hazelton group, British Columbia; ridge running east from Rup Mt. group.

Nilssonia cf. *densinerve* (Fontaine)

Specimen 194
Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 28, Pl. 14.
Mattagami group, Ontario; Mattagami River, east bank about 1,000 feet south of township line between Kipling and Sanborn.

Nilssonia cf. *tenuicaulis* (Phillips)

Specimen 5805
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 103, Pl. 49, fig. 2.
Hazelton group, British Columbia; mountains north of McDonald Creek, Groundhog coal basin.

Oleandra graminaefolia Knowlton

Hypotypes (specimens unnumbered and missing)
Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 38, Pl. 5, figs. 5, 6.
Kootenay formation, Alberta; McGillivray ridge, about middle part of formation.
=*Pityophyllum* sp. cf. *nordenskiöldi* (Heer)

Onychiopsis psilotoides (Stokes and Webb)

Hypotypes 1029, 4833 (*Glyptostrobus groenlandicus* Dawson)
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 59, Pl. 24, fig. 1; Pl. 26, fig. 3.
Luscar formation (Blairmore group), Alberta: Smoky River, first creek north of Gustave Flats, 120 feet above Cadomin conglomerate and 50 feet above a 7-foot coal seam.
Blairmore group, Alberta; Livingstone River.
See *Glyptostrobus groenlandicus* Dawson

Onychiopsis? sp. Bell

Specimens 163a, 163b, 163e, 163h
Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 30, Pl. 18, figs. 6-9.
Mattagami group, Ontario; Mattagami River.

Osmundites skidegatensis Penhallow

Syntypes 5093, 5093a-l
Penhallow D. P. 1902, Roy. Soc. Canada Trans. 1902, ser. 2, vol. 8, sec. 4, pp. 3-29, Text-figs. 1, 2; Pls. 1-4, figs. 1-8.
Haida formation, British Columbia; Alliford Bay, Skidegate Inlet, Queen Charlotte Islands.

Osmundites? sp. Penhallow

Specimen 5019

Penhallow D. P. 1902, Roy. Soc. Canada Trans., ser. 2, vol. 8, sec. 4, p. 10, Text-fig. 3 (erroneously entitled *Osmundites skidegatensis*).

Haida formation, British Columbia; east end Maude Island, Skidegate Inlet, Queen Charlotte Islands.

Pagiophyllum ambiguum (Heer)

Hypotype 5854

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 121, Pl. 68, fig. 1.

Kingsvale group, British Columbia; west bank Coldwater River, opposite Kingsvale.

Pagiophyllum magnifolium Bell

Holotype 6656; paratype 6657

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 120, Pl. 70, fig. 5; Pl. 71, fig. 1.

Luscar formation (Blairmore group), Alberta; Wildhay River at Carson Creek.

Pagiophyllum sp. A Bell

Specimens 5767, 6621

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 121, Pl. 72, fig. 2; Pl. 74, fig. 5.

Hazelton group, British Columbia; south side of Glacier gulch near Smithers, above and below coal of Lake Kathlyn.

Pagiophyllum sp. B Bell

Specimen 5855

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 121, Pl. 70, fig. 4.

Kingsvale group, British Columbia; west bank Coldwater River, opposite Kingsvale.

Pagiophyllum sp. Dawson

Specimen 4858

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 90, fig. 14.

Kootenay formation, Alberta; Canmore.

=*Zamites*? sp. (Dawson)

Pagiophyllum sp. cf. *Sphenolepidium sternbergianum* (Dunker)

Specimen 5216

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 120, Pl. 71, fig. 5.

Blairmore group (lower part), Alberta; east slope of Ma butte, 1,220 feet above base and 630 feet below top of group.

Paliurus montanus Dawson

Holotype 5120

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 14.

Blairmore group (upper part), Alberta; Oldman River, above Livingstone River.

=*Cinnamomoides ovalis* (Dawson)

Paliurus ovalis Dawson

Syntypes 5121, 5122

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 14, Pl. 4, figs. 4, 8.

Blairmore group (upper part), Alberta; Mill Creek.

=*Cinnamomoides ovalis* (Dawson)

Pecopteris browniana Dunker

Hypotype 4840

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 84, fig. 3.

Kootenay formation, Alberta; Anthracite.

=*Coniopteris brevifolia* (Fontaine).

Phlebopteris ? *elongata* Bell

Holotype 5798; paratype 429

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 61, Pl. 22, fig. 3; Pl. 26, fig. 1; Pl. 85, fig. 6.

Nikanassin formation, Alberta; North Wildhay River from J. Errington coal claim.

Hazelton group, British Columbia; Twenty Mile Mt., north of Hazelton.

Phoenicopsis angustifolia Heer, forma *media* Krasser

Hypotypes 5309, 5310, 6589

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 90, Pl. 39, fig. 1; Pl. 40, figs. 1, 3, 5.

Gething formation (Bullhead group), British Columbia; Dunlevy Creek at canyon about 6 miles above mouth.

Bullhead or Blairmore group, Alberta; above a mile east of B.C.-Alberta boundary near latitude 54°10′N., about 50 feet below a massive conglomerate and 20 feet below a coal seam.

Phoenicopsis arctica (Heer)

Hypotype 5294

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 91, Pl. 39, fig. 3.

Blairmore group (lower part), Alberta; north bank Castle River, east of Hell Gate canyon and west of cable foot-bridge on Carbon Hill property, about 800 feet above base of group.

Phyllites asplenioides ? Berry

Hypotype ? 5910

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 76, Pl. 32, fig. 4.

Kingsvale group, British Columbia; Kingsvale.

Phyllites sp. Bell

Specimens 6622, 6623

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 138, Pl. 77, figs. 2, 5.

Luscar formation (Blairmore group), Alberta; bore-hole 52, Brûlé coalfield at depths 71 to 161 feet in beds above Jewell coal seam.

Phylloteuthis incertus Whiteaves

Holotype 5994

Whiteaves J. F. 1884, Geol. Surv., Canada, Mesozoic Fossils, vol. 1, pt. 3, p. 268, Pl. 35, fig. 1.

Haida formation, British Columbia; east end Maude Island, Skidegate Inlet, Queen Charlotte Islands.

=*Taeniopteris*? *incerta* (Whiteaves)

Piceoxylon christopheri Bannan and Fry

Holotype 3918

Bannan M. W. and Fry W. L. 1957, Nat. Res. Council, Canada, Can. J. Botany, vol. 35, p. 330, Pl. 2, figs. 6-9; Pl. 3, figs. 10-12.

Isachsen formation, N.W.T.; Amund Ringnes Island.

Piceoxylon thomsoni Bannan and Fry

Holotype 3919

Bannan M. W. and Fry W. L. 1957, Nat. Res. Council, Canada, Can. J. Botany, vol. 35, p. 334, Pl. 3, figs. 13-14; Pl. 4, figs. 15-21.

Isachsen formation, N.W.T.; Amund Ringnes Island.

Pinus anthraciticus Dawson

Holotype 4855

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 89, fig. 10.

Kootenay formation, Alberta; Anthracite.

=*Pityospermum anthraciticum* (Dawson)

Pinus (Cyclopitus) nordenskiöldi Heer
Hypotype 4852
Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 88, fig. 9.
Kootenay formation, Alberta; Anthracite.
=*Pityophyllum* sp. cf. *nordenskiöldi* (Heer)

Pinus suskwaensis Dawson
Holotype 5137
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 23, Pl. 3, fig. 36.
Hazelton group, British Columbia; Suskwa River, tributary of Buckley River.

Pityocladus sp. Bell
Specimen 5795
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 115, Pl. 65, fig. 8.
Nikanassin formation, Alberta; North Wildhay River from J. Errington coal claim.

Pityophyllum graminaefolium (Knowlton)
Hypotypes 147c, 147d, 154d, 154e, 188
Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 29, Pl. 18, figs. 1-5.
Mattagami group, Ontario; Mattagami River.
Pityophyllum sp. cf. *nordenskiöldi* (Heer)

Pityophyllum sp. Bell
Specimen 6663
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 114.
Blairmore group (upper part), Alberta; York Creek, below dam, about 175 feet below top of group.

Pityophyllum sp. cf. *longifolium* (Nathorst)
Specimens 5314, 5315
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 113, Pl. 66, fig. 3; Pl. 69, fig. 1.
Luscar formation (Blairmore group), Alberta; Pocahontas.
Blairmore group (lower part), Alberta; Ram River.

Pityophyllum cf. *nordenskiöldi* (Heer)
Specimens 549, 4852 (*Pinus nordenskiöldi* Dawson), 5311, 5312
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 112, Pl. 61, fig. 3; Pl. 62, figs. 1, 4, 5.
Kootenay formation, Alberta; Anthracite.
Kootenay formation, British Columbia; Coal Creek.
Luscar formation (Blairmore group), Alberta; Smoky River.
Gething formation (Bullhead group), British Columbia; Dunlevy Creek at canyon about 6 miles above mouth.
See *Pinus (Cyclopitus) nordenskiöldi*
Oleandra graminaefolia

Pityospermum anthraciticum (Dawson)
Holotype 4855; hypotype 5784
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 114, Pl. 65, figs. 4 and 5 (pars).
Kootenay formation, Alberta; Anthracite.
Tantalus formation, Yukon Territory; Mt. Bush, Wheaten River area.
See *Pinus anthraciticus*

Pityospermum yukonense Bell
Holotype 5781; paratype 5782
Bell, W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 114, Pl. 65, figs. 2-4, 5 (pars).
Tantalus formation, Yukon Territory; Mt. Bush, Wheaten River area.

Platanus affinis Lesquereux
Hypotype 5109
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 12, Pl. 4, fig. 2.
Blairmore group (upper part), Alberta; Mill Creek.
=*Populites dawsoni* Bell

Platanus heeri Lesquereux
Hypotype 5106
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 12.
Blairmore group (upper part), Alberta; Mill Creek.
=*Platanus* sp. Bell

Platanus sp. Bell
Specimen 5106
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 132, Pl. 81, fig. 6.
Blairmore group (upper part), Alberta; Mill Creek.
See *Platanus heeri* Dawson

Podozamites corbinensis Bell
Holotype 5277; paratype 5274
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 124, Pl. 74, fig. 4; Pl. 75.
Kootenay formation, British Columbia; Corbin, about 15 feet below large coal seam at No. 6 mine.
Kootenay formation, Alberta; Anthracite.

Podozamites lanceolatus (Lindley and Hutton)
Hypotypes 6596 (Dawson's type), 5278 (Berry's type), 577, 5279
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 6, Pl. 1, fig. 3.
Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 45, Pl. 6.
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 123, Pl. 72, fig. 3; Pl. 73, fig. 2; Pl. 74, fig. 1.
Kootenay formation, British Columbia: Coal Creek; Michel, Crows Nest Pass Coal Co., roof of No. 3 coal seam.
Kootenay formation, Alberta; Lyon Creek, about 2 miles south of Blairmore, from bed 5 feet below top of formation.

Podozamites stenopus Lesquereux
Hypotype 6661
Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 60, Pl. 10, fig. 3.
Blairmore group (upper part), Alberta; York Creek, about 180 feet below top of group.
=*Podozamites*? *stenopus*? Lesquereux

Podozamites? *stenopus*? Lesquereux
Hypotype ? 6661
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 125, Pl. 68, fig. 5.
Blairmore group (upper part), Alberta; York Creek, about 180 feet below top of group.
See *Podozamites stenopus*

Populites dawsoni Bell
Holotype 5109 (*Platanus affinis* Dawson); paratypes 5108, 5118
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 125, Pl. 77, fig. 3; Pl. 79, fig. 4; Pl. 80, fig. 5.
Blairmore group (upper part), Alberta: Mill Creek; Oldman River above Livingstone River
See *Platanus affinis*

Proteoides daphnogenioides Heer
Hypotype 5112a
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 13.
Blairmore group (upper part), Alberta; Mill Creek.
=*Sapindopsis angusta* (Heer)

Pseudoctenis hazeltonensis Bell
Holotype 5316; paratype 5787
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 107, Pl. 55; Pl. 57, fig. 5.
Hazelton group, British Columbia: mountain peak north of Twenty Mile Creek between forks 7 miles to north; from boulder on Babine trail, ½ mile east of Comel mining claims and approximately 6 miles east of Hazelton.

Pseudocycas dunkeriana (Göppert)
Hypotypes 5270, 5299, 6593
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 97, Pl. 43, fig. 6; Pl. 47, figs. 2, 6.
Gething formation (Bullhead group), British Columbia: Kenuseo Creek, north bank, below Honeymoon Creek at crossing of trail from upper Muskeg Creek to Monkman highway, about 35 miles southwest of Alberta-B.C. boundary where it crosses Red Willow River; upper Ferguson Creek, Wapiti-Murray River area.

Pseudocycas sp. A Bell, cf. *P. unjiga* (Dawson)
Specimens 5271, 5300, 5301, 6665
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 98, Pl. 44, fig. 2; Pl. 45, fig. 3; Pl. 46, fig. 2; Pl. 47, fig. 4.
Blairmore group (upper part), Alberta: Ma butte about 45 feet below top of group; Link Creek, just above confluence with Castle River, about 80 feet below top of group.
Gething formation (Bullhead group), British Columbia: Kenuseo Creek, north bank, below Honeymoon Creek at crossing of trail from upper Muskeg Creek to Monkman highway, about 35 miles southwest of Alberta-B.C. boundary where it crosses Red Willow River.

Pseudocycas sp. B Bell cf. *P. unjiga* (Dawson)
Specimen 6660
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 99, Pl. 44, fig. 1.
Pasayten group, British Columbia; north side Hope-Princeton highway, 2 miles east of Chuwanten Creek and just east of small creek entering Similkameen River.

Pterophyllum plicatum Bell
Holotype 5259; paratypes 5258, 5261, 5262, 5263
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 93, Pl. 40, fig. 4; Pl. 42, figs. 1, 5; Pl. 43, figs. 2, 5.
Gething formation (Bullhead group), British Columbia; Kenuseo Creek, below Honeymoon Creek at crossing of trail from upper Muskeg Creek to Monkman highway, about 35 miles southwest of Alberta-B.C. boundary where it crosses Red Willow River.

Pterophyllum rectangulare Bell
Holotype 5254; paratypes 5256, 5257
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 92, Pl. 42, figs. 3, 4, 6.
Gething formation (Bullhead group), British Columbia; Stinking Creek, about ½ mile south of 16th base line, at head of narrow gorge.

Pterophyllum validum? Hollick
Hypotype ? 5871
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 94, Pl. 45, fig. 5.
Commotion formation, British Columbia; Commotion Creek, about 150 feet northeast of falls, about 40 feet above conglomerate.

Pterophyllum sp. Bell

Specimen 4823

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 94.

Kootenay formation, Alberta; near Canmore.

See *Anomozamites acutiloba*?

Ptilophyllum arcticum (Göppert)

Hypotypes 4819 (*Zamites montana* Dawson), 4820 (*Zamites acutipennis* Dawson), 4845 and 4846 (*Zamites montana* Dawson), 5266, 5269

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 94, Pl. 43, fig. 3; Pl. 44, fig. 3.

Kootenay formation, British Columbia: Martin (Marten) Creek; Corbin, at No. 6 mine.

Kootenay formation, Alberta: Castle River, south bank, on Carbon Hill property; Anthracite and Canmore.

See *Zamites montana*

Zamites acutipennis

Ptilophyllum columbianum Bell

Holotype 5803; paratypes 5759, 5760

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 96, Pl. 44, fig. 4; Pl. 45, fig. 6; Pl. 49, fig. 7.

Hazelton group, British Columbia; a mile northeast of Cedarville.

Ptilophyllum hirtum Bell

Holotype 5788; paratype 5789

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 96, Pl. 42, figs. 2, 7; Pl. 43, fig. 4.

Hazelton group, British Columbia; Gramophone Creek, northeast of Smithers.

Ptilophyllum (Anomozamites) montanense (Fontaine)

Hypotypes 5228, 5249, 5250, 5251, 6592

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 91, Pl. 40, fig. 2; Pl. 41, figs. 1-3; Pl. 47, fig. 1.

Hazelton group, British Columbia: Lake Kathlyn coal mine, Smithers; south side Glacier gulch near Smithers, above and below Lake Kathlyn coal.

Luscar formation (Blairmore group), Alberta: Luscar mine, Brûlé coalfield; East Mt. Creek, 80 feet above Cadomin conglomerate; Mt. Park, just above Cadomin conglomerate.

Ptilophyllum robustum Bell

Holotype 4821

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 95, Pl. 85, fig. 7.

Kootenay formation, Alberta; North Kootenay Pass, South Fork Oldman River.

See *Zamites* sp.

Quercus coriacea Newberry

Hypotype 5826

Penhallow D. P. 1907, Roy. Soc. Canada Trans. 1907, ser. 3, vol. 1, sec. 4, p. 309.

Pasayten group, British Columbia; east side Chuwanten Creek canyon, about 400 yards north of International Boundary, at elevation 4,200 feet.

=?*Sapindopsis angusta* Heer

Quercus flexuosa ? Newberry

Hypotypes ? 5819, 5820

Penhallow D. P. 1907, Roy. Soc. Canada Trans. 1907, ser. 3, vol. 1, sec. 4, p. 309.

Pasayten group, British Columbia; east side Chuwanten Creek canyon, about 400 yards north of International Boundary, at elevation 4,200 feet.

=?*Celastrophyllum acutidens* Fontaine

55790-0—7

Rhamnites sp. Bell

Specimens 6649, 6650, 6651

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 133, Pl. 83, figs. 2, 4; Pl. 85, fig. 1.

Jackass Mountain group, British Columbia; below highway, ¾ mile north of mouth of Stein River on east side of Fraser River.

Sagenopteris canadensis Berry

Syntype 5003

Berry E. W. 1922, Bot. Gazette, vol. 74, p. 329, fig. 1.

Blairmore group (lower part), Alberta; east slope Ma butte, 1,305 feet above base and 600 feet below top of group.

=*Hydropterangium canadense* (Berry)

Sagenopteris elliptica Fontaine

Hypotypes 5816 (*Salix perplexa*? Penhallow), ?500 (*Sagenopteris mantelli* Berry), 5002, 5345, 5347, 5872

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 35, Pl. 4, figs. 4, 5.

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 82, Pl. 33, fig. 6; Pl. 36, fig. 5.

Pasayten group, British Columbia; about 3 miles west of Pasayten group and 2 miles north of International Boundary, at elevation 6,750 feet.

Blairmore group (lower part), Alberta: east slope Ma butte, 450 feet above base of group and 1,400 feet below its top; east slope Ma butte, 720 feet above base of group and 1,130 feet below its top.

Kingsvale group, British Columbia; Kingsvale.

See *Salix perplexa* ?

Sagenopteris mantelli

Sagenopteris mantelli (Dunker)

Hypotype 5000

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 37, Pl. 5, fig. 7.

Blairmore group (lower part), Alberta; east slope Ma butte, 450 feet above base of group and 1,400 feet below its top.

=? *Sagenopteris elliptica* Fontaine

Sagenopteris mclearni Berry

Syntypes 4995, 5005; hypotypes 5333, 5334, 5335, 5336

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 36, Pl. 4, fig. 3; Pl. 5, figs. 8, 9.

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 81, Pl. 29, figs. 3-5; Pl. 32, fig. 3.

Blairmore group (lower part), Alberta: lower part of York Creek, west of Blairmore and south of railway; Mill Creek, NW sec. 25, tp. 5, rge. 2, W5th mer., near middle of formation above Horne sandstone equivalent; Blairmore group from unknown locality.

Luscar formation (Blairmore group), Alberta; Solomon Creek, from Grigsby coal claims.

Sagenopteris williamsii (Newberry)

Hypotypes 5337, 5339, 5342, 5344, 5348, 6583

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 80, Pl. 31, fig. 2; Pl. 33, fig. 4; Pl. 34, figs. 1-3.

Blairmore group (lower part), Alberta: Moose Mt. area; Ram River, below coal seam.

Luscar formation (Blairmore group), Alberta: Gregg River; creek flowing southwest into McLeod River, opposite mile post 29, and 150 feet above Cadomin conglomerate.

Gething formation (Bullhead group), British Columbia; Dunlevy Creek at canyon about 6 miles from mouth.

Salisburia (Ginkgo) lepida Heer

Hypotype 4825

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 8, Pl. 2, fig. 2.

Kootenay formation, British Columbia; Martin (Marten) Creek.

=?*Ginkgo nana* Dawson

Salisburia (Ginkgo) nana Dawson

Holotype 4826

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 8, Pl. 2, fig. 3.

Kootenay formation, British Columbia; Martin (Marten) Creek.

=*Ginkgo nana* Dawson

Salisburia (Ginkgo) sibirica Heer

Hypotype 4818

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 8, Pl. 2, fig. 1.

Kootenay formation, British Columbia; Martin (Marten) Creek.

=*Ginkgo nana* Dawson

Salix inaequalis ? Newberry

Hypotype ? 6648

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 125, Pl. 76, fig. 1.

Jackass Mountain group, British Columbia; ferry landing, east side Fraser River, ¾ mile north of Lytton.

Salix perplexa ? Knowlton

Hypotype ? 5816

Penhallow D. P. 1907, Roy. Soc. Canada Trans. 1907, ser. 3, vol. 1, sec. 4, p. 309, 1912, Geol. Surv., Canada, Mem. 38, pt. 2, Appendix B, p. 819.

Pasayten group, British Columbia; about 3 miles west of Pasayten River and 2 miles north of International Boundary line.

=*Sagenopteris elliptica* Fontaine

Sapindopsis angusta (Heer)

Hypotypes 4863 (*Laurus crassinervis* Dawson), 5112a (*Proteoides daphnogenioides* Dawson), 5741 (*Sapindopsis brevifolia* ? Berry), 5743 (*Sapindopsis brevifolia* ? Berry), specimen missing (*Sapindopsis magnifolia* Berry), 5873, ? 5826

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 134, Pl. 81, fig. 4; Pl. 83, fig. 3; Pl. 85, fig. 5.

Blairmore group (lower part), Alberta: Castle River, north bank, at Paint mine east of Cole ranch; east of Hell Gate canyon on Carbon Hill property, about 800 feet above base of group.

Blairmore group (upper part), Alberta: Livingstone River; Mill Creek; York Creek just below dam, about 260 feet below top of group.

Pasayten group, British Columbia; Chuwanten Creek canyon, east side, about 400 yards north of International Boundary.

See *Laurus crassinervis*
Proteoides daphnogenioides
Sapindopsis brevifolia?
Sapindopsis magnifolia
Quercus coriacea

Sapindopsis belviderensis ?

Hypotype ? 5875

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 65, Pl. 9, fig. 6.

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 136, Pl. 84, fig. 4.

Blairmore group (upper part), Alberta; York Creek below dam, about 260 feet below top of group.

55790-0—7½

Sapindopsis brevifolia? Fontaine

Hypotypes ? 5741, 5743

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 54, Pl. 8, figs. 8, 9.

Blairmore group (lower part), Alberta: Castle River, north bank, at Paint mine east of Cole ranch; east of Hell Gate canyon on Carbon Hill property, approximately 800 feet above base of group.

=*Sapindopsis angusta* (Heer)

Sapindopsis magnifolia Fontaine

Hypotype (specimen missing)

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 64, Pl. 10, fig. 8.

Blairmore group (upper part), Alberta; York Creek, just below dam about 260 feet below top of group.

=*Sapindopsis angusta* (Heer)

Sciadopitytes variabilis Bose

Holotype 6702.1 (slide); paratypes 6702, slides (6702.2-6702.6 and 6702.8-6702.23)

Bose M. N. 1955, Norsk. Geol. Tidssk., vol. 35, pp. 53-58, Pl. 1, figs. 1, 2, 4-8; Text-figs. 1-3.

Lower Cretaceous, N.W.T.; Padloping Island, north side Cumberland Peninsula, Baffin Island.

Selaginellites sp. Bell

Specimen 5746

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 77, Pl. 31, fig. 5.

Luscar formation (Blairmore group), Alberta; in draw north of Miette Mt., a mile south of Pocahontas.

Selaginellites ? sp. Bell

Specimen 4856

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 78, Pl. 76, fig. 3.

Kootenay formation, Alberta; Anthracite.

See *Sphenolepidium pachyphyllum* ?

Sequoia condita Lesquereux

Hypotypes 5847, 5848, 5849, 5852

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 117, Pl. 65, fig. 1; Pl. 67, fig. 3; Pl. 68, figs. 4, 7.

Crowsnest formation, Alberta; Baker's Creek, tributary to Pincher Creek, lsd 6, sec. 35, tp. 4, rge. 1, W5th mer.

Sequoia smittiana Heer

Hypotype 4832

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 9, Pl. 2, figs. 7, 7a.

Blairmore group (lower part), Alberta; Old Man River.

=*Elatocladus (Metasequoia?) smittiana* (Heer)

Sphenolepidium pachyphyllum? Fontaine

Hypotype ? 4856

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 89, fig. 12.

Kootenay formation, Alberta; Anthracite.

=*Selaginellites*? sp. Bell

Sphenolepidium sp. Dawson

Specimen 4857

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 90, fig. 13.

Kootenay group, Alberta; Anthracite.

=*Coniopteris brevifolia* (Fontaine)

Sphenopteris acrodentata Fontaine
Hypotypes 5360, 6564, 6578
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 68, Pl. 22, figs. 4, 6; Pl. 23, fig. 2.
Hazelton group, British Columbia: creek flowing into Skeena River opposite Hazelton; Buckley River below Monceton.

Sphenopteris bidens Bell
Holotype 4025; paratype 4024
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 71, Pl. 32, fig. 2; Pl. 33, fig. 5.
Blairmore group (lower part), Alberta; north bank Castle River, east of Hell Gate canyon and west of cable foot-bridge, about 800 feet above base of group.

Sphenopteris brulensis Bell
Holotype 5349; paratype 5350
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 71, Pl. 31, figs. 3, 4.
Luscar formation (Blairmore group), Alberta: Brûlé coalfield, Wawa map-area.

Sphenopteris cordai (Dunker)
Hypotype 6667
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 74, Pl. 28, fig. 1.
Kootenay formation, Alberta; 50 feet above base of formation at horizon Holt coal seam, Highwood River.

Sphenopteris (Gleichenites) (?) *erecta* Bell
Holotype 5736
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 65, Pl. 19, fig. 6; Pl. 22, figs. 1, 7.
Luscar formation (Blairmore group), Alberta; Solomon Creek.

Sphenopteris (Ruffordia) göpperti (Dunker)
Hypotypes 5370, 5372, 5767, 5780
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 67, Pl. 22, figs. 2, 8; Pl. 23, figs. 1, 4.
Blairmore group (lower part), Alberta: Mill Creek area; east slope Ma butte, 1,305 feet above base of group and 545 feet below its top.
Hazelton group, British Columbia; south side of Glacier gulch, Hudson Bay Mt., near Smithers.

Sphenopteris latiloba ? Fontaine
Hypotype ? 4844
Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 86, fig. 6.
Kootenay formation, Alberta; Anthracite.
=*Coniopteris brevifolia* (Fontaine)

Sphenopteris latiloba Fontaine
Hypotypes 4027, 4042, 4043, 4044, 6565, 6579
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 69, Pl. 28, fig. 3; Pl. 29, figs. 1, 2; Pl. 30, figs. 1, 3, 4.
Blairmore group (lower part), Alberta: east slope Ma butte, 1,220 feet above base of group and 630 feet below its top; bore-hole Taber Province No. 1 well, lsd 9, sec. 18, tp. 9, rge. 10, W4th mer. at depth 3,125 to 3,143 feet.
Luscar formation (Blairmore group), Alberta: Wildhay River; Adolphus Creek, Grand Cache area.

Sphenopteris latiloba ? Fontaine
Hypotype ? 4844
Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, p. 86, fig. 6.
Kootenay formation, Alberta; Anthracite.
=*Coniopteris brevifolia* (Fontaine)

Sphenopteris mclearni Bell

Holotype 5834; paratype 4815 (*Asplenium dicksonianum* Dawson)
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 73, Pl. 23, fig. 3; Pl. 24, fig. 2; Pl. 27, fig. 3.
Blairmore group (upper part), Alberta: Livingstone River; Mill Creek.
See *Asplenium dicksonianum* Dawson

Sphenopteris newberryi Bell

Holotype 5837; paratype 572
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 72, Pl. 27, figs. 1, 2.
Pasayten group, British Columbia; north side Hope-Princeton highway, about 1½ miles east of Chuwanten Creek, at elevation 4,810 feet.

Sphenopteris sp. A Bell

Specimens 5139, 6638
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 74, Pl. 16, fig. 2; Pl. 25, fig. 2; Pl. 26, fig. 2.
Blairmore group (upper part), Alberta; Mill Creek.

Sphenopteris sp. B Bell

Specimens 5839, 5840
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 75, Pl. 28, figs. 2, 4.
Blairmore group (upper part), Alberta; Link Creek, just above confluence with Castle River, and about 20 feet below top of group.
Kingsvale group, British Columbia; west bank Coldwater River, opposite Kingsvale.

Stenorachis canadensis Berry

Syntypes 4992, 4993
Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 45, Pl. 7, figs. 8-11.
Blairmore group (lower part), Alberta; north bank Castle River east of Hell Gate canyon and west of cable foot-bridge, approximately 800 feet above base of group.
=*Caytonia canadensis* (Berry)

Stenorachis striolatus (Heer, pars)

Hypotype 6598
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 88, Pl. 37, fig. 6.
Bullhead or Blairmore group, Alberta; near summit of mountain peak at north end of Coal ridge, a mile east of B.C.-Alta. boundary at about latitude 54°10′N.

Stenorachis sp. Bell

Specimen 6625
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 88, Pl. 38, fig. 3.
Luscar formation (Blairmore group), Alberta; in draw just north of Miette Mt., a mile south of Pocahontas.

Stenorachis ? sp. Bell

Specimens 576, 578, 6599
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 89, Pl. 85, figs. 2-4.
Nikanassin formation, Alberta; North Wildhay River, from J. Errington coal claim.

Sterculia vetustula Dawson

Holotype 4862
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 10, Pl. 3, fig. 2.
Blairmore group (upper part), Alberta; Livingstone River.
=*Araliaephyllum westoni* (Dawson)

Taeniopteris canmorensis (Dawson)
Holotype 4839
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 75, Pl. 33, fig. 1.
Kootenay formation, Alberta; Canmore.
See *Angiopteridium canmorense* Dawson

Taeniopteris ? incerta (Whiteaves)
Holotype 5994
Whiteaves J. F. 1844, Geol. Surv., Canada, Canadian Mesozoic Fossils, vol. 1, pt. 3, p. 268, Pl. 35, fig. 1.
Haida group, British Columbia; east end of Maude Island, Skidegate Inlet, Queen Charlotte Islands.
See *Phylloteuthis incertus* Whiteaves

Thallites blairmorensis (Berry)
Syntype 5374
Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 34, Pl. 4, figs. 1, 2.
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 46, Pl. 1, fig. 1.
Blairmore group (lower part), Alberta; east slope Ma butte, 1,250 feet above base of group and 545 feet below top.

Thallites zeilleri (Seward)
Hypotype 6630
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 46, Pl. 1, fig. 7.
Bullhead group, British Columbia; 2 miles northeast of Mt. Brickford and 1,050 feet above base of Dunlevy formation.

Trochodendroides (Cercidiphyllum?) potomacensis (Ward)
Hypotypes 5904, 5908
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 127, Pl. 71, fig. 2; Pl. 74, fig. 2.
Kingsvale group, British Columbia; Kingsvale.
Blairmore group (upper part), Alberta; Mill Creek area.

Williamsonia recentior Dawson
Holotype 5105
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 12, Pl. 4, fig. 1.
Blairmore group (upper part), Alberta; Mill Creek.
=*Williamsonia? recentior*

Williamsonia ? recentior (Dawson)
Holotype 5105; hypotypes 6636, 6645
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 101, Pl. 46, fig. 1; Pl. 50, fig. 2; Pl. 51, fig. 6.
Blairmore group (upper part), Alberta; Mill Creek, 2 to 4 feet below top of group.
See *Williamsonia recentior*

Zamites acutipennis Heer
Hypotype 4820
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 7, Pl. 1, fig. 5.
Kootenay formation, British Columbia; Martin (Marten) Creek.

Zamites montana Dawson
Syntype 4819; hypotypes 4845, 4846
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 7, Pl. 1, figs. 6, 6a.
Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 10, sec. 4, p. 87, fig. 7.

Zamites montana Dawson

Kootenay formation, British Columbia; Martin (Marten) Creek.
Kootenay formation, Alberta; Anthracite and Canmore.
=*Ptilophyllum arcticum* (Göppert)

Zamites tenuinervis Fontaine

Hypotype 5865
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 99, Pl. 48, fig. 4.
Blairmore group (upper part), Alberta; Mill Creek area.

Zamites? sp. Bell

Specimen 5296
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 100, Pl. 45, fig. 2.
Blairmore group (lower part), Alberta; north bank of Castle River, at Paint mine east of Cole ranch, probably several hundred feet below top of group.

Zamites sp. Dawson

Specimen 4821
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 7, Pl. 1, fig. 4.
Kootenay formation, Alberta; North Kootenay Pass, South Fork Old Man River.
=*Ptilophyllum robustum* Bell

Zamites? sp. (Dawson)

Specimens 4858 (*Pagiophyllum* sp. Dawson), 6591
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 100, Pl. 45, fig. 1.
Kootenay formation, Alberta; Canmore.
Luscar formation (Blairmore group), Alberta; about a mile north of Mt. Park, 200 feet above Cadomin conglomerate.
See *Pagiophyllum* sp. Dawson

UPPER CRETACEOUS

Abietites tyrrellii Dawson

Syntypes 5399, 6459
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 17.
Bearpaw formation, Alberta; Berry Creek, tributary to Red Deer River, rge. 12, tp. 25, W5th mer.
=*Torreyites tyrrellii* (Dawson)

Acer sp. Bell

Specimen 588
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 59, Pl. 54, fig. 3.
Comox formation (Nanaimo group), British Columbia; T. Sable River, east bank, about 5 chains above jct. with Tumble Water Creek.

Adiantites praelongus Dawson

Holotype 5621; hypotype 5681
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 25, Pl. 5, fig. 19.
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 55, Pl. 6, fig. 6.
Comox formation (Nanaimo group), British Columbia; Baynes Sound.
Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.
=*Protophyllocladus polymorpha* (Lesquereux)

Adiantum? *paululum* Bell

Holotype 6172; paratypes 6173, 6174, 6190
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 41, Pl. 1, figs. 2, 4, 6, 10.
St. Mary River formation, Alberta: Oldman River, north bank, SW sec. 12, tp. 10, rge. 2, W5th mer.; Belly River, south side, centre sec. 3, tp. 9, rge. 24, W5th mer.

Aesculus antiqua Dawson

Syntypes 5451a, ? 5451
Dawson J. W. 1875, British N.A. Boundary Com. (Rept. Geol. and Res. 49th Parallel), Appendix A, p. 330, Pl. 16, figs. 9, ? 8.
Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 29, Pl. 2, figs. 16a, ? 16.
Frenchman formation, Saskatchewan; south of Wood Mountain.
=*Carpolithus* (*Cycadinocarpus*?) *ceratops* (Knowlton)

Allantodiopsis erosa (Lesquereux)

Hypotypes 6461, 6465, 6546
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 21, Pl. 3, figs. 3, 6, 9.
Extension formation (Nanaimo group), British Columbia; White Rapids and Wellington collieries, Nanaimo.

Alnites insignis Dawson

Holotype 5633
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 8, fig. 36.
Newcastle formation (Nanaimo group), British Columbia; Newcastle Island.
=*Viburnum insigne* (Dawson)

Alnus perantiqua (Dawson)

Holotype 5632; hypotypes 5635 (*Ulmus dubia* Dawson), 6445, 6446, 6447, 6448, 6449

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 27, Pl. 7, fig. 27.

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 38, Pl. 21, figs. 2, 4, 6; Pl. 22, figs. 1-4.

Comox formation (Nanaimo group), British Columbia; Baynes Sound; No. 8 mine, Cumberland from roof of No. 2 coal seam.

See *Betula perantiqua*
Ulmus dubia

Amentotaxus sp. cf. *campbelli* Florin

Specimens 6400, 6401

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 30, Pl. 13, figs. 3, 4.

Comox formation (Nanaimo group), British Columbia; No. 8 mine, Cumberland, roof of No. 2 coal seam.

Ampelopsis? sp. Bell

Specimen 630

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 66, Pl. 56, fig. 2.

Protection formation (Nanaimo group), British Columbia; Round Island, below Dodds Narrows.

Aneimia fremonti Knowlton

Hypotypes 676, 5605 (*Sphenopteris elongata* Dawson pars), 6550, 6551, 6684

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 19, Pl. 1, figs. 1-5.

Protection formation (Nanaimo group), British Columbia; Protection Island and Round Island below Dodds Narrows.

See *Sphenopteris elongata* Dawson (pars)

Anisophyllum sp. Dawson

Specimen 5607

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 8, fig. 34.

Comox formation (Nanaimo group), British Columbia; Baynes Sound.

=*Quercus* ? *richardsoni* Bell

Anona robusta Lesquereux

Hypotype 6322

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 61, Pl. 15, fig. 6.

Edmonton formation (upper part), Alberta; SW ¼ sec. 15, tp. 34, rge. 22, 4th mer.

Antholithes (Nymphaeites?) marsilioides Bell

Holotype 6179

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 68, Pl. 13, fig. 3.

St. Mary River formation, Alberta; Oldman River, north bank, SW sec. 12, tp. 10, rge. 2, W5th mer.

Artocarpophyllum occidentale Dawson

Syntypes 5671, 5671A

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 60, Pl. 12, fig. 51; Pl. 13, fig. 52.

Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.

=*Artocarpus occidentalis* (Dawson)

Artocarpus occidentalis (Dawson)

Syntypes 5671, 5671A; hypotype ? 674

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 44, Pl. 30, fig. 2; Pl. 31, figs. 1, 2, 5.

Artocarpus occidentalis (Dawson)

Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.
? Protection formation (Nanaimo group), British Columbia; Round Island, below Dodds Narrows.
See *Artocarpophyllum occidentale* (Dawson)

Aspidiophyllum trilobatum Lesquereux

Hypotypes 167, 168
Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 23, Pl. 9, figs. 2, 3.
Upper Cretaceous, British Columbia; Stikine River, ¾ mile from mouth Carlson Creek.

Asplenites tenellus (Knowlton)

Hypotype 646
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 22, Pl. 4, fig. 6.
Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Bauhinia ? *gigantea* Newberry

Hypotypes 6453, 6454
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 55, Pl. 43, figs. 2, 3.
Comox formation (Nanaimo group), British Columbia; No. 8 mine, Cumberland.

Betula perantiqua Dawson

Holotype 5632
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 27, Pl. 7, fig. 27.
Comox formation (Nanaimo group), British Columbia; Baynes Sound.
=*Alnus perantiqua* (Dawson)

Calycithes sp. Bell

Specimen 663
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 73, Pl. 58, fig. 4.
Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Capparites sp. Bell

Specimen 6487
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 51, Pl. 38, fig. 3 pars.
Extension formation (Nanaimo group), British Columbia; Jingle Pot mine, Nanaimo, from roof Wellington coal seam.

Carpites sp. Bell

Specimen 664
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 74, Pl. 59, fig. 1.
Comox formation (Nanaimo group), British Columbia; bore-hole about a mile northeast of Comox No. 8 mine at depth 1,277 feet between No. 3 and No. 4 coal seams.

Carpolithes horridus Dawson

Holotype 5388
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 21, Pl. 1, figs. 3, 3a, 3b.
Dunvegan formation, British Columbia; Pine River forks.
=*Isoetites horridus* (Dawson)

Carpolithus (Cycadinocarpus?) ceratops (Knowlton)

Syntypes 5451a and ? 5451 (*Aesculus antiqua* Dawson); hypotypes 5201, 5203

Dawson J. W. 1875, British N.A. Boundary Com. (Rept. Geol. and Res. 49th Parallel) Appendix A, p. 330, Pl. 16, figs. 9, ? 8.

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 29, Pl. 2, figs. 16a, ? 16.

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 42, Pl. 12, figs. 3, 6.

Frenchman formation, Saskatchewan: south of Wood Mountains; about 4 miles southwest of Eastend.

See *Aesculus antiqua* (Dawson)

Carpolithus (Ginkgoites?) fultoni Bell

Holotype 5142; paratypes 6285, 6286, 6288

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, Pl. 12, figs. 4, 7; Pl. 13, figs. 1, 2.

Edmonton formation, Alberta; Red Deer River, Drumheller.

Carpolithus (Ginkgoites?) kneehillensis Bell

Holotype 6323

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 44, Pl. 11, figs. 1, 2.

Edmonton formation, Alberta; NE ¼ sec. 18, tp. 29, rge. 20, W4th mer.

Carpolithus (Ginkgoites?) selwyni Bell

Holotype 6280; paratype 6289

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 45, Pl. 66, fig. 1.

Eastend formation, Saskatchewan; SW ¼ sec. 28, tp. 7, rge. 3, W4th mer.

Ceanothus cretaceus Dawson

Holotype 5638

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 8, fig. 33.

Comox formation (Nanaimo group), British Columbia; Baynes Sound.

Zizyphus cretaceus (Dawson)

Celastrinites wardii (Knowlton)

Hypotypes 6477, 6496, 6499, 6512

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 58, Pl. 44, fig. 2; Pl. 45, figs. 2-5; Pl. 46, fig. 4.

Extension formation (Nanaimo group), British Columbia; White Rapids coal mine, Nanaimo.

Protection formation (Nanaimo group), British Columbia; Protection Island.

Celastrophyllum perryi Berry

Hypotype 6514

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 58, Pl. 45, fig. 1.

Protection formation (Nanaimo group), British Columbia; Protection Island.

Chrysobalanus nervillosus Bell

Holotype 626; paratypes 627, 642, 643, 645, 650, 5642, 6541, 6552

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 54, Pl. 36, fig. 3; Pl. 37, figs. 2-4; Pl. 38, figs. 1, 2; Pl. 39, fig. 3; Pl. 41, figs. 1, 2.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef above a 1- to- 2-inch coal seam.

Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Protection formation (Nanaimo group), British Columbia; Protection Island.

Cinnamomoides buckhami Bell

Holotype 5670 (*Cinnamomum sezannense* Dawson)

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 49, Pl. 35, fig. 1.

Cinnamomoides buckhami Bell

Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.

See *Cinnamomum sezannense*

Cinnamomum sezannense Watelet

Hypotype 5670

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 64, Pl. 13, fig. 58.

Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.

=*Cinnamomoides buckhami* Bell

Cinnamomum trinervis (Dawson)

Syntypes 5690 and 5691 (*Macclintockia trinervis* Dawson); hypotype 599

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 64, Pl. 10, fig. 38.

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 49, Pl. 33, figs. 2-4.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65° magnetic from Eel reef.

Comox formation (Nanaimo group), British Columbia; Brown's River, south bank, 195 chains in direction S43°W from junction with Puntledge River.

See *Macclintockia trinervis* Dawson

Cissites pseudoplatanus Hollick

Hypotype 6532

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 66, Pl. 62, fig. 2.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above a 1- to- 2-inch coal seam.

Cladophlebis (Gleichenites?) castor (Dawson)

Holotype 5606 (*Neuropteris castor* Dawson); hypotype 6673

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 23, Pl. 4, figs. 2, 4, 7.

Cretaceous of Beaver Harbour, Vancouver Island.

See *Neuropteris castor* Dawson

Cladophlebis columbiana Dawson

Syntypes 5658, 5679

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 55, Pl. 5, figs. 4, 5.

Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.

=*Cladophlebis (Dennstaedtia?) columbiana* (Dawson)

Cladophlebis (Dennstaedtia?) columbiana (Dawson)

Syntypes 5658 and 5679 (*Cladophlebis columbiana* Dawson); hypotypes 672, 6393, ? 6466, 6473, 6484, 6678

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 25, Pl. 5, figs. 2, 4-6; Pl. 6, figs. 1-3, 5, 6; Pl. 7, fig. 3.

Extension formation (Nanaimo group), British Columbia; Wellington, White Rapids, and Jingle Pot mines, Nanaimo.

Protection formation (Nanaimo group), British Columbia; Protection Island.

See *Cladophlebis columbiana*

Cladophlebis sp. A Bell

Specimens 687, 6391

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 26, Pl. 5, figs. 8, 9.

Comox formation (Nanaimo group), British Columbia; No. 8 mine, Cumberland.

Extension formation (Nanaimo group), British Columbia; Jingle Pot mine, Nanaimo.

Cladophlebis sp. B Bell

Specimen 6672
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 26, Pl. 6, fig. 4.
Comox formation (Nanaimo group), British Columbia; bore-hole ahead of No. 8 mine, Cumberland, at depth 1,080 feet.

Cladophlebis (Gleichenites?) usheri Bell

Holotype 6389; paratypes 616 (not 6672), 677
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 24, Pl. 4, figs. 3, 9; Pl. 5, figs. 1, 7.
Comox formation (Nanaimo group), British Columbia; No. 8 mine, Cumberland.

Cladophlebis (Gleichenites) vahliana Heer

Hypotypes 6392, 6671, 6677
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 19, Pl. 1, figs. 7, 9; Pl. 5, fig. 3.
Comox formation (Nanaimo group), British Columbia; south fork T Sable River.

Combretum cordifolia (Lesquereux)

Hypotypes 5677 (syntype of *Magnolia capellini* Dawson), 608, 654, 5652
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 69, Pl. 63, fig. 1; Pl. 65, figs. 1, 2, 3 pars.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above a 1- to- 2-inch coal seam.
See *Magnolia capellini* pars

Combretum sp. cf. *leve* Berry

Specimens 554, 555, 556, 5666
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 69, Pl. 64, figs. 1-3; Pl. 66, fig. 3.
Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.
Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Cornus obesus Dawson

Holotype (missing)
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 62, Pl. 9, fig. 30.
Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.
=*Rhamnites eminens* Dawson

Cupanites crenularis Bell

Holotype 682; paratypes 665, 6415, 6432, 6433, 6434, 6435, 6436, 6438, 6439
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 60, Pl. 50, figs. 2, 3, 7; Pl. 51, figs. 2, 3; Pl. 52, figs. 2-4; Pl. 53, fig. 2; Pl. 55, fig. 6.
Comox formation (Nanaimo group), British Columbia: roof No. 2 coal seam at No. 8 mine, Cumberland; Union Mine, Comox.

Cycadites unjiga Dawson

Syntypes 5125, 5393
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 20, Pl. 1, figs. 2, 2a, 2b.
Dunvegan formation, British Columbia; Pine River forks, Peace River area.
Dunvegan formation, Alberta; 25 miles above Dunvegan, Peace River.
=*Pseudocycas unjiga* (Dawson)

Dalbergites borealis (Heer)

Hypotype 650

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 55, Pl. 39, fig. 2.

Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.

Dammarites dubius Dawson

Holotype 5689

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 56, Pl. 6, fig. 8.

Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.

=?*Dammarites robinsi* (Dawson)

Dammarites microlepis (Heer)

Hypotype 660

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 34, Pl. 18, fig. 9.

Protection formation (Nanaimo group), British Columbia; Protection Island.

Dammarites robinsi (Dawson)

Holotype 5659 (*Noeggerathiopsis robinsi* Dawson); hypotypes 5613 (*Phragmites cordaiformis* Dawson), ? 5689 (*Dammarites dubius* Dawson), 4990 and 5006 (*Zamites albertensis* Berry), 6401

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 33, Pl. 19, figs. 2, 4, 6.

Extension formation (Nanaimo group), British Columbia; Wellington and Vancouver collieries, Nanaimo.

Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Allison formation, Alberta; east of Crowsnest Lake.

Upper Cretaceous, British Columbia; North Saanich, Vancouver Island.

See *Phragmites cordaiformis*
Noeggerathiopsis robinsi
Zamites albertensis
?*Dammarites dubius*

Davillites richardsoni Dawson

Syntypes 5603, 6676; hypotypes 5604, 6674, 6675, 6682, 6683, 6685, 6686

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 25, Pl. 5, figs. 18, 18a, 18b.

Bell W. A. 1957, Geol. Surv., Canada, p. 20, Pl. 2, figs. 1-10, Pl. 3, figs. 1, 8.

Protection formation (Nanaimo group), British Columbia; Protection Island.

Extension formation (Nanaimo group), British Columbia; Jingle Pot mine, Nanaimo.

Dewalquea sp. Bell

Specimens 570, 571

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 72, Pl. 67, figs. 1, 6.

Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Dewalquea sp. cf. *trifoliata* Newberry

Specimen 562

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 72, Pl. 67, fig. 5.

Comox formation (Nanaimo group), British Columbia; south bank Brown's River, 197 chains in direction S93°W from junction of Brown's and Puntledge Rivers.

Dicotylophyllum sp. Bell

Specimen 632

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 73, Pl. 62, fig. 4.

Comox formation (Nanaimo group), British Columbia; No. 8 mine, Cumberland, from roof of No. 2 coal seam.

Dicotylophyllum sp. cf. *Quercus rhamnoides* Lesquereux
Specimen 607
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 72, Pl. 61, fig. 3.
Extension formation (Nanaimo group), British Columbia; Jingle Pot coal mine, Nanaimo.

Dillenites paucidentatus Bell
Holotype 635
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 68, Pl. 62, fig. 3 pars.
Comox formation (Nanaimo group), British Columbia; No. 5 mine, Cumberland.

Diospyros eminens Dawson
Holotype 5667
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 62, Pl. 10, fig. 40.
Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.
=*Rhamnites eminens* (Dawson)

Diospyros nitida Dawson
Holotype 5132
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 22, Pl. 3, fig. 10.
Dunvegan formation, British Columbia; Pine River canyon.

Diospyros vancouverensis Dawson
Holotype 5687
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 8, fig. 32.
Protection formation (Nanaimo group), British Columbia; 2¼ miles up Nanaimo River.
=*Rhamnites eminens* (Dawson)

Dombeyopsis bebrascensis (Newberry)
Hypotypes 5042, 5165, 5166, 6333, 6341, 6342, 6343, 6360, 6361
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 62, Pl. 2, figs. 1-4; Pl. 9, figs. 1-3; Pl. 10, fig. 1; Pl. 12, figs. 9, 10; Pl. 19, fig. 1; Pl. 20, fig. 1.
Edmonton formation, Alberta: Red Deer River, sec. 32, tp. 31, rge. 21, W4th mer; 7 miles northwest of Drumheller, road opposite Kneehills Creek.
Brazeau formation, Alberta; Upper Cripple Creek.
Wapiti group, Alberta; Mistanusk (Pine) River, above tributary that enters about 5 miles north-northwest of where B.C.-Alta. boundary crosses river.

Dombeyopsis ovata Knowlton
Hypotypes 543, 6493, 6515, 6516
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 67, Pl. 58, figs. 1-3, 5.
Protection formation (Nanaimo group), British Columbia; Protection Island.

Dryophyllum elongatum Dawson
Holotype 5646; hypotypes 5596 (*Dryophyllum neillianum* Dawson), 5599 (*Quercus holmesii* Dawson), 5601 (*Ulmophyllum priscum* Dawson), 6700 (*Dryophyllum occidentale* Dawson pars)
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 58, Pl. 7, fig. 20.
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 39, Pl. 23, fig. 1; Pl. 24, figs. 1, 2, 4; Pl. 25, fig. 2.
Nanaimo group, British Columbia; north shore Port McNeill, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.
See *Dryophyllum neillianum*
Quercus holmesii
Ulmophyllum priscum
Dryophyllum occidentale
Quercus vancouveriana

Dryophyllum fallax (Dawson)
Holotype 5600; hypotype 653
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 40, Pl. 26, figs. 2, 3.
Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.
See *Juglandites fallax*

Dryophyllum furcinervosum Bell
Holotype 6486
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 40, Pl. 25, fig. 3.
Extension formation (Nanaimo group), British Columbia; Jingle Pot mine, from waste dump, Wellington coal seam, Nanaimo.

Dryophyllum neillianum Dawson
Holotype 5596
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 58, Pl. 7, fig. 19.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef.
=*Dryophyllum elongatum* Dawson

Dryophyllum occidentale Dawson pars
Syntype 6700
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 58, Pl. 7, fig. 19.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef.
=*Dryophyllum elongatum* Dawson

Dryophyllum occidentale Dawson pars
Syntype 5645a (=*reverse* of 5694)
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 58, Pl. 7, fig. 18.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef.
=*Rhamnites eminens* (Dawson)

Dryophyllum ripleyensis (Berry)
Hypotype 538
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 41, Pl. 25, fig. 1.
Protection formation (Nanaimo group), British Columbia; Round Island, below Dodds Narrows.

Dryophyllum whitmani (Knowlton)
Hypotypes 610, 6534, 6535
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 41, Pl. 29, figs. 1, 2; Pl. 30, fig. 1.
Protection formation (Nanaimo group), British Columbia; Round Island, Nanaimo.

Dryopteris georgei? Knowlton
Hypotype (?) 6352
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 40, Pl. 4, fig. 1.
Frenchman formation, Saskatchewan; near Eastend.

Dryopteris kennerlyi (Newberry)
Hypotypes 5631, 6691
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 22, Pl. 3, figs. 5, 7.
Protection formation (Nanaimo group), British Columbia: 2¼ miles up Nanaimo River; Round Island, below Dodds Narrows.
See *Sphenopteris elongata*

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Elatocladus albertacensis Bell
Holotype 199; paratypes 199a, 199b
Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 26, Pl. 13, figs. 1-3.
Belly River group, Alberta; sec. 16, tp. 22, rge. 4, W5th mer.

Elatocladus intermedius (Hollick)
Hypotypes 5176, 5944, 5966, 6113, 6278
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 51, Pl. 5, figs. 7-9; Pl. 6, figs. 1-3.
Brazeau formation, Alberta: near mouth of Prairie Creek, tributary to Athabasca River; south side abandoned railway grade, Athabasca River, Entrance area.
Edmonton formation, Alberta; railway track south of Bow River, sec. 13, tp. 26, rge. 5, W5th mer.

Equisetum articum Heer
Hypotype 5206
Berry E. W. 1924, Can. Field-Nat., vol. 38, p. 131, fig. 1.
Frenchman formation, Saskatchewan; sec. 15, tp. 1, rge. 5, W3rd mer.
=*Equisetum perlaevigatum* Cockerell

Equisetum perlaevigatum Cockerell
Hypotypes 5206, 6180, 6181, 6182
Berry E. W. 1924, Can. Field-Nat., vol. 38, p. 131, fig. 1.
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 36, Pl. 6, figs. 4-7.
St. Mary River formation, Alberta; Oldman River, north bank, SW sec. 12, tp. 10, rge. 2, W5th mer.
See *Equisetum articum*

Equisetum sp. Berry
Specimen 7392
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 15, Pl. 1, fig. 1.
Whitemud formation, Saskatchewan; north side Big Muddy valley, sec. 2, tp. 4, rge. 25, W2nd mer.

Fagophyllum nervosum Dawson
Holotype 5597
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 58, Pl. 7, fig. 16.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.
=*Rhamnites eminens* (Dawson)

Fagophyllum retosum Dawson
Holotype 5594
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 57, Pl. 7, fig. 15.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.
=*Rhamnites eminens* (Dawson)

Fagus proto-nucifera Dawson
Syntypes 5129, 5129a
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 21, Pl. 2, figs. 6, 6a.
Dunvegan formation, British Columbia; Pine River.

Ficus contorta Dawson
Holotype 5647
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 60, Pl. 9, fig. 31.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.
=*Rhamnites eminens* (Dawson)

Ficus laurophyllidia Dawson

Holotype 5662

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 60, Pl. 10, fig. 37.

Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.

=*Ternstroemites harwoodensis* (Dawson)

Ficus magnoliifolia Lesquereux

Hypotype 6490

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 60, Pl. 9, fig. 35,

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.

=*Rhamnites eminens* (Dawson)

Ficus maxima Dawson

Holotype 5128

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, sec. 4, p. 21, Pl. 2, fig. 5.

Dunvegan formation, British Columbia; Coal Brook, tributary to Pine River.

Ficus rotundata Dawson

Syntypes 5649, 6489

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 60, Pl. 9, figs. 32, 33A.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.

=*Rhamnites eminens* (Dawson)

Ficus speciossima canadensis Berry

Holotype 7402

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 30, Pl. 4, fig. A.

Whitemud formation, Saskatchewan; west side Wood Mountain Creek, NW¼ sec. 15, tp. 5, rge. 3, W3rd mer.

Ficus sp. cf. *mississippiensis* (Lesquereux)

Specimens 6470, 6498

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 44, Pl. 33, figs. 1, 5.

Extension formation (Nanaimo group), British Columbia; White Rapids coal mine, Nanaimo.

Protection formation (Nanaimo group), British Columbia; Protection Island.

Ficus wellingtoniae Dawson

Syntypes 5676, 5600

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 60, Pl. 9, figs. 33, 34.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.

=*Rhamnites eminens* (Dawson)

Filicites knowltoni Dorf

Hypotype 5194

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 41, Pl. 1, figs. 1, 3.

Edmonton formation (upper part), Alberta; Sarcee Butte, tp. 31, rge. 22, W4th mer.

Fraxinus leii Berry

Hypotype 5195

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 77, Pl. 8, figs. 2, 3.

Edmonton formation, Alberta; SE ¼ sec. 12, tp. 34, rge. 22, W4th mer.

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Fraxinus sp. Bell

Specimens 585, 6471

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 70, Pl. 60, fig. 2; Pl. 63, fig. 3.

Extension formation (Nanaimo group), British Columbia; White Rapids coal mine, Nanaimo.

Geonomites imperialis (Dawson)

Holotype 5622a; hypotypes 5622, 6464

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 37, Pl. 22, fig. 5; Pl. 23, fig. 2; Pl. 24, fig. 3.

Extension formation (Nanaimo group), British Columbia; Harwood colliery and White Rapids mine, Nanaimo.

See *Sabal imperialis*

Ginkgo dawsoni Knowlton pars

Syntypes 5609 and 5683 (*Salisburia pusilla* Dawson); hypotype 6558

Knowlton F. H. pars 1919, U.S. Geol. Surv., Bull. 696, p. 302.

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 29, Pl. 7, figs. 1, 2, 4.

Nanaimo group, British Columbia; north shore Port McNeill, bearing N65°E magnetic from Eel reef.

See *Salisburia pusilla*

Ginkgo pusilla

Ginkgo pusilla (Dawson)

Syntypes 5609 and 5683 (*Salisburia pusilla* Dawson)

Knowlton F. H. 1898, U.S. Geol. Surv., Bull. 152, p. 111.

Nanaimo group, British Columbia; north shore Port McNeill.

=*Ginkgo dawsoni* Knowlton pars.

See *Salisburia pusilla*

Ginkgoites sp. Bell

Specimens 5174, 5175

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 44, Pl. 3, figs. 1, 2.

Edmonton formation, Alberta; Sauffer ranch, Red Deer River.

Glyptostrobus comoxensis Bell

Holotype 680; paratypes 656, 657, 658, 659, 678, 679, 6376, 6377, 6379, 6381, 6383, 6384, 6385, 6386, 6412, 6536, 6695, 6696, 6697

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 32, Pl. 7, figs. 5, 6; Pl. 10, figs. 1, 2; Pl. 14, figs. 1, 2; Pl. 15, figs. 1-6; Pl. 16, figs. 1-9; Pl. 17, figs. 2, 5, 6.

Comox formation (Nanaimo group), British Columbia; collieries 5 and 9, Cumberland.

Isoetites horridus (Dawson)

Holotype 5388

Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 78, Pl. 50, fig. 3.

Dunvegan formation, British Columbia.

See *Carpolithes horridus*

Jenninsella arctica (Heer)

Hypotype 6337

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 57, Pl. 4, fig. 6.

Edmonton formation (lower part), Alberta; 7 miles northwest of Drumheller, opposite mouth of Kneehill Creek in road-cut.

Juglandites? sp. Dawson

Syntype 560

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 11, p. 59, Pl. 10, fig. 43.

Juglandites? sp. Dawson

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef.

=*Phaseolites manhassettensis* Hollick

Juglans harwoodensis Dawson

Holotype 5623

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 28, fig. 31.

Extension formation (Nanaimo group), British Columbia; Harwood colliery, Nanaimo.

=*Ternstroemites harwoodensis* (Dawson)

Juniperites gracilis (Heer)

Hypotype 6324

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 52, Pl. 4, fig. 5.

Edmonton formation, Alberta; 7 miles northwest of Drumheller, opposite mouth of Kneehill Creek in road-cut.

Koelreuteria prenigricans Bell

Holotype 592; paratypes 589, 593, 594, 602

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 61, Pl. 51, fig. 1; Pl. 54, fig. 2; Pl. 55, figs. 1, 4, 7.

Comox formation (Nanaimo group), British Columbia: Brown's River, south bank, 197 chains in direction S93°W from junction Brown's and Puntledge Rivers; T Sable River, east bank, about 5 chains above junction with Tumble Water Creek.

Laurophyllum debile Dawson

Holotype 5390

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 22, Pl. 2, figs. 7, 7a.

Dunvegan formation, British Columbia; east branch of Pine River.

Laurophyllum insigne Dawson

Syntypes 5675, 6424; hypotypes 681, 6425

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 61, Pl. 7, figs. 24, 25.

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 51, Pl. 36, figs. 1, 2; Pl. 37, fig. 1; Pl. 65, fig. 3.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef.

Laurus asiminoides? Berry

Hypotype (?) 5642

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 50, Pl. 36, fig. 4.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.

See *Proteoides* sp.

Leguminosites probalsamifera (Dawson)

Holotype 5641; hypotypes 603, 604, 640

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 57, Pl. 7, fig. 23.

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 56, Pl. 40, fig. 2; Pl. 42, figs. 1, 2, 7.

Comox formation (Nanaimo group), British Columbia: Trent River, 100 chains in direction S81°W from junction main Trent River and its south fork; Brown's River, south bank, 197 chains in direction S93°W from junction with Puntledge River.

Leguminosites probalsamifera (Dawson)

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef.
See *Populites probalsamifera*

Leguminosites rhamnifolioides Bell

Holotype 6488; paratypes 563, 564, 565
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 56, Pl. 38, fig. 3 pars; Pl. 40, fig. 3; Pl. 42, figs. 3, 4.
Extension formation (Nanaimo group), British Columbia: Wellington colliery, Nanaimo; Jingle Pot mine, Nanaimo, from waste dump of mine on Wellington coal seam.
Comox formation (Nanaimo group), British Columbia; Baynes Sound.

Leguminosites (*Cassia* ?) sp. Bell

Specimen 6543
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 57, Pl. 42, fig. 5.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.

Leguminosites stagnum Bell

Holotype 6171; paratype 6344
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 68, Pl. 1, figs. 8, 9.
St. Mary River formation, Alberta; Oldman River, sec. 6, tp. 10, rge. 1, W5th mer.

Lemna (Spirodela) scutata (Dawson)

Syntypes 5456, 5456a, 5457a
Dawson J. W. 1875, British N.A. Boundary Com., (Rept. Geol. and Res. 49th Parallel), Appendix A, p. 329, Pl. 16, figs. 5, 6, 7.
Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 23, Pl. 1, figs. 6, 6a.
Frenchman formation, Saskatchewan; badlands south of Wood Mountain.
=*Spirodela scutata* Dawson

Liriodendron giganteum Lesquereux

Hypotype 5669 (*Liriodendron praetulipiferum* Dawson)
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 47, Pl. 32, fig. 3.
Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.
See *Liriodendron praetulipiferum*

Liriodendron praetulipiferum Dawson

Holotype 5669
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 47, Pl. 32, fig. 3.
Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.
=*Liriodendron giganteum* Lesquereux

Liriodendron succedens Dawson

Holotype 5692; hypotypes 6440, 6441
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 62, Pl. 8, fig. 26.
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 48, Pl. 34, figs. 2, 4, 5.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to 2-inch coal seam.
Comox formation (Nanaimo group), British Columbia; No. 5 coal mine, Cumberland.

Macclintockia trinervis Dawson

Syntypes 5690, 5691
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 64, Pl. 10, fig. 38.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef.
=*Cinnamomum trinervis* (Dawson)

Macrotaeniopteris vancouverensis Dawson

Syntypes 5657, 5657a
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 24, Pl. 5, figs. 1-3.
Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.
=*Nilssonia vancouverensis* (Dawson)

Magnolia capellini Heer

Hypotype 5653
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 63, Pl. 13, fig. 49a.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to 2-inch coal seam.
=*Pterospermites* sp. Bell

Magnolia capellini Heer

Hypotype 5677
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 63, Pl. 11, fig. 49.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to 2-inch coal seam.
=*Combretum cordifolia* (Lesquereux)

Magnolia magnifica Dawson

Holotype 5133
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1883, vol. 1, sec. 4, p. 22, Pl. 3, fig. 11.
Bell W. A. 1956, Geol. Surv., Canada, Mem. 285, p. 130, Pl. 79, fig. 1.
Dunvegan formation, British Columbia; Coal Brook, tributary to Pine River.

Magnolia occidentalis Dawson

Holotype 5663
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 63, Pl. 10, fig. 36.
Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.
=*Rhamnites eminens* (Dawson)

Menispermites acutilobus Lesquereux

Hypotype 6479
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 46, Pl. 35, fig. 3.
Comox formation (Nanaimo group), British Columbia; No. 5 coal mine, Cumberland.

Menispermites belli Berry

Hypotype 7419
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 61, Pl. 12, fig. 5.
Whitemud formation, Saskatchewan; Wood Mt. Creek, west side, NW ¼ sec. 15, tp. 5, rge. 3, W3rd mer.

Menispermites reniformis Dawson

Holotype 5134

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1883, vol. 1, sec. 4, p. 23, Pl. 4, fig. 12.

Dunvegan formation, British Columbia; Coal Brook, tributary to Pine River.

Menispermites torosus Bell

Holotype 6451

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 47, Pl. 36, fig. 5.

Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Menispermum dauricumoides Bell

Holotype 6442; paratypes 583, 6443

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 46, Pl. 33, fig. 6; Pl. 34, figs. 1, 3.

Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Metasequoia cuneata (Newberry)

Hypotypes 606, 5618 (*Torreya densifolia* Dawson), 5639 and 5682 (*Sequoia langsdorfii* Dawson), 6388, 6476, 6497, 6505, 6507, 6529, 6694

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 31, Pl. 11, figs. 3, 5, 6; Pl. 12, figs. 1-3; Pl. 13, fig. 2; Pl. 17, figs. 1, 7.

Protection formation (Nanaimo group), British Columbia: Protection Island; Round Island.

Extension formation (Nanaimo group), British Columbia; White Rapids mine, Nanaimo.

Comox formation (Nanaimo group), British Columbia; No. 8 mine, Cumberland.

Nanaimo group, Port McNeill; north shore, Port McNeill, bearing N65° magnetic from Eel reef.

See *Torreya densifolia*
Sequoia langsdorfii

Myrica? sp. Bell

Specimen 169

Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49 (Geol. Ser. No. 48), p. 25, Pl. 10, fig. 1.

Upper Cretaceous, British Columbia; Stikine River, ¾ mile from mouth Carlson Creek.

Nelumbites striatus Berry

Syntypes 7421, 7422

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 38, Pl. 8, figs. 1-3.

Whitemud formation, Saskatchewan; north side Big Muddy valley.

=*Nymphaeites striatus* (Berry)

Nelumbo dawsoni Hollick

Hypotype 7412

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 36, Pl. 7, fig. 1.

Whitemud formation, Saskatchewan; west side Wood Mountain Creek, NW ¼ sec. 15, tp. 5, rge. 3, W3rd mer.

Nelumbo tenuifolia (Lesquereux)

Hypotype 7413

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 37, Pl. 7, fig. 2.

Whitemud formation, Saskatchewan; north side Big Muddy valley, sec. 2, tp. 4, rge. 25, W2nd mer.

Neuropteris castor Dawson

Holotype 5606

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 24, Pl. 4, figs. 14, 14a.

Cretaceous; Beaver Harbour, Vancouver Island.

=*Cladophlebis* (*Gleichenites*?) *castor* (Dawson)

Nilssonia lata Dawson

Holotype 5608

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 24, Pl. 4, fig. 15 *bis*.

Comox formation (Nanaimo group), British Columbia; Baynes Sound, Comox coalfield.

=*Pseudoctenis latipennis* (Heer)

Nilssonia serotina Heer

Hypotypes 5173, 5936, 6336, 6463

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 42, Pl. 1, figs. 5, 7; Pl. 4, fig. 4.

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 28, Pl. 13, fig. 1.

Edmonton formation, Alberta; Red Deer River, 10 miles northwest of Munson.

Brazeau formation, Alberta; old railway grade, ½ mile east of Entrance.

Newcastle formation (Nanaimo group), British Columbia; No. 10 mine, Nanaimo.

Nilssonia vancouverensis (Dawson)

Syntype 5657 (*Macrotaeniopteris vancouverensis* Dawson); hypotypes 5620 (*Taeniopteris plumosa* Dawson), 6402, 6403

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 27, Pl. 11, figs. 1, 2, 4; Pl. 12, fig. 5.

Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.

Comox formation (Nanaimo group), British Columbia: No. 8 mile, Cumberland; Baynes Sound, Comox coalfield.

See *Macrotaeniopteris vancouverensis*
Taeniopteris plumosa

Nilssonia sp. cf. *mehli* Berry

Specimen 6406

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 29, Pl. 14, fig. 3.

Comox formation (Nanaimo group), British Columbia; No. 8 mine, from roof No. 2 coal seam.

Noeggerathiopsis robinsi Dawson

Holotype 5659

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 56, Pl. 6, fig. 7.

Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.

=*Dammarites robinsi* (Dawson)

Nymphaeites angulatus (Newberry)

Hypotypes 6185, ? 6277; 7458, 7459, 7460, 7461, 7549, 7551, 7552

Trapa ? *microphylla* Berry.

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 64, Pl. 17, figs. 4, ? 7.

St. Mary River formation, Alberta; Oldman River, north bank, SW sec. 12, tp. 10, rge. 2, W5th mer.

Wapiti group, Alberta; Rock Creek, Pedley area.

Whitemud formation, Saskatchewan; north side Big Muddy valley.

Frenchman formation, Saskatchewan; badlands south of Wood Mountain.

See *Trapa*? *microphylla* Berry

Nymphaeites sp. Bell
Specimens 651, 652
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 45, Pl. 32, figs. 1, 2.
Extension formation (Nanaimo group), British Columbia; Vancouver colliery, Nanaimo.
Comox formation (Nanaimo group), British Columbia; Baynes Sound.

Nymphaeites striatus (Berry)
Syntypes 7421 and 7422 (*Nelumnites striatus* Berry); hypotypes 6169, 6183, 6186, 6187, 6188
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 67, Pl. 17, figs. 1-3, 5, 6.
Whitemud formation, Saskatchewan; north side Big Muddy valley.
St. Mary River formation, Alberta; Oldman River, north bank, SW ¼ sec. 12, tp. 10, rge. 2, W5th mer.
See *Nelumbites striatus*

Onoclea hebridica (Forbes)
Hypotypes 539, 675, 6509
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 22, Pl. 3, figs. 2, 4; Pl. 4, fig. 10.
Protection formation (Nanaimo group), British Columbia; Round Island, below Dodds Narrows.

Paliurus neillii Dawson pars
Syntype 5693
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 62, Pl. 11, fig. 45.
Comox formation (Nanaimo group), British Columbia; Baynes Sound.
=*Zizyphus cretaceus* (Dawson)

Paliurus neillii Dawson pars
Syntype 5656
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 3, sec. 4, p. 62, Pl. 11, fig. 44.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to 2-inch coal seam.
=*Zizyphoides neillii* (Dawson)

Paliurus? sp. Berry
Specimen 5502
Berry E. W. 1930, Geol. Surv., Canada, Mus. Bull. 63, p. 25, Pl. 5, fig. 7.
Eastend formation, Alberta; SW ¼ sec. 6, tp. 8, rge. 3, W4th mer.

Phaseolites manhassettensis Hollick
Hypotypes 560 (*Juglandites*? sp. Dawson), 561, 628
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 57, Pl. 43, fig. 1; Pl. 44, figs. 3, 4.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to 2-inch coal seam.
See *Juglandites*? sp.

Philadelphus normalis Bell
Holotype 6500; paratype 6501
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 52, Pl. 39, fig. 6; Pl. 40, fig. 4.
Protection formation (Nanaimo group), British Columbia; Protection Island.

Phragmites cordaiformis Dawson
Holotype 5613
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 26. Pl. 5, fig. 22.
Upper Cretaceous, British Columbia; north Saanich, Vancouver Island.
=*Dammarites robinsi* (Dawson)

Pinus suskwaensis Dawson

Holotype 5137

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 23, Pl. 3, fig. 36.

Dunvegan formation, Alberta; Suskwa River, tributary to Wapiti River.

Pistia corrugata Lesquereux

Hypotypes 5925, 5926

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 81, Pl. 12, figs. 1, 2.

Whitemud formation, Saskatchewan; Wood Mt. Creek, NW ¼ sec. 15, tp. 5, rge. 3, W3rd mer.

Pityostrobus (*Cunninghamiostrobus*?) sp. Bell

Specimens 5081, 5082

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 47, Pl. 7, figs. 1, 2.

Edmonton formation, Alberta; right of Acme road, 2 miles southeast of Drumheller.

Platanus affinis Lesquereux

Hypotypes 544, 5685 (*Platanus primaeva*? Dawson), 6513, 6444, 6556

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 52, Pl. 37, fig. 5; Pl. 39, figs. 1, 4, 5.

Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.

Protection formation (Nanaimo group), British Columbia; Round Island, below Dodds Narrows.

Comox formation (Nanaimo group), British Columbia: No. 8 mine, Cumberland; south bank Trent River, 100 chains in direction S81°W from junction main Trent River with its south fork.

See *Platanus primaeva*?

Platanus nanaimo (Dawson)

Holotype 5637

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 8, fig. 35.

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 54, Pl. 40, fig. 5.

Comox formation (Nanaimo group), British Columbia; Baynes Sound.

See *Protophyllum nanaimo*

Platanus primaeva? Lesquereux

Hypotype ? 5685

Dawson J. W. 1894, Roy. Soc. Canada Trans 1893, vol. 11, sec. 4, p. 59, Pl. 8, fig. 29.

Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.

=*Platanus affinis* Lesquereux

Platanus raynoldsii integrifolia Lesquereux

Hypotype 6313

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 60, Pl. 19, fig. 4.

Edmonton formation (upper part), Alberta; NE ¼ sec. 10, tp. 34, rge. 22, W4th mer.

Platanus uniformis Bell

Syntypes 185, 185a

Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 24, Pl. 11.

Upper Cretaceous, British Columbia; Stikine River, ¾ mile from mouth Carlson Creek.

Platanus sp. Berry

Specimen 4991

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 70, Pl. 12.

Allison formation (lower coal-bearing zone), Alberta; coal tunnel east of Matheson Brook.

Populites cyclophylla (Heer)

Hypotype 5131

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 22, Pl. 3, fig. 9.

Dunvegan formation, British Columbia; Pine River canyon.

Populites probalsamifera Dawson

Holotype 5641

Dawson J. W. 1893, Roy. Soc. Canada Trans. 1892, vol. 11, sec. 4, p. 57, Pl. 7, fig. 23.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to 2-inch coal seam.

=*Leguminosites probalsamifera* (Dawson)

Populus kerri Bell

Holotype 164

Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 25, Pl. 12.

Upper Cretaceous, British Columbia; Stikine River, ¾ mile from mouth Carlson Creek.

Populus protozadachii Dawson

Holotype 5627

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 26, Pl. 7, fig. 25.

Newcastle formation (Nanaimo group), British Columbia; Newcastle Island.

=*Trochodendroides (Cercidiphyllum) arctica* (Heer)

Populus rhomboidea Lesquereux

Hypotype 5684

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 26.

Newcastle formation (Nanaimo group), British Columbia; Newcastle Island.

=*Viburnum insigne* (Dawson)

Populus sp. Bell

Specimen 584

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 38, Pl. 25, fig. 5.

Protection formation (Nanaimo group), British Columbia; Round Island below Dodds Narrows.

Proteoides longus Heer

Hypotype 5396

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 22, Pl. 2, fig. 8.

Dunvegan formation, British Columbia; Coal Brook, tributary to Pine River.

Proteoides major Dawson

Holotype 5680

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 61, Pl. 12, fig. 54.

Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.

=*Protophyllocladus polymorpha* (Lesquereux)

Proteoides sp. Dawson

Specimen 5642

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 61, Pl. 13, fig. 55.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to 2-inch coal seam.

=*Laurus asiminoides*? Berry

Protophyllocladus polymorpha (Lesquereux)

Hypotypes 5619 (*Salisburia baynesiana* Dawson), 5621 (*Adiantites praelongus* Dawson), 5681 (*Adiantites praelongus* Dawson), 5680 (*Proteoides major* Dawson), 611, 6407, 6408, 6409, 6411, 6413, 6506, 6693

Bell W. A. 1937, Geol. Surv., Canada, Mem. 293, p. 35, Pl. 19, fig. 5; Pl. 20, figs. 1, 2, 4; Pl. 21, figs. 1, 3, 5; Pl. 25, fig. 4.

Comox formation (Nanaimo group), British Columbia; Baynes Sound; No. 8 mine, Cumberland.

Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.

Protection formation (Nanaimo group), British Columbia; Protection Island.

See *Adiantites praelongus*
Salisburia baynesiana
Proteoides major

Protophyllum boreale (Dawson)

Holotype 5398

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 23, Pl. 4, fig. 13.

Dunvegan formation, British Columbia; Coal Brook, tributary to Pine River.

Protophyllum nanaimo (Dawson)

Holotype 5637

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 8, fig. 35.

Comox formation (Nanaimo group), British Columbia; Baynes Sound.

=*Platanus nanaimo* (Dawson)

Protophyllum stikinensis (Bell)

Holotype 166

Bell W. A. 1928, Geol. Surv., Canada, Mus. Bull. 49, p. 24, Pl. 10, fig. 2.

Upper Cretaceous, British Columbia; Stikine River ¾ mile from mouth Carlson Creek.

Pseudoctenis latipennis (Heer)

Hypotypes 6396, 6398, 6426, 6690

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 26, Pl. 7, fig. 7; Pl. 8; Pl. 9; Pl. 10, fig. 3.

Comox formation (Nanaimo group), British Columbia; No. 8 mine, Cumberland, roof No. 2 coal seam, Comox coalfield.

See *Nilssonia lata*

Pseudocycas unjiga (Dawson)

Syntypes 5125, 5393

Berry E. W. 1921, Am. J. Sci., 5th ser., vol. 2, pp. 183-186.

See *Cycadites unjiga*

Pteris (Oleandra) glossopteroides Dawson

Holotype 5602

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 24, Pl. 4, figs. 16, 16a.

Protection formation (Nanaimo group), British Columbia; Protection Island.

=*Saccoloma gardneri* (Lesquereux)

Pterospermites sp. Bell

Specimens 684, 5653 (*Magnolia capellini* Dawson pars)

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 67, Pl. 59, fig. 3; Pl. 63, figs. 2, 4.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.

See *Magnolia capellini*

Pyrus sp. Bell.

Specimen 6523

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 54, Pl. 40, fig. 1; Pl. 41, fig. 3.

Protection formation (Nanaimo group), British Columbia; Round Island, below Dodds Narrows.

Quercus holmesii Lesquereux

Hypotype 5599

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 59, Pl. 7, fig. 21.

Nanaimo group, British Columbia; Port McNeill, north shore, on bearing N65°E from Eel reef.

=*Dryophyllum elongatum* Dawson

Quercus ? richardsoni Bell

Syntypes 6553a-c; paratypes 586, 587, 598, 629, 638, 639, 5607 (*Anisophyllum* sp. Dawson), 6511, 6555

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 42, Pl. 26, fig. 1; Pl. 27, figs. 1-3; Pl. 28, figs. 1-3; Pl. 31, figs. 3, 4.

Comox formation (Nanaimo group), British Columbia; Baynes Sound; south bank Trent River, 100 chains in direction S81°W from junction main Trent and south fork.

See *Anisophyllum* sp.

Quercus vancouveriana (Trelease)

Syntype 6700

Trelease W. 1918, Brooklyn Bot. Gardens Mem., vol. 1, p. 499.

Nanaimo group, British Columbia; north shore Port McNeill, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to- 2-inch coal seam.

=*Dryophyllum elongatum* Dawson

Quercus victoriae Dawson

Holotype 5634

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 27, Pl. 7, fig. 28.

Newcastle formation (Nanaimo group), British Columbia; Newcastle Island.

=*Rhamnites eminens* (Dawson)

Quercus sp. cf. *pseudowestfalica* Berry

Specimens 6510, 6511

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 43, Pl. 26, fig. 5; Pl. 27, fig. 4.

Protection formation (Nanaimo group), British Columbia; Protection Island.

Rhamnites eminens (Dawson)

Holotype 5667; hypotypes 5594 (*Fagophyllum retosum* Dawson), 5597 (*Fagophyllum nervosum* Dawson), 5600 and 5676 (*Ficus wellingtoniae* Dawson), 5634 (*Quercus victoriae* Dawson), 5645a (*Dryophyllum occidentale* Dawson pars= reverse of 5694), 5694 (*Salix* sp. Dawson), 5649 and 6489 (*Ficus rotundata* Dawson), 5647 (*Ficus contorta* Dawson), 5663 (*Magnolia occidentalis* Dawson), 5655 and 5687 (*Diospyros vancouverensis* Dawson), 6490 (*Ficus*

Rhamnites eminens (Dawson)

magnoliifolia Dawson), 558, 559, 5648, 6419, 6420, 6421, 6423, 6473, 6526, 6527

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 62, Pl. 10, fig. 40.

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 62, Pl. 44, fig. 1; Pl. 46, figs. 1-3, 5; Pl. 47, figs. 1-5; Pl. 48, figs. 1-5; Pl. 49, figs. 1-4; Pl. 50, fig. 5; Pl. 56, fig. 5.

Nanaimo group, British Columbia; Port McNeill, north shore, on bearing N65°E magnetic from Eel reef.

Comox formation (Nanaimo group), British Columbia: No. 8 mine, from roof No. 2 coal seam, Cumberland; No. 5 mine, Cumberland.

Extension formation (Nanaimo group), British Columbia; Wellington colliery; Nanaimo; White Rapids mine, Nanaimo.

Protection formation (Nanaimo group), British Columbia; Protection Island.

Newcastle formation (Nanaimo group), British Columbia; Newcastle Island.

See *Diospyros eminens*
Diospyros vancouverensis
Dryophyllum occidentale
Fagophyllum nervosum
Fagophyllum retosum
Ficus contorta
Ficus magnoliifolia
Ficus rotundata
Ficus wellingtoniae
Magnolia occidentalis
Quercus victoriae
Salix sp.

Sabal imperialis Dawson

Holotype 5622a; hypotype (missing)

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 26, Pl. 6, figs. 23, 23a, 23b.

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 57, Pl. 14, fig. 61.

Extension formation (Nanaimo group), British Columbia; Harwood colliery and Vancouver colliery, Nanaimo.

=*Geonomites imperialis* (Dawson)

Saccoloma gardneri (Lesquereux)

Hypotypes 5602 (*Pteris glossopteroides* Dawson), 6547

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 20, Pl. 1, figs. 6, 8.

Protection formation (Nanaimo group), British Columbia; Protection Island.

See *Pteris (Oleandra) glossopteroides*

Salisburia baynesiana Dawson

Syntype 5619

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 25, Pl. 5, fig. 21a.

Comox formation (Nanaimo group), British Columbia; Baynes Sound.

=*Protophyllocladus polymorpha* (Lesquereux)

Salisburia pusilla Dawson

Syntypes 5609, 5683

Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 56, Pl. 6, figs. 12, 13.

Nanaimo group, British Columbia; north shore Port McNeill on bearing N65°E magnetic from Eel reef.

=*Ginkgo dawsoni* Knowlton pars

Salix pacifica Dawson
Holotype 5629
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 26, Pl. 7, fig. 24.
Comox formation (Nanaimo group), British Columbia; Baynes Sound.
=*Sapindus pacificus* (Dawson)

Salix sp. Dawson
Specimen 5694
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 57, Pl. 7, fig. 22.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to 2-inch coal seam.
=*Rhamnites eminens* (Dawson)
See *Dryophyllum occidentale*

Sapindus pacificus (Dawson)
Holotype 5629; hypotypes 566, 567, 568, 569, 641, 644, 648, 6414, 6416, 6417, 6557
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 61, Pl. 50, figs. 1, 4, 6; Pl. 52, fig. 1; Pl. 53, figs. 1, 3-5; Pl. 54, figs. 1, 5.
Protection formation (Nanaimo group), British Columbia; Round Island, below Dodds Narrows.
Comox formation (Nanaimo group), British Columbia; No. 8 mine, Cumberland.
Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E from Eel reef, about 5 feet above 1- to 2-inch coal seam.
See *Salix pacifica*

Sapotacites sp. Bell
Specimen 6452
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 70, Pl. 57, fig. 1.
Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Sequoia albertensis (Penhallow)
Holotype 445
Penhallow D. P. 1908, Ottawa Naturalist, vol. 22, p. 83, figs. 1-6.
Belly River group, Alberta; Red Deer River, east side, 2½ miles below Berry Creek.

Sequoia langsdorfii Brongniart
Hypotypes 5639, 5682
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 56, Pl. 6, fig. 9.
Nanaimo group, British Columbia; Port McNeill.
=*Metasequoia cuneata* (Newberry)

Sequoiites artos Bell
Holotype 5192; paratypes 5951, 6325, 6326, 6358
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 47, Pl. 5, figs. 4, 6; Pl. 16. fig. 2: Pl. 18. figs. 1, 4.
Edmonton formation, Alberta: Red Deer River; sec. 32, tp. 31, rge. 21, W4th mer.; NE ¼ sec. 18, tp. 29, rge. 20, W4th mer.; right of Acme Road, 2 miles southeast of Drumheller; 7 miles northeast of Drumheller in road-cut opposite Kneehills Creek.
Brazeau formation, Alberta; Upper Cripple Creek.

Sequoiites dakotensis (Brown)
Hypotypes 5178, 5179, 5927
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 48, Pl. 5, figs. 1-3.
Edmonton formation, Alberta; Red Deer River, sec. 35, tp. 34, rge. 21, W5th mer.
Frenchman formation, Saskatchewan; sec. 26, tp. 6, rge. 2, W3rd mer.

Sparganium sp. Bell

Specimens 540, 582, 662, 668, 670

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 36, Pl. 17, fig. 4; Pl. 18, figs. 3, 5, 7, 10; Pl. 19, figs. 1, 3; Pl. 20, fig. 3.

Protection formation (Nanaimo group), British Columbia; Round Island below Dodds Narrows, and Protection Island.

Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland.

Sphenopteris (Dennstaedtia?) burlingi Bell

Holotype 6365; paratypes 6362, 6363, 6364

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 39, Pl. 2, figs. 2, 3; Pl. 14, figs. 1, 2, 4.

Wapiti group, Alberta; Mistanusk (locally Pine) River, above a tributary from south entering main river about 5 miles north-northwest where B.C.-Alta. boundary crosses river.

Sphenopteris elongata Newberry

Hypotype 5605

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 24, Pl. 5, fig. 17 pars.

Protection formation (Nanaimo group), British Columbia; Protection Island.

=*Aneimia fremonti* Knowlton

Sphenopteris elongata Newberry

Hypotype 5631

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 24, Pl. 5, fig. 17 pars.

Protection formation (Nanaimo group), British Columbia; Protection Island.

=*Dryopteris kennerlyi* (Newberry)

Sphenopteris hollicki (Knowlton)

Hypotype 6405

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 23, Pl. 4, figs. 1, 5.

Extension formation (Nanaimo group), British Columbia; Wellington colliery, Nanaimo.

Spirodela scutata Dawson

Syntypes 5456, 5456a, 5457a

Dawson J. W. 1875, British North America Boundary Com. (Rept. Geol. and Resources 49th Parallel), Appendix A, p. 329, Pl. 16, figs. 5, 6, 7.

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 23, Pl. 1, figs. 6, 6a.

Frenchman formation, Saskatchewan; badlands south of Wood Mountain.

See *Lemna* (*Spirodela*) *scutata*

Staphylca usheri Bell

Holotype 6531; paratypes 541, 542

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 59, Pl. 45, figs. 3, 4, 6.

Protection formation (Nanaimo group), British Columbia; Round Island, below Dodds Narrows, Nanaimo.

Taeniopteris plumosa (Dawson)

Syntype 5620

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 24, Pl. 4, fig. 15.

Comox formation (Nanaimo group), British Columbia; Baynes Sound, Comox coalfield.

=*Nilssonia vancouverensis* (Dawson)

55790-0—9

Ternstroemites harwoodensis (Dawson)
Holotype 5623; hypotypes 5662 (*Ficus laurophyllidia* Dawson), 6462, 6491, 6495, 683
Dawson J. W. 1884, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 8, fig. 31.
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 68, Pl. 59, fig. 4; Pl. 60, figs. 1, 3; Pl. 61, fig. 4; Pl. 62, fig. 1.
Extension formation (Nanaimo group), British Columbia; Wellington, Harwood, Jingle Pot, and White Rapids coal mines, Nanaimo.
Protection formation (Nanaimo group), British Columbia; Protection Island.
See *Juglans harwoodensis*
Ficus laurophyllidia

Thuites corpulentus Bell
Holotype 6372; paratypes 597, 631, 686, 6373, 6374, 6375, 6376, 6379, 6381
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 35, Pl. 16, fig. 10; Pl. 17, fig. 3; Pl. 18, figs. 1, 2, 4, 6, 8, 11-13.
Comox formation (Nanaimo group), British Columbia: No. 8 mine, Cumberland; south bank Brown's River, 197 chains in direction S93°W from junction with Puntledge River.

Torreya densifolia Dawson
Holotype 5618
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 25, Pl. 5, figs. 20, 20a.
Protection formation (Nanaimo group), British Columbia; Protection Island.
=*Metasequoia cuneata* (Newberry)

Torreya dicksonieoides Dawson
Holotype 5127
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 21, Pl. 2, fig. 4.
Dunvegan formation, British Columbia; Pine River.

Torreyites tyrrellii (Dawson)
Lectotype 6459; hypotypes 5399, 6281, 6283
Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 17.
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 45, Pl. 7, figs. 3, 4; Pl. 8, figs. 1, 4.
Bearpaw formation, Alberta; Berry Creek, rge. 12, tp. 25, W5th mer.
Edmonton formation, Alberta: waste dump from Atlas coal mine, nr. Drumheller; Acme road, 2 miles southeast of Drumheller.
See *Abietites tyrrellii*

Trapa borealis Heer
Hypotypes 5436, ? 5442
Dawson J. W. 1875, British N.A. Boundary Com. (Rept. Geol. and Resources 49th Parallel), Appendix A, p. 330 (specimen of Pl. 16, fig. 10, missing).
Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 31 (specimen of Pl. 2, fig. 19b, missing).
Frenchman formation, Saskatchewan; south of Wood Mountain.
Whitmud ? formation, Saskatchewan; Great Valley.

Trapa ? microphylla Lesquereux
Hypotypes 7458, 7459, 7460, 7461, 7549, 7551, 7552 (specimens of figs. 8-11 missing)
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 61, Pl. 19, figs. 1-11.
Whitemud formation, Saskatchewan; north side Big Muddy valley.
Frenchman formation, Saskatchewan; NW sec. 4, tp. 6, rge. 1, W3rd mer.
Edmonton formation, Alberta; Hay River crossing of Grand cache, sec. 29, tp. 52, rge. 27, W5th mer., Brûlé area.
=*Nymphaeites angulatus* (Newberry)

Trochodendroides arctica (Heer)

Hypotypes 5040, 6345, 5506
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 56, Pl. 4, fig. 2; Pl. 9, fig. 4; Pl. 44, fig. 2; Pl. 46, figs. 1, 3.
Edmonton formation (lower part), Alberta: Red Deer River, sec. 32, tp. 31, rge. 21, W4th mer; Acme road, 2 miles southeast of Drumheller.

Trochodendroides (Cercidiphyllum) arctica (Heer)

Hypotype 5627 (*Populus protozadachii* Dawson)
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 45, Pl. 35, fig. 2.
Newcastle formation (Nanaimo group), British Columbia; Newcastle Island.
See *Populus protozadachii*

Typha sp. Dorf

Specimen 6176
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 82, Pl. 12, fig. 8.
St. Mary formation, Alberta; Oldman River, north bank, SW sec. 12, tp. 10, rge. 2, W5th mer.

Ulmophyllum priscum Dawson

Holotype 5601
Dawson J. W. 1894, Roy. Soc. Canada Trans. 1893, vol. 11, sec. 4, p. 59, Pl. 8, fig. 28.
Nanaimo group, British Columbia; Port McNeill, north shore, on bearing N65°E magnetic from Eel reef.
=*Dryophyllum elongatum* Dawson

Ulmus dubia Dawson

Holotype 5635
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 27, Pl. 7, fig. 29.
Comox formation (Nanaimo group), British Columbia; Baynes Sound, Comox coalfield.
=*Alnus perantiqua* (Dawson)

Viburnum insigne (Dawson)

Holotype 5633; hypotypes 5684 (*Populus rhomboidea* Dawson), 6450, 6544, 6545
Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 8, fig. 36.
Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 71, Pl. 59, fig. 2; Pl. 66, figs. 1, 2, 4; Pl. 67, figs. 2-4.
Extension formation (Nanaimo group), British Columbia; Wellington and Vancouver collieries, Nanaimo.
Comox formation (Nanaimo group), British Columbia; No. 8 coal mine, Cumberland, from roof No. 2 coal seam.
Newcastle formation (Nanaimo group), British Columbia; Newcastle Island.
See *Alnites insignis*
Populus rhomboidea

Viburnum simile Knowlton

Hypotypes 6330, 6331, 6332, 6334, 6359
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 77, Pl. 16, fig. 1; Pl. 18, fig. 3; Pl. 21, figs. 2, 4-6.
Whitemud formation, Saskatchewan; Wood Mt. Creek, NW ¼ sec. 15, tp. 5, rge. 3, W3rd mer.
Brazeau formation, Alberta: Athabasca River, south side old railway grade, Entrance area; Upper Cripple Creek.

Viburnum sp. Berry

Specimen 7553

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 61, Pl. 19, fig. 12.

Whitemud formation, Saskatchewan; west side Wood Mt. Creek, NW ¼ sec. 15, tp. 5, rge. 3, W3rd mer.

Vitis dakotana Berry

Hypotypes 7435, 7436

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 47, Pl. 12, figs. 1, 2.

Whitemud formation, Saskatchewan; west side Wood Mt. Creek; NW ¼ sec. 15, tp. 5, rge. 3, W3rd mer.

=*Vitis stantoni* (Knowlton)

Vitis stantoni (Knowlton)

Hypotypes 6310, 6311, 6312, 6338, 6340, 7435 and 7436 (*Vitis dakotana* Berry)

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 75, Pl. 3, fig. 3; Pl. 9, fig. 5; Pl. 10, figs. 2, 3; Pl. 11, fig. 3.

Whitemud formation, Saskatchewan; west side Wood Mt. Creek; NW ¼ sec. 15, tp. 5, rge. 3, W3rd mer.

Edmonton formation, Alberta: SW ¼ sec. 15, tp. 34, rge. 22, W4th mer; NW ¼ sec. 14, tp. 34, rge. 22, W4th mer; NE ¼ sec. 10, tp. 34, rge. 22, W4th mer.

See *Vitis dakotana*

Zamites albertensis Berry

Syntypes 4990, 5006

Berry E. W. 1929, Geol. Surv., Canada, Mus. Bull. 58, p. 68, Pl. 11, figs. 1, 2.

Allison formation, Alberta; east of Crowsnest Lake.

=*Dammarites robinsi* (Dawson)

Zamites sp. Bell

Specimens 595, 596

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 29, Pl. 12, figs. 4, 6.

Comox formation (Nanaimo group), British Columbia; south bank Brown's River, 197 chains in direction S93°W from junction Brown's and Puntledge Rivers.

Zelkova sp. Bell

Specimen 6485

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 43, Pl. 26, fig. 4,

Extension formation (Nanaimo group), British Columbia; Jingle Pot coal mine, Nanaimo, from waste of Wellington coal seam.

Zizyphoides neillii (Dawson)

Lectotype 5656; hypotype 553

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 65, Pl. 55, fig. 8; Pl. 56, fig. 3.

Nanaimo group, British Columbia; Port McNeill, north shore, bearing N65°E magnetic from Eel reef, about 5 feet above 1- to 2-inch coal seam.

See *Paliurus neillii*

Zizyphus areolatus Bell

Holotype 6481; paratypes 551, 633, 6482, 6483

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 64, Pl. 57, figs. 2-4; Pl. 61, figs. 1, 2; Pl. 62, fig. 3 pars.

Extension formation (Nanaimo group), British Columbia; Jingle Pot coal mine, Nanaimo.

Protection formation (Nanaimo group), British Columbia; Round Island, below Dodds Narrows.

Comox formation (Nanaimo group), British Columbia; No. 5 mine, Cumberland.

Zizyphus cretaceus (Dawson)

Holotype 5638; hypotypes 637, 5693 (*Paliurus neillii* Dawson pars), 6428, 6429, 6430, 6431

Dawson J. W. 1883, Roy. Soc. Canada Trans. 1882-83, vol. 1, sec. 4, p. 28, Pl. 8, fig. 33.

Bell W. A. 1957, Geol. Surv., Canada, Mem. 293, p. 64, Pl. 54, fig. 4; Pl. 55, figs. 2, 3, 5; Pl. 56, figs. 1, 4, 6.

Comox formation (Nanaimo group), British Columbia; No. 5 and No. 8 mines, Cumberland, Baynes Sound.

See *Ceanothus cretaceus*
Paliurus neillii

55790-0—10

TERTIARY

1. Megaplant remains

Acer arcticum Heer

Hypotype 6154

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 71, Pl. 48, fig. 2.

Paleocene, Northwest Territories; Bear River, near Fort Norman, Mackenzie River.

Acer macropterum Heer

Hypotype 4941

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 113, Pl. 10, fig. 7.

Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Acer sp. Dawson

Specimen 6091a

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 87, Text-fig. 20 pars.

Kamloops group, British Columbia; near Stump Lake.

Acer sp. Penhallow

Specimen 7591a

Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, pp. 33-34, Text-figs. 1, 4.

Tertiary, British Columbia; Horsefly River.

Acerites negundifolium Dawson

Holotype 6092

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 86, Text-fig. 19.

Kamloops group, British Columbia; near Stump Lake.

=*Acer negundifolium* (Dawson)

Aesculophyllum hastingsense Dawson

Holotype (genotype) 7476

Dawson J. W. 1895, Roy. Soc. Canada Trans. 1895, 2nd ser., vol. 1, sec. 4, p. 149, Pl. 8, fig. 16.

Burrard formation, British Columbia; Hastings.

Ailanthophyllum incertum Dawson

Holotype (genotype) 6095

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 88, Text-fig. 25.

Kamloops group, British Columbia; Tranquille River.

Alnites curta Dawson

Syntypes 6078 (leaf), 6078a and 6078b (catkins)

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 86, Text-figs. 18, 18a, 18b.

Princeton group, British Columbia; North Fork Similkameen River.

Alnus cremastogynoides Berry

Holotype (apparently missing)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 104, Pl. 16, fig. 1.

Chu Chua formation, British Columbia; Newhykulston Creek, North Thompson Valley area.

Alnus crispoides Berry

Syntype 4946

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 105.

Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Alnus kefersteinii (Göppert)

Hypotype (figured specimen missing, but fragments of other specimens identified by Berry are in collections)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 105, Pl. 15, fig. 6.

Chu Chua formation, British Columbia; Newhykulston Creek, North Thompson River area.

Alnus serrata Newberry

Hypotype 6218

Bell W. A. 1949, Geol. Surv., Canada, p. 52, Pl. 33, fig. 6.

Ravenscrag formation, Saskatchewan; Eastend.

Alnus sp. Hollick

Specimen 4978

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 398, Pl. 31, fig. 2.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity St. Eugene Mission.

Androvettia catenulata Bell

Holotype 6303; paratypes 6346, 6347, 6348, 6349, 6350

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 46, Pl. 15, figs. 1-5; Pl. 16, fig. 4; Pl. 27, figs. 5, 7, 8.

Willow Creek formation (upper part), Alberta; Willow Creek, SW ¼ sec. 1, tp. 13, rge. 28, W4th mer.

Paskapoo formation, Alberta: Tongue Creek, NE ¼ sec. 17, tp. 19, rge. 29, W4th mer.; Highwood River, near mouth of Sheep Creek Aldersyde.

Antholithes sp. Dawson

Specimen 6067

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 82, Text-fig. 11.

Princeton group, British Columbia; North Fork Similkameen River.

Aralia alexoensis Bell

Holotype 5985; paratypes 5989, 6232

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 76, Pl. 56, figs. 2, 5 pars; Pl. 59, fig. 1.

Post-Brazeau (Paleocene) beds, Alberta: tp. 40, rge. 13, W5th mer. Porcupine Hills or Willow Creek formation (upper part), Alberta; Crowsnest River, lsd 8, sec. 34, tp. 7, rge. 1, W5th mer. approximately 200 feet above junction with Oldman River.

Aralia notata Lesquereux

Hypotype 7448

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, Pl. 14, fig. B.

Ravenscrag formation Saskatchewan; sec. 19, tp. 1, rge. 22, W2nd mer.

Aristolochia crassifolia Cockerell

Hypotypes 5509, 5510, 5519

Berry E. W. 1930, Geol. Surv., Canada, Mus. Bull. 63, p. 20, Pl. 6, figs. 1-3.

Ravenscrag formation, Saskatchewan; Ravenscrag butte, 3½ miles east of Ravenscrag, sec. 27, tp. 6, rge. 23, W3rd mer.

=*Paranymphaea crassifolia* (Newberry)

55790-0—10½

Asplenites sp. Dawson

Specimen 7494

Dawson J. W. 1895, Roy. Soc. Canada Trans. 1895, n. ser., vol. 1, sec. 4, p. 142, Pl. 4, fig. 4.

Burrard formation, British Columbia; Stanley Park, Vancouver.

Asplenium? *penhallowi* Bell

Holotype 5553; paratype 5551 (*Sphenopteris guyottii* Penhallow)

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 41, Pl. 26, figs. 1, 3, 4.

Paskapoo formation, Alberta; Red Deer River at mouth Blindman River.

See *Sphenopteris guyottii*

Azollophyllum primaevum Penhallow

Holotype (genotype) 6061

Penhallow D. P. *in* Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 77, Text-fig. 2.

Kamloops group, British Columbia; near Stump Lake.

Betula angustifolia Newberry

Hypotype (figured specimen Berry, 1926, missing, but accessory material in collections)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 104, Pl. 16, fig. 4.

Kitsilano formation, British Columbia; Kitsilano, Vancouver area.

Betula heterodonta Newberry

Holotype 4965

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 103, Pl. 16, fig. 5.

Kitsilano formation, British Columbia; Kitsilano, English Bay, Vancouver.

Betula parvifolia Berry

Syntypes 4920, 6273, (specimen Berry, 1926, Pl. 15, fig. 2, missing)

Berry E. W. 1926, Geol, Surv., Canada, Mus. Bull. 42, p. 103, Pl. 15, figs. 1-3.

Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Betula ulmoides Hollick

Holotype 4982

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 397, Pl. 31, fig. 1.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Betula sp. Berry

Specimen 4931

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, Pl. 17, fig. 4.

Kitsilano formation, British Columbia; Kitsilano, 100 yards west of pier at end Balaclava Street.

Callistemophyllum latum Dawson

Holotype 5590

Dawson J. W. 1890, Roy. Soc. Canada Trans. 1889, vol. 7, sec. 4, p. 72, Pl. 10, fig. 8.

Paleocene, Northwest Territories; Mackenzie River about 20 miles above Bear River.

=*Leguminosites borealis* Heer

Canna? *dawsoni* Berry

Syntypes 4951, 4952, 4953

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 99.

Burrard formation, British Columbia; south side Burrard Inlet, west of Hastings.

Cannophyllites magnifolia (Knowlton)

Hypotypes 5557 "dubious species" Penhallow

Penhallow D. P. 1902, Roy. Soc. Canada Trans. 1902, 2nd ser., vol. 8, sec. 4, p. 63, Text-fig. 8, 6159, 6160

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 81, Pl. 64, fig. 2; Pl. 65.

Paskapoo formation, Alberta; Red Deer River, at mouth of and also 1½ miles above Blindman River.

Carex burrardiana Dawson

Holotype 7521

Dawson J. W. 1895, Roy. Soc. Canada Trans. 1895, n. ser., vol. 1, sec. 4, p. 146, Pl. 4, fig. 6.

Burrard formation, British Columbia; Burrard Inlet, Vancouver.

Carex vancouverensis Dawson

Holotype 7507

Dawson J. W. 1895, Roy. Soc. Canada Trans. 1895, 2nd ser., vol. 1, p. 144, Pl. 4, fig. 5.

Burrard formation, British Columbia; Stanley Park.

Carpinus grandis Unger

Hypotypes 6075, 6270 (an unnumbered figured specimen Berry 1926, apparently missing)

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 87, Text-fig. 21.

Berry E. W. 1926, Geol, Surv., Canada, Mus. Bull. 42, p. 104, Pl. 15, figs. 4, 5; Pl. 19, fig. 4.

Kamloops group, British Columbia; Stump Lake.

Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Kitsilano formation, British Columbia; Kitsilano, English Bay, Vancouver.

Carpolithes dentatus Penhallow

Hypotypes 7597, 7648, 7648a

Penhallow D. P. 1891, *in* Dawson, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 89, Text-fig. 26.

Tertiary, British Columbia; (Kamloops group) Quilchena; Horsefly River.

Carpolithes sp. Penhallow

Specimen 7698

Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, p. 42, Text-fig. 6

Kamloops group, British Columbia; Kamloops Lake at Red Point.

Castanea sp. Dawson

Specimen 5449

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 27, Pl. 1, fig. 8.

Ravenscrag formation, Saskatchewan; Short Creen, Souris River at Roche Percée.

Ceanothus? sp. Dawson

Specimen 6096

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 84, Text-fig. 14.

Princeton group, British Columbia; North Fork Similkameen River.

Cebatha multiformis Hollick

Holotype 4964

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 406, Pl. 39, fig. 1.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of St. Eugene Mission.

Celastrinites insignis (Heer)

Hypotypes 5488, 5490, 5491, 5702, 5986, 5990, 6237, 6238, 6239, 6240, 6241, 6242, 6246, 6271, 6304, 6354

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 71, Pl. 36, fig. 4 pars; Pl. 53; Pl. 54, figs. 1-4; Pl. 55, figs. 1, 2; Pl. 56, figs. 1, 3, 4; Pl. 57, fig. 4; Pl. 58, figs. 2, 3; Pl. 59, fig. 4.

Paskapoo formation, Alberta: Red Deer River, north side, about 1½ miles above mouth Blindman River; Blindman River, about 1,000 feet above junction with Red Deer River.

Post-Brazeau (Paleocene) beds, Alberta: Alexo area, tp. 40, rge. 13, W5th mer.; Shunga Creek (tributary to North Saskatchewan River).

Ravenscrag formation, Saskatchewan; Eastend; sec. 27, tp. 6, rge. 23, W3rd mer.

See *Virburnum finale*

Celastrophyllum pugetensis Berry

Holotype (apparently missing)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 112, Pl. 12, fig. 2.

Kitsilano formation, British Columbia; Kitsilano, English Bay.

Cercocarpus ravenscragensis Berry

Holotype 5517

Berry E. W. 1930. Geol. Surv., Canada, Mus. Bull. 63, p. 23, Pl. 5, fig. 6.

Ravenscrag formation, Saskatchewan; north branch Frenchman River SE¼ sec. 22, tp. 7, rge. 22, W3rd mer.

Cinnamomum? sp. Dawson

Specimen 6089

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 84, Text-fig. 15.

Princeton group, British Columbia; North Fork Similkameen River.

Cissampelos dubiosa Hollick

Holotype 4959

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 408, Pl. 37, fig. 4.

St. Eugene silts, British Columbia; Kootenay valley, St. Mary River, vicinity of St. Eugene Mission.

Cladophlebis groenlandica (Heer)

Hypotype 5587 (*Pteris sitkensis* Dawson)

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 38, Pl. 26, fig. 2.

Paleocene beds, N.W.T.; Mackenzie River, 20 miles above Bear River.

See *Pteris sitkensis*

Clintonia oblongifolia Penhallow

Holotype 5558

Penhallow D. P. 1902, Roy. Soc. Canada Trans. 1902, 2nd ser., vol. 8, sec. 4, p. 55, Text-fig. 6.

Paskapoo formation, Alberta; Red Deer River at mouth Blindman River.

=*Majanthemophyllum grandifolium* Penhallow

Cocculus kanii (Heer)

Hypotype (apparently missing)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 111, Pl. 16, fig. 2.

Kitsilano formation, British Columbia; Kitsilano.

Comptonia columbiana Dawson

Holotype 6110

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 81, Text-fig. 10.

Princeton group, British Columbia; North Fork Similkameen River.

Comptonia predryandriodes Berry

Holotype 4921; hypotype 6063 (*Myrica (Comptonia) cuspidata* Dawson)
Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 100, Pl. 10, fig. 6.
Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.
Princeton group, British Columbia; North Fork Similkameen River.
See *Myrica (Comptonia) cuspidata*

Comptonia quilchenensis Penhallow

Holotype 7625
Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, p. 46, Text-fig. 13.
Kamloops group, British Columbia; Quilchena.

Cornus denverensis Knowlton

Hypotype 6233
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 76, Pl. 56, fig. 5 pars.
Porcupine Hills or Willow Creek formation (upper part), Alberta; Crowsnest River approximately 200 feet above junction with Oldman River, lsd 8, sec. 34, tp. 7, rge. 1, W5th mer.

Corylites fosteri (Ward)

Hypotypes 6120, 6121, 6122, 6123, 6124, 6125
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 53, Pl. 33, figs. 1-5, 7.
Paskapoo formation, Alberta; North Saskatchewan River at small brook, about 800 feet above CNR bridge at Rocky Mountain House.

Corylus macquarrii (Forbes)

Hypotypes 4925, 4929, 6270, 6272
Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 105, Pl. 17, fig. 6; Pl. 18, figs. 2-4; Pl. 19, fig. 5.
Chu Chua formation, British Columbia; Joseph and Newhykulston Creeks, North Thompson Valley area.
Kitsilano formation, British Columbia; Kitsilano, English bay.

Crataegus tranquillensis Penhallow

Holotype 7588
Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, p. 49, Text-fig. 8.
Tertiary, British Columbia; Horsefly Coal Mine, Horsefly River.

Crataegus tulmeenensis Penhallow

Holotype 8011
Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, p. 48, Text-fig. 7.
Princeton group, British Columbia; Vermilion Cliffs, Tulameen River.

Cryptomerites lambii Bell

Holotype 5524; paratypes 5523, 5537, 5549, 5550, 6140, 6259, 6262, 7466
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 49, Pl. 29, figs. 2, 4; Pl. 30, figs. 1, 3-5; Pl. 31, fig. 4; Pl. 32, figs. 2, 4.
Paskapoo formation, Alberta: Red Deer River at mouth Blindman River; north side Blindman River about 1,000 feet above junction with Red Deer River.
Post-Brazeau beds, Alberta; Alexo area, 100 and 1,000 feet up small tributary of west side North Saskatchewan River, Paleocene beds, Yukon Territory, Lewes River.

Cupressinoxylon sp. Fry

Specimens 1149, 1150, and slides 1150.1, 1150.2, 1150.3
Fry W. L. 1958, Geol. Surv., Canada, Bull. 48, p. 11, Pl. 4, fig. 2; Pl. 5; Pl. 6.
Cretaceous or Tertiary, British Columbia; near west shore Chilko Lake.

Cyperites? sp. Dawson

Specimen 6097

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 89, Text-fig. 31.

Kamloops group, British Columbia; near Stump Lake.

Davallia (Stenoloma) tenuifolia Swartz

Hypotypes 5454b, 5454

Dawson J. W. 1875, British N. A. Boundary Com., (Rept. Geol. and Res. 49th Parallel), Appendix A, p. 329, Pl. 16, figs. 1, 1a, 2, 2a.

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 21, Pl. 1, figs. 1, 1a, 1b.

Ravenscrag formation, Saskatchewan; Porcupine Creek (Poplar River).

=*Dennstaedtia blomstrandi* (Heer)

Dennstaedtia blomstrandi (Heer)

Plesiotypes 5454b and 5454 (*Davallia tenuifolia* Dawson), 6167, 6168, 6254

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 39, Pl. 24, figs. 1, 4; Pl. 26, fig. 5.

Ravenscrag formation, Saskatchewan; Porcupine Creek (Poplar River).

Paskapoo formation, Alberta; Red Deer River at mouth of Blindman River.

See *Davallia (Stenoloma) tenuifolia* Dawson.

Dicotylophyllum contractinervosum Bell

Holotype 6118; paratypes 6166, 6137

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 79, Pl. 62, fig. 5; Pl. 67, fig. 3.

Post-Brazeau (Paleocene) beds, Alberta; Alexo area, tp. 40, rge. 13, W5th mer.

Diospyros dawsoni Berry

Holotype 4942

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 115, Pl. 19, fig. 3.

Chu Chua formation, British Columbia; Joseph Creek, north Thompson Valley area.

Dombeyopsis nebrascensis (Newberry)

Hypotypes 6155, 6245

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 62, Pl. 22, fig. 6; Pl. 46, fig. 4; Pl. 48, fig. 1.

Post-Brazeau (Paleocene) beds: Coalspur, from roof shales Mynheer coal seam; Alexo area, tp. 40, rge. 13, W5th mer.

Dryophyllum (*Castanea*?) sp. Bell

Specimen 6136

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 53, Pl. 34, fig. 1.

Post-Brazeau (Paleocene) beds, Alberta; Alexo area, tp. 40, rge. 13, W5th mer.

Dryophyllum stanleyanum Dawson

Syntypes 7477, 7477a

Dawson J. W. 1895, Roy. Soc. Canada Trans., 2nd ser., vol. 1, sec. 4, p. 147, Pl. 7, fig. 13.

Burrard formation, British Columbia; Stanley Park, Vancouver.

=*Hicoria stanleyanum* (Dawson)

Elatocladus (*Cryptomerites?*) *nordenskiöldi* (Heer)

Hypotypes 6134, 6261, 6263

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 50, Pl. 31, figs. 2, 3, 5.

Paskapoo formation, Alberta; north side Blindman River, about 1,000 feet above junction with Red Deer River.

Post-Brazeau (Paleocene) beds, Alberta: roof of Mynheer coal seam in Sterling cut, about ½ mile east of Sterco; Alexo area, tp. 40, rge. 13, W5th mer.

Elatocladus (*Taxites*?) *olriki* (Heer)

Hypotypes 3981, 5465

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 46, Pl. 29, fig. 5; Pl. 30, fig. 2.

Ravenscrag formation, Saskatchewan; Short Creek, Souris River, at Roche Percée.

Post-Brazeau (Paleocene) beds; Alexo area, tp. 40, rge. 13, W5th mer.

Elatocladus (*Sequoiites*?) *ungeri* (Heer)

Holotype 6264; paratype 6265

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 48, Pl. 28, figs. 1-3.

Paleocene (?) British Columbia; 3 miles east-northeast of mouth of Niven River.

Equisetum alexoensis Bell

Holotype 6138; paratypes 5521, 6139, 6145, 6146, 6357

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 36, Pl. 22, fig. 4; Pl. 23, figs. 5-7, 9; Pl. 67, fig. 5.

Post-Brazeau (Paleocene) beds, Alberta: about 7/8 mile west of Sterco, in rock-cut CNR; Sterco, rock-cut CNR near mile-post 46.

Ravenscrag formation, Saskatchewan; tp. 7, rge. 24, W3rd mer. on central branch Fairwell Creek.

Equisetum arcticum Heer

Hypotypes 5554, 6256, 6257

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 37, Pl. 23, figs. 2, 4, 8.

Paskapoo formation, Alberta; Red Deer River at and near mouth Blindman River.

See *Physagenia parlatorii*
Equisetum sp.

Equisetum boreale Heer

Hypotypes 615, 6131, 6132

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 38, Pl. 21, fig. 1; Pl. 23, figs. 1, 3.

Paskapoo formation, Alberta; North Saskatchewan River, east side at small brook about 800 feet above CNR at Rocky Mt. House.

Post-Brazeau (Paleocene) beds, Alberta; Sterco and Coal Valley.

Equisetum similkamense Dawson

Syntypes or paratypes, 5997a

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 76. Text-figs. a-c.

Princeton group, British Columbia; South Fork Similkameen River.

Equisetum sp. Dawson

Specimen 7386 (unfigured specimen of original series identified by Dawson)

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 22, cf. Pl. 1, fig. 2.

Ravenscrag formation, Saskatchewan; Great Valley.

=*Equisetum arcticum* Heer

Fagus sanctieogeniensis Hollick

Holotype 4987

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 399, Pl. 30, fig. 3.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Ficus canadensis Hollick

Holotype 4984

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 405, Pl. 37, fig. 1.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Ficus interglacialis Hollick
Holotype 4958
Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 405, Pl. 34.
St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Ficus? johnstoni Berry
Holotype 4947
Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 108, Pl. 11, fig. 7.
Burrard formation, British Columbia; Burrard Inlet, Vancouver.

Ficus? sp. Dawson
Specimen 6085
Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 89, Text-fig. 27.
Kamloops group, British Columbia; near Stump Lake.

Fraxinus leii Berry
Hypotype 7445
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 55, Pl. 15, fig. 4.
Ravenscrag formation, Saskatchewan; sec. 1, tp. 1, rge. 22, W2nd mer.

Ginkgo adiantoides (Unger)
Hypotype 7567h
Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, p. 57, Text-fig. 12.
Princeton group, British Columbia; Similkameen River.
=*Ginkgoites adiantoides* (Unger)

Ginkgoites adiantoides (Unger)
Hypotypes 6152, 6153, 7567h (*Ginkgo adiantoides* Penhallow)
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 43, Pl. 32, figs. 1, 3.
Paskapoo formation, Alberta; Brickburn, NE¼ sec. 23, tp. 24, rge. 2, W5th mer.
See *Ginkgo adiantoides*

Glyptostrobus? sp. Dawson
Specimen 6066
Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 79, Text-fig. 7.
Princeton group, British Columbia; North Fork Similkameen River.

Grewiopsis mclearni Berry
Holotype 7437; paratype 7440
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 50, Pl. 12, fig. 3; Pl. 14 (A).
Ravenscrag formation, Saskatchewan; South arm Big Muddy Lake.
=*Trochodendroides arctica* (Heer)

Hicoria dawsoni Berry
Holotype 4943
Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 101, Pl. 16, fig. 3.
Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Hicoria pseudovata Hollick
Holotype 4985
Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 395, Pl. 30, fig. 2.
St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Hicoria stanleyanum (Dawson)
Syntypes 7477, 7477a
Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 101.
Burrard formation, British Columbia; Stanley Park, Vancouver.
See *Dryophyllum stanleyanum*

Jenkinsella arctica (Heer)
Hypotypes 4039, 6255, 7589
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 57, Pl. 44, fig. 1.
Paleocene, Northwest Territories; Mackenzie River, about 20 miles above Bear River.
Paskapoo formation, Alberta; east side Highwood River 700 to 1,000 feet below mouth of Sheep Creek, Aldersyde.

See *Leguminosites*? *borealis*
Leguminosites? *arachioides*
Leguminosites dawsoni

Juglans nigella Heer
Hypotype 5493
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 55, Pl. 57, fig. 5.
Ravenscrag formation, Saskatchewan; Ravenscrag butte.

Juglans nigelloides Berry
Syntype 4950
Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 102, Pl. 11, figs. 5, 6.
Burrard formation, British Columbia; south side Burrard Inlet, ¼ mile west of Hastings railway station.

Juglans thermalis Lesquereux
Hypotypes 5698, 5699
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 54, Pl. 57, figs. 2, 3.
Paskapoo formation, Alberta; Red Deer River at mouth Blindman River.

Lastrea (Goniopteris) fischeri Heer
Hypotype 7496
Dawson J. W. 1895, Roy. Soc. Canada Trans., n. ser. vol. 1, sec. 4, p. 141, Pl. 4, fig. 1.
Burrard formation, British Columbia; bore-hole at Hastings.

Laurophyllum laramianum (Dawson)
Holotype 5419 (*Salix laramiana* Dawson), 7441 and 7442 (*Laurophyllum ripleyensis* Berry pars)
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 61.
Ravenscrag formation, Saskatchewan: Great Valley; sec. 1, tp. 1, rge. 22, W2nd mer.
See *Salix laramiana*
Laurophyllum ripleyensis

Laurophyllum ripleyensis Berry pars
Hypotypes 7441, 7442
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 51, Pl. 15, figs. 1, 2.
Ravenscrag formation, Saskatchewan; sec. 1, tp. 1, rge. 22, W2nd mer.
=*Laurophyllum laramianum* (Dawson)

Lebephyllum reineckei Wilson
Holotype 8038; paratype 8038a
Wilson W. J. 1913, Geol. Surv., Canada, Mus. Bull. 1, p. 88, Pl. 9, figs. 1, 2.
Tertiary, British Columbia; north fork Kettle River, Beaverdell area.

Leguminosites? arachioides Lesquereux

Hypotype 7589

Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Pl. B.C., Pub. 1013, p. 61, Text-fig. 14.

Tertiary, British Columbia; Horsefly River.

=*Jenkinsella arctica* (Heer)

Leguminosites borealis Heer

Hypotypes (unfigured specimens)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 111.

Kitsilano formation, British Columbia; Kitsilano.

Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

See *Callistemophyllum latum*

Leguminosites? borealis Dawson

Syntype 4039

Dawson J. W. 1890, Roy. Soc. Canada Trans. 1889, vol. 7, sec. 4, p. 72, Pl. 10, fig. 7 pars.

Paleocene, Northwest Territories; Mackenzie River, about 20 miles above Bear River.

=*Jenkinsella arctica* (Heer)

See *Leguminosites? borealis*

Leguminosites dawsoni Berry

Syntype 4039

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 112.

Paleocene, Northwest Territories, Mackenzie River, about 20 miles above Bear River.

=*Jenkinsella arctica* (Heer)

See *Leguminosites? borealis*

Leguminosites williamsi Berry

Holotype 5520

Berry E. W. 1930, Geol. Surv., Canada, Mus. Bull. 63, p. 23, Pl. 5, fig. 1.

Ravenscrag formation, Saskatchewan; north branch Frenchman River, SE¼ sec. 22, tp. 7, rge. 22, W3rd mer.

Lemna (Spirodela) scutata Dawson

Syntypes 5456, 5456a, ?5457a

Dawson J. W. 1875, British N. A. Boundary Com. (Rept. Geol. and Res. 49th Parallel), Appendix A, p. 329, Pl. 16, figs. 5, 6, 7.

Ravenscrag formation, Saskatchewan; badlands south of Wood Mountain.

=*Spirodela scutata* Dawson

Magnolia? sp. Dawson

Specimen 6088

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 88, Text-fig. 29.

Princeton group, British Columbia; North Fork Similkameen River.

Majanthemophyllum grandifolium Penhallow

Holotype 5559; hypotypes 5558 (*Clintonia oblongifolia* Penhallow), 6161, 6162, 6252

Penhallow D. P. 1902, Roy. Soc. Canada Trans. 1902, 2nd ser., vol. 8, sec. 4, p. 54, Text-fig. 5.

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 80, Pl. 63, fig. 2; Pl. 64, figs. 1, 3; Pl. 66, figs. 2, 3.

Paskapoo formation, Alberta; Red Deer River at mouth of, and also about 1½ miles above Blindman River.

See *Clintonia oblongifolia*

Myrciophyllum americanum Berry
Holotype 7443
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 52, Pl. 15, fig. 3.
Ravenscrag formation, Saskatchewan; sec. 27, tp. 3, rge. 24, W2nd mer.

Myrica (Comptonia) cuspidata Lesquereux
Hypotype 6063
Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 80, Text-fig. 9.
Princeton group, British Columbia; North Fork Similkameen River.
=*Comptonia predryandroides* Berry

Myrica uglowi Berry
Holotype 4909
Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 100, Pl. 18, fig. 1.
Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Nelumbites protoluteus (Berry)
Hypotype 6301
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 64, Pl. 63, fig. 5.
Paskapoo formation, Alberta; Highwood River, tp. 20, rge. 28, W4th mer.
See *Nelumbo tenuifolia*

Nelumbium pygmaeum Dawson
Holotype 6099
Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 87, Text-fig. 22.
Princeton group, British Columbia; Similkameen River.

Nelumbium saskatchuense Dawson
Syntype 5480
Dawson J. W. 1888, Roy. Soc. Canada Trans. 1887, vol. 5, sec. 4, p. 35.
Paskapoo formation, Alberta; North Saskatchewan River, near Rocky Mountain House, sec. 33, tp. 39, rge. 7, W5th mer.

Nelumbo tenuifolia (Lesquereux)
Hypotype 7414
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 37, Pl. 7, fig. 3.
Ravenscrag formation, Saskatchewan; east end Twelvemile Lake, south side.
=*Nelumbites protoluteus* (Berry)

Neuropteris civica Dawson
Holotype 7504
Dawson J. W. 1895, Roy. Soc. Canada Trans., n. ser., vol. 1, sec. 4, p. 141, Pl. 4, fig. 2.
Burrard formation, British Columbia; Vancouver.
=*Dryopteris*? *civica* (Dawson)

Nordenskiöldia borealis Heer
Hypotypes 5585, 5586
Dawson J. W. 1890, Roy. Soc. Canada Trans. 1889, vol. 10, sec. 4, p. 71, Pl. 10, fig. 6.
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 80, Pl. 18, fig. 2; Pl. 21, fig. 3.
Paleocene beds, Northwest Territories; Mackenzie River about 20 miles above Bear River.

Onoclea hebridica (Forbes)
Hypotypes 5459e, 5922, 5481, 7393, 7394, 7395
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 40, Pl. 20, fig. 5; Pl. 24, figs. 3, 5; Pl. 25, fig. 2.

Onoclea hebridica (Forbes)

Ravenscrag formation, Saskatchewan: badlands south of Wood Mountain; SW sec. 35, tp. 1, rge. 22, W2nd mer.; Porcupine Creek (Poplar River).

Post-Brazeau (Paleocene) beds, Alberta; McLeod River, Pedley area.

See *Onoclea sensibilis fossilis*

Onoclea sensibilis fossilis Newberry

Hypotypes 7393, 7394

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 16, Pl. 1, figs. 2, 3, Pl. 2.

Ravenscrag formation, Saskatchewan; SW sec. 35, tp. 1, rge. 22, W2nd mer.

=*Onoclea hebridica* (Forbes)

Oreopanax? sp. Bell

Specimens 6147, 6148

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 76, Pl. 59, figs. 2, 3.

Post-Brazeau (Paleocene) beds, Alberta; Sterco, rock-cut 700 feet from 46 mile-post, CNR.

Osmunda macrophylla Penhallow

Holotype (missing); hypotypes 6163, 6164, 6166

Penhallow D. P. 1907, Geol. Surv., Canada, Pub. 1013, p. 65, Text-fig. 15.

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 38, Pl. 24, fig. 2; Pl. 25, figs. 1, 3, 4.

Paskapoo formation, Alberta; Red Deer River at mouth Blindman River.

Paliurus pulcherrimus Ward.

Hypotypes 7431, 7432 (missing), 7433, 7434

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 47, Pl. 11, figs. 5-8.

Ravenscrag formation, Saskatchewan; NE sec. 8, tp. 6, rge. 1, W3rd mer.

Paranymphaea crassifolia (Newberry)

Hypotypes 5169, 5509, 5510, 5519, 5923, 7415, 7416, 7423, 7424, 7425, 7426

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 39, Pl. 7, figs. 4, 5; Pl. 9, figs. 1, 2; Pl. 10, figs. A, B.

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 68, Pl. 50, fig. 3; Pl. 52, fig. 5.

Ravenscrag formation, Saskatchewan: Ravenscrag butte, sec. 27, tp. 6, rge. 23, W3rd mer.; SE sec. 29, tp. 3, rge. 24, W2nd mer.; NW sec. 4, tp. 6, rge. 1, W3rd mer.

Paskapoo formation, Alberta; Tongue Creek, NE¼ sec. 17, tp. 19, rge. 29, W4th mer.

Post-Brazeau (Paleocene) beds, Alberta; Sterling colliery, roof of coal seam, tp. 48, rge. 20, W5th mer.

See *Aristolochia crassifolia*

Passiflora canadensis Hollick

Holotype 4975

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 416, Pl. 37, fig. 2.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Phyllites aquaticus Berry

Holotype 5514

Berry E. W. 1930, Geol. Surv., Canada, Mus. Bull. 63, p. 28, Pl. 5, fig. 5.

Ravenscrag formation, Saskatchewan; 3½ miles east of Ravenscrag.

Phyllites sp. Dawson

Specimen 5445

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 32, Pl. 2, fig. 20.

Ravenscrag formation, Saskatchewan; Great Valley.

Physagenia parlatorii Heer

Syntypes (missing)

Dawson J. W. 1875, British N. A. Boundary Com. (Rept. Geol. and Res. 49th Parallel), Appendix A, p. 329, Pl. 16, figs. 3, 4.

Ravenscrag formation, Saskatchewan; Great Valley.

=*Equisetum arcticum* Heer

Picea columbiensis Penhallow

Holotype 5809

Penhallow D. P. 1907, Roy. Soc. Canada Trans. 1907, 3rd ser., vol. 1, sec. 4, p. 290, Pl. 1.

Tertiary, British Columbia; Kettle River, 6 miles upstream from Midway.

Picea tranquillensis Penhallow

Holotype 7667

Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, p. 67, Text-fig. 17.

Kamloops group (Tranquille beds), British Columbia; Tranquille River.

Pinus columbiana Penhallow

Syntype 5810 (cone)

Penhallow D. P. 1907, Roy. Soc. Canada Trans., vol. 1, sec. 4, p. 296, Pl. 2.

Tertiary, British Columbia; Kettle River, a few miles north of International Boundary line.

Pinus lardyana Heer

Hypotype 7602

Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, p. 68, Text-fig. 19.

Kamloops group, British Columbia; Quilchena.

Pinus steenstrupiana Heer

Hypotypes 7603, 7603b, c, d

Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, pp. 68-69, Text-figs. 20, 22, 23.

Kamloops group, British Columbia; Quilchena.

Pinus trunculus Dawson

Syntypes 6069, 6069a; hypotypes 7604, ?7653, 7653b. (figured specimens of Berry 1926, missing)

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 78, Text-figs. 5a, 5b.

Penhallow D. P. 1908, Geol. Surv., Canada, Rept. Tert. Pl. B.C., Pub. 1013, pp. 69-72, Text-figs. 24, 25, ?28.

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 98, Pl. 10, figs. 4, 5.

Kamloops group, British Columbia; near Stump Lake.

Kamloops group (Tranquille beds), British Columbia; Tranquille River.

Chu Chua formation, British Columbia, Joseph and Darlington Creeks, North Thompson Valley area.

Planera longifolia Lesquereux

Hypotype 6083

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 85, Text-fig. 16.

Princeton group, British Columbia; North Fork Similkameen River.

Planera nervosa Newberry

Hypotype (apparently missing)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 109, Pl. 17, fig. 5.

Kitsilano formation, British Columbia; Kitsilano, English Bay.

Platanus basilobata Ward

Hypotypes 5466 (*Platanus nobilis* Dawson), specimen missing (*Viburnum oxycoccoides* Dawson), 5914, 6149, 6150, 6356, 7411

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 32, Pl. 6, fig. 7.

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 58, Pl. 42; Pl. 43, figs. 1-3.

Ravenscrag formation, Saskatchewan: Roche Percée, Short Creek, Souris River; NE sec. 13, tp. 3, rge. 24, W2nd mer.

Paskapoo formation, Alberta: Brickburn, NE¼ sec. 23, tp. 24, rge. 2, W5th mer.; Shaganappi Point, near Calgary.

See *Viburnum oxycoccoides*
Platanus nobilis

Platanus nobilis Dawson

Holotype 5466

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 24, Pl. 1, fig. 7.

Ravenscrag formation, Saskatchewan; Roche Percée, Short Creek, Souris River.

=*Platanus basilobata* Ward

Platanus pseudoccidentalis Hollick

Holotype 4988

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 409, Pl. 41.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Platanus raynoldsii Newberry

Hypotypes 5977, 5978, 5979, 6191, 6243, 6244, 6355

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 59, Pl. 37, fig. 2; Pl. 38; Pl. 39; Pl. 40; Pl. 41; Pl. 44, fig. 3; Pl. 60, fig. 30.

Paskapoo formation, Alberta; Red Deer River at mouth of Blindman River and also about 1½ miles upstream.

Post-Brazeau (Paleocene) beds, Alberta; Alexo area, tp. 40, rge. 13, W5th mer.

Porcupine Hills or Willow Creek (upper part) formation; Crowsnest River, lsd 8, sec. 34, tp. 7, rge. 1, W5th mer., approximately 200 feet above junction with Oldman River.

Populus acuminatafolia Berry

Syntypes 4922, 4923, 4924

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 102, Pl. 17, figs. 1-3.

Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Populus arctica Heer

Hypotypes 5412, 5581, 5582

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 27, Pl. 1, fig. 9.

Dawson J. W. 1890, Roy. Soc. Canada Trans. 1889, vol. 7, sec. 4, p. 71, Pl. 10, figs. 2-4.

Ravenscrag formation, Saskatchewan; Great Valley.

Paleocene, Northwest Territories; Mackenzie River, about 20 miles above Bear River.

=*Trochodendroides arctica* (Heer)

Populus balsamoides Göppert

Hypotype 7478

Dawson J. W. 1895, Roy. Soc. Canada Trans. 1895, 2nd ser., vol. 1, sec. 4, p. 146, Pl. 4, fig. 8; Pl. 6, fig. 9 (specimen missing).

Burrard formation, British Columbia; CPR west of Hastings.

Populus carneosa (Newberry)

Hypotypes 5706, 5915, 5916, 5917, 6119, 6248, 6249, 6250, 6251

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 55, Pl. 35, figs. 1-3; Pl. 36, figs. 1-3, 4 pars, 5,6.

Paskapoo formation, Alberta: Red Deer River at mouth Blindman River; Red Deer River, north side, about 1½ miles above mouth Blindman River; road on slope to bridge over Red Deer River about 9½ miles east of Red Deer.

Populus daphnogenoides ? Ward

Hypotype 6073

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 83, Text-fig. 13.

Princeton group, British Columbia; North Fork Similkameen River.

=*Trochodendroides arctica* (Heer)

Populus? *daturaefolia* (Ward)

Hypotypes 6126, 6127, 6128, 6129, 6130

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 56, Pl. 34, figs. 2-6.

Paskapoo formation, Alberta; North Saskatchewan River, east side at small brook about 800 feet above CNR bridge at Rocky Mountain House.

Populus hookeri Heer

Hypotype 5583

Dawson J. W. 1890, Roy. Soc. Canada Trans. 1889, vol. 7, sec. 4, p. 71, Pl. 10, fig. 5.

Paleocene, Northwest Territories; Mackenzie River, about 20 miles above Bear River.

=*Trochodendroides arctica* (Heer)

Populus obtrita Dawson

Holotype 6030b

Dawson J. W. 1890, Roy. Soc. Canada Trans. 1889, vol. 8, p. 82, Text-fig. 12.

Princeton group, British Columbia; Similkameen River.

=*Trochodendroides arctica* (Heer)

Populus penhallowi Bell

Holotype 5560

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 55, Pl. 35, fig. 4.

Paskapoo formation, Alberta; Red Deer River at mouth of Blindman River.

Populus rotundifolia Newberry

Hypotype 7809

Dawson J. W. 1895, Roy. Soc. Canada Trans., 2nd ser., vol. 1, sec. 4, p. 146, Pl. 6, fig. 10.

Burrard formation, British Columbia; Hastings.

=*Trochodendroides arctica* (Heer)

Protophyllum canadensis Berry

Syntypes 7403, 7404

Berry, E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 31, Pl. 4, fig. B, Pl. 5.

Ravenscrag formation, Saskatchewan; sec. 19, tp. 1, rge. 22, W2nd mer.

=*Pterospermites dawsoni* (Knowlton)

Prunus mclearni Berry

Holotype 7427; paratype 7428

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 41, Pl. 11, figs. 1, 2.

Ravenscrag formation, Saskatchewan; SE sec. 29, tp. 3, rge. 24, W2nd mer.

55790-0—11

Pteris sitkensis Heer
Hypotype 5587
Dawson J. W. 1890, Roy. Soc. Canada Trans. 1889, vol. 7, sec. 4, p. 70, Pl. 10, fig. 1.
Paleocene beds, Northwest Territories; Mackenzie River, 20 miles above Bear River.
=*Cladophlebis groenlandica* (Heer)

Pterospermites dawsoni (Knowlton)
Holotype 5463b (*Quercus platania* Dawson), paratype 6307; hypotypes 6305, 6306, 6308, 7403 and 7404 (*Protophyllum canadensis* Berry), 7430 (*Pterospermites minor* Berry), 7438 and 7439 (*Pterospermites penhallowi* Berry)
Paskapoo formation, Alberta: Elbow River, Calgary; near Aldersyde.
Ravenscrag formation, Saskatchewan: Morgan Creek; sec. 19, tp. 1, rge. 22, W2nd mer.
See *Quercus platania*
Protophyllum canadensis
Pterospermites minor
Pterospermites penhallowi

Pterospermites haguei? (Knowlton)
Hypotype? 6336
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 71, Pl. 52, fig. 1.
Porcupine Hills or Willow Creek formation (upper part), Alberta; Crowsnest River, lsd 8, sec. 34, tp. 7, rge. 1, W5th mer.

Pterospermites minor Ward
Hypotype 7430
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 48, Pl. 11, fig. 4.
Ravenscrag formation, Saskatchewan; Morgan Creek.
=*Pterospermites dawsoni* (Knowlton)

Pterospermites penhallowi Berry
Syntypes 7438, 7439
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 49, Pl. 13, figs. 1, 2.
Ravenscrag formation, Saskatchewan; sec. 19, tp. 1, rge. 22, W2nd mer.
=*Pterospermites dawsoni* (Knowlton)

Pterospermites whitei Ward
Hypotypes 6247, 6275, 6276
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 69, Pl. 47, figs. 1, 3, 5.
Paleocene beds, Northwest Territories; Bear River, near Fort Norman, West bank.

Quercus banksiaefolia Newberry
Hypotype (apparently missing)
Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 107, Pl. 16, fig. 6.
Kitsilano formation, British Columbia; Kitsilano.

Quercus dalli Lesquereux
Hypotype 6079
Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 85, Text-fig. 17.
Princeton group, British Columbia; North Fork Similkameen River.

Quercus dentoni Lesquereux
Hypotype 7483
Dawson J. W. 1895, Roy. Soc. Canada Trans., 2nd ser., vol. 1, sec. 4, p. 148, Pl. 7, fig. 15.
Burrard formation, British Columbia; a mile west of Hastings on CPR.

Quercus kootenayensis Hollick

Holotype 4979

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 402, Pl. 32, fig. 4.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Quercus platania Heer

Hypotypes 5463b, 6307

Dawson J. W. 1890, Roy. Soc. Canada Trans. 1889, vol. 7, sec. 4, p. 72, Pl. 11.

Paskapoo formation, Alberta; Elbow River, Calgary.

=*Pterospermites dawsoni* (Knowlton)

Quercus praegroenlandica Berry

Syntypes 7398, 7399, 7400, 7401

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 26, Pl. 3, figs. 3-7.

Ravenscrag formation, Saskatchewan; sec. 4, tp. 2, rge. 22, W2nd mer.

Quercus schofieldii Hollick

Holotype 4974

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 403, Pl. 33.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Quercus simplex Newberry

Hypotypes 4954, 4956, 6274

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 107, Pl. 11, fig. 3.

Burrard formation, British Columbia; south side Burrard Inlet, ¼ mile west of Hastings.

Quercus uglowi Berry

Holotype (specimen apparently missing)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 107, Pl. 15, fig. 8.

Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Quercus? sp. Dawson

Specimen 6081

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 89, Text-fig. 28.

Kamloops group, British Columbia; near Stump Lake.

Rhamnites marginatus (Lesquereux)

Hypotypes 5573, 5574, 6253

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 73, Pl. 60, figs. 1, 2; Pl. 61, fig. 5.

Paskapoo formation, Alberta; Red Deer River at mouth of, and also 1½ miles above Blindman River.

Rhamnites ovatus (Penhallow)

Holotype 5701 (*Viburnum ovatum* Penhallow); hypotypes 5704, 6266, 6267

Penhallow D. P. 1902; Roy. Soc. Canada Trans., 2nd ser., vol. 8, sec. 4, p. 62. Text-fig. 7.

Bell W. A. 1949; Geol. Surv., Canada, Bull. 13, p. 72, Pl. 50, fig. 2; Pl. 51. figs. 2-4.

Paskapoo formation, Alberta; Red Deer River at mouth of, and also 1½ miles above Blindman River.

55790-0—11½

Rhamnus kitsilaniana Berry

Holotype (apparently missing)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 113, Pl. 19, fig. 1.

Kitsilano formation, British Columbia; Kitsilano, English Bay.

Salisburya adiantoides ? Unger

Hypotype (?) 6099

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 78, Text-fig. 4.

Princeton group, British Columbia; North Fork Similkameen River.

=*Ginkgo adiantoides* ? (Unger)

Salix kamloopsiana Dawson

Holotype 6074

Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 90, Text-fig. 32.

Kamloops group, British Columbia; near Kamloops.

Salix laramiana Dawson

Holotype 5419

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 28, Pl. 1, fig. 10.

Ravenscrag formation, Saskatchewan; Great Valley.

=*Laurophyllum laramianum* (Dawson)

Salix orbicularis Penhallow

Holotype 8131

Penhallow D. P. 1908, Geol. Surv., Canada, Pub. 1013, p. 86, Text-fig. 30.

Kamloops group, British Columbia; Quilchena.

Sapindus grandifolius Ward

Hypotype 7429

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 44, Pl. 11, fig. 3.

Ravenscrag formation, Saskatchewan; sec. 27, tp. 3, rge. 24, W2nd mer.

Sassafras selwynii Dawson

Holotype 5424; hypotypes 4915, 4916, 4917, 4918

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 28, Pl. 2, fig. 13.

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 114, Pl. 14, figs. 1-4.

Ravenscrag formation, Saskatchewan; Short Creek, Souris River, at Roche Percée.

Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Sequoia heerii Lesquereux

Hypotype (missing)

Penhallow D. P. 1908, Geol. Surv., Canada, Pub. 1013, p. 89, Text-fig. 32.

Princeton group, British Columbia; Tulameen River.

=*Sequoiites langsdorfii* (Brongniart)

Sequoiites langsdorfii (Brongniart)

Hypotypes 5991, 5992, 5995, 6133

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 47, Pl. 27, figs. 4,6; Pl. 29, figs. 1,3.

Paskapoo formation, Alberta; Red Deer River on hill slope to bridge, about 9½ miles east of Red Deer.

Post-Brazeau (Paleocene) beds, Alberta; roof of Mynheer coal seam, in Sterling cut about ½ mile east of Sterco.

See *Sequoia heerii*

Sorbus decorafolia Berry

Holotype 4945

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 111, Pl. 19, fig. 2.

Chu Chua formation, British Columbia; North Thompson Valley area.

Sphenopteris guyottii Lesquereux

Hypotype 5551

Penhallow D. P. 1902, Roy. Soc. Canada Trans., 2nd ser., vol. 8, sec. 4, p. 48.

Paskapoo formation, Alberta; Red Deer River at mouth Blindman River.

=*Asplenium* ? *penhallowi* Bell

Spirodela scutata Dawson

Syntypes 5456, 5456a, ?5457a; hypotypes 3461, 6135

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 82, Pl. 63, fig. 3; Pl. 67, fig. 1.

Ravenscrag formation, Saskatchewan; badlands south of Wood Mountain.

Post-Brazeau (Paleocene) beds, Alberta; rock-cut on CNR about a mile east of Alexo.

See *Lemna* (*Spirodela*) *scutata*

Symphorocarpophyllum albertum Dawson

Holotype 5861

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 30, Pl. 2, fig. 17.

Ravenscrag formation, Saskatchewan; Great Valley.

Symphorocarpophyllum linnaeiforme Dawson

Holotype 5450

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 30, Pl. 2, fig. 18.

Ravenscrag formation, Saskatchewan; Porcupine Creek (Poplar River).

Taxodium occidentale Newberry

Hypotype

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 97, Pl. 10. fig. 1.

Chu Chua formation, British Columbia; Newhykulston Creek, North Thompson Valley area.

Thuites interruptus (Newberry)

Hypotypes 5409 (Dawson), 7396 (Berry), 6142, 6143, 6144

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 52, Pl. 27, figs. 1-3.

Ravenscrag formation, Saskatchewan: Porcupine Creek (Poplar River); NE sec. 24, tp. 3, rge. 25, W2nd mer.

Post-Brazeau (Paleocene) beds, Alberta: roof of Mynheer coal seam in Sterling cut about ½ mile east of Sterco and north side of railway at mine tipple Coal Valley Coal Co.; Alexo area, tp. 40, rge. 13, W5th mer.

See *Thuya interrupta*

Thuya interrupta Newberry

Hypotypes 5409 (one of series identified by Dawson, but figured specimen missing), 7396 (not located)

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 22, Pl. 1, fig. 3.

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 21, Pl. 3, fig. 1.

Ravenscrag formation, Saskatchewan: Porcupine Creek (Poplar River); NE sec. 24, tp. 3, rge. 25, W2nd mer.

=*Thuites interruptus* (Newberry) Bell

Tilia ? *incerta* Hollick

Holotype 4976

Hollick A. 1927, New York Bot. Garden, Mem. 7, p. 414, Pl. 43, fig. 2.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Trochodendroides arctica (Heer)

Hypotypes 5412 (*Populus arctica* Dawson), 5506, 5581 (*P. arctica* Dawson, specimen missing), 5582 (*P. arctica* Dawson, specimen missing), (specimen *P. arctica* Dawson 1890, Pl. 10, fig. 3, missing), 5583 (*P. hookeri* Dawson), 5695. 5918, 5919, 6030b (*P. obtrita Dawson*), 6073 (*P. daphnogenoides ? Dawson*) 6114, 7405, to 7410 (*Trochodendroides cuneata* Berry), *T. speciosa* Berry, 7437 (*Grewiopsis mclearni* Berry), 7440 (missing), (*G. mclearni* Berry)

Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 27. Pl. 1, fig. 9.

Dawson J. W. 1890, Roy. Soc. Canada Trans. 1889, vol. 7, sec. 4, p. 71. Pl. 10, figs. 2-4.

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 109, Pl. 13. fis. 1-4.

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 56, Pl. 4, fig. 2; Pl. 9. fig. 4; Pl. 20, fig. 3; Pl. 44, fig. 2; Pl. 43, figs. 1, 2; Pl. 46, figs. 1-3.

Ravenscrag formation, Saskatchewan: Great Valley; sec. 18, tp. 4, rge. 2, W3rd mer.

Paskapoo formation, Alberta; Red Deer River at mouth Blindman River.

Post-Brazeau (Paleocene) beds, Alberta; tp. 40, rge. 13, W5th mer.

Tertiary (Paleocene), Northwest Territories; Mackenzie River, about 20 miles above Bear River.

Kitsilano formation, British Columbia; Kitsilano.

Burrard formation, British Columbia; Hastings.

Princeton group, British Columbia; Similkameen River.

See *Populus arctica*
P. daphnogenoides?
P. hookeri
P. obtrita
P. rotundifolia
Trochodendroides cuneata
T. speciosa
Grewiopsis mclearni

Trochodendroides cuneata (Newberry)

Hypotypes 5513, 7405, 7406, 7407, 7408, 7409, 7410

Berry E. W. 1930, Geol. Surv., Canada, Mus. Bull. 63, p. 20, Pl. 5, figs. 2,3.

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 34, Pl. 6, figs. 1-6.

Ravenscrag formation, Saskatchewan: sec. 27, tp. 6, rge. 23, W3rd mer.; sec. 18, tp. 4, rge. 2, W3rd mer.

=*Trochodendroides arctica* (Heer)

Trochodendroides speciosa (Ward)

Hypotype (missing)

Berry E. W. 1930, Geol. Surv., Canada, Mus. Bull. 63, p. 22, Pl. 5, fig. 8.

Ravenscrag formation, Saskatchewan; sec. 28, tp. 7, rge. 24, W3rd mer.

=*Trochodendroides arctica* (Heer)

Typha sp. Penhallow

Specimen 5556

Penhallow D. P. 1902, Roy. Soc. Canada Trans., 2nd ser., vol. 8, sec. 4, p. 52, Text-fig. 3.

Paskapoo formation, Alberta; Red Deer River at mouth Blindman River.

Ulmites pusillus Dawson

Holotype 6082
Dawson J. W. 1891, Roy. Soc. Canada Trans. 1890, vol. 8, sec. 4, p. 88, Text-fig. 24.
Princeton group, British Columbia; Similkameen River.

Ulmus columbianus Berry

Holotype 4944
Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 108, Pl. 15, fig. 7.
Chu Chua formation, British Columbia; Joseph Creek, North Thompson Valley area.

Ulmus minuta Göppert

Hypotype 7583 (fruit)
Penhallow D. P. 1908, Geol. Surv., Canada, Pub. 1013, p. 94, Text-fig. 33.
Tertiary, British Columbia; Horsefly mine, Horsefly River.

Ulmus praecursor Dawson

Holotype 5423
Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 28, Pl. 2, fig. 11.
Ravenscrag formation, Saskatchewan; Porcupine Creek (Poplar River).

Ulmus protoracemosa Penhallow

Holotype 5812 (wood slides missing)
Penhallow D. P. 1907, Roy. Soc. Canada Trans. 1907, 3rd ser., vol. 1, sec. 4, p. 297, Pls. 4-6.
Tertiary, British Columbia; Kettle River, 6 miles upstream from Midway.

Vaccinium pseudocorymbosum Hollick

Holotype 4980
Hollick A. 1927, New York Bot. Garden. Mem. 7, p. 417, Pl. 37, fig. 3.
St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Viburnum antiquum (Newberry)

Hypotypes 6151, 7453 (missing), 7454 (missing), 7455, 7456, 7457 (missing).
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 58, Pl. 17, figs. 1-3; Pl. 18, figs. A. and B.
Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 77, Pl. 61, fig. 4.
Ravenscrag formation, Saskatchewan: NW sec. 5, tp. 4, rge. 26, W2nd mer.; sec. 19, tp. 1, rge. 22, W2nd mer.; sec. 30, tp. 1, rge. 21, W2nd mer.
Paskapoo formation, Alberta; Brickburn, NE ¼ sec. 23, tp. 24, rge. 2, W5th mer.

Viburnum antiquum mut. *trinervum* Berry

Holotype 7417; paratype 7447
Berry E. W. 1935, Geol. Surv., Canada, Mem. 185, p. 60, Pl. 7, fig. 6; Pl. 15, fig. 6.
Ravenscrag formation, Saskatchewan; Rockglen, sec. 33, tp. 2, rge. 30, W2nd mer.
=*Viburnum trinervum* Berry

Viburnum asperum Newberry

Hypotypes 5476, 7449, 7450, 7451, 7452
Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 56, Pl. 16, figs. 1-4.
Ravenscrag formation, Saskatchewan: sec. 18, tp. 4, rge. 2, W3rd mer.; sec. 27, tp. 6, rge. 23, W3rd mer.
See *Viburnum saskatchuense*

Viburnum calgarianum Dawson

Holotype 5441

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 18.
Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, sec. 4, p. 29, Pl. 2, fig. 14.

Paskapoo formation, Alberta; Shaganappi Point, near Calgary.

Viburnum castrae Knowlton and Cockerell

Hypotype 7446

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 56, Pl. 15, fig. 5.

Ravenscrag formation, Saskatchewan; SE sec. 3, tp. 5, rge. 1, W3rd mer.

=*Viburnum trinervum* Berry

Viburnum finale Ward

Hypotype 6271

Berry E. W. 1930, Geol. Surv., Canada, Mus. Bull. 63, p. 27, Pl. 5, fig. 4.

Ravenscrag formation, Saskatchewan; Ravenscrag butte, sec. 27, tp. 6, rge. 23, W3rd mer.

=*Celastrinites insignis* (Heer)

Viburnum lakesii Lesquereux

Hypotypes 6192, 6193, 6194, 6195, 6197, 6198, 6235

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 78, Pl. 14, fig. 3; Pl. 37, fig. 1; Pl. 58, fig. 1; Pl. 61, fig. 1; Pl. 62, figs. 1, 3, 4.

Porcupine Hills or Willow Creek formation (upper part), Alberta; Crowsnest River, lsd 8, sec. 34, tp. 7, rge. 1, W5th mer., approximately 200 feet above junction with Oldman River.

Viburnum oxycoccoides Dawson

Type missing

Dawson J. W. 1886, Roy. Soc. Canada Trans. 1885, vol. 3, sec. 4, p. 17.
Dawson J. W. 1887, Roy. Soc. Canada Trans. 1886, vol. 4, sec. 4, p. 29, Pl. 2, fig. 15.

Paskapoo formation, Alberta; Shaganappi Point, near Calgary.

=*Patanus basilobata* Ward

Viburnum saskatchuense Dawson

Syntype 5476

Dawson J. W. 1888, Roy. Soc. Canada Trans. 1887, vol. 5, sec. 4, p. 35.

Paskapoo formation, Alberta; North Saskatchewan River, east side, sec. 11, or 14, tp. 47, rge. 9, W5th mer.

=*Viburnum asperum* Newberry

Viburnum trinervum Berry

Holotype 7417, and paratype 7447 (*Viburnum antiquum* mut. *trinervum* Berry); hypotypes 6196, 6199

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 78, Pl. 61, figs. 2, 3.

Ravenscrag formation, Saskatchewan: sec. 33, tp. 2, rge. 30, W2nd mer.

Porcupine Hills or Willow Creek formation, Alberta; Crowsnest River, lsd 8, sec. 34, tp. 7, rge. 1, W5th mer., approximately 200 feet above junction with Oldman River.

See *Viburnum antiquum* mut. *trinervum*
Viburnum castrae

Vitis alia Hollick

Holotype 4977

Hollick A. 1927. New York Bot. Garden, Mem. 7, p. 413, Pl. 43, fig. 1.

St. Eugene silts, British Columbia; Kootenay Valley, St. Mary River, vicinity of Saint Eugene Mission.

Woodwardia maxoni Knowlton

Hypotypes (figured specimens missing, but unnumbered specimens from same locality identified by Berry)

Berry E. W. 1926, Geol. Surv., Canada, Mus. Bull. 42, p. 95, Pl. 10, figs. 2, 3.

Chu Chua formation, British Columbia; Newhykulston Creek, North Thompson Valley area.

Xantholithes propheticus Ward

Hypotypes 7554, 7555

Berry E. W. 1935, Geol. Surv., Canada, Mem. 182, p. 65, Pl. 20, figs. 1-3.

Ravenscrag formation, Saskatchewan; NW sec. 35, tp. 5, rge. 1, W3rd mer.

Zizyphoides colombi (Heer)

Hypotypes 5956, 5957, 6117, 6157, 6158

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 73, Pl. 50, fig. 1; Pl. 51, fig. 1; Pl. 52, figs. 2-4.

Ravenscrag formation, Saskatchewan; SE sec. 3, tp. 5, rge. 1, W3rd mer.

Post-Brazeau (Paleocene) beds, Alberta: Sterling cut, about ½ mile east of Sterco, from roof of Mynheer coal seam; about a mile southeast of Alexo at mile post 134 CNR; Saunders area, 150 to 200 feet, below coal of west Saunders.

Zizyphoides mackayi Bell

Holotype 621; paratypes 623, 624

Bell W. A. 1949, Geol. Surv., Canada, Bull. 13, p. 74, Pl. 19, figs. 2, 3; Pl. 20, figs. 2, 4.

Post-Brazeau (Paleocene) beds, Alberta; Sterco and Coal Valley.

2. Microplant Remains

Aclistochara compressa (Knowlton)

Hypotypes 6366, 6368, 6369, 6455, 6456, 6457

Bell W. A. 1949, Geol Surv., Canada, Bull. 13, p. 36, Pl. 22, figs. 1-3, 5, 7, 8

Porcupine Hills or Willow Creek formation (upper part), Alberta; SE¼ sec. 36, tp. 10, rge. 27, W4th mer.

PLEISTOCENE

Chamaedaphne calyculata (Linnaeus)

Hypotypes 3574-3585

Terasmae J. 1959, Can. J. Bot., vol. 37, p. 715, Pl. 1, fig. 3.

Pleistocene peat, Northwest Territories; interglacial beds, Mackenzie River delta area.

Dryas drummondii Richardson

Hypotypes 3557-3573

Terasmae J. *in* Terasmae J. and Fyles J. G. 1959, Can. J. Bot., vol. 37, p. 816, Pl. 2, figs. 5-7.

Upper Pleistocene beds, British Columbia: bottom-set deltaic sands, Englishman River, 3 miles southeast of Parksville, Vancouver Island; post-glacial marine clay near Alberni, Vancouver Island.

Larix laricina (Du Roi)

Hypotype 3586 (cone)

Terasmae J. 1959, Can. J. Bot., vol. 37, p. 715, Pl. 1, fig. 6.

Pleistocene peat, Northwest Territories; Mackenzie River delta area, interglacial beds.

Pinus contorta Douglas

Hypotypes 3555 and 3556 (cones)

Terasmae J. *in* Terasmae J. and Fyles J. G. 1959, Can. J. Bot., vol. 37, p. 816, Pl. 1, figs. 3, 4.

Upper Pleistocene beds, British Columbia; bottom-set deltaic sands, Englishman River, 3 miles southeast of Parksville.

LIST OF TRIVIAL NAMES

acadica—Aneimites; Astereotheca; Palaeochara; Pecopteris
acicularis—Annularia
acifolia—Elatocladus
acrodentata—Sphenopteris
aculeata—Annularia; Neuropteris; Sphenopteris
aculeatum—Lepidodendron
aculeatus—Lepidozonotriletes
acuminata—Sporangites
acuminatum—Lepidostrobophyllum
acuta—Mariopteris
acutidens—Celastrophyllum
acutiloba—Anomozamites
acutipennis—Zamites
adiantoides—Adiantites; Diplotmeme; Ginkgo; Ginkgoites
affine—Telangium
affinis—Platanus
alberta—Cladophlebis
albertum—Symphorocarpophyllum
alexoensis—Aralia; Equisetum
alia—Vitis
almaensis—Alloiopteris
altilis—Cincturasporites
ambiguum—Pagiophyllum
americanum—Myrciophyllum
amoenaeformis—Sphenopteris
amplus—Cylogranisporites
ampullacea—Samaropsis; Raistrickia
angusta—Sapindopsis
angustus—Endosporites
angustifolia—Betula; Phoenicopsis
annulatus—Densosporites
anthraciticum—Pityospermum
anthraciticus—Pinus
antiquum—Viburnum
appendices—Cincturasporites
aquaticus—Phyllites
arachioides—Leguminosites
arctica—Ginkgo; Jenkinsella; Phoenicopsis; Populus; Trochodendroides
arcticum—Acer
arcticus—Punctatisporites
artemisaefolia—Eremopteris
asperum—Viburnum
asplenioides—Phyllites
asteris—Annularia
attenuata—Neuropteris
attenuatus—Labiadensites
auritus—Cincurasporites
avoldensis-Zeilleria
baculosa—Raistrickia
baileyi—Samaropsis
banksiaefolia—Quercus
barbalata—Sphenopteris
barlowi—Neurocardiopteris
basilobata—Platanus
beauharnoisensis—Palaeophycus
belviderensis—Sapindopsis
berryi—Athrotaxites; Coniopteris
beverlyensis—Palaeophycus
bidens—Sphenopteris
bisecta—Samaropsis
blairmorensis—Sphenopteris
blomstrandi—Dennstaedtia
boblayi—Sigillaria
bondi—Adiantites
boreale—Equisetum; Myrtophyllum
borealis—Ctenis; Dioonnites; Leguminosites; Nordenskiöldia
boulayi—Crossotheca
bretonensis—Lepidodendron; Telangium
brevifolia—Coniopteris; Elatocladus; Sapindopsis; Whittleseya
brittsi—Sphenopteris
broadheadi—Hymenotheca
brongniarti—Oligocarpia; Nilssonia
bronni—Hymenophylites; Sphenopteris
browniana—Pecopteris
brownii—Cyclopteris; Platyphyllum
bunburii—Linopteris
burrardiana—Carex
caducum—Tetrameridium
calgarianum—Viburnum
calyculata—Chamaedaphne
camptotaenia—Asolanus
canadense—Cinnamomum; Hydropterangium; Protophyllum; Tetradium
canadensis—Caytonia; Ficus; Klukia; Macclintockia; Nikitinsporites; Nilssonia; Passiflora; Sagenopteris; Solenopora; Stenorachis
canis—Solenopora
canmorense—Angiopteridium
canmorensis—Taeniopteris
cantiana—Sphenopteris
carinatum—Cardiocarpon
carneosa—Populus
carnosa—Mariopteris
castrae—Viburnum
catenulata—Androvettia
cellulosus—Ponctatisporites

latum—**Callistemophyllum**
lawsoni—Atikokania
leii—Fraxinus
lepida—Ginkgo; Salisburia
licens—Sphenopteris
limbatus—Punctatisporites
lineata—Sphenopteris
linnaeforme—Symphorocarpophyllum
literatus—Cincturasporites
lonchitica—Alethopteris
longifolia—Baiera; Mariopteris; Planera
longifolius—Asterophyllites; **Leptostrobus**
lorwayana—Sigillaria
lycopodioides—Lepidodendron
lyelli—Equisetites; Equisetum
macconachiei—Sphenopteridium
macgregori—Microsporites
mackayi—Zizyphoides
maclarenii—Ocksisporites
macquarrii—Corylus
macromanifestus—Endosporites
macrophylla—Neuropteris; Osmunda
macropterum—Acer
magnifica—Lycospora; Magnolia
magnifolia—Cannophyllites; Sapindopsis
magnifolium—Pagiophyllum
major—Linopteris; Stenozonotriletes
majus—Lepidostrobophyllum; **Sphenophyllum**
mamillaris—Sigillaria
mantelli—Sagenopteris
marginalis—Leiotriletes
marginatis—Rhamnites
martinianum—Asplenium; Cladophlebis
maxoni—**Woodwardia**
mclearni—Brachyphyllum; Grewiopsis; Prunus; Sagenopteris; Sphenopteris
melvillensis—Circumsporites
meracus—Leiozonotriletes
microdeltoides—**Leiotriletes**
micrograna—Lycospora
micromanifestus—Endosporites
miltoni—Asterotheca; **Pecopteris**
minimus—Planisporites
minor—Licrophycus; Odontopteris; Pterospermites; Triphyllopteris
mintoensis—Lepidostrobus
minuscula—Sphenopteris
minuta—Girvanella; Solenopora; Ulmus
missouriensis—Oligocarpia; Sphenopteris
mixta—Sphenopteris
moniliformis—Monilospora
montanense—Ptilopyllum
montanensis—Anomozamites
montana—Zamites
montanus—Paliurus
moriensis—Sphenopteris
moyseyi—Lepidostrobophyllum; Sphenopteris.
multiformis—Cebatha
munda—Cladophlebis; Dicksonia; Gleichenites
myriophyllum—Sphenophyllum
naevulus—Cyclogranisporites
nahannensis—Punctatisporites; Reinschospora
nana—Ginkgo; Salisburia
nebrascensis—Dombeyopsis
negundifolium—Acerites
nervosa—Mariopteris; Planera
neuropteroides—Linopteris; Sphenopteris
newberryi—Sphenopteris
nicholsoni—Girvanella
nigella—Juglans
nigelloides—Juglans
nigracollensis—Nilssonia
nitidus—Punctatisporites
nobilis—Platanus
nordenskiöldi—Cryptomerites; Cyclopitus; Elatocladus; Gleichenites; Pinus
notata—Aralia
notatus—Leiotriletes
nummularia—Sphenopteris
obliqua—Linopteris; Mixoneura; Neuropteris
oblongifolia—Clintonia
oblongifolium—Sphenophyllum
obovatum—Lepidodendron
obscurum—Palaeophycus
obtrita—Populus
obtusa—Cyclopteris; Eupecopteris; **Senftenbergia**
obtusiloba—Sphenopteris
obtusus—Adiantites
occidentale—Taxodium
ocksensis—Biharisporites
oerstedi—Cladophlebis
olriki—Elatocladus; Taxites
olryi—Lepidostrobus
ophiurus—Lepidodendron
orbicularis—Salix
ottawaensis—Chaetocladus; Licrophycus
ovalis—Cinnamomoides; Paliurus
ovata—Mixoneura; Neuropteris; Sigillaria
ovatifolia—Ficus
ovatus—Rhamnites
oxfordensis—Sphenopteris
oxycoccoides—Viburnum
pachyphylla—Coniopteris
pachyphyllum—Sphenolepidium
pallida—Lycospora
paniculata—Calamostachys
paquettiana—Solenopora
parlatorii—Physagenia
papulosus—Verrucosisporites
parva—Cladophlebis
pasaytensis—Nilssonia

speciosus—Reticulatisporites
sphenophylloides—Annularia
sphenopteroides—Mariopteris
spiniformis—Sphenopteris
spinulosa—Spenopteris
spinosus—Cordaianthus; Cordaitanthus
splendida—Elatides
stanleyanum—Dryophyllum; Hicoria
steenstrupiana—Pinus
stellata—Annularia
stenopus—Podozamites
stenozonalis—Cincturasporites
sternbergi—Alloiopteris; Corynepteris
sterzeliformis—Pecopteris
stipulatiformis—Sphenopteris
striata—Palaeostachya; Nageiopsis; Sphenopteris
strictinervis—Cladophlebis
strigosa—Sphenopteris
striulatus—Stenorachis
subalatus—Tendosporites
subcrenatus—Tendosporites
subcuneata—Odontopteris
subfurcatum—Diplotmema
submamillarius—Biharisporites
subserratus—Densosporites
succulens—Clematischnia
suckowi (ii)—Calamites
sulcata—Sphenopteris
sulcatus—Cincturasporites
sullivanti—Pecopteridium
superba—Calamostachys
suspecta—Sphenopteris
tendoris—Triquitrites
tenellus—Carpolithes
tenuifolia—Davallia; Nelumbo; Neuropteris; Stenoloma
tenuifolius—Adiantites
tenuineris—Zamites
tenuis—Bythotrephis; Mariopteris; Tholisporites
tenuispinus—Spinozonotriletes
tessellata—Sigillaria
thermalis—Juglans
torulosa—Lycospora
tranquillensis—Crataegus; Picea
triangulare—Lepidostrobus
trichomatosum—Sphenophyllum
trifoliolata—Sphenopteris
trinervum—Viburnum
triquetris—Simozonotriletes
trivalvis—Triquitrites
trunculus—Pinus
tuberculata—Calamostachys
tulameenensis—Crataegus
uber—Cirratriradites
uglowi—Myrica; Quercus
uncatus—Spinozonotriletes
undulatus—Calamites
ungeri—Elatocladus; Sequoiites
ulmoides—Betula
unitus—Ptychocarpus
vagans—Licrophycus
valida—Alethopteris; Sphenopteris
validum—Pterophyllum
vallatus—Vallatisporites
vancouverensis—Carex
variabilis—Lepidostrobus; Sciadopityytes; Verrucosisporites
varioreticulatus—Reticulatisporites
verrucosus—Vallatisporites
vetustula—Sterculia
virginiana—Triphyllopteris
virginiensis—Cladophlebis
viriosus—Punctatisporites
volkmannianum—Lepidodendron
waldenburgensis—Calamites
waltoni—Cladophlebis; Gleichenites
westoni—Aralia; Araliaephyllum
whitei—Pterospermites
whitii—Diplotmema; Sphenopteris
wickendeni—Eochara
williamsi (ii)—Leguminosites; Sagenopteris
wilsoni—Gymnosporus; Rhodea; Samaropsis
winslowi—Corynepteris
wortheni—Lepidodendron
yukonense—Pityospermum
yukonensis—Coniopteris
zeilleri—Thallites
zobeli—Diplotmema