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SUPPLEMENT TO CATALOGUE OF
MESOZOIC AND CENOZOIC PLANTS
OF NORTH AMERICA
1919-37

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CONTENTS

	Page
Introduction.....	1
Bibliography.....	7
Catalogue.....	65
Errors and omissions in Bulletin 696.....	325

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INTRODUCTION

As indicated by the title, this work is a supplement to the "Catalogue of the Mesozoic and Cenozoic plants of North America," by Frank Hall Knowlton, published in 1919 as Bulletin 696 of the United States Geological Survey. It is intended to be used with the earlier work, which it supplements but does not replace.

Knowlton's catalogue, in spite of its comprehensive title, did not include all North American fossil plants of Mesozoic and Cenozoic age then known. It specifically excluded those from Greenland and Mexico. The Central American Republics and the Antilles were not mentioned. Knowlton further excluded many thallophytes, such as marine and fresh-water Algae, as well as the Diatomaceae. He did, however, include Fungi and the Charophyta.

In the present volume North America is defined as including Greenland and the islands lying north of Canada, the Antilles to the coast of South America, Mexico, the Central American Republics, Panama, and the Canal Zone. The effort has been made to include in this supplement all publications issued during the period 1919-37 that deal with plants of Mesozoic and Cenozoic age of North America as defined, and the papers that Knowlton omitted or excluded on territorial grounds. This latter objective has been only partially met with regard to Greenland, for those species described in Heer's "*Flora fossilis arctica*" which do not occur elsewhere in North America have not been added to the catalogue. This omission is intended to afford opportunity for thorough revision of the arctic floras before burdening the catalogue with useless species, for many of Heer's species, as the result of recent work by Seward (1925, 1926, 1935), Harris (1926-33), and others, are known to be synonyms.

This supplement includes references to all plants of appropriate age described from North America between 1919 and 1937 except the marine and fresh-water Algae and Diatomaceae. Fungi, Charophyta, Bryophyta, and all higher plants have been included, even though the

material upon which they are based is microscopic in character. Thus, spores of higher plants have received consideration, but studies of late Pleistocene and Recent peat bogs have not been catalogued.

The present volume consists of three parts—the bibliography, the catalogue, and a section noting errors and omissions in Knowlton's catalogue.

The bibliography comprises all papers dealing with North American Mesozoic and Cenozoic paleobotany up through 1937. Papers are listed alphabetically by author and by year of publication within each author group. If more than one publication has been issued by an author in a single year, letters distinguishing the separate items have been inserted after the year of publication. It is thus possible to identify fully any particular paper by citing author and year of publication, including the distinguishing letter. Where authorship is joint, papers are listed only under the name of the author whose name appears first on the title page. The bibliography has been made up largely from the extensive series of bibliographies begun by Nickles and continued by Thom and published in United States Geological Survey Bulletins 746, 747, 823, 834, 858, 869, and 892. It includes entries from Knowlton, 1919, and has been kept up to date by systematically checking bibliographies of authors at the time their papers were catalogued. Papers of general interest dealing with various phases of North American Mesozoic and Cenozoic paleobotany are included, as well as those that are purely systematic in character. The bibliography does not contain citations of abstracts of papers that have been published in full, nor does it contain citations of all abstracts of unpublished papers presented orally to scientific societies. An effort has been made to include references to only those abstracts which record fossil species and locality data. All institutional annual reports by paleobotanists which do not record species and locality data have been excluded. Thus a long series of reports by Chaney in the Year Book of the Carnegie Institution of Washington are omitted, as are also certain papers by Hollick, Wieland, and others. This portion of the present volume is a complete revision of the bibliography that appears in Knowlton, 1919, pp. 13-44.

It has been assumed that papers listed in the Knowlton, 1919, bibliography, pp. 13-44, were correctly catalogued in the earlier work, and no effort has been made to check systematically the original catalogue. Nevertheless, experience has shown that certain papers did not receive as close examination as might have been desired. Thus many citations of species described in United States Geological Survey Monograph 26 are erroneously cited as appearing in Monograph 35, and it was found desirable to recheck all papers published by Berry and Hollick in the Maryland Geological Survey series. Knowlton over-

looked certain papers that should have been included in the 1919 work. These have been catalogued in the present supplement in the same manner as papers bearing a date subsequent to 1919.

The catalogue in general follows the style of the catalogue portion of Knowlton, 1919. It is arranged alphabetically by genera and species. Generic titles cited by Knowlton are not listed except as new genera or species have since appeared in the fossil record. Thus citation of a genus in the supplement indicates either that fossils of that genus have been recorded in North America since 1919 or that some change has been made in the concept of the genus. Where a fossil genus is described, the author's citation is given and the genotype indicated. Where a living genus appears for the first time in the North American fossil record, the author's name only is cited. Thus a distinction is created between exclusively fossil genera and modern genera that have a fossil record. This distinction is similarly made in regard to species.

After each genus come the named species, listed alphabetically. These are followed by unnamed species and identifications of genus alone, which are arranged in alphabetical order by author and in chronological sequence under each author.

A major difference in style between the present volume and Knowlton, 1919, needs to be noted. Knowlton gave the complete citation of each paper relating to a species in chronological order. This was followed by synonyms in order and, finally, locality data completely dissociated from the reports. In the present volume the following plan is adopted: (1) First is given the genus and species name followed by the name of the primary author. (2) If the species is listed in Knowlton, 1919, the symbol □ is inserted after the primary author's name to indicate that further data may be found in Knowlton's catalogue. (3) Then follow, in chronological order, citations by author, year of publication and letter, page, plate and figure references, and finally formation and locality data. It will be noted that this identifies the locality connected with each citation. Three examples will suffice to show the method employed:

ABIES Link. □ Mason, 1927, 149; discussion.

This citation indicates that the genus *Abies* was recorded in the fossil state in Knowlton's catalogue of 1919. It was discussed by Mason on page 149 of the publication listed in the bibliography as Carnegie Inst. Washington Pub. 346.

Abies chaneyi Mason, 1927, 149, pl. 4, f. 1, 2, 7; Mascall: White Hills, John Day Basin, Oreg.—R. W. Brown, 1937, 167, pl. 45, f. 23, 24; Mascall: Tipton, Oreg.

This citation indicates that *Abies chaneyi* Mason was first described by Mason in Carnegie Inst. Washington Pub. 346, page 149, plate 4, figures 1, 2, and 7, 1927, from the Mascall formation at the White Hills

locality in the John Day Basin of Oregon. It was later found by R. W. Brown in the Mascall formation at Tipton, Oreg., and reported in U. S. Geol. Survey Prof. Paper 186, page 167, plate 45, figures 23, 24, 1937.

Amelanchier dignatus (Knowlton) R. W. Brown, 1935, 577, pl. 69, f. 5, 6; Latah: Salmon, Idaho—1937, 176, pl. 53, f. 11; Latah: Spokane, Wash.—1937c, 511.

Celastrus dignatus Knowlton. ☐

Amelanchier scudderi Cockerell. ☐ Berry, 1929f, 252, pl. 55, f. 4; Latah: Spokane, Wash.

The above citation indicates that R. W. Brown in 1935 proposed the new combination *Amelanchier dignatus* for material from the Latah formation at Salmon, Idaho, previously described by Knowlton as *Celastrus dignatus* Knowlton and listed in Knowlton's catalogue under the heading *Celastrus dignatus*. Brown described *Amelanchier dignatus* in 1937 from the Latah formation at Spokane, Wash., and cited it in 1937 in another paper. Brown places under *Amelanchier dignatus* also the form that Berry in 1929 classified as *Amelanchier scudderi* Cockerell, from the Latah formation at Spokane, Wash. The original *Amelanchier scudderi* was listed under that name in Knowlton's catalogue.

In the main list, valid names are printed in **bold-face** type and synonyms in *italic*, in accordance with usual practice. In text, synonymy, and notes, all names are in *italic*.

In this supplemental catalogue the compiler desires to record that which is now standing in the literature and to refrain from expressing his personal views regarding the species listed. For this reason he has listed species under the generic names that their authors prefer. He does not assert that *Carya* is preferable to *Hicoria*, nor that *Tumion* should be used for *Torreya*. He has cross-indexed these and other synonymous genera, but species will be found under each as described in the present literature. He has changed specific names, where homonyms have been found, in accordance with the practice established by Knowlton. At times he has been forced to exercise paleobotanic judgment according to his understanding of particular species, as illustrated by the following: The paper listed under Hollick, 1936, was obviously prepared prior to 1930, the date of that author's death. In it are recorded species that were revised by Berry and others between 1930 and 1936. The compiler considers that where the judgment of revisers within the period 1930-36 is adverse to that of Hollick the judgment of the revisers holds. The compiler has from time to time felt the necessity of expressing his opinion as a paleobotanist regarding material with which he has personal acquaintance; this has been done in notes indicating the nature of such opinion held contrary to the present state of the literature. The compiler feels, however, that his

primary duty has been to indicate the present state of the literature and not to attempt revision of the many obviously erroneous citations that have been made from time to time.

The last part of this volume is a section in which are noted errors and omissions in Knowlton's catalogue of 1919. It is in no sense complete, but represents the combined findings of the compiler, Dr. Erling Dorf of Princeton University, Dr. Roland W. Brown of the United States Geological Survey, and Dr. Ralph W. Chaney of the University of California, who have jotted down in their copies errors detected during the course of their work. The compiler wishes to record his opinion that, all things considered, Knowlton's catalogue of 1919 is a remarkably careful and accurate listing of the fossil plants of North America up to the date of its publication, which will stand as a monument to the memory of Dr. Knowlton for many years to come.

In conclusion, the compiler wishes to acknowledge certain help that has made this volume possible. The Carnegie Institution of Washington has contributed funds liberally for the clerical work incidental to preparing and typing the manuscript. Prof. Ralph W. Chaney of the University of California has supported the project from its inception in 1932 to its conclusion. Dr. Roland W. Brown, United States Geological Survey, has borne the responsibility of editing for style and form. All paleobotanists have been most kind in assisting the compiler in every way he has asked. To those mentioned may be given much of the credit for what is sound in the present work; the compiler assumes full responsibility for any error that has crept in. In the Knowlton catalogue of 1919 errors appear to have been less than one percent; it is hoped that the present volume will be found to have maintained the same high standard. Workers are asked to notify the author concerning any error or omission found, as it is hoped that ultimately a new and completely revised catalogue may be issued to replace the present volume and its predecessor.



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CATALOGUE¹

ABIES Link. □ Mason, 1927, 149; discussion.

Abies chaneyi Mason, 1927, 149, pl. 4, f. 1, 2, 7; Mascall: White Hills, John Day Basin, Oreg.—Brown, R. W., 1937, 167, pl. 45, f. 23, 24; Mascall: Tipton, Oreg.

Abies concolipites Wodehouse, 1935a, 490, f. 12; Green River: Parachute Creek, Garfield Co., Colo.

Abies laticarpus MacGinitie, 1933, 47, pl. 3, f. 5; Trout Creek; Harney Co., Oreg.—Oliver, 1934, 14; Mascall: Tipton, Oreg.—LaMotte, 1936, 109, pl. 3, f. 2; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.

Abies longirostris Knowlton, 1923a, 187, pl. 42, f. 1, 2; Creede: Creede, Colo.

Abies magnifica shastensis Lemmon. Mason, 1927, 150, pl. 4, f. 6, 7; Mascall: White Hills, John Day Basin, Oreg.

Abies parviseminis LaMotte, 1936, 110, pl. 4, f. 2-4; Upper Cedarville: Pit River, Modoc Co., Calif.

Abies rigida Knowlton, 1923a, 186, pl. 41, f. 1, 2, 4, 5; Creede: Creede, Colo.

Abies sternbergi Nilsson=**Ontheodendron sternbergi** (Nilsson) Harris.

Abies sp., Brown, R. W., 1937, 167, pl. 45, f. 27, 28; pl. 46, f. 1, 2; Latah: Thunder Mt., Idaho.

Abies sp., Dorf, 1936, 107, pl. 1, f. 6; Idaho: near Weiser, Idaho.

Abies sp., Grewingk. □ Hollick, 1936, 46; Kodiak Isl., Alaska Peninsula.

Abies sp. 1, Mason, 1927, 151, pl. 4, f. 4; Mascall: White Hills, John Day Basin, Oreg.

Abies sp. 2, Mason, 1927, 151, pl. 4, f. 3; Bridge Creek: Gray Ranch, Crooked River, Oreg.—Chaney, 1927a, 101; Bridge Creek: Gray Ranch, Crooked River, Oreg.

ABIETIPITES Wodehouse, 1933a, 491. Genotype: *A. antiquus* Wodehouse.

Abietipites antiquus Wodehouse, 1933a, 491, f. 15, 16; Green River: Parachute Creek, Garfield Co., Colo.

Abietites dubius Lesquereux. □ Lesquereux, 1871, 382; Raton?: Raton Pass, Colo.

Abietites ernestinae Lesquereux. □ Berry, 1922d, 212; Cheyenne: Osage Rock, Belvidere, Kans.

Abietites foliosus (Fontaine) Berry. □ Berry, 1913a, 572; Tuscaloosa: Snow Plantation, Ala.

Abietites longifolius (Fontaine) Berry. □ Berry, 1922d, 211, pl. 47, f. 3; Cheyenne: near Belvidere, Kans.

Abietites macrocarpus Fontaine. □ Brown, R. W., 1935a, 444, text-f. 4; Potomac: Northwest Branch Anacostia River, Md.

ABUTILON Tournefort.

Abutilon eakini Hollick, 1936, 149, pl. 118, f. 3; between Herendeen Bay and Port Moller, Alaska Peninsula.

Abutilon sp.?, Hollick, 1936, 150, pl. 31, f. 3b; Chignik River opposite Nun Point, Alaska Peninsula.

Acacia aquilonia Hollick, 1936, 127, pl. 120, f. 13; Kootznahoo Inlet, Admiralty Island, southeastern Alaska.

Acacia wilcoxensis Berry. □ Ball, 1931, 78, pl. 17, f. 4; Indio: Barton's Ranch, Bastrop Co., Texas.

Acaciaphyllites cretaceum Berry, 1925, 57, pl. 10, f. 6; Ripley: Henry Co., Tenn.

ACACIOXYLON Schenk, K. Svenska Vet. Akad., Handl. vol. 30, 9, 1888.

¹ For explanation of plan of arrangement and symbols see pp. 3-5.

Acacioxylon tenax Nathorst, 1893, 49, pl. 3, f. 4, 6-8; Tlacolula, Oaxaca, Mexico.
Acalypha myricina Cockerell=*Paliurus florissanti* Lesquereux.

Acalypha serrulata Potbury, 1935, 72, pl. 7, f. 7; La Porte, Plumas Co., Calif.

Acalypha virginica Linné.□Berry, 1924a, 21, pl. 2, f. 10; Washington, D. C., Pleistocene.

ACER (Tournefort) Linné.□Ball, 1931, 83; discussion.—LaMotte, 1936, 134; discussion.

Acer aquilum Chaney=*Acer negundoides* MacGinitie.

Acer arcticum Heer.□Mathiesen, 1932, 60-61, text-f. 24; Sabine Island, east Greenland.—Hollick, 1936, 133, pl. 77, f. 1; pl. 78, f. 7, 8; Eska Creek, Matanuska Coal Field; Portage (Balboa) Bay, Alaska Peninsula; near Herendeen Bay, Alaska Peninsula.

Acer bendirei Lesquereux (part), 1888a, 14, pl. 8, f. 1 only; Mascall: Van Horn's Ranch, John Day Basin, Oreg.—Brown, R. W., 1937, 179, pl. 58, f. 20-22; Latah: Salmon, Idaho: Mascall: Tipton, Oreg.—1937c, 515.

Acer dimorphum Lesquereux.□

Acer, fruits of, Lesquereux, 1888a, 15, pl. 6, f. 2, 3; Mascall: Van Horn's Ranch, John Day Basin, Oreg.

Acer oregonianum Knowlton.□Oliver, 1934, 24; Mascall: Austin, Oreg.

Acer minor Knowlton (part), 1902, 76, pl. 14, f. 2 only; Mascall: Van Horn's Ranch, John Day Basin, Oreg.

Acer medianum Knowlton.□

Acer osmonti, Chaney (part) not Knowlton, 1927a, 126, pl. 18, f. 8, 9; Bridge Creek; Gray Ranch, Crooked River Basin, Oreg.

Acer merriami of authors not Knowlton. Berry, 1931a, 39, pl. 13, f. 13; Latah: Grand Coulee, Wash.—MacGinitie, 1933, 61, pl. 10, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.—LaMotte, 1936, 135, pl. 12, f. 7; Upper Cedarville: 49 Camp, Washoe Co., Nev.—1936b, 417; Ellensburg: Ellensburg, Wash.—Dorf, 1936, 120, pl. 3, f. 8; Idaho: near Weiser, Idaho.

Acer septilobatum Oliver, 1934, 25, pl. 4, f. 1, 2; Mascall: Austin and Tipton, Oreg.

Acer bendirei Knowlton not Lesquereux=*Acer glabroides* R. W. Brown.

Acer bendirei Lesquereux (part)=*Platanus dissecta* Lesquereux.

Acer bolanderi Lesquereux.□Chaney, 1920a, 179; Eagle Creek: Multnomah Co., Oreg.

Acer caudatum Heer=*Platanus? newberryana* Heer.

Acer chaneyi Knowlton=*Acer osmonti* Knowlton.

Acer collieri Hollick, 1930, 99, pl. 78, f. 5; Nulato: Lower Yukon, Alaska.

Acer completum Chaney=*Acer negundoides* MacGinitie.

Acer cretaceum Berry, 1925, 66, pl. 13, f. 2; Ripley: Carroll Co., Tenn.

Acer dimorphum Lesquereux=*Acer bendirei* Lesquereux.

Acer disputabilis Hollick, 1936, 134, pl. 74, f. 4; southwest from forks of Pumicestone Creek, Alaska Peninsula.

Acer edentatum Heer=*Platanus? newberryana* Heer.

Acer florissanti Berry not Kirchner=*Acer osmonti* Knowlton.

Acer gigas Knowlton=*Acer osmonti* Knowlton.

Acer glabroides R. W. Brown, 1937, 180, pl. 58, f. 13-15; Latah: Salmon, Idaho; Latah: Spokane, Wash.; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Acer bendirei Knowlton not Lesquereux, 1926, 45, pl. 27, f. 3; Latah: Mica, Wash.

Acer osmonti of authors not Knowlton. Chaney (part), 1927a, 126, pl. 17, f. 6; pl. 18, f. 1, 3, 5 only; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Oliver, 1934, 24; Mascall: Tipton and Austin, Oreg.—Brooks, 1935, 298, pl. 20, f. 2; Sucker Creek: Ballantyne Ranch near Homedale, Idaho—LaMotte, 1936, 137, pl. 12, f. 6; Upper Cedarville: 49 Camp, Washoe Co., Nev.—Dorf, 1936, 121, pl. 3, f. 2; Idaho: near Weiser, Idaho.

Acer minor Berry not Knowlton, 1929f, 256, pl. 64, f. 2; Latah: Spokane, Wash.

Acer trilobatum productum? Knowlton not Heer, 1898b, 733, pl. 102, f. 3; Payette: near Marsh, Boise Co., Idaho.

Acer grahamensis Knowlton & Cockerell. □ Hollick, 1936, 134; Port Graham, Kenai Peninsula, Alaska.

Acer inaequale Heer, *Flora fossilis arctica*, vol. 4, no. 1, 89, pl. 24, f. 4-6, 1876.—? Hollick, 1936, 135, pl. 77, f. 2, 3; Chickaloon River and Eska Creek, Matanuska Coal Field, Alaska.

Acer indivisum Lesquereux (part) not Weber = **Acer mysticum** Kirchner.

Acer indivisum Lesquereux (part) not Weber = **Acer lesquereuxii** Knowlton.

Acer lesquereuxii Knowlton. □ Knowlton, 1923, 169; Green River: Uinta Co., Wyo.—Brown, R. W., 1934, 61; Green River: Uinta Co., Wyo.—1937, 180, pl. 58, f. 3; Green River: Fossil, Wyo.

Acer indivisum Lesquereux (part) not Weber, 1883, 180, pl. 36, f. 6 only; Green River: Uinta Co., Wyo.

Acer macrophyllum Pursh. Mason, 1934, 167, pl. 10, f. 12; Tomales: Tomales Bay, Marin Co., Calif.

Acer macropterum Heer, 1869, 37, pl. 9, f. 7-9.—Berry, 1926d, 113, pl. 10, f. 7; Joseph Creek, British Columbia.

Acer, fruit of, Dawson. □

Acer medianum Knowlton = **Acer bendirei** Lesquereux.

Acer merriami Knowlton = **Platanus dissecta** Lesquereux.

Acer merriami Knowlton (part) = **Vitis washingtonensis** (Knowlton) R. W. Brown.

Acer merriami of authors not Knowlton = **Acer bendirei** Lesquereux.

Acer minor Knowlton (part) = **Acer bendirei** Lesquereux.

Acer minor Knowlton (part) = **Acer negundoides** MacGinitie.

Acer minor Berry not Knowlton = **Acer glabroides** R. W. Brown.

Acer minutifolia Chaney, 1920a, 179, pl. 19, f. 2; Eagle Creek: Multnomah Co., Oreg.

Acer mysticum Kirchner. □ Brown, R. W., 1934, 61 (under the heading of **Acer lesquereuxii**).

Acer indivisum Lesquereux (part) not Weber, 1883, 180, pl. 36, f. 9 only; Florissant: Florissant, Colo.

Acer negundoides MacGinitie, 1933, 62, pl. 11, f. 2, 3; Trout Creek: Trout Creek, Harney Co., Oreg.—Brown, R. W., 1935, 580, pl. 69, f. 9-11; Latah: Spokane, Wash.; Bridge Creek: Bridge Creek, John Day Basin, Oreg.; Mascall: John Day Basin, Oreg.—LaMotte, 1936, 136, pl. 12, f. 3, 4; Upper Cedarville: 49 Camp, Washoe Co., Nev.—Dorf, 1936, 121, pl. 3, f. 2; Idaho: near Weiser, Idaho.—Chaney & Elias, 1936b, 42, pl. 7, f. 10, 11; Ogallala: Beaver Co., Okla.—R. W. Brown, 1937, 180, pl. 58, f. 1; Latah: Spokane, Wash.; Mascall: John Day Basin, Oreg.—1937c, 515.—Chaney, 1938, 216, pl. 6, f. 2; pl. 7, f. 1a, b; Deschutes: Vanora Grade near Madras, Crook Co., Oreg.

Acer, fruits of, Lesquereux, 1888a, 15, pl. 7, f. 2 only; Mascall: Van Horn's Ranch, John Day Basin, Oreg.

Acer minor Knowlton (part), 1902, 76, pl. 14, f. 3 only; Mascall: Van Horn's Ranch, John Day Basin, Oreg.

Acer osmonti Chaney (part) not Knowlton, 1927a, 126, pl. 18, f. 7 only; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.

Acer oregonianum Berry not Knowlton, 1929f, 255, pl. 57, f. 2; pl. 63, f. 11; Latah: Republic and Spokane, Wash.

Rulao crataegifolium Knowlton. □

Phyllites bifurcies Knowlton. □

Crataegus heterodentata Chaney, 1920a, 175, pl. 16, f. 1, 2; Eagle Creek: Multnomah Co., Oreg.

Acer aquium Chaney, 1920a, 178, pl. 17, f. 4, 5; pl. 18, f. 1; pl. 19, f. 1; Eagle Creek: Multnomah Co., Oreg.

Acer completum Chaney, 1920a, 179, pl. 18, f. 2; Eagle Creek: Multnomah Co., Oreg.

Liriodendron trilobata Chaney, 1920a, 173, pl. 14, f. 4; Eagle Creek: Multnomah Co., Oreg.

Acer cf. *negundoides* MacGinitie. Brooks, 1935, 298, pl. 21, f. 2; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.

Acer newtonianum Penhallow, 1906, 972; Pleistocene: Newton Creek, Elmira, N. Y.

Acer oregonianum Knowlton=*Acer bendirei* Lesquereux.

Acer oregonianum, Berry (part) not Knowlton=*Acer negundoides* MacGinitie.

Acer oregonianum, Berry (part) not Knowlton=*Acer osmonti* Knowlton.

Acer osmonti Knowlton. □ R. W. Brown, 1937, 180, pl. 58, f. 16-18; Latah: Spokane, Wash.; Mascall: John Day Basin; Tipton, Ore.; Latah: White Bird, Idaho—1937c, 513, text-f. 1; Latah: Orofino Creek, Idaho.

Acer gigas Knowlton. □ LaMotte, 1936a, 146.

Acer chaneyi Knowlton, 1926, 45, pl. 27, f. 2; Latah: Spokane, Wash.—Berry, 1929f, 256, pl. 63, f. 13; Latah: Spokane, Wash.—MacGinitie, 1933, 61; Trout Creek: Trout Creek, Harney Co., Ore.—Oliver, 1934, 26, pl. 5, f. 3; Mascall: Tipton and Austin, Ore.—Brooks, 1935, 297, pl. 19, f. 5; pl. 21, f. 1a; Sucker Creek; Ballantyne Ranch near Homedale, Idaho—Dorf, 1936, 120; Idaho: near Weiser, Idaho.

Quercus cf. *pseudolycrata* Knowlton not Lesquereux, 1926, 36, pl. 22, f. 2; Latah: 10 mi. east of Spokane, Wash.

Acer florissanti, Berry not Kirchner, 1934, 118, pl. 24, f. 5-7; text-f. 5; Latah: near Juliaetta; near White Bird, Idaho.

Acer oregonianum Berry not Knowlton, 1934, 118, pl. 24, f. 1; Latah: near White Bird, Idaho.

Rhus diluvialis Arnold, 1937, 93, pl. 5, f. 4; Carter Creek, southwest of Finley McKenzie Ranch, Ore.

Acer osmonti, Chaney (part) not Knowlton=*Acer bendirei* Lesquereux.

Acer osmonti, Chaney (part) not Knowlton=*Acer negundoides* MacGinitie.

Acer osmonti of authors not Knowlton=*Acer glabroides* R. W. Brown.

Acer pleistocenicum Penhallow. □ Penhallow, 1899, 527; Taylor's Brickyard, Don Valley, Toronto, Ontario—1900, 335; Don River and Taylor's Brickyard, Don Valley, Toronto, Ontario.

Acer scottiae MacGinitie, 1933, 62, pl. 12, f. 4; pl. 11, f. 4, 8; Trout Creek: Trout Creek, Harney Co., Ore.—R. W. Brown, 1937c, 514, text-f. 2; Idaho?: near Boise, Idaho.

Acer septilobatum, Dorf not Oliver, 1936, 122, pl. 3, f. 5; Idaho: near Weiser, Idaho.

Acer septilobatum Oliver=*Acer bendirei* Lesquereux.

Acer septilobatum, Dorf not Oliver=*Acer scottiae* MacGinitie.

Acer spicatum Lamarck. □ Penhallow, 1899, 527; Taylor's Brickyard, Don Valley, Toronto, Ontario.

Acer trilobatum productum? (Al. Braun) Heer. □ Hollick, 1936, 135, pl. 76, f. 2; south bank Yukon River above Rampart, central Yukon region, Alaska.

Acer trilobatum productum?, Knowlton not Heer=*Acer glabroides* R. W. Brown.

Acer trilobatum productum Lesquereux not Heer, 1883, 253, pl. 59, f. 1, 2, 4 only=*Acer* species in need of revision.

Acer trilobatum productum, Penhallow not Heer=*Acer* species in need of revision.

Acer trilobatum var., Knowlton. □ Hollick, 1936, 135; Kukak Bay, Alaska Peninsula.

Acer visibilis Hollick, 1936, 135, pl. 76, f. 3, 4; south bank Yukon River above Rampart, central Yukon region, Alaska.

Acer vivarium Knowlton=*Acer* sp. needing systematic revision.

Acer, fruit, Berry, 1931a, 34; Latah: Grand Coulee, Wash.

Acer sp., Berry 1929=*Vitis washingtonensis* (Knowlton) R. W. Brown.

Acer, n. sp., Chaney, 1922a, 216; Payette: Idaho.

Acer, fruit of, Dawson=*Acer macropternum* Heer.

Acer? sp., fruit of, Hollick, 1936, 136, pl. 76, f. 1; Cache Creek, Yentna River, Matanuska-Cook Inlet region, Alaska.

Acer? sp. Lesquereux, 1871, 382; Raton?: Raton Pass, Colo.

Acer, fruits of, Lesquereux 1888a=*Acer bendirei* Lesquereux.

Acer, fruits of, Lesquereux (part)=*Acer negundooides* MacGinitie.

Acer, n. sp., Knowlton in Merriam 1901e=*Platanus dissecta* Lesquereux.

Acer sp., Knowlton, 1930, 101, pl. 45, f. 6; Dawson: Sedalia, Colo.

Acer sp.? Newberry=*Cedrela merrilli* (Chaney) R. W. Brown.

Acer sp., F. M. Scott, 1926, 406; Upper Miocene, Tesla, Calif.

Acer species needing systematic revision; not discussed by R. W. Brown, in U. S. Geol. Survey Prof. Paper 186, 1937.

Acer bendirei Knowlton not Lesquereux, 1900d, 49, pl. 6, f. 4; near mouth of Moffat's Creek, left bank Columbia River, Oreg.—1902, 73; Mescal: Van Horn's Ranch, John Day Basin, Oreg.

Acer bendirei Berry not Lesquereux, 1929f, 256; Latah: Mica, Wash.—1934, 117, pl. 23, f. 7; Latah: Juliaetta, White Bird, St. Maries, Idaho.

Acer bendirei Hoffman not Lesquereux, 1932, 737; Douglas Canyon, Wash.

Acer bendirei Arnold not Lesquereux, 1935, 379; Trout Creek: Trout Creek, Harney Co., Oreg.

Acer chaneyi Berry not Knowlton, 1932a, 40; Ballantyne Ranch, Malheur Co., Oreg.—1934, 118; Latah: near Juliaetta, Idaho.

Acer gigas Chaney not Knowlton, 1922a, 216; Payette: Idaho.

Acer merriami Berry not Knowlton, 1929f, 256; Latah: Vera and Mica, Wash.—1934, 117; Latah: Moscow and Juliaetta, Idaho.

Acer minor Knowlton, 1926, 45, pl. 27, f. 4; Latah: Spokane, Wash.

Acer minor Berry not Knowlton, 1934, 117; Latah: Moscow, Idaho.

Acer oregonianum Jennings not Knowlton, 1920, 423, pl. 32, f. 3; Missoula, Mont.

Acer osmonti MacGinitie not Knowlton, 1933, 62; Trout Creek: Trout Creek, Harney Co., Oreg.

Acer trilobatum productum Lesquereux not Heer, 1883, 253, pl. 59, f. 1, 2, 4 only; Spanish Ranch, Calif. Previously referred to *Acer bendirei*.

Acer trilobatum productum Penhallow not Heer, 1908a, 35; Horsefly River, British Columbia. Previously referred to *Acer bendirei* by Knowlton, 1919.

Acer vivarium Knowlton. □ Kirkham and Johnson, 1929, 496; Latah: Previously referred to *Acer bendirei* by Knowlton, 1919.

Acerates amboyensis Berry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Sanders Ferry Bluff, Ala.—1920e, 405; Black Creek: North Carolina.

Acerates cretacea Berry, 1925, 86, pl. 20, f. 4; Ripley: Carroll Co., Tenn.

Acerates wilcoxiana Berry, 1930, 131, pl. 19, f. 16, 17; Holly Springs: La Grange, Fayette Co., Tenn.

Acerites multiformis Lesquereux. □ Hollick, 1930, 100, pl. 78, f. 3; Kaltag: Lower Yukon, Alaska.

ACHAENITES Al, Braun, in Steitzenberger, Uebersicht der Versteinerungen des Grossherzogthums Baden, 83, 1851. Genotype *A. ungeri* Al. Braun.

CYPSELITES Heer, Flora tertiaria Helvetiae, vol. 3, p. 2, 1859.

Achaenites cichorioides Knowlton, 1923, 173, pl. 40, f. 4; Green River: Camp Gulch about 25 mi. northwest of De Beque, Colo.

ACLISTOCHARA Peck, 1937, 86. Genotype: *A. bransoni* Peck.

Aclistochara bransoni Peck, 1937, 87, pl. 14, f. 8-11; Morrison: northwest of Rawlins; near Mayoworth, Wyo.

Aclistochara elongata Peck, 1937, 89, pl. 14, f. 24-25; Morrison: northwest of Rawlins, Wyo.

Aclistochara jonesi Peck, 1937, 88, pl. 14, f. 12-15; Morrison: northwest of Rawlins, Wyo.

Aclistochara lata Peck, 1937, 88, pl. 14, f. 20-23; Morrison: northwest of Rawlins, Wyo.

Aclistochara latitruncata Peck, 1937, 89, pl. 14, f. 1-4; Morrison: south of Mayoworth, Wyo.

Aclistochara obovata Peck, 1937, 88, pl. 14, f. 26-29; Morrison: northwest of Rawlins, Wyo.

Aclistochara oligospirata Peck, 1937, 89, pl. 14, f. 5-7; Morrison: northwest of Rawlins, Wyo.

Acorus heeri Berry, 1930, 55, pl. 8, f. 7; Holly Springs: La Grange, Fayette Co., Tenn.

ACRODICLIDIUM Nees.

Acrodiclidium pseudocanelo Hollick, 1928, 197, pl. 62; Collazo: Porto Rico.

Acrodiclidium pseudosalicifolium Hollick, 1928, 197, pl. 61, f. 2; Collazo: Porto Rico.

ACROSTICHITES Goeppert. See TODITES Seward.

Acrostichopteris fimbriata Knowlton. □ Berry, 1929k, 43; Kootenai: southwest Alberta.

Acrostichopteris pluripartita (Fontaine) Berry. □ Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

Acrostichum georgianum Berry. □ Berry, 1924, 42; Gosport: Monroe Co., Ala.; Lisbon: Newton Co., Miss.; 143, pl. 28, f. 1; Barnwell: Columbia Co., Ga.; near Gibson, Glascock Co., Ga.

Acrostichum hesperium Newberry. □ Knowlton, 1923, 149; Green River: Green River, Wyo.—Berry, 1924, 43, pl. 3, f. 4; Yegua: Columbia, Caldwell Parish, La.

Acrostichum mexicanum Berry, 1923b, 4, pl. 1, f. 3; near Palomares, Oaxaca, Mexico.

Acrostichum simulatum Knowlton, 1900d, 37, pl. 1, f. 1; Coal Creek, Oreg.

Acrostichum smithi Berry, 1916e, 231, pl. 55, f. 5-8; Catahoula: near King, Rankin Co., Miss.

Acrostichum sp., Berry, 1922g, 6; Carrizo: Carrizo Springs, Dimmit Co., Texas.

Acrostichum sp., (fragments) Berry, 1918, 23; Culebra: near Empire, Canal Zone.

ACTINIDIA Lindley.

Actinidia ovata MacGinitie, 1937, 147, pl. 13, f. 2, 3; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

ADENOSTOMA Blume.

Adenostoma fasciculatum Hooker & Arnott. Mason, 1934, 161, pl. 9, f. 18; Tomales: Tomales Bay, Marin Co., Calif.

Adiantum formosum Heer = *Ginkgoites* sp., Seward.

Adiantum francisi Ball, 1931, 31, pl. 6, f. 3; Indio: Barton's Ranch, Bastrop Co., Texas.

Aesculus arctica Knowlton. □ Hollick, 1936, 136; Kukak Bay, Alaska Peninsula.

Aesculus hesperia Berry = *Viburnum lantanifolium* Berry.

Aesculus? simulata Knowlton = *Carya simulata* (Knowlton) R. W. Brown.

AGAVE Linné.

Agave utahensis Engelmann. Laudermilk & Munz, 1934a, 37; Pleistocene?: Gypsum Cave near Las Vegas, Nev.

AILANTHIPITES Wodehouse, 1933a, 512; Green River: Parachute Creek, Garfield Co., Colo.

Ailanthipites berryi Wodehouse, 1933a, 512, f. 44; Green River: Parachute Creek, Garfield Co., Colo.

Ailanthus? americana Cockerell. □ Oliver, 1934, 23; Mascall: Tipton, Oreg.

Ailanthus lesquereuxi Cockerell, 1927, 95; Florissant: Florissant, Colo.—Brown, R. W., 1934, 59; Green River: Uinta Co., Wyo.—Arnold, 1937, 95, pl. 8, f. 3, 4; Trout Creek: Trout Creek, Harney Co., Oreg.; Sucker Creek west of Fenwick Ranch, Malheur Co., Oreg.

Ailanthus longipetiolata Lesquereux (part), 1883, 197; Green River: Uinta Co., Wyo.—Knowlton (part), 1923, 166; Green River: Uinta Co., Wyo.

Ailanthus longipetiolata Lesquereux (part) = *Ailanthus lesquereuxi* Cockerell.
Ailanthus longipetiolata Lesquereux (part) = *Rhus longipetiolata* (Lesquereux)
 R. W. Brown.

Ailanthus ovata Lesquereux = *Micropodium ovatum* (Lesquereux) R. W. Brown.
Ailanthus sp., fruit, Arnold, 1935, 579; Trout Creek: Trout Creek, Harney Co.,
 Oreg.

ALANGIOPHYLLUM Potbury, 1935, 79. Genotype: *A. petiocalum* Potbury.
Alangiophyllum petiocalum Potbury, 1935, 79, pl. 15, f. 1; pl. 16, f. 2; pl. 17,
 f. 1; pl. 18, f. 1-3; pl. 19, f. 2, 3; La Porte: Plumas Co., Calif.

ALATAMPULLA Miner, 1935, 600. Genotype: *A. bartlettii* Miner.

Alatampulla bartlettii Miner, 1935, 600; Disko Island, west Greenland.

ALETHOPTERIS Sternberg, 1826.

Alethopteris mexicana Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca,
 Mexico.

Alethopteris? oaxacensis Wieland, 1914, 126, pl. 42, f. 1-4; pl. 44, f. 5, 6;
 Liassic: Mixteca Alta, Oaxaca, Mexico—Müllerried, 1933, 43; Triassic?:
 Coapec, Puebla, Mexico.

Alethopteris whitneyi Newberry, 1876, 145, pl. 7, f. 1, 1a, 1b; Triassic?: Los
 Bronces, Sonora, Mexico.

ALEURITES Forster.

Aleurites americana Potbury, 1935, 72, pl. 8, f. 1, 4; La Porte: Plumas Co.,
 Calif.

Algites americana Berry. □ Berry, 1920e, 397; Black Creek: Sampson Co., N. C.

Alismaphyllum cretaceum Berry, 1925, 35, pl. 3, f. 6; Ripley: Carroll Co., Tenn.

Alismaphyllum victor-masoni (Ward) Berry. □ Noé, 1925, 94, pl. 19, f. 1; Dakota:
 Cimarron Co., Okla.

ALLAMANDA Linné.

Allamanda carmenensis Berry, 1923b, 24, pl. 7, f. 2; San José del Carmen,
 Vera Cruz, Mexico.

ALLANTODIOPSIS Knowlton & Maxon. □ Knowlton, 1930, 24. Genotype: *A.*
erosa (Lesquereux) Knowlton & Maxon.

Allantodiopsis erosa (Lesquereux) Knowlton & Maxon. □ Knowlton, 1924, 78,
 pl. 6, f. 1; Animas: Pagosa quadrangle, Colo.—1930, 24, pl. 4, 5; Denver:
 Golden, Colo.; Dawson: Sedalia, Colo.; Middle Park: Grand Co., Colo.

Pteris subsimplex Lesquereux. □ Lesquereux, 1888, 43; Denver: Golden, Colo.

Pteris erosa Lesquereux. □ Lesquereux, 1888, 43; Denver: Golden, Colo.

Pteris undulata Lesquereux. □

Asplenium erosum Lesquereux. □ Cross, 1895, 211; Middle Park: Middle Park, Colo.

ALLICOSPERMUM Harris, 1935, 121. Genotype: *A. xystum* Harris.

Allicospermum fragilis Harris, 1935, 127, text-f. 48s; Lepidopteris Zone:
 Scoresby Sound, east Greenland.

Seed D, Harris, 1926, 128, text-f. 32a-d; Rhaetic: Scoresby Sound, east Greenland.

Allicospermum hartzi Harris, 1935, 125, pl. 27, f. 8, 9; Lepidopteris Zone:
 Scoresby Sound, east Greenland.

Seed B, Harris, 1926, 126, text-f. 31e-h; Rhaetic: Scoresby Sound, east Greenland.

Allicospermum obscurum Harris, 1935, 125, text-f. 47a, g-j; Lepidopteris Zone:
 Scoresby Sound, east Greenland.

Allicospermum ooides Harris, 1935, 128, text-f. 48 h-l, r, t; Thaumatopteris
 Zone: Scoresby Sound, east Greenland.

Allicospermum? striatum Harris, 1935, 124, pl. 11, f. 6, text-f. 47b; Lepidopteris
 Zone: Scoresby Sound, east Greenland.

Allicospermum xystum Harris, 1935, 121, pl. 9, f. 1-10, 13, 18; text-f. 46; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Allicospermum? sp. A, Harris, 1935, 124, pl. 11, f. 9; Lepidopteris Zone: Scoresby Sound, east Greenland.

ALLOPHYLUS Linné.

Allophylus wilsoni Chaney & Sanborn, 1933, 81, pl. 24, f. 1-4, 6; Fisher: Goshen, Oreg.—Sanborn, 1935, 25, pl. 9, f. 5; Comstock: Comstock, Douglas Co., Oreg.

Alnites curta Dawson.□Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.

Alnites inaequilateralis Lesquereux (part) = *Planera inaequilateralis* (Lesquereux) Knowlton.

Alnites inaequilateralis Lesquereux (part) = *Grewiopsis wyomingensis* Berry.

Alnus alaskana Newberry.□Hollick, 1936, pl. 51, f. 8; south of Old Tyonek, Cook Inlet, Alaska.

Alnus alnifolia (Goeppert) Hollick, 1936, 93, pl. 47, f. 7b, 8; pl. 51, f. 3, 4, 5b, 6, 7; Port Camden Bay, Kuin Island, southeastern Alaska; divide between Folger Creek and Nowitna River, central Yukon region, Alaska.

Carpinus alnifolia Goeppert, 1852. Deutsche geol. Gesell. Zeitschr., vol. 4, 492.

Alnus auraria Knowlton & Cockerell.□Knowlton, 1930, 49, pl. 15, f. 6; Denver: Golden, Colo.

Alnus carpinifolia Lesquereux.□Knowlton, 1930, 49, pl. 15, f. 2; Denver: Golden, Colo.

Alnus carpinoides Lesquereux.□Knowlton, 1900d, 40; 3 mi. south of Ashland, Oreg.—Chaney, 1925a, 7-10, pls. 2-7; Bridge Creek: Bridge Creek, Grant Co., Oreg.—1927a, 108, pl. 10, f. 5, Bridge Creek: Bridge Creek, Grant Co.; Gray Ranch, Crooked River Basin, Oreg.—MacGinitie, 1933, 51, pl. 4, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.—Oliver, 1934, 19; Mascall: Tipton and Austin, Oreg.—Brooks, 1935, 284; Sucker Creek: Ballantyne Ranch, Malheur Co., Oreg.—LaMotte, 1936, 117, pl. 7, f. 1; Upper Cedarville: 49 Camp, Nev.; Pit River, Modoc Co., Calif.—1936b, 417; Ellensburg: Ellensburg, Wash.—Brown, R. W., 1937, 170, pl. 48, f. 4, 5; Latah: Spokane, Wash.; Salmon, Idaho; Mascall: Tipton, Oreg.

Betula bendirei Knowlton.□

Betula heterodonta Newberry.□Berry, 1926d, 100; Eocene: Newhykulston and Kitsilno, British Columbia.

Betula grandifolia Heer not Ettingshausen, 1869, 29, pl. 5, f. 8; Knowlton, 1894, 221.—1894c, 583; Kenai: Port Graham and Hess Creek, Alaska.

Betula heteromorpha Knowlton (part), 1902, 39, pl. 3, f. 6, 7; pl. 5, f. 1; Bridge Creek: Bridge Creek, Grant Co., Oreg.—Chaney, 1920a, 165; Eagle Creek: Multnomah Co., Oreg.

Betula angustifolia Newberry.□Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.

Alnus macrodonta Knowlton.□

Populus polymorpha Newberry.□Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.

Quercus pseudo-alnus Lesquereux not Ettingshausen, 1883, 244, pl. 53, f. 1-7.—Knowlton, 1902, 46; Bridge Creek: Bridge Creek, Grant Co. and Officer's Ranch, Butler Basin, Oreg.

Quercus oregoniana Knowlton.□Hollick, 1936, 103, pl. 50, f. 5; Kenai: Coal Bay, Port Graham, Kenai Peninsula, Alaska.

Quercus, n. sp., Knowlton, in Merriam, 1901e, 288; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Betula thor Knowlton, 1926, 35, pl. 17, f. 3; Latah: Spokane, Wash.

Alnus prerhombifolia Berry, 1929f, 244, pl. 50, f. 11; Latah: Vera and Spokane, Wash.

Alnus corrallina Lesquereux. □ Brown, R. W., 1935, 575, pl. 67, f. 15; Latah: Salmon, Idaho.—1937, 170, pl. 48, f. 1-3; Latah: Salmon, Idaho; Republic, Wash.

Alnus hollandiana Jennings, 1920, 413, pl. 25, f. 3; pl. 24, f. 8; pl. 28, f. 1; pl. 30, f. 1, 1a, 3; Missoula, Mont.

Alnus microdontoides Jennings, 1920, 415, pl. 24, f. 7; pl. 30, f. 2, 2a; Missoula, Mont.

Prunus rustii Knowlton, 1926, 43, pl. 24, f. 4, 5; Latah: Coeur d'Alene, Idaho; Spokane, Wash.—Berry, 1931a, 34; Latah: Grand Coulee, Wash.—Hoffman, 1932, 737; Douglas Canyon, Wash.—Dorf, 1936, 118, pl. 2, f. 6; Idaho: near Weiser, Idaho.

Alnus corylina Knowlton & Cockerell. □ Hollick, 1936, 93, pl. 46, f. 1a; pl. 49, f. 8, 9; pl. 50, f. 1; Kachemak Bay, Kenai Peninsula, Alaska.

Alnus cremastogynoides Berry, 1926d, 104, pl. 16, f. 1; Newhykulston Creek, British Columbia.

Alnus crispoides Berry, 1926d, 105; Joseph Creek, British Columbia.

Alnus elliptica Berry, 1929f, 244, pl. 50, f. 8-10; Latah: Republic, Wash.

Alnus grandiflora Newberry. □ Knowlton, 1894c, 582, (erroneously designated "*Alnus grandifolia*").—1894, 220.—1896, 884.—Hollick, 1936, 95; Cook Inlet, Alaska.

Alnus grewiopsis Ward. □ ?Berry, 1935, 26; Upper Ravenscrag: Loc. 32, southern Saskatchewan.

Alnus hollandiana Jennings=***Alnus corrallina*** Lesquereux.

Alnus inaequilateralis (Lesquereux) Lesquereux=***Planera inaequilateralis*** (Lesquereux) Knowlton.

Alnus kefersteinii (Goeppert) Unger. □ Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek; Eska Creek, Alaska.—1936, 94, pl. 22, f. 5b; Ninilchik, Kenai Peninsula; Chignik, Alaska Peninsula.—Berry, 1926d, 105, pl. 15, f. 6; Newhykulston and Joseph Creeks, British Columbia.

Alnus kefersteinii, Lesquereux not Goeppert=***Viburnum asperum*** Newberry.

Alnus kefersteinii (Goeppert) Heer, var. □ Knowlton, 1896, 884.—Hollick, 1936, 95; Port Graham and Ninilchik, Kenai Peninsula, Alaska.

***Alnus?* larseni** Knowlton, 1923a, 188, pl. 42, f. 3; Creede: Creede, Colo.

Alnus macrodonta Knowlton=***Alnus carpinoides*** Lesquereux.

Alnus macrophylla Goeppert=***Betula dubiosa*** Hollick.

Alnus merriami Dorf, 1930, 80, pl. 8, f. 6, 7; Garberville; Bennett Valley; Lakeville; Calabazas Canyon, Calif.

Alnus microdontoides Jennings=***Alnus corrallina*** Lesquereux.

Alnus oregoniana Chaney, 1920a, 165, pl. 10, f. 1, 2; Eagle Creek: Multnomah Co., Oreg.

Alnus prerhombifolia Berry=***Alnus carpinoides*** Lesquereux.

Alnus pyramidalis Hollick, 1930, 69, pl. 85, f. 4a; Chignik: Alaska Peninsula.

Alnus relatus (Knowlton) R. W. Brown, 1937, 170, pl. 49, f. 1-6; Latah: Spokane, Wash.; Salmon, Idaho.

Phyllites relatus Knowlton, 1926, 48, pl. 28, f. 8; Latah: Coeur d'Alene, Idaho.

Betula elliptica, Lesquereux not Saporta, 1883, 242, pl. 51, f. 6; Miocene: south of Mt. Diablo, Calif.

Prunus rustii, Berry not Knowlton, 1929f, 252, pl. 55, f. 1; Republic and Spokane, Wash.

Betula heteromorpha, Brooks not Knowlton, 1935, 283, pl. 5, f. 1-3; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.

Alnus rhombifolia Nuttall. Scott, F. M., 1926, 404; Tesla, Calif.

Alnus rubra Bongard. □ Mason, 1934, 152, pl. 7, f. 19-21; Tomales: Tomales Bay, Marin Co., Calif.

- Alnus?* *scabrities* Chaney, 1920a, 165; Eagle Creek: Multnomah Co., Oreg.
Alnus speciiipites Wodehouse, 1933a, 508, f. 40; Green River: Parachute Creek, Garfield Co., Colo.
Alnus or *Betula*, staminate catkin, Berry, 1929f, 244; Latah: Spokane, Wash.
Alnus sp., Dorf, 1936, 112; Idaho: near Weiser, Idaho.
Alnus sp., Grewingk. □ Hollick, 1936, 95; Kenai Peninsula, Alaska.
Alnus sp., Hollick, 1927, 398, pl. 31, f. 2; St. Eugene silts, British Columbia.
Alnus? sp., pistillate aments, Hollick, 1936, 95, pl. 50, f. 8; Kachemak Bay, Kenai Peninsula, Alaska.
Alnus? sp., Knowlton. □ Knowlton, 1893b, 104; Ellensburg: Ellensburg, Wash.
Alnus, pistillate cones, Knowlton, 1926, 33, pl. 18, f. 3-5a; Latah: Coeur d'Alene, Idaho—Berry, 1929f, 244; Latah: Coeur d'Alene, Idaho; Spokane, Wash.
Alnus sp., Knowlton, 1904. □ Hollick, 1936, 95; Kukak Bay, Alaska Peninsula.
ALSINITES Cockerell, 1925, 6. Genotype: *A. revelatus* Cockerell.
Alsinites revelatus Cockerell, 1925, 7, pl. 1, f. 2; Green River: Roan Mts., Colo.
AMDRUPIA Harris, 1932, 29. Genotype: *A. stenodonta* Harris.
Amdrupia stenodonta Harris, 1932, 29; pl. 3, f. 4; text-f. 19; Lepidopteris Zone: Scoresby Sound, east Greenland.
Amelanchier alnifolia Nuttall. □ Mason, 1934, 160, pl. 9, f. 11; Tomales: Tomales Bay, Marin Co., Calif.
Amelanchier dignatus (Knowlton) R. W. Brown, 1935, 577, pl. 69, f. 5, 6; Latah: Salmon, Idaho—1937, 176, pl. 53, f. 11; Latah: Spokane, Wash.—1937c, 511.
Celastrus dignatus Knowlton. □
Amelanchier scudderi Cockerell. □ Berry, 1929f, 252, pl. 55, f. 4; Latah: Spokane, Wash.—1934, 113; Latah: near Moscow, Idaho.
Phyllites coulecanus Berry, 1931a, 42, pl. 13, f. 12; Latah: Grand Coulee, Wash.
Amelanchier magnifolia Arnold, 1937, 89, pl. 4, f. 1, 4; Trout Creek: Trout Creek, Harney Co., Oreg.
Amelanchier grayi Chaney, 1927a, 120, pl. 14, f. 3-5; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—MacGinitie, 1933, 58; Trout Creek: Trout Creek, Harney Co., Oreg.
Amelanchier grayi?, flower, MacGinitie, 1933, 59; Trout Creek: Trout Creek, Harney Co., Oreg.
Amelanchier magnifolia Arnold = *Amelanchier dignatus* (Knowlton) R. W. Brown.
Amelanchier scudderi, Berry not Cockerell = *Amelanchier dignatus* (Knowlton) R. W. Brown.
Amelanchier typica Lesquereux. □ Berry, 1932a, 40; Ballantyne Ranch, Malheur Co., Oreg.
Amelanchier sp., Arnold, 1935, 379; Trout Creek: Trout Creek, Harney Co., Oreg.
Amelanchier sp., Dorf, 1930, 100; Calabazas Canyon, Contra Costa Co., Calif.
Amentum masculum coniferarum Nathorst = *Ourostrobos nathorsti* Harris.
AMORPHA Linné.
Amorpha utensis Cockerell, 1925, 5, pl. 2, f. 6; Green River: Roan Mountains, Colo.
AMPELOCISSITES Berry, 1929a, 39. Genotype: *A. lytlensis* Berry.
Ampelocissites lytlensis Berry, 1929a, 39, text-f. 1; Wilcox: Lytle, Atacosa Co., Tex.—Parks & Kirn, 1936, 14, text-f. 1; Bexar Co., Tex.
Ampelophyllites ovatus (Lesquereux) Knowlton. □
Populites ovata Lesquereux. □ Lesquereux, 1871, 379; Dakota: Dakota Co., Nebr.
Ampelopsis montanensis Cockerell. □ ?Berry, 1935, 48; Whitemud: Locs. 7, P 5-30, southern Saskatchewan.

Ampelopsis? *multesima* Hollick, 1930, 106, pl. 79, f. 2; Kaltag: Lower Yukon, Alaska.

Ampelopsis *tertiaria* Lesquereux. □ Berry, 1930d, 73, pl. 11, f. 15; pl. 14, f. 4; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Parthenocissus *tertiaria* (Lesquereux) Knowlton, 1923, 170; Green River: Green River, Wyo.

Ampelopsis? sp., Berry, 1924a, 22, pl. 2, f. 19; Pleistocene: Washington, D. C.

AMPHORISPERMUM Harris, 1932a, 14. Genotype: *A. ellipticum* Harris.

Amphorispermum *ellipticum* Harris, 1932a, 15, text-f. 4a-l; Lepidopteris Zone: Scoresby Sound, east Greenland.

Seed E, Harris, 1926, 128, pl. 10, f. 7; pl. 13, f. 2; text-f. 32h-i; Rhaetic: Scoresby Sound, east Greenland.

Amphorispermum *major* Harris, 1932a, 17, text-f. 4 m-u; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Amphorispermum *rotundum* Harris, 1932a, 17, text-f. 5; Lepidopteris Zone: Scoresby Sound, east Greenland.

Seed C, Harris, 1926, 127, text-f. 32g; pl. 10, f. 6; Rhaetic: Scoresby Sound, east Greenland.

AMYDROSTROBUS Harris, 1935, 148. Genotype: *A. groenlandicus* Harris.

Amydrostrobos *groenlandicus* Harris, 1935, 148, pl. 29, f. 7, 8; text-f. 50a, b; Lepidopteris Zone: Scoresby Sound, east Greenland.

Amygdalus alexanderi Berry = **Fagus** *washoensis* LaMotte.

Amygdalus *gracilis* Lesquereux (part). □ Knowlton, 1923, 164; Green River: Uinta Co., Wyo.—Brown, R. W., 1934, 58; Green River: Uinta Co., Wyo.

Quercus nerifolia Lesquereux (part) not Al. Braun, 1883, 155, pl. 12; Green River: Uinta Co., Wyo.

Amygdalus gracilis Lesquereux (part) = **Palmocarpon** *lesquereuxi* Berry.

Amygdalus *wilcoxiana* Berry, 1930, 72, pl. 12, f. 1; Grenada: Somerville, Fayette Co., Tenn.; Holly Springs: Whiteville Gully, Hardeman Co., Tenn.

Anacardites *americanus* Berry, 1925a, 104, pl. 1, f. 3; Forest: Trinidad, British West Indies.

Anacardites *balli* Berry, 1924, 177, pl. 62, f. 7; Fayette: Barrera League, Brazos Co.; Piedmont, Grimes Co., Texas.—Ball, 1931, 160; Fayette: Barrera League, Brazos Co.; Piedmont, Grimes Co., Texas.

Anacardites *eocenicus* Berry, 1930, 96, pl. 14, f. 18; Wilcox: Nevada Co., Ark.; Holly Springs: Mill Creek, Hardman Co., Tenn.

Anacardites *grevilleaefolia* Berry. □ Ball, 1931, 84; Carrizo?: Concillas Creek, Webb Co., Texas.

Anacardites *inequilateralis* Berry, 1930, 94, pl. 29, f. 7; Holly Springs: Somerville, Fayette Co., Tenn.

Anacardites *lanceolatus* Berry, 1923b, 10, pl. 6, f. 1, 2; north of Palomares, Oaxaca, Mexico.

Anacardites *schinoloxus* R. W. Brown, 1929, 288, pl. 73, f. 8; Green River: northwest of De Beque, Colo.

Anacardites *schinus* R. W. Brown, 1934, 60, pl. 15, f. 19; Green River: northwest of De Beque, Colo.

Anacardites *spondiaeformis* Berry, 1925a, 105, pl. 15, f. 4; Forest: Trinidad, British West Indies.

ANACARDIUM Linné.

Anacardium *kirni* Berry, 1929, 38, text-f. 1, 2; Wilcox: Lytle, Atascosa Co., Texas.

ANDROLEPIS Nathorst, 1902, K. Svenska Vet. Akad., Handl., vol. 36, no. 4.

Androlepis hartzii Harris, 1932a, 121, pl. 13, f. 15, 16; *Lepidopteris* Zone: Scoresby Sound, east Greenland.

Androlepis sp., Harris, 1926, 124, pl. 9, f. 3; Rhaetic: Scoresby Sound, east Greenland.

Androlepis sp., Harris=*Androlepis hartzii* Harris.

Andromeda anceps Berry, 1925, 84, pl. 20, f. 3; Ripley: Henry Co., Tenn.

Andromeda delicatula Lesquereux=*Cotinus fraterna* (Lesquereux) Cockerell.

Andromeda grandifolia Berry. □ Berry, 1913a, 570; Tuscaloosa: near Glen Allen, Shirleys Mill, near Tuscaloosa, Snow Plantation, Ala.—1920e, 405; Black Creek: N. C.

Andromeda? lanceolata Knowlton. □ Ball, 1931, 64, pl. 46, f. 2; pl. 37, f. 4; Indio: Little Sandy Creek, Bastrop Co., Tex.

Andromeda nargonensis Heer not Saporta=*Laurophyllum plutonium* (Heer) Seward.

Andromeda novaecaesareae Hollick (emend), in Newberry, 1895, 121, pl. 42, f. 9-12, 28-31.—Berry, 1906d, 181.—1907a, 204.—1910, 29.—1910b, 505.—1911, 204.—1912b, 405.—1913a, 570; Tuscaloosa: near Glen Allen, Snow Plantation, Shirleys Mill, Ala.—1916, 885, pl. 89, f. 1, 2.—1916f, 301; Raritan: South Amboy, N. J.; Magothy: New Jersey; Grove Point and Round Bay, Md.—1920e, 405; Black Creek: North Carolina.—1922c, 177, pl. 38, f. 1; Woodbine.

Andromeda novaecaesareae, Berry (part) not Hollick=*Euphorbiophyllum petiolatum* Berry.

Andromeda parlatorii Heer. □ Lesquereux, 1884, 12; near New Ulm, Minn.—White, 1890, 97, pl. 2, f. 4; Martha's Vineyard, Mass.—Newberry, 1895, 120, pl. 31, f. 1-7; pl. 33, f. 1, 2, 4, 5; Raritan: New Jersey, locality not stated.—Berry, 1913a, 570; Tuscaloosa: near Glen Allen, Shirleys Mill, near Tuscaloosa, near Cottondale, Snow Plantation, Ala.—1920e, 405; Black Creek: North Carolina.—Gress, 1922, 323; Dakota: Ellsworth Co., Kans.

Andromeda pfaffiana Heer. □ White, 1898, 360; Atane, Nugsuak Pen., west Greenland.—Gress, 1922, 324; Dakota: Ellsworth Co., Kans.

Andromeda snowii Lesquereux. □ Berry, 1922c, 178; Woodbine: Arthur's Bluff, Lamar Co., Tex.

Andromeda wardiana Lesquereux. □ Berry, 1913a, 570; Tuscaloosa: near Iuka, Miss.; Shirleys Mill, Ala.

Andromeda, n. sp., Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Andromeda? sp., Hollick, 1930, 113; Kaltag: Lower Yukon, Alaska.

ANDROSACE Tournefort.

Androsace villosa Linné. Chaney & Mason, 1936c, 16, text-f. 28, 35; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Androvettia carolinensis Berry. □ Berry, 1913a, 570; Tuscaloosa: near Iuka, Miss.—1920e, 398; Black Creek: North Carolina.

ANEIMIA Swartz. (spelled ANEMIA in Knowlton's catalogue)

Aneimia delicatula R. W. Brown, 1929, 281, pl. 70, f. 1, 2; Green River: northwest of De Beque, Colo.

Aneimia eocenica Berry. □ Berry, 1924, 41; Yegua: Fayette Co., Texas; Houston Co., Texas.—Ball, 1931, 119, pl. 18, f. 2-4; Indio: Barton's Ranch, Bastrop Co., Texas; Yegua: Fayette and Houston Cos., Texas.—Berry, 1930, 51, pl. 47, f. 1; Holly Springs: Rogers Spring, Hardeman Co.; Jackson, Madison Co.; McKenzie, Carroll Co.; Puryear, Henry Co., Tenn.; Wilcox: Boydeville, Ark., and Mansfield, La.

Aneimia fremonti Knowlton. □ Berry, 1929j, 130; Frontier: near Cumberland, Wyo.—Brown, R. W., 1933, 3, pl. 1, f. 3; Aspen: southwest Wyo.

Aneimia trinitatis Ball, 1931, 146, pl. 23, f. 3, 4; Fayette: Trinity, Texas.

- Anemia elongata* (Newberry) Knowlton. □ Cross, 1895, 211; Middle Park: Middle Park, Grand Co., Colo.
- Anemia grandifolia* Knowlton, 1924, 78, pl. 5; Animas: Pagosa Quad., Colo.
- Anemia lanceolata* Knowlton, 1930, 29, pl. 8, f. 10; Middle Park: Middle Park, Grand Co., Colo.
- Anemia mosbyensis* Knowlton, 1930, 28, pl. 8, f. 9; Dawson: Mosby, Colo.
- Anemia stricta* Newberry = *Sphenopteris* (*Anemia*?) *stricta* (Newberry) Bell.
- Anemia supercretacea* Hollick. □ Knowlton, 1922, 112; Laramie: Marshall, Colo.; Vermejo: Florence, Colo.
- Anemia supercretacea conformis* Hollick, 1930, 40, pl. 1 f. 6, 7; Melozi & Kaltag: Lower Yukon, Alaska.
- Anemia* sp., Knowlton, 1930, 30, pl. 8, f. 7; Middle Park: Middle Park, Grand Co., Colo.
- Angiospermous infructescence** Seward & Conway, 1935a, 32, text-f. 33; Igdloukunguak: west Greenland.
- ANIBA** Aublet.
- Aniba colazoensis* Hollick, 1928, 198, pl. 64, 65; Collazo: Porto Rico.
- Aniba portoricensis* Hollick = *Hufelandia portoricensis* (Hollick) Hollick.
- Anisophyllum semialatum* (Lesquereux) Lesquereux. □
Quercus semialatus Lesquereux. □ Lesquereux, 1871, 379; Dakota: Beatrice, Gage Co., Nebr.
- ANOMOZAMITES** Schimper. □ Wieland, 1914, 61; discussion.—Harris, 1932a, 20, discussion.
- Anomozamites amdrupiana* Harris, 1932a, 33, text-f. 12; pl. 8, f. 5; Lepidopteris Zone: Scoresby Sound, east Greenland.
Anomozamites cf. *major* Harris not Brongniart, 1926, 86, pl. 6, f. 1, 2; text-f. 14L.
- Anomozamites cretaceus* Heer, 1874, 70, pl. 16, f. 19, 20.—Seward, 1925, 242; type specimens are indeterminate.
- Anomozamites elegans* Newberry, 1888a, 348; pl. 8, f. 6-8; near San Juancito, Honduras.
- Anomozamites gracilis* Nathorst = *Anomozamites marginatus* (Unger) Nathorst.
- Anomozamites hartzii* Harris, 1926, 86, pl. 5, f. 3, 4a, 5; text-f. 15a-e; Rhaetic; Scoresby Sound, east Greenland.—1932a, 24, text-f. 7-9; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Anomozamites* cf. *inconstans* Hartz, 1896, 235, pl. 15, f. 6, 8, 9; Rhaetic: Cape Stewart, east Greenland.
- Anomozamites* cf. *lindleyanus* Schimper. Wieland, 1914, 62, pl. 16, f. 6, 7; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Anomozamites lindleyanus* var. Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Anomozamites* cf. *major* Harris not Brongniart = *Anomozamites amdrupiana* Harris.
- Anomozamites marginatus* (Unger) Nathorst. Harris, 1932a, 21, pl. 6, f. 4-7; text-f. 6; Thaumatopteris Zone: Scoresby Sound, east Greenland.
Anomozamites gracilis Nathorst. Harris, 1932, 97, text-f. 38D-G; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Anomozamites minor* (Brongniart) Nathorst. Harris, 1926, 80, text-f. 13A-K; text-f. 14C, L; Rhaetic: Scoresby Sound, east Greenland.—1932a, 29, pl. 1, f. 7; pl. 2, f. 1, 6; text-f. 10; Lepidopteris and Transitional Zones: Scoresby Sound, east Greenland.
- Anomozamites nitida* Harris, 1932a, 30, pl. 2, f. 2; pl. 3, f. 1, 7, 8, 12; text-f. 11; Lepidopteris Zone: Scoresby Sound, east Greenland.

- Anona ampla* Berry. □ Ball, 1931, 72; Indio: Zavalla Co.; Wilcox: Tyler Co., Texas.
- Anona cetera* Hollick, 1928, 196, pl. 60, f. 1; pl. 76, f. 2a, b; pl. 85, f. 1b; pl. 86, f. 1c; Collazo: Porto Rico.
- Anona coloradensis* Knowlton. □ Knowlton, 1922, 143, pl. 18, f. 4; Laramie: Cowan Station, near Denver, Colo.—Sanborn, 1935, 18; Comstock: Comstock, Douglas Co., Oreg.
- Anona costaricana* Berry, 1921b, 173, pl. 24; southeastern Costa Rica.
- Anona eolignitica*, Berry. □ Ball, 1931, 73, 121; Indio?: Zavalla Co.; Dimmit Co.; Yegua: Turkey Creek, Brazos Co., Texas.
- Anona prereticulata* Chaney & Sanborn, 1933, 70, pl. 14, f. 2-5; Fisher: Goshen, Oreg.
- Anona pseudoglabra* Hollick, 1928, 196, pl. 54, f. 3b; Collazo: Porto Rico.
- Anona robertsi* Berry, 1930, 70, pl. 41, f. 14-18; Holly Springs: Grable Pit, Henry Co.; Thompson Farm, Madison Co.; Bell City, Calloway Co., Tenn.; Grenada: Cottage Grove, Henry Co.; Milan, Gibson Co., Tenn.
- Anona saraviana* Berry, 1923b 8, pl. 3, f. 2; north of Palomares, Oaxaca, Mexico—Hollick, 1924, 198, pl. 9, f. 3; near Lares, P. R.
- Anona texana* Berry, 1916e, 239, pl. 60, f. 9; Fayette: Trinity Co., Tex.—1924, 165, pl. 33, f. 7; Fayette: Trinity Co., Tex.—Ball, 1931, 154, pl. 28, f. 1; Fayette: Trinity Co., Tex.
- Anona wilcoxiana* Berry. □ Ball, 1931, 73, pl. 43, f. 2, 3; Carrizo: Dimmit Co.; Indio: Little Sandy Creek, Bastrop Co., Tex.
- ANONASPERMUM* Ball, 1931, 121. Genotype: *A. reidi* Ball.
- Anonaspermum reidi* Ball, 1931, 121, pl. 20, f. 5, 9, 11, 13; Yegua: Cross Co., Ark., Brazos Co., Tex.
- Antholithes amentiferus* Berry, 1930, 142, pl. 44, f. 23; Grenada: Cottage Grove, Henry Co., Tenn.
- Antholithes anceps* Berry, 1930d, 77, pl. 15, f. 1; so-called Bridger: Tipperary, Wind River Basin, Wyo.
- Antholithes balli* Berry, 1924, 199, pl. 65, f. 6; Fayette: Mossy Creek, Brazos Co., Tex.—Ball, 1931, 171, pl. 24, f. 6; Fayette: Boggy Creek, Brazos Co., Tex.
- Antholithes browni* Berry, 1930d, 77, pl. 15, f. 3; so-called Bridger: Tipperary, Wind River Basin, Wyo.
- Antholithes castaneoides* Hollick, 1936, 169, pl. 120, f. 5; Mañanaska River below Moose creek, Alaska.
- Antholithes dubia* R. W. Brown, 1929, 292, pl. 76, f. 7; Green River: northwest of De Beque, Colo.
- Antholithes fremontensis* Berry, 1930d, 78, pl. 15, f. 2; so-called Bridger: Tipperary, Wind River Basin, Wyo.
- Antholithes grablensis* Berry, 1930, 142, pl. 45, f. 15; Holly Springs: Grable Pit, Henry Co., Tenn.
- Antholithes iliciformis* Berry, 1930, 141, pl. 44, f. 8-10; Grenada: Cottage Grove, Henry Co., Tenn.
- Antholithes improbus* Lesquereux. □ Knowlton, 1923, 174; Green River: Uinta Co., Wyo.
- Antholithes mimosiformis* Berry, 1930, 140, pl. 25, f. 23-25; Holly Springs: Mill Creek, Hardeman Co., Tenn.
- Antholithes pendula* R. W. Brown, 1929, 292, pl. 76, f. 9; Green River: northwest of De Beque, Colo.
- Antholithes polomonioides* R. W. Brown, 1929, 292, pl. 76, f. 6; Green River: northwest of De Beque, Colo.
- Antholithes pruniformis* Berry, 1930, 141, pl. 44, f. 11, 12; Holly Springs: Puryear, Henry Co., Tenn.

- Antholithes ramaliformis** Berry, 1928f, 446, pl. 11, f. 7, 8; Ripley: Carroll Co., Tenn.
- Antholithes ternstroemioides** Berry, 1930, 140, pl. 42, f. 5, 6; Holly Springs: Puryear, Henry Co., Tenn.
- Antholithes vitaciflora** R. W. Brown, 1929, 292, pl. 76, f. 8; Green River: northwest of De Beque, Colo.
- Antholithes wilcoxensis** Berry, 1930, 141, pl. 50, f. 6, 7; Grenada: Cottage Grove, Henry Co., Tenn.
- Antholithes** sp., R. W. Brown, 1934, 67, pl. 15, f. 1-7; Green River: Roan Creek, northwest of De Beque; Greasewood Creek, Colo.; Fossil, Wyo.
- ANTHOLITHUS** Linné.
- Antholithus** cf. **arberi** Thomas. Harris, 1932a, 14, text-f. 2A-E; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Sagenopteris nilssoniana*, stamen and pollen. Harris, 1926, 77, pl. 8, f. 4, 5, 9; text-f. 12B; Rhaetic: Scoresby Sound, East Greenland.
- ANTHROPHYOPSIS** Nathorst, 1878, Sveriges Geol. Undersökn, series C, no. 27, p. 43.
- Anthrophyopsis crassinervis** Nathorst=**Glossopteris crassinervis** (Nathorst) Harris.
- Anthrophyopsis hamiltonensis** Hollick, 1936, 41, pl. 6, f. 1-5; Hamilton Bay, Kupreanof Isl., southeastern Alaska.
- Apeibopsis atwoodi** Hollick, 1930, 107, pl. 82, f. 2; Chignik: Alaska Peninsula.
- Apeibopsis deloesi** (Gaudini) Heer. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.
- Apeibopsis? discolor** (Lesquereux) Lesquereux. □ Berry, 1930c, 27; Ravenscrag: Cypress Hills, Canada.—1930f, 64; Ravenscrag: southern Alberta.—Hollick, 1936, 149, pl. 81, f. 3; King Salmon Lake, Alaska Peninsula.
- Apeibopsis nordenskiöldi** Heer=**Menispermities nordenskiöldi** (Heer) Seward.
- Apeibopsis thomseniana** Heer=**Magnoliaephyllum thomsenianum** (Heer) Shotton.
- Apocynophyllum alatum** Berry, 1925, 87 pl. 23, f. 7; Ripley: Henry Co., Tenn.
- Apocynophyllum constrictum** Berry. □ Berry, 1922g, 20; Wilcox: Somerville, Fayette Co., Tenn.
- Apocynophyllum crassum** Berry, 1930, 130, pl. 37, f. 1; Holly Springs: Bolivar, Hardeman Co., Tenn.
- Apocynophyllum giganteum** Berry, 1925, 86, pl. 21, f. 2; Ripley: Carroll Co., Tenn.
- Apocynophyllum grevilleaefolium** Berry, 1924, 92, 196, pl. 23, f. 4-6; pl. 36, f. 10; pl. 55, f. 1; Mt. Selman: Palestine, Anderson Co., Tex.; near Palofax, Webb Co., Tex.—Ball, 1931, 129, 170, pl. 30, f. 1; Mt. Selman: Palestine, Anderson Co.; Palofax, Webb Co.; Fayette: Miraflores, Webb Co.; Alum Creek, Brazos Co., Tex.
- Apocynophyllum latahense** Berry (part)=**Magnolia spectabilis** Knowlton.
- Apocynophyllum latahense** Berry (part)=**Quercus simulata** Knowlton.
- Apocynophyllum linifolium** Knowlton. □ ?Berry, 1930; Holly Springs: Water Valley, Yalobusha Co., Miss.
- Apocynophyllum mexicanum** Berry, 1923b, 23, pl. 4, f. 2; San José del Carmen, Vera Cruz, Mexico.
- Apocynophyllum mississippiensis** Berry. □ Berry, 1922g, 20; Wilcox: Mansfield, De Soto Parish, La.—1930, 129, pl. 40, f. 3, 4; Grenada: Grenada, Miss.; Fayette Co., Tenn.; Holly Springs: Madison and Henry Cos., Tenn.; Wilcox: Boydsville, Ark.; Mansfield, La.—Ball, 1931, 108; Wilcox: Mansfield, La.

Apocynophyllum mississippiensis ovatum Berry, 1930, 129, pl. 19, f. 15; Holly Springs: Shepherd Price Farm, near Whiteville, and Mill Creek, Hardeman Co., Tenn.

Apocynophyllum parvulum Berry, 1930, 129, pl. 41, f. 6; Holly Springs: Shandy, Hardeman Co., Tenn.

Apocynophyllum perryensis Berry, 1925, 87, pl. 21, f. 1; Ripley: Henry Co., Tenn.

Apocynophyllum preplumiera Berry, 1930, 130, pl. 42, f. 1, 2; Holly Springs: Bolivar, Hardeman Co., Tenn.

Apocynophyllum pseudowillughbya Hollick, 1924, 318, pl. 11, f. 3; Collazo River, Porto Rico.—1928, 222; Collazo: Porto Rico.

Apocynophyllum ratonense Ball, 1931, 106, pl. 8, f. 4; pl. 43, f. 6; Indio: Barton's Ranch, Bastrop Co., Tex.

Apocynophyllum wilcoxensis, Knowlton not Berry, 1917, 345, pl. 103, f. 3; pl. 105, f. 1, 2; pl. 106, f. 1; Raton: Primero, Riley Canyon, near Trinidad, Colo.—1924, 95, pl. 14, f. 5; Animas: Pagosa Quad., Colo.

Apocynophyllum ripleyensis. Berry, 1925, 87, pl. 21, f. 3; Ripley: Carroll Co., Tenn.

Apocynophyllum roanense R. W. Brown, 1934, 65, pl. 11, f. 5; Green River: Parachute Creek, northwest of Grand Valley, Colo.

Salix sp., Knowlton, 1923, 156, pl. 37, f. 4; Green River: southwest of Meeker, Rio Blanco Co., Colo.

Apocynophyllum sapindifolium Hollick.=*Heisteria sapindifolia* (Hollick) Berry.

Apocynophyllum scudderii Lesquereux=*Eucalyptus? americanus* Lesquereux.

Apocynophyllum sumterensis (Berry) Berry, 1925, 87; Carroll Co., Tenn.; Barbour Co., Ala.

Quercus sumterensis Berry.□

Undeterminable leaf, Berry, 1919, pl. 31, f. 5, 6; Ripley: Barbour Co., Ala.

Apocynophyllum tabellarum (Lesquereux) Berry.□Ball, 1931, 108, pl. 16, f. 5; Wilcox: Harrison Co.; Indio: Barton's Ranch, Bastrop Co., Tex.

Salix tabellaris Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi.

Apocynophyllum texensis Berry, 1924, 91, 195, pl. 32, f. 12, 13; pl. 40, f. 4; pl. 41, f. 1, 2; pl. 55, f. 2, 3; Lisbon: Lexington, Holmes Co., Miss.; Yegua: Nevils Prairie, Houston Co., Tex.; Mt. Selman: Palestine, Anderson Co., Tex.—Ball, 1931, 129, 170, pl. 30, f. 2; Mt. Selman: Palestine, Anderson Co.; Yegua: Nevils Prairie, Houston Co.; Fayette: Trinity Co.; Miraflores, Webb Co., Tex.; Forest Hill: Jackson, Miss.

Apocynophyllum wilcoxensis Berry.□?Hollick, 1928, 222, pl. 85, f. 4; Collazo: Porto Rico.—Brown, R. W., 1929, 291; Green River: between Carr and Brush Creeks, 30 mi. northwest of De Beque, Colo.

Apocynophyllum wilcoxensis, Knowlton not Berry=*Apocynophyllum ratonense* Ball.

Apocynophyllum sp., Hollick, 1924, 318, pl. 13, f. 3; Santo Domingo.

APOCYNOSPERMUM Reid, in Reid & Chandler, Catalogue of Cainozoic plants in the Dept. of Geol., vol. 1, The Bembridge Flora, London, British Museum, 1926.

Apocynospermum coloradensis R. W. Brown, 1929, 291; Green River: northwest of De Beque, Colo.—1934, 65, pl. 10, f. 3; Green River: Parachute Creek, northwest of Grand Valley, Colo.

APOCYNUM (Tournefort) Linné.

Apocynum indiana MacGinitie=*Cedrela oregoniana* (Lesquereux) R. W. Brown.

APOROSA Blume.

- Aporosa pattersoni* Sanborn, 1935, 22, pl. 8, f. 1, 3, 4; Comstock: Comstock, Douglas Co., Oreg.
- Aralia angustiloba* Lesquereux. □ Sanborn, 1935, 27, pl. 9, f. 6; Comstock: Comstock, Douglas Co., Oreg.
- Aralia browni* Berry, 1930d, 75, pl. 13, f. 5; so-called Bridger: Tipperary, Wind River Basin, Wyo.
- Aralia delicatula* Hollick, 1936, 157, pl. 98, f. 4; between Herendeen Bay and Port Moller, Alaska Peninsula.
- Aralia digitata* Ward = *Platanus basilobata* Ward.
- Aralia formosa* Heer. □ Fritel, 1914a, 21.
- Sterculia reticulata* Lesquereux. □
- Aralia groenlandica* Heer = *Platanophyllum insigne* (Heer) Seward.
- Aralia hercules* Unger, ?Lesquereux, 1888, 51; Denver: Golden, Colo.
- Aralia jorgenseni* Heer = *Platanophyllum wellingtonianum* (Lesquereux) Seward.
- Aralia kowalewskiana* Saporta & Marion, Le monde des plantes, 199, f. 1.—Fritel, 1914a, 21.
- Aralia westoni* Dawson. □
- Aralia lobata* Knowlton, 1924, 93, pl. 17, f. 1, 2; Animas: Pagosa Quad., Colo.
- Aralia longipetiolata* Jennings, 1920, 424, pl. 33, f. 1, 1a, 2, 2a; Missoula, Mont.
- Aralia nassauensis* Hollick = *Aralia saportana* Lesquereux.
- Aralia newberryi* Berry. □ Berry, 1922d, 220; Cheyenne: near Belvidere, Kiowa Co., Kans.
- Aralia polymorpha* Newberry. □ Hollick, 1930, 110, pl. 84, f. 3; Kaltag: Lower Yukon, Alaska.
- Araliaephyllum polymorphum* (Newberry) Fritel, 1914a, 21.
- Aralia notata* Lesquereux. □ Lesquereux, 1888, 51; Denver: Golden, Colo.—Cross, 1895, 211; Middle Park: Middle Park, Colo.—Berry, 1926, 197; Paskapoo: Alberta.—1935, 53, pl. 14, f. B; Lower Ravenscrag: Loc. 3; Upper Ravenscrag: Loc. 1, 32, 35; southern Saskatchewan.—Ball, 1931, 101, pl. 15; Indio: Barton's Ranch, Bastrop Co., Tex.
- Aralia notata denticulata* Berry, 1930d, 75, pl. 15, f. 5; so-called Bridger: Tipperary, Wind River Basin, Wyo.
- Aralia parvidens* Hollick, 1930, 110, pl. 84, f. 2; Kaltag: Lower Yukon, Alaska.
- Aralia polymorpha* Newberry = *Aralia newberryi* Berry.
- Aralia problematica* Berry, 1925, 83, pl. 20, f. 1, 2; Ripley: Henry and Carroll Cos., Tenn.
- Aralia pseudoplatanoidea* Hollick, 1930, 110, pl. 83, f. 4; Chignik: Alaska Peninsula.
- Aralia pungens* Lesquereux = *Artocarpus lessigiana* (Lesquereux) Knowlton.
- Aralia ravniana*, Berry not Heer = *Platanophyllum insigne* (Heer) Seward.
- Aralia reesidei* Knowlton, 1924, 94, pl. 17, f. 3; Animas: Pagosa Quad., Colo.
- Aralia republicensis* R. W. Brown, 1937, 183, pl. 55, f. 7; Latah: Republic, Washington.
- Platanus appendiculata*? Berry not Lesquereux, 1929f, 249, pl. 52, f. 5; Latah: Republic, Wash.
- Aralia whitneyi*, Berry not Lesquereux, 1929f, 260; Latah: Republic, Wash.
- Aralia rotundiloba* Newberry = *Platanophyllum insigne* (Heer) Seward.
- Aralia saportana* Lesquereux. □ Berry, 1922c, 177; Woodbine: Arthur's Bluff, Lamar Co., Tex.
- Aralia wellingtoniana* Lesquereux (part), 1892, pl. 22, f. 2, 3 only.
- Araliaephyllum saportanum* (Lesquereux) Fritel, 1914a, 21.
- Aralia nassauensis* Hollick. □
- Aralia saportana deformata* Lesquereux. □

Aralia saportana deformata Lesquereux=*Aralia saportana* Lesquereux.

Aralia? *semina* Berry, 1930, 124, pl. 8, f. 2, 3; Holly Springs: Bell City, Callo-way Co., Ky.

Aralia taurinensis (Ward) Sanborn, 1935, 27, pl. 10, f. 1, 2, 4; Comstock: Comstock, Douglas Co., Oreg.

Celastrus taurinensis Ward.□Berry, 1930c, 24; Ravenscrag: Cypress Hills, Can-ada.—1930f, 64; Ravenscrag: southern Alberta.—1935, 42; Middle Ravenscrag: Locs. P. 12-30, 5, 24; Upper Ravenscrag: Loc. 33, southern Saskatchewan.

Celastrus wardii Knowlton & Cockerell.□Berry, 1930c, 24; Ravenscrag: Cypress Hills, Saskatchewan.—1930f, 64.

Celastrus ovatus Ward.□

Celastrus curvinervis Ward.□

Aralia towneri Lesquereux=*Sterculia towneri* (Lesquereux) Berry.

Aralia triloba Newberry.□?Berry, 1935, 54; Middle Ravenscrag: Loc. 24, south-ern Saskatchewan.

Aralia veatchi Knowlton.□Knowlton, 1929j, 131; Frontier: near Cumberland, Wyo.

Aralia wardiana Knowlton & Cockerell=*Platanus basilobata* Ward.

Aralia wellingtoniana Lesquereux (part)=*Aralia saportana* Lesquereux.

Aralia wellingtoniana Lesquereux (part)=*Platanophyllum wellingtonianum* (Lesquereux) Seward.

Aralia wellingtoniana minor Berry, 1925, 82, pl. 19, f. 4, 5; pl. 23, f. 4, 5; Ripley: Henry Co., Tenn.

Aralia westoni Dawson=*Aralia kowalewskiana* Saporta & Marion.

Aralia whitneyi Lesquereux.□Chaney, 1921a, 90; Puente: Los Angeles Co., Calif.—Berry, 1930d, 76; so-called Bridger: Crow Heart Butte, Wyo.

Aralia whitneyi Berry not Lesquereux=*Aralia republicensis* R. W. Brown.

Aralia wyomingensis Knowlton & Cockerell.□Knowlton, 1923a, 172, pl. 39, f. 4; pl. 40, f. 12; Green River: Green River, Wyo.: Cathedral Bluff, Rio Blanco Co., Colo.—Cockerell, 1925, 5; Green River: Roan Mts., Colo.

Aralia, n. sp., Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Aralia? sp., Hollick, 1936, 157, pl. 99, f. 5; between Portage (Balboa) Bay and Herendeen Bay, Alaska Peninsula.

Aralia? sp., Hollick, 1936, 157, pl. 98, f. 5, 6; head of north branch of Russell Creek, Alaska Peninsula.

Aralia sp., Knowlton, 1924, 94, pl. 6, f. 4; Animas: Pagosa Quad., Colo.

Araliaephyllum groenlandicum (Heer) Fritel=*Platanophyllum insigne* (Heer) Seward.

Araliaephyllum paluxyense Ball, 1937, 530, text-figs. 1-4; Paluxy: near Stephen-ville, Erath Co., Texas.

Araliaephyllum saportanum (Lesquereux) Fritel=*Aralia saportana* Lesquereux.

Araliaephyllum snowii (Lesquereux) Fritel=*Sterculia towneri* (Lesquereux) Berry.

Araliaephyllum towneri (Lesquereux) Fritel=*Sterculia towneri* (Lesquereux) Berry.

Araliopsoides cretacea (Newberry) Berry.□Berry, 1922d, 221, pl. 61, f. 2; Cheyenne: near Belvidere, Kiowa Co., Kans.

Sassafras cretaceum Newberry.□Gress, 1922, 303; Dakota: Salina; Ft. Ellsworth and Ellsworth Co., Kans.

Araliopsoides cretacea salisburiaefolia (Lesquereux) Berry.□

Sassafras obtusum Lesquereux.□Gress, 1922, 305; Dakota: Ellsworth Co., Kans. *Populites salisburiaefolia* Lesquereux.□Lesquereux, 1871, 379; Dakota: Lancaster Co., Nebr.

Araucaria bladenensis Berry.□Berry, 1920e, 598; Black Creek: N. C.—1925, 33; Eutaw: Hale Co., Ala.; Chattahoochee Co., Ga.; Ripley: Houston Co., Ga.

Araucaria clarkii Berry. □ Berry, 1920e, 398; Black Creek: N. C.

Araucaria jeffreyi Berry. □ Berry, 1920e; 398, Black Creek: North Carolina—1925, 34; Eutaw: Chattahoochee Co., Ga.; Ripley: Houston Co., Ga.

ARAUCARIOXYLON Kraus. □ Knowlton, 1890, 601–617. Revision of genus.

Araucarioxylon arizonicum Knowlton. □ Knowlton, 1890, 614; near Fort Wingate, N. Mex.; Lithodendron Creek and Chalcedony Park, Ariz.—Reagan, 1926, 122, 123, f. 5–7; Chinle and Shinarump: Defiance Plateau, N. Mex.

Araucarioxylon edvardianum (Dawson) Knowlton, 1890, 615; Triassic: Prince Edward Island.

Dadoxylon edvardianum Dawson, 1871a, 45, pl. 3, f. 25–27.

Araucarioxylon mexicanum Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 120, pl. 41; Liassic: Mixteca Alta, Oaxaca, Mexico.

Araucarioxylon texense Torrey, 1923, 89, pl. 15, f. 61–64; Comanchean: Cottondale, Tex.

Araucarioxylon virginicum Knowlton, 1890, 615; Potomac: Taylorsville, Va.—1901, 161; Newark: South Britain, Conn.

ARAUCARITES Presl. □ Harris, 1935, 111; discussion.

Araucarites charcotti Harris, 1935, 113, pl. 20, f. 1–5, 9–13; text-f. 43, 44; Lepidopteris Zone: Scoresby Sound, east Greenland.

Araucarites emmonsii (Fontaine) Wieland, 1928, 33, f. 1; Newark: North Carolina.

Zamiostrobus emmonsii Fontaine. □

Cycadeoidea emmonsii (Fontaine) Ward. □

Araucarites virginianensis (Fontaine) Wieland, 1928, 36; Newark: near Midlothian, Haw River and Lockville, N. C.

Zamiostrobus virginianensis Fontaine. □

Lepidodendron sp. Emmons. □

Zamiostrobus sp. Fontaine. □

Araucarites sp., Berry, 1929a, 159, pls. 19, 20; Verapaz District, Guatemala.

Arbutus idahoensis (Knowlton) R. W. Brown, 1937, 184, pl. 59, f. 2–4; Latah: Spokane, Wash; Trout Creek: Trout Creek, Harney Co., Oreg.; Latah: near Montour, Gem Co., Idaho.

Myrica? idahoensis Knowlton. □

Myrica lanceolata Knowlton. □ Kirkham-Johnson, 1929, 497; Payette: Idaho.

Betula aequalis? Knowlton not Lesquereux, 1898b, 728, pl. 102, f. 5; Payette: near Marsh, Boise Co., Idaho.

Arbutus sp., Chaney, 1925b, 39; Mascall: Tipton, Oreg., (Oliver later referred these specimens to *Arbutus trainii* MacGinitie); Upper Cedarville: 49 Camp Nevada, (LaMotte later referred these specimens to *Arbutus matthesii* Chaney and considered *Arbutus trainii* of MacGinitie and Oliver a synonymy); Tuolumne Table Mountain, and Independence Hill, Calif.

Salix knowltoni Berry, 1927c, 9, pl. 2, f. 1; Esmeralda: Mineral Co., Nev.—1934, 106; Latah: 11 mi. east of Lewiston, Idaho.

Celastrus lacœi Berry not Lesquereux, 1929f, 255; Latah: Spokane, Wash.

Laurus princeps Berry not Heer, 1929f, 259, pl. 58, f. 5; Latah: Spokane and Billyard, Wash.

Arbutus trainii MacGinitie, 1933, 64, pl. 12, f. 3; pl. 13, f. 1, 2; Trout Creek: Trout Creek, Harney Co., Oreg.—Oliver, 1934, 26; Mascall: Tipton and Austin, Oreg.—Brooks, 1935, 300, pl. 21, f. 3; Sucker Creek: Ballantyne Ranch, Idaho.

Arbutus matthesii Chaney, 1927a, 131, pl. 20, f. 1, 3–5; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.; Buchanan Tunnel, Table Mountain near Columbia, Calif.—LaMotte, 1936, 140, pl. 14, f. 1–4; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—Dorf, 1936, 123, pl. 3, f. 9; Idaho: near Weiser, Idaho.—Brown, R. W., 1937, 184, pl. 59, f. 1, 5, 6; Latah: Spokane, Wash.

Quercus eleanoides Lesquereux (part), 1878c, 4, pl. 1, f. 9 only; Auriferous Gravels: Table Mountain, Tuolumne Co., Calif.

Arbutus menziesii Pursh. □ Mason, 1934, 175, pl. 11, f. 5; Tomales: Tomales Bay, Marin Co., Calif.

Arbutus trainii MacGinitie = **Arbutus idahoensis** (Knowlton) R. W. Brown.

Arbutus sp., Axelrod, 1937, 177, pl. 6, f. 1; Mt. Eden: near Beaumont, Calif.

Arbutus sp., Chaney = **Arbutus idahoensis** (Knowlton) R. W. Brown.

ARCELLITES Miner, 1935, 600. Genotype: *A. disciformis* Miner.

Arcellites disciformis Miner, 1935, 600; Disko Isl., west Greenland.

ARCEUTHOBIUM Bieberstein.

Arceuthobium campylopodum Engelm. Chaney & Mason, 1930, 12, pl. 7, f. 13; Pleistocene: Santa Cruz Isl., Calif.—1933a, 59, pl. 7, f. 1-3, 5, 6; Pleistocene: Carpinteria, Santa Barbara Co., Calif.

Arceuthobium sp., Chaney & Mason, 1927, 157.

Arceuthobium cf. **campylopodum** Engelm. Mason, 1934, 155, pl. 8, f. 5-7, 9-12; Tomales: Tomales Bay, Marin Co., Calif.

Arceuthobium sp., Chaney & Mason = **Arceuthobium campylopodum** Engelm.

ARCHAEOMNIUM E. G. Britton, in Knowlton, 1926, 24.

Archaeomnium patens E. G. Britton, in Knowlton, 1926, 24, pl. 8, f. 1, 2; Latah: Spokane, Wash.

ARCHIHICORIA Barbour, 1898, 272-274. (Genus nudum) Genotype: *A. siouxensis* Barbour = **Juglans siouxensis** (Barbour) Berry.

ARCTOSTAPHYLOS Adanson. □ Chaney & Mason, 1933a, 63.—Mason, 1934, 172-173; generic discussion.

Arctostaphylos columbiana Piper. ?Mason, 1934, 174, pl. 11, f. 1-3; Tomales: Tomales Bay, Marin Co., Calif.

Arctostaphylos cuneata R. W. Brown, 1935, 583, pl. 67, f. 20; Latah: Salmon, Idaho.

Arctostaphylos glauca Lindley. Chaney & Mason, 1933a, 64, pl. 9, f. 2, 3; Pleistocene: Carpinteria, Calif.

Arctostaphylos sp., Chaney & Mason, 1930, 12, pl. 7, f. 16-18; Pleistocene: Santa Cruz Island, Calif.

Arctostaphylos knowltoni Berry = **Vaccinium sophoroides** (Knowlton) R. W. Brown.

Arctostaphylos preglaucia Axelrod, 1937, 178, pl. 6, f. 8, 9; Mt. Eden: near Beaumont, Calif.

Arctostaphylos prepungens Axelrod, 1937, 178, pl. 6, f. 10, 11; Mt. Eden: near Beaumont, Calif.

Arctostaphylos spatulata Berry, 1929f, 262, pl. 64, f. 6; Latah: Spokane, Wash.

Arctostaphylos uva-ursi (Linné) Sprengel. Mason, 1934, 174, pl. 11, f. 4; Tomales: Tomales Bay, Marin Co., Calif.

Arctostaphylos sp., Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.

Arctostaphylos sp., Berry & Johnston, 1922a, 138, pl. 2, f. 6; Point Grays: Vancouver, British Columbia.

Arctostaphylos sp., Chaney & Mason, 1933a, 64, pl. 9, f. 1, 4-12; Pleistocene: Carpinteria, Santa Barbara, Calif.

Arctostaphylos sp., Chaney & Mason, 1930 = **Arctostaphylos glauca** Lindley.

Arctostaphylos, sp. A, Webber, in Chaney & Mason, 1933a, 68; Pleistocene: Carpinteria, Santa Barbara Co., Calif.

Arctostaphylos, sp. B, Webber, in Chaney & Mason, 1933a, 68; Pleistocene: Carpinteria, Santa Barbara Co., Calif.

ARDISIA Swartz.

Ardisia sp., Berry, 1924, 193, pl. 62, f. 6; Fayette: Barrera League, Brazos Co., Tex.—Ball, 1931, 168, pl. 33, f. 7; Fayette: Boggy Creek and Raney Hdr., Brazos Co., Tex.

ARECIPITES Wodehouse, 1935a, 497.

Arecipites punctatus Wodehouse, 1933a, 497, f. 22; Green River: Parachute Creek, Garfield Co., Colo.

Arecipites rugosus Wodehouse, 1933a, 498, f. 23; Green River: Parachute Creek, Garfield Co., Colo.

ARENARIA Ruppius.

Arenaria sajanensis Willdenow. Chaney & Mason, 1936c, 13, text-f. 55, 56; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Arisaemia hesperia Knowlton, 1926, 29, pl. 10, f. 1; Latah: Spokane, Wash.

ARISTIDA Linné.

Aristida sp. Lauder milk & Munz, 1934a, 37; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.

Aristolochia claiborniana Berry, 1924, 59, pl. 9, f. 7, 8; Yegua: Caldwell Parish, La.

Aristolochia? coloradensis Knowlton, 1916, 92, pl. 18, f. 3; Fox Hills: near Milliken, Colo.

Aristolochia cordifolia Newberry=*Paranymphaea crassifolia* (Newberry) Berry.

Aristolochia crassifolia (Newberry) Cockerell=*Paranymphaea crassifolia* (Newberry) Berry.

Aristolochia mexicana Chaney & Sanborn, 1933, 68, pl. 11, f. 2, 3; pl. 23, f. 2b; Fisher: Goshen, Ore.

Aristolochia paigei Hollick, 1930, 74, pl. 40, f. 3; Melozi: Lower Yukon, Alaska.

Aristolochia triangularis MacGinitie, 1937, pl. 5, f. 5; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Aristolochia whitebirdensis Ashlee=*Smilax magna* Chaney.

Aristolochia sp., Hollick, 1912a, 38; west of King's River, Matanuska Valley, Alaska.

Aristolochites heeri Berry, 1920e, 402; Black Creek: Bladen Co., N. C.

Arthropphyta (Horsetails), species of, R. W. Brown, 1937, 167, pl. 45, f. 4; Latah: Thunder Mt., Idaho.

Artocarpidium alaskanum Hollick, 1936, 108, pl. 59, f. 1-5; near Berg Lake, Yakutat-Copper River region; Fairbanks District, Tenana region, Alaska.

Artocarpidium cretaceum Ettingshausen=*Phyllites cretaceus* (Ettingshausen) Berry.

Artocarpoides balli Berry, 1922g, 8, pl. 4, f. 8-10; pl. 5; Wilcox: Goss Pit, near Mansfield, De Soto Parish, La.—Ball, 1931, 56, pl. 46, f. 1; Indio: Little Sandy Creek, Bastrop Co., Tex.

Artocarpus cretacea Berry, 1925, 48, pl. 8, 9; Ripley: Henry and Carroll Cos., Tenn.

Artocarpus dicksoni Nathorst, 1890, 3, pl. 1, f. 1-3; Igdlounguak, west Greenland.

Artocarpus dissecta Knowlton=*Artocarpus lessigiana* (Lesquereux) Knowlton.

Artocarpus dubia Hollick=*Artocarpus lessigiana* (Lesquereux) Knowlton.

Artocarpus? gigantea Knowlton, 1930, 75; Dawson: east of Colorado Springs, Colo.

Artocarpus lessigiana (Lesquereux) Knowlton. □ Knowlton, 1922, pl. 12, f. 1; pl. 22, f. 4; Laramie: Coal Creek, Boulder Co., Colo.; Marshall, Colo.; Cowan Station near Denver, Colo.—Ball, 1930, 312-325, 17 figs.;—1931, 52, pl. 37, f. 1-3; pl. 38, f. 1-7; pl. 39, f. 1-7; Indio: Bastrop Co., Tex.

Aralia pungens Lesquereux. □

Artocarpus pungens (Lesquereux) Hollick. □ Knowlton, 1924, 85, pl. 12; Animas: Ignacio and Pagosa Quads., Colo.—1930, 73, pl. 30, f. 2; pl. 31; pl. 32, f. 1, 2; Denver: Golden, Colo.—Berry, 1930, 63, pl. 9, f. 1-3; Wilcox: Chester Co., Tenn.

Artocarpus dubia Hollick. □

Artocarpus similis Knowlton. □ Knowlton, 1930, 75, pl. 32, f. 4; Dawson: Calban, Colo.

Artocarpus dissecta Knowlton. □

Artocarpus lessigiana floridana Berry, 1916b, 48, pl. 10, f. 5-7; Alum Bluff: Alum Bluff, Liberty Co., Fla.

Artocarpus ordinarius Hollick, 1936, 108, pl. 56, f. 1, 2; south bank Yukon River above Rampart, central Yukon region, Alaska.

Artocarpus pungens (Lesquereux) Hollick=*Artocarpus lessigiana* (Lesquereux) Knowlton.

Artocarpus similis Knowlton=*Artocarpus lessigiana* (Lesquereux) Knowlton.

Artocarpus sp., Seward cf. *A. dicksoni* Nathorst. Seward, 1926, 115, pl. 11, f. 113; Nugsuak, west Greenland.

Artocarpus sp., Berry, 1930, 63; Holly Springs: Bolivar, Hardeman Co., Tenn.

Arundinaria, cf. *macrosperma* Michaux.□Berry, 1922b, 11; Pleistocene: Chilton Co., Ala.

Arundo cretaceus Lesquereux=*Phragmites cretaceus* (Lesquereux) Lesquereux.

Arundo goepperti, Lesquereux not Münster=*Arundo pseudogoepperti* Berry.

Arundo groenlandica Heer.□White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.

Arundo? *obtusa* Lesquereux.□Knowlton, 1930, 35; Denver: Golden, Colo.

Arundo pseudogoepperti Berry.□Berry, 1924, 49; 148; Claiborne: near Ft. Gaines, Clay Co., Ga.; Gosport: Claiborne Landing, Monroe Co., Ala.; Lisbon: Lexington, Holmes Co., Miss.; Yegua: Columbia, Caldwell Parish, La.; near Stevens, Ouachita Co., Ark.; Fayette and Houston Cos. Tex.; Jackson: Union Co., Ark.; Barnwell: Columbia Co., Ga.—1932e, 8; Lysite: Wind River, Wyo.—Ball, 1931, 119; Yegua: Turkey Creek, Brazos Co., Tex.—? Hollick, 1936, 54, pl. 19, f. 3-8; pl. 20, f. 1-8; pl. 22, f. 4; Eska Creek, Matanuska Coal Field; west side of Herendeen Bay, Alaska Peninsula; Matanuska River below Moose Creek, Alaska.

Arundo goepperti, Lesquereux not Münster, 1872, 5.—1878, 86, pl. 8, f. 3-5; Green River: Green River, Wyo.; Denver: Silver Cliff, Colo.

Arundo reperta Lesquereux.□Knowlton, 1923, 152; Green River: Green River, Wyo.—Brown, R. W., 1934, 53; Green River localities as cited by authors.

Arundo sp. (fragments) Lesquereux, 1871, 382; Raton?: Purgatory Canyon, Colo.

ASARUM (Tournefort) Linné.

Asarum circularis Chaney, 1927a, 115, pl. 13, f. 11; Bridge Creek: Gray Ranch and Reams Ranch, Crooked River Basin, Oreg.

Asimina eocenica Lesquereux.□?Berry, 1919g, 7; Basal Tuffs: Barilla Mts., Tex.—Knowlton, 1930, 94, pl. 40, f. 4; pl. 43, f. 1, 2, 4, 6; Denver: Golden, Colo.; Middle Park: Middle Park, Grand Co., Colo.; Dawson: Sedalia and Ramah, Colo.—Ball, 1931, 73; Indio: Bexar and Bastrop Cos., Tex.

Asimina eocenica?, Knowlton not Lesquereux=*Laurus asiminoides* Berry.

Asimina eotriloba Ball, 1931, 74, pl. 48, f. 1; Indio: Little Sandy Creek, Bastrop Co., Tex.

Asimina knowltoni Hollick, 1930, 80, pl. 44, f. 4, 5; Kaltag: Lower Yukon, Alaska.

Asimina leiocarpa Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi.

Aspidiophyllum trilobatum Lesquereux.□Gress, 1922, 297, Dakota: Ft. Harker, Kans.—Bell, 1928, 23, pl. 9, f. 1, 2; Stikine River, British Columbia.

ASPIDIUM Swarts=**DRYOPTERIS** Adanson.

Aspidium fecundum Heer=*Gleicheniopsis fecunda* (Heer) Tutin.

Aspidium heterophyllum Fontaine (part)=*Gleichenites nordenskiöldi* (Heer) Seward.

Aspidium jenseni Heer (part)=*Gleichenites porsildi* Seward.

Aspidium lakesii (Lesquereux) Knowlton=**Dryopteris lakesii** (Lesquereux) Knowlton.

Aspidium meyeri Heer=**Dryopteris meyeri** (Heer) Hollick.

Aspidium monocarpum Fontaine=**Cladophlebis oerstedii** (Heer) Seward.

Aspidium montanense Fontaine=**Cladophlebis oerstedii** (Heer) Seward.

Aspidium oerstedii Heer=**Cladophlebis oerstedii** (Heer) Seward.

Aspidium oerstedii, Lesquereux not Heer (part)=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Aspidium polypodioides (Ettingshausen) Heer=**Dryopteris polypodioides** (Ettingshausen) Knowlton.

Aspidium (Lastraea) pulchellum Heer=**Dryopteris laramiensis** Knowlton.

Aspidium schouwii Heer=**Gleichenites porsildi** Seward.

Aspidium ursinum Heer. White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

Aspidium? sp. White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.

Aspidium sp. (in fruit) White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.

ASPIDOSPERMA Martius & Zuccarini.

Aspidosperma collazoensis Hollick, 1924, 317, pl. 11, f. 1, 2; Collazo River, Porto Rico.—1928, 223; Collazo: Porto Rico.

Aspleniopteris pinnatifida? Fontaine=**Coniopteris pachyphylla** (Fontaine) Berry.

Asplenites sp.?, Hartz, 1896, 231, pl. 11, f. 3, 3a; Rhaetic: Cape Stewart, east Greenland.

Asplenium alaskanum Hollick, 1936, 38, pl. 3, f. 1, 1a, 1ax; pl. 4, f. 1a, 1ax, 1b, 1bx, 2-6, 6a; pl. 5, f. 3-5; Controller Bay region; Yakutat Bay; Port Camden Bay, Alexander Archipelago, Alaska.

Asplenium arenaflumensis Ball, 1931, 32, pl. 8, f. 2; pl. 9, f. 2; Indio: Little Sandy Creek, Bastrop Co., Tex.

Asplenium berryi LaMotte, (new name).

Asplenium occidentale Berry, 1929f, 236, pl. 49, f. 3, 4; Latah: Spokane, Wash. (Homonym, Knowlton, 1917).

Asplenium boyeanum Heer. White, 1898, 347, 352; Kook, Ujarartorsuak, Nugsuak Pen., west Greenland.

Asplenium calopteris (Debey & Ettingshausen) Heer, 1883, 5, pl. 48, f. 5a, 6a, 6b, 7, 8.—Berry, 1925, 25, pl. 1, f. 9, 10; Ripley: Carroll Co., Tenn.

Benizia calopteris Debey & Ettingshausen, 1850, K. Akad. Wiss. Wien, Denkschr., vol. 17, 216, pl. 5, f. 13-17.

Asplenium? coloradense Knowlton. □ Berry, 1929m, 67; Allison: southwest Alberta.

Asplenium (Diplazium) crossii Knowlton=**Diplazium crossii** (Knowlton) Knowlton.

Asplenium dicksonianum Heer=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Asplenium dicksonioides Heer. Bell, 1928, 23; Stikine River, British Columbia

Asplenium diforme Sternberg=**Myrica diforme** (Sternberg) Chaney.

Asplenium eolignitica Berry. □ Berry, 1930d, 62, pl. 8, f. 2-4; so-called Bridger: Tipperary, Wind River Basin, Wyo.—Brown, R. W., 1934, 52, pl. 8, f. 3, 4; Green River: Clear Creek northwest of De Beque; Ute Trail, Roan Mts., Colo.

Gymnogramma haydenii Lesquereux (part), 1883, 122, pl. 19, f. 2 (not Lesquereux 1878).—1888, 43, Denver: Golden, Colo.

Asplenium foersteri Debey & Ettingshausen=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Asplenium hurleyensis Berry. □ Sanborn, 1935, 15, pl. 2, f. 1; Comstock: Comstock, Douglas Co., Ore.

Asplenium johnstrupi (Heer) Heer (part), 1874, 32, 122, pl. 10, f. 6c, 6d; pl. 35, f. 1-5.—? Hollick, 1930, pl. 1, f. 10, 11; Kaltag: Yukon River, north bank 6 mi. above Nahochatilton, Alaska.

Sphenopteris (*Asplenium*?) *johnstrupi* Heer, 1868, 78, pl. 43, f. 7.

Asplenium johnstrupi (Heer) Heer (part) = *Sphenopteris* (*Onychiopsis*?) *psilotoides* (Stokes & Webb) Halle.

Asplenium nordenskiöldi Heer = *Sphenopteris* (*Onychiopsis*?) *psilotoides* (Stokes & Webb) Halle.

Asplenium occidentale Knowlton. □ Berry, 1929j, 130; Frontier: near Cumberland, Wyo.—Brown, R. W., 1933, 3, pl. 1, f. 5; Aspen: southwest Wyo.

Asplenium occidentale Berry (not Knowlton) = *Asplenium berryi* LaMotte, (new name).

Asplenium pingelianum Heer = *Sphenopteris* (*Onychiopsis*?) *psilotoides* (Stokes & Webb) Halle.

Asplenium? primo Knowlton. □ Berry, 1924d, 91, pl. 33, f. 1; Wilcox: Sayersville, Bastrop Co., Tex.—Ball, 1931, 32; Indio: Sayersville, Bastrop Co., Tex.—Sanborn, 1935, 15; Comstock: Comstock, Douglas Co., Ore.

Asplenium puilaskense Heer = *Sphenopteris* (*Onychiopsis*?) *psilotoides* (Stokes & Webb) Halle.

Asplenium serraforme Berry, 1930d, 62, pl. 8, f. 1; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Asterocarpus falcatus (Emmons) Fontaine. □ Humphreys, 1916a, 76; Santa Clara Coal Field, Sonora, Mexico.

Pecopteris falcatus Emmons. □ Newberry, 1876, 144, pl. 6, f. 3; Triassic?: Los Bronces, Sonora, Mexico.

Asterocarpus virginiensis Fontaine. □ Humphreys, 1916a, 76, Santa Clara Coal Field, Sonora, Mexico.

ASTROCARYUM Meyer, 1818, Prim. Fl. Esseq., 265.—Noé, 1936a, 441; catalogue of fossil species.

ASTRONIUM Jacquin.

Astronium oregonum Chaney & Sanborn, 1933a, 80, pl. 31, f. 2, 4; Fisher: Goshen, Ore.—Sanborn, 1935, 24, pl. 9, f. 2-4; Comstock: Comstock, Douglas Co., Ore.

Rhus mixta, Knowlton not Lesquereux, 1900, 49, pl. 3, f. 2, 3; Comstock: Comstock, Douglas Co., Ore.

Athrotaxis sp., Berry, 1924, 46, pl. 2, f. 3; Yegua: Cherry Valley, Cross Co., Ark.

Athrotaxopsis expansa Fontaine (part) = *Pagiophyllum ambiguum* (Heer) Seward.

Athrotaxopsis grandis Fontaine. □ Berry, 1929k, 51, pl. 8, f. 4-6; Kootenai?: Lower Blairmore: southwest Alberta.—1932h, 209, 210; Bull Head Mountain (Gethring member): Peace River Valley, British Columbia.

ATOPOCHARA Peck, 1938, 173. Genotype: *A. trivolvus* Peck.

Atopochara trivolvus Peck, 1938, 174, pl. 28, f. 8-12, text-f. 1; Glen Rose: Trinity Co., Tex.

ATRIFLEX (Tournefort) Linné.

Atriplex hastata Linné. Mason, 1934, 157, pl. 8, f. 17; Tomales: Tomales Bay, Marin Co., Calif.

Atriplex sp., Lauder milk & Munz, 1934a, 37; Pleistocene?: Gypsum Cave near Las Vegas, Nev.

ATTALEA Humboldt, Bonpland & Kunth.

- Attalea gunteri** Berry, 1929h, 253, text-f. 1, 2; Ocala: Williston and Levy Cos., Fla.—1931, 121–125, f. 1; Ocala: Williston and Levy Cos., Fla.
- Avicennia nitida** Jacquin. Berry, 1925c, 8, pl. 3, f. 1, 2, 6; pl. 4, f. 1; Pleistocene: Trinidad, British West Indies.
- AZOLLA** Lamarck.
- Azolla berry** R. W. Brown, 1934, 52, pl. 8, f. 2; Green River: Ute Trail, Roan Plateau, Colo.
- Azolla tertiaria** Berry, 1927c, 4, pl. 1, f. 9, 10; Esmeralda: Mineral Co., Nev.
- BACCHARIS** Linné.
- Baccharis pilularis** DeCandolle. Potbury, 1932, 39, pl. 4, f. 8; San Bruno: San Mateo Co., Calif.—Mason, 1934, 179, pl. 11, f. 13; Tomales: Tomales Bay, Marin Co., Calif.
- BACTRITES** Berry, 1924, 51. Genotype: *B. pandanifolius* Berry.
- Bactrites pandanifolius** Berry, 1924, 52, pl. 7, f. 1–6; Lisbon: Newton, Newton Co., Miss.
- BAIERA** F. Braun, □ Harris, 1935, 25, 47, discussion.
- Baiera amalloidea** Harris, 1935, 32, pl. 3, f. 5, 6; pl. 4, f. 1; pl. 6, f. 5; text-f. 16, 17; Lepidopteris Zone; Scoresby Sound, east Greenland.
- ?*Baiera* cf. *angustiloba*, Antevs not Heer=*Stenopteris dinosaurens* Harris.
- Baiera arctica* Heer=*Ginkgoites pleuripartita* (Schimper) Seward.
- Baiera boeggildiana* Harris, 1935, 28, pl. 3, f. 3, 4; pl. 4, f. 2, 6, 8; text-f. 14; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Baiera brevifolia* Newberry=*Ginkgoites pleuripartita* (Schimper) Seward.
- Baiera cretosa* Schenk=*Phoenicopsis steenstrupi* Seward.
- Baiera geinitzi* Nathorst=*Ginkgoites taeniata* (Braun) Harris.
- Baiera grandis** Heer, 1874, 37, pl. 3, f. 4.—Seward, 1926, 96. Seward considers this as probably a torn leaf of *Ginkgoites*.
- Baiera grandis* Heer (part)=*Ginkgoites pleuripartita* (Schimper) Seward.
- Baiera ikorfatensis** Seward, 1926, 96, pl. 9, f. 81; text-f. 11C, D; Nugsuak, west Greenland.
- Baiera incurvata* Heer, 1882, 45, pl. 13, f. 6.—Seward, 1926, 96; the material is indeterminate.
- Baiera leptophylla** Harris, 1935, 30, pl. 5, f. 6, 7; text-f. 15; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Baiera* sp. A, Harris, 1926, 103, text-f. 25 a–d; Rhaetic: Scoresby Sound, east Greenland.
- Baiera leptopoda** Heer, 1882, 46, pl. 28, f. 9.—Seward, 1926, 96; Heer's drawing is misleading. It may be a *Sphenopteris* sp.
- Baiera* cf. *longifolia*, Johansson not Pomel=*Ginkgoites hermelini* (Hartz) Harris.
- Baiera magothyensis** LaMotte (new name).
- Baiera grandis*?, Hollick not Heer, 1906, 36, pl. 2, f. 44–46; Magothy: Gay Head, Martha's Vineyard, Mass.
- Baiera minuta* Nathorst=*Ginkgoites minuta* (Nathorst) Harris.
- Baiera multinervis** Nathorst. Wilson, 1914, 409; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.
- Baiera münsteriana** (Presl) Heer, □ Loper, 1891, 429; Newark (Anterior Shales): near Meriden, Conn.
- Baiera münsteriana*, Harris not Presl=*Ginkgoites minuta* (Nathorst) Harris.
- Baiera palmata** Heer, □ Berry, 1932h, 210; Bull Head Mt. (Gethring member): Peace River Valley, British Columbia.
- Baiera pleuripartita* Schimper=*Ginkgoites pleuripartita* (Schimper) Seward.

Baiera sagittata Heer, 1882, 46, pl. 30, f. 18.—Seward, 1926, 96; the material is poor but may be a *Baiera*.

Baiera spectabilis Nathorst. Harris, 1926, 99, text-f. 23 a-d; Rhaetic: Scoresby Sound, east Greenland.—1935, 25, text-f. 12, 13; pl. 3, f. 7, 8; *Thaumatopteris* Zone: Scoresby Sound, east Greenland.

Baiera taeniata F. Braun=**Ginkgoites taeniata** (Braun) Harris.

Baiera taeniata, Antevs not Braun=**Ginkgoites hermelini** (Hartz) Harris.

Baiera sp., Berry, 1929k, 49; Kootenai: southwest Alberta.

Baiera sp. A, Harris=**Baiera leptophylla** Harris.

Baiera cf. *lindleyana* (Schimper) Heer. Seward, 1926, 96, pl. 10, f. 101; Nugsuak, west Greenland.

BANARA Aublet.

Banara eocenica Berry, 1930, 110, pl. 45, f. 17; Holly Springs: Puryear, Henry Co.; Bolivar, Hardeman Co., Tenn.

Banisteria bradleyi R. W. Brown=**Cassia hesperia** R. W. Brown.

Banisteria praenuntia Berry, 1918, 35, pl. 17, f. 2; Culebra: Gaillard Cut, Canal Zone.

Banisteria texana Berry, 1924, 175, pl. 34, f. 6; Catahoula?: Stryker, Polk Co., Tex.—Ball, 1931, 158, pl. 34, f. 2; Catahoula?: Stryker, Polk Co., Tex.

Banksia cockerelli R. W. Brown=**Salix longiacuminata** Knowlton.

Banksia comptonifolia R. W. Brown, 1934, 57, pl. 9, f. 3-5; Green River: near Rifle; northwest of De Beque, Colo.

Banksia helvetica Heer=**Bumelia pseudotenax** Berry.

Banksia jacksonensis Berry, 1924, 161, pl. 32, f. 2-4; Lagrange: Hickman, Fulton Co., Ky.; near Union City, Obion Co., Tenn.; Forest Hill: north of Jackson, Miss.

Banksia puryearensis Berry. □ Ball, 1931, 59; Upper Wilcox: near La Pryor Crossing, Zavalla Co., Tex.

Banksia tenuifolia Berry. □ Berry, 1930, 66, pl. 31, f. 3; Holly Springs: Shandy, Hardeman Co.; Grable Pit, Henry Co.; LaGrange, Fayette Co., Tenn.; Jackson, Madison Co.; Bell City, Calloway Co., Ky.; Grenada: Somerville, Fayette Co., Tenn.

Banksites lineatulus Cockerell, 1925, 8, pl. 2, f. 3; Green River: Roan Mts., Colo.

Bauhinia cretacea Newberry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottdale, Ala.

Bauhinia marylandica Berry. □ Berry, 1913a, 570; Tuscaloosa: near Glen Allen; Shirleys Mill; near Cottdale, Ala.

Bauhinia ripleyensis Berry. □ Berry, 1925, 58; Ripley: Barbour Co., Ala.; McNairy Co., Tenn.

Bauhinia wadii Berry, 1924, 169, pl. 51, f. 3; Lagrange: Hickman, Fulton Co., Ky.

BAUHINITES Seward & Conway, 1935a, 25. Genotype: *B. groenlandica* Seward & Conway.

Bauhinites groenlandica Seward & Conway, 1935a, 25, text-f. 21; Atanekerdluk: west Greenland.

Benizia calopteris Debey & Ettingshausen=**Asplenium calopteris** (Debey & Ettingshausen) Heer.

BENNETTICARPUS Harris, 1932a, 101. Designated as a form genus for which Harris believes no genotype should be selected. First described species *B. oxylepidus* Harris.

Bennetticarpus crossospermus Harris, 1932a, 103, text-f. 48G-W, 50; Lepidopteris Zone: Scoresby Sound, east Greenland.

Wielandiella sp., Harris (part), 1926, 82, pl. 11, f. 1-6; pl. 13, f. 1-4, 6; text-f. 14, G, H, J, K; Rhaetic: Scoresby Sound, east Greenland.

- Bennetticarpus exiguus** Harris, 1932a, 102, pl. 14, f. 8-10, 12-16; text-f. 48C; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Bennetticarpus oxylepidus** Harris, 1932a, 101, pl. 14, f. 1-6, 11; text-f. 48D-F; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Bennetticarpus tylotus** Harris, 1932a, 106, pl. 15, f. 2, 5, 6-11, 13-15; text-f. 48A; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- BENNETTISTEMON** Harris, 1932a, 98. Genotype not designated by Harris.
? *B. amblum* Harris. Harris is of the opinion that a form genus cannot have a genotype.
- Bennettistemon amblum** Harris, 1932a, 98, pl. 11, f. 5-7; pl. 12, f. 1-4, 12-17; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Bennettistemon bursigerum** Harris, 1932a, 99, pl. 12, f. 5-10; pl. 13, f. 1-4, 10; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Bennettistemon ovatum** Harris, 1932a, 100, pl. 13, f. 5-9, 11-14; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Benzoin antiquum** Heer. ☐ Hollick, 1936, 119, pl. 65, f. 2-5; Kachemak Bay, Kenai Peninsula, Alaska.
- Benzoin dilleri** Knowlton, 1900d, 46, pl. 4, f. 3; 5 mi. south of Ashland, Oreg.
- Benzoin venustum** (Lesquereux) Knowlton. ☐ Berry, 1922c, 171, pl. 38, f. 2; Woodbine: Arthur's Bluff, Lamar Co., Tex.
- Benzoin venustum alaskanum** Hollick, 1930, 81, pl. 45, f. 2; Melozi, Kaltag: Lower Yukon, Alaska.
- Berberis caplani** Cockerell, 1935, 127, 1 text-f.; Creede: Creede, Colo.
- Berberis? gigantea* Knowlton = **Oreopanax gigantea** (Knowlton) Arnold.
- Berberis simplex* Newberry = **Mahonia simplex** (Newberry) Arnold.
- Berchemia eocenica** Berry, 1930, 104, pl. 33, f. 12-14; Holly Springs: Milk Creek, Hardeman Co., Tenn.; Grenada: Cottage Grove, Henry Co., Tenn.
- Berchemia multinervis** (Al. Braun) Heer. ☐ Knowlton, 1930, 102; Denver: Golden, Colo.; Dawson: Sedalia, Colo.—MacGinitie, 1937, 145, pl. 13, f. 1; Weaverville: Redding Creek, Trinity Co., Calif.
- Berchemia parvifolia* Lesquereux. ☐ Lesquereux, 1871, 382; Raton?: Raton Pass, Colo.
- Berchemia parvifolia* Lesquereux = **Berchemia multinervis** (Al. Braun) Heer.
- BERNETTIA** Gothan, 1914, Nat. Ges. Nürnberg Abd., vol. 19, 146. Genotype: *B. inopinata* Gothan.—Harris, 1935, 140; discussion.
- Bernetitia phialophora** Harris, 1935, 140, pl. 22; pl. 23, f. 1, 2, 8-10, 12-14; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- BERRIOCHLOA** Elias, 1932, 346. Genotype: *B. glabra* (Berry) Elias.
- Berriochloa? aristata** (Berry) Elias, 1932, 349; Loup Fork: Phillips Co., Kans.
- Lithospermum fossilium aristatum* Berry, 1928c, 2, pl. 1, f. 14.
- Berriochloa glabra** (Berry) Elias, 1932, 347, pl. 28, f. 13a-c, 14-16; pl. 29, f. 1a-c; Ogallala: Wallace and Phillips Cos., Kans.
- Lithospermum fossilium glabrum* Berry, 1928c, 2, pl. 1, f. 11-13; Loup Fork: Phillips Co., Kans.
- BERRYA** Knowlton, 1930, 133. Genus nudum.
- Berrya racemosa** (Knowlton) Knowlton = **Leguminosites arachnioides minor** Berry.
- Betula aequalis?* Knowlton not Lesquereux = **Arbutus idahoensis** (Knowlton) R. W. Brown.
- Betula alaskana** Lesquereux. ☐ Hollick, 1936, 92; Chignik Bay, Alaska Peninsula.
- Betula alaskana**, Sargent not Lesquereux = **Betula neoalaskana** Sargent.

Betula angustifolia Newberry=*Alnus carpinoides* Lesquereux.

Betula beatriciana Lesquereux. □ Lesquereux, 1871, 579; Dakota: Beatrice, Gage Co., Nebr.

Betula beatricina [!] *conformis* Hollick, 1930, 68, pl. 35, f. 4; Kaltag: Lower Yukon, Alaska.

Betula bendirei Knowlton=*Alnus carpinoides* Lesquereux.

Betula brongniartii Ettingshausen, K. k. geol. Reichsanstalt Abh., vol. 2, pt. 3, no. 1, 12, pl. 1, f. 18, 1851; vol. 1, pt. 3, no. 5, 5, pl. 1, f. 4, 5, 1852.—Hollick, 1936, 90 pl. 57, f. 8; between Herendeen Bay and Port Moller, Alaska Peninsula.

Betula cf. *Brongniartii* Ettingshausen, Wilson, 1914, 409; Kenai: Sourdough Mine, Coal Creek, Yukon Territory.

Betula bryani Knowlton=*Betula fairii* Knowlton.

Betula claripites Wodehouse, 1933a, 509, f. 41; Green River: Parachute Creek, Garfield Co., Colo.

Betula coloradea R. W. Brown, 1934, 44; Green River: northwest of De Beque, Colo.

Betula eocenica R. W. Brown, 1929, 283, pl. 71, f. 6; Green River: northwest of De Beque, Colo. (Homonym *B. eocenica* Ettingshausen, 1858).

Betula confusa lata Hollick, 1936, 91, pl. 52, f. 1; Kachemak Bay, Kenai Peninsula, Alaska.

Betula dubiosa Hollick, 1936, 92; Ninilchik, Kenai Peninsula, Alaska.

Alnus macrophylla Goepfert, Deutsch. geol. Gesell., Zeitschr., vol. 4, 491, 1852; Die Tertiäre Flora von Schossnitz in Schlesien, 12, pl. 4, f. 6; pl. 5, f. 1, Görlitz, 1855.

Betula macrophylla (Goepfert) Heer. □ not Ettingshausen. Heer, 1868a, 146, pl. 25, f. 11-19a; 1880a, 14, pl. 2, f. 3-5.

Betula elliptica, Lesquereux not Saporta=*Alnus relatus* (Knowlton) R. W. Brown.

Betula eocenica R. W. Brown not Ettingshausen=*Betula coloradea* R. W. Brown.

Betula fairii Knowlton, 1926, 33, pl. 17, f. 4; Latah: Spokane, Wash.—Berry, 1929f, 243; Latah: Coeur d'Alene, Idaho; Vera, Hillyard, Republic, Spokane, Wash.—1934, 107; Latah: east of Arrow Junction, Nez. Perce Co., Idaho—Brown, R. W., 1937, 171, pl. 47, f. 5-7; Latah: Spokane, Wash.—1937c, 516.

Betula nanoides Knowlton, 1926, 34, pl. 18, f. 2; Latah: Coeur d'Alene, Idaho.

Betula heteromorpha Knowlton (part), 1926, 34, pl. 17, f. 5, 6; Latah: Coeur d'Alene, Idaho; Spokane, Wash.—Berry, 1929f, 243; Coeur d'Alene, Idaho; Vera, Hillyard, Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—Hoffman, 1932, 737; Douglas Canyon: Douglas Canyon, Wash.—Berry, 1934, 107; Latah: east of White Bird, Idaho; east of Arrow Junction, Nez Perce Co.; near St. Maries, Kootenai Co., Idaho.

Betula? largei Knowlton, 1926, 34, pl. 17, f. 1, 2; Latah: Mica and Spokane, Wash.—Berry, 1929f, 244, pl. 50, f. 12; Latah: Mica and Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 107; east of Lewiston, Nez Perce Co.; near St. Maries, Kootenai Co. Idaho—Kirkham and Johnson 1929, 662.—Hoffman, 1932, 737; Douglas Canyon: Douglas Canyon, Wash.—Brooks, 1935, 284, pl. 5, f. 4, 5; pl. 6, f. 1; Sucker Creek: Ballantyne Ranch, near Homedale, Idaho.

Betula bryani Knowlton, 1926, 34, pl. 18, f. 1; Latah: Spokane, Wash.

Celastrus fernquisti Knowlton, 1926, 44, pl. 28, f. 2; Latah: Spokane, Wash.

Picea? sp., Chaney, 1920a, 159, pl. 5, f. 2; Eagle Creek: Multnomah Co., Ore.

Betula heterodonta? Newberry. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilichena, British Columbia.

Betula fallax Lesquereux. □ Knowlton, 1930, 50, pl. 15, f. 7-10; pl. 16, f. 1, 2; Denver: Golden, Colo.

- Betula glandulosa* Michaux. Chaney & Mason, 1936c, 13, text-f. 16; Pleistocene: head of Goldstream, near Fairbanks, Alaska.
- Betula gracilis*? Ludwig. Knowlton, 1930, 50; Denver: Golden, Colo.
- Betula grandifolia*, Heer not Ettingshausen=*Alnus carpinoides* Lesquereux.
- Betula heterodonta* Newberry=*Alnus carpinoides* Lesquereux.
- Betula heterodonta*?, Penhallow not Newberry=*Betula fairii* Knowlton.
- Betula heteromorpha* Knowlton (part)=*Alnus carpinoides* Lesquereux.
- Betula heteromorpha* Knowlton (part)=*Betula fairii* Knowlton.
- Betula heteromorpha*, Brooks not Knowlton=*Alnus relatus* (Knowlton) R. W. Brown.
- Betula lacustris* MacGinitie, 1933, 50, pl. 4, f. 2-4; Trout Creek: Trout Creek, Harney Co., Oreg.—Dorf, 1936, 111, pl. 1, f. 5; Idaho: near Weiser, Idaho.
- Betula*? *largei* Knowlton=*Betula fairii* Knowlton.
- Betula macrophylla* Ettingshausen, K. Akad. Wiss. (Wien), Math.-naturwiss. Cl., Sitzungsber., vol. 9, 43 (7), pl. 3 (2), f. 1, 2; pl. 4, f. 1, 1852.
- Betula macrophylla*, (Goepfert) Heer, not Ettingshausen=*Betula dubiosa* Hollick.
- Betula multinervis* Jennings, 1920, 411, pl. 27, f. 1, 1a, 1b, 1c, 2; pl. 28, f. 2; Missoula: Montana.
- Betula nanita* Chaney, 1920a, 166, pl. 9, f. 3; Eagle Creek: Multnomah Co., Oreg.
- Betula nanoides* Knowlton=*Betula fairii* Knowlton.
- Betula neoalaskana* Sargent, 1923, Bot. Gazette.
- Betula alaskana*, Sargent not Lesquereux. Chaney & Mason, 1936c, 12, text-f. 20; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.
- Betula nigra* Linné. Berry, 1926b, 107, pl. 47, f. 8-19; Chowan: Neuse River, Wayne Co.; Pamlico: Old Mill Landing, Roanoke River, Pitt Co., N. C.
- Betula nigra*, Berry (part) not Linné=*Planera hickmanensis* Berry.
- Betula parvifolia* Berry, 1926d, 103, pl. 15, f. 1-3; Joseph Creek, British Columbia.
- Betula populoides* Hollick, 1936, 91, pl. 50, f. 10; Chignik River, opposite Nun Point, Alaska Peninsula.
- Betula prisca* Ettingshausen. Hollick, 1936, 91, pl. 50, f. 3a; pl. 52, f. 2; Kachemak Bay, Kenai Peninsula, Alaska.
- Betula pseudo-fontinalis* Berry. Berry, 1926b, 108, pl. 48, f. 1-2; Chowan: Neuse River, Wayne Co., N. C.
- Betula schimperi* Lesquereux. Knowlton, 1930, 49, pl. 15, f. 3, 4; Denver: Golden, Colo.
- Betula stevensonii* Lesquereux. Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.
- Betula thor* Knowlton=*Alnus carpinoides* Knowlton.
- Betula ulmoides* Hollick, 1927, 397, pl. 31, f. 1; pl. 32, f. 1; St. Eugene silts, British Columbia.
- Betula vera* R. W. Brown, 1937, 171, pl. 48, f. 7-11; Latah: Spokane, Wash.
- Betula*, winged fruit, Berry, 1929f, 244, pl. 63, f. 9; Latah: Spokane, Wash.
- Betula* sp., Chaney, 1920a, 166; Eagle Creek: Multnomah Co., Oreg.
- Betula* n. sp., Chaney, 1922a, 216; Payette: Idaho.
- Betula*? sp., (aments), Hollick, 1936, 92, pl. 9, f. 1b; pl. 34, f. 1, 2; pl. 50, f. 2, 3b, 4; Kachemak Bay, Kenai Peninsula, Alaska.
- Betula* sp., (branch) Knowlton, 1904. Hollick, 1936, 93; Kukak Bay, Alaska Peninsula.
- Betula* sp., Lesquereux, 1888, 45; Denver: Golden, Colo.
- Betula* sp., Oliver, 1934, 18, pl. 3, f. 5; Mascall: Austin, Oreg.

Betula sp.?, Wilson, 1917, 300; Hazelton-Aldermere area, British Columbia.
Betulites populifolius Lesquereux. □ Gress, 1922, 291; Dakota: Ellsworth Co., Kans.

Betulites rugosus Lesquereux. □ Gress, 1922, 295; Dakota: Ellsworth Co., Kans.
Betulites rugosus apiculatus Hollick, 1930, 68, pl. 36, f. 1; Kaltag: Lower Yukon, Alaska.

Betulites westii inaequilateralis Lesquereux. □ Gress, 1922, 295; Dakota: Ellsworth Co., Kans.

Betulites westii latifolius Lesquereux. □ Gress, 1922, 292; Dakota: Ellsworth Co., Kans.

Betulites westii multinervis Lesquereux. □ Gress, 1922, 293; Dakota: Ellsworth Co., Kans.

Betulites westii oblongus Lesquereux. □ Gress, 1922, 292; Dakota: Ellsworth Co., Kans.

Betulites westii obtusus Lesquereux. □ Gress, 1922, 294; Dakota: Ellsworth Co., Kans.

Betulites westii quadratifolius Lesquereux. □ Gress, 1922, 294; Dakota: Ellsworth Co., Kans.

Betulites westii rhomboidalis Lesquereux. □ Gress, 1922, 294; Dakota: Ellsworth Co., Kans.

Betulites westii rotundatus Lesquereux. □ Gress, 1922, 292; Dakota: Ellsworth Co., Kans.

Betulites westii subintegrifolius Lesquereux. □ Gress, 1922, 293; Dakota: Ellsworth Co., Kans.

BIGNONIA (Tournefort) Linné.

Bignonia sensibilis Hollick, 1924, 319, pl. 15, f. 5; Santa Clara, Cuba.

BIGNONICAPSULA Berry, 1930, 132. Genotype: *B. formosa* Berry.

Bignonicapsula formosa Berry, 1930, 132, pl. 43, f. 3; Holly Springs: Denmark, Madison Co., Tenn.

BIGNONIOIDES Berry, 1923b, 25. Genotype: *B. orbicularis* Berry.

Bignonioides orbicularis Berry, 1923b, 25, pl. 3, f. 4; north of Palomares, Oaxaca, Mexico.

BIORBIA Elias, 1932, 350. Genotype: *B. rugosa* (Berry) Elias.

Biorbia fossilia (Berry) Cockerell, 1933, 15.

Biorbia rugosa Elias, 1932, 330-355.

Lithospermum fossilium rugosum Berry, 1928c, 1, pl. 1, f. 1-10; Loup Fork: Kans. and Colo.

Celtis microendocarpica Brooks, 1928, 297, pl. 18, f. 1.—1929, 135, pl. 4, f. 1-9; Loup Fork: Phillips Co., Kans.

Biorbia rugosa (Berry) Elias=*Biorbia fossilia* (Berry) Cockerell.

Bombacites ceibaoides Ball, 1931, 93, pl. 8, f. 6; pl. 46, f. 4; Indio: Barton's Ranch and Little Sandy Creek, Bastrop Co., Tex.

Bombacites eocenicus Berry, 1930, 106, pl. 36, f. 8; Holly Springs: Bell City, Calloway Co., Ky.

Bombacites formosus Berry. □ Berry, 1930, 106, pl. 47, f. 2; Holly Springs: Puryear, Henry Co., Tenn.; Wilcox: Mansfield, La.—Ball, 1931, 94; Wilcox: Mansfield, La.

Bombacites jacksonensis Berry, 1924, 180, pl. 34, f. 14; pl. 35, f. 1, 5; Jackson: Somerville, Burleson Co., Tex.; Fayette: Miraflores, Webb Co., Tex.; near Christie, La.—Ball, 1931, 161, pl. 27, f. 4, 5; Jackson: Burleson Co., Tex.; Fayette: Miraflores, Webb Co.; Rocky Mount, Trinity Co.; Alum Creek, Brazos Co., Tex.

Bombax prebarrigon Berry, 1925a, 108, pl. 14, f. 3; Forest: Trinidad, British West Indies.

Bovista plumbea Persoon. Chaney & Mason, 1936c, 6, text-f. 12, 21, 22; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Brachyoxylon comanchense Torrey, 1923, 82, pl. 13, f. 44-46; Comanchean: Cottondale, Tex.

Brachyoxylon raritanense Torrey, 1923, 83, pl. 13, f. 47, 48; Raritan: Mattewan, N. J.

Brachyoxylon woodworthianum Torrey, 1923, 80, pl. 12, f. 37-40; pl. 13, f. 41-43; Raritan: Martha's Vineyard, Mass.

Brachyphyllum crassum Lesquereux=**Brachyphyllum macrocarpum** Newberry.

Brachyphyllum macrocarpum Newberry. □ Berry, 1929m, 69; Allison: southwest Alberta.

Brachyphyllum crassum Lesquereux. □ Gress, 1922, 285; Dakota: Ellsworth Co., Kans.

Brachyphyllum macrocarpum, Berry not Newberry (part)=**Brachyphyllum macrocarpum formosum** Berry.

Brachyphyllum macrocarpum formosum Berry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Whites Bluff, Ala.—1920e, 398; Black Creek: North Carolina.—1922c, 160, pl. 36, f. 1; Woodbine: Arthur's Bluff, Lamar Co., Tex.

Brachyphyllum macrocarpum, Berry not Newberry, 1910a, 183.—1911h, 420.

Brachyphyllum mclearni Bell, 1928b, 28, pl. 15, f. 1-11; pl. 16, f. 1-14; pl. 18, f. 10; Mattagami: Ontario.

Brachyphyllum sp., Berry, 1929k, 53; Lower Blairmore: southwest Alberta.

BRACHYRUSCUS Cockerell, 1922a, 213. (Genus nudum) Genotype: *B. allenii* (Lesquereux) Cockerell=**Koelreuteria allenii** (Lesquereux) Edwards.

Bracts, Berry, 1930, 143, pl. 48, f. 24, 25; Holly Springs: Puryear, Henry Co., Tenn.; Grenada: Cottage Grove, Henry Co., Tenn.

Branchlet and bud?, Knowlton, 1926, 50; Latah: Spokane, Wash.

Brasenia? *antiqua* Newberry=**Sparganium antiquum** (Newberry) Berry.

Brasenia peltata, Penhallow not Pursh=**Brasenia scherberi** Gmelin.

Brasenia purpurea, Coleman et al. not Michaux=**Brasenia scherberi** Gmelin.

Brasenia scherberi Gmelin. Berry, 1927, 24; Pleistocene: Henry Co., Tenn.

Brasenia peltata, Penhallow not Pursh, 1890, 326.—1896, 70.—1900, 335 (8).—Berry, 1917f, 662; Pleistocene: Green's Creek and Besserer's Wharf, Ottawa River, Canada; Vero, Fla.

Brasenia purpurea, Knowlton not Caspary, 1919, 125.—Coleman, 1915, 247.

Brasenia antiqua Dawson=**Nelumbo dawsoni** Hollick.

BRIGHTONIA Harris, 1932a, 119. Genotype: *B. arota* Harris.

Brightonia arota Harris, 1932a, 119, pl. 19; text-f. 51; Lepidopteris Zone: Scoresby Sound, east Greenland.

BROSIMUM Swartz.

Brosimum miocenicum Berry, 1925a, 89, pl. 8, f. 4; Forest: Trinidad, British West Indies.

BUCIDA Linné.

Bucida sanchezensis Berry, 1921a, 123, pl. 21, f. 8; Samaná District, Santo Domingo.

Bud scales, R. W. Brown, 1937, 186; Latah: Spokane, Wash.; White Bird, Idaho; Mascall: Tipton, Oreg.

Carpites spokaneensis Knowlton, 1926, 49, pl. 26, f. 6; Latah: Spokane, Wash.

Populus, bud scales, Berry, 1929f, 243, pl. 50, f. 4; pl. 63, f. 8; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 106; Latah: Moscow, Idaho.

Tsuga latahenensis Berry, 1929f, 239, pl. 63, f. 3, 4; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.

Buettneria cinnamomifolia Englehardt, 1895, Abh. Senck. Naturf. Gessell., vol. 19, 32, pl. 7, f. 9; Miocene of Colombia.—?Berry, 1921f, 175; southeastern Costa Rica.

Buettneria eocenica Berry, 1930, 107, pl. 18, f. 4; Holly Springs: Mill Creek, Hardeman Co., Tenn.

Buettneria jacksoniana Berry, 1924, 182, pl. 56, 57; pl. 58, f. 1; Fayette: Barrera League and Mossy Creek, Brazos Co., Tex.—Ball, 1931, 162, pl. 31, f. 1, 3; Fayette: Barrera League, Brazos Co.; Boggy Creek, Brazos Co., Tex.

BUMELIA Swartz. □ Ball, 1931, 102. Generic discussion.

Bumelia americana (Lesquereux) Berry. □ Berry, 1930, 128, pl. 19, f. 11, 12; Holly Springs: Clover Creek, Hardeman Co., Tenn.; Grenada: Somerville, Fayette Co., Tenn.

Bumelia apalachicolaensis Berry, 1916b, 51, pl. 9, f. 4; Alum Bluff: Alum Bluff, Liberty Co., Fla.

Bumelia balli Berry, 1924, 195, pl. 65, f. 1-4; Fayette: Mossy Creek, Brazos Co., Tex.—Ball, 1931, 102, 169, pl. 24, f. 8-10; Indio: Barton's Ranch, Bastrop Co.; Fayette: Boggy Creek, Brazos Co., Tex.

Bumelia coloradensis Cockerell = *Leguminosites lesquereuxiana* Knowlton.

Bumelia cuneatafolia Berry, 1923b, 9, pl. 1, f. 6, 7; Artibonite Group: Haiti.

Bumelia florissanti Lesquereux. □ Chaney, 1921a, 90; Puente: Los Angeles Co., Calif.—Chaney & Elias, 1936b, 43, pl. 6, f. 6; Ogallala, Beaver Co., Okla.

Bumelia prewilcoxiana Berry, 1925, 85, pl. 20, f. 5; pl. 21, f. 4; Ripley: Henry Co., Tenn.

Bumelia pseudolycioides Berry, 1930, 128, pl. 44, f. 20; Grenada: Cottage Grove, Henry Co., Tenn.

Bumelia pseudotenax Berry. □

Banksia helvetica Heer. □ Lesquereux, 1871, 382; Wilcox: Mississippi.

Bumelia reclinatafolia Berry, 1921a, 125, pl. 21, f. 4; Samaná District, Santo Domingo.—Hollick, 1924, 313, pl. 14, f. 9; Matanzas, Cuba.

Bumelia ripleyana Berry, 1925, 85, pl. 20, f. 6; Ripley: Henry Co., Tenn.

Bumelia trinitense Berry, 1925a, 123, pl. 15, f. 1; Upper Forest: Trinidad, British West Indies.

Bumelia vicksburgensis Berry, 1916e, 243, pl. 55, f. 7; Catahoula: Chalk Hills, near Rosefield, La.

Bumelia wilcoxiana Berry. □ Ball, 1931, 170; Fayette: Boggy Creek, Brazos Co., Tex.

BURSERITES Berry, 1924, 175. Genotype: *B. fayettensis* Berry.

Burserites fayettensis Berry, 1924, 175, pl. 41, f. 7, 8; Fayette: near Hornbeck, Sabine Parish, La.; Catahoula?: Hermon's Creek, Stryker, Polk Co., Tex.; Lagrange: Hickman, Fulton Co., Ky.—Ball, 1931, 158, pl. 28, f. 3; Catahoula?: Polk Co., Tex.

BURTINIA Endlicher, 1837, Gen. Pl., 257.—Noé, 1936a, 441; catalogue of fossil species.

BYSMATOSPERMUM Harris, 1935, 131. Genotype: *B. macrotrachelum* Harris.

Bysmatospermum macrotrachelum Harris, 1935, 132, pl. 29, f. 12; text-f. 48a-g, m, p, q; Thaumatopteris and Lepidopteris Zones: Scoresby Sound, east Greenland.

Caenomyces eucalyptae Knowlton = *Sphaerites*, species of, R. W. Brown.

Caenomyces jacksonensis Berry, 1924, 141, pl. 65, f. 8; Fayette: near Wellborn, Brazos Co., Tex.—Ball, 1931, 145, pl. 30, f. 9; Fayette: Boggy Creek, Brazos Co., Tex.

Caenomyces planerae R. W. Brown = *Sphaerites*, species of, R. W. Brown.

Caenomyces sapindicola Knowlton = *Sphaerites*, species of, R. W. Brown.

- Caesalpinia ovalifolia* Hollick, 1904a, 485, text-f. 1e; Calvert: Good Hope Hill Road, Md.
- Caesalpinia sellardsi* Berry, 1916b, 49, pl. 9, f. 1, 2; Alum Bluff: Alum Bluff, Liberty Co., Fla.
- Caesalpinia wilcoxiana* Berry. □ Berry, 1950, 79, pl. 40, f. 1; Holly Springs: Shandy, Hardeman Co., Tenn.
- Caesalpinites mississippiensis* Berry. □ Berry, 1930, 79, pl. 39, f. 5; Holly Springs: Holly Springs, Miss.; Mill Creek, Hardeman Co.; McKenzie, Carroll Co., Tenn.
- Caesalpinites perryensis* Berry, 1925, 58, pl. 10, f. 8; Ripley: Henry Co., Tenn.
- Caesalpinites ripleyensis* Berry, 1925, 58, pl. 11, f. 6; Ripley: Henry Co., Tenn.
- Caesalpinites wilcoxensis* Berry, 1930, 79, pl. 44, f. 21, 22; Holly Springs: Grable Pit, Henry Co., Tenn.
- CALADIOSOMA** Berry, 1925d, 38. Genotype: *C. miocenica* Berry.
- Caladiosoma miocenica* Berry, 1925d, 38, pl. 5; Forest: Trinidad, British West Indies.—1925a, 83, pl. 10, f. 1-4; Forest: Trinidad, British West Indies.
- Calamopsis danai* Lesquereux=*Chamaedorea danai* (Lesquereux) Berry.
- CALANDRINIA** Humboldt, Bonpland & Kunth.
- Calandrinia caulescens* Humboldt, Bonpland & Kunth. Mason, 1934, 159, pl. 8, f. 13; Tomales: Tomales Bay, Marin Co., Calif.
- CALATOLOIDES** Berry, 1922e, 253. Genotype: *C. eocenicum* Berry.
- Calatoloides eocenicum* Berry, 1922e, 253, text-f. 1; Wilcox: Freestone Co., Tex.—1922g, 14, pl. 14, f. 3-5; Wilcox: Butler Salt Dome, Freestone Co., Tex.—Ball, 1931, 86; Wilcox: Butler Salt Dome, Freestone Co., Tex.
- CALYCOPHYSOIDES** Berry, 1924b. Genotype: *C. balli* Berry; found to be human artifact and generic name vacated.
- Calycophysoides balli* Berry=human artifact. Berry, 1924b, 5—Ball, 1931, 109.—Berry, 1937, 108.
- CALLICHLAMYS** Miquel.
- Callichlamys zeteki* Chaney & Sauborn, 1933, 95, pl. 39, f. 2, 3b, 4; Fisher: Goshen, Oreg.
- Callicoma microphylla*, Lesquereux not Ettingshausen=*Ulmus brownellii* Lesquereux.
- CALLIPITYS** Harris, 1935, 110. Genotype: *C. leptoderma* Harris.
- Callipitys leptoderma* Harris, 1935, 110, pl. 19, f. 1-4; pl. 21, f. 4-7; text-f. 44c, d, f-h; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Callistemophyllum latum* Dawson=*Leguminosites borealis*, Heer not Dawson.
- Callitris potlatchensis* R. W. Brown, 1935, 575, pl. 67, f. 16; Latah: Potlatch Creek, Idaho.
- Callitrites subtilis* (Heer) Seward=*Elatocladus subtilis* (Heer) Seward.
- CALOCARPUM** Pierre. Berry, 1924, 193; discussion.
- Calocarpum viridiforme* Berry, 1924, 193, pl. 40, f. 4; Fayette: Hamilton League, Fayette Co., Tex.; near Hornbeck, Sabine Parish, La.; Piedmont, Grimes Co., Tex.—Ball, 1931, 168, pl. 31, f. 4; Fayette: Hamilton League, Fayette Co.; Piedmont, Grimes Co., Tex.
- CALOPHYLLUM** Linné.
- Calophyllum calabaformis* Berry, 1925a, 106, pl. 4, f. 2-4; pl. 12, f. 3; Forest: Trinidad, British West Indies.
- Calycites milanensis* Berry=*Heisteria sapindifolia* (Hollick) Berry.
- Calycites puryearensis* Berry, 1930, 142, pl. 48, f. 4; Holly Springs: Puryear. Henry Co., Tenn.
- Calycites rhizophoroides* Berry, 1930, 142, pl. 45, f. 12; Holly Springs: Grable Pit, Henry Co., Tenn.

Calycites ripleyensis Berry, 1925, 88, pl. 22, f. 1; Ripley: Henry Co., Tenn.

Calyptanthus arbutifolia Chaney & Sanborn, 1933, 90, pl. 33, f. 1, 6; Fisher: Goshen, Oreg.—MacGinitie, 1937, 149, pl. 12, f. 5; pl. 15, f. 1; Weaverville: Hay Fork, Trinity Co., Calif.

Calyptanthus domingensis Berry, 1921a, 122, pl. 21, f. 9, 10; Samaná District, Santo Domingo.

Calyptanthus gatunensis Berry, 1918, 39, pl. 18, f. 1; Gatun, Canal Zone.

Calyx, Berry, 1934, 122, pl. 24, f. 8; Latah: east of White Bird, Idaho Co., Idaho. CAMASSIA Lindley.

Camassia leichtlinii S. Watson. Mason, 1934, 151, pl. 7, f. 16; Tomales: Tomales Bay, Marin Co., Calif.

CAMERARIA (Plumier) Linné.

Cameraria? incerta Hollick, 1924, 317, pl. 8, f. 1; Siparia: Trinidad, British West Indies.

Camphora polymorpha Heer=*Cinnamomum cinnamomeum* (Rossmoesler) Hollick.

CAMPTOPTERIS Schimper, 1870, Paleont. veg., pl. 42, f. 4. Genotype: *C. serrata* Schimper.

Camptopteris remondi Newberry, 1876, 146, pl. 7, f. 2, 2a; Triassic?: Los Bronces, Sonora, Mexico.

Camptothecium woldenii Grout, 1917, 9; Kansas: Wallingford, Iowa.

Canavalia acuminata Berry□Berry, 1930, 86, pl. 12, f. 5; pl. 27, f. 1 pl. 32, f. 11; Holly Springs: Early Grove, Miss.; Mill Creek, Hardeman Co.; Smyrna Church, Patterson and La Grange, Fayette Co.; Mercer, Madison Co.; Puryear, Henry Co., Tenn.

Canavalia eocenica Berry.□Berry, 1930, 86, pl. 32, f. 12; Grenada: Grenada, Miss.; Holly Springs: Holly Springs, Miss.; Hardeman, Fayette, Madison, Gibson, Carroll, and Henry Cos., Tenn.; Wilcox; Nevada Co., Ark.; Palestine, Anderson Co., Tex.; Carrizo: Zavalla Co. and Dimmit Co., Tex.—Ball, 1931, 77, pl. 45, f. 7; Indio: Little Sandy Creek, Bastrop Co., Tex.—Hollick, 1936, 129, pl. 71, f. 8; Bering Lake, Yakutat-Copper River region, Alaska.

Canavalia miocenica Berry, 1925a, 97, pl. 12, f. 2; Siparia: Trinidad, British West Indies.

Canna? dawsoni Berry, 1926d, 99; Burrard Inlet, British Columbia.

Canna eocenica Berry.□Ball, 1931, 36; Wilcox: Harrison Co., Tex.

Canna flaccidifolia Berry, 1924, 50, pl. 2, f. 4, 5; Yegua: Columbia, Caldwell Parish, La.

Canna jacksoniana Berry, 1924, 147, pl. 49, f. 4-6; Fayette: Wellborn, Brazos Co., Tex.—Ball, 1931, 148, pl. 24, f. 1, 2; Fayette, Boggy Creek, Brazos Co., Tex.

Canna cf. magnifolia Knowlton. Berry, 1934a, 129; Lance: Jump Off, Harding Co., S. Dak.

CAPPARIDOCARPUS Berry, 1924, 166. Genotype *C. sphericus* Berry.

Capparidocarpus sphericus Berry, 1924, 166, pl. 55, f. 4-9; Lagrange: Hickman, Fulton Co., Ky.

CAPPARIS (Tournefort) Linné.

Capparis eocenica ampla Berry, 1930, 71, pl. 36, f. 4, 5; Holly Springs: Madison Co., Tenn.

Capparis proeocenica Berry, 1925, 56, pl. 10, f. 4, 5; Ripley: Henry Co., Tenn.—1928f, 442; Ripley: Carroll Co., Tenn.

CAPRIFOLIIPITES Wodehouse, 1933a, 518. Genotype: *C. viridi-fluminis* Wodehouse.

Caprifoliipites viridi-fluminis Wodehouse, 1933a, 518, f. 54; Green River: Parachute Creek, Garfield Co., Colo.

Carapa eolignitica Berry. □ Berry, 1930, 95, pl. 39, f. 10; Holly Springs: Center Church, Hardeman Co.; Pattersonville and La Grange, Fayette Co.; Mercer, Madison Co.; Puryear, Henry Co., Tenn.; Wickliff, Ballard Co., Ky.

Carapa xylocarpoides Berry. □ Berry, 1924, 67, pl. 12, f. 1; Claiborne: near Ft. Gaines, Clay Co., Ga.

Carduus florissantensis Cockerell = *Mahonia hakeaefolia* (Lesquereux) Arnold.

Carex? berthoudi Lesquereux. □ Knowlton, 1930, 35; Denver: Golden, Colo.

Carex, cf. *collinsii* Nuttall. Berry, 1924a, 17, pl. 1, f. 4-8; Pleistocene: Washington, D. C.

Carex, cf. *intumescens* Rudge. Berry, 1924a, 17, pl. 1, f. 9-11; Pleistocene: Washington, D. C.

Carex noursoakensis Heer. Mathiesen, 1932, 58; Sabine Isl., east Greenland.

Carex reticulata Penhallow = *Carex utriculata* Boott.

Carex servata Heer. □ Hollick, 1936, 56; Port Graham, Kenai Peninsula; Herendeen Bay, Alaska Peninsula.

Carex utriculata Boott. □

Carex reticulata Penhallow, 1900, 335; Scarborough Heights, Don Valley, Toronto, Ontario.

Carex sp., Berry, 1922b, 11; Pleistocene: Tipton Co., Tenn.

Carex? sp. A, Chaney & Mason, 1936c, 8, text-f. 43, 44; Pleistocene: near Fairbanks, Alaska.

Carex? sp. B, Chaney & Mason, 1936c, 8, text-f. 45, 46; Pleistocene: near Fairbanks, Alaska.

Carex sp., Potbury, 1932, 33, pl. 3, f. 4; San Bruno: San Mateo Co., Calif.—Mason, 1934, 151; Tomales: Tomales Bay, Marin Co., Calif.

Carex (leaves of) Lesquereux. □ Hollick, 1936, 56; Sitka?, Alaska.

CARPINITES Goeppert & Berendt.

Carpinites truncatus Hollick, 1936, 85, pl. 49, f. 2; Nenana coal field, Tanana Region, Alaska.

Carpinus alnifolia Goeppert = *Alnus alnifolia* (Goeppert) Hollick.

Carpinus ancipites Wodehouse, 1933a, 510, f. 42; Green River: Parachute Creek, Garfield Co., Colo.

Carpinus caroliniana Walter. □ Berry, 1926b, 108, pl. 47, f. 5, 6; Chowan; Neuse River, Wayne Co., N. C.

Carpinus pseudo-caroliniana Hollick. □

Carpinus grandis Unger. □ Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.—Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.—Berry, 1926d, 104, pl. 15, f. 4, 5; pl. 19, f. 4; Joseph and Darlington Creeks; Kitsilano, British Columbia.—Chaney, 1927a, 105, pl. 9, f. 6-11; Bridge Creek: Bridge Creek, Gray Ranch, Crooked River, Oreg.—MacGinitie, 1933, 50; Trout Creek: Trout Creek, Harney Co., Oreg.—LaMotte, 1935b, 53; Sooke: Muir Creek, Vancouver Island, British Columbia.—Hollick, 1936, 84, pl. 47, f. 7a; pl. 49, f. 1; pl. 50, f. 9; Port Camden Bay, Kuiu Isl., southeastern Alaska; Cook Inlet, Anchorage Bay, Chignik Bay, Alaska Peninsula.

Carpinus pseudo-caroliniana Hollick = *Carpinus caroliniana* Walter.

Carpinus sp. Goeppert, 1861, Schlesische Gesell. vaterl. cultur 39te Jahresber., Abt. Naturwiss. u. Med., Abh., no. 2, 201—Hollick, 1936, 85; Kachemak Bay? or Port Graham?, Alaska.

Carpinus sp. Knowlton, 1926, 35; Latah: Spokane, Wash.

Carpites boraginoides Knowlton, 1926, 49, pl. 29, f. 7; Latah: Coeur d'Alene, Idaho—Berry, 1931a, 34; Latah: Grand Coulee, Wash.—1934, 98; Latah: Coeur d'Alene, Idaho—Brown, R. W., 1937, 185, pl. 62, f. 13; Latah: Spokane, Wash.

Carpolithus hibiscoides R. W. Brown, 1935, 584, pl. 67, f. 19; Latah: White Bird, Idaho.

Carpites coffeaeformis Lesquereux.□Knowlton, 1930, 132; Denver: Golden, Colo.

Carpites coryloides Knowlton, 1930, 132, pl. 58, f. 3-5; Dawson: east of Colorado Springs, Colo.

Carpites costatus Lesquereux.□Knowlton, 1930, 132; Denver: Golden, Colo.

Carpites ginkgoides Knowlton, 1926, 50, pl. 29, f. 4; Latah: Spokane, Wash.—Berry, 1931a, 34; Latah: Grand Coulee, Wash.

Carpites inquirenda Knowlton, 1923, 175, pl. 38, f. 4; Green River: Cathedral Bluff, Rio Blanco Co., Colo.

Carpites judithae Knowlton.□Wilson, 1916, 205; Belly River: Red Deer River, Alberta.

Carpites lakesii Knowlton.□Berry, 1934a, 132, pl. 26, f. 2; Lance: Jump Off, Harding Co., S. Dak.

Carpites laurineus Lesquereux=*Ginkgo? truncata* (Lesquereux) Knowlton.

Carpites magnifica Knowlton=*Nyssa magnifica* (Knowlton) Berry.

Carpites menthoides Knowlton=*Carpolithus* sp., R. W. Brown.

Carpites minutulus Lesquereux.□Knowlton, 1930, 132; Denver: Golden, Colo.

Carpites myracarum Lesquereux, 1878, 303, pl. 60, f. 8-11; Post-Laramie: Black Buttes, Wyo.—Knowlton, 1930, 132; Denver: Golden, Colo.

Ginkgo sp., Knowlton, 1898, 111; Post-Laramie: Black Buttes, Wyo.

Carpites newberryana Knowlton, 1923, 174; Green River: Green River, Wyo.—Berry, 1930d, 77, pl. 14, f. 2, 6; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Juglans occidentalis Newberry (part), 1898, 34, pl. 66, f. 4a-4c only; Green River: Green River, Wyo.

Carpites oviformis Lesquereux.□Knowlton, 1930, 131; Denver: Golden, Colo.

Carpites paulownia Knowlton=*Gordonia hesperia* Berry.

Carpites polygonoides Knowlton, 1926, 49, pl. 26, f. 7; Latah: Spokane, Wash.

Carpites quadrivalvis Knowlton, 1930, 131, pl. 56, f. 2; Dawson: east of Colorado Springs, Colo.

Carpites rostellatus Lesquereux, 1878, 303, pl. 60, f. 11, 12; Denver: Golden, Colo.—Knowlton, 1930, 131; Denver: Golden, Colo.

Carpites spokaneensis Knowlton=*Bud scales*, R. W. Brown.

Carpites sulcatus Knowlton, 1924, 96, pl. 19, f. 3, 4; Animas: Pagosa Quad., Colo.

Carpites templetoni Knowlton, 1930, 131, pl. 58, f. 6; Dawson: east of Colorado Springs, Colo.

Carpites viburni Lesquereux.□Knowlton, 1923, 174; Green River: Alkali Station, Wyo.

Carpites sp., Knowlton 1898d.□Hollick, 1936, 171; Drew's Mine, north bank Yukon River, central Yukon region, Alaska.

Carpolithes achillaeoides Ball, 1931, 129, pl. 2, f. 6; Yegua: Turkey Creek, Brazos Co., Tex.

Carpolithes allenii (Lesquereux) Cockerell=*Koelreuteria allenii* (Lesquereux) Edwards.

Carpolithes auriformis Hollick, 1936, 170, pl. 120, f. 6, 7; south of King Salmon Lake, Alaska Peninsula.

Carpolithes carrollensis Berry, 1925, 89, pl. 22, f. 6; Ripley: Carroll Co., Tenn.

- Carpolithes compositus* Lesquereux=**Palmocarpon compositum** (Lesquereux) Lesquereux.
- Carpolithes corrugatum* (Lesquereux) Cockerell=**Palmocarpon? corrugatum** Lesquereux.
- Carpolithes elytraeformis** Hollick, 1936, 171, pl. 120, f. 3, 4; Yakutat Bay, Alaska.
- Carpolithes komensis** Heer. White, 1898, 347; Kook, Nugsuak Pen., west Greenland.
- Carpolithes perryensis** Berry, 1925, 89, pl. 22, f. 3; Ripley: Henry Co., Tenn.
- Carpolithes ripleyensis** Berry, 1925, 89, pl. 22, f. 5; Ripley: McNairy Co., Tenn.
- Carpolithes septentrionalis* (Agardh) Nathorst=**Stachyotaxus elegans** Nathorst.
- Carpolithes umbonatus** Ball, 1931, 171, pl. 18, f. 5; Fayette: Boggy Creek, Brazos Co., Tex.
- CARPOLITHUS** Allioni=**CARPOLITHES** Schlotheim.
- Carpolithus aggregatus** Berry, 1930, 134, pl. 33, f. 10; Holly Springs: Mill Creek, Hardeman Co., Tenn.
- Carpolithus ailanthioides** Berry, 1930, 135, pl. 32, f. 9; Holly Springs: Bolivar, Hardeman Co., Tenn.
- Carpolithus alabaccus** R. W. Brown, 1934, 67, pl. 15, f. 11; Green River: Piceance Creek, Colo.
- Carpolithus alatus** Berry, 1930, 135, pl. 25, f. 30; Holly Springs: Center Church, Hardeman Co., Tenn.
- Carpolithus amisutensis** Miner, 1935, 599; Disko Isl., west Greenland.
- Carpolithus balli** Berry, 1924, 198, pl. 64, f. 3; Fayette: Piedmont; Grimes Co., Tex.—Ball, 1931, 171, pl. 33, f. 11; Fayette: Piedmont Co., Grimes Co., Tex.
- Carpolithus banisteroides** Berry, 1930, 134, pl. 33, f. 5, 6; Holly Springs; La Grange, Fayette Co., Tenn.
- Carpolithus belvidereensis** Berry, 1922d, 224, pl. 41, f. 4; Cheyenne: near Belvidere, Kiowa Co., Kans.
- Carpolithus bicuspidatus** Berry, 1930, 139, pl. 48, f. 26; Holly Springs: La Grange, Fayette Co., Tenn.
- Carpolithus biseminatus** Berry, 1930, 139, pl. 49, f. 17; Holly Springs: Puryear, Henry Co., Tenn.
- Carpolithus bladenensis** Berry, 1920e, 406; Black Creek: Sampson Co., N. C.
- Carpolithus bolivarensis** Berry, 1930, 136, pl. 45, f. 4, 5; Holly Springs: Puryear, Henry Co., Bolivar, Hardeman Co., Tenn.
- Carpolithus bonnevillensis** Chaney, 1920a, 181, pl. 22, f. 4; Eagle Creek: Multnomah Co., Oreg.
- Carpolithus bridgerensis** Berry, 1930d, 78, pl. 15, f. 4; so-called Bridger: Tipperary, Wind River Basin, Wyo.
- Carpolithus browni** Berry, 1930d, 78, pl. 14, f. 1; so-called Bridger: Wind River Basin, Tipperary, Wyo.
- Carpolithus bumeliaformis** Berry, 1916e, 243, pl. 60, f. 8; Catahoula: Chalk Hills, near Rosefield, La.—1924, 198; Lagrange: Hickman, Fulton Co., Ky.; near Union City, Obion Co., Tenn.
- Carpolithus burseraformis** Berry, 1930, 137, pl. 48, f. 6; Holly Springs: Puryear, Henry Co., Tenn.
- Carpolithus callitriiformis** Berry, 1924, 197, pl. 40, f. 3; Catahoula?: Trinity Co., Tex.—Ball, 1931, 171; Catahoula? (Jackson): Trinity Co., Tex.
- Carpolithus callowayensis** Berry, 1930, 140, pl. 48, f. 29, 30; Holly Springs: Bell City, Calloway Co., Ky.
- Carpolithus capsularis** R. W. Brown, 1929, 291, pl. 76, f. 3; Green River: on Piceance Creek near junction with White River, Colo.

- Carpolithus carolinensis** Berry, 1920e, 405; Black Creek: Sampson Co., N. C.
- Carpolithus caryophylloides** Knowlton, 1923, 174, pl. 37, f. 13; Green River: Greasewood Creek, Rio Blanco Co., Colo.
- Carpolithus cassioides** R. W. Brown, 1929, 291, pl. 76, f. 1; Green River: northwest of De Beque, Colo.—1934, 67, pl. 15, f. 8; Green River: Ute Trail northwest of De Beque, Colo.
- Carpolithus chesterensis** Berry, 1930, 136, pl. 25, f. 9; Holly Springs: Taylor Farm, Chester Co., Tenn.
- Carpolithus collinsi** Berry, 1930, 137, pl. 25, f. 10; Holly Springs: Taylor Farm, Chester Co., Tenn.
- Carpolithus delicatulus** Berry, 1930, 134, pl. 33, f. 9; Holly Springs: Bolivar, Hardeman Co., Tenn.
- Carpolithus ellipticus** R. W. Brown not Sternberg=**Carpolithus prunoides** R. W. Brown.
- Carpolithus fagaraformis** Berry, 1930, 137, pl. 48, f. 31; Holly Springs: Puryear, Henry Co., Tenn.
- Carpolithus filiferus** R. W. Brown, 1934, 67, pl. 15, f. 17, 18; Green River: Roan Creek northwest of De Beque; between Carr and Brush Creeks northwest of De Beque, Colo.
- Carpolithus floribundus** Newberry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.
- Carpolithus globuliferus** (Heer) Seward, 1926, 98, pl. 10, f. 99; text-f. 12; Nugsuak, west Greenland.
Zamites globuliferus Heer, 1882, 12, pl. 4, f. 1-7.—White, 1898, 347; Kook, Nugsuak Pen., west Greenland.
- Carpolithus gronovii** Berry, 1930, 135, pl. 25, f. 2-5, 20; Holly Springs; Siler-ton Road, Taylor farm, Chester Co.; Hardeman Co., Tenn.
- Carpolithus hibiscoides** R. W. Brown=**Carpites boraginoides** Knowlton.
- Carpolithus hiraeformis** Berry, 1930, 138, pl. 48, f. 19, 20; Grenada: Somerville, Fayette Co., Tenn.
- Carpolithus inequilateralis** Berry, 1930, 140, pl. 48, f. 27, 28; Holly Springs: La Grange, Fayette Co., Tenn.
- Carpolithus juncaformis** Berry, 1930, 138, pl. 25, f. 18; pl. 49, f. 20; Holly Springs: La Grange, Fayette Co., Tenn.
- Carpolithus kentuckyensis** Berry, 1930, 140, pl. 49, f. 16; Holly Springs: Bell City, Calloway Co., Ky.
- Carpolithus leitneriaformis** Berry, 1930, 139, pl. 49, f. 10; Holly Springs: Mill Creek, Hardeman Co., Tenn.
- Carpolithus longipedunculatus** Berry, 1930, 136, pl. 25, f. 16, 17; Holly Springs: Mill Creek, Hardeman Co., Tenn.
- Carpolithus malpighiaformis** Berry, 1930, 134, pl. 25, f. 33; Holly Springs: Bolivar, Hardeman Co., Tenn.
- Carpolithus marylandicus** Hollick, 1901, 258, pl. 64, f. 11, 11a, 11b; Nanjemoy (Woodstock): Pope's Creek, Md.
- Carpolithus marylandicus rugosus** Hollick, 1901, 258, pl. 64, f. 12, 12a, 12b; Nanjemoy (Woodstock): Pope's Creek, Md.
- Carpolithus najasoides** Berry, 1924, 198, pl. 41, f. 4; Barnwell: near Macon, Bibb Co., Ga.
- Carpolithus oblongus** (Heer) Seward, 1926, 136, pl. 11, f. 114; Nugsuak, west Greenland.
Tetraphyllum oblongum Heer, 1882, 105, pl. 26, f. 5b, 6.
- Carpolithus paliuroides** R. W. Brown, 1934, 67, pl. 15, f. 12; Green River: Roan Creek northwest of De Beque, Colo.

- Carpolithus palmitis* R. W. Brown, 1929, 291, pl. 76, f. 4; Green River: north-west of De Beque, Colo.
- Carpolithus patootensis* Miner, 1935, 599; Patoot: Nugsuak Peninsula, west Greenland.
- Carpolithus plumosus* Berry, 1930, 139, pl. 48, f. 3; Holly Springs: Puryear, Henry Co., Tenn.
- Carpolithus poaformis* Berry, 1930, 138, pl. 25, f. 12; Holly Springs: Center Church, Hardeman Co., Tenn.
- Carpolithus prunoides* R. W. Brown, 1934, 68; Piceance Creek near junction with White River, Colo.
- Carpolithus ellipticus* R. W. Brown not Sternberg, 1929, 291, pl. 76; f. 2; Green River: Piceance Creek near junction with White River, Colo.
- Carpolithus pteraformis* Berry=*Cedrela pteraformis* (Berry) R. W. Brown.
- Carpolithus puryearensis* Berry, 1930, 137, pl. 25, f. 11; Holly Springs: Whiteville, west of Nashville, Hardeman Co., Tenn.; Grenada: Somerville, Fayette Co., Tenn.
- Carpolithus rotundalatus* Berry, 1930, 136, pl. 44, f. 4-7; Holly Springs: Mill Creek, west of Bolivar, Hardeman Co.; Bradley Pit, Henry Co., Tenn.
- Carpolithus rugosus* Chaney, 1920a, 181, pl. 22, f. 2, 3; Eagle Creek: Multnomah Co., Oreg.
- Carpolithus sapindoides* Berry, 1930, 137, pl. 25, f. 14; Holly Springs: Center Church, Hardeman Co., Tenn.
- Carpolithus serratifolius* R. W. Brown, 1929, 292, pl. 76, f. 5; Green River: northwest of De Beque, Colo.
- Carpolithus shandyensis* Berry, 1930, 135, pl. 25, f. 1; Holly Springs: Mill Creek, Hardeman Co., Tenn.
- Carpolithus silertonensis* Berry, 1930, 136, pl. 25, f. 6, 7; Holly Springs: Silerton Road, Taylor Farm, Chester Co., Tenn.; Mill Creek, Shandy, Hardeman Co., Tenn.
- Carpolithus somervillensis* Berry, 1930, 137, pl. 45, f. 6, 7; Grenada: Somerville, Fayette Co., Tenn.
- Carpolithus? stipuliformis* Seward, 1926, 137, pl. 10, f. 98; Nugsuak, west Greenland.
- Carpolithus taylorensis* Berry, 1930, 136, pl. 25, f. 8; Holly Springs: Taylor Farm, Chester Co., Tenn.
- Carpolithus vitaceus* R. W. Brown, 1934, 68, pl. 15, f. 10; Green River: Kimball Creek northwest of De Beque, Colo.
- Carpolithus* sp. 1, Berry, 1922c, 179; Woodbine: Arthur's Bluff, Lamar Co., Tex.
- Carpolithus* sp. 2, Berry, 1922c, 180, pl. 40, f. 1; Woodbine: Arthur's Bluff, Lamar Co., Tex.
- Carpolithus* sp. 3, Berry, 1922c, 180, pl. 40, f. 2-4; Woodbine: Arthur's Bluff, Lamar Co., Tex.
- Carpolithus* sp., R. W. Brown, 1937, 185, pl. 63, f. 2, 3; Latah: Spokane, Wash.; White Bird, Idaho.

Equisetum, underground stem, Knowlton, 1926, 24, pl. 9, f. 1; pl. 26, f. 5; pl. 29, f. 8; Latah: Spokane, Wash.

Malva? hesperia Knowlton, 1926, 47, pl. 29, f. 11; Latah: Spokane, Wash.—Berry, 1934, 120, pl. 24, f. 2; Latah: White Bird, Idaho.

Phyllites amplexicaulus Knowlton, 1926, 47, pl. 29, f. 3; Latah: Spokane, Wash.—Berry, 1931a, 34; Latah: Grand Coulee, Wash.

Carpites menthoides Knowlton, 1926, 49, pl. 26, f. 4; Latah: Spokane, Wash.—Berry, 1929f, 264; Latah: Spokane, Wash.—1934, 122; Latah: White Bird, Idaho.

Ficus interglacialis Hollick. □ Hollick, 1927, 405, pl. 34; pl. 35; St. Eugene slits: British Columbia.—Berry, 1931a, 37; Latah: Grand Coulee, Wash.

Carpolithus sp., R. W. Brown, 1937, 185, pl. 61, f. 15; Latah: Spokane, Wash.

Juncus? *crassulus* Berry not Cockerell, 1929f, 240; Latah: Spokane, Wash.

Carpolithus, species of, R. W. Brown, 1934, 68, pl. 15, f. 13-16; Green River: Ute Trail northwest of De Beque, Colo.

Carpolithus sp., Seward, 1926, 138, text-f. 35; Nugsuak, west Greenland.

Carpolithus sp. A, Seward & Conway, 1935, 36, pl. 2, f. 15; Kingigtok: west Greenland.

Carpolithus sp. B, Seward & Conway, 1935, 36, pl. 2, f. 18; Kingigtok: west Greenland.

CARYA Nuttall=**HICORIA** Rafinesque.

Carya aquatica Michaux fils=**Hicoria aquatica** (Michaux fils) Britton.

Carya bilinica (Unger) Ettingshausen=**Juglans juglandiformis** (Sternberg) Giebel.

Carya egregia (Lesquereux) LaMotte, 1936, 116, pl. 4, f. 5, 6; pl. 6, f. 1, 2.—Brown, R. W., 1937, 169, pl. 47, f. 4; pl. 57, f. 4; Latah: White Bird, Idaho; Mascall: Tipton, Oreg.

Juglans egregia Lesquereux.□Berry, 1931a, 35, pl. 11, f. 3; Latah: Grand Coulee, Wash.—Hollick, 1936, 79 pl. 22, f. 2b; pl. 100, f. 5; Hamilton Bay, Kupreanof Isl., southeast Alaska; Portage (Balboa) Bay, Alaska Peninsula.

Juglans oregoniana Lesquereux.□Chaney, 1927a, 104; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—MacGinitie, 1933, 50; Trout Creek: Trout Creek, Harney Co., Oreg.—Berry, 1938, 90; Latah: Grand Coulee, Wash.

Rhus bendirei Lesquereux.□Chaney, 1920a, 178; Eagle Creek: Multnomah Co., Oreg.

Juglans cryptata Knowlton.□

Salix miata Knowlton (part), 1902, 32, pl. 2, f. 12 (leaflet on left only); Mascall: Van Horn's Ranch, John Day Basin, Oreg.

Hicoria pseudovata Hollick, 1927, 395, pl. 30, f. 1, 2; St. Eugene silts: British Columbia.

??"*Ptelea miocenica*" LaMotte, 1936, 133, pl. 11, f. 4 only?? Upper Cedarville: Pit River, Modoc Co., Calif. R. W. Brown considers it equal to *Carya egregia*; I am unable to concur, feeling that the leaves in question do not equal this species. That they may not represent the leaflets of *Ptelea miocenica* is acknowledged and they are cited in this catalogue under the heading of "*Ptelea miocenica*," LaMotte not Berry, in need of critical revision.

Carya olivaeformis, Lesquereux not Nuttall=**Hicoria jacksoniana** Berry.

Carya ovata Miller=**Hicoria ovata** (Miller) Britton.

Carya simulata (Knowlton) R. W. Brown, 1937, 169; Mascall: John Day Basin, Oreg.

Aesculus? *simulata* Knowlton.□Chaney, 1922a, 216; Payette, Idaho.

Rhus? sp., Knowlton, 1902, 70, pl. 14, f. 6; Mascall: Van Horn's Ranch, John Day Basin, Oreg.

Aesculus simulata, Oliver not Knowlton, 1934, 24; Mascall: Tipton, Oreg.

Cassia alaskana Hollick, 1930, 98, pl. 74, f. 2, 3; Kaltag: Lower Yukon, Alaska.

Cassia amphioxsa Ball, 1931, 76, pl. 5, f. 6; Indio: Barton's Ranch, Bastrop Co., Tex.

Cassia angusta Heer=**Sapindopsis angusta** (Heer) Seward & Conway.

Cassia bentonensis Berry.□Ball, 1931, 76; Indio: Calaveras Creek, Wilson Co., Tex.

Cassia bolivarensis Berry, 1930, 81, pl. 32, f. 4, 5; Holly Springs: Bolivar, Hardeman Co., Tenn.

Cassia cockfieldensis Berry, 1924, 63, pl. 10, f. 12; Yegua: Columbia, Caldwell Parish, La.

Cassia culebrensis Berry, 1918, 34, pl. 16, f. 1; Culebra: near Empire, Canal Zone.

Cassia? *dubiosa* Hollick, 1924, 304, pl. 10, f. 4; Collazo: Porto Rico.—1928, 2-3; Collazo: Porto Rico.

Cassia emarginata Berry. □ Berry, 1922g, 14; Wilcox: Holly Springs: Mashall Co., Miss.; Lagrange: Grand Junction, Fayette Co., Tenn.

Cassia evidens Hollick, 1928, 204, pl. 69, f. 8; Collazo, Porto Rico.

Cassia fayettensis Berry. □ Berry, 1930, 79, pl. 12, f. 8; pl. 25, f. 22; pl. 39, f. 4; pl. 46, f. 7, 8; pl. 48, f. 33; Holly Springs: Lamar and Holly Springs, Miss.; Hardeman Co.; LaGrange, Fayette Co.; Jackson, Madison Co.; McKenzie, Carroll Co.; Grable pit, Puryear and Cottage Grove, Henry Co., Tenn.; Grenada: Somerville and Williston, Fayette Co., Tenn.; Wilcox: Benton, Saline Co., Ark.; Nevada Co., Ark.; Texarkana, Miller Co., Ark.

Cassia georgiana Berry. □ Berry, 1924, 169, pl. 33, f. 8; Barnwell: near Gibson, Glascock Co., Ga.

Cassia glenni Berry. □ Berry, 1930, 82, pl. 41, f. 13; Holly Springs: Early Grove and Holly Springs, Miss.; Mill Creek, Hardeman Co.; La Grange, Fayette Co.; Mercer, Madison Co.; Atkins Pit, Henry Co., Tenn.; Wickliffe, Ballard Co., Ky.; Grenada: Cottage Grove, Henry Co.; Fayette Corners, Fayette Co., Tenn.—Hollick, 1936, 128, pl. 72, f. 3, 4; Drews Mine, north bank Yukon River, central Yukon region; Matanuska River west from Moose Creek, Alaska.

Cassia hesperia, R. W. Brown, 1929, 287, pl. 73, f. 6; Green River: northwest of De Beque, Colo.—1934, 58, pl. 12, f. 1-4; Green River: Piceance Creek; northwest of De Beque, Colo.

Banisteria bradleyi R. W. Brown, 1929, 287, pl. 73, f. 7; Piceance Creek near junction with White River, Colo.

Cassia idahoensis Knowlton=*Salix inquirenda* Knowlton.

Cassia idahoensis Berry not Knowlton=*Sophora spokaneensis* Knowlton.

Cassia imitativa Hollick, 1928, 204, pl. 70, f. 1, 2a, 2b; Collazo: P. R.

Cassia imparilis Hollick, 1928, 205, pl. 70, f. 5; Collazo: P. R.

Cassia jacksoniana Berry, 1924, 169, pl. 33, f. 6; Jackson: near El Dorado, Union Co., Ark.

Cassia kügleri Berry, 1925a, 95, pl. 15, f. 3; Forest: Trinidad, British West Indies.

Cassia leptocarpoides Berry, 1925a, 94, pl. 5, f. 5; Siparia: Trinidad, British West Indies.

Cassia longifolia Engelhardt, 1895, Abh. Senck. Naturf. Gesell., vol. 19, 19, 24, pl. 2, f. 14-16; Loja and Tablayaca, Ecuador.—Berry, 1925a, 93, pl. 1, f. 6; Porcellanite, Siparia: Trinidad; British West Indies.

Cassia marshallensis Berry. □ Ball, 1931, 76; Carrizo?: Concillas Creek, Webb Co., Tex.

Cassia mississippiensis Berry=*Gleditsia?* *mississippiensis* (Berry) Berry.

Cassia nictitanioides Berry, 1930, 81, pl. 41, f. 8; Holly Springs: Shandy, Hardeman Co., Tenn.

Cassia obionana Berry, 1924, 169, pl. 51, f. 2; Lagrange: near Union City, Obion Co., Tenn.

Cassia obtusa Knowlton not Clos=*Salix inquirenda* Knowlton.

Cassia ordinaria Hollick, 1928, 205, pl. 69, f. 10; Collazo: P. R.

Cassia phaseolites Unger, 1850, K. Akad. Wiss. (Wien), Math.-naturwiss. Cl., Denkschr., vol. 2, 188 (58), pl. 65 (44), f. 1-5; pl. 66 (45), f. 1-9.—Hollick, 1936, 129, pl. 72, f. 5, 6; Matanuska River below Moose Creek, Alaska.

Cassia puryearensis Berry. □ Knowlton, 1924, 90, pl. 14, f. 1, 2; Animas: Pagosa Quad., Colo.—Hollick, 1928, 205, pl. 70, f. 3, 4; Collazo: P. R.—Berry, 1930, 81, pl. 12, f. 13; Wilcox: Hardeman, Fayette, Madison and Henry Cos., Tenn.; Calloway Co., Ky.; Grenada: Fayette and Henry Cos., Tenn.—MacGinitie, 1937, 141, pl. 7, f. 3; Weaverville: Hay Fork, Trinity Co., Calif.

Cassia robertsi Berry, 1930, 80, pl. 41, f. 7; Grenada: Cottage Grove, Henry Co., Tenn.

Cassia sipariensis Hollick, 1924, 303, pl. 1, f. 1; Siparia: Trinidad, British West Indies.—Berry, 1925a, 96; Siparia: Trinidad, British West Indies.

Cassia sophoroides (Knowlton) Berry=*Vaccinium sophoroides* (Knowlton) R. W. Brown.

Cassia sophoroides Berry not Knowlton=*Sophora spokanensis* Knowlton.

Cassia spokanensis Berry=*Cedrela pteriformis* (Berry) R. W. Brown.

Cassia tennesseensis Berry.□Ball, 1931, 77; Carrizo?: Dimmit Co., Tex.

Cassia vetusta Knowlton, 1930, 99, pl. 45, f. 2; Dawson; near Colorado Springs, Colo.

Cassia visibilis Hollick, 1928, 206, pl. 69, f. 12; Collazo: P. R.

Cassia wilcoxiana Berry.□Berry, 1930, 79, pl. 12, f. 7; Holly Springs: Mill Creek, Hardeman Co.; La Grange, Fayette Co., Tenn.

Cassia zuliana Berry, 1925a, 95, pl. 11, f. 4-6; Siparia, Trinidad, British West Indies.

Cassia sp.?, Newberry=*Cercidiphyllum crenatum* (Unger) R. W. Brown.

Castalia pulchella Knowlton, 1930, 94, pl. 42, f. 1; pl. 57, f. 3; Dawson: east of Colorado Springs, Colo.

Castalia stantoni Knowlton.□Wilson, 1914a, 323; near Steveville, Red Deer River, Alberta.—1916, 205; Belly River: Red Deer River, Alberta.

Castalia? sp., Berry, 1927c, 12, pl. 1, f. 1; Esmeralda: Mineral Co., Nev.

Castalia sp., Berry, 1924a, 19, pl. 1, f. 25; Pleistocene: Washington, D. C.

CASTALIITES Hollick, 1930, 76. Genotype: *C. ordinarius* Hollick.

Castaliites acutidentatus Hollick, 1930, 77, pl. 41, f. 3; Chignik: Alaska Peninsula.

Castaliites cordatus Hollick, 1930, 76, pl. 41, f. 6; Nulato: Lower Yukon, Alaska.

Castaliites crenatidentatus Hollick, 1930, 77, pl. 41, f. 4; Chignik: Alaska Peninsula.

Castaliites flabelliformis Hollick, 1930, 76, pl. 41, f. 5; Melozi: Lower Yukon, Alaska.

Castaliites inordinatus Hollick, 1930, 77, pl. 41, f. 2; Kaltag: Lower Yukon, Alaska.

Castaliites ordinarius Hollick, 1930, 76, pl. 41, f. 7; Kaltag: Lower Yukon, Alaska.

Castanea castaneaefolia (Unger) Knowlton=*Castanea orientalis* Chaney.

Castanea claibornensis Berry.□Berry, 1924, 156; Barnwell: Grovetown, Columbia Co., Ga.

Castanea dentata (Marshall) Borkhausen. Berry & Hawkins, 1935a, 250, pl. 23, f. 3; Pensauken: near Durham's Corner, Middlesex Co., N. J.

Castanea intermedia Lesquereux.□Knowlton, 1924, 81, pl. 8, f. 1; Animas: Pagosa Quad., Colo.—1930, 50; Dawson: Purdon Mine, Colo.

Castanea lesquereuxi LaMotte=*Fagus washoensis* LaMotte.

Castanea orientalis Chaney, 1927a, 110, pl. 12, f. 1, 4; Bridge Creek: Crooked River, Gray Ranch, Oreg.; Cant's Ranch, Oreg.—Berry, 1929f, 245, pl. 51, f. 4, 5; Latah: Spokane, Wash.—1932a, 40; Ballantyne Ranch, Malheur Co., Oreg.—1938, 89; Latah: Grand Coulee, Wash.—Hoffman, A. D., 1932, 737; Douglas Canyon, Wash.—Brown, R. W., 1937, 171, pl. 49, f. 17; Latah: Spokane, Wash.; White Bird, Idaho—1937c, 516.

Castanea castaneaefolia (Unger) Knowlton.□Knowlton, 1900d, 40; Clarno?: southeast of Ashland, Oreg.; 1 mi. east of Murphy's Spring and 3 mi. southeast of Ashland, Oreg.—1926, 37, pl. 18, f. 7, 8; pl. 19, f. 1; Latah: Spokane, Wash.—Berry, 1929f, 245; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 108; Latah: ?White Bird; Linson Valley; Nez Percé Co.; near

Castanea orientalis—Continued.

St. Maries, Idaho.—Hollick, 1936, 97, pl. 53, f. 4-6; Hamilton Bay, Kupreanof Isl., southeastern Alaska; Port Campden, Kuiu Isl., southeastern Alaska; Eskra Creek, Matanuska Coal Field, Alaska.

Castanea pulchella Knowlton.□

Dryophyllum longipetiolatum Knowlton.□Hollick, 1936, 104, pl. 42, f. 5; Hamilton Bay, Kupreanof Isl., southeastern Alaska.

Castanea ungeri Heer.□

Quercus spokaneensis Knowlton, 1926, 37, pl. 19, f. 3; Latah: Spokane, Wash.—Berry, 1938, 89; Latah: Grand Coulee, Wash.

Castanea pulchella Knowlton=*Castanea orientalis* Chaney.

Castanea pumila Miller.□Berry, 1919b, 9; Pleistocene: McNairy Co., Tenn.

Castanea? radiata Chaney, 1920a, 166, pl. 10, f. 3-5; Eagle Creek: Multnomah Co., Oreg.

Castanea ungeri Heer=*Castanea orientalis* Chaney.

Castanea sp., F. M. Scott, 1926, 405; Tesla, Calif.

Castanopsis chrysophylloides Lesquereux.□Dorf, 1930, 90, pl. 9, f. 4, 5; Santa Rosa; Lakeville; Bennett Valley, Calif.—LaMotte, 1936, 121; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.

Castanopsis consimilis (Newberry) Brooks, 1935, 285, pl. 6, f. 2; pl. 7, f. 3, 4; pl. 8, f. 1-5; pl. 9, f. 4, 5; pl. 10, f. 4, 6; pl. 17, f. 1; pl. 20, f. 5; Sucker Creek: Ballantyne Ranch, near Homedale, Idaho—Berry, 1938, 92, text-f. 6; Latah: Grand Coulee, Wash.

NOTE.—Brooks lists the following synonymy which requires further study before general acceptance of this as a species of *Castanopsis*: *Quercus consimilis* Newberry, *Quercus drymeja* Unger, *Quercus idahoensis* Knowlton, *Quercus berryi* Trelease, *Castanea orientalis* Chaney, *Quercus* unnamed leaf, Berry, *Quercus simulata* Knowlton (part).

Castanopsis convexa (Lesquereux) Brooks, 1935, 288, pl. 6, f. 5; pl. 10, f. 1, 3; pl. 12, f. 1-6; pl. 13, f. 4-6; pl. 18, f. 3-5; pl. 20, f. 4; pl. 21, f. 1b; Sucker Creek: Ballantyne Ranch near Homedale, Idaho—Dorf, 1936, 112, pl. 1, f. 7, 8; Idaho: near Weiser, Idaho—R. W. Brown, 1937, 171, pl. 49, f. 8-11; Latah: Spokane, Wash.; Mascall: Tipton, Oreg.—1937c, 515.

Diospyros elliptica Knowlton.□LaMotte, 1936b, 417; Ellensburg: Ellensburg, Wash.

Sapindus oregonianus Knowlton.□Chaney, 1922a, 216; Payette: Idaho.—Brooks, 1935, 297, pl. 19, f. 4; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.

NOTE.—Brooks lists the following synonymy which requires further study before general acceptance of this as a species of *Castanopsis*: *Quercus convexa* Lesquereux, *Quercus simplex* Newberry, *Quercus simulata* Knowlton (part), *Salix perplexa* Knowlton, *Salix pseudo-argentea* Knowlton, *Salix dayana* Knowlton (part), *Salix elongata*, Knowlton not Weber, *Salix* sp., Knowlton, 1926, *Quercus perplexa* (Knowlton) Berry.

Castanopsis sp. Arnold, 1935, 379; Trout Creek: Trout Creek, Harney Co., Oreg.

Catalpa crassifolia Newberry=*Paranymphaea crassifolia* (Newberry) Berry.

Catalpa? sp., Arnold, 1935, 379; Trout Creek: Trout Creek, Harney Co., Oreg.

CAULINIA DeCandolle.

Caulinia laevis (Goepfert) Goepfert, 1861, Schlesische Gesell. vaterl. Cultur 39te Jahresber., Abt., Naturwiss. u. Med., Abh. 202.—Hollick, 1936, 53; Ninilchik, west side of Kenai Peninsula, Alaska.

Caulinites acanthus R. W. Brown, 1929, 292, pl. 76, f. 10; Green River; north-west of De Beque, Colo.

Caulinites gleichenioides Seward, 1926, 147, pl. 11, f. 108; Nugsuak, west Greenland.

Caulinites prehensus R. W. Brown, 1929, 292, pl. 76, f. 11; Green River; north-west of De Beque, Colo.

- Caulinites* sp., Chaney & Elias, 1936b, 35; Ogallala: Brown Co., Nebr.; Beaver Co., Okla.; Logan Co., Kans.
- CAYTONIA** Thomas, 1925, The Caytoniales, a new group of Angiospermous plants from the Jurassic rocks of Yorkshire, Roy. Soc. London, Phil. Trans., Ser. B, vol. 213, 314.—Harris, 1932a, 13. Genotype: *C. sewardi* Thomas.
- Caytonia thomasi* Harris, 1932a, 13; Thaumatopteris Zone: Scoresby Sound, east Greenland.—1933, 97, pl. 4, 5; Liassic: Scoresby Sound, east Greenland.
- Sagenopteris nilssoniana* seed Harris, 1926, 77, pl. 8, f. 7, 8; text-f. 12f-g; Rhaetic: Scoresby Sound, east Greenland.
- Ceanothus blakei* Chaney, 1927a, 128, pl. 16, f. 4, 6-9; Bridge Creek: Bridge Creek, Gray Ranch, Crooked River Basin, Oreg.
- Ceanothus chaneyi* Dorf, 1930, 103, pl. 13, f. 3, 4; Calabazas Canyon, Contra Costa Co., Calif.
- Ceanothus edensis* Axelrod, 1937, 179, pl. 6, f. 4; Mt. Eden: near Beaumont, Calif.
- Ceanothus idahoensis* R. W. Brown, 1935, 581, pl. 69, f. 8; Latah: Salmon, Idaho.
- Populus zaddachi* Jennings not Heer. □ 1920, 406, pl. 24, f. 6; pl. 25, f. 1, 2; pl. 26, f. 1a, 2, 3, 5, 6; Missoula Mont.
- Ceanothus jacksonensis* Berry, 1924, 178, pl. 60, f. 3, 4; Fayette: Barrera League, Brazos Co., Tex.—Ball, 1931, 160, pl. 33, f. 5, 6; Fayette: Barrera League, Brazos Co., Tex.
- Ceanothus meigsii* Lesquereux=*Zizyphus meigsii* (Lesquereux) Berry.
- Ceanothus polymorphus* Al. Braun=*Cinnamomum cinnamomeum* (Rossmäessler) Hollick.
- Ceanothus rigidus* Nuttall. Mason, 1934, 167, pl. 10, f. 8; Tomales: Tomales Bay, Marin Co., Calif.
- Ceanothus, thyrsiflorus* Eschscholtz. Chaney & Mason, 1930, 13, pl. 7, f. 14; Pleistocene: Santa Cruz Isl., Calif.—Potbury, 1932, 37, pl. 3, f. 10; Pleistocene: San Bruno, San Mateo Co., Calif.—Chaney & Mason, 1933a, 62, pl. 8, f. 1, 2; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Mason, 1934, 168, pl. 10, f. 4, 7; Tomales: Tomales Bay, Marin Co., Calif.
- Ceanothus* sp., Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.
- Ceanothus* sp., Axelrod, 1937, 180, pl. 6, f. 5; Mt. Eden: near Beaumont, Calif.
- Cebatha carolina* (Linné) Britton. □ Berry & Hawkins, 1935a, 250, pl. 24, f. 3; Pensauken: near Durham's Corner, Middlesex Co., N. J.
- Cebatha carolina*, Berry (part) not Britton=*Menispermites carolinaformis* Berry.
- Cebatha haydenianus* (Ward) Knowlton=*Paranymphaea crassifolia* (Newberry) Berry.
- Cebatha heteromorpha* (Knowlton) Berry, 1931a, 37; Latah: Grand Coulee, Wash.—1934, 112; Latah: east of Lewiston on bank of Clearwater River, Nez Percé Co.; near Arrow Junction, Nez Percé Co.; south of Juliaetta, Nez Percé Co.; east of White Bird, Idaho Co.; near St. Maries, Kootenai Co., Idaho—LaMotte, 1936, 126, pl. 9, f. 1; Upper Cedarville: 49 Camp, Washoe Co., Nev.
- Populus heteromorpha* Knowlton, 1926, 30, pl. 12, f. 8-10; pl. 13, f. 1-7; pl. 14, f. 1-3; pl. 15, f. 3-5; Latah: Spokane, Wash.—Berry, 1929f, 242; Latah: Spokane, Wash.—Hoffman., 1932, 735; Douglas Canyon, Wash.
- Populus fairii* Knowlton, 1926, 30, pl. 15, f. 2; pl. 16, f. 1-3; Latah: Spokane, Wash.
- Cebatha multiformis* Hollick, 1927, 406, pl. 38, f. 1-6; pl. 39, f. 1-3; St. Eugene silts: British Columbia.
- Cissampelos dubiosa* Hollick, 1927, 408, pl. 37, f. 4-7; pl. 39, f. 4; St. Eugene silts: British Columbia.
- Cebatha multiformis* Hollick=*Cebatha heteromorpha* (Knowlton) Berry.

Cedrela browniana Arnold=*Cedrela oregoniana* (Lesquereux) R. W. Brown.

Cedrela jacksoniana Berry, 1924, 67, 174, pl. 34, f. 4, 5; pl. 44, f. 1-5; Yegua: Rock Creek, Brazos Co., Tex.; Jackson: White Bluff, Jefferson Co., Ark.; Fayette: near Hornbeck, Sabine Parish, La.; Catahoula?: Trinity Co., Tex.; Lagrange: near Cane City, Obion Co., Tenn.; Fayette: near Millican and near Wellborn, Brazos Co., Tex.—Ball, 1931, 157, pl. 33, f. 8-10; pl. 34, f. 9; Catahoula?: Trinity Co.; Fayette: Brazos Co., Tex.

Cedrela lancifolia (Lesquereux) R. W. Brown, 1937, 178, pl. 60, f. 3, 4; Florissant: Florissant, Colo.

Sapindus lancifolius Lesquereux (part), 1883, 182, pl. 32, f. 3-6 only; Florissant: Florissant, Colo.

Cedrela merrilli (Chaney) R. W. Brown, 1937c, 511; Bridge Creek: Gray Ranch, Crooked River Basin; near Mitchell, Oreg.

Rhus merrilli Chaney, 1927a, 125, pl. 16, f. 1, 2; Crooked River: Gray Ranch and Cove Creek, Oreg.—Berry, 1934, 116; Latah: east of White Bird, Idaho Co.; south of Juliaetta, Nez Percé Co., Idaho—1938, 89; Latah: Grand Coulee, Wash.

Cedrela pteriformis (Berry) R. W. Brown (part), 1935, 579, (refer only to *Acer* sp.? Newberry).—1937, 179, (refer only to *Pinus knowltoni* Mason (part) not Chaney).

Acer? sp. Newberry, 1898, 115, pl. 46, f. 8; Bridge Creek: Crook Co., Oreg.

Pinus knowltoni Mason (part) not Chaney, 1927, pl. 3, f. 3, only; Mascall: Tipton, Oreg.

Cedrela miocenica Berry, 1923b, 16, pl. 7, f. 1; San José del Carmen, Vera Cruz, Mexico.

Cedrela mississippiensis major Berry, 1930, 95, pl. 41, f. 3; Holly Springs: Grable Pit, Henry Co.; Bolivar, Hardeman Co., Tenn.

Cedrela mississippiensis minor Berry, 1930, 95, pl. 41, f. 1, 2; Holly Springs: Grable Pit, Henry Co., Tenn.

Cedrela oregoniana (Lesquereux) R. W. Brown, 1937c, 513; Upper Cedarville: 49 Camp, Nev.; Mascall: John Day Basin; Tipton; Trout Creek; Sucker Creek, Oreg.; Hog Creek, Idaho.

Ficus? oregoniana Lesquereux. □ LaMotte, 1936b, 417; Ellensburg; Ellensburg, Wash.

Sapindus affinis? MacGinitie not Newberry, 1933, 60; Trout Creek: Trout Creek, Harney Co., Oreg.

Sapindus oregonianus LaMotte not Knowlton, 1935, 37, pl. 1, f. 2, 3, 5; pl. 2, f. 1-4; pl. 3, f. 2, 4, 5; Upper Cedarville: 49 Camp, Washoe Co., Nev.—1936, 136; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.

Cedrela browniana Arnold, 1936a, 1019; f. 11; Strode Ranch, Sucker Creek; McKenzie Ranch, Carter Creek, Malheur Co., Oreg.—1937, 95, pl. 7, f. 1, 2; Sucker and Carter Creek, Oreg.

Cedrela trainii Arnold, 1936a, 1018, f. 1, 2; Strode Ranch, Sucker Creek; McKenzie Ranch, Carter Creek, Malheur Co., Oreg.—1937, 95, pl. 6, f. 1-3, 6; Sucker and Carter Creeks, Oreg.

Apocynum indiana MacGinitie, 1933, 66, pl. 12, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.

Pinus monticolensis LaMotte not Berry, 1936, 110, pl. 5, f. 1, 4; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Pseudotsuga masoni LaMotte not MacGinitie, 1936, 111, pl. 2, f. 6, 7; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Pinus russelli LaMotte, 1936, 110, pl. 5, f. 2, 3; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.

Libocedrus sp., Dorf, 1936, 108, pl. 1, f. 4; Idaho: near Weiser, Idaho.

Cedrela pteriformis (Berry) R. W. Brown, 1937, 179, pl. 60, f. 9; Latah: Spokane, Wash. (including also *Pinus monticolensis* LaMotte not Berry, *Pinus russelli* LaMotte, *Pseudotsuga masoni* LaMotte not MacGinitie, *Libocedrus* sp., Dorf, and *Cedrela pteriformis* Arnold not Brown).

Cedrela pteriformis Arnold not R. W. Brown, 1937, 95, pl. 6, f. 4, 7-10; Sucker and Carter Creeks, Malheur Co., Oreg.

Cedrela preodorata Berry, 1925a, 102, pl. 11, f. 7, 8; Upper Forest: Trinidad, British West Indies.

Cedrela prewilcoxiana Berry, 1925, 61, pl. 12, f. 1; Ripley: Carroll Co., Tenn.

Cedrela pteriformis (Berry) R. W. Brown, 1935, 579, pl. 67, f. 21; Latah: Spokane, Wash.—1937, 179, pl. 52, f. 12; pl. 60, f. 5-8, 10; Latah: Spokane, Wash.—1937c, 513; Latah: Spokane, Wash.

Carpolithus pteriformis Berry, 1929f, 264, pl. 60, f. 5; Latah: Vera and Spokane, Wash.

Gordonia pteriformis (Berry) Berry, 1929n, 431; Latah: Spokane and Vera, Wash.

Umbellularia dayana Berry (part) not Knowlton, 1929f, 260, pl. 58, f. 4; Latah: Coeur d'Alene, Idaho; Spokane, Wash.

Sapindus armstrongi Berry, 1929f, 254, pl. 63, f. 14; Latah: Spokane, Wash.

Cassia spokaneensis Berry, 1929f, 253, pl. 63, f. 18; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.

Cedrela pteriformis Arnold not R. W. Brown=*Cedrela oregoniana* (Lesquereux) R. W. Brown.

Cedrela pteriformis (Berry) R. W. Brown (part)=*Cedrela merrilli* (Chaney) R. W. Brown.

Cedrela pteriformis (Berry) R. W. Brown (part)=*Cedrela oregoniana* (Lesquereux) R. W. Brown.

Cedrela? tertiaria Berry, 1925a, 103, pl. 5, f. 4; pl. 6, f. 2; Siparia and Forest: Trinidad, British West Indies.

Cedrela trainii Arnold=*Cedrela oregoniana* (Lesquereux) R. W. Brown.

CEDRIPITES Wodehouse, 1933a, 490. Genotype: *C. eocenicus* Wodehouse.

Cedripites eocenicus Wodehouse, 1933a, 490, f. 13; Green River: Parachute Creek, Garfield Co., Colo.

CEDRITES R. W. Brown, 1935a, 445. Genotype: *C. primevus* R. W. Brown.

Cedrites primevus R. W. Brown, 1935a, 445, text-f. 11; Potomac: west branch of Anacostia River, Md.

Cedroxylon nordenskiöldi Mathiesen, 1932, 35-47, pl. 1, text-f. 11-17; Turner Sound, east Greenland.

Cedroxylon orvini Høeg, 1931, 377, pl. 4, f. 5; pl. 5, f. 6-8; pl. 6-8; text-f. 2-5; Myggbukta, east Greenland.

Cedroxylon sp. Miner, 1935, 591; Disko Isl., west Greenland.

Cedroxylon sp. Miner, 1935, 592; Disko Isl., west Greenland.

Cedroxylon sp. Miner, 1935, 619, pl. 24, f. 17-20; Ft. Union: Bear Creek, Carbon Co., Mont.

Celastrinites artocarpidioides Lesquereux. □ Knowlton, 1930, 100; Denver: Golden, Colo.

Celastrinites populifolius Knowlton, 1930, 100, pl. 40, f. 1; pl. 45, f. 11; Denver: Golden, Colo.

Populus ungeri Lesquereux (part), 1888, 46; Denver: Golden, Colo.

CELASTROCARPUS Berry, 1930, 97. Genotype: *C. eocenicus* Berry.

Celastrorcarpus eocenicus Berry, 1930, 97, pl. 25, f. 26-27; Holly Springs: Saulsbury Station, Hardeman Co.; Laconia, Fayette Co., Tenn.

Celastrophyllum brittonianum Hollick. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

Celastrophyllum carolinensis Berry. □ Berry, 1913a, 572; Tuscaloosa: Snow Plantation, Ala.—1925, 63; Ripley: Carroll Co., Tenn.

Celastrophyllum cassinoides Berry, 1925, 65, pl. 12, f. 11; Ripley: Henry Co., Tenn.

Celastrophyllum columbianum Berry, 1924, 69, pl. 12, f. 4; Yegua: Columbia, Caldwell Parish, La.

- Celastrophyllum crenatum* Heer.□Berry, 1913a, 572; Tuscaloosa: near Cottondale and Snow Plantation, Ala.—1920e, 404; Black Creek: North Carolina.
- Celastrophyllum cretaceum* Lesquereux.□Gress, 1922, 313; Dakota: Ellsworth Co., Kans.
- Celastrophyllum decurrens* Lesquereux.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.
- Celastrophyllum emarginatum* R. W. Brown, 1929, 289, pl. 74, f. 2; Green River: northwest of De Beque, Colo.
- Celastrophyllum grandifolium* Newberry.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottondale, Ala.
- Celastrophyllum gymindoides* Berry, 1924, 68, pl. 12, f. 3; Lisbon: Newton, Newton Co., Miss.
- Celastrophyllum lesquereuxii* R. W. Brown, 1929, 289, pl. 74, f. 1; Green River: northwest of De Beque, Colo.
- Celastrophyllum minimum* Berry, 1925, 64, pl. 12, f. 7; Ripley: Henry Co., Tenn.
- Celastrophyllum newberryanum* Hollick.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.
- Celastrophyllum* cf. *newberryanum* Hollick. White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.
- Celastrophyllum perryi* Berry, 1925, 65, pl. 12, f. 12; Ripley: Henry Co., Tenn.
- Celastrophyllum pugetensis* Berry, 1926d, 112, pl. 12, f. 2; Kitsilano, British Columbia.
- Celastrophyllum ripleyanum* Berry, 1925, 64, pl. 12, f. 8-10; Ripley: Henry and Carroll Cos., Tenn.—1928f, 442; Ripley: Carroll Co., Tenn.
- Celastrophyllum undulatum* Newberry.□Berry, 1913a 572; Tuscaloosa: near Cottondale, Ala.—1920e, 404; Black Creek, N. C.
- Celastrophyllum variabilis* Berry, 1925, 65, pl. 13, f. 1; Ripley: Henry Co., Tenn.
- Celastrophyllum?* sp., Bell, 1932, 220; Dunvegan: Peace River Valley, British Columbia.
- Celastrus bolivarensis* Berry, 1930, 97, pl. 29, f. 2; Holly Springs: Bolivar, Hardeman Co., Tenn.
- Celastrus borealis* Heer.□Hollick, 1936, 132, pl. 74, f. 2, 3; Nenana Coal Field, Alaska.
- Celastrus comparabilis* Hollick, 1936, 132, pl. 75, f. 1a, 2b; west shore of Yakutat Bay; north bank Yukon River, Drew's mine, central Yukon region, Alaska.
- Celastrus curvinervis* Ward=*Aralia taurinensis* (Ward) Sanborn.
- Celastrus dignatus* Knowlton=*Amelanchier dignatus* (Knowlton) R. W. Brown.
- Celastrus fernquisti* Knowlton=*Betula fairii* Knowlton.
- Celastrus ferrugineus* Ward.□Sanborn, 1935, 24, pl. 9, f. 1; Comstock: Comstock, Douglas Co., Oreg.—Berry, 1935, 43; Middle Ravenscrag: Locs. P: 3-30, P 4-30, southern Saskatchewan.

Celastrus serratus Knowlton.□

Celastrus fraxinifolius Lesquereux=*Hydrangea fraxinifolia* (Lesquereux) R. W. Brown.

Celastrus gaudini Lesquereux.□Knowlton, 1930, 99, pl. 45, f. 3, 4, 9; Denver: Golden, Colo.

Parrotia fagifolia Lesquereux not Ettingshausen, 1888, 52; Denver: Golden, Colo.

Celastrus herendeenensis Hollick, 1930, 99, pl. 76, f. 1-4; Chignik: Alaska Peninsula.

Celastrus lacoiei Berry not Lesquereux=*Arbutus idahoensis* (Knowlton) R. W. Brown.

Celastrus minor Berry. □ Berry, 1930, 97, pl. 14, f. 17; Holly Springs: Holly Springs, Miss.; Mill Creek and Whiteville, Hardeman Co.; McKenzie, Carroll Co.; Grable Pit, Henry Co.; Tenn.; Grenada: Cottage Grove, Henry Co.; Somerville and Moses Hall, Williston, Fayette Co., Tenn.

Celastrus ovatus Ward=*Aralia taurinensis* (Ward) Sanborn.

Celastrus parvifolius Jennings, 1920, 422, pl. 31, f. 2, 2a; Missoula, Mont.

Celastrus pseudocurvinervis Hollick, 1930, 99, pl. 76, f. 5; Chignik: Alaska Peninsula.

Celastrus serratus Knowlton=*Celastrus ferrugineus* Ward.

Celastrus spokaneensis Berry, 1929f, 255, pl. 64, f. 5; Latah: Spokane, Wash.—Hoffman, 1932, 737; Douglas Canyon, Wash.

Celastrus taurinensis Ward=*Aralia taurinensis* (Ward) Sanborn.

Celastrus veatchi Hollick. □ Berry, 1930, 97, pl. 14, f. 20, 21; Holly Springs: La Grange, Fayette Co.; Bolivar, Hardeman Co., Tenn.

Celastrus wardii Knowlton & Cockerell=*Aralia taurinensis* (Ward) Sanborn.

Celastrus sp., Dorf, 1936, 120, pl. 3, f. 7; Idaho: near Weiser, Idaho.

Celastrus sp.?, Heer, 1868a, 65.—Hollick, 1936, 133; Port Graham, Kenai Peninsula, Alaska.

Celtis besseyi Barbour=*Celtis willistoni* (Cockerell) Berry.

Celtis brevifolia Lesquereux=*Ficus schimperii* Lesquereux.

Celtis cretacea Berry, 1925, 47, pl. 7, f. 2; Ripley: Carroll Co., Tenn.

Celtis debequensis R. W. Brown=*Celtis mccoshii* Lesquereux.

Celtis hatcheri Chaney=*Celtis willistoni* (Cockerell) Berry.

Celtis hesperius Berry=*Platanus dissecta* Lesquereux.

Celtis kansana Chaney & Elias, 1936b, 38, pl. 5, f. 1-5; Ogallala: Beaver Co., Okla.; Logan Co., Kans.

Celtis mccoshii Lesquereux. □ Brown, 1934, 56; Green River: Locs. as cited by authors.

Celtis debequensis R. W. Brown, 1929, 284, pl. 72, f. 1; Green River: northwest of De Beque, Colo.

Celtis microendocarpica Brooks=*Biorbia fossilia* (Berry) Cockerell.

Celtis mississippiensis Bosc. Berry 1919b, 10; Pleistocene: McNairy Co., Tenn.

Celtis mississippiensis reticulata Sargent. Frost, 1927, 82; Pleistocene: Rancho La Brea, Calif.

Celtis obliquifolia Chaney, 1925 c, 53, pl. 1, f. 1, 3, 5; Bridge Creek: Bridge Creek near Mitchell; Gray Ranch, Crooked River Basin, Oreg.—1927a, 115, pl. 13, f. 12; Bridge Creek: Gray Ranch and Ream's Ranch, Crooked River Basin, Oreg.—Brown, R. W., 1937, 173, pl. 48, f. 6; Bridge Creek: Bridge Creek, Oreg.

Ficus planicostata? Newberry not Lesquereux, 1898, 88, pl. 46, f. 1; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Celtis, cf. *obliquifolia* Chaney. Arnold, 1935, 379; Trout Creek: Trout Creek, Harney Co., Oreg.

Celtis occidentalis Linné. Berry, 1909d, 435.—1926b, 111, pl. 54, f. 3; Chowan: Neuse River, Wayne Co., N. C.—Hollick, 1931, 42, pl. 4, f. 1, 2, 3a; Pleistocene: Colebrooke, N. H.

Celtis phenacodorum (Cockerell) Berry=*Celtis willistoni* (Cockerell) Berry.

Celtis willistoni (Cockerell) Berry, 1928a, 1-5; Loup Fork: Long Island, Kans.—Elias, 1932, 359, pl. 29, f. 8a-c; Ogallala: Kans. and Colo.

Tithymalus willistoni Cockerell.□

Tithymalus phenacodorum Cockerell.□

Celtis besseyi Barbour, 1925, 89, f. 47, 51; Nebraska.

Celtis hatcheri Chaney, 1925c, 54, pl. 1, f. 8; White River: Lower Oreodon Beds, Big Badlands, S. Dak.—Berry, 1928a, 1-5; White River: S. Dak.

Celtis phenacodorum (Cockerell) Berry, 1928a, 1-5; Clark's Fork Basin, Wyo.

Cephalanthus occidentalis Linné.□Berry, 1934f, 482; Pleistocene: Dayton, Tenn.

Cephalotaxites insignis Heer=*Pagiophyllum ambiguum* (Heer) Seward.

Cephalotaxopsis electilis Hollick, 1930, 55, pl. 24, f. 1; Melozi: Lower Yukon, Alaska.

Cephalotaxopsis heterophylla Hollick, 1930, 52, pl. 10, f. 2b; pl. 15, f. 1-11; pl. 16, f. 6b; pl. 17, f. 4; pl. 19, f. 8, 11; pl. 28, f. 1; Melozi, Nulato, Kaltag: Lower Yukon, Alaska.

Cephalotaxopsis intermedia Hollick, 1930, 54, pl. 17, f. 1-3; Chignik: Alaska Peninsula; Melozi: Lower Yukon, Alaska.

Cephalotaxopsis magnifolia Fontaine.□Berry, 1929k, 51; Lower Blairmore: southwest Alberta.

Cephalotaxopsis magnifolia successiva Hollick, 1930, 53, pl. 7, f. 9c; pl. 16, f. 1a, 2, 3a, 4-6a; pl. 20, f. 4b; Melozi, Nulato, Kaltag: Lower Yukon, Alaska.

Cephalotaxopsis microphylla laxa Hollick, 1930, 54, pl. 5, f. 5b; pl. 7, f. 10b; pl. 17, f. 5; pl. 19, f. 1-3, 9, 10, 12; pl. 29, f. 6c; Chignik: Alaska Peninsula; Melozi: Lower Yukon, Alaska; Seventy Mile Creek: Upper Yukon; Kaltag: Lower Yukon, Alaska.

Cephalotaxopsis ramosa Fontaine.□Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

Cephalotaxospermum carolinianum Berry.□Berry, 1920e, 398; Black Creek: N. C.

Cephalotaxus californica Potbury, 1935, 61, pl. 1, f. 2; La Porte, Plumas Co., Calif.

Ceratopetalum americanum Ettingshausen=*Ulmus brownellii* Lesquereux.

CERATOPHYLLUM Linné.

Ceratophyllum demersum Linné. Berry, 1924a, 20, pl. 1, f. 33-35; Pleistocene: Washington, D. C.

Ceratophyllum fossilum Berry, 1927c, 10, pl. 1, f. 2-4; Esmeralda: Mineral Co., Nev.

Ceratophyllum incertum Berry, 1930, 71, pl. 33, f. 7-8; Holly Springs: Somerville, Fayette Co., Tenn.

Ceratophyllum praedemersum Ashlee, 1932, 78, text-f. 2; Latah: White Bird, Idaho—Brown, R. W., 1937, 175, pl. 1, f. 2; Latah: Spokane, Wash.

CERATOZAMIA Brongniart.

Ceratozamia wrightii Hollick, 1932, 169, pl. 1; Hamilton Bay, Alexander Archipelago, Alaska.—1936, 42, pl. 12, f. 6, Hamilton Bay, Alexander Archipelago, Alaska.

CERCIDIPHYLLUM Siebold & Zuccarini.

Cercidiphyllum crenatum (Unger) R. W. Brown, 1935, 575, pl. 68, f. 1, 6, 8-10; Latah: Republic, Wash.—LaMotte, 1936, 126; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Ellensburg: Ellensburg: Montesano: near Aberdeen, Wash.—1936b, 417; Ellensburg: Ellensburg, Wash.—Brown, R. W., 1937, 175; Mascall:

Cercidiphyllum crenatum—Continued.

John Day Basin, Oreg.—1937c, 509, text-f. 9; Bridge Creek: 9 miles north of Mitchell, Oreg.

Dombeyopsis crenata Unger, 1850, Gen. et Sp. Pl. Foss., 448.

Grewia crenata (Unger) Heer, 1859. Fl. Tert. Helv., vol. 3, 42, pls. 109, 110.—1876, Fl. Foss. Arct., vol. 4, 84, pl. 19, f. 12a-14.—Newberry, 1898, 120, pl. 46, f. 2; pl. 48, f. 2, 3; Bridge Creek: Grant Co., Oreg.—Knowlton, 1902, 80; Mascall: Van Horn's Ranch, John Day Basin, Oreg.—Penhallow, 1908a; Horsefly River, British Columbia—Chaney, 1927a, 133; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Hollick, 1936, 145, pl. 84, f. 1; south bank Yukon River above Rampart, central Yukon region, Alaska.

Grewia crenulata Heer, 1876, Fl. Foss. Arct., vol. 4, 85, pl. 16, f. 96; pl. 19, f. 16, 17.

Grewia obovata Heer, 1876, Fl. Foss. Arct., vol. 4, 86, pl. 59, f. 15.

Grewia auriculata Lesquereux.□

Paliurus columbi Lesquereux not Heer, 1888, 16; Mascall: Van Horn's Ranch, John Day Basin, Oreg.

Cassia sp.?, Newberry, 1898, 113, pl. 46, f. 10; Bridge Creek: Bridge Creek, Grant Co., Oreg.—Knowlton, 1902, 69; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Cercidiphyllum crenatum Chaney & Elias not R. W. Brown=*Populus lamottei* Chaney & Elias.

Cercidium hesperium Ashlee=*Cercis spokaneensis* Knowlton.

Cercis canadensis Linné.□Berry, 1926b, 114, pl. 57, f. 10, 11; Wycomico: Wellton, Northampton Co., N. C.

Cercis coloradensis Knowlton, 1930, 99, pl. 45, f. 5; Dawson: near Colorado Springs, Colo.

Cercis eocenica Lesquereux.□Knowlton, 1922, 148; Laramie: Erie, Colo.

Cercis idahoensis Berry (part)=*Vitis washingtonensis* (Knowlton) R. W. Brown.

Cercis idahoensis Berry (part)=*Cercis spokaneensis* Knowlton.

Cercis oregonensis Chaney, 1920a, 177, pl. 16, f. 3, 4; Eagle Creek: Multnomah Co., Oreg.

Cercis parvifolia Lesquereux.□Brown, R. W., 1937, 177, pl. 54, f. 2-5; Florissant: Florissant, Colo.

Paliurus haydenii Cockerell.□

Paliurus orbiculatus Lesquereux not Saporta, 1883, 188, pl. 38, f. 12; Florissant, Florissant, Colo.

Cercis spokaneensis Knowlton, 1926, 43, pl. 29, f. 9; Latah: Spokane, Wash.—LaMotte, 1936, 132, pl. 10, f. 4; Upper Cedarville; 49 Camp, Washoe Co., Nev.—Brown, R. W., 1937, 177, pl. 54, f. 8-12; Latah: Spokane, Wash.; White Bird, Idaho.

Meibomites lucens Knowlton, 1926, 44, pl. 28, f. 10; Latah: Spokane, Wash.—Hoffman, 1932, 737; Douglas Canyon, Wash.

Ficus? *washingtonensis* Knowlton, 1926, 40, pl. 25; pl. 26, f. 1-3; Latah: Spokane, Wash.; Coeur d'Alene, Idaho—Berry, 1929f, 248, pl. 54, f. 1-3; pl. 55, f. 5, 6; pl. 62: Latah: Republic, Vera and Spokane, Wash.—1931a, 34: Latah: Grand Coulee, Wash.—Hoffman, 1932, 737, Douglas Canyon, Wash.—Berry, 1934, 111; Latah: near Weiser; Edward's Ranch, Stanley Hill, Coeur d'Alene, Idaho.

Cercis sp., Chaney, 1927a, 125, pl. 15, f. 5; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.

Meibomites knowltoni Berry, 1929f, 253, pl. 56, f. 7; Latah: Spokane, Wash.

Cercis idahoensis Berry, 1930b, 240, text-f. 1; pl. 9, f. 1-3 only; Latah: Washington and Idaho—1934, 114 (not pl. 21, f. 1); pl. 22, f. 1-3 only; pl. 23, f. 5, 6 only; Latah: east of White Bird, Idaho.

Cercis sp., Ashlee, 1932, 80, pl. 1, f. 7 not 7a; Latah: Oviat Creek, Elk River, Idaho.

Cercidium hesperium Ashlee, 1932, 80, pl. 2, f. 9; Latah: Elk River District, Idaho.

Gleditschia praeaequatica Ashlee, 1932, 80, pl. 2, f. 8; Latah: Elk River, Idaho.

Meibomites, cf. *lucens*, Brooks, 1935, 296, pl. 19, f. 1-3; Sucker Creek: Ballantyne Ranch, near Homedale, Idaho.

Cercis tenuinervis (Lesquereux) R. W. Brown, 1934, 58; Green River: Alkali Station, Wyo.

Ficus tenuinervis Lesquereux. □ Knowlton, 1923, 162; Green River: Alkali Station, Wyo.

Cercis wilcoxiana Berry. □ Berry, 1930, 84; Holly Springs: Lamar, Marshall Co., Miss.; La Grange, Fayette Co., Tenn.

Cercis sp., Ashlee (part), 1932, 80, pl., f. 1-6; Latah: White Bird, Juliaetta, Oviat Creek, Idaho.

Cercis sp., Ashlee (part) = *Cercis spokaneensis* Knowlton.

Cercis sp., Chaney, 1927a, = *Cercis spokaneensis* Knowlton.

Cercocarpus antiquus Lesquereux. □ Oliver, 1934, 22; Mascall: Tipton, Oreg.—Dorf, 1936, 118; Idaho: near Weiser, Idaho—Brown, R. W., 1937, 176, pl. 57, f. 6; Mascall: Tipton, Oreg.

Cercocarpus cuneatus Dorf, 1930, 98, pl. 12, f. 3; Pliocene: Calabazas Canyon, Calif.—Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.—1937, 175, pl. 4, f. 4; Mt. Eden: near Beaumont, Calif.

Cercocarpus harneyensis Arnold, 1937, 90, pl. 4, f. 5; Trout Creek, Harney Co., Oreg.

Cercocarpus praeledifolius Berry, 1929f, 252, pl. 64, f. 7; Latah: Spokane, Wash.—Brown, R. W., 1937, 177, pl. 56, f. 13; Latah: Spokane, Wash.

Cercocarpus ravenscragensis, Berry, 1930c, 23, pl. 5, f. 6; Ravenscrag: Cypress Hills, Canada.

Cercocarpus n. sp., Berry, 1930, 64; probably = *C. ravenscragensis* Berry; Ravenscrag: southern Alberta.

CHAMAEBATIA Benth.

Chamaebatia prefoliolosa R. W. Brown, 1935, 578, pl. 69, f. 4; Latah: Salmon, Idaho.

CHAMAEBATIARIA Maximowicz.

Chamaebatiaria creedensis R. W. Brown, 1937, 177, pl. 57, f. 8, 9; Creede: Creede, Colo.

CHAMAECISTUS S. F. Gray.

Chamaecistus procumbens (Linné) Kuntze. ?Hollick, 1931, 44; Pleistocene: Colebrook, N. H.

Chamaecyparis gilmorea LaMotte, 1936, 112, pl. 3, f. 4, 5; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.

CHAMAEDAPHNE Moench.

Chamaedaphne calyculata (Linné) Moench. Berry & Johnson, 1922a, 139, pl. 2, f. 8; Pt. Grays: Vancouver, British Columbia.

CHAMAEDOREA Willdenow. □ Noé, 1936a, 441.

Chamaedorea? coloradensis Knowlton, 1930, 40, pl. 10, f. 3; Middle Park: Middle Park, Grand Co., Colo.

Chamaedorea danai (Lesquereux) Berry. □

Calamopsis danai Lesquereux. □ Lesquereux, 1871, 381; Wilcox: Mississippi.

Chaetochloa sp., Berry. □ Berry, 1926b, 106; Chowan: Neuse River, Wayne Co., N. C.

Chara brewsterensis Groves, 1925, 12, f. 1; Brewster Co., Tex.

Chara gardnerae Groves, 1925, 14, f. 3; Midway: Bastrop Co., Tex.

Chara texensis Groves, 1925, 13, f. 2; Brewster Co., Tex.

Chara verticillata Peck, 1937, 84, pl. 14, f. 30-33; Morrison: near Mayoworth, Wyo.

Chara voluta Peck, 1937, 85, pl. 14, f. 16-19; Morrison: northwest of Rawlins, Wyo.

Chara woodringi Berry, 1922, 3, text-f. 1; Haiti.

CHEILANTHES Swartz.

Cheilanthes eocenica Berry, 1930, 50, pl. 48, f. 35; Holly Springs: Puryear Co., Tenn.

Cheirolepis sp., Lozano, 1916, 18, pl. 9, f. 11, 12; Liassic: Huauchinango, Puebla, Mexico.

CHENOPODIUM (Tournefort) Linné.

Chenopodium sp., Berry, 1924a, 19, pl. 1, f. 24; Pleistocene: Washington, D. C.

CHITOSPERMUM Harris, 1935, 134. Genotype: *C. stereococcus* Harris.

Chitospermum stereococcus Harris, 1935, 134, pl. 29, f. 13; Lepidopteris Zone: Scoresby Sound, east Greenland.

Seed F, Harris 1926, 129, text-f. 32e-f; Rhaetic: Scoresby Sound, east Greenland.

Chondrites dictyotoides Hollick, 1928, 181, pl. 51, f. 1; Collazo: Porto Rico.

Chondrites heerii Eichwald. □? Hollick, 1936, 34, pl. 108, f. 1; Whitney Isl.; Kachemak Bay, Alaska.

Chondrites sp., Hollick, 1931a, pl. 1, f. 1; Newark Ser.: Staten Isl., N. Y.

Chondrites sp., Hollick, 1931a, pl. 1, f. 2; Newark Ser.: Staten Isl., N. Y.

CHORIZANTHE Robert Brown.

Chorizanthe pungens Benth. Chaney & Mason, 1933a, 60; Pleistocene: Carpinteria, Santa Barbara Co., Calif.

Chrysobalanus coloradensis Knowlton, 1930, 95, pl. 40, f. 2, 3; pl. 43, f. 3, 5, 7-9; pl. 44, f. 1, 2; Dawson: Mosby, Colo.; Denver; Golden, Colo.

Cissus spectabilis, Lesquereux not Heer, 1888, 52; Denver: Golden, Colo.

Chrysobalanus ellipticus Chaney & Sanborn, 1933, 77, pl. 20, f. 4-8; Fisher: Goshen, Oreg.

Chrysobalanus eocenica Berry. □ Berry, 1930, 73, pl. 12, f. 2-4; Grenada: Somerville, Fayette Co., Tenn.; Holly Springs: Taylor Farm, Chester Co., Tenn.

Chrysobalanus icaco Linné. Berry, 1934c, 238, text-f. 1: Asphalt Pit: east of Sabanilla de las Palmas, Matanzas Province, Cuba.

Chrysobalanus lacustris R. W. Brown, 1929, 286, pl. 72, f. 8; Green River: northwest of De Beque, Colo.

Chrysobalanus? lanceolatus Knowlton, 1930, 96, pl. 44, f. 5; Dawson: Mosby, Colo.

Chrysophyllum cahobaensis Berry, 1922, 8, pl. 1, f. 9; Artibonite Group: Haiti.

Chrysophyllum comparabile Hollick, 1928, 220, pl. 84, f. 1: Collazo: P. R.

Chrysophyllum conforme Potbury, 1935, 77, pl. 12, f. 1; La Porte, Plumas Co., Calif.

Chrysophyllum parvum Berry, 1925, 84, pl. 19, f. 7, 8; Ripley: Carroll Co., Tenn.

Chrysophyllum preoliviforme Berry, 1924, 194, pl. 63, f. 3, 4; Fayette: Mossy Creek, Brazos Co., Tex.—Ball, 1931, 169, pl. 34, f. 1; Fayette: Boggy Creek, Brazos Co., Tex.

Chrysophyllum pseudargenteum Hollick, 1928, 220, pl. 83, f. 1: Collazo: P. R.

Chrysophyllum pseudargenteum oblongum Hollick, 1928, 220, pl. 83, f. 3-5; Collazo: P. R.

Chrysophyllum sp., F. M. Scott, 1926, 407; Tesla, Calif.

CHRYSOTHAMNUS Nuttall.

Chrysothamnus sp. Lauder milk & Munz, 1934a, 37; Pleistocene?: Gypsum Cave near Las Vegas, Nev.

CHRYSOTHECA Miner, 1935, 590. Genotype: *C. diskoensis* Miner.

Chrysotheca diskoensis Miner, 1935, 590; Disko Isl., west Greenland.

Cinchonidium ovale Lesquereux. □ Cross, 1895, 211; Middle Park: Middle Park, Grand Co., Colo.

CINNAMOMOIDES Seward, 1925, 253.—1926, 123. Genotype: *C. newberryi* (Berry) Seward.

Cinnamomoides heerii (Lesquereux) Seward, 1926, 124, text-f. 28; Nugsuak, west Greenland.

Daphnogene heerii Lesquereux.□

Cinnamomum heerii (Lesquereux) Lesquereux.□Newberry, 1863, 519: Cretaceous?: Orcas Isl., Wash.—Lesquereux, 1871, 379; Dakota: Fort Ellsworth, Kans.—Berry, 1920e, 404; Black Creek: North Carolina.

Sassafras acutilobum Lesquereux.□Newberry, 1895, 87, pl. 25, f. 1–10; pl. 26, f. 2–6; Raritan: Woodbridge, N. J.—Berry, 1913a, 572; Tuscaloosa: near Cottondale, Ala.—1920e, 404; Black Creek: Bladen Co., N. C.—Gress, 1922, 301; Dakota: Ellsworth Co., Kans.

Paliurus membranaceus Lesquereux.□Lesquereux, 1871, 380; Dakota: Decatur, Nebr.

Menispermites sp., Dawson.□

Cinnamomum membranaceum (Lesquereux) Hollick.□Berry, 1922c, 174; Woodbine: Arthur's Bluff, Lamar Co., Tex.

Cinnamomoides newberryi (Berry) Seward, 1925, 253, pl. 100, f. 29; west Greenland.

Cinnamomum newberryi Berry.□Berry, 1913a, 570; Tuscaloosa: near Glen Allen; Shirleys Mill; near Cottondale, Ala.—1922c, 173, pl. 39, f. 3; Woodbine: Arthur's Bluff, Tex.—1925, 75, pl. 16, f. 5; Ripley: Chester and Carroll Cos., Tenn.

Cinnamomum intermedium Newberry.□

Cinnamomum sezannense, Heer not Watelet, 1882, 77, pl. 19; pl. 33, f. 12, 13.—1883, 30, pl. 61, f. 1a.—Lesquereux, 1892, 107, pl. 12, f. 6, 7.—Dawson, 1894, 64, pl. 13, f. 58.—Hollick 1894, 53, pl. 180, f. 5, 7.—Bartsch, 1896, 180; Dakota: Holman Cut, Woodbury Co., Iowa.—Penhallow, 1902a, 46.—Hollick, 1903 b, 50.

Cinnamomoides sp. cf. **Cinnamomum mississippiensis** Lesquereux. Seward & Conway, 1935a, 31, text-f. 31; Patoot: west Greenland.

Cinnamomum acrodromum Potbury, 1935, 65, pl. 5, f. 6, 8; La Porte, Plumas Co., Calif.

Cinnamomum affine Lesquereux.□Lesquereux, 1871, 382; Raton?: Raton Pass; Marshall, Colo.—Berry, 1930, 114.—Ball, 1931, 63; Indio: Earle, Bexar Co., Tex.

Cinnamomum polymorphum Al. Braun.□Cross, 1895, 211; Middle Park: Middle Park, Grand Co., Colo.

Cinnamomum angustum Berry.□Berry, 1924, 78, 184, pl. 14, f. 6; pl. 35, f. 3, 4; Lisbon: Newton, Newton Co., Miss.; Barnwell: Phinizy Gully, Columbia Co., Ga.—Ball, 1931, 126, pl. 20, f. 8; Yegua: Turkey Creek, Brazos Co., Tex.

Cinnamomum bendirei Knowlton=**Philadelphia bendirei** (Knowlton) Chaney.

Cinnamomum buchii Heer?□Berry, 1930, 115; Wilcox: Coushatta, La.

Cinnamomum cinnamomeum (Rossmassler) Hollick, 1936, 115, pl. 64, f. 2; near Berg Lake, Yakutat-Copper River region, Alaska.

Phyllites cinnamomeifolia Brongniart, 1828, 200 (209), Prodrome d'hist. veg. foss. (Nomen nudum?).

Phyllites cinnamomeus Rossmassler, 1840, Beiträge zur Versteinerungskunde, vol. 1, 23, pl. 1, f. 1 (excl. f. 2–8).

Laurus cinnamoni formis (*Phyllites cinnamomiformis* Brongniart), C. F. W. Braun, Verzeichniss der in der Kreis-Naturellen-Sammlung zu Bayreuth befindlichen Petrefacten, 1840, 104. (Nomen nudum).

Ceanothus polymorphus Al. Braun, Neues Jahrb., 1845, 171. (equals *Rhamnus terminalis* Al Braun in Buckland, Geol. and Miner., vol. 1, 513, 1836. Nomen nudum).

Daphnogene cinnamomeifolia (Brongniart?) Unger, Synopsis plantarum fossilium, 1845, 227.

Daphnogene polymorpha (Al. Braun) Ettingshausen. K. K. geol. Reichsanstalt.

Daphnogene polymorpha (Al. Braun) Ettingshausen, K. K. geol. Reichsanstalt.

Cinnamomum polymorphum (Al. Braun) Heer, 1856, Fl. Tert. Helv., vol. 2, 88, pl. 93, f. 25–28; pl. 94, f. 1–26 (*Camphora polymorpha* Heer, Idem, 1855?, 112, pl. 1, f. 11 (part)).

- Cinnamomum dilleri* Knowlton. □ Knowlton, 1900d, 47, pl. 4, f. 1; Comstock, Oreg.—Sanborn, 1935, 18, pl. 4, f. 1, 3-4, 6-8; Comstock: Comstock, Douglas Co., Oreg.—Potbury, 1935, 66, pl. 5, f. 4, 5; LaPorte, Plumas Co., Calif.
- Cinnamomum dubiosum* Hollick, 1930, 83, pl. 45, f. 1; Melozi: Lower Yukon, Alaska.
- Cinnamomum ellipsoideum* Saporta & Marion. □ Bartsch, 1896, 180; Dakota: Holman Cut, Woodbury Co., Iowa.
- Cinnamomum ellipsoideum*, Heer not Saporta, 1883, 31, pl. 61, f. 2; west Greenland.—Seward, 1925, 245; specimen indeterminable.
- Cinnamomum ficoides* Hollick, 1936, 116, pl. 64, f. 1; head of north branch Russell Creek, Alaska Peninsula.
- Cinnamomum heerii* (Lesquereux) Lesquereux = *Cinnamomoides heerii* (Lesquereux) Seward.
- Cinnamomum hesperium* Knowlton. □ Berry, 1929j, 131; Frontier: near Cumberland, Wyo.
- Cinnamomum intermedium* Newberry = *Cinnamomoides newberryi* (Berry) Seward.
- Cinnamomum linifolium* Knowlton. □ Knowlton, 1930, 86, pl. 59, f. 3; Dawson: near Colorado Springs, Colo.
- Cinnamomum membranaceum* (Lesquereux) Hollick = *Cinnamomoides heerii* (Lesquereux) Seward.
- Cinnamomum mississippiensis* Lesquereux = *Ficus mississippiensis* (Lesquereux) Berry.
- Cinnamomum newberryi* Berry = *Cinnamomoides newberryi* (Berry) Seward.
- Cinnamomum newberryi ellipticum* Berry, 1925, 77, pl. 16, f. 7; Ripley: Carroll Co., Tenn.
- Cinnamomum newberryi lanceolatum* Berry, 1925, 76, pl. 16, f. 4; Ripley: Carroll Co., Tenn.
- Cinnamomum newberryi minimum* Berry, 1925, 77, pl. 16, f. 6; Ripley: Carroll Co., Tenn.
- Cinnamomum ovoides* Perkins. □ Berry, 1930, 114, pl. 19, f. 1; Holly Springs: Taylor Farm, Chester Co., Tenn.
- Cinnamomum paluxyense* Ball, 1937, 534, text-f. 5; Paluxy: near Stephenville, Erath Co., Tex.
- Cinnamomum* cf. *pedunculatum* Presl. LaMotte, 1935b, 53; Sooke: Muir Creek, Vancouver Isl., British Columbia.
- Cinnamomum polymorphum*, Al. Braun not Heer = *Cinnamomum affine* Lesquereux.
- Cinnamomum polymorphum*, Heer not Al. Braun = *Cinnamomum cinnamomeum* (Rossmäessler) Hollick.
- Cinnamomum praespectabile* Berry, 1925, 77, pl. 17, f. 4, 5; Ripley: Carroll Co., Tenn.
- Cinnamomum salicoides* Knowlton, 1924, 88, pl. 15, f. 2; Animas: Pagosa Quad., Colo.
- Cinnamomum scheuchzeri* Heer. □ Lesquereux, 1884, 12; near New Ulm, Minn.—Berry, 1926b, 51, pl. 10, f. 4; Alum Bluff, Liberty Co., Fla.
- Cinnamomum scheuchzeri*, Lesquereux (part) not Heer = *Ficus wyomingiana* Lesquereux.
- Cinnamomum sezannense* Watelet, 1866, Description des Plantes Fossiles du Bassin de Paris, 170, pl. 50, f. 2.—?Knowlton, 1930, 86, pl. 38, f. 7, 8; pl. 59, f. 2; Denver: 9 mi. east of Colorado Springs, Colo.
- Cinnamomum sezannense*, Heer not Watelet = *Cinnamomoides newberryi* (Berry) Seward.

Cinnamomum spectabile Heer. □ Berry, 1924, 184; Jackson: near New Edinburgh, Cleveland Co., Ark.—Ball, 1931, 163, pl. 22, f. 6; Jackson: Raney Hdr., Brazos Co., Tex.

Cinnamomum vera Berry = *Melastomites verus* (Berry) Berry.

Cinnamomum sp., Berry, 1924, 185; Fayette: near Miraflores, Webb Co., Tex.—Ball, 1931, 163; Fayette: near Miraflores, Brazos Co., Tex.

Cinnamomum? sp., Knowlton, 1917a, Berry, 1929j, 131; Frontier: near Cumberland, Wyo.

Cinnamomum sp., Knowlton, 1930, 87, pl. 39, f. 1; Denver: Golden, Colo.

Cinnamomum? sp., Knowlton, 1930, 87, pl. 36, f. 4; Dawson: near Colorado Springs, Colo.

Cinnamomum sp., F. M. Scott, 1926, 406; Tesla, Calif.

Cissampelos dubiosa Hollick = *Cebatha heteromorpha* (Knowlton) Berry.

Cissampelos rotundifolia Potbury, 1935, 64, pl. 3, f. 2; La Porte, Plumas Co., Calif.

Cissites affinis (Lesquereux) Lesquereux = *Platanus? newberryana* Heer.

Cissites asymmetricus Berry, 1930, 103, pl. 35, f. 1-5; Grenada: Somerville, Fayette Co., Tenn.

Cissites collinsi Berry, 1930, 102, pl. 17, f. 1-6; Holly Springs: Mill Creek, Burnett's Store, Bolivar, Hardeman Co., Tenn.

Cissites comparabilis Hollick, 1930, 105, pl. 79, f. 9-10; Melozi, Nulato: Lower Yukon, Alaska.

Cissites crispus Velenovsky. □ Berry, 1925, 70; Ripley: McNairy Co., Tenn.

Cissites dentato-lobatus Lesquereux = *Platanophyllum insigne* (Heer) Seward.

Cissites formosus Heer = *Platanophyllum insigne* (Heer) Seward.

Cissites formosus magothiensis Berry = *Platanophyllum insigne* (Heer) Seward.

Cissites harkerianus (Lesquereux) Lesquereux. □

Sassafras harkerianum Lesquereux. □ Gress, 1922, 304; Dakota: Ellsworth Co., Kans.

Cissites insignis Heer = *Platanophyllum insigne* (Heer) Seward.

Cissites obtusum Lesquereux = *Araliopsoides cretacea salisburiaefolia* (Lesquereux) Berry.

Cissites panduratus Knowlton = *Platanophyllum insigne* (Heer) Seward.

Cissites pseudoplatanus Hollick, 1930, 105, pl. 80, f. 2; Kaltag: Lower Yukon, Alaska.

Cissites salisburiaefolius (Lesquereux) Lesquereux = *Araliopsoides cretacea salisburiaefolia* (Lesquereux) Berry.

Cissites yukonensis Hollick, 1930, 106, pl. 79, f. 11; Melozi: Lower Yukon.

Cissus? cannoni Knowlton, 1930, 113, pl. 47, f. 5; Middle Park: Middle Park, Grand Co., Colo.

Cissus cissoides (Saporta) Hollick, 1936, 143, pl. 80, f. 2; Eska Creek, Matanuska coal field, Alaska.

Vitigene cissoides Saporta, 1865, Ann. sci. nat., ser. 5, Botanique, vol. 3, 48; Études sur la végétation du sud-est de la France à l'époque tertiaire, vol. 2, pt. 1, 44, 1866.

Cissus primaeva Saporta, 1868, Soc. géol. France Mém., vol. 8, no. 3, 388 (100), text-f. 16, pl. 31 (10), f. 10, 11; pl. 32 (11), f. 1, 2.

Cissus coloradensis Knowlton & Cockerell. □ Knowlton, 1930, 112, pl. 46, f. 6; pl. 50, f. 2; Dawson: Sedalia; Denver: Golden, Colo.

Cissus corylifolia Lesquereux. □ Knowlton, 1930, 113, pl. 47, f. 4; pl. 48, f. 1; pl. 49, f. 1; Denver: Golden, Colo.

Cissus grossedentata Knowlton. □ Knowlton, 1930, 112, pl. 48, f. 2; pl. 51, f. 10; Dawson: Calhan, Colo.

Cissus hesperia Knowlton, 1930, 112, pl. 47, f. 1; Dawson: Sedalia; Denver: Golden; Raton: Abeton, Colo.

Cissus lesquereuxii Knowlton. □ Knowlton, 1930, 114, pl. 48, f. 3, 4; Dawson: Calhan; Denver: Golden, Colo.

Cissus tricuspidata (Heer) Lesquereux, 1888, 51; Denver: Golden, Colo.
Vitis tricuspidata Heer. □ Cross, 1895, 211; Middle Park: Middle Park, Colo.

Cissus lobato-crenata Lesquereux. □ Lesquereux, 1888, 52; Denver: Golden, Colo.—Cross, 1895, 211; Middle Park: Middle Park, Colo.—Knowlton, 1930, 114, pl. 49, f. 3, 4; Dawson: Ramah, Sedalia, Colo.; Middle Park: Middle Park, Grant Co., Colo.

Cissus obovata Knowlton, 1930, 114, pl. 49, f. 5; Denver: Golden, Colo.

Cissus parrottiaefolia Lesquereux (part), 1888, 52; Denver: Golden, Colo.

Cissus parrottiaefolia Lesquereux (part). □ Lesquereux, 1888, 52; Denver: Golden, Colo.—Knowlton, 1923, 170; Green River: Green River, Wyo.

Cissus parrottiaefolia Lesquereux (part) = *Cissus obovata* Knowlton.

Cissus primaeva Saporta = *Cissus cissoides* (Saporta) Hollick.

Cissus primaeva, Lesquereux not Saporta = *Ficus denveriana* Cockerell.

Cissus pterospermoides Hollick, 1936, 143, pl. 80, f. 1; Eska Creek, Matanuska coal field, Alaska.

Cissus pulcherrima Ball, 1931, 92, pl. 14, f. 1-3, 5; Indio: Barton's Ranch, Bastrop Co., Tex.

Cissus spectabilis, Lesquereux not Heer = *Chrysobalanus coloradensis* Knowlton.

Cissus n. sp. Lesquereux, 1884, 12; near New Ulm, Minn.

Citharexylon brazosense Berry, 1924, 197, pl. 64, f. 1; Fayette: Mossy Creek, Brazos Co., Tex.—Ball, 1931, 171, pl. 30, f. 7; Fayette: Boggy Creek, Brazos Co., Tex.

Citrophylum aligerum (Lesquereux) Berry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottondale, Ala.—1920e, 403; Black Creek: Edgecombe Co., N. C.

Citrophylum bifoliolatum Berry, 1930, 91, pl. 33, f. 15; Holly Springs: Fayette Co., Tenn.

Citrophylum eocenicum Berry, 1924, 66, pl. 11, f. 2-8; Yegua: Cherry Valley, Cross Co.; near Stevens, Ouachita Co., Ark.; Rabb Creek, Fayette Co.; Nevil's Prairie and near Climax, Houston Co., Tex.; Mt. Selman: Palestine, Anderson Co., Tex.; Gosport: Claiborne Landing, Monroe Co., Ala.; Lisbon: Newton, Newton Co., Miss.—Ball, 1931, 124, 157, pl. 34, f. 6, 7; Mt. Selman: Anderson Co.; Yegua: Rabb Creek, Fayette Co.; Nevil's Prairie, Houston Co.; Jackson?: Rock Creek, Brazos Co., Tex.

CLADIUM P. Brown.

Cladium sp., Berry, 1924a, 18, pl. 1, f. 16; Pleistocene: Washington, D. C.

CLADOPHLEBIS Brongniart. □ Wieland, 1914, 129; discussion.

Cladophlebis albertsii (Dunker) Brongniart. □ Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 192, pl. 22; pl. 49, f. 1; Liassic: Mixteca Alta, Oaxaca, Mexico.

Cladophlebis albertsii (Heer) Berry = *Cladophlebis blairmorensis* LaMotte, new name.

Cladophlebis cf. *albertsii* (Dunker) Brongniart. Bell, 1928b, 29, pl. 17, f. 1-11; Mattagami: Ontario.

Cladophlebis arctica (Heer) Seward, 1926, 88, pl. 8, f. 61, 61a; Nugsuak, west Greenland.—Bell, 1932, 220; Dunvegan: Peace River Valley, British Columbia.

Osmunda arctica Heer. □

Cladophlebis blairmorensis LaMotte, new name.

Cladophlebis albertsii (Heer) Berry, 19291, 58; Upper Blairmore: southwest Alberta. (Homonym, Dunker, 1849.)

Pteris albertsii Heer, 1882, 29, pl. 16, f. 5, 6; pl. 28, f. 1-3; pl. 46, f. 22-24.

Cladophlebis cf. *browniana* (Dunker) Seward. Wilson, 1914, 408; Kootenai: Pimainus Hills, north of Spence Bridge, Thomson River, British Columbia.

Cladophlebis browniana infirma Hollick, 1930, 39, pl. 1, f. 8; Kaltag: Lower Yukon, Alaska.

Cladophlebis constricta Fontaine. □ Penhallow, 1906a, 392a; Crow's Nest Coal Basin, Michel Station, British Columbia.

Cladophlebis dakotensis (Lesquereux) Berry, 1922d, 207; Cheyenne: near Belvidere, Kiowa Co., Kans.

Pteris dakotensis Lesquereux. □

Cladophlebis distans Fontaine. □ Berry, 1929k, 41; Lower Blairmore: southwest Alberta.

Cladophlebis cf. *falcata montanensis* Fontaine. Wilson, 1914, 408; Kootenai: Pimainus Hills, north of Spence Bridge, Thomson River, British Columbia.

Cladophlebis fisheri Knowlton. □ Wilson, 1914, 409; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

Cladophlebis frigida (Heer) Seward, 1926, 87; Nugsuak, west Greenland.—Bell, 1932, 220; Dunvegan: Peace River Valley, British Columbia.

Pteris frigida Heer, 1882, 3, 25, pl. 2, f. 5, 10–13—1883, 51, pl. 102, f. 8.—White, 1898, 347, 349, 353; Kook, Pagtorfik, Ujarartorsuak, Nugsuak Pen., west Greenland.

Pecopteris denticulata, Heer not Brongniart, 1874, 95, pl. 26, f. 7, 7b.

Osmunda obergiana Heer, 1874, 98, pl. 26, f. 9; pl. 32, f. 7a.—Ward, 1895, 390; Potomac: no locality.

Cladophlebis frigida longipennis (Heer) Seward & Conway, 1935a, 8; Atanekkerdluk: west Greenland.

Cladophlebis longipennis (Heer) Seward, 1925, 238, pl. B, f. 12, 12A; Atane beds: Greenland.

Pteris longipennis Heer, 1882, 28, pl. 10, f. 5–13; pl. 13, f. 1.

Cladophlebis heterophylla Fontaine=Gleichenites gieseckiana (Heer) Seward.

Cladophlebis holttumi Seward, 1926, 88, pl. 8, f. 57, 57a; Nugsuak, west Greenland.

Cladophlebis ingens Harris, 1931b, 55, text-f. 17A–D; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Cladophlebis longipennis (Heer) Seward=*Cladophlebis frigida longipennis* (Heer) Seward & Conway.

Cladophlebis montanense (Fontaine) Berry=*Cladophlebis oerstedii* (Heer) Seward.

Cladophlebis nebbensis, Harris not Brongniart=*Todites hartzi* Harris.

Cladophlebis oerstedii (Heer) Seward, 1926, 86, pl. 7, f. 32, 34, 35; text-f. 9; Nugsuak, west Greenland.

Aspidium oerstedii Heer, 1882, 30, pl. 35,—1883, 2, pl. 48, f. 11; pl. 49, f. 1, 2.—Fontaine, 1889, 99, pl. 19, f. 4.—White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.

Pecopteris argutula Heer, 1874, 96, pl. 26, f. 8.

Pecopteris borealis (Brongniart) Heer (part), 1882, 5, pl. 2, f. 9c, 10.

Aspidium montanense Fontaine. □

Aspidium monocarpum Fontaine, 1892, 490, pl. 83, f. 4–6; pl. 84, f. 3; Kootenai: Great Falls, Mont.

Dryopteris oerstedii (Heer) Knowlton, 1898, 92.—Hollick, 1930, 38; Nulato: Lower Yukon, Alaska.

Dryopteris montanensis (Fontaine) Knowlton. □

Dryopteris monocarpa (Fontaine) Knowlton, 1898, 92.

Dicksonia oregonensis Fontaine. □

Cladophlebis montanense (Fontaine) Berry, 1929k, 39; Kootenai: Great Falls, Mont.; Lower Blairmore: southwest Alberta.

Cladophlebis parva Fontaine. □ Berry, 1929k, 40; Lower Blairmore: southwest Alberta.

Cladophlebis readi R. W. Brown, 1933, 4, pl. 1, f. 2; Aspen: southwest Wyo.

Cladophlebis roesserti groenlandica Hartz, 1896, 228, pl. 7-10, 12, f. 1; Rhaetic: Cape Stewart, east Greenland.

Cladophlebis roesserti Harris not Schenk = *Cladophlebis scariosa* Harris.

Cladophlebis rotundata Fontaine. □ Penhallow, 1906a, 392a; Nordenskiöld River, Yukon Terr.

Cladophlebis scariosa Harris, 1931b, 52, pl. 11, f. 5; Lepidopteris Zone: Scoresby Sound, east Greenland.

Cladophlebis roesserti Harris not Schenk, 1926, 57, text-f. 3A-D; Rhaetic: Scoresby Sound, east Greenland.

Cladophlebis scoresbyensis Harris = *Todites scoresbyensis* (Harris) Harris.

Cladophlebis septentrionalis Hollick, 1930, 59, pl. 2, f. 1-3; Chignik: Alaska Peninsula.

Cladophlebis socialis (Heer) Berry = *Phyllites socialis* (Heer) Seward.

Cladophlebis sphenopteroides Fontaine = *Ruffordia goepperti* (Dunker) Seward.

Cladophlebis stewartiana Hartz, 1896, 231, pl. 11, f. 1, 2; pl. 12, f. 2, 3; Cape Stewart, east Greenland.—Harris, 1926, 61; Rhaetic: Scoresby Sound, east Greenland.

Cladophlebis svedbergi Johansson. Harris, 1931b, 56, text-f. 18; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Cladophlebis ungeri (Dunker) Ward. □ Berry, 1929k, 42; Lower Blairmore: southwest Alberta.

Cladophlebis vaccensis Ward. □ Wilson, 1916, 207; Mt. Bush, Yukon Terr.

Cladophlebis virginienensis Fontaine. □ Wilson, 1914, 408, Kootenai: Groundhog Coal Basin, British Columbia.—Berry, 1929k, 41; Kootenay and Lower Blairmore; southwest Alberta.

Cladophlebis wyomingensis Fontaine. □

Cladophlebis falcata Fontaine. □ Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

Cladophlebis falcata var. Fontaine. Wilson, 1917, 301; Bankhead Coal Mine, northeast of Anthracite Station, Alberta.

Cladophlebis wyomingensis Fontaine = *Cladophlebis virginienensis* Fontaine.

Cladophlebis sp. Berry, 1921i, 58; Upper Blairmore: southwest Alberta.

Cladophlebis sp. A. Harris, 1931b, 56, text-f. 19; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Cladophlebis? sp. Penhallow, 1906a, 392a; Nordenskiöld River, Yukon Terr.

Cladophlebis cf. *browniana* Dunker. Seward, 1926, 89, pl. 7, f. 38; Upernivik Isl., west Greenland.

Cladophlebis sp. Wilson, 1914, 408; Kootenai: Pimainus Hills, north of Spence Bridge, Thomson River, British Columbia.

Cladospirites fasciculatus Berry. □ Berry, 1924, 39, 141, pl. 2, f. 1, 2; Yegua: Houston Co., Tex.; Fayette: Trinity Co., Tex.; Jackson: 8 mi. south of Jackson, Miss.—Ball, 1931, 118; Yegua: Westmoreland and vicinity, Houston Co., Tex.

CLADOTHECA Halle. See *TODITES* Seward.

CLADRASTIS Rafinesque.

Cladrastis eocenica Berry, 1930, 84, pl. 41, f. 12; Holly Springs: Shandy, Harde-man Co., Tenn.

Cladrastis oregonensis R. W. Brown, 1937b, 415, text-f. 1; Bridge Creek: 9 mi. northwest of Mitchell, Oreg.

Cladrastis n. sp., Arnold, 1935, 379; Trout Creek: Trout Creek, Harney Co., Oreg.

Clathropteris meniscoides Brongniart. Harris, 1931b, 88, pl. 15, f. 1, 9; pl. 16, f. 9, 10; pl. 18, f. 3, 5, 12; text-f. 32-34; *Lepidopteris* and *Thaumatopteris* Zones: Scoresby Sound, east Greenland.

Clathropteris platyphylla (Goeppert) Brongniart. □ Loper, 1891, 429; Newark (Anterior Shales): near Meriden, Conn.

Clematis reticulata MacGinitie=*Mahonia reticulata* (MacGinitie) R. W. Brown.

Clethra? *lepidioides* Cockerell, 1925, 5, pl. 2, f. 7; Green River: Roan Mts., Colo.

Clintonia oblongifolia Penhallow=*Majanthemophyllum oblongifolium* (Penhallow) Berry.

CLUSIA Linné.

Clusia fossilia Berry, 1925c, 3, pl. 3, f. 3; Pleistocene: Trinidad, British West Indies.

Clusia vera Hollick, 1924, 308, pl. 6, f. 2, 3; Siparia: Trinidad, British West Indies.—Berry, 1925a, 111, pl. 3; pl. 4, f. 1; Siparia: Trinidad, British West Indies.

CLUSIAPHYLLUM Berry, 1930, 113. Genotype: *C. eocenicum* Berry.

Clusiaphyllum eocenicum Berry, 1930, 113, pl. 18, f. 2; Wilcox: Nevada Co., Ark.

Coccoloba simulans Hollick, 1924, 296, pl. 15, f. 3, 4; Santa Clara, Cuba.

Coccoloba? sp., Hollick, 1924, 297, pl. 9, f. 8; Collazo: near Lares, P. R.

Coccolobis chapini Hollick, 1936, 112, pls. 121, 122; Eska Creek, Matanuska Coal Field, Alaska.

Coccolobis claibornensis Berry, 1924, 59, 161, pl. 9, f. 5, 6; Gosport: Claiborne Landing, Monroe Co., Ala.; Lisbon: Lexington, Holmes Co., Miss.; Yegua: Rabb Creek, Fayette Co., Tex.; Mt. Selman: Palofax, Webb Co., Tex.; Jackson: El Dorado, Union Co., Ark.; Fayette: Miraflores, Webb Co., Tex.—Ball, 1931, 121, 152, pl. 19, f. 3, 4; Mt. Selman: Palofax, Webb Co.; Yegua: Rabb Creek, Fayette Co., Fayette: Miraflores, Webb Co., Tex.

Coccolobis columbianus Berry, 1924, 60, 162, pl. 10, f. 1, 2; Yegua: Columbia, Caldwell Parish, La.; Rabb Creek, Fayette Co., Tex.; Fayette: Millikan, Brazos Co., Tex.—Ball, 1931, 121, 152; Yegua: Rabb Creek, Fayette Co., Tex.; Fayette: Alum Creek, Brazos Co., Tex.

Coccolobis uviferifolia Berry. □ Berry, 1930, 67, pl. 22, f. 9; Holly Springs: Pattersonville, Fayette Co., Puryear, Henry Co., Tenn.; Wilcox: Boydsville, Ark.; Scottsville, Harrison Co., Tex.; Carrizo: La Prior, Zavalla Co., Tex.

Cocconeis sp., Penhallow, 1900, 335; Rolling River, Manitoba.

Cocculites kanei (Heer) Heer=*Cocculus kanei* (Heer) Saporta & Marion.

Cocculus cinnamomeus Velenovsky. □ ?Berry, 1913a, 572; Tuscaloosa: near Cottondale, Ala.

Cocculus haydenanus Ward=*Paranymphaea crassifolia* (Newberry) Berry.

Cocculus kanii (Heer) Saporta & Marion, Fl. Heer. Gelinder, 63, pl. 10, f. 1, 1873.—Berry, 1926d, 111, pl. 16, f. 2; Kitsilano, British Columbia.

Daphnogene kani Heer, 1866, Naturf. Gessell. Zurich, Vierteljahresschr., vol. 11, 277.—1868, 112, pl. 14, f. 1-5; pl. 16, f. 1.—Hollick, 1936, 121, pl. 67, f. 11; Bering River above Chilkat, Yakutat-Copper River region, Alaska.

Cocculites kani (Heer) Heer, 1874, 21.—1883, 124, pl. 100, f. 1b.

NOTE.—Seward & Conway, 1935, 24, have transferred these citations to *Macclintockia kani* (Heer) Seward & Conway, q. v.

COCOS Linné.—Noé, 1936a, 442.

COLUBRINA Richard.

Colubrina miocenica Berry, 1925a, 106, pl. 13, f. 1-3; Forest: Trinidad, British West Indies.

COLUMBIA Persoon.

Columbia occidentalis Potbury, 1935, 75, pl. 13, f. 5; La Porte, Plumas Co., Calif.

Colutea obovata Berry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

Colutea primordialis Heer=*Dalbergites simplex* (Newberry) Seward.

Colutea valde-inaequalis Heer=*Dalbergites simplex* (Newberry) Seward.

Combretum bartoni Ball, 1931, 96, pl. 13, f. 1; pl. 13A; Indio: Barton's Ranch, Bastrop Co., Tex.

Combretum incertum Berry, 1925a, 117, pl. 8, f. 2; Siparia: Trinidad, British West Indies.

Combretum leve Berry, 1930, 118, pl. 29, f. 3, 4; Holly Springs: Smith's Church, Pattersonville, Fayette Co., Tenn.; Grenada; Fayette Co., Tenn.

Combretum ovale (Lesquereux) Berry. □ Ball, 1931, 97, pl. 44, f. 4; Indio: Little Sandy Creek, Bastrop Co., Tex.

Combretum petraflumense Berry, 1924, 85, 190, pl. 45, f. 1-4; pl. 58, f. 2-4; pl. 59, f. 1-5; Yegua: Rock Creek, Brazos Co., Tex.; Fayette: near Wellborn, Brazos Co., Tex.—Ball, 1931, 165, pl. 30, f. 3-5; Jackson?: Rock Creek, Brazos Co.; Fayette: near Millican, Brazos Co., Tex.—Berry, 1933c, 505-508, 5 text-f.; Yegua: near Jackson, Miss.

Combretum pseudojacquinii Hollick, 1928, 215, pl. 55, f. 4b; pl. 78, f. 1; pl. 79, f. 3a; Collazo: P. R.

Combretum wilcoxense Berry. □ Berry, 1930, 119, pl. 31, f. 2; Holly Springs: Bolivar and Shandy?, Hardeman Co., Williston, Fayette Co.; Puryear, Henry Co., Tenn.; Carrizo: La Prior, Zavalla Co., Tex.

Comptonia acutiloba (Lesquereux) Cockerell=*Dipteronia insignis* (Lesquereux) R. W. Brown.

Comptonia? anomala Knowlton=*Planera inaequilateralis* (Lesquereux) Knowlton.

Comptonia columbiana Dawson=*Myrica diforme* (Sternberg) Chaney.

Comptonia cuspidata Lesquereux. □ Hollick, 1936, 74, pl. 2, f. 1b; pl. 33, f. 4-6; head of Herendeen Bay, Alaska Peninsula.

Comptonia diforme (Sternberg) Berry=*Myrica diforme* (Sternberg) Chaney.

Comptonia dryandroides Berry not Unger=*Comptonia predryandroides* Berry.

Comptonia hesperia Berry, 1929f, 241, pl. 50, f. 6; Latah: Spokane, Wash.—Brown, R. W., 1937, 169, pl. 46, f. 11-14; Latah: Spokane, Wash.; Thunder Mt., Idaho.

Comptonia insignis (Lesquereux) Cockerell=*Dipteronia insignis* (Lesquereux) R. W. Brown.

Comptonia insignis Berry not Cockerell=*Dipteronia americana* R. W. Brown.

Comptonia praemissa Lesquereux. □ Hollick, 1936, 74; Chignik Bay, Alaska Peninsula.

Comptonia predryandroides Berry, 1926d, 100, pl. 10, f. 6; Joseph Creek, British Columbia.

Myrica (Comptonia) cuspidata Dawson not Lesquereux 1891, 80, f. 9; Similkameen River and Quilchena, British Columbia.

Comptonia dryandroides Berry not Unger, 1900c, 502.—Penhallow, 1908a, 46; Similkameen River and Quilchena, British Columbia.

Comptonia sp. Wilson, 1916, 207; Sheep Creek, Yukon Terr.

Cone, male, A, Harris, 1926, 124, pl. 7, f. 4, 5; Rhaetic: Scoresby Sound, east Greenland.—1935, 149; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Cone, male, B, Harris, 1935, 151, pl. 29, f. 5, 14; transitional between Thaumatopteris and Lepidopteris Zones: Scoresby Sound, east Greenland.

- Cone axis, Type A, Harris, 1935, 104; *Lepidopteris* Zone: Scoresby Sound, east Greenland.
- Cone axis, Type B, Harris, 1935, 105, pl. 17, f. 1, 11, 16; *Lepidopteris* Zone: Scoresby Sound, east Greenland.
- Confervites vaucheriodes* Harris, 1931b, 3, pl. 11, f. 6, 7; *Thaumatopteris* Zone: Scoresby Sound, east Greenland.
- Conifer A. Harris, 1926, 123, text-f. 30G-I; Rhaetic: Scoresby Sound, east Greenland.
- Conifer B, Harris, 1926, 124; Rhaetic: Scoresby Sound, east Greenland.
- Coniferous wood, Grewingk, 1850, 364.—Hollick, 1936, 53; Unga Isl. south of Alaska Peninsula.
- Coniopteris* cf. *hymenophylloides* Brongniart. Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 130, pl. 45, f. 2; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Coniopteris pachyphylla* (Fontaine) Berry, 1929k, 42, pl. 7, f. 1-4; Kootenai and Lower Blairmore: southwest Alberta.

Dicksonia pachyphylla Fontaine.□

Dicksonia montanensis Fontaine.□

Aspleniopteris pinnatifida? Fontaine.□

CONITES Sternberg.

Conites sp. A, Seward, 1926, 100, pl. 8, f. 63; Nugsuak, west Greenland; (?) = *Pagiophyllum ambiguum* (Heer) Seward.

Conites sp. B, Seward, 1926, 112, pl. 9, f. 70; Nugsuak, west Greenland.

Conites sp. C, Seward, 1926, 112, pl. 11, f. 75; Nugsuak, west Greenland.

CONNARUS Linné.

Connarus carmenensis Berry, 1923b, 9, pl. 3, f. 6; San José del Carmen, Vera Cruz; north of Palomares, Oaxaca, Mexico.

Conocarpus eocenica Berry.□Berry, 1924, 86, 190, pl. 35, f. 5; pl. 39, f. 2; Gosport: Claiborne Landing, Monroe Co., Ala.; Yegua: near Lufkin, Angelina Co., Tex.; Barnwell: Phinizy Gully, Grovetown, Columbia Co.; near Forest Station, Columbia Co., near Macon, Bibb Co., Ga.; Fayette: near Christie, La.; near Miraflores, Webb Co., Tex.—Ball, 1931, 128, 166; Yegua: Cedar Creek, Angelina Co.; Fayette: Miraflores, Webb Co.; Alum Creek, Brazos Co., Tex.

Conocarpus erectus Linné. Berry, 1925c, 5, pl. 1, f. 5; Pleistocene: Trinidad, British West Indies.

Conocarpus sp. Berry, 1934c, 237; Chapapote: near Baños de Montero, Santa Clara Province, Cuba.

Convolvulaceous? flower, Kirchner=*Porana speirii* Lesquereux.

COPAIFERA Linné—See also **COPAIVA** Jacquin.

Copaifera? wilcoxiana Berry, 1930, 78, pl. 46, f. 5, 6; Holly Springs: Grable Pit, Henry Co., Tenn.

Copaifera yeguana Berry, 1924, 63, pl. 10, f. 4; Yegua: near Lufkin, Angelina Co., Tex.—Ball, 1931, 123, pl. 20, f. 10; Yegua: Cedar Creek, Angelina Co., Tex.

COPAIVA Jacquin=**COPAIFERA** Linné.

Copaiva oligocenica Hollick, 1928, 206, pl. 71, f. 5; Collazo: P. R.

Cordia oregona Chaney & Sanborn, 1933, 94, pl. 38, f. 4, 5; Fisher: Goshen, Oreg.

Cordia rotunda Chaney & Sanborn, 1933, 94, pl. 38, f. 1, 3; Fisher: Goshen, Oreg.—Sanborn, 1935, 28; Comstock: Comstock, Douglas Co., Oreg.

CORETHROGYNE DeCandolle.

Corethrogyne sp., Chaney & Mason, 1933a, 66, pl. 9, f. 13; Pleistocene: Carpinteria, Santa Barbara Co., Calif.

Cornophyllum minimum Berry, 1925, 84, pl. 19, f. 2; Ripley: Carroll Co., Tenn.

Cornophyllum obtusatum Berry. □ Berry, 1920e, 405; Black Creek: Bladen Co., N. C.

Cornophyllum vetustum Newberry. □ Berry, 1913a, 571; Tuscaloosa; near Glen Allen, Ala.—1922c, 177; Woodbine: Arthur's Bluff, Lamar Co., Tex.

Cornus acuminata, Berry not Weber = *Cornus republicensis* LaMotte, new name.

Cornus acuminata, Newberry not Weber = *Cornus newberryi* Hollick.

Cornus amomum Miller. Berry, 1924a, 22, pl. 2, f. 15-18; Pleistocene: Washington, D. C.

Cornus becki Berry, 1938, 97, text-f. 7; Latah: Grand Coulee, Wash.

Cornus benjamini Hollick, 1930, 112, pl. 85, f. 4b, 5; Chignik: Alaska Peninsula.

Cornus büchii Heer, 1853, Gartenflora, vol. 2, 295, pl. 66, f. 6, 7—1859, Fl. Tert. Helv., vol. 3, 26, pl. 105.—Hollick, 1936, 157, pl. 98, f. 7; Bed of creek from Mt. Chezum, Yakutat-Copper River region, Alaska.

Cornus californica C. A. Meyer. Chaney & Mason, 1930, 14, pl. 7, f. 19, 20; Pleistocene: Santa Cruz Isl., Calif.—Mason, 1934, 171, pl. 10, f. 9, 13, 18; Tomales: Tomales Bay, Marin Co., Calif.

Cornus ceterus Hollick, 1930, 113, pl. 86, f. 1; Chignik: Alaska Peninsula.

Cornus denverensis Knowlton, 1930, 119, pl. 13, f. 1; Denver: Golden, Colo.

Cornus forchhammeri Heer. □ Hollick, 1930, 112, pl. 30, f. 3a; pl. 86, f. 2; Chignik: Alaska Peninsula.

Cornus fosterii Ward. □ Berry, 1935, 54; Middle Ravenscrag: Locs. 5, P 1-30, southern Saskatchewan.

Cornus holmesii Lesquereux. □ Knowlton, 1930, 119; Denver: east of Denver, Colo.

Cornus hyperborea Heer, 1869a, 476, pl. 50, f. 3, 4.—Hollick, 1936, 158, pl. 99, f. 2, 3; near Berg Lake, also in creek bed from Mt. Chezum, Yakutat-Copper River region, Alaska.

Cornus impressa Lesquereux. □ Cross, 1895, 211; Middle Park: Middle Park, Grand Co., Colo.—Berry, 1926, 197; Paskapoo: Alberta.—Knowlton, 1930, 118, pl. 51, f. 1, 2; Middle Park: Middle Park, Grand Co., Colo.; Denver: near Denver and Golden, Colo.; Dawson: Mosby and Calhan, Colo.—Berry, 1935, 54; Upper Ravenscrag: Locs. 1, P 11-30, southern Saskatchewan.

Cornus incompletus Lesquereux. □ Lesquereux, 1871, 382; Marshall, Colo.

Cornus irregularis Hollick, 1936, 158, pl. 99, f. 1; bed of creek from Mt. Chezum, Yakutat-Copper River region, Alaska.

Cornus kelloggii Lesquereux. □ Potbury, 1935, 77, pl. 12, f. 3; La Porte, Plumas Co., Calif.

Cornus lakesii Knowlton, 1930, 119, pl. 50, f. 1; Denver: Golden, Colo.

Cornus macrophylla Heer. Hollick, 1912a, 51; Eska Creek, Lower Matanuska Valley, Alaska.

Cornus newberryi Hollick. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.—Berry, 1935, 54; Upper Ravenscrag: Loc. 33, southern Saskatchewan.

Cornus acuminata Newberry. □ Cross, 1895, 211; Middle Park: Middle Park, Grand Co., Colo.

Cornus orbifera Heer. □ Hollick, 1936, 159; Cook Inlet, Alaska.

Cornus ovalis Lesquereux. □ Chaney, 1927a, 131, pl. 19, f. 1-4; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Brooks, 1935, 299; Sucker Creek: Ballantyne Ranch, Malheur Co., Oreg.—Brown, R. W., 1937, 183, pl. 63, f. 5; Latah; Spokane, Wash.

Cornus republicensis LaMotte (new name).

Cornus acuminata Berry, 1929f, 260, pl. 59, f. 3; Latah: Republic, Wash. (Homonym, Weber, 1852).

Cornus rhamnoides Hollick, 1930, 112, pl. 86, f. 3; Chignik; Alaska Peninsula.

Cornus speciosissima Knowlton, 1922b, 136-138, f. 1, 2; Lance: Converse Co., Wyo.

Cornus studeri? Heer, 1859, Fl. Tert. Helv., vol. 3, 27, pl. 105, f. 18-21;—Ward, 1886a, 553, pl. 44, f. 1; Mesaverde?: Point of Rocks, Wyo.—Knowlton, 1917, 342, pl. 109, f. 2; Raton: Aguilar, Colo.—1924, 94, pl. 13, f. 2; pl. 15, f. 1; Animas: Ignacio Quad., Colo.

Cornus studeri, Knowlton not Heer=*Rhamnites knowltoni* Berry.

Cornus studeri Lesquereux not Heer=*Rhamnus cleburni* Lesquereux.

Cornus suborbifera Lesquereux.□?Berry, 1926d, 115; Burrard Inlet, British Columbia.

Cornus sp., Arnold, 1935, 380; Trout Creek: Trout Creek; Harney Co., Oreg.

CORYLITES.

Corylites hebridica Seward & Holtum. Seward & Conway, 1935, 20, text-f. 4; Kingigtok, west Greenland. The authors indicate that some of the North American citations to *Corylus macquarrii* are referable to this category but the extent is not indicated.

Corylites nostratus Seward & Conway, 1935, 21, text-f. 5; Kagdlunguak: west Greenland.

CORYLOPSITES Mathiesen, 1932, 16. Genotype: *C. groenlandicus* Mathiesen.

Corylopsites groenlandicus Mathiesen, 1932, 16-28, f. 5-10; Cape Dalton, east Greenland.

Corylus adumbrata Hollick, 1936, 86, pl. 47, f. 6; pl. 49, f. 5-7; Kachemak Bay, Kenai Peninsula, west shore of Cook Inlet south of Old Tyonek, Alaska.

Corylus americana fossilis Newberry.□Hollick, 1936, 86, pl. 45, f. 3b; pl. 48, f. 1-3; Kachemak Bay, Kenai Peninsula; between Herendeen Bay and Port Moller, Alaska Peninsula.

Corylus evidens Hollick, 1936, 86, pl. 49, f. 3; Kukak Bay west of Cape Nukhshak, Alaska Peninsula.

Corylus harrimani Knowlton.□Hollick, 1936, 87; Kukak Bay, Alaska Peninsula.

Corylus insignis Heer. Hollick, 1912a, 51; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.

Corylus kenaiana Hollick, 1936, 87, pl. 45, f. 1-3a; pl. 46, f. 1b, 2-5; pl. 47, f. 1-5; Kachemak Bay, Kenai Peninsula, Alaska.

Corylus macquarrii (Forbes) Heer (part), 1869, 29, pl. 4, f. 1-4, 5a, 6-8 (excl. pl. 3, f. 9).

Corylus macquarrii (Forbes) Heer.□?Penhallow, 1906a, 392a; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.—Knowlton, 1912i, 52; Chickaloon: Chickaloon River, Alaska.—Wilson, 1916, 206; Sheep Creek, Yukon Terr.—Berry, 1926d, 105, pl. 17, f. 6; pl. 18, f. 2-4; pl. 19, f. 5; Newhykulston, Joseph and Darlington Creeks, Kitsilano, British Columbia.—Chaney, 1927a, 104; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Mathiesen, 1932, 59, text-f. 22; Sabine Isl., east Greenland.—Oliver, 1934, 18, pl. 3, f. 2, 4; Mascall: Tipton, Oreg.—Hollick, 1936, 88; Port Graham and Ninilchik, east shore of Cook Inlet; Kuiu Isl., southeastern Alaska; Kukak Bay, Alaska Peninsula.—Brown, R. W., 1937, 171, pl. 50, f. 6; Mascall: Tipton, Oreg.—Seward & Conway, 1935, 20, indicate that some of the above references should be transferred to *Corylites hebridica* Seward & Holtum, q. v.

Corylus macquarrii (Forbes) Heer (part)=*Corylus kenaiana* Hollick.

Corylus macquarrii Newberry (part) not Heer=*Tilia oregona* LaMotte.

Corylus macquarrii macrophylla Heer.□Hollick, 1936, 89; Port Graham, Kenai Peninsula, Alaska.

- Corylus maxicarpus* Chaney, 1920a, 166, pl. 9, f. 4; Eagle Creek: Multnomah Co., Oreg.
- Corylus?* *palachei* Knowlton. □ Hollick, 1936, 89; Kukak Bay, Alaska Peninsula.
- Corylus* *rostrata californica* DeCandolle. Mason, 1934, 152, pl. 8, f. 1, 2; Tomales: Tomales Bay, Marin Co., Calif.
- Corylus* sp. Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.
- Corylus* sp.?, aments, Hollick, 1936, 90, pl. 50, f. 6, 7; Kachemak Bay, Kenai Peninsula; Yukon River south bank above Rampart, central Yukon region, Alaska.
- Corylus* sp., staminate aments, Hollick, 1936, 90, pl. 49, f. 4; Kukak Bay west of Cape Nukshak, Alaska Peninsula.
- Corylus* sp. Mason, 1935, 50; Pleistocene gravels: Montecito, Santa Barbara Co., Calif.
- Corylus* sp. F. M. Scott, 1926, 404; Tesla, Calif.
- Corylus?* sp. Wilson, 1914, 409; Kenai: Sourdough Mine, Coal Creek, Yukon Terr.
- Corylus?* sp. Wilson, 1916, 206; Sheep Creek, Yukon Terr.
- Corylus?* sp. Wilson, 1916, 207; Granite Creek, Yukon Terr.
- COSTUS** Linné.
- Costus?* *incertus* Berry, 1925a, 82, pl. 15, f. 5; Forest: Trinidad, British West Indies.
- Cotinus cretacea* Hollick, 1930, 98, pl. 75, f. 4; Melozi: Lower Yukon, Alaska.
- Cotinus fraterna* (Lesquereux) Cockerell. □ Brown, R. W., 1937, 179; Florissant: Florissant, Colo.
- Andromeda delicatula* Lesquereux. □ Knowlton, 1923, 172; Green River: Uinta Co., Wyo.
- Frazinus ungeri* Knowlton (part) not Lesquereux, 1916b, 286, pl. 22, f. 3 only; Florissant: Florissant, Colo.
- COUSSAPOA** Aublet.
- Coussapoa vaningeni* Hollick, 1924, 296, pl. 6, f. 1; Siparia: Trinidad, British West Indies.
- Coussapoa vaningeni major* Berry, 1925a, 86, pl. 1, f. 4; Porcellanite, Siparia: Trinidad, British West Indies.
- Coussapoa veracruziana* Berry, 1923b, 6, pl. 2; San José del Carmen, Vera Cruz, Mexico.
- Crataegus alaskensis* Hollick, 1936, 125, pl. 71, f. 5; Cape Douglas, Alaska Peninsula.
- Crataegus antiqua* Lesquereux not Heer = *Quercus viburnifolia* Lesquereux.
- Crataegus betulaefolia* Lesquereux (part) = *Viburnum richardsoni* Knowlton.
- Crataegus betulaefolia* Lesquereux (part) = *Quercus viburnifolia* Lesquereux.
- Crataegus cappsi* Hollick, 1936, 126, pl. 71, f. 3; Nenana Coal Field, Alaska.
- Crataegus coccineafolia* Berry, 1926b, 114, pl. 56, f. 5-7; Chowan: Neuse River, Wayne Co., N. C.
- Crataegus?* *gigantea* Knowlton, 1924, 89, pl. 10, f. 2; Animas: Pagosa Quad., Colo.
- Crataegus gracilens* MacGinitie, 1933, 57, pl. 9, f. 6; Trout Creek: Trout Creek, Harney Co., Oreg.—Oliver, 1934, 23; Mascall: Tipton, Oreg.
- Crataegus heterodontata* Chaney = *Acer negundoides* MacGinitie.
- Crataegus latahensis* Ashlee, 1932, 79, pl. 1, f. 6; Latah: White Bird, Juliaetta, Idaho.
- Crataegus microcarpifolia* Arnold, 1937, 91, pl. 5, f. 2-3; Trout Creek: Trout Creek, Harney Co., Oreg.

- Crataegus myricoides* Lesquereux. □ Knowlton, 1930, 96, pl. 44, f. 7-10; Denver: Golden, Colo.
- Crataegus newberryi* Cockerell. □ Chaney, 1927a, 121, pl. 14, f. 6, 10; Bridge Creek: Bridge Creek, Cove Creek, and Gray Ranch, Crooked River Basin, Oreg.—LaMotte, 1936, 131; Upper Cedarville: 49 Camp, Washoe Co., Nev.
- Crataegus pacifica* Chaney, 1920a, 176, pl. 17, f. 1; Eagle Creek: Multnomah Co., Oreg.
- Crataegus spathulatoides* Berry. □ Berry, 1926b, 114, pl. 56, f. 4; Chowan: Neuse River, Wayne Co., N. C.
- Crataegus tomentosa punctata* Gray. Penhallow, 1899, 527; Pleistocene: Taylor's Brickyard, Don Valley, Toronto, Ontario.
- Crataegus yukonensis* Hollick, 1936, 126, pl. 71, f. 4; north bank Yukon River at Drew's mine, central Yukon region, Alaska.
- Crataegus* sp., Arnold, 1935, 380; Trout Creek: Trout Creek; Harney Co., Oreg.
- Crataegus?* sp., Chaney, 1921a, 90; Puente: Los Angeles Co., Calif.
- Crataegus* sp., Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.
- Crataegus* sp., Meehan, 1899, 281; Pleistocene: Port Kennedy, Pa.
- Credneria basinnervosa* Hollick, 1930, 89, pl. 56, f. 1; Melozi: Lower Yukon, Alaska.
- Credneria comparabilis* Hollick, 1930, 89, pl. 57, f. 4; Kaltag: Lower Yukon, Alaska.
- Credneria daturaefolia* Ward. □ Cragin, 1891, 31; Loup Fork: Near Alpine, Kans.
- Credneria elegans* Hollick, 1930, 88, pl. 56, f. 2; Kaltag: Lower Yukon, Alaska.
- Credneria grewioipsoides* Hollick, 1930, 87, pl. 52, f. 3; pl. 53, f. 1; Kaltag: Lower Yukon, Alaska.
- Credneria inordinata* Hollick, 1930, 86, pl. 56, f. 3; pl. 57, f. 2, 3; Kaltag: Lower Yukon, Alaska.
- Credneria inordinata maxima* Hollick, 1930, 86, pl. 58, f. 1, 2; Kaltag: Lower Yukon, Alaska.
- Pterospermites dentatus*, Newberry not Heer, 1898, 133, pl. 53, f. 1, 2; Kaltag: Lower Yukon, Alaska.
- Credneria intermedia* Hollick, 1930, 89, pl. 55, f. 1; Melozi: Lower Yukon, Alaska.
- Credneria leconteana* Lesquereux = *Protophyllum leconteanum* (Lesquereux) Lesquereux.
- Credneria longifolia* Hollick, 1930, 87, pl. 60; Melozi: Lower Yukon, Alaska.
- Credneria mixta* Hollick, 1930, 88, pl. 56, f. 4; pl. 57, f. 1; Melozi, Nulato: Lower Yukon, Alaska.
- Credneria?* *parva* Hollick, 1930, 89, pl. 65, f. 5; Seventymile River: Upper Yukon, Alaska.
- Credneria spatiosa* Hollick, 1930, 87, pl. 59; Kaltag: Lower Yukon, Alaska.
- Credneria* sp., Bell, 1932, 220; Dunvegan: Peace River Valley, British Columbia.
- CRESCENTIA** Linné.
- Crescentia cucurbitinoides* Berry, 1923b, 24, pl. 5, f. 2; north of Palomares, Oaxaca, Mexico.—Hollick, 1924, 319, pl. 4, f. 1; pl. 8, f. 7; Siparia: Trinidad, British West Indies.
- Crotonophyllum panduraeformis* Berry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.
- Cryptocarya praesamarensis* Sanborn, 1935, 19, pl. 5, f. 4, 6; Comstock: Comstock, Douglas Co., Oreg.
- Cryptocarya wilcoxiana* Berry, 1930, 113, pl. 18, f. 1; Holly Springs: Shandy, Hardeman Co., Tenn.

Ctenis albertensis Warren, 1927, 48-49, pls. 1, 2; Kootenai: Canmore, Alberta.
Ctenis fallax Nathorst (part). Harris, 1932, 8 pl. 1, f. 8; text-f. 3-5, 35G-L;
 Thaumatopteris Zone: Scoresby Sound, east Greenland.

Ctenis nilssoni Nathorst (part). Harris, 1932, 14, pl. 1, f. 9; text-f. 7, 36A-D;
 Lepidopteris Zone: Scoresby Sound, east Greenland.

Ctenis stewartiana Harris, 1932, 12, text-f. 6; Thaumatopteris Zone: Scoresby Sound, east Greenland.

?*Ctenis*, sp. A. Harris, 1932, 15, text-f. 8; Lepidopteris Zone: Scoresby Sound, east Greenland.

Ctenophyllum? cf. *angustifolium* Fontaine. Wilson, 1916, 207; Mt. Bush, Yukon Terr.

Ctenophyllum braunianum Schimper. Loper, 1891, 429; Newark (Posterior Shales): near Meriden, Conn.

CUCURBITA (Tournefort) Linné.

Cucurbita glandulosa R. W. Brown, 1929, 291, pl. 75, f. 6; Green River: northwest of De Beque, Colo.—1934, 66, pl. 13, f. 2; Green River: Roan Creek northwest of De Beque, Colo.

Culmites groenlandica (Heer) Seward, 1926, 114; Nugsuak, west Greenland.

Arundo groenlandica Heer. □ Heer, 1874, 104, pl. 28, f. 9, 10.—1882, 57, pl. 17, f. 10.—1883, 18, pl. 54, f. 1-3.—Seward, 1925, 233.—Berry, 1922d, 213; Cheyenne: near Belvidere, Kiowa Co., Kans.

CUNNINGHAMIA Robert Brown.

Cunninghamia concedipites Wodehouse, 1933a, 495, f. 19; Green River: Parachute Creek, Garfield Co., Colo.

Cunninghamites borealis Heer=*Elatocladus smittiana* (Heer) Seward.

Cunninghamites elegans (Corda) Endlicher not Heer. □ Berry, 1920e, 398; Black Creek: N. C.—1925, 33; Ripley: Houston Co., Ga.

Cunninghamites elegans Heer not Corda=*Elatocladus elegans* (Heer) Seward.

Cunninghamites pulchellus Knowlton. Wilson, 1914a, 323; near Steveston, Red Deer River, Alberta.—1916, 205; Belly River: Red Deer River, Alberta.

CUPANIA Linné.

Cupania comparabilis Hollick, 1936, 136, pl. 74, f. 5; Kukak Bay west of Cape Nukshak, Alaska Peninsula.

Cupania oregona Chaney & Sanborn, 1933, 82, pl. 25, f. 1, 3-5; Fisher: Goshen, Oreg.

Cupania packardii Chaney & Sanborn, 1933, 83, pl. 26, f. 1-6; Fisher: Goshen, Oreg.

Cupanites amplius Berry, 1930, 99, pl. 43, f. 1, 2; Holly Springs: Hardeman Co., Tenn.

Cupanites formosus Berry, 1930, 98, pl. 30, f. 1-4; Holly Springs: near Pattersonville, Fayette Co., Tenn.; Grenada: near Somerville, Fayette Co., Tenn.—Ball, 1931, 86, pl. 2, f. 5; Indio: Barton's Ranch, Bastrop Co., Tex.

Cupanites nigricans (Lesquereux) Berry. □ Berry, 1924, 176, pl. 34, f. 7; Barnwell: near Macon, Bibb Co., Ga.

Myrica nigricans Lesquereux. □

Cupanites parvifolia Ball, 1931, 87, pl. 41, f. 5; pl. 11, f. 2; Indio: Little Sandy Creek, Bastrop Co., Tex.

Cupanites parvulus Berry, 1924, 70, pl. 12, f. 5; Yegua: Columbia, Caldwell Parish, La.; near Antioch, Houston Co., Tex.—Ball, 1931, 124, 160; Yegua: Antioch, Houston Co.; Fayette: Trinity Co., Tex.

Cupanites sp.?, Ball, 1931, 87, pl. 5, f. 4, 5; Indio: Barton's Ranch, Bastrop Co., Tex.

CUPRESSINOCLADUS.

Cupressinocladus cretacea (Heer) Seward, 1926, 100, text-f. 13; Disko Isl., west Greenland.

Libocedrus cretacea Heer, 1882, 49, pl. 29, f. 1-3.

Cupressinocladus sp., Seward & Conway cf. *Libocedrus cretacea* Heer. □ Seward & Conway, 1935, 11, text-f. 2; Kingigtok, west Greenland.

CUPRESSINOXYLON Goeppert. □ Berry, 1922g, 6; redefinition of genus—Read, 1930, 17; discussion.

Cupressinoxylon arkansanum Knowlton. □ Berry, 1924, 49; Yegua: Willsburg, Cross Co., Ark.

Cupressinoxylon cheyennense Penhallow. □ Berry, 1922d, 212; Cheyenne: near Belvidere, Kiowa Co., Kans.

Cupressinoxylon dawsoni Penhallow. □ Berry, 1924, 48, pl. 6, f. 1-3; Yegua: Somerville, Burleson Co.; Houston Co., Tex.—Ball, 1931, 119; Yegua: Somerville, Burleson Co.; near Wooten's siding, Houston Co., Tex.

Cupressinoxylon eutreron Felix = *Sequoia magnifica* Knowlton.

Cupressinoxylon jurassica Lutz, 1930, 92-107, text-f. 1-12; Upper Como (Barosaurus horizon): Sturgis, S. Dak.

Cupressinoxylon lamarensense Read, 1930b, 17, pl. 4, f. 1-5; pl. 5, f. 1-3; Lamar Flora: Yancey Forest, Specimen Ridge, Yellowstone Nat. Park.

Cupressinoxylon wilcoxense Berry, 1922g, 6, pls. 1-3; Wilcox: Caddo and De Soto Parishes, La.

Cupressites sudworthi Berry, 1917, 232, pl. 55, f. 1; Catahoula: Chalk Hills, 2 mi. south of Rosefield, La.—1924, 143; Lagrange; Randolph Bluff, Tipton Co., Tenn.

Cupressoxylon sp. A, Dawson, 1875 = *Sequoioxylon burgessii* (Penhallow) Torrey.

CUPRESSUS Linné. □ Mason, 1927, 156.—Chaney & Mason, 1930, 10, discussion.

Cupressus goveniana Gordon. □ Chaney & Mason, 1927, 157.—1930, 10, pl. 5, f. 4-6; pl. 7, f. 1-9; Pleistocene: Santa Cruz Isl., Calif.—1933a, 58, pl. 6, f. 1-5, pl. 8; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Mason, 1934, 149, pl. 6, f. 1; pl. 7, f. 5-9; Tomales: Tomales Bay, Marin Co., Calif.—Webber, in Chaney & Mason, 1933, 68; Pleistocene: Carpinteria, Calif.

Cupressus macrocarpa Hartweg. □ Mason, 1927, 156, pl. 5, f. 12; Pleistocene: Rancho La Brea, Los Angeles Co., Calif.—Frost, 1927, 76, pl. 15, f. 3; Pleistocene: Ranch La Brea, Los Angeles Co., Calif.

Cupressus preforbesii Axelrod, 1937, 167, pl. 2, f. 1; Mt. Eden: near Beaumont, Calif.

Cupressus sp., Webber, 1953, 122, pl. 2, f. 1-3; Ricardo: near Barstow, Calif.

Cyathea angusta Heer = *Gleichenites porsildi* Seward.

Cyathea fertilis Heer = *Gleichenites porsildi* Seward.

Cyathea hammeri Heer (part), 1882, pl. 31, f. 1, 7 = *Lacopteris rigida* (Heer) Seward.

Cyathea hammeri Heer (part) = *Gleichenites porsildi* Seward.

Cycad fruits, White, 1898, 347; Kook, Nugsuak Pen., west Greenland.

Cycad (gen. et sp.?) Hollick, 1932, 172; Kern River Region, near Bakersfield, Calif.

Cycadella ramentosa Ward. □ Wieland, 1906, 100, pl. 18; Morrison: Carbon Co., Wyo.

Cycadella wyomingensis Ward. □ Wieland, 1906, 175, text-f. 93; Morrison: Carbon Co., Wyo.

Cycadeoidea abiquidensis Dawson = *Araucarites abiquidensis* (Dawson) Wieland.

- Cycadeoidea boesiana* Wieland, 1921b, 84, pls. 11, 12; Wise Co., Tex.
- Cycadeoidea emmonsii* (Fontaine) Ward=*Araucarites* (*Cycadeoidea*) *emmonsii* (Fontaine) Wieland.
- Cycadeoidea goucheriana* Ward.□Wieland, 1916, 31.
- Cycadeoidea heliochorea* Ward.□Wieland, 1906, 162.
- Cycadeoidea munita* Cragin.□Berry, 1922, 209; near Belvidere, Kiowa Co., Kans.; locality uncertain.
- Cycadeoidea peridemalis* Chrysler, 1932, 689, pls. 48, 49, 5 text-f.; Raritan: Woodbridge, N. J.
- Cycadeoidea pulcherrima* Ward.□?Wieland, 1906, 171, text-f. 91.
- Cycadeoidea sternbergii* Wieland, 1921b, 81, pls. 9, 10; Belly River: near Red Deer River, Alberta.
- Cycadeoidea superba* Ward.□Wieland, 1906, 171, pl. 9-11.
- Cycadeoidea* sp. Wieland, 1906, 170, text-f. 90; Lakota: Minnekahta, S. Dak.
- Cycadeoidea* sp. Wieland, 1906, 169, text-f. 90; Lakota: Minnekahta, S. Dak.
- Cycadeomyelon?* sp. Humphreys, 1916a, 77; Santa Clara Coal Field, Sonora, Mexico.
- Cycadeospermum lineatum* Lesquereux.□Berry, 1922d, 209; Cheyenne: near Belvidere, Kiowa Co., Kans.
- Cycadeospermum oaxacensis* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 119, pl. 37, f. 5; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Cycadeospermum* sp. Lozano, 1916, 18, pl. 9, f. 10; Liassic: Huauchinango, Puebla, Mexico.
- Cycadinocarpus chapini* Newberry.□Loper, 1891, 429; Newark (Anterior and Posterior Shales): near Meriden, Conn.
- Cycadinocarpus circularis* Newberry.□Berry, 1913a, 571; Tuscaloosa: near Glen Allen, Ala.—1920e, 398; Black Creek: North Carolina.—1923c, 434, text-f. 4; Tuscaloosa: Ft. Decatur, Ala.
- Cycadites dicksoni* Heer=*Pseudocycas dicksoni* (Heer) Nathorst.
- Cycadites pungens* Lesquereux=*Pseudocycas unjiga* (Dawson) Berry.
- Cycadites unjiga* Dawson=*Pseudocycas unjiga* (Dawson) Berry.
- Cycadites?* sp. Hollick, 1930, 42, pl. 2, f. 12; Kaltag: Lower Yukon, Alaska.
- CYCADOCARPIDIUM** Nathorst, 1886, Om floran i Skånes kolförande bildningar. III, Ser. C, no. 85, 91. Genotype: *C. erdmanni* Nathorst.—Harris, 1935, 99; discussion.
- Cycadocarpidium erdmanni* Nathorst, 1886, Om floran i Skånes kolförande bildningar. III, Ser. C, no. 85, 91, pl. 26, f. 15-20.—Harris, 1935, 105, pl. 17, f. 2, 4, 7, 9, 10, text-f. 42; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Cycadocarpidium swabi* Nathorst, K. Svenska Vet. Akad. Handl., vol. 46, no. 8, 5, pl. 1, f. 11-15.—Harris, 1935, 101, pl. 17, f. 3, 5, 6, 8; pl. 17, f. 1, 5, 11-14, 16; Lepidopteris Zone: Scoresby Sound, east Greenland.
- CYCADOLEPIS** Saporta, 1875, Pal. Franc. (Plantes Jurassiques), Ser. 2, 200.—Wieland, 1914, 77; discussion.
- Cycadolepis mexicana* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 78, pl. 36; pl. 20, f. 20; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Cycadolepis psila* Harris, 1932a, 91, pl. 11, f. 4, 12-14; text-f. 46; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Cycadolepis rugosa* Johansson. Harris, 1932a, 93, pl. 11, f. 3, 8-11; text-f. 47A-G; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Cycadolepis* sp., Berry, 1929k, 44, pl. 17, f. 7; Kootenai: southwest Alberta.
- Cycadolepis*, fragments, Lozano, 1916, 12, pl. 6, f. 6; pl. 7, f. 4; Liassic: Huyacocotla, Vera Cruz, Mexico.
- CYCADOPITES** Wodehouse, 1933a, 483. Genotype: *Cycadopites* sp. Wodehouse.

Cycadopites sp. Wodehouse, 1933a, 483; Green River: Parachute Creek, Garfield Co., Colo.

CYCADOSPADIX Schimper. □ Harris, 1932a, 95; discussion.

Cycadospadix dactylota Harris, 1932a, 97, pl. 10, f. 1, 2; text-f. 47H-K; Lepidopteris Zone: Scoresby Sound, east Greenland.

Cycadospadix? sp., Cockerell=**Matonidium americanum** Berry.

Cycas dicksoni (Heer) Heer=**Pseudocycas dicksoni** (Heer) Nathorst.

Cycas steenstrupi Heer=**Pseudocycas steenstrupi** (Heer) Nathorst.

Cycas sp., Nathorst=**Pseudocycas insignis** Nathorst.

Cyclopteris digitata (Brongniart) Dunker=**Ginkgoites pleuripartita** (Schimper) Seward.

Cyclopteris huttoni Sternberg=**Ginkgo digitata** (Brongniart) Heer.

CYMOPTERUS Rafinesque.

Cymopterus littoralis Gray. Chaney & Mason, 1933a, 62, pl. 8, f. 3, 4; Pleistocene: Carpinteria, Santa Barbara Co., Calif.

CYNOMETRA Linné.

Cynometra rabellii Hollick, 1928, 206, pl. 71, f. 1a, 2; Collazo: Porto Rico.

Cyparissidium gracile (Heer) Heer, 1874, 74, pl. 17, f. 5b, c; pl. 19; pl. 20, f. 1e; pl. 21, f. 9b, 10d.—1882, 16, 50, pl. 1, f. 2; pl. 7, f. 5-9; pl. 28, f. 8.—1883, 12. □ White, 1898, 347, 349, 350, 353; Kook, Pagtorfik, Kaersuk, Ujarartorsuak, Nugsuak Pen., west Greenland.—Wilson, 1917, 301; near Pocahontas, Alberta.—Seward, 1926, 111, pl. 10, f. 100; pl. 11, f. 107; text-f. 20; Upervivik Isl., Disko Isl., Nugsuak, west Greenland.—Seward & Conway, 1935a, 16, pl. 4, f. 19; Atanekerdluk and Upervivik Island, west Greenland.

Widdingtonites gracilis Heer, 1868, 83, pl. 43, f. 1e, 3c, f. g. □

?*Sequoia gracilis* Heer (part), 1874a, pl. 22, f. 1a, 4, 7, 9.—?White, 1898, 349, 350, 353; Pagtorfik, Kaersuk, Ujarartorsuak, Nugsuak Pen., west Greenland.—?Wilson, 1917, 301; Anthracite Station, Alberta.

Sequoia reichenbachii (Geinitz) Heer. Hollick, 1892a, 30, pl. 1, f. 18.

Cyperaceae sp. Penhallow, 1900, 335; Taylor's Brickyard, Don Valley, Toronto, Ontario; Green's Creek and Besserer's Wharf, Quebec.

Cyperacites angustifolia Chaney, 1920a, 160, pl. 6, f. 2; Eagle Creek: Multnomah Co., Oreg.

Cyperacites haydenii (Lesquereux) Knowlton. □ Knowlton, 1923, 152; Green River: Uinta Co., Wyo.

Cyperacites minutus Berry, 1930, 53, pl. 35, f. 6; Holly Springs: Taylor Farm, Chester Co., Tenn.

Cyperacites potomacensis Berry, 1916, 455, pl. 79, f. 6; Patapsco: near Wellhams, Anne Arundel Co., Md.

Cyperacites wilcoxensis Berry, 1930, 53, pl. 35, f. 7; Holly Springs: Taylor Farm, Chester Co., Tenn.

Cyperacites sp., Chaney, 1927a, 133; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.

Cyperacites sp., Chaney & Elias, 1936b, 35; Ogallala: Logan Co., Kans.; Brown Co., Nebr.; Beaver Co., Okla.

Cyperacites sp., Dorf, 1936, 110; Idaho: near Weiser, Idaho.

Cyperacites sp., Jennings, 1920, 406, pl. 24, f. 3; Missoula, Mont.

Cyperacites sp., Hollick, 1912a, 50; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.

Cyperacites sp., Ball, 1931, 148; Eocene: Texas. Many localities.

Cyperites deucalionis Heer. □

Cyperus deucalionis Heer. □ Lesquereux, 1871, 384; Barrel Springs, Wyo.

Cyperus chavannesi Heer. □ Knowlton, 1923, 152; Green River: Green River, Wyo.

Cyperus deucalionis Heer = *Cyperites deucalionis* Heer.

Cyperus (or *Scirpus*) sp., Berry, 1927, 23; Pleistocene: Henry Co., Tenn.

CYPSELITES Heer = *ACHAENITES* Al. Braun.

Cypselites jacksonensis Berry, 1924, 198, pl. 40, f. 2; Jackson: near El Dorado, Union Co., Ark.

CZEKANÓWSKIA Heer. □ Harris, 1935, 38; discussion.

Czekanowskia dichotoma Heer, 1882, 14, pl. 2, f. 12b, c; pl. 3, f. 1; west Greenland.

—White, 1898, 347, 352; Kook, Ujarartorsuak, Nugsuak Pen., west Greenland.

—Seward, 1925, 243; type specimens are indeterminable.

Czekanowskia hartzii Harris, 1926, 104, pl. 4, f. 1-3; text-f. 25e-g; Rhaetic: Scoresby Sound, east Greenland.—1935, 38, pl. 4, f. 4, 5; pl. 6, f. 1, 9-11; pl. 7, f. 10; text-f. 19; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Czekanowskia rigida, Hartz not Heer, 1896, 241, pl. 17, f. 1, 4; pl. 18, f. 1-3; Rhaetic: Cape Stewart, east Greenland.

Czekanowskia setacea, Hartz not Heer, 1896, 242, pl. 17, f. 1-3; pl. 18, f. 1; pl. 13, f. 5b; Rhaetic: Cape Stewart, east Greenland.

Czekanowskia nathorstii Harris, 1935, 40, pl. 4, f. 3, 7, 9; pl. 5, f. 1-5; pl. 6, f. 2-4, 6-8; pl. 8, f. 1, 2; text-f. 19; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Czekanowskia rigida and *C. setacea* Nathorst (?Heer), 1906, Lunds Univ. Arsskr., N. F. Afd. 2, vol. 2, no. 8, 11, pl. 1, f. 9; pl. 2, f. 2-15; text-f. 16-18.

Czekanowskia rigida, Hartz not Heer = *Czekanowskia hartzii* Harris.

Czekanowskia rigida Nathorst (?Heer) = *Czekanowskia nathorstii* Harris.

Czekanowskia setacea, Hartz not Heer = *Czekanowskia hartzii* Harris.

Czekanowskia setacea Nathorst (?Heer) = *Czekanowskia nathorstii* Harris.

Czekanowskia sp. Berry, 1929k, 47, pl. 8, f. 1-3; Kootenai: southwest Alberta.

DADOXYLON Endlicher, 1847, Syn. Conif. 300.—Knowlton, 1890, 609; Catalogue of genus.

Dadoxylon edvardianum Dawson = *Araucarioxylon edvardianum* (Dawson) Knowlton.

Dalbergia attenuata Berry, 1930, 85, pl. 38, f. 1; Holly Springs: Paris, Henry Co., Tenn.

Dalbergia cretacea Berry, 1925, 59, pl. 11, f. 3; Ripley: Henry Co., Tenn.

Dalbergia eocenica Berry not Ettingshausen = *Dalbergia puryearensis* Berry.

Dalbergia gabbi Hollick, 1924, 305, pl. 13, f. 5; Santo Domingo.

Dalbergia knowltoni Cockerell = *Leguminosites lesquereuxiana* Knowlton.

Dalbergia ovata MacGinitie, 1937, 142, pl. 8, f. 4; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Dalbergia perryana Berry, 1925, 59, pl. 11, f. 4; Ripley: Henry Co., Tenn.

Dalbergia prewilcoxiana Berry, 1925, 59, pl. 11, f. 5; Ripley: Henry Co., Tenn.

Dalbergia puryearensis Berry, 1922g, 14; Lagrange: Puryear, Henry Co., Tenn.

Dalbergia eocenica Berry not Ettingshausen. □ (Homonym, Ettingshausen, 1858).

Dalbergia retusa Knowlton, 1923, 165, pl. 40, f. 5-6; Green River: Little Duck Creek, Rio Blanco Co., Colo.

Dalbergia rinkiana Heer = *Dalbergites simplex* (Newberry) Seward.

Dalbergia viridiflumis Knowlton = *Planera nervosa* Newberry.

Dalbergia wilcoxiana Berry. □ Berry, 1930, 85, pl. 48, f. 34; Holly Springs: Puryear and Atkins Pit, Henry Co.; Mill Creek, Hardeman Co., Tenn.

Dalbergites borealis (Heer) Seward, 1926, 135, text-f. 33 a-b; Nugsuak, west Greenland.

Myrsine borealis Heer. □ Heer, 1874a, 113, pl. 32, f. 23.—Berry, 1920e, 405; Black Creek: N. C.—White, 1890, 98, pl. 2, f. 5; Martha's Vineyard, Mass.

Myrsine consobrina Heer, 1883, 112, pl. 107, f. 11.

Diospyros rotundifolia, Hollick not Lesquereux, 1894, 53, pl. 179, f. 2.

Dalbergites simplex (Newberry) Seward, 1926, 135, pl. 11, f. 110; text-f. 32; Nugsuak, Disko Isl., west Greenland.—Seward & Conway, 1935a, 26, text-f. 22-24; Atanekerdluk: west Greenland.

Liriodendron meekii Heer. □ Berry, 1913a, 572, Tuscaloosa: near Cottondale, Ala.

Populus berggreni Heer. □ Heer, 1874a, 106.—1882, 63.—White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.—Berry, 1929i, 61, pl. 10, f. 6; Upper Blairmore: southwestern Alberta.—Gress, 1922, 286; Dakota: Ellsworth Co., Kans.; New Ulm, Minn.

Magnolia alternans Heer (part), 1874a, 116.

Ficus atavina Heer. □ White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

Diospyros primaeva Heer (part), 1882, 80, pl. 18, f. 11.—Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirleys Mill; near Tuscaloosa; near Cottondale, Ala.

Diospyros prodromus Heer. □ Heer, 1882, 81.

Colutea primordialis Heer. □ Berry, 1922 c, 168; Woodbine: Arthur's Bluff, Lamar Co., Tex.—Hollick, 1930, 97, pl. 74, f. 1; Chignik: Alaska Peninsula.

Colutea valde-inaequalis Heer, 1882, 100, pl. 27, f. 12, 13.

Dalbergia rinkiana Heer, 1882, 102.

Sapotacites nervulosus Heer, 1883, 32, pl. 61, f. 11.

Sapotacites retusus Heer, 1883, 32, pl. 61, f. 10.—Hollick, 1896b, 123, pl. 53, f. 5, 6.

Liriodendron simplex Newberry (part), 1887, 6, pl. 62, f. 2, 3.—White, 1890, 98, pl. 2, f. 7; Martha's Vineyard, Mass.

Liriodendron simplex Hollick not Newberry, 1893, 235, pl. 5, f. 5.

Ficus protogaea, Hollick not Ettingshausen, 1894, 51, pl. 175, f. 4.

Liriodendropsis simplex (Newberry) Newberry. □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen, Shirleys Mill, Ala.—Hollick, 1930, 80, pl. 28, f. 4b; Kaltag: Lower Yukon, Alaska.

Liriodendropsis retusa (Heer) Hollick. □

Dalbergites vetustus Ball, 1931, 80; Indio: Little Sandy Creek, Bastrop Co., Tex.

Dammara acicularis Knowlton. □ Wilson, 1914a, 323; near Stevestville, Red Deer River, Alberta.—1916, 205; Belly River: Red Deer River, Alberta.—Berry, 1925, 34, pl. 22, f. 8; Ripley: Carroll Co., Tenn.

Dammara borealis Heer=**Dammarites borealis** (Heer) Seward.

Dammara cliffwoodensis, Berry not Hollick=**Dammarites borealis** (Heer) Seward.

Dammara macrosperma Heer=**Dammarites borealis** (Heer) Seward.

Dammara microlepis Heer=**Dammarites borealis** (Heer) Seward.

Dammara sp.? White, 1898, 350; Kaersut, Nugsuak Pen., west Greenland.

Dammarites borealis (Heer) Seward, 1926, 98, pl. 10, f. 89; Nugsuak, Disko Isl., west Greenland.

Dammara borealis Heer. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.—1920e, 398; Black Creek: North Carolina.—1923c, 434, text-f. 5, 6; Tuscaloosa: Ft. Decatur, Ala.

Myrsine borealis Heer. □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen, Shirleys Mill, Snow Plantation, Ala.

Eucalyptus geinitzi Heer (part). □ Heer, 1882, 93 pl. 45, f. 4-9, pl. 46, f. 12d.—White, 1890, 98, pl. 2, f. 8-11; Marthas Vineyard, Mass.—Hollick, 1892a, 34, pl. 2, f. 5; Raritan: Kreischerville, Staten Isl., N. Y.—Berry, 1913a, 572; Tuscaloosa: Snow Plantation, Ala.—1920e, 404; Black Creek: North Carolina.—Maiden, 1924, 236; critical revision of the genus *Eucalyptus*.

Dammara microlepis Heer. □ Heer, 1882, 55, pl. 40, f. 5.

Dammara macrosperma Heer, 1883, 17, pl. 53, f. 11.

Dammarites borealis—Continued.

Dammara cliffwoodensis Berry not Hollick, 1903, 61, pl. 48, f. 8-11.—1904a, 69, pl. 1, f. 11.

Myrtophyllum warderi Lesquereux.□

* *Myrtonium geinitzi* (Heer) Berry, 1922c, 175; Woodbine: Arthurs Bluff, Lamar Co., Tex.

NOTE.—Seward & Conway, 1935, 12, have referred certain specimens to *Sciadopitytes borealis*, q. v.

DANAEA Smith.

Danaea coloradensis Knowlton, 1923, 150, pl. 36, f. 4; Green River: 40 mi. southeast of Meeker, Rio Blanco Co., Colo.—Brown, R. W., 1934, 52; Green River: 40 mi. southeast of Meeker, Rio Blanco Co., Colo.

Danaea coloradensis Berry not Knowlton=Sporophylls. Berry.

Daphnogene angelica?, Lesquereux not Heer=*Zizyphus daphnogenoides* Knowlton.

Daphnogene cinnamomifolia (Brongniart?) Unger=*Cinnamomum cinnamomeum* (Rossmassler) Hollick.

Daphnogene cocculoides Hollick, 1930, 82, pl. 45, f. 5; Melozi: Lower Yukon, Alaska.

Daphnogene heerii Lesquereux=*Cinnamomoides heerii* (Lesquereux) Seward.

Daphnogene kanei Heer=*Cocculus kanei* (Heer) Saporta & Marion.

Daphnogene polymorpha (Al. Braun) Ettingshausen=*Cinnamomum cinnamomeum* (Rossmassler) Hollick.

Daphnogene turbulenta Hollick, 1930, 82, pl. 45, f. 6; Kaltag: Lower Yukon, Alaska.

Daphnophyllum dakotense Lesquereux.□Bartsch, 1896, 180; Dakota: Holman Cut, Woodbury Co., Iowa.—Gress, 1922, 313; Dakota: Ellsworth Co., Kans.—Berry, 1929l, 63, pl. 10, f. 4; 83, pl. 45, f. 4; Upper Blairmore: southwest Alberta—Hollick, 1930, 83, pl. 45, f. 4; Melozi: Lower Yukon, Alaska.

DATISCA Linné.

Datisca glomerata Baillon. Mason, 1934, 169, pl. 10, f. 6; Tomales: Tomales Bay, Marin Co., Calif.

DAUCUS (Tournefort) Linné.

Daucus pusillus Michaux. Mason, 1934, 170, pl. 10, f. 14; Tomales: Tomales Bay, Marin Co., Calif.

DAVILLA Vandelli.

Davilla intermedia Potbury, 1935, 76, pl. 12, f. 4, 5; La Porte, Plumas Co., Calif. Decorticated roots?, Knowlton, 1930, 135, pl. 58, f. 1, 2; Dawson: east of Colorado Springs, Colo.

DELTOIDOSPORA Miner, 1935, 618. Genotype: *D. hallii* Miner.

Deltoidospora cascadiensis Miner, 1935, 618, pl. 24, f. 9-12; Kootenai: Cascade Co., Mont.

Deltoidospora hallii Miner, 1935, 618, pl. 24, f. 7, 8; Kootenai: Cascade Co., Mont.

Dendrium pleistocenicum Berry.□Berry, 1926b, 116, pl. 57, f. 1, 2; Chowan: Neuse River, Wayne Co., N. C.

Dennstaedtia americana Knowlton.□Berry, 1935, 16; Middle Ravenscrag: Loc. 17, southern Saskatchewan.

Sphenopteris blomstrandii Heer.□Heer, 1874, 12, pl. 1, f. 3, 4a, 5.—Penhallow, 1906a, 391a; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.

Asplenium tenerum Lesquereux.□Knowlton, 1900d, 38; Coal Creek, Oreg.

Dennstaedtia blomstrandii (Heer) Hollick, 1936, 37, pl. 2, f. 5; Cape Douglas, Alaska Peninsula.

Dennstaedtia blomstrandii (Heer) Hollick=*Dennstaedtia americana* Knowlton.

Dennstaedtia crossiana Knowlton, 1930, 21, pl. 2, f. 7-9; Dawson: Sedalia, Colo.
Dennstaedtia? *fremonti* (Hall) Knowlton. □Berry, 1929j, 130; Frontier: near
 Cumberland, Wyo.

Dermatophyllites actus Heer. □Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

DESMIOPHYLLUM Lesquereux, 1878, Am. Phil. Soc. Proc. vol. 17, 315—
 Solms-Laubach, 1904, K. Svenska Vet. Akad. Handl., vol. 37, no. 7, 6.—Harris,
 1935, 98; discussion.

Desmiophyllum sp. (Type 1) Harris, 1935, 98; Thaumatopteris Zone: Scoresby
 Sound, east Greenland.

Desmiophyllum sp. (Type 2) Harris, 1935, 98, pl. 17, f. 15; Thaumatopteris
 Zone: Scoresby Sound, east Greenland.

Desmiophyllum sp. (Type 3) Harris, 1935, 99; Lepidopteris Zone: Scoresby
 Sound, east Greenland.

?*Podozamites* sp. A, Harris, 1926, 117, pl. 12, f. 3, 4; Rhaetic: Scoresby Sound,
 east Greenland.

Dewalquea groenlandica Heer. □Berry, 1920e, 402; Black Creek: Wayne Co.,
 N. C.

Dewalquea grönlandica Newberry (part) not Heer, 1895, 72, pl. 32, f. 11=
Laurophyllum plutonium (Heer) Seward.

Dewalquea insigniformis Berry. □Berry, 1922c, 167; Woodbine: Arthur's Bluff,
 Lamar Co., Tex.

Dewalquea insignis Hos. & Marck. White, 1898, 362; Patoot, Nugsuak Pen.,
 west Greenland.

Dewalquea pulchella Knowlton. □Berry, 1929j, 131; Frontier: near Cumber-
 land, Wyo.

Dewalquea smithi Berry. □Berry, 1913a, 571; Tuscaloosa: Shirleys Mill;
 Whites Bluff, Ala.

Dicksonia bellidula Heer. White, 1898, 347; Kook, Nugsuak Pen., west Green-
 land.

Dicksonia (*Sphenopteris*) cf. *bindrabunensis*. Wieland, 1913, 265; Liassic: Mix-
 teca Alta, Oaxaca, Mexico.

Dicksonia closipes Heer. Wilson, 1916, 207; Mt. Bush, Yukon Terr.

Dicksonia groenlandica Heer (part)=*Sphenopteris* (*Onychiopsis?*) *johnstrupi*
 (Heer) Seward.

Dicksonia groenlandica Heer (part)=*Sphenopteris groenlandica* (Heer) Sew-
 ard & Conway.

Dicksonia johnstrupi Heer=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes
 & Webb) Halle.

Dicksonia montanensis Fontaine=*Coniopteris pachyphylla* (Fontaine) Berry.

Dicksonia oregonensis Fontaine=*Cladophlebis oerstedii* (Heer) Seward.

Dicksonia pachyphylla Fontaine=*Coniopteris pachyphylla* (Fontaine) Berry.

Dicksoniopsis coniopteroides Berry, 1929o, 162, pl. 19, f. 1, 19; Verapaz Dis-
 trict, Guatemala.

Dicotyledon undet. sp., Webber, 1933, 125, pl. 5, f. 1-3; Ricardo: near Barstow,
 Calif.

Dicotyledonous leaf, Hollick, 1936, 170, pl. 22, f. 5c; Chignik Bay, Alaska
 Peninsula.

DICOTYLOPHYLLUM Saporta, 1894, 147, Flore Fossile du Portugal, Direct.
 Trav. Geol., Portugal, Lisbon.

Dicotylophyllum bellum (Heer) Seward & Conway, 1935, 31, text-f. 15, 16;
 Kingigtok; west Greenland.

Rhus bella Heer. North American combinations of this species not transferred
 pending critical studies.

Dicotylphyllum boreale (Heer) Seward & Conway, 1935, 33, pl. 3, f. 27; Kingitok: west Greenland.

Ulmus boreale Heer, 1878, 35, pl. 5, f. 10; pl. 7, f. 1-4; pl. 9, f. 2-5—Hollick, 1936, 106, pl. 57, f. 1, 2; Kachemak Bay, Kenai Peninsula.

Dicotylphyllum gaudini (Heer) Seward & Conway, 1935, 29, pl. 4, f. 33; text-f. 13; Kingitok, upper Atanekrdluk and Unortoarsuk, west Greenland.

Populus gaudini Fischer-Ooster. North American combinations of this species not transferred pending critical studies.

Dicotylphyllum kingitokense Seward & Conway, 1935, 32, pl. 2, f. 21; Kingitok: west Greenland.

Dicotylphyllum longifolium (Heer) Seward & Conway, 1935, 32, pl. 4, f. 34; pl. 5, f. 38; Kagdlunguak: west Greenland.

Illex longifolium Heer, 1868, pl. 48, f. 3-6.

Dicotylphyllum olafseni (Heer) Seward & Conway, 1935, 28, text-f. 11; Kingitok and Kagdlunguak; west Greenland.

Quercus olafseni Heer. The authors regard this species a synonym but do not consider the North America citations which the cataloguer has left under the former designation pending critical studies.

Dicotylphyllum ovale (Lesquereux) Seward & Conway, 1935a, 31, text-f. 30; Atanekrdluk, west Greenland.

Hedera ovalis Lesquereux.□

Populus stygia Heer (part), 1882, pl. 18, f. 6 only.

Dicotylphyllum shottoni Seward & Conway, 1935a, 31, pl. 5, f. 25; text-f. 32; Atanekrdluk, west Greenland.

Dicotylphyllum steenstrupianum (Heer) Seward & Conway, 1935, 29, pl. 2, f. 19; text-f. 12; Kingitok, west Greenland.

Dicotylphyllum washingtonense (Knowlton) Seward & Conway, 1935, 33, pl. 5, f. 36; text-f. 17, 18; Kingitok, west Greenland.

NOTE.—The Knowlton types of *Ficus? washingtonensis* do not agree with the Seward & Conway figures, which should be renamed.

Dicotylphyllum sp., Seward, 1925, 244; west Greenland.

Populus primaeva Heer, 1874, 88, pl. 24, f. 6.

Dicotylphyllum sp., Seward & Conway cf. *Fraxinus denticulata* Heer. Seward & Conway, 1935, 30, text-f. 14; Kingitok, west Greenland.

Dicotylphyllum sp., Seward & Conway, 1935, 34, text-f. 19; Kagdlunguak, west Greenland.

Dictyophyllum dicksoni Heer=*Hausmannia kohlmanni* Richter.

Dictyophyllum exile (Al. Braun) Nathorst. Harris, 1926, 64, pl. 1, f. 1, 2; text-f. 7b; Rhaetic: Scoresby Sound, east Greenland.—1931b, 80, pl. 18, f. 15, 16; Lepidopteris and Thaumatopteris Zones; Scoresby Sound, east Greenland.

Dictyophyllum exile, Harris (part) not Braun=*Dictyophyllum nilssoni* (Brongniart) Goeppert.

Dictyophyllum muensteri (Goeppert) Nathorst. Harris, 1931b, 85, pl. 14, f. 3; pl. 17, f. 1-4, 10; pl. 18, f. 14; text-f. 31; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Dictyophyllum nilssoni (Brongniart) Goeppert.□Harris, 1931b, 81, pl. 14, f. 4; pl. 15, f. 3, 5, 6, 8; pl. 16, f. 1-5, 7, 8, 11, 12; pl. 17, f. 9; text-f. 29, 30; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Dictyophyllum exile, Harris (part) not Braun, 1926, 64, text-f. 7A only.

DILLENNIA Linné.

- Dillenia alaskana* Hollick, 1936, 153, pl. 94, f. 1, 2; Chignik River opposite Nun point, Alaska Peninsula; Hamilton Bay, Kupreanof Isl., southeastern Alaska.
- Dillenites ceterus* Hollick, 1936, 154, pl. 96, f. 1; Hamilton Bay, Kupreanof Isl., southeastern Alaska.
- Dillenites cretaceus* Berry, 1925, 74, pl. 15, f. 5; Ripley: Carroll Co., Tenn.
- Dillenites ellipticus* Hollick, 1936, 154, pl. 95, f. 1-3; pl. 97, f. 1; Hamilton Bay, Kupreanof Isl., southeastern Alaska.
- Dillenites ellipticus ulmifolius* Hollick, 1936, 154, pl. 96, f. 2-4; pl. 97, f. 2, 3; Hamilton Bay, Kupreanof Island, southeastern Alaska.
- Dillenites microdentatus* (Hollick) Berry. □ Ball, 1931, 96, pl. 40, f. 5; Indio: Bastrop Co., Tex.—Hollick, 1936, 153, pl. 97, f. 4; Hamilton Bay, Kupreanof Island, southeastern Alaska.
- Dillenites* sp., Chaney & Sanborn, 1933=*Tetracera castaneaefolia* MacGinitie.
- DILODENDRON** Radlkofer.
- Dilodendron boreale* R. W. Brown, 1937, 181, pl. 59, f. 9; Latah: Spokane, Wash.
- DIOCLEA** Humboldt, Bonpland & Kunth.
- Dioclea? mexicana* Berry, 1923b, 12, pl. 1, f. 4; near Palomares, Oaxaca, Mexico.
- DIOON** Lindley.
- Dioon inopinus* Hollick, 1932, 170, pl. 3; Hamilton Bay, Kupreanof Isl., Alaska—1936, 43, pl. 9, f. 4a; pl. 10, f. 2a; Hamilton Bay, Kupreanof Isl., southeastern Alaska.
- Dioon praespinulosum* Hollick, 1932, 171, pl. 4, f. 1, 2; Hamilton Bay, Kupreanof Isl., Alaska—1936, 43, pl. 10, f. 1a; pl. 11, f. 1a, 2-5; pl. 110, f. a; Hamilton Bay, Kupreanof Isl., Alaska.
- DIOONIPITES** Wodehouse, 1933a, 484. Genotype: *Dioonipites* sp. Wodehouse.
- Dioonipites* sp. Wodehouse, 1933a, 484; Green River: Parachute Creek, Garfield Co., Colo.
- Dioonites borealis* Dawson. □ Wilson, 1914a, 323; Coal Creek Mines near Fernie, British Columbia—? 1917, 301; Anthracite Station, Alberta.
- Dioonites buchianus abietinus* (Goeppert) Ward. □ Berry, 1929k, 44; Lower Blairmore: southwestern Alberta.
- Dioonites carnallianus?* Goeppert. Newberry, 1888a, 349; near San Juancito, Honduras.
- Dioonites longifolius?* Emmons. Newberry, 1888a, 349; near San Juancito, Honduras.
- DIOSCORITES** Saporta, 1862, Annales sci. nat. Bot., vol. 17, 196. Genotype: *D. resurgens* Saporta.
- Dioscorites cretaceus* Berry, 1925, 36, pl. 3, f. 7; Ripley: Henry Co., Tenn.
- DIOSPYROS** Linné. □ Ball, 1931, 105, discussion.
- Diospyros alaskana* Schimper. □ Hollick, 1936, 161; Ninilchik, Alaska.
- Diospyros amboyensis* Berry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.
- Diospyros anceps* Heer. □ Hollick, 1936, 161, pl. 105, f. 2; Kachemak Bay, Kenai Peninsula, Alaska.
- Diospyros andersonae* Knowlton, 1926, 46, pl. 27, f. 6; Latah: Spokane, Wash.—Brown, R. W., 1937, 185, pl. 60, f. 12-17, 21; Latah: Spokane, Wash.; White Bird, Idaho—Berry, 1938, 97, text-f. 4, 5; Latah: Grand Coulee, Wash.
- Diospyros asper* Berry, 1930, 127, pl. 25, f. 32; Holly Springs: Grable Plt, Henry Co., Tenn.
- Diospyros brachysepalae* Al. Braun. □ Berry, 1916b, 52, pl. 10, f. 3; Alum Bluff: Alum Bluff, Liberty Co., Fla.—1924, 91; Yegua: Rabb Creek, Fayette Co., Tex.; Lisbon: Lexington, Holmes Co., Miss.—Knowlton, 1930, 121, pl. 51, f. 5-7; pl. 52, f. 3; Denver: Golden, Colo.; Mosby and Sedalia, Colo.—Bull. 1931, 104, 129; Wilcox: Calaveras Creek, Wilson Co., Tex.; Claiborne: mouth of Rabb Creek,

Diospyros brachysepala—Continued.

Fayette Co., Tex.—Hollick, 1936, 161, pl. 105, f. 1; south bank Yukon River above Rampart, central Yukon Region, Alaska.

Diospyros princetoniana Cockerell, 1908b, 105, pl. 10, f. 36; Florissant: Florissant, Colorado.

Diospyros brachysepala Knowlton and Berry not Al. Braun=**Diospyros pretexana** Chaney & Elias.

Diospyros cornifolius Hollick, 1930, 114, pl. 85, f. 3: Chignik: Alaska Peninsula.

Diospyros dawsoni Berry, 1926l, 115, pl. 19, f. 3; Joseph Creek, British Columbia.

Diospyros elliptica Knowlton=**Castanopsis convexa** (Lesquereux) Brooks.

Diospyros eolignitica Berry, 1930, 126, pl. 27, f. 4; Wilcox: Nevada Co., Ark.; Holly Springs: Bolivar, Hardeman Co., Tenn.

Diospyros lesquereuxi Knowlton & Cockerell.□

Diospyros rotundifolia Lesquereux.□Gress, 1922, 324; Dakota: Ellsworth Co., Kans.

Diospyros macdonaldi Berry, 1918, 41, pl. 18, f. 4-8; near mouth of Tonosi River, Canal Zone.

Diospyros madisonensis Berry, 1930, 126, pl. 36, f. 6; Holly Springs: Mandy, Madison Co., Tenn.

Diospyros? *microcalyx* Knowlton=**Porana microcalyx** (Knowlton) Berry.

Diospyros mira Berry, 1930d, 76, pl. 13, f. 4; pl. 14, f. 7; so-called Bridger: Tipperary, Wind River Basin, Wyo.—1932e, 12; Lysite: Wind River Basin, Wyo.

Diospyros mirafioriana Berry, 1924, 195, pl. 40, f. 5; pl. 43, f. 5; Fayette: near Miraflores, Webb Co., Tex.—Ball, 1931, 170, pl. 32, f. 4, 5; Fayette: Miraflores, Webb Co.; Jackson?: Rock Creek, Brazos Co., Tex.

Diospyros nebraskana Knowlton & Cockerell.□

Quercus anceps Lesquereux.□Lesquereux, 1871, 379; Dakota: Dakota Co., Nebr.

Diospyros oregona Chaney & Sanborn, 1933, 92, pl. 36, f. 2-4; Fisher: Goshen, Oreg.

Diospyros orientalis Sanborn, 1935, 26, pl. 10, f. 3; Comstock: Comstock, Douglas Co., Oreg.

Diospyros pretexana Chaney & Elias, 1936b, 44, pl. 7, f. 6-8; Ogallala: Beaver Co., Okla.

Diospyros brachysepala Knowlton not Al. Braun, 1916b, 285.—Berry, 1918a, 635, pl. 95, f. 3; Florissant: Florissant, Colo.; Beaver Creek, 10 mi. east of Beaver City, Okla.

Diospyros primaeva Heer.□Bartsch, 1896, 181; Dakota: Holman Cut, Woodbury Co., Iowa.—White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.—Berry, 1920e, 405; Black Creek: North Carolina.—1922c, 178, pl. 39, f. 2; Woodbine: Arthur's Bluff, Lamar Co., Tex.—1923c, 434, text-f. 3; Tuscaloosa: Ft. Decatur, Ga.—Gress, 1922, 326; Dakota: Ellsworth Co., Kans.

Diospyros primaeva Heer (nart)=**Dalbergites simplex** (Newberry) Seward.

Diospyros princetoniana Cockerell=**Diospyros brachysepala** Al. Braun.

Diospyros princetoniana Berry not Cockerell=**Vaccinium sophoroides** (Knowlton) R. W. Brown.

Diospyros prodromus Heer=**Dalbergites simplex** (Newberry) Seward.

Diospyros pseudoanceps Lesquereux.□Bartsch, 1896, 181; Dakota: Holman Cut, Woodbury Co., Iowa.

Diospyros rotundifolia Lesquereux.□Bartsch, 1896, 181; Dakota: Holman Cut, Woodbury Co., Iowa.—Berry, 1913a, 571; Tuscaloosa: near Glen Allen, Shirleys Mill, Ala.

Diospyros rotundifolia Hollick not Lesquereux=*Dalbergites borealis* (Heer) Seward.

Diospyros steenstrupi Heer. □ White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.—Gress, 1922, 325; Dakota: Ellsworth Co., Kans.—Hollick, 1930, 114, pl. 85, f. 2; Chignik: Alaska Peninsula.

Diospyros stenosepala Heer. □ Hollick, 1936, 162; Port Graham, Kenai Peninsula, Alaska.

Diospyros wilcoxiana Berry. □ Berry, 1930, 128, pl. 47, f. 3; Holly Springs: near Bolivar, Hardeman Co.; near McKenzie, Carroll Co.; Puryear, Henry Co., Tenn.; Wilcox: Mansfield, La.—Ball, 1931, 104, pl. 8, f. 1; Indio: Barton's Ranch, Bastrop Co., Tex.

Diospyros sp., Berry, 1930, 127; Holly Springs: Grable Pit, Henry Co., Tenn.

Diospyros sp., Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

DIPHOLIS DeCandolle.

Dipholis pseudoleiantha Hollick, 1928, 221, pl. 84, f. 3; Collazo: Porto Rico.

DIPLAZIUM Swartz.

Diplazium crossii (Knowlton) Knowlton, 1930, 23, pl. 2, f. 6; Denver: Golden, Colo.; Middle Park: Middle Park, Grand Co., Colo.

Diplazium muelleri? Lesquereux not Heer, 1873, 393.—1878, 55, pl. 4, f. 10, 10a.—1883, 138; Denver: Golden: Colo.

Asplenium (*Diplazium*) *crossii* Knowlton. □

Diplazium muelleri? Lesquereux not Heer=*Diplazium crossii* (Knowlton) Knowlton.

DIPTERONIA Oliver.

Dipteronia americana R. W. Brown, 1935, 580, pl. 67, f. 6, 12; Republic: Republic, Wash.

Comptonia insignis, Berry not Cockerell, 1929f, 241, pl. 50, f. 5; Latah: Republic, Wash.

Dipteronia insignis (Lesquereux) R. W. Brown, 1937, 181, pl. 59, f. 10–12; Florissant: Florissant, Colo.

Myrica insignis Lesquereux, 1876, 312.—1878, 135, pl. 65, f. 7, 8; Florissant: Florissant, Colo.

Myrica latiloba acutiloba Lesquereux, 1874, 412.—1878, 134, pl. 17, f. 13; Florissant: Florissant, Colo.

Rhus subrhomboidalis Lesquereux. □

Comptonia insignis (Lesquereux) Cockerell, 1906a, 173.—1908b, 81.—Berry, 1906c, 499.—Brown, R. W., 1934, 54; Florissant: Florissant, Colo.

Comptonia acutiloba (Lesquereux) Cockerell. □

DISCITES Harris, 1931b, 6. Genotype: *D. minutus* Harris.

Discites minutus Harris, 1931b, 6, pl. 7, f. 4, 9; text-f. 1; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Dodoniaea knowltoni Berry. □ Berry, 1930, 100; Holly Springs: Puryear, Henry Co., Tenn.

Dodoniaea parvula Berry, 1930, 100, pl. 33, f. 1–4; Holly Springs: Bolivar, Hardeman Co., Tenn.

Dodoniaea viscosoides Berry. □ Berry, 1924, 70, 176, pl. 12, f. 7; pl. 34, f. 11–13; pl. 42, f. 1; Lisbon: Newton, Newton Co.; near Lexington, Holmes Co., Miss.; Yegua: Columbia, Caldwell Parish, La.; Fayette: near Wellborn, Brazos Co., Tex.; Barnwell: Grovetown, Ga.; Forest Station, Columbia Co.; near Macon, Bibb Co., Ga.; Jackson: near El Dorado, Union Co., Ark.—Ball, 1931, 158; Jackson: Rock Creek, Brazos Co.; Fayette: Alum and Boggy Creeks, Brazos Co., Tex.—Brown, R. W., 1934, 63, pl. 10, f. 9; Green River: Ute Trail northwest of De Beque, Colo.

Dodonaea wilcoxiana Berry. □ Berry, 1930, 100; Holly Springs: Grable Pit, Henry Co., Tenn.

Dolichites deusseni Berry. □ Ball, 1931, 80; Indio: Earle, Bexar Co., Tex.

DOLICHOS Linné.

Dolichos convexa Hollick, 1936, 130, pl. 71, f. 6, 7; Eska Creek, Matanuska Coal Field, Alaska.

Dombeyopsis crenata Unger = *Cercidiphyllum crenatum* (Unger) R. W. Brown.

Dombeyopsis grandifolia?, Lesquereux not Unger = *Dombyopsis magnifica* Knowlton.

Dombeyopsis magnifica Knowlton, 1930, 125, pl. 54, f. 4; pl. 55, f. 4; pl. 57, f. 1; pl. 58, f. 8; Dawson: Purdon Mine, Colo.

Dombyopsis grandifolia? Lesquereux not Unger. □

Ficus (*Dombeyopsis*) *grandifolia*, Lesquereux not Unger, 1888, 49; Denver: Golden, Colo.

Dombeyopsis obtusa Lesquereux. □ Knowlton, 1930, 124; Denver: Golden, Colo.; Dawson: near Colorado Springs, Sedalia, Colo.

Dombeyopsis obtusiloba Lesquereux = *Menispermites obtusiloba* Lesquereux.

Dombeyopsis occidentalis Lesquereux = *Ficus mississippiensis* (Lesquereux) Berry.

Dombeyopsis? *sedaliensis* Knowlton, 1930, 126, pl. 56, f. 5; pl. 59, f. 1; Dawson: Sedalia, Colo.

Dombeyoxylon jacksonensis Berry, 1924, 181, pl. 36; pl. 37; Fayette: Hornbeck, Sabine Parish, La.

DORATOPHYLLUM Harris, 1932, 36. Genotype: *D. astartensis* Harris.

Doratophyllum astartensis Harris, 1932, 36, pl. 2, f. 6; pl. 3, f. 7, 12, 14; text-f. 21; Lepidopteris Zone: Scoresby Sound, east Greenland.

Doryanthites cretacea Berry. □ Berry, 1920e, 339; Black Creek: Cumberland and Wayne Cos., N. C.—1925, 36; Eutaw: Hale Co., Ala.; Decatur Co., Tenn.; Ripley: Marion Co., Ga.

NOTE.—References to this genus and species in Knowlton, 1919, are under *Doryanthes*, a misspelling.

DRABA Dillenius.

Draba fladnizensis Wulfenius. Chaney & Mason, 1936c, 16, text-f. 23-27; Pleistocene: Head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Drepanolepis reniformis Berry, 1932c, 217, text-f. 1; Chitina Valley, Alaska.

DREPANOZAMITES Harris, 1932a, 83. Genotype: *D. nilssoni* (Nathorst) Harris.

Drepanozamites nilssoni (Nathorst) Harris, 1932a, 83, pl. 7; pl. 8, f. 1, 12; text-f. 44, 45; Lepidopteris Zone: Scoresby Sound, East Greenland.

DRIMYS Forster.

Drimys americana Chaney & Sanborn, 1933, 69, pl. 12, f. 2, 5; Fisher: Goshen, Oreg.

Dryandroides lanceolata Knowlton = *Dryophyllum lanceolatum* (Knowlton) Berry.

DRYAS Linné.

Dryas drummondii Richards. Hollick, 1931, 43, pl. 5, f. 1-7, 9b, 11b; pl. 6, f. 1d, 2e, 2f; pl. 7, f. 1c, 2c, d; pl. 8, f. 1f, g, h, i; Pleistocene: Colebrook, N. H.

DRYOPHYLLUM Debey. □ Ball, 1931, 47; discussion.

Dryophyllum aquilonium Hollick, 1936, 104, pl. 43, f. 6; near Matanuska River and Moose Creek, Alaska.

Dryophyllum berryana Knowlton, 1924, 81, pl. 8, f. 2; Animas: Pagosa Quad., Colo.

Dryophyllum brevipetiolatum Berry, 1924, 56, pl. 23, f. 3; Mt. Selman: Santo Tomas, Webb Co., Tex.—1924, pl. 28, f. 11; pl. 31; Fayette: Trinity Co., Tex.; Piedmont, Grimes, Co., Tex.; Catahoula?: Trinity Co., Tex.; Jackson: Hornbeck, Sabine Parish, La.—Ball, 1931, 120, 151, pl. 27, f. 1; Mt. Selman: Santo Tomas, Webb Co.; Catahoula?: Trinity and Grimes Cos.; Fayette: Brazos Co., Tex.

Dryophyllum bruneri Ward. □ Hollick, 1930, 70, pl. 38, f. 2; Chignik: Alaska Peninsula.

Dryophyllum gracile Debey. □ Berry, 1925, 46; Ripley: McNairy and Carroll Cos., Tenn.

Dryophyllum johnstrupi (Heer) Seward & Conway, 1935, 22, pl. 4, f. 29; text-f. 6. Kingigtok, west Greenland.

NOTE.—The authors indicate that this species was formerly described by Heer but do not state under what generic category. It seems likely that *Quercus johnstrupi* may be the former name.

Dryophyllum juvenale Berry, 1930, 62, pl. 48, f. 18; Holly Springs: Puryear, Henry Co., Tenn.

Dryophyllum lanceolatum (Knowlton) Berry, 1929j, 133; Frontier: Near Lander, Wyo.

Dryandroides lanceolata Knowlton. □ Brown, R. W., 1933, 6, pl. 1, f. 6; Aspen: southwest Wyoming.

Dryophyllum longipetiolatum Knowlton = *Castanea orientalis* Chaney.

Dryophyllum moorii (Lesquereux) Berry. □ Ball, 1931, 47, pl. 43, f. 5; Indio: Little Sandy Creek, Bastrop Co., Tex.

Quercus moorii Lesquereux. □ Lesquereux, 1871, 382; Wilcox: Mississippi.

Dryophyllum protofagus Berry, 1925, 46, pl. 5, f. 4, 5; Ripley: Carroll Co., Tenn.

Dryophyllum stanleyanum Dawson = *Hicoria stanleyanum* (Dawson) Berry.

Dryophyllum tennesseensis Berry. □ Ball, 1931, 45, pl. 9, f. 4, 5. Indio: Bartons Ranch and Little Sandy Creek, Bastrop Co., Tex.

Dryophyllum wyomingense Berry, 1930d, 69, pl. 10, f. 3–5; so-called Bridger: Tipperary, Wind River Basin, Wyo.—1932e, 11; Lysite: Wind River Basin, Wyo.

Dryophyllum n. sp., Bell, 1932, 220; Dunvegan: Peace River Valley, British Columbia.

Dryophyllum sp. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Dryophyllum sp. Seward & Conway, 1935, 22, text-f. 7; Kingigtok, West Greenland.

Dryopteris arguta (Lesquereux) Knowlton = *Dryopteris lakesii* (Lesquereux) Knowlton.

Dryopteris cladophleboides Knowlton. □ Berry, 1922g, 5, pl. 4, f. 5–7; Wilcox: De Soto Parish, La.—Knowlton, 1924, 78, pl. 6, f. 5–7; Animas: Pagosa Quad., Colo.—Ball, 1931, 33; Wilcox: De Soto Parish, La.

Dryopteris coloradensis Knowlton. □ Berry, 1929j, 130; Frontier: near Cumberland, Wyo.

Dryopteris? gleichenoides Knowlton = *Dryopteris idahoensis* Knowlton.

Dryopteris idahoensis Knowlton. □ Berry, 1934, 103, pl. 19, f. 2, 3; Latah: Alkali Creek, Lewis Co., Idaho.—Dorf, 1936, 105; Idaho: near Weiser, Idaho.

Gleichenia ? obscura Knowlton. □

Dryopteris ? gleichenoides Knowlton. □

Dryopteris obscura (Knowlton) Berry, 1927c, 5; Esmeralda: northeast of Emigrant Peak, Nevada.

Dryopteris integra Knowlton, 1930, 17, pl. 1, f. 5; Middle Park: Middle Park, Grand Co., Colo.

Dryopteris lakesii (Lesquereux) Knowlton, 1930, 18, pl. 1, f. 1, 2; Denver: Golden, Colo.; Dawson: Sedalia, Colo.; Middle Park: Middle Park, Grand Co., Colo.

Lathraea arguta Lesquereux.□

Sphenopteris eocenica, Lesquereux not Ettingshausen, 1873, 376; Denver: Golden, Colo.

Sphenopteris lakesii Lesquereux.□ Lesquereux, 1888, 43; Denver: Golden, Colo.

Aspidium lakesii (Lesquereux) Knowlton.□

Dryopteris arguta (Lesquereux) Knowlton.□

Sphenopteris membranacea Lesquereux.□ Lesquereux, 1888, 43; Denver: Golden, Colo.

Dryopteris laramiensis Knowlton.□

Aspidium (*Lastraea*) *pulchellum* Heer.□ Lesquereux, 1871, 384; Muddy Creek, Utah.

Dryopteris meyeri (Heer) Hollick, 1936, 36, pl. 109, f. 1-6; Central Yukon River region; King Salmon Lake, Alaska Peninsula; Pumicestone Creek; Russell Creek, Alaska Peninsula.

Aspidium meyeri Heer, 1855, Fl. Tert. Helv., vol. 1, 36, pl. 11, f. 2a-e, 2g-i, 2k-l.—White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.

Dryopteris monocarpa (Fontaine) Knowlton=**Cladophlebis oerstedii** (Heer) Seward.

Dryopteris monocarpa, Fontaine not Knowlton=**Dicksonia oregonensis** Fontaine.

Dryopteris montanensis (Fontaine) Knowlton=**Cladophlebis oerstedii** (Heer) Seward.

Dryopteris obscura (Knowlton) Berry=**Dryopteris idahoensis** Knowlton.

Dryopteris oerstedii (Heer) Knowlton=**Cladophlebis oerstedii** (Heer) Seward.

Dryopteris polypodioides (Ettingshausen) Knowlton.□ Knowlton, 1930, 21; Denver: east of Denver, Colo.

Aspidium polypodioides (Ettingshausen) Heer.□ Cross, 1895, 211: Middle Park: Middle Park, Grand Co., Colo.

Dryopteris richardsoniana Knowlton, 1930, 20, pl. 2, f. 3-5; Dawson: Sedalia, Colo.

Dryopteris stephensoni Berry.□ Berry, 1913a, 572; Tuscaloosa: Snow Plantation, Ala.—1925, 28; Ripley: Houston Co., Ga.

Dryopteris weedii Knowlton.□ Berry, 1930d, 63, pl. 7, f. 1; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Drypetes elliptica Berry, 1923b, 15, pl. 7, f. 5; near Palomares, Oaxaca, Mexico.

Dulichium arundinaceum (Linné) Britton. Berry, 1924a, 18, pl. 1, f. 17, 18; Pleistocene: Washington, D. C.

Ebenoxylon boreale Platen.□ Hollick, 1936, 162; no locality, Alaska.

ECHITES P. Browne.

Echites ettingshauseni Berry, 1925a, 127, pl. 14, f. 5; Forest: Trinidad, British West Indies.

Echites pseudostellaris Hollick, 1928, 223, pl. 85, f. 5; Collazo: Porto Rico.

Echitonium sophiae? O. Weber.□ Lesquereux, 1871, 382; Raton?: Raton Pass; Marshall, Colo.

Echitonium? sp. Hollick, 1928, 223, pl. 79, f. 3d; Collazo: Porto Rico.

Elaeocarpus alaskensis Hollick, 1936, 143, pl. 80, f. 5; Kachemak Bay, Kenai Peninsula, Alaska.

Elaeodendron helveticum Heer.□ Hollick, 1936, 133; Unga Isl., off south coast of Alaska Peninsula.

ELATOCLADUS Halle, 1913, Wiss. Ergeb. Schwed. südpol. Exped. 1901-1903, vol. 3, no. 14, 82.—Harris, 1935, 60; discussion.

Elatocladus albertensis Bell, 1928a, 26, pl. 13, f. 1-3; Belly River: Alberta.

NOTE.—The figures on plate 13 are referred to as *Cephalotaxopsis albertensis*.

Elatocladus amblus Harris, 1935, 70, pl. 16, f. 8, 9; pl. 19, f. 15, 16, 18, 19; text-f. 31f, g; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Elatocladus dicksoniana (Heer) Seward, 1926, 108, pl. 10, f. 91; text-f. 17; Nugssuak, west Greenland.

Torreya dicksoniana Heer, 1874, 70, pl. 18, f. 1-4.—1882, 15.—1883, pl. 109, f. 4.—Berry, 1929k, 50; Lower Blairmore: southwest Alberta.—1932h, 209; Bull Head Mountain (Gethring Member): Peace River Valley, British Columbia.

Elatocladus elegans (Heer) Seward, 1925, 243; west Greenland.

Cunninghamites elegans, Heer not Corda, 1883, 17, pl. 53, f. 1.

Elatocladus eury stomus Harris, 1935, 76, pl. 16, f. 13; text-f. 30g-i; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus lacunosus Harris, 1935, 65, pl. 14, f. 3, 4; text-f. 29f; Lepidopteris Zone: Scoresby Sound, east Greenland.

Taxites sp. A, Harris, 1926, 123, text-f. 30a-d; Rhaetic: Scoresby Sound, east Greenland.

Elatocladus macilentia (Heer) Seward, 1926, 109; Disko Isl., west Greenland.

Juniperus macilentia Heer, 1882, 47, pl. 35, f. 10, 11.—Newberry, 1895, 54, pl. 10, f. 7; Raritan: Woodbridge, N. J.

Juniperus hypnoides Heer (part), 1882, 47, pl. 46, f. 18.

Elatocladus mathieseni Seward & Conway, 1935, 13, pl. 2, f. 12; pl. 5, f. 37; Kingitok, west Greenland.

Elatocladus molopicus Harris, 1935, 73, pl. 14, f. 1, 2; text-f. 29e, g, h; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus nitidus Harris, 1935, 68, pl. 12, f. 1, 2; text-f. 27a-c; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus oligostomus Harris, 1935, 69, pl. 12, f. 9, 10; pl. 18, f. 9, text-f. 27g-i; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Elatocladus pachyteichus Harris, 1935, 61, pl. 14, f. 7, 10; pl. 15, f. 2; text-f. 30d-f; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Elatocladus patens Harris, 1935, 61, pl. 11, f. 4, 10, 11, 16, 19; pl. 15, f. 3; text-f. 29a-c; transitional between Thaumatopteris and Lepidopteris Zones: Scoresby Sound, east Greenland.

Elatocladus perforatus Harris, 1935, 64, pl. 13 f. 1, 2; text-f. 28a-c; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus physetus Harris, 1935, 76, pl. 14, f. 5, 6; text-f. 30a-c; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus polystictus Harris, 1935, 75, pl. 4, f. 8, 9; text-f. 29d, i-k; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus polystomus Harris, 1935, 72, pl. 13, f. 9, 10; text-f. 28d-f; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus punctatus Harris, 1935, 68, pl. 12, f. 5, 6; text-f. 27j-l; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus smittiana (Heer) Seward, 1926, 103, pl. 10, f. 90, 92; pl. 12, f. 119; text-f. 14; Upemnivik Island, Nugsuak, west Greenland.

Sequoia smittiana Heer. □ Heer, 1874, 82, pl. 12, f. 10b; pl. 17, f. 3, 4; pl. 18, f. 1b; pl. 20, f. 5b, 7c; pl. 23, f. 1-6.—1882, 17.—Wilson, 1917, 301; Near Pochontas, Alberta.—Berry, 1929k, 53; Kootenai: southwest Alberta.

Elatocladus smittiana—Continued.

Sequoia rigida Heer (part), 1874, 30, pl. 22, f. 5g, 11a.—1882, 51, pl. 7, f. 10-12; pl. 8, f. 7.—1883, pl. 53, f. 5, 6.—White, 1898, 360; Atane, Nugsuak Pen., west Greenland.

Torreya parvifolia Heer, 1874, 7, pl. 17, f. 1, 2.

Cunninghamites borealis Heer, 1882, 55, pl. 29, f. 12.

Sequoia langsdorffii, (*Brongniart*) Heer (part), 1883, 15, pl. 53, f. 8.

Taxodium cuneatum Dawson not Newberry, 1883, 25.—1886, 9, pl. 2, f. 7, 7a; Kootenai; British Columbia.

Torreya dicksonioides Dawson.□

Tumton dicksonioides (Dawson) Knowlton.□

Elatocladus (Sequoia?) smittiana (Heer) Bell, 1932, 220; Dunvegan: Peace River, British Columbia.—Seward & Conway, 1935a, 16, pl. 4, f. 22; Atane-kerdluk, west Greenland.

Sequoia schmittiana Heer. White, 1898, 349, 352, 353; Pagtorfik, Ujarartorsuak, Nugsuak Pen., west Greenland.

Elatocladus (Sequoia?) smittiana (Heer) Bell=*Elatocladus smittiana* (Heer) Seward.

Elatocladus stenocytus Harris, 1935, 72, pl. 13, f. 7, 8; text-f. 28j-l; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus stenostomus Harris, 1935, 65, pl. 13, f. 3, 4; text-f. 28g-i; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus subtilis (Heer) Seward, 1926, 110; Nugsuak, west Greenland.

Widdringtonites subtilis Heer.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill Snow Plantation, Ala.

Callitrites subtilis (Heer) Seward, 1919, Fossil Plants, vol. 4, 339.

Juniperus hypnoides Heer (part), 1882, pl. 44, f. 3.

Elatocladus subulata (Heer) Seward, 1926, 109, pl. 9, f. 85; Nugsuak, West Greenland.

Sequoia subulata Heer, (part), 1874a, 102, pl. 17, f. 3b, 7, 8b, 15a; pl. 28, f. 3-6; pl. 29, f. 2c, 7b.—1882, 54, pl. 5c, pl. 17, f. 1, 9b.—?Hollick, 1930, 58, pl. 25, f. 8, 9; Melozi; Lower Yukon, Alaska.

Elatocladus tuberculatus Harris, 1935, 69, pl. 12, f. 3, 4; text-f. 27d-f; Thaumapteris Zone: Scoresby Sound, east Greenland.

Elatocladus ungeri (Heer) Seward & Conway, 1935, 14, pl. 1, f. 8; Kingigtok, West Greenland.

NOTE.—It does not appear advisable to the cataloguer to transfer all North American citations of *Glyptostrobus ungeri* and *G. europaeus* to this category nor does it appear to be the intention of Seward & Conway to so do.

Elatocladus upernivikensis Seward, 1926, 110, pl. 10, f. 103; text-f. 18; Upernivik Isl., West Greenland.

Elatocladus sp. A, Harris, 1935, 74, pl. 20, f. 6, 7; text-f. 31h-j; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus sp. B, Harris, 1935, 74, pl. 16, f. 18; text-f. 31e; Lepidopteris Zone: Scoresby Sound, east Greenland.

Elatocladus sp. C, Harris, 1935, 77, text-f. 32; Thaumapteris Zone: Scoresby Sound, east Greenland.

Elatocladus sp. Seward cf. *Cephalotaxopsis brevifolia* Fontaine. Seward, 1926, 111, text-f. 19; Nugsuak, west Greenland.

Elatocladus sp. Seward & Conway, 1935, 13, pl. 1, f. 6; pl. 5, f. 35; Kingigtok, West Greenland.

Embothrites ungeri Berry, 1916e, 238, pl. 55, f. 11, 12; Catahoula: Chalk Hills near Rosefield, La.

Encephalartos? denticulatus Newberry, 1888a, 346, pl. 8, f. 5; near San Juancito, Honduras.

Encyonema prostratum Penhallow, 1900, 335; Rolling River, Manitoba; Green's Creek and Besserer's Wharf, Quebec.

Endogenites palmacites Sprengel=*Palmoxylon palmacites* (Sprengel) Stenzel.

Engelhardtia corylipites Wodehouse, 1933a, 504, f. 32; Green River: Parachute Creek, Garfield Co., Colo.

Engelhardtia ettingshauseni Berry. Ball, 1931, 43, pl. 1, f. 6; Indio: Bartons Ranch, Bastrop Co., Tex.—Hollick, 1936, 84, pl. 119, f. 3; Kachemak Bay, Kenai Peninsula, Alaska.

Engelhardtia jacksonensis Berry, 1924, 153, pl. 28, f. 5; Jackson: near El Dorado, Union Co., Ark.

Engelhardtia puryearensis Berry, 1930, 60; Holly Springs: Puryear, Henry Co., Tenn.

EOACHRAS *eocenica* Berry. □Berry, 1924, 90, pl. 22, f. 7-9; Lisbon: near Lexington, Holmes Co., Miss.

Ephedra eocenipites Wodehouse, 1933a, 495, f. 20; Green River: Parachute Creek, Garfield Co., Colo.

Ephedra miocenica Wodehouse, 1934, 1-4, text-f. 1; Florissant: Florissant, Colo.

Ephedra nevadensis Watson. Lauder milk & Munz, 1934, 37, pl. 4, f. 2-6; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.

Ephedra sp. Axelrod, 1937, 168; Mt. Eden: near Beaumont, Calif.

EQUISETITES Sternberg, 1833, Versuch einer geognostisch-botanischen Darstellung der Flora der Vorwelt. Fasc. 2, Leipsig, 43. Genotype: *E. muensteri* Sternberg.

Equisetites amissus (Heer) Seward & Conway, 1935a, 4, pl. 1, f. 4; pl. 2, f. 10; Patoot: west Greenland.

Equisetum amissum Heer (part), 1874a, 60, pl. 13, f. 2-8; pl. 22, f. 11.—White, 1898, 347, 350; Kook, Kaersuk, Nugsuak Pen., west Greenland.—Seward (part), 1925, 232.

Equisetites annularioides Heer, 1874a, 61, pl. 13, f. 9.—Seward, 1925, 233; the type specimen is indeterminate.

Equisetites doratodon Harris, 1931b, 16-18, pl. 3, figs. 1, 2, 4-6, 9, 11, 13, 14, 16, 18; text-f. 3f; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Equisetites sp. B, cf. *E. sarrani*, Harris, 1926, 54, pl. 2, f. 2-3; Rhaetic: Scoresby Sound, east Greenland.

Equisetites groenlandicus Heer 1874, 81, pl. 13, f. 10.—Seward, 1925, 233. The type specimens are indeterminate.

Equisetites grosphodon Harris, 1931b, 18-21, pl. 3, f. 3, 8, 10, 12, 17, 19; pl. 4, f. 1, 4; text-f. 3g; Lepidopteris zone: Scoresby Sound, East Greenland.

Equisetites sp. A, cf. *E. praelongus*, Harris, 1926, 54, pl. 5, f. 7; Rhaetic: Scoresby Sound, East Greenland.

Equisetites (Calamites) gümbeli. Wieland, 1913, 266; Liassic: Mixteca Alta, Oaxaca, Mexico.

Equisetites kingitokensis Seward & Conway, 1935, 9, pl. 1, f. 1; Kingitok, West Greenland.

Equisetites laevis Halle. Harris, 1926, 53, pl. 2, f. 8; pl. 3, f. 1-4; Rhaetic: Scoresby Sound, East Greenland.—1931b, 14-16, pl. 3, f. 7, 20; text-f. 3a-e; Lepidopteris and Thaumatopteris zones: Scoresby Sound, East Greenland.

Equisetites münsteri Sternberg. Harris, 1926, 52, pl. 2, f. 1, 6, 7; Rhaetic: Scoresby Sound, east Greenland.—1931b, 7-14, pl. 2, f. 1-15; ?pl. 3, f. 15; pl. 7, f. 3; text-f. 2; Lepidopteris and Thaumatopteris Zones: Scoresby Sound, East Greenland.

Equisetites sp. A, Harris cf. *praelongus* Halle=*Equisetites grosphodon* Harris.

Equisetites sp. B, Harris cf. *sarrani* Zeiller=*Equisetites doratodon* Harris.

Equisetites sp. Seward & Conway, 1935a, 4, pl. 1, f. 2; Atanekerdluk, west Greenland.

Equisetites sp. Seward & Conway, 1935a, 5, pl. 1, f. 1; Atanekerdluk, west Greenland.

Equisetum alexanderi R. W. Brown, 1937, 167, pl. 45, f. 5; Latah: Spokane, Wash.

Equisetum amissum Heer (part).—1882, 40, pl. 13, f. 7, 8; pl. 15, f. 3a; pl. 43.—Seward, 1925, 232; species indeterminate.

Equisetum amissum Heer (part)=*Equisetites amissus* (Heer) Seward & Conway.

Equisetum arcticum Heer. □ Hollick, 1912a, 38; west of Kings River, Matanuska Valley, Alaska.—1936, 41, pl. 7, f. 1-9; pl. 8, f. 1-10; pl. 114, f. 3b; American Creek, Bryant Creek, Drews Mine, Yukon River Region; Matanuska River, Matanuska Coal Field, Anchorage Bay, Cape Douglas, Alaska Peninsula.—Berry, 1924i, 131, 132, pl. 1; Lance: Saskatchewan, Canada.

Equisetum haydenii Lesquereux. □

Equisetum laevigatum, Lesquereux not Al. Braun. □

Physogenia parlatorii, Dawson not Heer, 1875, 329, pl. 16, f. 3, 4; Paskapoo: British Columbia.

Equisetum sp. Dawson, 1887, 22, pl. 1, f. 2; Paskapoo: British Columbia.

Equisetum perlaevigatum Cockerell. □ Knowlton, 1922, 113, pl. 1, f. 8, 9; Laramie: Golden, Colo.

Equisetum parlatorii, Penhallow not Schimper, 1908a, 54; Paskapoo: Saskatchewan.

Equisetum cf. *arcticum* Heer. Wilson, 1914, 409; Kenai: Sourdough Mine, Coal Creek, Yukon Terr.

Equisetum boreale Heer, 1868, 89, pl. 1, f. 17; pl. 45, f. 10, 13e, 13f.—1869a, 463, pl. 43, f. 16; East Greenland.—Berry, 1926, 95; Joseph Creek, B. C.—Hollick, 1936, 42; Unga Island, Alaska.

Equisetum similkameenense Dawson. □

Equisetum globosum Lesquereux. □

Equisetum coloradense Knowlton, 1930, 31, pl. 8, f. 1-6; Middle Park: Middle Park, Grand Co., Colo.; Dawson: Mosby, Colo.

Equisetum globulosum Lesquereux=*Equisetum boreale* Heer.

Equisetum haydenii Lesquereux=*Equisetum arcticum* Heer.

Equisetum insculptum Jennings, 1920, 398, pl. 22, f. 2; Missoula, Mont.

Equisetum laevigatum, Lesquereux not Al. Braun=*Equisetum arcticum* Heer.

Equisetum münsteri Sternberg. □ Hartz, 1896, 233, pl. 6, f. 1-4; Rhaetic, Cape Stewart, East Greenland.

Equisetum oregonense Newberry. □ Sanborn, 1935, 16; Comstock: Comstock, Douglas Co., Oreg.

Equisetum parlatorii Penhallow not Schimper=*Equisetum arcticum* Heer.

Equisetum perlaevigatum Cockerell=*Equisetum arcticum* Heer.

Equisetum phillipsii (Dunker) Brongniart. □ Wilson, 1914, 409; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

Equisetum rogersii (Banbury) Schimper. □ Loper, 1891, 429; Newark (Posterior Shales): near Meriden, Conn.—Hollick, 1931a, 15, pl. 4; Newark: Staten Isl., N. Y.

Equisetum scirpoides Michaux. □ Penhallow, 1900, 335; Rolling River, Manitoba; Green's Creek, Ottawa River, Canada.

Equisetum similkamenense Dawson=*Equisetum boreale* Heer.

Equisetum tipperarense Berry, 1930d, 61, pl. 6, f. 4-10; so called Bridger: Tipperary, Wind River Basin, Wyo.

- Equisetum winchesteri* R. W. Brown, 1929, 282, pl. 70, f. 3; Green River: north-west of De Beque, Colo.
- Equisetum wyomingense* Lesquereux. □ Knowlton, 1923, 151; Green River: Green River, Wyo.—Cockerell, 1925, 2; Green River: De Beque, Colo.
- Equisetum* sp. Arnold, 1935, 380; Trout Creek: Trout Creek, Harney Co., Ore.—1937, 82, pl. 1, f. 1; Trout Creek: Trout Creek, Harney Co.; Sucker Creek, Ore.
- Equisetum* sp. Axelrod, 1937, 164; Mt. Eden: near Beaumont, Calif.
- Equisetum* sp. Berry, 1924, 142, pl. 41, f. 5; Jackson: near El Dorado, Union Co., Ark.
- Equisetum* sp. Berry, 1924g, 490, text-f. 1; Popo Agie Beds: Lander, Wyo.
- Equisetum* sp. Berry, 1930, 47, pl. 7, f. 1; pl. 50, f. 5; Holly Springs: Laconia, Fayette Co.; Mandy, Madison Co., Tenn.; Wilcox: Queen City, Cass Co., Tex.
- Equisetum* sp. Berry, 1930c, 17; Ravenscrag: Cypress Hills, Canada.—1930f, 64; Estevan: southern Alberta.
- Equisetum* sp., rhizome, Berry, 1930c, 17; Estevan: Cypress Hills, Canada.
- Equisetum* sp. Berry, 1935, 15, pl. 1, f. 1; Whitemud: Loc. 30, southern Saskatchewan.
- Equisetum?* sp. Chaney, 1920a, 159; Eagle Creek: Multnomah Co., Ore.
- Equisetum* sp., Dawson=*Equisetum arcticum* Heer.
- Equisetum* sp. Dorf, 1936, 105; Idaho: near Weiser, Idaho.
- Equisetum*, stem, Hartz, 1896, 234, pl. 6, f. 5; Rhaetic: Cape Stewart, east Greenland.
- Equisetum* sp. Jennings, 1920, 399, pl. 22, f. 1; Missoula, Mont.
- Equisetum*, underground stem, Knowlton=*Carpolithus* sp. R. W. Brown.
- Equisetum?* sp., Knowlton, 1906e. □ Berry, 1929j, 130; Frontier: near Cumberland, Wyo.
- Equisetum* sp. Knowlton, 1930, 32; Denver: Golden, Colo.

Physagenia sp., Lesquereux. □

- Equisetum* sp. Knowlton, 1930, 32, pl. 9, f. 4; Denver: Golden, Colo.
- Equisetum* sp. Potbury, 1952, 31, pl. 3, f. 1; San Bruno: San Mateo Co. Calif.
- Equisetum* sp.?, Wilson, 1914, 408; Kootenai: Pimainus Hills, north of Spence Bridge, Thomson River, British Columbia.
- Eremophyllum fimbriatum* (Lesquereux) Lesquereux. □

Ficus? *fimbriatus* Lesquereux. □ Lesquereux, 1871, 379; Dakota: Decatur, Nebr.

- ERICIPITES** Wodehouse, 1933a, 516. Genotype: *E. longisulcatus* Wodehouse.
- Eriopites brevisulcatus* Wodehouse, 1933a, 518, f. 53; Green River: Parachute Creek, Garfield Co., Colo.
- Eriopites longisulcatus* Wodehouse, 1933a, 517, f. 52; Green River: Parachute Creek, Garfield Co., Colo.
- Eriocaulon?* *porosum* Lesquereux. □ Knowlton, 1930, 132; Denver: east of Denver, Colo.
- Eriocaulon septangulare?* With. ?Penhallow, 1899, 527; Taylor's brickyard, Don Valley, Toronto, Ontario.
- ERIODICTYON** Benth.
- Eriodictyon californicum* (Hooker & Arnold) Greene. Chaney & Mason, 1933a, 65, pl. 8, f. 5; Pleistocene: Carpinteria, Santa Barbara Co., Calif.
- ERIPHORUM** Linné.
- Eriophorum* sp. A, Chaney & Mason, 1936c, 10, text-f. 47; Pleistocene: near Fairbanks, Alaska.
- ERIOPHYLLUM** Lagaska.
- Eriophyllum artemisiaefolium* O. Kuntze. Mason, 1934, 178, pl. 11, f. 14, 15; Tomales: Tomales Bay, Marin Co., Calif.

Eucalyptus? americana Lesquereux. □ Knowlton, 1923, 171, pl. 39, f. 1-5; Green River; Green River, Wyo.; Alkali Station, Wyo.; Cathedral Bluff, Rio Blanco Co., Colo.; between Carr and Bushy creeks, Garfield Co., Colo.—Maiden, 1924, 223.

Apocynophyllum scudderi Lesquereux, 1883, 172, pl. 45A f. 1-5, 1883; Green River: Alkali Station, Wyo.

Salix angusta? Newberry not Al. Braun, 1898, 54, pl. 65, f. 2; Green River: Green River, Wyo.

Eucalyptus angusta Velenovsky=*Myrtophyllum angustum* (Velenovsky) Berry.

Eucalyptus? angustifolia Newberry=*Laurophyllum plutonium* (Heer) Seward.

Eucalyptus? attenuata Newberry. □ Berry, 1920e, 404; Black Creek: North Carolina.—Maiden, 1924, 233.

Eucalyptus? attenuata Newberry (part)=*Ficus daphnogenoides* (Heer) Berry.

Eucalyptus attenuata, Ward not Newberry=*Myrcia havanensis* Berry.

Eucalyptus dakotensis Lesquereux. □ Maiden, 1924, 228.

Cf. Eucalyptus dakotensis Lesquereux. Knowlton, 1920, 190, Morrison: Morrison, Colo.

Eucalyptus geinitzii Heer (part)=*Laurophyllum plutonium* (Heer) Seward.

Eucalyptus geinitzii Heer (part)=*Dammarites borealis* (Heer) Seward.

Eucalyptus gouldii Ward. □ Maiden, 1924, 229.

Eucalyptus haeringiana Ettingshausen. □ Maiden, 1924, 220.

Eucalyptus latifolia Hollick. □ Berry, 1913a, 572; Tuscaloosa: Snow Plantation, Ala.—Maiden, 1924, 237.

Eucalyptus linearifolia Berry. □ Berry, 1920e, 404; Black Creek: North Carolina.

Eucalyptus? nervosa Newberry. □ Maiden 1924, 235.

Eucalyptus? parvifolia Newberry. □ Maiden, 1924, 235.

Eucalyptus? schubleri Heer. □ Maiden, 1924, 221.

Eucalyptus wardiana Berry. □ Maiden, 1924, 238.

Eugenia? anceps Berry. □ Berry, 1925, 82, pl. 19, f. 6; Ripley: McNairy and Carroll Cos., Tenn.

Eugenia bastropensis Ball, 1931, 100, pl. 43, f. 4; Indio: Little Sandy Creek, Bastrop Co., Tex.

Eugenia comparabilis Hollick. 1924, 310, pl. 8, f. 2-5, 6b; Siparia: Trinidad, British West Indies.—Berry, 1925a, 119, pl. 9, f. 1-5; Siparia and Forest: Trinidad, British West Indies.

Eugenia grenadensis Berry. □ Ball, 1931, 100; Carrizo?: La Prior Crossing, Zavalla Co., Tex.

Eugenia hilgardiana Berry. □

Sapindus undulatus Al. Braun. □ Lesquereux, 1871, 382; Wilcox: Mississippi.

Eugenia pseud aeruginea Hollick, 1928, 216, pl. 80, f. 3; Collazo: P. R.

Eugenia yeguana Berry. Ball, 1931, 167, pl. 34, f. 11, 12; Fayette; Boggy Creek, Brazos Co., Tex.

Euonymus flexifolius Lesquereux=*Fraxinus flexifolia* (Lesquereux) R. W. Brown.

Euonymus? frutescens Berry, 1930, 98, pl. 25, f. 13; Holly Springs: Bolivar, Hardeman Co., Tenn.

Euonymus glanduliferus Ball, 1931, 85, pl. 6, f. 1-3; pl. 7, f. 1; Indio: Bartons Ranch, Bastrop Co., Tex.

Euonymus knowltoni Berry=*Hydrangea bendirei* (Ward) Knowlton.

Euonymus? montana MacGinite, 1933, 60, pl. 11, f. 7; Trout Creek: Trout Creek, Harney Co., Oreg.

Euonymus pacificus R. W. Brown, 1937, 179, pl. 56, f. 10, 11; Latah: Spokane, Wash.

- Euonymus santotomasensis** Berry, 1924, 69, 179, pl. 23, f. 1; pl. 42, f. 2-5; Mt. Selman: Santo Tomas; Webb Co., Tex.; Fayette: near Millican, Brazos Co., Tex.—Ball, 1931, 124, 159, pl. 32, f. 10-12; Mt. Selman: Santo Tomas, Webb Co.; Fayette: Brazos Co., Tex.
- Euonymus splendens** Berry, 1930c, 24; Ravenscrag: Cypress Hills, Canada.—1930f, 64; Ravenscrag: Southern Alberta.—Ball, 1931, 84, pl. 4, f. 2, 3; Indio: Bartons Ranch and Little Sandy Creek, Bastrop Co., Tex.
- Euonymus xantholithensis** Ward. □ Berry, 1935, 43; Lower Ravenscrag: Loc. 3; Middle Ravenscrag: Locs. 2, 37, P 1-30, P 12-30; Upper Ravenscrag: Loc. 1; Whitemud: Loc. P 5-30, Southern Saskatchewan.
- Euphorbiophyllum antiquum** Saporta & Marion, 1885, Evolution du règne végétal Phanerogames, 117, f. 125c—Berry, 1925, 62, pl. 12, f. 5; Ripley; Carroll Co., Tenn.
- Euphorbiophyllum cretaceum** Berry, 1925, 62, pl. 12, f. 6; Ripley: Henry Co., Tenn.
- Euphorbiophyllum multififormum** Potbury, 1935, 73, pl. 9, f. 1-4; La Porte, Plumas Co., Calif.
- Euphorbiophyllum petiolatum** Berry, 1925, 62, pl. 12, f. 2, 3; Eutaw: Coffee Bluff, Tenn.; Ripley: Buena Vista, Ga.; Henry, Carroll and Chester Cos., Tenn.
- Andromeda novaecaesareae* Berry (part) not Hollick, 1914, 130.—1919, 130, pl. 30, f. 1, 2.—1922d, 177, pl. 38, f. 1; Woodbine: Arthurs Bluff, Lamar Co., Tex.
- Euphorbiophyllum tennesseensis** Berry, 1925, 62, pl. 12, f. 4; Ripley: Henry Co., Tenn.
- FAGARA** Linné. □ Berry, 1916e, 240. Discussion.
- Fagara apalachicolensis** Berry, 1916b, 50, pl. 9, f. 2; Alum Bluff: Alum Bluff, Liberty Co.; Boynton Bluff, Choctawhatchee River, Florida.
- Fagara catahoulensis coriacea** Berry, 1916e, 241, pl. 59, f. 8-10; Catahoula: Chalk Hills, near Rosefield, La.—1924, pl. 51, f. 10; Lagrange: Hickman, Fulton Co., Ky.
- Fagara catahoulensis elongata** Berry, 1916e, 241, pl. 59, f. 11-15; Catahoula: Chalk Hills, near Rosefield, La.—1924, 173; Lagrange: Hickman, Fulton Co., Ky.; Cane Creek, Obion Co., Tenn.; Catahoula?: Stryker, Polk Co., Tex.—Ball, 1931, 156; Catahoula?: Polk Co., Tex.
- Fagara catahoulensis major** Berry, 1916e, 241, pl. 59, f. 4-7; Catahoula: Chalk Hills, near Rosefield, La.—1924, 173, pl. 51, f. 11, 12; Fayette: Wellborn, Brazos Co., Tex.; Lagrange: Hickman, Fulton Co., Ky.; ?Piedmont, Grimes Co., Tex.—Ball, 1931, 156, pl. 30, f. 7; Fayette: Raney Hdrt. Brazos Co.; Grimes Co., Tex.
- Fagara catahoulensis orbiculata** Berry, 1916e, 240, pl. 59, f. 1-3; Catahoula: Chalk Hills, near Rosefield, La.; Fayette: Stryker, Tex.—1924, 173; Catahoula?: Stryker, Polk Co., Tex.—Ball, 1931, 156; Catahoula? (Jackson?): Stryker, Polk Co., Tex.
- Fagara claibornensis** Berry, 1924, 66, pl. 11, f. 1; Mt. Selman: Palestine, Anderson Co., Tex; Lisbon: near Lexington, Holmes Co., Miss.
- Fagara miocenica** Berry, 1925a, 100, pl. 5, f. 1; Forest: Trinidad, British West Indies.
- Fagara petraflumensis** Berry, 1924, 66, pl. 43, f. 3; Yegua: Rock Creek, Brazos Co., Tex.—Ball, 1931, 157, pl. 27, f. 6; Jackson?: Rock Creek, Brazos Co. Tex.
- Fagara wadii** Berry, 1923b, 14, pl. 1, f. 5; Palomares, Oaxaca, Mexico.
- Fagara wyomingensis** Berry, 1930d, 71, pl. 11, f. 4; so-called Bridger: Tipperary, Wind River Basin, Wyo.
- Fagopsis longifolia** (Lesquereux) Hollick. □ Chaney, 1921a, 90; Puente: Los Angeles Co., Calif.

Fagopsis longifolia, Berry not Hollick=**Zelkova oregoniana** (Knowlton) R. W. Brown.

Fagus alnitifolia Hollick, 1936, 97, pl. 52, f. 5a, 7; Kachemak Bay, Kenai Peninsula, Alaska.

Fagus americana Sweet. □ Berry, 1926b, 108, pl. 48, f. 3-13; Chowan: Wayne Co., N. C.—1927, 25; Cherokee Co., Tex.

Fagus antipofii Abich. □ ?Wilson, 1916, 207; Sheep Creek, Yukon Terr.—Hollick, 1936, 95, pl. 53, f. 1, 2; Port Graham and west of Point Nashkovich, Kenai Peninsula, Alaska.

Fagus lancifolia Heer, 1868a, 64.—1869, 30, pl. 5, f. 4a; pl. 7, f. 4-8.

Fagus emarginata Heer, 1869, 30, pl. 8, f. 1.

Fagus? bonnevillensis Chaney=**Fagus washoensis** La Motte.

Fagus castaneaefolia Unger, 1847, Chlor. Prot., 104, pl. 28, f. 1.

Castanea ungeri Heer, 1869, 32, pl. 7, f. 1-3.

Castanea castaneaefolia Knowlton (part), 1898, 60; not later references nor references to *Castanea ungeri*.

Fagus crossii Knowlton, 1924, 81, pl. 19, f. 2; Animas: Pagosa Quad., Colo.

Fagus deucalionis Unger. □ Hollick, 1936, 97, pl. 53, f. 3; Kachemak Bay, Kenai Peninsula, Alaska.

Fagus emarginata Heer=**Fagus antipofii** Abich.

Fagus feroniae Unger. □ Hollick, 1936, 96; Port Graham, Kenai Peninsula, Alaska.

Fagus lancifolia Heer=**Fagus antipofii** Abich.

Fagus pacifica Chaney, 1927a, 108, pl. 10, f. 6-9; Bridge Creek: Gray Ranch, Crooked River, Oreg.—LaMotte, 1935b, 53; Sooke: Muir Creek, Vancouver Island, British Columbia.—Brown, R. W., 1937c, 508, text-f. 11; Bridge Creek: 9 miles north of Mitchell, Oreg.—Berry, 1938, 89; Latah: Grand Coulee, Wash.

Fagus pacifica of Berry, Brooks, Oliver, not Chaney=**Fagus washoensis** LaMotte.

Fagus polyclada Lesquereux. □ Lesquereux, 1871, 379, 1874, 67, pl. 5, f. 6; Dakota: Decatur, Nebr.

Fagus ripleyensis Berry, 1925, 47, pl. 5, f. 6; pl. 7, f. 1; Ripley: Carroll Co., Tenn.

Fagus sanctieugeniensis Hollick, 1927, 399, pl. 30, f. 3; pl. 51, f. 3; pl. 32, f. 2, 3; St. Eugene silts: British Columbia.

Fagus washoensis LaMotte, 1936, 119, pl. 8, f. 2, 3, 5; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—Brown, R. W., 1937, 171, pl. 51, f. 1-3, 8-10; Latah: Spokane, Wash.; Mascall: Tipton, Oreg.—1937c, 515.

Fagus pacifica, Berry not Chaney, 1934, 107, pl. 19, f. 6; pl. 20, f. 1; Latah: southeast of Moscow, Latah Co.; east of Lewiston, Nez Perce Co., east of White Bird, Idaho Co., Idaho.—Oliver, 1934, 19; Mascall: Tipton and Austin, Oreg.—Brooks, 1935, 285, pl. 6, f. 3, 4; Sucker Creek: Ballantyne Ranch southeast of Homedale, Idaho.

Castanea lesquereuxi LaMotte, 1936, 120, pl. 9, f. 6; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif. (Note: All synonyms are hereby rejected which I referred to this species and restored to their former status—R. S. L.)

Sorbus chaneyi LaMotte, 1936, 130, pl. 9, f. 4, 5; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Amygdalus alexandert Berry, 1926b, 41-43, text-f. 1; Latah: Spokane, Wash.

Fagus? bonnevillensis Chaney, 1920a, 167, pl. 11, f. 1; Eagle Creek: Multnomah Co., Oreg.

Fagus sp. Heer, 1868a, 64.—Hollick, 1936, 97; Port Graham, Kenai Peninsula, Alaska.

Fagus sp. Hollick, 1927, 401, pl. 30, f. 4; St. Eugene silts: British Columbia.

Fagus sp.? Wilson, 1916, 206; Sheep Creek, Yukon Terr.

FASCICULITES Cotta.

Fasciculites groenlandicus Heer, 1868, 85, pl. 44, f. 23.—1874, 88.—1882, 19.—White, 1898, 347; Kook, Nugsuak Pen., west Greenland.—Seward, 1926, 139, pl. 11, f. 117; Nugsuak, west Greenland.

Fasciculites lacunosus Unger=**Palmoxylon lacunosum** (Unger) Felix.

Fasciculites palmacites (Sprengel) Corda=**Palmoxylon palmacites** (Sprengel) Stenzel.

Feistmantelia oblonga Ward.□Berry, 1922d, 222, pl. 47, f. 4, 5; Cheyenne: near Belvidere, Kiowa Co., Kansas.

Fern, fragment, Knowlton=**Pteris** sp. Berry.

Fern fragments (Helechos) Lozano, 1916, 12, pl. 7, f. 5; Liassic: Huyacocotla, Vera Cruz, Mexico.

Festuca ovina Linné.□?Penhallow, 1899, 527; Taylor's Brickyard and Gaol Hill, Don Valley, Toronto, Ontario.

Ficus aguilari Knowlton (part) = **Ficus denveriana** Cockerell.

Ficus? *alaskana* Newberry.□Hollick, 1936, 109; Cook Inlet and Admiralty Inlet; Millers Creek, Yukon River; 25 miles below Mission Creek; above Minook Creek, Alaska.

Ficus? *alata* Knowlton, 1930, 64, pl. 23, f. 9; Dawson: Sedalia, Colo.

Ficus alkalina Lesquereux = **Juglans alkalina** Lesquereux.

Ficus andraei Lesquereux = **Ficus mississippiensis** (Lesquereux) Berry.

Ficus aquiana Berry, 1936, 108, text-f. 2; Aquia: Belvedere Beach, Prince George Co., Va.

Ficus arenaceaeformis Cockerell.□Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.

Ficus asarifolia of authors not Ettingshausen = **Menispermities belli** Berry.

Ficus asarifolia, Lesquereux (part) not Ettingshausen = **Ficus** sp. Knowlton.

Ficus asarifolia minor Lesquereux = **Menispermities belli** Berry.

Ficus atavina Heer = **Dalbergites simplex** (Newbery) Seward.

Ficus berryi Ball, 1931, 48, pl. 12; Indio: Bartons Ranch, Bastrop Co., Tex.

Ficus berthoudi Lesquereux.□Knowlton, 1930, 65, pl. 25, f. 1, 2, 6; Denver: Golden, Colo.

Ficus brazosensis Berry, 1924, 160, pl. 60, f. 2; Fayette: Barrera League, Mossy Creek, Brazos Co., Tex.—Ball, 1931, 152, pl. 26, f. 5; Fayette: Barrera League and Boggy Creek, Brazos Co., Tex.

Ficus canadensis Hollick, 1927, 405, pl. 37, f. 1; St. Eugene silts: British Columbia.

Ficus carrollensis Berry, 1925, 53, pl. 10, f. 3; Ripley: Carroll Co., Tenn.

Ficus celtifolius Berry, 1925, 52, pl. 10, f. 1; Ripley: Carroll Co., Tenn.

Ficus ceratops Knowlton.□Berry, 1935, 28; Lower Ravenscrag: Loc. 3, Southern Saskatchewan.

Ficus russelli Knowlton.□

Ficus cinnamomoides Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi.

Ficus claibornensis Berry.□Berry, 1924, 159, pl. 32, f. 1; Barnwell: Gravetown, Ga.; Forest Station, Columbia Co.; south of Macon, Twiggs Co., Ga.—Ball, 1931, 151, pl. 26, f. 4; Fayette: Alum Creek, Brazos Co., Tex.

Ficus clintoni Lesquereux = **Ficus mississippiensis** (Lesquereux) Berry.

Ficus cockerelli Knowlton = **Ficus mississippiensis** (Lesquereux) Berry.

Ficus coloradensis Cockerell.□Knowlton, 1930, 69; Denver: Golden, Colo.

Ficus irregularis Lesquereux, 1888, 50; Denver, Golden, Colo.

Ficus comparabilis Hollick = **Ficus porcellanaria** Hollick.

- Ficus cooperensis* Berry, 1925, 52, pl. 10, f. 2; Ripley: Carroll Co., Tenn.
Ficus crassipes (Heer) Heer. □ Berry, 1913a, 572; Tuscaloosa: Snow Plantation, Sanders Ferry Bluff, Ala.—1920e, 401; Black Creek: Bladen Co., N. C.—1925, 51, pl. 7, f. 5; Ripley: Henry Co., Tenn.
Ficus crassipes Heer (part), 1882, 70, pl. 17, f. 9a only; west Greenland.—Seward, 1925, 245=specimen indeterminate.
Ficus culebrensis Berry, 1918, 26, pl. 13, f. 1; Culebra: Gaillard Cut, C. Z.
Ficus dalli Cockerell. □ Hollick, 1936, 110; Cook Inlet, Alaska.
Ficus daphnogenoides (Heer) Berry. □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirley Mill; near Tuscaloosa; near Cottondale; Snow Plantation, Ala.—?Knowlton, 1920, 190; Morrison: Morrison, Colo.—Berry, 1920e, 400; Black Creek: North Carolina.—1922c, 163, pl. 39, f. 1; Woodbine: Arthurs Bluff, Lamar Co., Tex.—Gress, 1922, 296; Dakota: Ellsworth Co., Kans.—Hollick, 1930, 71, pl. 39, f. 3-5; Melozi: Lower Yukon, Alaska.

Eucalyptus? attenuata Newberry (part), 1895, pl. 18, f. 5 only.

- Ficus dawsonensis* Knowlton, 1930, 67, pl. 26, f. 1; Dawson: Mosby, Colo.
Ficus denveriana Cockerell. □ ?Knowlton, 1922, 138, pl. 12, f. 5; Laramie: Popes Bluff near Pikeview, Colo.; Denver: Golden, Colo.; Raton: Raton Mesa region of Colorado and New Mexico.—1924, 83, pl. 9, f. 1; Animas: Pagosa Quad., Colo.—1930, 64 pl. 24, f. 1-3; Denver: Golden, Sand Creek, Colo.; Dawson: near Colorado Springs; near Ramah, Colo.—Berry, 1924d, 87; Wilcox: Earle, Bexar Co., Tex.—1935, 29; Middle Ravenscrag: Locs. 6, P 4-30; Upper Ravenscrag: Locs. 6, 32, southern Saskatchewan.—Ball, 1931, 49, pl. 10, f. 3; (Midway?) Indio: Earle, Bexar Co., Tex.

Populus ungeri Lesquereux. □

Populus heliadum Lesquereux not Unger. □

Ficus aguilari Knowlton (part). □ Knowlton, 1930, 65, pl. 24, f. 4; Dawson: Purdon Mine; Denver: Golden, Colo.

Ficus spectabilis Lesquereux, 1888, 50; Denver: Golden, Colo.—Cross, 1895, 211; Middle Park: Middle Park, Colo.

Cissus primaeva ?Saporta. Lesquereux, 1888, 51; Denver: Golden, Colo.

- Ficus dictyodroma* Hollick, 1930, 72, pl. 38, f. 5; Kaltag: Lower Yukon, Alaska.
Ficus domingensis Hollick, 1924, 294, pl. 13, f. 6; Santo Domingo.
Ficus eldridgi Knowlton, 1930, 69, pl. 59, f. 4; Denver: Scranton, Colo.
Ficus? fimbriatus Lesquereux=*Eremophyllum fimbriatum* (Lesquereux) Lesquereux.

Ficus fremonti Knowlton. □ Berry, 1929j, 154; Frontier: near Lander, Wyo.

Ficus fructus Berry, 1920e, 401; Black Creek: Bladen Co., N. C.

Ficus fructus pediculata Berry, 1930, 66, pl. 48, f. 8; Holly Springs: Puryear, Henry Co., Tenn.; Grenada: Somerville, Fayette Co., Tenn.

Ficus fructus rostrata Berry, 1930, 66, pl. 48, f. 5; Holly Springs: Puryear, Henry Co., Tenn.

Ficus georgiana Berry. □ Berry, 1925, 53; Ripley: Henry Co., Tenn.; Marion Co., Ga.

Ficus glascocana Lesquereux. □ Berry, 1922c, 164; Woodbine; Arthurs Bluff, Lamar Co., Tex.

Ficus goshenensis Chaney & Sanborn, 1933, 66, pl. 6, f. 1-3, 4; Fisher: Goshen, Oreg.—Sanborn, 1935, 16; Comstock: Comstock, Douglas Co., Oreg.—Potbury, 1935, 64; La Porte, Plumas Co., Calif.

Ficus (Dombeyopsis) grandifolia, Lesquereux not Unger=*Dombeyopsis magnifica* Knowlton.

Ficus? grönlandica Heer. ?Knowlton 1912i, 42; Moose Creek, Lower Matanuska, Alaska.—Hollick, 1912a, 51; Chickaloon: Eska Creek, Moose Creek, Kings Creek, Lower Matanuska Valley, Alaska.

Ficus hypodroma Hollick, 1928, 194, pl. 57, f. 2; Collazo: P. R.

Ficus inaequalis Lesquereux. □ Bartsch, 1896, 180; Dakota: Holman Cut, Woodbury Co., Iowa.—Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottondale, Ala.—1920e, 400; Black Creek: North Carolina.—1929j, 134, pl. 21, f. 3; Frontier: near Lander, Wyo.—Gress, 1922, 297; Dakota: Ellsworth Co., Kans.

Ficus interglacialis Hollick = *Carpolithus* sp. R. W. Brown.

Ficus johnstoni Berry, 1926d, 108, pl. 11, f. 7; Burrard Inlet, British Columbia.

Ficus? *juglandifolia* Hollick, 1930, 72, pl. 38, f. 1; Chignik: Alaska Peninsula.

Ficus knowltoni (Cockerell) Cockerell, 1923, 52–53.

Ficus navicularis Cockerell. □ Knowlton, 1922, 137, pl. 6, f. 4, 5; pl. 11, f. 3–5; Laramie: Marshalls Mine, Coal Creek, and near Mt. Carbon, Colo.

Ficus lanceolata, Heer not Buch Ham. □

Ficus krausiana Heer. □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirleys Mill; near Cottondale; Snow Plantation; Sanders Ferry Bluff, Ala.—1925, 50; Ripley: Carroll Co., Tenn.

Ficus suspecta Velenovsky, 1885, Die Flora der böhmischen Kreideformation, pt. 4, 10, pl. 5, f. 6, 9.

Ficus lacustris Knowlton = *Populus lacustris* (Knowlton) Berry.

Ficus lakesii Knowlton, 1930, 69, pl. 28, f. 1; Denver: Golden, Colo.

Ficus latifolia, Knowlton not Kunth = *Ficus mississippiensis* (Lesquereux) Berry.

Ficus laurophylla Lesquereux. □ Hollick, 1930, 72, pl. 40, f. 2; Chignik: Alaska Peninsula.

Ficus leei Knowlton = *Ficus speciosissima* Ward.

Ficus leonis Knowlton & Cockerell. □

Ficus macrophylla Lesquereux. □ Gress, 1922, 295; Dakota: Ellsworth County, Kansas.

Ficus lesquereuxi lata Hollick, 1930, 71, pl. 40, f. 1; Kaltag: Lower Yukon, Alaska.

Ficus magnoliaefolia Lesquereux. □ Bartsch, 1896, 180; Dakota: Holman Cut, Woodbury Co., Iowa.—Knowlton, 1920, 190; Morrison: Morrison, Colo.

Ficus martini Knowlton, 1950, 69, pl. 40, f. 5; Denver: east of Denver, Colo.—?Berry, 1935, 29; Whitemud: Loc. P 5–30, southern Saskatchewan.

Ficus melanophylla Lesquereux. □? Hollick, 1930, 72, pl. 52, f. 2b; Kaltag: Lower Yukon, Alaska.

Ficus menzeli Hollick, 1936, 109, pl. 60, f. 6; Matanuska Coal Field, Alaska.

Ficus mississippiensis (Lesquereux) Berry, 1922g, 9, pl. 6–8; Ackerman: Raglans Branch, Lafayette Co., Miss.; Colemans Mill, Choctaw Co., Miss; Hurleys, Benton Co., Miss.; Upper Wilcox: Shreveport, Caddo Parish, La.; Mansfield, Naborton and vic.; De Soto Parish, La.; Old Port Caddo Landing, Harrison Co., Tex.; Elmendorf, Bexar Co., Tex.; near Carrizo Springs, Dimmit Co., Tex.; Lagrange: Puryear, Henry Co., Tenn.; Sandy, Hardeman Co., Tenn.—1924, 160; Fayette: near Wellborn, Brazos Co., Tex.—Brown, R. W., 1929, 284; Green River: between Carr and Brush Creeks, northwest of De Beque, Colo.—Ball, 1931, 49, 152, pl. 10, f. 2–4; Indio: Bartons Ranch, Bastrop Co., Tex.; Fayette: Brazos Co., Tex.—Brown, R. W., 1937, 173, pl. 63, f. 4; Green River: Fossil, Wyo.

Cinnamomum mississippiensis Lesquereux. □ Lesquereux, 1871, 382; Wilcox: Mississippi.

Ficus planicostata Lesquereux. □ Chaney, 1920a, 172; Eagle Creek: Multnomah Co., Oreg.—Knowlton, 1922, 131; Laramie: Coal Creek, Boulder Co.; near Golden, Colo.; Post-Laramie: Black Buttes, Wyo.; Denver: Golden and Sedalia, Colo.; Wilcox: Shreveport, La.; Mesaverde: Rock Springs, Wyo.—1924, 82, pl. 9, f. 2; Animas: Ignacio and Pagosa Quads., Colo.

Ficus mississippiensis—Continued.*Ficus clintoni* Lesquereux.□*Ficus planicostata goldiana* Lesquereux.□ Knowlton, 1930, 70, pl. 28, f. 5; Denver: Golden, Colo.*Ficus planicostata clintoni* (Lesquereux) Knowlton.□*Ficus planicostata magnifolia* Knowlton, 1922, 133, pl. 10, f. 3; Laramie: Marshall, Colo.*Ficus planicostata problematica* Knowlton, 1930, 71, pl. 28, f. 2; Denver: Golden, Colo.*Ficus pseudo-populus* Lesquereux.□ Knowlton, 1924, 83 pl. 7 f. 4; pl. 9, f. 3; Animas: Pagosa Quad., Colo.—1930, 66, pl. 25, f. 3-5; pl. 26, f. 2-4; Dawson: near Colorado Springs and Calhan, Colo.—Ball, 1931, 50, pl. 9, f. 3; Wilcox: Bastrop Co., Tex.*Ficus andraei* Lesquereux.□*Ficus occidentalis* (Lesquereux) Lesquereux.□ Knowlton, 1924, 82, pl. 8, f. 5; Animas: Pagosa Quad., Colo.—1930, 68, pl. 26, f. 5; pl. 27, f. 4; Denver: Golden, Colo.*Ficus latifolia* Knowlton not Kunth, 1898.□*Ficus cockerelli* Knowlton.□*Ficus neoplanicostata* Knowlton.□ Knowlton, 1924, 82, pl. 9, f. 4; Animas: Pagosa Quad., Colo.—1930, 69, pl. 28, f. 3, 4, 6, 7; pl. 29, f. 3, 4; Denver: Golden, Colo.; Dawson: Sedalia, Colo.*Ficus richardsoni* Knowlton.□*Dombeyopsis occidentalis* Lesquereux.□**Ficus mississippiensis cordata** Berry, 1930, 65, pl. 39, f. 11; Holly Springs: Huckleberry Schoolhouse, Carroll Co., Jackson, Madison Co., Tenn.**Ficus mississippiensis gigantea** Berry, 1930, 64, pl. 23; Grenada: Somerville, Fayette Co., Tenn.**Ficus mississippiensis** (Lesquereux) Berry, mutant **pseudopopulus** Lesquereux. Berry, 1930d, 71, pl. 8, f. 7; so-called Bridger: Tipperary, Wind River Basin, Wyo.**Ficus monodon** (Lesquereux) Berry.□ Knowlton, 1924, 83, pl. 10, f. 1; Animas: Pagosa Quad., Colo.*Populus monodon* Lesquereux.□ Lesquereux, 1871, 382; Wilcox: Mississippi.—1888, 47; Denver: Golden, Colo.**Ficus myrtifolia ampla** Berry, 1930, 65, pl. 32, f. 13; Holly Springs: Puryear, Henry Co.; Pattersonville, Fayette Co., Tenn.**Ficus myrtifolia ovata** Berry, 1930, 66, pl. 38, f. 4, 5; Holly Springs: Mandy, Madison Co., Tenn.*Ficus navicularis* Cockerell=**Ficus knowltoni** (Cockerell) Cockerell.*Ficus neoplanicostata* Knowlton=**Ficus mississippiensis** (Lesquereux) Berry.*Ficus newberryana* Heer (part)=**Platanus? newberryana** Heer.**Ficus newtonensis** Berry.□ Berry, 1924, 58, 160, pl. 9, f. 1-3; Lisbon: Newton, Newton Co., Miss.; Mt. Selman: Palofax, Webb Co., Palestine, Anderson Co., Tex.; Barnwell: Forest Station, Columbia Co., Ga.—Ball, 1931, 120, pl. 19, f. 1, 2; Mt. Selman: Palofax, Webb Co.; Anderson Co., Tex.**Ficus obtusa-sessilia** Berry, 1925, 51, pl. 7, f. 3, 4; Ripley: Henry Co., Tenn.*Ficus occidentalis* (Lesquereux) Lesquereux=**Ficus mississippiensis** (Lesquereux) Berry.**Ficus omballi** R. W. Brown, 1929, 285, pl. 72, f. 2; Green River: northwest of De Beque, Colo.—Berry, 1932e, 11; Wind River: Lysite, Wyo.*Ficus? oregoniana* Lesquereux=**Cedrela oregoniana** (Lesquereux) R. W. Brown.**Ficus ovatifolia** Berry.□ Berry, 1920e, 401; Black Creek: North Carolina.—1929k, 61, pl. 9, f. 1-5; Upper Blairmore: Southwest Alberta.**Ficus overbecki** Hollick, 1936, 110, pl. 60, f. 7; Nenana Coal Field, Alaska.**Ficus pagosensis** Knowlton, 1924, 84 pl. 11; Animas: Pagosa Quad., Colo.

- Ficus pandurifolia** Berry, 1930, 64, pl. 21, f. 5, 6; pl. 42, f. 4; Holly Springs: Bolivar, Hardeman Co.; La Grange, Fayette Co., Tenn.
- Ficus plinerva** Chaney & Sanborn, 1933, 66, pl. 7, f. 1-3; Fisher: Goshen, Ore.—Macginitie, 1937, 137, pl. 5, f. 6; pl. 7, f. 1; Weaverville: Redding Creek, Trinity Co., Calif.
- Ficus planicostata* Lesquereux=**Ficus mississippiensis** (Lesquereux) Berry.
- Ficus planicostata?*, Newberry not Lesquereux=**Celtis obliquifolia** Chaney.
- Ficus planicostata clintoni* (Lesquereux) Knowlton=**Ficus mississippiensis** (Lesquereux) Berry.
- Ficus planicostata goldiana* Lesquereux=**Ficus mississippiensis** (Lesquereux) Berry.
- Ficus planicostata latifolia* Lesquereux=**Ficus mississippiensis** (Lesquereux) Berry.
- Ficus planicostata magnifolia* Knowlton=**Ficus mississippiensis** (Lesquereux) Berry.
- Ficus planicostata maxima* Berry=**Ficus mississippiensis** (Lesquereux) Berry.
- Ficus planicostata problematica* Knowlton=**Ficus mississippiensis** (Lesquereux) Berry.
- Ficus porcellanaria** Hollick, 1924, 292, pl. 2, f. 1; Siparia: Trinidad, British West Indies—Berry, 1925a, 88, pl. 5, f. 1; pl. 6, f. 1; pl. 7, f. 2; Siparia, Moruga and Forest: Trinidad, British West Indies.
- Ficus pseudoeggersi* Hollick, 1924, 293, pl. 5, f. 5; pl. 14, f. 11; Siparia: Trinidad, British West Indies; Santa Clara: Cuba.
- Ficus comparabilis* Hollick, 1924, 293, pl. 4, f. 2a, 2b; pl. 3, f. 1, 2; pl. 5, f. 2-4; Siparia and Moruga: Trinidad, British West Indies.
- Ficus post-trinervis** Knowlton. □ Knowlton, 1922, 136, pl. 6, f. 1, 2; Laramie: Cowan Station near Denver, Colo.—Ball, 1931, 50; Indio: Sayersville; Bastrop Co., Tex.
- Ficus praetrinervis** Knowlton. □ Knowlton, 1930, 71, pl. 28, f. 8-10; Dawson: east of Colorado Springs, Colo.
- Ficus protogaea** Ettingshausen. □ ? Lesquereux, 1888, 50; Denver: Golden, Colo.
- Ficus protogaea*, Hollick not Ettingshausen=**Dalbergites simplex** (Newberry) Seward.
- Ficus? prunifolia** Jennings, 1920, 420, pl. 32, f. 1, 1a; Missoula, Montana.
- Ficus pseudoeggersii* Hollick=**Ficus porcellanaria** Hollick.
- Ficus pseudonitida** Hollick, 1924, 295, pl. 14, f. 6; Santa Clara: Cuba.
- Ficus pseudo-populus* Lesquereux?=**Ficus mississippiensis** (Lesquereux) Berry.
- Ficus puryearensis** Berry. □ Knowlton, 1930, 72, pl. 29, f. 1, 2; Dawson: Calhan, Colo.—Ball, 1931, 51, pl. 41, f. 6; Indio: Bastrop Co., Tex.
- Ficus cf. puryearensis** Berry. Chaney, 1921a, 90; Puente: Los Angeles Co., Calif.
- Ficus quisumbingi** Chaney & Sanborn, 1933, 67, pl. 8, f. 1; pl. 9, f. 1; pl. 10, f. 1-3; Fisher: Goshen, Ore.
- Ficus ramahensis** Knowlton, 1930, 68, pl. 27, f. 5; Dawson: Ramah, Colo.
- Ficus? rhomboideus* Lesquereux=**Trochodendroides rhomboideus** (Lesquereux) Berry.
- Ficus richardsoni** Knowlton=**Ficus mississippiensis** (Lesquereux) Berry.
- Ficus ripleana** Berry, 1925, 50, pl. 7, f. 6; Ripley: Carroll Co., Tenn.
- Ficus russelli* Knowlton=**Ficus ceratops** Knowlton.
- Ficus schimperi** Lesquereux. □ Lesquereux, 1871, 382; Wilcox; Mississippi.—Hollick, 1928, 195, pl. 57, f. 4; Collazo: Porto Rico.—Ball, 1931, 51, pl. 4, f. 4-6; Indio: Bartons Ranch, Bastrop Co., Tex.
- Celtis brevifolia* Lesquereux. □ Lesquereux, 1871, 382; Wilcox: Mississippi.

Ficus cf. *sordida* Lesquereux. Knowlton, 1900d, 46, pl. 4, f. 2; Comstock, Oreg.

Ficus speciosissima Ward. □ Berry, 1935, 30; No Saskatchewan locality.

Ficus leei Knowlton. □ Berry, 1925, 52; Ripley: Carroll Co., Tenn.

Ficus speciosissima canadensis Berry, 1935, 30, pl. 4, f. A; Whitemud: Loc. P 5-30, Southern Saskatchewan.

Ficus stantoni Hollick, 1936, 110, pl. 119, f. 4; Chignik, Alaska Peninsula.

Ficus stephensoni Berry. □ Berry, 1920e, 401; Black Creek: North Carolina.

Ficus subtruncata Lesquereux. □ Lesquereux, 1888, 50; Denver: Golden, Colo.—Knowlton, 1924, 83, pl. 8, f. 3; Animas: Pagosa Quad., Colo.—1930, 63; Denver: Golden, Colo.—Berry, 1935, 29; Middle Ravenscrag: Loc. 24, southern Saskatchewan.

Ficus auriculata Lesquereux. □ Lesquereux, 1888, 50; Denver: Golden, Colo.

Ficus suspecta Velenovsky = *Ficus krausiana* Heer.

Ficus talamancana Berry, 1921b, 172, pl. 23; Costa Rica.—1923b, 7, pl. 3, f. 7; north of Palomares, Oaxaca, Mexico.

Ficus tennesseensis Berry, 1930, 63, pl. 33, f. 18, 19; Grenada: Somerville, Fayette Co., Tenn.

Ficus tenuinervis Lesquereux = *Cercis tenuinervis* (Lesquereux) R. W. Brown.

Ficus tiliaefolia, Lesquereux not Al. Braun = *Ficus* sp. Knowlton.

Ficus ungeri, Knowlton not Lesquereux = *Salix inquirenda* Knowlton.

"*Ficus ungeri*" of authors not Lesquereux; in need of systematic revision.

Knowlton, 1899, 713, pl. 91, f. 3; Fort Union?: Yellowstone National Park.—Penhallow, 1908a, 56; Oligocene: Quilchena, British Columbia.—Berry, 1924, 58; Claiborne (Gosport): Claiborne Landing, Monroe Co., Ala.—1930d, 70, pl. 12, f. 4; pl. 14, f. 5; so called Bridger: Wind River Basin, Wyo.

Ficus ungeri Lesquereux = *Juglans schimperii* Lesquereux.

Ficus unionensis Berry, 1924, 57, 160, pl. 32, f. 5; Yegua: Houston Co., Tex.; Columbia, Caldwell Parish, La.; Jackson: El Dorado, Union Co., Ark.; Cleveland Co., Ark.; Forest Hill: near Jackson, Miss.—Ball, 1931, 120; Yegua: Nevils Prairie, Houston Co., Tex.

Ficus vaghani Berry. □ Ball, 1931, 52, pl. 11, f. 3; Indio: Bartons Ranch, Bastrop Co., Tex.

Ficus vexativus Hollick, 1928, 195, pl. 59, f. 1-4; Collazo: Porto Rico.

Ficus viburnifolia Ward. □ Berry, 1930c, 19; Estevan: Cypress Hills, Canada.—1930f, 63; Estevan: Southern Alberta.

Ficus? washingtonensis Knowlton = *Cercis spokanensis* Knowlton.

Ficus woolsoni Newberry. □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirleys Mill; near Tuscaloosa; near Cottondale, Ala.

Ficus wyomingiana Lesquereux. □ Knowlton, 1923, 162; Green River: Green River Wyo.—Berry, 1930d, 70, pl. 12, f. 1-3; so-called Bridger: Tipperary, Wind River Basin, Wyo.—Brown, R. W., 1934, 56; Locs. as cited by authors.

Cinnamomum scheuchzeri, Lesquereux (part) not Heer, 1883, 38, f. 6; Green River: Green River, Wyo.—Knowlton, 1923, 140; Green River: Green River, Wyo.

Ficus n. sp. Bell, 1932, 220; Dunvegan: Peace River Valley, British Columbia.

Ficus sp. Berry, 1916e, 238, pl. 55, f. 9; Catahoula: Chalk Hills, near Rosefield, La.

Ficus sp. Berry, 1924, 58, pl. 9, f. 4; Yegua: Fayette Co., Tex.—Ball, 1931, 120; Yegua: Fayette Co., Tex.

Ficus sp. Berry, 1924, 161, pl. 60, f. 6; Fayette: Barrera League, Brazos Co., Tex.—Ball, 1931, 152; Fayette: Barrera League, Brazos Co., Tex.

Ficus sp. Hollick, 1924, 295, pl. 13, f. 2; Santo Domingo.

- Ficus* sp. Hollick, 1928, 196, pl. 87, f. 1, 2; Collazo: Porto Rico.
- Ficus* sp. Knowlton, 1900d, 46; Comstock, Oreg.
- Ficus* sp.? Knowlton, 1900d, 46, pl. 3, f. 1; 5 miles south of Ashland, Oreg.
- Ficus* sp. Knowlton, 1917a, 88, pl. 34, f. 2, 3; Frontier: about 1 mile east of Cumberland, Wyo.—Berry, 1929j, 134; Frontier: near Lander, Wyo.
- Ficus* sp. Knowlton, 1924, 84, pl. 7, f. 3; Animas: Pagosa Quad., Colo.
- Ficus* sp. Knowlton, 1924, 84, pl. 6, f. 7; Animas: Pagosa Quad., Colo.
- Ficus* sp. Knowlton, 1930, 67, pl. 27, f. 1-3; Dawson: Ramah, Colo.
- Ficus* sp. Knowlton, 1930, 72, pl. 29, f. 5; Dawson: east of Colorado Springs, Colo.
- Ficus* sp. Knowlton, 1930, 72, pl. 30, f. 1; Dawson: east of Colorado Springs, Colo.
- Ficus* sp. Knowlton, 1930, 67; Denver: Golden, Colo.
- Ficus tiliacifolia*, Lesquereux not Al. Braun (part), 1878, 203, pl. 32, f. 2; Denver: Golden, Colo.—1888, 49; Denver: Golden, Colo.
- Ficus* sp. Knowlton, 1930, 73; Denver: Golden, Colo.
- Ficus asarifolia* Lesquereux (part) not Ettingshausen, 1888, 50; Golden, Colo.
- Ficus?* sp. Knowlton, 1917a, 88, pl. 35, f. 1, Frontier: near Cumberland, Wyo.—Berry, 1929j, 131; Frontier: near Cumberland, Wyo.
- Ficus* sp. Lesquereux, 1888, 50; Denver: Golden, Colo.
- Ficus* sp. Penhallow, 1906a, 391a; Coal Gully near Couplee, British Columbia.
- Filicites hybridicus* Forbes=*Onoclea sensibilis* Linné.
- FIRMIANITES** Cockerell, 1909, 447. Genotype: *F. atterimus* Cockerell.
- Firmianites atterimus* Cockerell, 1909, 447, text-f. 2; Green River: Green River, Wyo.
- Fittonia* sp. Lesquereux, 1887, 32, pl. 1, f. 1; Tertiary: Clear Lake, Calif.
- FLABELLARIA** Sternberg. □ Noé, 1936, 442. (Homonym, **FLABELLARIA** Cavaillès—a Malpighiaceae genus from west Africa.) The fossil forms should be reassigned when possible to *Sabalites*, *Geonmites*, etc.
- Flabellaria alaskana* Hollick, 1936, 57, pl. 22, f. 2a, 3; pls. 111, 112; south side Hamilton Bay, Kupreanof Island, Southeastern Alaska.
- Flabellaria communis* Lesquereux=*Sabalites grayanus* (Lesquereux) Lesquereux.
- Flabellaria eocenica* Lesquereux=*Sabalites grayanus* (Lesquereux) Lesquereux.
- Flabellaria florissanti* Lesquereux=*Sabalites florissanti* (Lesquereux) Berry.
- Flabellaria?* sp. Seward, 1926, 113, text-f. 21; Upernivik Isl., West Greenland.
- Florissantia physalis* Knowlton=*Porana speirii* Lesquereux.
- Flower petals, Berry, 1930, 143, pl. 48, f. 15-17; Holly Springs: Puryear, Henry Co., Tenn.
- Flowers, R. W. Brown, 1937, 186, pl. 59, f. 7; pl. 61, f. 12; Latah: Spokane, Wash.; Green River: Fossil, Wyo.
- FOMES** Fries.
- Fomes applanatus* (Persoon) Gillet. Mason, 1934, 143, pl. 5, f. 1, 4; Tomales: Tomales Bay, Marin Co., Calif.—Chaney & Mason, 1936c, 6, f. 3, 7; Pleistocene: Lillian Creek, Livingood, near Fairbanks, Alaska.
- Fomes fomentarius* (Linné) Gillet. Chaney & Mason, 1936, 6, text-f. 4; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.
- Fomes pinicola* (Schwehd.) Cooke. Chaney & Mason, 1936, 8, text-f. 1, 2; Pleistocene: head of Goldstream, near Fairbanks, Alaska.
- FRAGARIA** (Tournefort) Linné.
- Fragaria californica* Chamisso & Schlectendal. Mason, 1934, 164, pl. 9, f. 9; Tomales: Tomales Bay, Marin Co., Calif.

Fraxinus americana Linné. ?Penhallow, 1899, 527; Taylor's Brickyard, Don Valley, Toronto, Ontario.

Fraxinus caudata Dorf, 1930, 106, pl. 13, f. 6-8; Garberville; Santa Rosa; Lafayette Dam; Coalinga, Calif.

Fraxinus coulteri Dorf, 1936, 123, pl. 3, f. 3, 4; Idaho: near Weiser, Idaho.

Fraxinus denticulata Heer. □ Chaney, 1927a, 132, pl. 19, f. 5-7; Bridge Creek: Gray Ranch, Crooked River, Oreg.

Fraxinus denticulata, Lesquereux (part) not Heer=**Fraxinus** sp. Knowlton.

Fraxinus edensis Axelrod, 1937, 182; Mt. Eden: near Beaumont, Calif.

Fraxinus eocenica Lesquereux. □ Knowlton, 1930, 123, pl. 52, f. 4-6; Denver: Golden, Colo.

Fraxinus flexifolia (Lesquereux) R. W. Brown, 1934, 64; Green River: localities as cited by authors.

Euonymus flexifolius Lesquereux. □ Knowlton, 1923, 169; Green River: Uinta Co., Wyo.—Cockerell, 1925, 4; Green River: Roan Mts., Colo.

Fraxinus petiolata R. W. Brown, 1929, 290, pl. 75, f. 1-4; Green River: northwest of De Beque, Colo.

Odostemon reynoldsii Hollick, 1929, 95, pl. 2, f. 2; Green River (Bridger?): De Beque, Colo.—Arnold, 1936, 65; Arnold considers this specimen to be indeterminate.

Fraxinus heerii Lesquereux=**Hydrangea fraxinifolia** (Lesquereux) R. W. Brown.

Fraxinus herendeenensis Knowlton. □ Hollick, 1936, 165; Herendeen Bay, Alaska Peninsula.

Fraxinus idahoensis R. W. Brown, 1935, 583, pl. 67, f. 7; Latah: Potlatch Creek, Idaho.—1937c, 516.—LaMotte, 1936, 141, pl. 12, f. 5; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.

Fraxinus? *samaras*, Berry, 1934, 122, pl. 24, f. 3, 4; Latah: east of White Bird, Idaho.

Fraxinus sp. MacGinitie, 1933, 66; Trout Creek: Trout Creek, Harney Co., Oreg.

Rhus payettensis Knowlton. □

Fraxinus inordinata Hollick, 1936, 163, pl. 100, f. 4; pl. 101, f. 1-7; Anchorage Bay, Chignik Bay, Alaska Peninsula; Matanuska River below Moose Creek, Alaska.

Fraxinus integrifolia, Newberry not Moench=**Umbellularia oregonensis** (Knowlton & Cockerell) Chaney.

Fraxinus johnstrupi Heer. □ Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—1936, 164, pl. 105, f. 3; Matanuska River west from Moose Creek, Alaska.

Fraxinus juglandina Saporta, 1867, An. Sci. Nat. (Paris), Ser. 5, Botanique, vol. 8, 89, pl. 7, f. 6; pl. 9 (7 on plate) f. 13-16a.—Hollick, 1936, 163, pl. 42, f. 4b; pl. 100, f. 1-3; pl. 101, f. 8-10; Matanuska River below Moose Creek; Matanuska Coal Field; Anchorage Bay, Chignik Bay, Alaska Peninsula; Kachemak Bay, Kenai Peninsula, Alaska.

Fraxinus lateralis Hollick, 1936, 164, pl. 105, f. 5, 6; Matanuska River below Moose Creek; near Berg Lake, Yakutat-Copper River region, Alaska.

Fraxinus lei Berry, 1934, 132, pl. 25, f. 1-5; Lance: Jump Off, Harding Co., S. Dak.—1935, 55, pl. 15, f. 4; Lower Ravenscrag; Loc. 3; Middle Ravenscrag; Loc. 34; Upper Ravenscrag; Loc. 33, Southern Saskatchewan.

Fraxinus mespilifolia Lesquereux. □ Chaney, 1921a, 90; Puente: Los Angeles Co., Calif.

Fraxinus nigra Marshall. □

Fraxinus sambuctifolia Lamarck. □ Penhallow, 1899, 527; Taylor's Brickyard, Don Valley, Toronto, Ontario.

Fraxinus oregona Nuttall. Scott, 1926, 406; Tesla, Calif.

Fraxinus oregonensis Knowlton & Cockerell=**Umbellularia oregonensis** (Knowlton & Cockerell) Chaney.

Fraxinus petiolata R. W. Brown=**Fraxinus flexifolia** (Lesquereux) R. W. Brown.

Fraxinus praedicta, Lesquereux not Heer=**Hydrangea fraxinifolia** (Lesquereux) R. W. Brown.

Fraxinus? princetoniana Knowlton, 1922, 161, pl. 22, f. 7; Laramie?: Sandstone Ridge east of South Table Mountain, Golden, Colo.

Fraxinus? pseudobliqua Hollick, 1936, 164, pl. 104, f. 6, 7a; Anchorage Bay, Chignik Bay, Alaska Peninsula; Hamilton Bay, Kupreanof Island, southeastern Alaska.

Fraxinus quadrangulata Michaux.□Penhallow, 1894, 94; Pleistocene: Don Valley near Toronto, Canada.

Fraxinus succorensis Arnold, 1937, 97, pl. 3, f. 2; Fenwick Ranch, west of Sucker Creek, Oreg.

Fraxinus ungeri Lesquereux.□?Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.—Chaney & Elias, 1936b, 45, pl. 6, f. 8–10; Ogallala: Brown Co., Nebr.; Beaver Co., Okla.

Fraxinus ungeri, Knowlton (part) not Lesquereux=**Cotinus fraterna** (Lesquereux) Cockerell.

Fraxinus wieser R. W. Brown, 1934, 64, pl. 12, f. 5; Green River: Alkali Station, Wyo.

Fraxinus yukonensis Hollick, 1936, 164, pl. 102, f. 1–4; pl. 105, f. 4; Seventymile Creek below Mogul Creek, upper Yukon region; Matanuska River below Moose Creek, Matanuska-Cook Inlet region: Nenana coal field, Alaska.

Fraxinus?, samaras, Berry=**Fraxinus idahoensis** R. W. Brown.

Fraxinus? sp. Chaney, 1920a, 180, pl. 20, f. 4; Eagle Creek: Multnomah Co., Oreg.

Fraxinus sp. Knowlton, 1930, 124, pl. 58, f. 7; Denver: Golden, Colo.

Fraxinus denticulata, Lesquereux not Heer, 1888, 51; Denver: Golden, Colo.

Fraxinus sp. MacGinitie=**Fraxinus idahoensis** R. W. Brown.

Frenelopsis gracilis Newberry=**Raritania gracilis** (Newberry) Hollick & Jeffrey.

Frenelopsis hoheneggeri (Ettingshausen) Schenk.□White, 1898, 349; Pagtorfik, Nugsuak Pen., west Greenland.

Fruits, cf. **Leguminosites sp.**, Knowlton, 1912i, 42; Moose Creek, Lower Matanuska, Alaska.

Fruit or nut? A. O. Thomas, 1917, 113–117, pl. 5, f. 1–4.—Hollick, 1936, 171; Tokun: Bering River coal field, Alaska.

Fucus irregularis Hollick, 1930, 37, pl. 1, f. 1; Nulato: Lower Yukon, Alaska.

Fucus lignitum Lesquereux.□Berry, 1935, 65; Whitemud: Loc. P 5–30, Southern Saskatchewan.

FURCULA Harris, 1932a, 4. Genotype: *F. granulifer* Harris.

Furcula granulifer Harris, 1932a, 4, pl. 1, f. 1–7; text–f. 1, 2; Lepidopteris Zone: Scoresby Sound, East Greenland.

GALIUM Linné.

Galium californicum Hooker & Arnott. Mason, 1934, 176, pl. 11, f. 7; Tomales: Tomales Bay, Calif.

Galium sp. Potbury, 1932, 38, pl. 4, f. 6, 7; San Bruno: San Mateo Co., Calif.

Galium sp. Berry, 1924a, 23, pl. 2, f. 20; Pleistocene: Washington

Galium sp. Potbury=**Galium californicum** Hooker & Arnott.

GANODERMA (Karst.) Patouillard.

Ganoderma lucidum (Leyss.) Karst. Chaney & Mason, 1936c, 8, text-f. 5, 6; Pleistocene: head of Goldstream, near Fairbanks, Alaska.

GARRYA Douglas.

Garrya elliptica Douglas. □ Chaney & Mason, 1930, 13, pl. 7, f. 18; Pleistocene: Santa Cruz Island, Calif.—1933a, 63, pl. 8, f. 6-8, Pleistocene: Carpinteria, Santa Barbara Co.—Mason, 1934, 170, pl. 10, f. 10, 11; Tomales: Tomales Bay, Marin Co., Calif.

Garrya masoni Dorf, 1930, 104, pl. 13, f. 5; Bennett Valley; Coalinga, Calif.

Gaylussacia dumosa (Andrae) Torrey & Gray. Barry & Hawkins, 1935a, 251, pl. 25, f. 3; Pensauken; near Durhams Corner, Middlesex Co., N. J.

Geinitzia formosa Heer. □ Hollick, 1897c, 129, pl. 12, f. 1, 2.—Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottondale, Ala.—?Wilson, 1914a, 323; Belly River: near Steveville, Red Deer River, Albert.—Berry, 1925, 32; Ripley: Carroll Co., Tenn.—1929m, 69; Allison: southwest Alberta.

Geinitzia sp. Newberry, 1873, 10.

Sequoia gracillima Newberry (part) not Lesquereux, 1895, 26, pl. 9, f. 1-3 (cones only).—Berry, 1903, pl. 48, f. 21, 22.—1904, pl. 15.—1904a, 69, pl. 2.—1905, 44.—1906b, 139.—1906d, 165.

Geinitzia gracillima Jeffrey, 1911, 21-27, pl. 8.

Geinitzia gracillima Jeffrey = **Geinitzia formosa** Heer.

Geinitzia jenneyi Fontaine. □ Berry, 1929 l, 60; Upper Blairmore: Southwest Alberta.

Geinitzia sp., Berry, 1929k, 52; Lower Blairmore: Southwest Alberta.

Geinitzia sp. Newberry = **Geinitzia formosa** Heer.

GEISSANTHUS Hooker filius.

Geissanthus brittoni Hollick, 1924, 312, pl. 2, f. 2, 3; Siparia: Trinidad, British West Indies.

GELLERA Hollick, 1931a, 9. Genotype: *G. paradoxa* Hollick.

Gellera paradoxa Hollick, 1931a, 9, pl. 2, f. 1-3; Newark Series: Staten Island, N. Y.

GEONOMA Willdenow. □ Noé, 1936a, 443.

GEONOMITES Visiani. □ Noé, 1936a, 443.

Geonomites claibornensis Berry, 1924, 58, pl. 48, f. 1, 2; Mt. Selman: near Palofax, Webb Co., Tex.—Ball, 1931, 119; Mt. Selman: near Palofax, Webb Co., Tex.

Geonomites goldianus (Lesquereux) Lesquereux. □ Knowlton, 1930, 39, pl. 10, f. 2; Denver: Golden, Colo.

Geonomites grammifolius Lesquereux. □ Knowlton, 1930, 39; Denver: Golden, Colo.

Geonomites haydenii (Newberry) Knowlton, 1923, 152; Green River: Green River, Wyo.—Berry, 1930d, 67; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Manicaria haydenii Newberry. □

Geonomites schimperi Lesquereux. □ Berry, 1925, 37, pl. 2; Ripley: Henry, Chester and McNairy Cos., Tenn.

Geonomites tenuirachis Lesquereux. □ Knowlton, 1930, 38, pl. 6; pl. 9, f. 1, 2, 8; Dawson: east of Colorado Springs, Colo.

Geonomites visianii Berry, 1919g, 5, pl. 2; Basal Tuffs: Barilla Mts., Tex.—Ball, 1931, 34; Basal Tuffs: Barilla Mts., Tex.

Geonomites? sp. Knowlton, 1930, 40, pl. 10, f. 1; Denver: Golden, Colo.

Geonomites sp. Lesquereux, 1888, 44; Denver: Golden, Colo.

Ginkgo adiantoides (Unger) Heer. □ Chaney, 1920a, 159, pl. 5, f. 1; Eagle Creek: Multnomah Co., Oreg.—1925b, 26; Mascall: White Hills, Oreg.—Knowlton, 1926, 25, pl. 8, f. 10, 11; Latah: Spokane, Wash.—Mason, 1927, 145, pl. 1, f. 1; Mascall: White Hills, Oreg.; Eagle Creek: Multnomah Co., Oreg.—Berry, 1926, 190; Paskapoo: Calgary, British Columbia—1926d, 96; east of Joseph Creek, Chu Chua Dist., British Columbia—1930, 63; Estevan: Southern Alberta.—1930c, 18; Estevan: Cypress Hills, Canada.—1935, 17; Whitemud: Loc. 7, 30; Lower Ravenscrag: Loc. 3; Upper Ravenscrag: Loc. 32, Southern Saskatchewan.—1938, 89, text-f. 2; Latah: Grand Coulee, Wash.—Mathiesen, 1932, 55, text-f. 19, 20; Sabine Island, east Greenland.—Hollick, 1936, 43, pl. 117, f. 1, 2; Folger Creek, Yukon River, Alaska.—LaMotte, 1936, 107, text-f. 3; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—Arnold, 1937, 83, pl. 2, f. 4; Sucker Creek, Oreg.

Ginkgo laramiensis Ward. □ ?Hollick, 1930, 49, pl. 12, f. 3, 4; Kaltag: Lower Yukon, Alaska.

Ginkgo arctica Heer=*Ginkgoites pleuripartita* (Schimper) Seward.

Ginkgo concinna Heer=*Ginkgoites concinna* (Heer) Seward & Conway.

Ginkgo crenulata Hollick, 1930, 49, pl. 12, f. 1, 2; Kaltag; Lower Yukon, Alaska.

Ginkgo digitata (Brongniart) Heer. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia—Wilson, 1917, 301; near Pocahontas, Alberta.—Hollick, 1930, 48, pl. 11, f. 2-7a, 8; Melozi: Lower Yukon; Kaltag: Lower Yukon, Alaska.

Ginkgo huttoni (Sternberg) Heer. □

Cyclopteris huttoni Sternberg. □

Ginkgo multinervis, Lesquereux not Heer, 1888a, 31, pl. 16, f. 6.

Ginkgo digitata huttoni (Sternberg) Seward, 1900, Catalogue of Mesozoic Pls. in Brit. Mus., Jurassic Fl., pt. 1, 259, pl. 9, f. 2.

Ginkgo huttoni magnifolia Fontaine. □

Ginkgo digitata huttoni (Sternberg) Seward=*Ginkgo digitata* (Brongniart) Heer.

Ginkgo (*Baiera*?) *hermelini* Nathorst=*Ginkgoites hermelini* (Hartz) Harris.

Ginkgo huttoni (Sternberg) Heer=*Ginkgo digitata* (Brongniart) Heer.

Ginkgo huttoni magnifolia Fontaine=*Ginkgo digitata* (Brongniart) Heer.

Ginkgo laramiensis Ward=*Ginkgoites adiantoides* (Unger) Heer.

Ginkgo lepida (Heer) Heer. □ ?Wilson, 1916, 207; Mt. Bush, Yukon Terr.

Ginkgo minor Hollick, 1930, 50, pl. 2, f. 4b; pl. 13, f. 1-7; pl. 19, f. 6b; 7b; pl. 29, f. 2c, 4c, 6a; Chignik: Alaska Peninsula.

Ginkgo minuta Nathorst=*Ginkgoites minuta* (Nathorst) Harris.

Ginkgo multinervis Heer=*Ginkgoites pleuripartita* (Schimper) Seward.

Ginkgo multinervis, Lesquereux not Herr=*Ginkgo digitata* (Brongniart) Heer.

Ginkgo obovata Nathorst=*Ginkgoites obovata* (Nathorst) Seward.

Ginkgo pseudoadiantoides Hollick, 1930, 49, pl. 3, f. 7b; pl. 13, f. 8-12; pl. 28, f. 4a; Melozi, Kaltag: Lower Yukon, Alaska.

Ginkgo pseudoadiantoides major Hollick, 1930, 50, pl. 13, f. 13; Kaltag: Lower Yukon, Alaska.

Ginkgo reniformis Hollick, 1930, 49, pl. 12, f. 5-7; Kaltag: Lower Yukon, Alaska.

Ginkgo reniformis conformis Hollick, 1936, 44, pl. 12, f. 1; Chinitna Bay, Alaska Peninsula.

Ginkgo sibirica Heer. □ Wilson, 1914, 408; Kootenai: Groundhog coal basin, upper Skeena River, British Columbia.

Ginkgo sibirica (or *arctica*) (Heer) Heer. Berry, 1932h, 210; Bull Head Mt. (Gethring Member): Peace River Valley, British Columbia.

Ginkgo cf. *sibirica*, Johansson not Heer=*Ginkgoites hermelini* (Hartz) Harris.

Ginkgo sibirica Knowlton not Heer, 1907, 124, pl. 13, f. 1-4; pl. 14, f. 1-2=*Ginkgoites pleuripartita* (Schimper) Seward.

Ginkgo? truncata (Lesquereux) Knowlton, 1930, 34, pl. 9, f. 3; Denver: Golden, Colo.

Palmocarpus truncatus minor Lesquereux, 1878, 120, pl. 11, f. 8, 9; Denver: Golden, Colo.—1888, 44; Denver: Golden, Colo.

Carpites laurineus Lesquereux. □

Ginkgo sp., Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Ginkgo? sp. (stones), Berry, 1930c, 18; Estevan: Cypress Hills; Ravenscrag: Cypress Hills, Canada.—1930f, 63; Estevan: Southern Alberta.

Ginkgo sp., Hollick, 1930, 49, pl. 11, f. 9; Seventy-Mile River: Upper Yukon, Alaska.

Ginkgo sp., Knowlton=*Carpites myracarum* Lesquereux.

GINKGOITES Seward, 1919, Catalogue Fossil Plants, British Museum, Vol. 4, p. 10.—Harris, 1935, 1, 47; discussion.

Ginkgoites acosmia Harris, 1935, 8, pl. 1, f. 3-5; pl. 2, f. 1, 2, text-f. 3e-h, 4, 4i; Lepidopteris Zone: Scoresby Sound, east Greenland.

Ginkgoites concinna (Heer) Seward & Conway, 1935a, 14, text-f. 11; Atanekrdluk: west Greenland.

Ginkgo concinna Heer, 1876, Fl. Foss. Arct., vol. 4, no. 2, 63, pl. 7, f. 8; pl. 13, f. 6b, 6c, 7, 8, 8b;—Hollick, 1930, 47, pl. 11, f. 1; Kaltag: Lower Yukon, Alaska.

Ginkgoites fimbriata Harris, 1935, 6, pl. 1, f. 11; pl. 2, f. 7, 8, text-f. 3a-b; Lepidopteris Zone: Scoresby Sound, east Greenland.

Ginkgoites hermeleni (Hartz) Harris, 1926, 99; Rhaetic: Scoresby Sound, east Greenland.—1935, 13, pl. 1, f. 8, 10; pl. 2, f. 5, 6; text-f. 6-8; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Ginkgo (Baiera?) hermeleni Nathorst. Hartz, 1896, 240, pl. 19, f. 1; Rhaetic: Cape Stewart, east Greenland.

Baiera taeniata, Antevs not Braun, K. Svenska Vet. Akad. Handl., vol. 59, no. 8, 44, pl. 5, f. 20-24; pl. 6, f. 43.

Baiera cf. *longifolia*, Johansson not Pomel, 1922, K. Svenska Vet. Akad. Handl., vol. 63, no. 5, 45, pl. 3, f. 7-11; pl. 8, f. 3, 4.

Ginkgo cf. *sibirica*, Johansson not Heer, 1922, K. Svenska Vet. Akad. Handl., vol. 63, no. 5, 42, pl. 3, f. 5; pl. 8, f. 7-9 only.

Ginkgoites minuta (Nathorst) Harris, 1935, 11, pl. 1, f. 7; text-f. 5; Lepidopteris Zone: Scoresby Sound, east Greenland.

Baiera minuta Nathorst, 1878, Om floran i Skånes kolförande bildningar. I, Ser. C, no. 27, 12.

Sphenopteris baieraformis Nathorst, 1878, Om floran i Skånes kolförande bildningar, I, Ser. C, no. 28, 55, pl. 1, f. 3; pl. 13, f. 1, 2.

Ginkgo minuta Nathorst, 1886, Om floran i Skånes kolförande bildningar, III, Ser. C, no. 85, 93, pl. 20, f. 14-16.

Baiera münsteriana Harris not Presl, 1926, 101, text-f. 24; Rhaetic: Scoresby Sound, east Greenland.

Ginkgoites obovata (Nathorst) Seward, 1919, Fossil Plants, vol. 4, 12, text-f. 632a.—Harris, 1935, 1, pl. 1, f. 6, 12-14; pl. 3, f. 1, 2, text-f. 1, 2; Lepidopteris Zone: Scoresby Sound, east Greenland.

Baiera minuta Nathorst, 1878, Om floran i Skånes kolförande bildningar, III, Ser. C, no. 85, 93, pl. 20, f. 3.

Ginkgoites pleuripartita (Schimper) Seward. Seward & Conway, 1935a, 14; Atanekrdluk: west Greenland.—Seward, 1926, 93, pl. 9, f. 65, 66, 71, 74, 76?, 83, 83a, 84, 86; text-f. 11A, 11E, 11F; Upemvik Isl.; Nugsuak; Disko Isl., west Greenland.

Ginkgoites pleuripartita—Continued.

Cyclopteris digitata (Brongniart) Dunker, 1846, Mon. der Norddeutschen Wealdbildung, Braunschweig, 9, pl. 1, f. 8–10; pl. 5, f. 5, 6; pl. 6, f. 11.—Ettingshausen. 1852, K. k. Geol. Reichsanstalt Abh., vol. 1, pt. 3, 12, pl. 4, f. 2.

Baiera pleuripartita Schimper, 1869, Traité Paléont. Veg., vol. 1, 423, pl. 31, f. 12.

Baiera arctica Heer, 1874, 37, pl. 3, f. 3.

Baiera grandis, Heer not Hollick, 1874, 37, pl. 3, f. 4.—1882, 10.

Ginkgo sibirica, Knowlton not Heer, 1907, 124, pl. 13, f. 1–4; pl. 14, f. 1, 2; Kootenai: near Geyser, Cascade Co., Mont.

Ginkgo arctica (Heer) Heer, 1882, 14.—1929k, 48, pl. 7, f. 6; Lower Blairmore: Southwest Alberta.

Ginkgo multinervis Heer 1882, 46, pl. 5, f. d; pl. 8, f. 2b, 3, 4; pl. 9, f. 3b.—White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

Salisburia (*Ginkgo*) *siberica*, Dawson not Heer, 1886, 8, pl. 2, f. 1; Kootenai: Martin Creek, British Columbia.

Baiera brevifolia Newberry.□

Ginkgoites taeniata (Braun) Harris, 1935, 19, pl. 1, f. 1, 2, 9; pl. 2, f. 3, 4; text: f. 9–11; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Baiera taeniata F. Braun, 1843, in Münster, Beiträge zur Petrefactenkunde, vol. 6, 21.

Baiera geinitzi Nathorst, 1878, Om florän i Skånes kolförande bildningar. I, Ser. C, no. 27, 26, pl. 13, f. 17.

Ginkgoites sp., Seward, 1925, 239.

Adiantum formosum Heer, 1874, 35, pl. 13, f. 11, 12.—White, 1898, 347, 352; Kook, Ujarartorsuak, Nugsuak Pen., west Greenland.

Gleditschia praeaguetica Ashlee = *Cercis spokanensis* Knowlton.

Gleditsia? *mississippiensis* (Berry) Berry, 1930, 82, pl. 50, f. 2–4; Holly Springs: Grable Pit, Henry Co., Tenn.

Cassia mississippiensis Berry.□

Gleditsiophyllum aristatum Berry, 1925, 61, pl. 11, f. 7; Ripley: Carroll Co., Tenn.

Gleditsiophyllum eocenicum Berry.□Berry, 1924, 63; Mt. Selman; Palestine, Anderson Co., Tex.—1930, 82; Holly Springs: Puryear, Henry Co., Tenn.—Ball, 1931, 77, 123; Wilcox (Indio?): Calaveras Creek, Wilson Co., Tex.; Carrizo sandstone: La Prior Crossing, Zavala Co., Tex.; Mt. Selman: Anderson Co., Tex.

Gleditsiophyllum fructuosum Berry.□Ball, 1931, 77; Wilcox: Tyler, Smith Co., Tex.

Gleditsiophyllum proeocenicum Berry, 1925, 61, pl. 11, f. 8–10; Ripley: Henry Co., Tenn.

Gleditsiophyllum preovatum Berry, 1925, 60, pl. 11, f. 11, 12; Ripley: Henry Co., Tenn.

Gleditsiophyllum triacanthoides Berry.□Berry, 1920e, 403; Black Creek: North Carolina.

Gleichenia? *bohemia* (Corda) Berry, 1922d, 208, pl. 47, f. 2; Cheyenne: near Belvidere, Kiowa Co., Kansas.

Pecopteris bohemia Corda, in Reuss, 1846, Versteinerungen der böhmischen Kreideformation, 95, pl. 49, f. 1.—Heer, 1874, 96, pl. 26, f. 17a.—1883, 6, pl. 58, f. 4.

Gleichenia comptoniaefolia (Debey & Ettingshausen) Heer (part), 1874, 49, pl. 11, f. 1, 2.—1882, 8, 36, pl. 46, f. 25(?) = *Gleichenites gieseckiana* (Heer) Seward.

Gleichenia delicatula? Heer.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.—1928f, 433, pl. 11, f. 5; Ripley: Carroll Co., Tenn.

Gleichenia gieseckiana Heer (part) = *Gleichenites gieseckiana* (Heer) Seward.
Gleichenia gieseckiana Heer (part) = *Gleichenites porsildi* Seward.
Gleichenia gracilis Heer (part) = *Gleichenites gieseckiana* (Heer) Seward.
Gleichenia gracilis Heer (part) = *Gleicheniopsis* sp. Tutin.
Gleichenia longipennis Heer (part) = *Gleichenites gieseckiana* (Heer) Seward.
Gleichenia longipennis Heer (part) = *Gleichenites nordenskiöldi* (Heer) Seward.
Gleichenia nauckhoffi Heer = *Gleichenites gieseckiana* (Heer) Seward.
Gleichenia nervosa Heer = *Gleichenites nordenskiöldi* (Heer) Seward.
Gleichenia nordenskiöldi Heer (part) = *Gleichenites nordenskiöldi* (Heer) Seward.

Gleichenia? *obscura* Knowlton = *Dryopteris idahoensis* Knowlton.
Gleichenia rigida Heer (part) = *Lacopteris rigida* (Heer) Seward.
Gleichenia rigida Heer (part) = *Gleichenites porsildi* Seward.
Gleichenia rinkiana Heer = *Gleichenites gieseckiana* (Heer) Seward.
Gleichenia thulensis Heer = *Gleichenites gieseckiana* (Heer) Seward.
Gleichenia zippei (Corda) Heer = *Gleichenites gieseckiana* (Heer) Seward.
Gleichenia sp. Wilson, 1914, 409; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

GLEICHENIOPSIS Tutin, 1932, 503. Genotype: *G. fecunda* (Heer) Tutin.
Gleicheniopsis erlansonii Miner, 1934, 262, text-f. 1-6; Atane or Patoot: Nngsuak Peninsula, west Greenland.
Gleicheniopsis fecunda (Heer) Tutin, 1932, 503, pl. 16, f. 1-5; Patoot and Disko Isl., west Greenland.—Seward & Conway, 1935a, 6; Patoot: west Greenland.

Aspidium fecundum Heer, 1882.

Polypodium grahamianum Heer, 1883.

Gleichenites gieseckiana (Heer) Seward (part), 1926, 69.

Gleicheniopsis sewardii Tutin, 1932, 505; Pagtorfik, west Greenland.—Seward & Conway, 1935a, 6; Pagtorfik, west Greenland.

Gleichenites gieseckiana (Heer) Seward (part), 1926, 215, pl. 5, f. 9, 16.

Gleicheniopsis sp. Tutin, 1932, 506; Disko Isl., west Greenland.—Seward & Conway, 1935a, 6; Patoot: west Greenland.

Gleichenites gieseckiana (Heer) Seward (part), 1926, 215, pl. 5, f. 12, 12a.

?*Gleichenia gracilis* Heer (part), 1883.

GLEICHENITES Goeppert, 1836, Die fossilen Farrnkräuter. Nova Acta Leop. Car. Vol. 17, 181.

GLEICHENITES, Seward not Goeppert, 1926, 57.—Harris, 1931b, 67. Harris states: "*Gleichenites* Goeppert is a synonym of *Sphenopteris*, but Seward has used the name in a quite different sense for fossil ferns with sori like *Gleichenia*. Berry (1924) criticized this use of *Gleichenites* because it is contrary to the rules of nomenclature and because he considers it unnecessary the fossils being in his opinion generically identical with *Gleichenia*. It has not, however, been proved that the species described here is identical with *Gleichenia*, but at the same time, the material does not justify a revision of the nomenclature of this group."—Berry, 1924, Mesozoic *Gleichenia* from Argentine. Pan-Am. Geol., Vol. 41, 17.

Gleichenites gieseckiana (Heer) Seward, 1926, 69, pl. 5, f. 1-4, 6-8, 10, 11, 17; pl. 10, f. 96; pl. 12, f. 118; text-f. 2: Upernivik Isl.; Nugsuak; Disko Isl., west Greenland.—Seward & Conway, 1935a, 5, pl. 2, f. 9; Kook: west Greenland.

Pecopteris zippei Corda. □

Pecopteris hyperborea Heer, 1868, 81, pl. 44, f. 4.—1874, 41.

Gleichenia rinkiana Heer, 1868, 80, pl. 43, f. 6.

Pecopteris artica Heer (part), 1868, 80, pl. 43, f. 5b.—Knowlton 1898a, 195; Eocene?: below Melozokakat, Yukon River, Alaska.

Gleichenites gieseckiana—Continued.

Pecopteris borealis Heer not Brongniart (part), 1868, 81, pl. 44, f. 5.—Fontaine, 1899, 655, pl. 160, f. 14, 15; Fuson: Oak Creek, Crook Co., Wyo.—White, 1898, 347, 350, 362; Kook, Kaersuk, Patoot, Nugsuak Pen., west Greenland.

Gleichenia gieseckiana Heer (part), 1868, 78, pl. 43, f. 1; pl. 44, f. 2, 3.—1874, 43, pl. 3, f. 1d, 8; pl. 7, f. 1.—1882, 6, pl. 2, f. 9.—Newberry, 1895, 36, pl. 4, f. 12; Raritan: Woodbridge, N. J.—White, 1898, 347, 349; Kook, Pagtorfik, Nugsuak Pen., west Greenland.—Berry, 1911, 65; Raritan: Woodbridge, N. J.

Gleichenia zippei (Corda) Heer. □ Heer, 1868, 79, pl. 43, f. 4.—1874, 44, 90, 97; pls. 4-7; pl. 25, f. 1-3; pl. 26, f. 11-13.—1882, 7, pl. 3, f. 2.—White, 1898, 347, 349, 350, 352, 353; Kook, Pagtorfik, Kaersuk, Ujarartorsuak, Nugsuak Pen., west Greenland.

Gleichenia longipennis Heer (part), 1874, 46, pl. 6, f. 4-6.—1882, 7, pl. 2, f. 5.

Gleichenia thulensis Heer, 1874, 48, pl. 5, f. 9b; pl. 10, f. 18.—1882, 7.

Gleichenia comptoniaefolia (Debey & Ettingshausen) Heer (part), 1874, 49, pl. 11, f. 1, 2.—1882, 3, 36, pl. 46, f. 25 (?).—White, 1898, 349; Pagtorfik, Nugsuak Pen., west Greenland.

Gleichenia gracilis Heer (part) 1874, 52, pl. 10, f. 5.—White, 1898, 349, 350, 353; Pagtorfik, Kaersuk, Ujarartorsuak, Nugsuak Pen., west Greenland.

Gleichenia nauckhoffi Heer, 1874, pl. 25, f. 4.—White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

Cladophlebis heterophylla Fontaine. □ Wilson, 1917, 301; near Pocahontas, Alberta.—Berry, 1929k, 39, pl. 5, f. 1-4; Kootenai: southwestern Alberta.

***Gleichenites gieseckiana* (Heer) Seward (part) = *Gleicheniopsis fecunda* (Heer) Tutin.**

***Gleichenites gieseckiana* (Heer) Seward (part) = *Gleicheniopsis sewardii* Tutin.**

***Gleichenites gieseckiana* (Heer) Seward (part) = *Gleicheniopsis* sp. Tutin.**

***Gleichenites microphyllus*, Harris not Schenk = *Gleichenites nitida* Harris.**

***Gleichenites nitida* Harris, 1931b, 67, pl. 14, f. 5; text-f. 23; Thaumatopteris Zone: Scoresby Sound, east Greenland.**

cf. *Gleichenites microphyllus* Harris not Schenk, 1926, 61, text-f. 5A-G; Rhaetic: Scoresby Sound, east Greenland.

***Gleichenites nordenskiöldi* (Heer) Seward, 1926, 74, pl. 6, f. 22, 25, 26, pl. 10, f. 97; Nugsuak, west Greenland.—Seward & Conway, 1935a, 5, pl. 1, f. 6, 8; Patoot, Atanekerdluk, Kook, west Greenland.**

Gleichenia nordenskiöldi Heer (part), 1874, 48, pl. 8, f. 4, 5; pl. 9, f. 1-4.—Fontaine, 1890, 119, pl. 21, f. 11; Patuxent: Dutch Gap Canal, Va.—Lesquerieux, 1892, 25; Dakota: Kansas.—White, 1898, 347, 353, 362; Kook, Pagtorfik, Ujarartorsuak, Patoot, Nugsuak Pen., west Greenland.—Fontaine, 1906, 231, pl. 65, f. 24-29; Knoxville: Tehama Co., Calif.—Knowlton, 1910c, 41.—Berry, 1922d, 208, pl. 48, f. 1; Cheyenne: near Belvidere, Kiowa Co., Kans.

Pecopteris andersoniana Heer, 1874, 41, pl. 3, f. 7, 7b.—White, 1898, 347; Kook, Nugsuak Pen., west Greenland.

Gleichenia longipennis Heer (part), 1874, pl. 8, f. 1-3.—?White, 1898, 347, 350; Kook, Kaersuk, Nugsuak Pen., west Greenland.

Gleichenia nervosa Heer, 1874, 53 pl. 3, f. 3-6.

Pecopteris (*Polypodium*?) *andersoniana* Heer, 1880, 4, pl. 1, f. 10b; pl. 2, f. 5-9.

Pecopteris strictinervis Fontaine? □

Aspidium heterophyllum Fontaine, 1894, 450.—1895a, 15; Knoxville: Tehama Co., Calif.

Osmunda dicksonioides Fontaine?, 1894, 450.—1895a, 15; Knoxville: Tehama Co., Calif.

***Gleichenites porsildi* Seward, 1926, 76, pl. 6, f. 18, 19, 24, 27, 29-31; pl. 12, f. 122, 124; text-f. 4-7; Upervik Island, Nugsuak, Disko Island, west Greenland.—Seward & Conway, 1935a, 5, pl. 1, f. 5; Atanekerdluk: west Greenland.**

Gleichenia rigida Heer (part), 1874, 43, pl. 1, f. 1b, 5a, b. 1882, 6, pl. 2, f. 6, 7.

Aspidium jenseni Heer (part), 1882, 31, pl. 29, f. 4; pl. 30, f. 1-6.

Aspidium schouwii Heer, 1882, 31, pl. 32, f. 10.

Cyathea fertilis Heer (part), 1882, 21, pl. 31, f. 3-6.

Cyathea hammeri Heer (part), 1882, 22, pl. 31, f. 2; pl. 35, f. 4.

Cyathea angusta Heer, 1883, 1, pl. 50, f. 5.

Gleichenia gieseckiana Heer (part), 1883, 7, pl. 50, f. 1-3.

Gleichenites sp. Seward, 1925, 235, pl. A, f. 7, 8.

Gleichenites? *waltoni* Seward, 1926, 74, pl. 6, f. 28; text-f. 3; Nugsuak, west Greenland.

Gleichenites cf. *gieseckiana* Heer. □ Seward, 1926, 73, pl. 5, f. 15; Nugsuak, west Greenland.

Gleichenites sp., Seward=*Gleichenites porsildi* Seward.

GLOSSOPTERIS Brongniart, 1828, Hist. des. veg. foss., 54.—Wieland, 1914, 134; discussion.

Glossopteris crassinervis (Nathorst) Harris, 1932, 28, text-f. 15-18; Rhaetic: Scoresby Sound, east Greenland.

Anthrophyopsis crassinervis Nathorst. Harris, 1926, 74, pl. 8, f. 1, 2; text-f. 11A-F; Rhaetic: Scoresby Sound, east Greenland.

Glossopteris? *linearis* McCoy. Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 135, pl. 17, f. 2; Liassic: Mixteca Alta, Oaxaca, Mexico.

Glossopteris? *mexicana* Wieland, 1913, 266; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 136, pl. 46, f. 3; Liassic: Mixteca Alta, Oaxaca, Mexico.

Glossopteris? sp., Müllerried, 1933, 44; Triassic?: Coatepec, Puebla, Mexico.

Glossozamites schenkii Heer=*Otozamites schenkii* (Heer) Seward.

Glyptostrobus dakotensis R. W. Brown, 1936a, 355, text-f. 2-4; numerous localities in the Ft. Union formation in North Dakota and Montana.

Glyptostrobus europaeus, Newberry not Heer, 1898, pl. 26, f. 6-8a; pl. 55, f. 3, 4; Ft. Union Group: Ft. Union, N. Dak.; Birch Bay, Wash.

Glyptostrobus europaeus (Brongniart) Heer, 1855, Fl. Tert. Helv., vol. 1, 51, pl. 19; pl. 20.—1868, 135, pl. 3, f. 20-23.—Newberry, 1863, 517; Chucanut: Birch Bay, Bellingham Bay, Wash.—Lesquereux, 1878, pl. 7, f. 1, 2; Costello's Ranch, Florissant, Colo.—Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.—1883, 32; Knowlton, 1894, 214.—1896, 879; Kuiv Isl., near Sitka; Ninilchik; Herendeen Bay; Kootznahoo Inlet, Admiralty Isl., Alaska.—1902c, 705.—1909, 188, 189, 197, 198, 211, 214; Ft. Union: Miles City, Mont.; near Glendive, Mont.; near Dayton, Wyo.; Big Horn Basin, Wyo.—1911g, 369; Lance: South Dakota.—1912f, 198, 426, 481; Ft. Union: Davis Co., Wyo.; Converse Co.; Lance: eastern Montana.—Penhallow, 1902a, 51, 68.—1907c, 309; British Columbia between Pasayten and Skagit Rivers.—1908a, 58; Lignite Tertiary; Ninemile Creek, Similkameen River; Porcupine Creek and Great Valley, Alberta; Burrard Inlet and Vancouver, British Columbia; Tulameen, Red Deer, Horsefly and Tranquille Rivers, British Columbia.—Berry, 1916a, 169, pl. 15, f. 3; Wilcox: foliage from Holly Springs and Oxford, Miss., seeds from Early Grove, Marshall Co., Miss.—1924, 46, 144, pl. 49, f. 1, 2; Claiborne: Lisbon, near Lexington, Holmes Co., Miss.; La Grange: Obion Co., Tenn.—1926, 192; Paskapoo: Red Deer and Evansburg, Alberta.—1926d, 97; Joseph Creek and Kitsilano, British Columbia.—1930, 52, pl. 7, f. 7-9; Holly Springs: road west of La Grange, Fayette Co., Tenn.; Wilcox: Silverton Road, Taylor Farm, Chester Co., Tenn.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 103, pl. 19, f. 1; Latah: 11 mi. east of Lewiston, north bank of Clearwater River, Nez Perce Co.; 3.8 mi. east of White Bird, Idaho Co., Idaho; the figured specimen from 19½ mi. east of Lewiston, Idaho.—1935, 20; Middle Ravenscrag: Loc. 5, 36; Upper Ravenscrag: Loc. 1, Southern Saskatchewan.—Chaney, 1922a, 216; Payette: Idaho.—Ball, 1931, 147; Jackson: Lisbon, Holmes Co., Miss.; Fayette: Kaney Headright, Brazos Co., Tex.—Hollick, 1936, 51, pl. 10, f. 3b; pl. 17, f. 1-6; pl. 18, f. 1-5a; pl. 19, f. 1, 2; pl. 104, f. 7b; pl. 109, f. 11; Eska Creek, Matanuska Region; Hamilton Bay, Kupreanof Island, Southeastern Alaska; Chignik River, Alaska Peninsula; Matanuska River; Yakutat Bay; Salmon Bay, Alaska Peninsula.

Glyptostrobus europaeus—Continued.

Taxodium europaeum Brongniart, 1833, Annales sci. nat., Botanique, vol. 30, 168.

Taxodites europaeus Endlicher, 1847, Synopsis coniferarum, 278.

Glyptostrobus ungeri Heer. □? Hollick, 1912a, 38, 50; west of Kings River, Matanuska Valley, Alaska; Chickaloon: Matanuska River below Moose Creek, Alaska.

Glyptostrobus europaeus ungeri (Heer) Heer. □ Heer, 1874, 6, pl. 1, f. 6b, 6c.—1878, pl. 9; f. 9a, 10–13; pl. 13, f. 2b, 3, 4b, 4c.—1883, 61 pl. 70, f. 9, 10; pl. 66, f. 5c, 9; pl. 85, f. 6–8.

Sequoia nordenskiöldii, Lesquereux not Heer, 1888a, 19.

Sequoia affinis Lesquereux (part), 1878, 75, pl. 7, f. 305; pl. 65, f. 1–4; Elko, Nev.

NOTE.—Seward & Conway, 1935, 14, refer certain specimens to *Elatocladus ungeri* (Heer) Seward & Conway, q. v.

Glyptostrobus europaeus ungeri (Heer) Heer = **Glyptostrobus europaeus** (Brongniart) Heer.

Glyptostrobus groenlandicus Heer, 1874, 76, pl. 17, f. 9; pl. 20, f. 9–10; pl. 22, f. 12.—Dawson, 1886, 9, pl. 3, f. 8; Kootenai: north branch of Old Man River, British Columbia.—Hollick, 1930, 60, pl. 10, f. 3c; pl. 24, f. 2; pl. 26, f. 1–4; Yukon River, north bank, 5 mi. above Louden Station and at Pickarts mine, and 10 mi. below Blatchford's mine, Alaska.

Glyptostrobus linguaefolia (Lesquereux) Brooks = **Glyptostrobus oregonensis** R. W. Brown. Note: Only the material newly described by Brooks is recognized. All synonyms of Brooks are referred back to their original status.

Glyptostrobus oregonensis R. W. Brown, 1936a, 356, text-f. 1; type specimen from near Beulah, Malheur Co., Oreg.

Glyptostrobus linguaefolia, Brooks not Lesquereux, 1935, 281, pl. 4, f. 6; Ballantyne Ranch, 13 mi. southeast of Homedale, Idaho. Note: All synonyms of Brooks are rejected and returned to their former status.

Glyptostrobus specialis Hollick, 1930, 61, pl. 24, f. 3–6; Yukon River, north bank, about 7 mi. below and 10 mi. below Blatchford's Mine, Alaska.

Glyptostrobus ungeri Heer = **Glyptostrobus europaeus** (Brongniart) Heer. cf. *Glyptostrobus ungeri* Heer. Nathorst, 1915, 11, pl. 2, f. 1–12; Ellesmereland.

Glyptostrobus vacuipites Wodehouse, 1933a, 494, f. 18; Green River: Parachute Creek, Garfield Co., Colo.

Glyptostrobus?, staminate aments, Berry, 1929f, 239, pl. 63, f. 1; Latah: Spokane, Wash.

Glyptostrobus? sp. Hollick, 1930, 61, pl. 24, f. 7; Chignik Bay, Alaska Peninsula.

GOEPPERTIA Grisebach.

Goeppertia tertiaria Berry, 1921b, 176, pl. 25, f. 1; Costa Rica.

Goeppertia cf. tertiaria Berry, 1923b, 20, pl. 5, f. 5; north of Palomares, Oaxaca, Mexico.

Goeppertia cf. tertiaria Berry = **Goeppertia tertiaria** Berry.

Goniopteris claiborniana Berry. □ Berry, 1924, 44, pl. 4; pl. 5; Columbia, Caldwell Parish, La.; Lisbon: Newton, Newton Co., Miss.

Goniopteris lesquereuxi Berry, 1932e, 7; Lower Bridger: Wind River Basin, Wyo.

Lastrea (Goniopteris) fischeri, Lesquereux not Heer, 1883, 239, pl. 50, f. 1, 1a.—Newberry, 1898, 10, pl. 48, f. 6.—Knowlton, 1900d, 38, pl. 1, f. 2; 5 mi. south of Asbland, Oreg.—1902, 22.—Penhallow, 1902a, 48.—1908a, 61.—Knowlton, 1914d, 36; Lower Clarno: Currant Creek, Oreg.; Paskapoo (Ft. Union): Red Deer River, Alberta; Burrard Inlet, British Columbia; Eugene, Oreg.

Lastrea (Goniopteris) knightiana Newberry. □

Lastrea (Goniopteris) fischeri Heer. □ Sanborn, 1935, 15, pl. 3, f. 5; Comstock: Comstock, Douglas Co., Oreg.

GORDONIA Ellis.

Gordonia hesperia Berry, 1929n, 430, text-f. 1, 2; Latah: Spokane, Wash.—1931a, 41, pl. 13, f. 7, 8; Latah: Grand Coulee, Wash.—Brown, R. W., 1937, 183, pl. 52, f. 5-8; Latah: Spokane, Wash.

Ternstroemites idahoensis, Berry not Knowlton, 1929f, 258, pl. 58, f. 1; Latah: Spokane, Wash.

Gordonia idahoensis, Berry not Knowlton, 1929n, 429-432; Latah: Idaho.—1934, 120; Latah: near White Bird; near Juliaetta, Idaho.

Carpites paulownia Knowlton, 1926, 50, pl. 29, f. 12; Latah: Spokane, Wash.

Gordonia idahoensis, Berry not Knowlton=*Gordonia hesperia* Berry.

Gordonia pteriformis (Berry) Berry=*Cedrela pteriformis* (Berry) R. W. Brown.

GOUANIA Jacquin.

Gouania miocenica Berry, 1923b, 17, pl. 7, f. 4; Palomares, Oaxaca, Mexico.

Gramineae sp. Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.

Gramineae, impressions, Grewingk, 1850, 170.—Hollick, 1936, 56; Unga Island, south of Alaska Peninsula.

Gramineae sp., Penhallow, 1900, 335; Green's Creek, Ottawa River, Canada.

GRAMMAEPHLOIOS Haris, 1935, 151. Genotype: *G. ichtya* Harris.

Grammaephloios *ichtya* Harris, 1935, 152, pl. 23, f. 4; pl. 25, f. 10; pl. 27, f. 1, 3-5, 10, 14, 15; pl. 28, f. 5, 13, 14; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Grass, leaf of, Knowlton=*Keteleeria heterophylloides* (Berry) R. W. Brown.

Grass?, genus?, Knowlton, 1926, 29, pl. 10, f. 8-9; Latah: Spokane, Wash.

Grevillea alaskana Hollick, 1936, 111, pl. 60, f. 3-5; Kachemak Bay, Kenai Peninsula, Alaska.

Grewia alaskana Hollick, 1930, 107, pl. 82, f. 1; Chignik: Alaska Peninsula.

Grewia auriculata Lesquereux=*Cercidiphyllum crenatum* (Unger) R. W. Brown.

Grewia crenata (Unger) Heer=*Cercidiphyllum crenatum* (Unger) R. W. Brown.

Grewia crenata, Ward not Unger=*Trochodendroides genetrix* (Newberry) R. W. Brown.

Grewia crenulata Heer=*Cercidiphyllum crenatum* (Unger) R. W. Brown.

Grewia obovata Heer=*Cercidiphyllum crenatum* (Unger) R. W. Brown.

Grewia obovata, Ward not Heer=*Trochodendroides genetrix* (Newberry) R. W. Brown.

Grewia orbiculata Hollick, 1936, 146, pl. 83, f. 1-4; pl. 84, f. 3-5; south bank Yukon River above Rampart and north bank at Drew's mine, central Yukon region, Alaska.

Grewia zizyphoides Hollick, 1936, 147, pl. 84, f. 2; Chignik River opposite Nun Point, Alaska Peninsula.

Grewia, n. sp., Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Grewiopsis alaskana Hollick, 1936, 149, pl. 85, f. 1-4; Chignik Bay, Alaska Peninsula; Eska Creek, Matanuska coal field, Alaska.

Grewiopsis cissifolius R. W. Brown, 1929, 290, pl. 74, f. 8; Green River: northwest of De Beque, Colo.

Grewiopsis claiborniana Berry, 1924, 75, pl. 13, f. 1-4 Yegua: Columbia, Caldwell Parish, La.: near Stevens, Ouachita Co., Ark.

Grewiopsis congermalis Hollick, 1936, 148, pl. 85, f. 5, 6; Seventy Mile Creek below Mogul Creek, upper Yukon region; Chignik Bay, Alaska Peninsula.

Grewiopsis defectivus Hollick, 1936, 148, pl. 86, f. 2a; Hamilton Bay, Kupreanof Island, southeastern Alaska.

Grewiopsis? *dubium* Chaney & Sanborn, 1933, 85, pl. 30, f. 3; Fisher: Goshen, Oreg.

Grewiopsis elegans Berry, 1930, 105, pl. 18, f. 5; Holly Springs: Mill Creek, Hardeman Co., Tenn.

Grewiopsis flabellata (Lesquereux) Knowlton. □ Gress, 1922, 321; Dakota: Ellsworth Co., Kansas.

Populites flabellata Lesquereux. □ Lesquereux, 1871, 379; Dakota: Lancaster Co. Nebr.

Grewiopsis frustratorius Hollick, 1936, 148, pl. 86, f. 1; Hamilton Bay, Kupreanof Island, southeastern Alaska.

Grewiopsis grandiculus Hollick, 1936, 147, pl. 87, f. 1; Chignik River opposite Nun Point, Alaska Peninsula.

Grewiopsis inequilateralis Berry, 1925, 73, pl. 15, f. 1; Ripley: Henry and Carroll Cos., Tenn.

Grewiopsis mclearnii Berry, 1935, 50, pl. 12, f. 3; pl. 14, f. A; Middle Ravenscrag: Locs. 34, 37, Southern Saskatchewan.

Grewiopsis ripleyensis Berry, 1925, 72, pl. 15, f. 2; Ripley: Carroll Co., Tenn.

Grewiopsis tennesseensis Berry. □ Berry, 1930, 106, pl. 14; pl. 15; Grenada: Somerville, Fayette Co., Tenn.; Holly Springs: Bolivar, Hardeman Co.; Somerville, Fayette Co.; Grand Junction, Hardeman Co., Tenn.

Grewiopsis tenuifolia Lesquereux. □ Lesquereux, 1888, 54; Denver: Golden, Colo.—Knowlton, 1930, 116, pl. 50, f. 3; Denver: Golden, Colo.; Dawson: Mosby, Colo.

Grewiopsis viburnifolia Ward = *Viburnum antiquum* (Newberry) Hollick.

Grewiopsis wadii Berry, 1924, 179, pl. 52, f. 1; Lagrange: Hickman, Fulton Co., Ky.—1930, 105, pl. 40, f. 2; Holly Springs; near McKenzie, Carroll Co., Ky.

Grewiopsis wyomingensis Berry, 1930d, 73, pl. 8, f. 6; pl. 13, f. 1, 2; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Alnites inequilateralis Lesquereux (part), 1878, pl. 62, f. 1, 2, 4 only; Green River: Alkali Station, Wyo.

Grewiopsis yukonensis Hollick, 1930, 107, pl. 81; Melozi: Lower Yukon, Alaska.

Grewiopsis, n. sp., Bell, 1932, 220; Dunvegan: Peace River, British Columbia. GUAJACUM Plumier.

Guajacum informe Hollick, 1930, 98, pl. 75, f. 3; Chignik: Alaska Peninsula.

GUAREA Allemao.

Guarea opinabilis Hollick, 1928, 208, pl. 86, f. d; Collazo: Porto Rico.

Guatteria culebrensis Berry, 1918, 27, pl. 13, f. 2; Culebra: Gaillard Cut; Gatun: Canal Zone; Caimito: Canal Zone.

Guettarda cookei Berry, 1921a, 125, pl. 21, f. 5, 6; Santo Domingo.—1922, 9; Haiti.—1923b, 26; north of Palomares, Oaxaca, Mexico.

Guettarda intercalaris Hollick, 1928, 225, pl. 81, f. 5b; Collazo: Porto Rico.

Gymnocladus casei Berry. □ Chaney & Elias, 1936b, 42, pl. 6, f. 7; Ogallala: Beaver Co., Okla.

Rhamnus lesquereuxii Berry. □

Rhamnus notatus?, Lesquereux not Saporta, 1883, 189, pl. 38, f. 15; Florissant: Florissant, Colo.

Gymnogramma haydenii Lesquereux (part) = *Asplenium eolignitica* Berry.

Gymnogramma wadii Berry, 1923b, 4, pl. 1, f. 1; near Palomares, Oaxaca; near San José del Carmen, Vera Cruz, Mexico.

Gymnogramma woodringi Berry, 1923b, 4, pl. 1, f. 1-4; Haiti.

Gyrogonites glyptus Peck, 1934, 52, pl. 4, f. 7-9; Chugwater: near Lander, Wyo. HAKEA Schrader.

Hakea alaskana Hollick, 1936, 111, pl. 116, f. 8; Eska Creek, Matanuska Coal Field, Alaska.

Halymenites major Lesquereux. □ Berry, 1925, 90; Ripley: McNairy Co., Tenn.;
Entaw: Hardin Co., Tenn.

HAMAMELIS Gronovius.

Hamamelis clarus Hollick, 1936, 122, pl. 115, f. 4; Seventy-Mile Creek below
Mogul Creek, upper Yukon region, Alaska.

Hamamelites quadrangularis (Lesquereux) Lesquereux. □

Populites quadrangularis Lesquereux. □ Lesquereux, 1871, 379; Dakota: Decatur
Co., Kans.

HAMPEA Schlechtendal.

Hampea condionalis Hollick, 1936, 150, pl. 118, f. 1; Yakutat Bay; 7 mi. above
mouth of Kings River, east bank, Matanuska Coal Field, Alaska.

HANCORNIA Gomes.

Hancornia minor Hollick, 1924, 316, pl. 11, f. 6; Collazo River, Porto Rico.—
1928, 224; Collazo: Porto Rico.

Hancornia pseudopubescentis Hollick, 1924, 316, pl. 11, f. 7; Collazo River, Porto
Rico.—1928, 224; Callazo: Porto Rico.

HARTZIA Harris, 1935, 42. Genotype: *H. tenuis* (Harris) Harris.

Hartzia tenuis (Harris) Harris, 1935, 42, text-f. 20; Lepidopteris Zone:
Scoresby Sound, east Greenland.

Phoenicopsis tenuis Harris, 1926, 106, pl. 3, f. 6, 7; pl. 4, f. 5, 6; pl. 10, f. 5;
text-f. 26a-c; Rhaetic: Scoresby Sound, east Greenland.

Hausmannia kohlmanni Richter, 1906, Beiträge zur Flora der unteren Kreide
Quedlinburgs.—?Seward & Conway, 1935a, 6, pl. 1, f. 1-3, 7; Atanekerdluk:
west Greenland.

Hausmannia cf. kohlmanni Richter. Seward, 1925, 234, pl. A, f. 3, 3A.
Dic'yophyllum dicksoni Heer, 1874a, 55, pl. 3, f. 9.—Seward, 1926, 82; Nugsuak,
west Greenland.

Hausmannia cf. kohlmanni Richter=*Hausmannia kohlmanni* Richter.

Hausmannia sp. A, Harris=*Thaumatopteris brauniana* Popp.

Hausmannia sp. B, Harris, 1926, 66, text-f. 7d-f; Rhaetic: Scoresby Sound, east
Greenland.—1931b, 97, pl. 15, f. 2, 4; text-f. 37; Thaumatopteris Zone: Scoresby
Sound, east Greenland. Note: Referred to as sp. A in Harris 1931b.

Hausmannia sp. Knowlton, 1932, 43; Slates Hot Springs, Monterey Co., Calif.

Hausmannia sp. Seward, 1925, 235.

Protorhipis cordata Heer, 1882, 10, pl. 3, f. 11.—Seward, 1926, 82; Nugsuak,
West Greenland.

Hedera auriculata Heer. □ Hollick, 1936, 157; Port Graham, Kenai Peninsula,
Alaska.

Hedera curva Hollick, 1930, 112, pl. 29, f. 3a, 4a; pl. 82, f. 4; Chignik: Alaska
Peninsula.

Hedera macclurii Heer. □ Hollick, 1930, 110, pl. 30, f. 2b; Chignik: Alaska Penin-
sula.—1926, 156, pl. 98, f. 1-3; Herendeen Bay, Alaska Peninsula; Nenana coal
field, Alaska.

Hedera marginata Lesquereux=*Mahonia marginata* (Lesquereux) Arnold.

Hedera ovalis Lesquereux=*Dicotylophyllum ovale* (Lesquereux) Seward &
Conway.

Hedera platanoidea Lesquereux. □ ?Hollick, 1930, 111, pl. 27, f. 6b; Seventymile
River: Upper Yukon, Alaska.

Hedera primordialis Saporta. □ White, 1898, 353; Ujarartorsuak, Nugsuak Pen.,
west Greenland.—Berry, 1920e, 405; Black Creek: North Carolina.

Hedera schraderi Hollick, 1930, 111, pl. 83, f. 1; Nulato?: Koyukuk Valley,
Alaska.

Hedera vera Hollick, 1930, 111, pl. 83, f. 2; Nulato: Lower Yukon, Alaska.

Heironymia lehmanni Engelhardt, 1895, Ueber Neue Tertiärpflanzen Süd-Amerikas, Abh. Senck. Naturf. Gesell., vol. 19, 11, pl. 2, f. 1, 2; Ecuador.—Berry, 1918, 36, pl. 16, f. 3; Caimito: Canal Zone.—?1921b, 174; southeast Costa Rica.

HEISTERIA Linné.

Heisteria sapindifolia (Hollick) Berry, 1938a, 6; Holly Springs: Milan, Gibson Co., Tenn.

Apocynophyllum sapindifolium Hollick.□Berry, 1930, 129, pl. 19, f. 13, 14; pl. 44, f. 19; Wilcox: Nevada Co., Ark.; Holly Springs: near LaGrange, Fayette Co.; near Cloverport, Hardeman Co.; Taylor Farm, Chester Co., Tenn.—Ball, 1931, 108, pl. 16, f. 2; Indio: Barton's Ranch, Bastrop Co., Tex.

Calycites milanensis Berry, 1930, 142, pl. 49, f. 6-8; Holly Springs: Milan, Gibson Co., Tenn.

HELICONIA Linné.

Heliconia elegans (Engelhardt) Berry, 1921b, 56, f. 1; Costa Rica.—1925a, 80; Siparia and Forest: Trinidad, British West Indies.

Musophyllum elegans Engelhardt, 1895, Abh. Senck. Naturf. Gesell., vol. 19, 25, pl. 4, f. 1-3; pl. 5, f. 1.

Musophyllum trinitense Hollick, 1924, 228, pl. 1; Siparia: Trinidad, British West Indies.

Heliconia sp. Berry, 1921b, 170; southeastern Costa Rica.

HELICTOXYLON Felix, 1883, Fossile Hölzer Westindiens, 18.

Helictoxylon wilcoxianum Berry, 1922g, 18, pl. 17; pl. 18; Wilcox: near Nabor-ton, La.

HEMITELIA Braun.

Hemitelia brannerii Hollick & Berry, Johns Hopkins Stud. Geol., vol. 5, 46, pl. 1, f. 3-6, 1924.—Hollick, 1928, 182, pl. 51, f. 4; Collazo; Porto Rico.

HEMIZONIA DeCandolle.

Hemizonia virgata Gray. Potbury, 1932, 40, pl. 4, f. 9; San Bruno: San Mateo Co., Calif.

HEPATICITES Walton, 1925, Ann. Bot., Vol. 39, No. 155, 565.

Hepaticites globosus Harris, 1931b, 4 pl. 1, f. 3, 4, 6-11; Thaumattopteris Zone: Scoresby Sound, East Greenland.

Hepaticites laevis Harris, 1931b, 5, pl. 6, f. 7-10; pl. 7, f. 1, 2; text-f. 1; Thaumattopteris Zone: Scoresby Sound, East Greenland.

Heterocalyx saportana Berry.□Berry, 1930, 96, pl. 14, f. 15-16; Holly Springs: Mill Creek, Hardeman Co., Tenn.

HETEROMELES M. Roemer=PHOTINIA Lindley.

Heteromeles sp. Dorf, 1930, 99, pl. 12, f. 2; Petrified Forest near Calistoga, Calif.

HIBISCUS Linné.

Hibiscus? occidentalis Berry=Mentzelia occidentalis (Berry) R. W. Brown.

Hibiscus roanensis R. W. Brown, 1934, 63, pl. 13, f. 1; Green River: Roan Creek, northwest of De Beque, Colo.

HICORIA Rafinesque=CARYA Nuttall.□Ball, 1931, 151; discussion.

Hicoria alba (Linné) Britton.□

Carya alba Nuttall. Penhallow, 1899, 527; Taylor's Brickyard and Gaol Hill, Don Valley, Toronto, Ontario.

Hicoria antiquorum (Newberry) Knowlton.□Knowlton, 1930, 48; Denver: Golden, Colo.—Ball, 1931, 44, pl. 1, f. 2, 3; Indio: Bastrop Co., Tex.—?Berry, 1935, 25; Whitemud: Loc. P. 5-30; Middle Ravenscrag: Loc. 34, P. 4-30, southern Saskatchewan.—Hollick, 1936, 83, pl. 37, f. 1; Anchorage Bay, Chignik Bay, Alaska Peninsula.

Carya antiquorum Newberry.□Lesquereux, 1888, 56; Denver: Golden, Colo.—Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia; Red Deer River Valley, Blind Man River, Northwest Territories.

Hicoria aquatica (Michaux fils) Britton. □ Berry, 1926b, 106, pl. 46, f. 5; Chowan: Neuse River, Wayne Co., N. C.

Hicoria sp., cf. *H. microcarpa* (Nuttall) Britton. □

Hicoria bartoni Ball, 1931, 44, pl. 1, f. 1; Indio: Bartons Ranch, Bastrop Co., Tex.

Hicoria crescentia Knowlton. □ Berry, 1930, 59, pl. 34, f. 1-5; Grenada: Fayette Co., Tenn.—Ball, 1931, 45, pl. 9, f. 1; Indio: Bartons Ranch, Bastrop Co., Tex.

Hicoria dawsoni Berry, 1926d, 101, pl. 16, f. 3; Joseph Creek, British Columbia.

Hicoria dentata Chaney, 1920a, 163, pl. 8, f. 1; Eagle Creek: Multnomah Co., Oreg.

Hicoria duriuscula Hollick, 1930, 68, pl. 34, f. 1; Chignik: Alaska Peninsula.

Hicoria glabra (Miller) Britton. □ Berry, 1926b, 106, pl. 46, f. 1-4; Chowan: Neuse River, Wayne Co., N. C.

Hicoria pseudoglabra Hollick. □

Hicoria jacksoniana Berry, 1924, 55, 155, pl. 45, f. 6, 7; pl. 50, f. 1-3; Yegua: Rock Creek, Brazos Co., Tex.: La Grange: Columbus, Hickman Co., Ky.; Fulton Co., Ky.—Ball, 1931, 150, pl. 26, f. 2, 3; Jackson?: Rock Creek, Brazos Co., Tex.

Carya olivaeformis, Lesquereux not Nuttall, 1859, 365.

Hicoria pecan Berry not Marshall 1915b, 297.

Hicoria juglandiformis (Sternberg) Knowlton = *Juglans juglandiformis* (Sternberg) Giebel.

Hicoria juxtaporipites Wodehouse, 1933a, 504, f. 30; Green River: Parachute Creek, Garfield Co., Colo.

Hicoria magnifica Knowlton. □ Hollick, 1936, 83, pl. 35, f. 1, 2; pl. 36, f. 1, 2; pl. 38, f. 6; Drew's Mine, north bank Yukon River, central Yukon region; opposite mouth of Hess Creek, Yukon River, central Yukon region, Alaska.

Hicoria cf. *minima* (Marsh) Britton. Berry, 1922b, 11; Pleistocene: Chilton Co., Alabama.

Hicoria orientalis Chaney, 1920a, 163, pl. 8, f. 2; Eagle Creek: Multnomah Co., Oreg.

Hicoria ovata (Miller) Britton. □ Berry, 1926b, 106, pl. 46, f. 6, 7; Chowan: Neuse River, Wayne Co., N. C.—1927, 22; Pleistocene: Washington, D. C.

Carya ovata Miller. Meehan, 1899, 279, f. 8; Pleistocene: Port Kennedy, Pa.

Hicoria pecan, Berry not Marshall = *Hicoria jacksoniana* Berry.

Hicoria pecanoides Chaney, 1920a, 164, pl. 8, f. 3; Eagle Creek: Multnomah Co., Oreg.—LaMotte, 1935b, 53; Sooke; Muir Creek, Vancouver Island, British Columbia.

Hicoria pseudo-glabra Hollick = *Hicoria glabra* (Miller) Britton.

Hicoria pseudovata Hollick = *Carya egregia* (Lesquereux) LaMotte.

Hicoria rostrataformis Berry, 1924, 155, pl. 50, f. 6-9; Lagrange: Hickman, Fulton Co., Ky.; near Union City, Obion Co., Tenn.

Hicoria stanleyanum (Dawson) Berry, 1926c, 101; Joseph Creek, British Columbia.

Dryophyllum stanleyanum Dawson. □ Hollick, 1936, 103, pl. 56, f. 3-5; Hamilton Bay, Kupreanof Island, southeastern Alaska; Yakutat-Copper River region; above Rampart, south bank Yukon River, central Yukon region, Alaska.

Hicoria viridi-fluminipites Wodehouse, 1933a, 503, f. 29; Green River: Parachute Creek, Garfield Co., Colo.

Hicoria washingtoniana Berry, 1931a, 35, pl. 11, f. 4; Latah: Grand Coulee, Wash.

Hicoria williamsi Chaney, 1920a, 164, pl. 8, f. 4; Eagle Creek: Multnomah Co., Oreg.

Hicoria sp. Berry, cf. *H. microcarpa* (Nuttall) Britton=*Hicoria aquatica* (Michaux fils) Britton.

Hiraea oligocaenica Berry, 1918, 35, pl. 17, f. 1; Caimito: Canal Zone.

Hiraea wilcoxiana Berry. ☐ Berry, 1930, 95, pl. 27, f. 6; Holly Springs: Bolivar, Hardeman Co., Tenn.

HUFELANDIA Nees.

Hufelandia portoricensis (Hollick) Hollick, 1928, 198, pl. 67, f. 1-3, 5, 6; Collazo: Porto Rico.

Aniba portoricensis Hollick, 1924, 300, pl. 92, f. 4, 5; Collazo: Porto Rico.

Hydrangea alaskana Hollick, 1925, 21-22, pl. 2, f. 1, 2; Jaw Mt., Alaska Peninsula.—1936, 122, pl. 63, f. 4, 5; Jaw Mountain, Alaska Peninsula.

Hydrangea bendirei (Ward) Knowlton. ☐ Knowlton, 1926, 42, pl. 24, f. 6; Latah: Spokane, Wash.—Berry, 1929f, 251 (not pl. 52, f. 7); Latah: Spokane, Wash.—MacGinitie, 1933, 59; Trout Creek: Trout Creek, Harney Co., Oreg.—Arnold, 1937, 87, pl. 2, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.—Brown, R. W., 1937, 176, pl. 53, f. 1, 2; Latah: Spokane, Wash.

Euonymus knowltoni Berry, 1929f, 255, pl. 56, f. 9; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 117; Latah: White Bird, Idaho.

Hydrangea bendirei, Berry not Ward=*Porana speirii* Lesquereux.

Hydrangea florissantia Cockerell=*Hydrangea fraxinifolia* (Lesquereux) R. W. Brown.

Hydrangea fraxinifolia (Lesquereux) R. W. Brown, 1937, 176, pl. 53, f. 5, 6; Florissant: Florissant, Colo.

Fraxinus praedicta, Lesquereux not Heer, 1878, 229, pl. 40, f. 3; Florissant; Florissant, Colo.

Celastrus fraxinifolius Lesquereux. ☐

Juglans affinis Kirchner. ☐

Hydrangea florissantia Cockerell. ☐

Rhus rotundifolia Kirchner. ☐

Fraxinus heerii Lesquereux. ☐

Hydrangea reticulata MacGinitie, 1937, 139, pl. 5, f. 4; pl. 7, f. 2; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Hydrangea russelli Chaney & Sanborn, 1933, 76, pl. 21, f. 1-3; Fisher: Goshen, Oreg.

HYDROPTERIDANGIUM Halle, 1910, K. Svenska Vet. Akad. Handl., vol. 45, no. 7, 11. Genotype: *H. marsilioides* Halle.

Hydropteridangium marsilioides Halle. Harris, 1932a, 122, pl. 9; pl. 10, f. 3-8; pl. 11, f. 1, 2, 15; text-f. 52; Lepidopteris Zone: Scoresby Sound, East Greenland.

Hymenaea dakotana Lesquereux. ☐ Newberry, 1895, 90, pl. 41, f. 14; no locality given.—Gress, 1922, 312; Dakota: Ellsworth Co., Kansas.

Hymenaea eocenica Berry, 1930, 82, pl. 13, f. 1; Holly Springs: Mill Creek, Hardeman Co., Tenn.

Hymenaea wilcoxiana Berry, 1930, 84, pl. 41, f. 5; Holly Springs: Hardeman Co., Tenn.

Hymenophyllum confusum Lesquereux. ☐ Knowlton, 1930, 17, pl. 1, f. 4; Denver: Golden, Colo.

Hymenophyllites confusus Lesquereux, 1888, 43; Denver: Golden, Colo.

Hymenophyllites confusus Lesquereux=*Hymenophyllum confusum* Lesquereux. *Hymenopteris psilotoides* Stokes & Webb=*Sphenopteris* (*Onychiopsis*?) *psilotoides* (Stokes & Webb) Halle.

HYPERBAENA Miers.

Hyperbaena diforma Potbury, 1935, 65, pl. 4, f. 1-4; La Porte, Plumas Co., Calif.

Hypnum commutatum Hedwig. □ Penhallow, 1900, 335; Scarborough Heights, Ont.
Hypnum recurvans Schwegler. □ Penhallow, 1900, 335; Moose and Missinaid Rivers, Canada.

Hypnum sp. Penhallow, 1899, 528; Gaol Hill, Don Valley, Toronto, Ont.

Icacorea prepaniculata Berry. □ Ball, 1931, 106; Wilcox: Tyler, Smith Co., Tex.

Icacorea prisca Hollick, 1924, 312, pl. 11, f. 5; Collazo River, Porto Rico.—1928, 219; Collazo: Porto Rico.

Icacorea? sp. Hollick, 1928, 219, pl. 87, f. 5; Collazo: Porto Rico.

IDESIA Maximowicz.

Idesia cordata MacGinitie, 1937, 148, pl. 14, f. 1, 4; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Ilex? affinis Lesquereux = *Quercus castaneopsis* Lesquereux.

Ilex barillensis Berry, 1919g, 8, pl. 3, f. 4b; Basal Tuffs: Barilla Mts., Tex.

Ilex coloradensis R. W. Brown, 1934, 63, pl. 10, f. 5, 6; Green River: between Carr and Brush Creeks, northwest of De Beque, Colo.

Ilex fulva MacGinitie, 1937, 145, pl. 10, f. 1, 2; pl. 12, f. 1; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Ilex furcinervis Jennings, 1920, 421, pl. 24, f. 5; pl. 32, f. 2, 2a, 2b; Missoula, Mont.

Ilex insignis Heer. □ Hollick, 1936, 131, pl. 73, pl. 74, f. 1; Kukak Bay west of Cape Nukshak, Alaska Peninsula; Nenana Coal Field; Port Graham, Kenai Peninsula, Alaska.

Ilex latahensis Ashlee = *Mahonia simplex* (Newberry) Arnold.

Ilex longifolium Heer = *Dicotylophyllum longifolium* (Heer) Seward & Conway.

Ilex maculata Lesquereux = *Quercus castaneopsis* Lesquereux.

Ilex masoni Lesquereux. □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen; near Cottondale, Ala.

Ilex opaca Aiton. □ Berry, 1924a, 21, pl. 2, f. 4, 5; Pleistocene: Washington, D. C.—1926b, 115, pl. 56, f. 11, 12; Chowan: Neuse River, Wayne Co., N. C.

Ilex oregona Chaney & Sanborn, 1933, 80, pl. 22, f. 2, 5, 6; Fisher: Goshen, Oreg.—Potbury, 1935, 74, pl. 8, f. 2; La Porte, Plumas Co., Calif.

Ilex? ovata Knowlton, 1930, 102, pl. 46, f. 4; Denver: Golden, Colo.

Ilex pseudocassine Hollick, 1924, 306, pl. 14, f. 6, 7; Matanzas, Cuba.

Ilex pseudomyrtifolia Hollick, 1924, 306, pl. 14, f. 8; Matanzas, Cuba.

Ilex? reticulata Heer, 1868, 124, pl. 48, f. 7.—Hollick, 1956, 132, pl. 103, f. 3b; Matanuska River below Moose Creek, Alaska.

Ilex sonomensis Dorf, 1930, 101, pl. 12, f. 6, 7; pl. 13, f. 1, 2; Petrified Forest, near Calistoga; Santa Rosa, Calif.

Ilex sphenophylla Unger, 1847, Chlor. Protog., 149, pl. 50, f. 9.—Lesquereux, 1888, 54; Denver: Golden, Colo.

Ilex sp. Ashlee, 1932, 81, pl. 2, f. 15; Latah: Juliaetta, Idaho.

Inga arkansensis Berry, 1924, 62, pl. 10, f. 13; Yegua: Cherry Valley, Cross Co., Ark.; Nevils Prairie, Houston Co., Tex.—Ball, 1931, 122, Yegua: Nevils Prairie, Houston Co., Tex.

?*Inga cottai* Ettingshausen = *Sapindopsis angusta* (Heer) Seward & Conway.

Inga cretacea Lesquereux. □ Bartsch, 1896, 181; Dakota: Holman Cut, Woodbury Co., Iowa.—Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.—1923c, 434, text-f. 2; Tuscaloosa: Ft. Decatur, Ga.

Inga culebrana Berry, 1920f, 101; Culebra: Canal Zone.

Inga oligocaenica, Berry not Engelhardt, 1918, 32, pl. 16, f. 2; Culebra: Canal Zone. (Homonym, Engelhardt 1898.)

Inga curta Hollick, 1928, 200, pl. 69, f. 1; Collazo: Porto Rico.

- Inga jacksoniana* Berry, 1924, 167, pl. 42, f. 5, 6; Fayette: Alum Creek, Brazos Co.; Miraflores, Webb Co., Tex.—Ball, 1931, 154, pl. 34, f. 8, 10; Fayette: Miraflores, Webb Co.; Alum Creek, Brazos Co.; Jackson?: Rock Creek, Brazos Co., Tex.
- Inga kügleri* Berry, 1925a, 91, pl. 9, f. 5; Upper Forest: Trinidad, British West Indies.
- Inga lancifolia* MacGinitie, 1937, 142, pl. 8, f. 1, 2; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.
- Inga laurinafolia* Berry. □ Berry, 1930, 76, pl. 22, f. 1-4; Granada: near Moses Hall, Fayette Co., Tenn.; Holly Springs: Grove Pit, Henry Co. Tenn.; Wilcox: Mansfield and Coughatta, La.; near Scottsville, Harrison Co., Tex.—Ball, 1931, 78, pl. 3, f. 3; Indio: Bartons Ranch, Bastrop Co., Tex.
- Inga miocenica* Berry, 1923b, 11, pl. 5, f. 3; west of San José del Carmen, Vera Cruz, Mexico.
- Inga oligocaenica*, Berry not Engelhardt=*Inga culebrana* Berry.
- Inga oregona* Chaney & Sanborn, 1933, 78, pl. 22, f. 1, 4; Fisher: Goshen, Oreg.
- Inga pseudinsignis* Hollick, 1928, 201, pl. 79, f. 1b, 2b; Collazo: Porto Rico.
- Inga pseudonobilis* Hollick, 1924, 301, pl. 5, f. 6; pl. 10, f. 7; Moruga: Trinidad, British West Indies; Collazo River, Porto Rico.—1928, 201, pl. 70, f. 6a; pl. 76, f. 1a; Collazo: Porto Rico.
- Inga pseudospuria* Hollick, 1928, 202, pl. 69, f. 3; Collazo: Porto Rico.
- Inga sanchezensis* Berry, 1921a, 120, pl. 21, f. 11; Samaná Dist., Santo Domingo.
- Inga sheroliensis* Berry, 1921a, pl. 25, f. 2; southeast of Costa Rica.
- Inga wickliffensis* Berry. □ Ball, 1931, 79; Carrizo?: Cincillas Creek, Webb Co., Tex.
- Inga?* sp., Hollick, 1924, 301, pl. 12, f. 5; Collazo River, P. R.
- ?*Inolepis affinis* Heer=*Pagiophyllum ambiguum* (Heer) Seward.
- Inolepis imbricata* Heer. White, 1898, 349; Pagtorfik, Nugsuak Pen., west Greenland.
- Interseminale scale A, Harris=*Vardekleoftia sulcata* Harbis.
- IRIARTITES Berry, 1919, U. S. Nat. Mus. Proc., vol. 55, 285. Genotype: *I. tumbezensis* Berry.—Noé, 1936a, 444.
- Iriartites vauhani* Berry, 1921, 21, text-f. 1-3; Gatun: near Gatun, Canal Zone.
- Iris?* sp., (Lesquereux) Newberry=*Monocotyledonous leaf*, Berry.
- Isoetes ?incerta* Hollick, 1928, 183, pl. 52, f. 1, 2; Collazo: Porto Rico.
- IXOSTROBUS Raciborski, 1892, Nakladem Akad. Umiej. Krakowie, vol. 22, 12. Genotype: *I. siemiradzskii* Raciborski.—Harris, 1935, 146; discussion.
- Ixostrobus groenlandicus* Harris, 1935, 147, pl. 27, f. 12, 13; pl. 28, f. 1-4, 7-10, 12; text-f. 50g; Thaumatopteris Zone; Scoresby Sound, east Greenland.
- Jeanpaulia lepida* Heer (part)=*Sphenopteris (Onychiopsis?) johnstrupi* (Heer) Seward.
- Jeanpaulia radiata* Newberry, 1876, 148, pl. 8, f. 6; Triassic?: Los Pronces, Sonora, Mexico.
- Juglans acuminata* Al. Braun. □ Hollick, 1912a, 51; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.—Wilson, 1914, 409; Kenai: Sourdough Mine, Coal Creek, Yukon Terr.—1916, 206; Sheep Creek, Yukon Terr.—Ball, 1931, 40, pl. 3, f. 1; Indio: near Utley, Bastrop Co., Tex.—Hollick, 1936, 77, pl. 117, f. 10; Nenana Coal Field, Alaska.
- Juglans acuminata?*, Lesquereux not Al. Braun=*Juglans rugosa* Lesquereux.
- Juglans acuminata latifolia* (Al. Braun) Heer, 1859, Fl. Tert. Helv., vol. 3, 88, pl. 129, f. 2-8.—Hollick, 1936, 78, pl. 41, f. 3; Drew's mine, north bank Yukon River, central Yukon region, Alaska.
- Juglans latifolia* Al. Braun, 1845. Neues Jahrb., 17.

Juglans affinis Kirchner=*Hydrangea fraxinifolia* (Lesquereux) R. W. Brown.
Juglans alkalina Lesquereux.□ Knowlton, 1923, 160; Green River: Alkali Station 30 mi. north of Green River, Wyo.—Berry, 1930d, 68, pl. 10, f. 1, 2; so-called Bridger: Lenore and Tipperary, Wind River Basin, Wyo.—1932e, 10; Lysite: Wind River Basin, Wyo.—Brown, R. W., 1934, 54, Green River: as cited by authors.

Ficus alkalina Lesquereux.□

Juglans winchesteri Knowlton, 1923, 160, pl. 38, f. 5; Green River: 20 mi. west of Rio Blanco, Rio Blanco Co., Colo.

Juglans appressa Lesquereux.□ Lesquereux, 1871, 382; Wilcox: Miss.

Juglans archaeoantillana Hollick, 1926, 244, f. 1a, 1a'; near Isabella, northern Porto Rico.

Juglans arctica Heer.□? Newberry, 1895, 62, pl. 20, f. 2; Raritan: Woodbridge, N. J.—White, 1898, 360; Atane, Nugsuak Pen., west Greenland.—Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottondale, Ala.—Gress, 1922, 289; Dakota: Ellsworth Co., Kans.—Hollick, 1930, 67, pl. 35, f. 5, 6; Kaltag: Lower Yukon, Alaska.

Juglans basilica Unger=*Sapindus basilicus* (Unger) Unger.

Juglans bastropensis Ball, 1931, 41, pl. 1, f. 4, 5; Indio: Bartons Ranch, Bastrop Co., Tex.

Juglans beaumontii Axelrod, 1937, 171, pl. 4, f. 11, 12; Mt. Eden: near Beaumont, Calif.

Juglans berryi Knowlton.□ Knowlton, 1924, 80, pl. 6, f. 5, 6; Animas: Ignacio and Pagosa Quads., Colo.

Juglans bilinica Unger=*Juglans juglandiformis* (Sternberg) Giebel.

Juglans calvertiana Berry, 1934d, 228, text-f. 1, 2; Calvert: south of Plum Point, Calvert Co., Md.

Juglans crassipes Heer=*Phyllites crassipes* (Heer) Berry.

Juglans crossii Knowlton.□ Knowlton, 1923, 160; Green River: Green River, Wyo.—Hollick, 1936, 80, pl. 40, f. 1-4; pl. 44, f. 3, 4; pl. 103, f. 3a; Matanuska River below Moose Creek, Alaska.

Juglans denticulata Heer.□ Cross, 1895, 211; Middle Park; Middle Park, Colo.—Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Juglans cryptata Knowlton=*Carya egregia* (Lesquereux) LaMotte.

Juglans denticulata Heer=*Juglans crossii* Knowlton.

Juglans denveriana Knowlton, 1930, 44, pl. 12, f. 1, 2; pl. 13, f. 2-4; Denver: Golden, Colo.

Juglans egregia Lesquereux=*Carya egregia* (Lesquereux) LaMotte.

Juglans heerii Etttingshausen. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Juglans hesperia Knowlton=*Salix inquirenda* Knowlton.

Juglans indioensis Ball, 1931, 41, pl. 40, f. 6; Indio: Little Sandy Creek, Bastrop Co., Tex.

Juglans? *innominata* Knowlton, 1924, 80, pl. 7, f. 2; Animas: Ignacio Quad., Colo.

Juglans juglandiformis (Sternberg) Giebel, 1852, Deutschlands Petrefacten, 149, Leipzig.—Hollick, 1936, 80, pl. 39, f. 1-4, 5-7 (?); pl. 43, f. 3-5; Matanuska River below Moose Creek, Alaska.

Phyllites juglandiformis Sternberg.□

Juglans bilinica Unger.□ Hollick, 1912a, 50; Chickaloon; Matanuska River below Moose Creek, Alaska.

Carya bilinica (Unger) Etttingshausen.□

Hicoria juglandiformis (Sternberg) Knowlton.□ Berry, 1929f, 241.—Brown, R. W., 1929, 283, pl. 71, f. 4, 5; Florissant: Florissant, Colo.; Latah: Spokane, Wash.; Green River: Green River, Wyo.

Juglans latifolia Al. Braun=*Juglans acuminata latifolia* (Al. Braun) Heer.

Juglans leconteana Lesquereux. □ Lesquereux, 1871, 382; Raton?: Raton Pass; Marshall, Colo.

Juglans longiapiculata Hollick, 1936, 79, pl. 10, f. 1b, 2c; pl. 41, f. 1, 2; Hamilton Bay, Kupreanof Island, southeastern Alaska.

Juglans nevadensis Berry, 1928b, 158-160, 1 text-f.; exact locality in doubt; probably Truckee: 50 mi. east of Reno, Nevada, on Old Emigrant Trail.

Juglans nigella Heer. □ Hollick, 1912a, 51; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.—Berry, 1930, 19; Ravenscrag: Cypress Hills, Canada.—1930f, 64.—1935, 24; Middle Ravenscrag: Loc. P 3-30; Upper Ravenscrag: Loc. 33, southern Saskatchewan.—Hollick, 1936, 81, pl. 38, f. 1-5; Hamilton Bay, Kupreanof Island, southeast Alaska; Kootznahoo Inlet, Admiralty Island, southeast Alaska; Eska Creek, Matanuska Coal Field, Alaska.

Juglans nigelloides Berry, 1926d, 102, pl. 11, f. 5, 6; Burrard Inlet, British Columbia.

Juglans nigripites Wodehouse, 1933a, 504, f. 31; Green River: Parachute Creek, Garfield Co., Colo.

"*Juglans occidentalis*" of authors not Lesquereux, in need of systematic revision.—Penhallow, 1902a, 61; Paskapoo: Red Deer River, Alberta.—1908, 60, Oligocene: Horsefly River, British Columbia.—Berry, 1930, 58, pl. 9, f. 4; Wilcox: Coushatta and Naborton, La.; Bolivar Creek, Ark.; Grenada: Grenada, Miss.; Fayette Corners, Fayette Co., Tenn.; Holly Springs: Puryear, Henry Co.; near Bolivar, Hardeman Co., Tenn.—1930d, 68; so-called Bridger: Tipperary, Wind River Basin, Wyo.—1932e, 9; Lysite: Wind River Basin, Wyo.

Juglans occidentalis Newberry=*Juglans schimperi* Lesquereux.

Juglans oregoniana Lesquereux=*Carya egregia* (Lesquereux) LaMotte.

Juglans oregoniana, Oliver not Lesquereux=*Pterocarya mixta* (Knowlton) R. W. Brown.

Juglans orientalis MacGinitie, 1937, 135, pl. 3, f. 6; pl. 4; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Juglans ovooides Chaney, 1920a, 164, pl. 9, f. 1, 2; Eagle Creek: Multnomah Co., Oreg.

Juglans pentagona Jennings, 1920, 410, pl. 29, f. 1, 1a, 2, 2a; Missoula, Mont.

Juglans picroides Heer. □ Hollick, 1936, 82, pl. 37, f. 2; pl. 43, f. 7; Anchorage Bay, Chignik Bay, Alaska Peninsula; Nenana Coal Field, Tenana region, Alaska.

Juglans? pseudopunctata Hollick, 1936, 82, pl. 104, f. 2-5; Kachemak Bay, Matanuska-Cook Inlet region; Eska Creek, Matanuska Coal Field; Hamilton Bay, Kupreanof Island, southeastern Alaska.

Juglans rhamnoides (Rossmmaessler) Lesquereux. □ Lesquereux, 1888, 56; Denver: Golden, Colo.—Knowlton, 1930, 46; Denver: Golden, Colo.—Ball, 1931, 42, pl. 40, f. 4; Indio: Bastrop Co., Tex.

Phyllites rhamnoides Rossmmaessler, 1840, Beiträge zur Versteinerungskunde, no. 1, 35, pl. 8, f. 37, 38 (30, 31).

Rhamnus rosmaessleri Unger. □ Unger, 1850, Gen. et sp. plant. foss., 464.—Hollick, 1936, 138, pl. 78, f. 6a; Hamilton Bay, Kupreanof Isl., southeastern Alaska.

Juglans rugosa Lesquereux. □ Cross, 1895, 211; Middle Park: Middle Park, Colo.—Berry, 1919g, 7; Basal Tuffs: Barilla Mts., Tex.—Knowlton, 1930, 46, pl. 14, f. 1; Denver: northeast of Denver, Colo.—Ball, 1931, 42; Barilla Mts., Tex.—Berry, 1935, 25; Lower Ravenscrag: Loc. 3; Middle Ravenscrag: Loc. 13, 24; Upper Ravenscrag: Loc. 32, 33, southern Saskatchewan.

Juglans acuminata? Lesquereux not Al. Braun, 1872a, suppl. pl. 8; Florissant: Florissant, Colo.

Juglans? sepultis Cockerell (part), 1908b, 80; only that portion referring to *Juglans acuminata?* Lesquereux.

Juglans, cf. *rugosa* Lesquereux. Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.

Juglans rupestris pleistocenica Berry, 1921c, 84-86, text-f. 1; Pleistocene: Tilman Co., Okla.

Juglans saffordiana Lesquereux. □ Lesquereux, 1871, 382; Wilcox: Mississippi.

Juglans salicifolia Goeppert, 1852, Deutsche geol. Gesell. Zeitschr., vol. 4, 495.—1855, Die tertiäre Flora von Schosnütz, 36, pl. 25, f. 4, 5, Görlitz.—Hollick, 1936, 79, pl. 28, f. 3; Kachemak Bay, Kenai Peninsula, Alaska.

Juglans schimperi Lesquereux, emend. R. W. Brown. Lesquereux, 1872a, 8; Green River: Green River, Wyo.—1878, 287, pl. 56, f. 5-10; Green River: Green River, Wyo.—Knowlton, 1923, 159; Green River: Alkali Station and Green River, Wyo.—Brown, R. W., 1934, 54; Green River: localities of authors.

NOTE.—The following synonyms are made and it is emphasized that occurrences outside of the Green River basin are not included.

Juglans occidentalis Newberry, 1883, 507; Green River: Green River, Wyo.—1898, 34, pl. 65, f. 1; pl. 66, f. 1-4; Green River: Green River, Wyo.—Knowlton, 1923, 158; Green River: Green River, Wyo.

Ficus ungeri Lesquereux, 1872, 7; Green River: Green River, Wyo.—1878, 195, pl. 30, f. 3; Green River: Green River, Wyo.—1883, 163, pl. 44, f. 1-4; Green River: Green River, Wyo.—Knowlton, 1923, 162; Green River: Green River and Alkali Station, Wyo.

"*Juglans schimperi*" of authors not Lesquereux, in need of critical revision.—Knowlton, 1899, 688; Miocene: Yellowstone National Park.—Hollick, 1899, pl. 33, f. 1, 2; pl. 35, f. 3; Wilcox: Coshatta, La.—Knowlton, 1902, 34; Bridge Creek: Bridge Creek, Grant Co., Oreg.—Penhallow, 1908, 60; Eocene: Porcupine Creek, British Columbia.—Berry, 1916a, 182, pl. 18, f. 3-5; pl. 19, f. 4; Lagrange: Kentucky; Wilcox: many localities in Arkansas, Louisiana, Texas, and Mississippi.—Knowlton, 1917, 296, pl. 64, f. 1; Denver: Golden, Colo.; Raton: Dillon Canyon near Blossburg, Raton Tunnel, and South Raton Canyon, N. Mex.; Aguilar and Wootton, Colo.—1924, 80, pl. 7, f. 1; Animas: Pagosa Quad., Colo.—1930, 45; Denver: Golden, Colo.—Berry, 1924, 54; Claiborne?: near Santo Tomas, Webb Co., Tex.—1930, 59; Wilcox: many localities in Louisiana, Tennessee and Kentucky.—Ball, 1931, 43, 119, pl. 5, f. 3; Indio: Bastrop Co., Tex.; Claiborne: Rio Grande, Webb Co., Tex.

Juglans rugosa Lesquereux (part), 1888a, 11.

NOTE.—The above list of papers are left in systematic doubt by R. W. Brown, 1934, 54, q. v.

Juglans? sepultis Cockerell (part) = *Juglans rugosa* Lesquereux.

Juglans similis Knowlton. □ Berry, 1925, 39; Ripley: Henry Co., Tenn.

Juglans siouxensis (Barbour) Berry, 1926e, 3, text-f. 1-6.

Archicoria siouxensis Barbour, 1898, 272-274, text-f. 3; pl. 5; Titanotherium Beds: Nebraska.

Juglans strozziana Gaudin, 1857, Allg. schweiz. Gesell. gesamt. Naturwiss. Verh. (Versammt. 42) 60.—Gaudin & Strozzi, 1858, Soc. Helv. sci. nat. nouv. mem., vol. 16, no. 3, 39, pl. 8, f. 7a, b, 8.—?Hollick, 1936, 78, pl. 103, f. 1b; Kootznahoo Inlet, Admiralty Island, southeastern Alaska.

Juglans tennesseensis Berry, 1925, 39, pl. 3, f. 8; Ripley: Henry Co., Tenn.

Juglans thermalis Lesquereux. □ Cross, 1895, 211; Middle Park: Middle Park, Grand Co., Colo.—Knowlton, 1930, 45, pl. 13, f. 5; Middle Park: Middle Park, Colo.—Hollick, 1936, 79, pl. 60, f. 1a; near Berg Lake, Yakutat-Copper River region, Alaska.

Juglans townsendi Knowlton. □ Knowlton, 1896, 886.—Hollick, 1936, 83; Herendeen Bay, Alaska Peninsula.

- Juglans valida** Hollick, 1936, 82, pl. 104, f. 1; Hamilton Bay, Kupreanof Island, southeastern Alaska.
- Juglans wadii** Berry, 1925, 40, pl. 4, f. 1-3; Ripley: Henry Co., Tenn.
- Juglans winchesteri* Knowlton=**Juglans alkalina** Lesquereux.
- Juglans woodiana** Heer. □ Hollick, 1936, 81; Port Graham, Kenai Peninsula; Chignik Bay, Alaska Peninsula.
- Juglans** sp., Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.
- Juglans** sp., Bell, 1930, 31; Foremost: southern Alberta.
- Juglans** sp.?, Hollick, 1936, 83, pl. 42, f. 1b; Matanuska Coal Field, Alaska.
- Juglans** sp., Knowlton, 1900d, 39, pl. 1, f. 5; Comstock, Oreg.
- Juglans** sp., Knowlton, 1930, 48, pl. 14, f. 5; pl. 15, f. 1; Dawson: near Colorado Springs, Colo.
- Juglans** sp., Lesquereux, 1888, 56; Denver: Golden, Colo.
- Juglans** sp., Wilson, 1916, 207; Sheep Creek, Yukon Terr.
- Juglans** sp.?, Wilson, 1916, 207; Sheep Creek, Yukon Terr.
- Juncus?* **crassulus**, Berry not Cockerell=**Carpolithus** sp., R. W. Brown.
- Juncus** sp., Lesquereux. □ Knowlton, 1923, 155; Green River: Green River, Wyo.
- JUNGERMANNIOPSIS** Howe & Hollick, 1922a, 208. Genotype: *J. cockerellii* Howe & Hollick.
- Jungermanniopsis cockerellii** Howe & Hollick. 1922a, 208, f. 1; Florissant: Florissant, Colo.
- Jungermannites bryopteroides** Ball, 1931, 145, pl. 23, f. 2; pl. 19, f. 7; Fayette: Boggy Creek, Brazos Co., Tex.
- Juniperites gracilis** (Heer) Seward & Conway, 1935, 11, pl. 1, f. 11; Kingigtok, West Greenland.
- Juniperus californica** Carrière. □ Mason, 1927, 156; Pleistocene: Rancho La Brea, Los Angeles Co., Calif.—Chaney & Mason, 1933a, 58, pl. 6, f. 9, 10; Pleistocene: Carpinteria, Santa Barbara Co., Calif.
- Juniperus californica breaensis* Frost, 1927, 77, pl. 16, f. 1-3; pl. 19, f. 1-6; Pleistocene: Rancho La Brea, Los Angeles Co., Calif.
- Juniperus californica breaensis* Frost=**Juniperus californica** Carrière.
- Juniperus?** **haydenii** (Lesquereux) Knowlton. □
- Sequoia haydenii* (Lesquereux) Cockerell. □ Jennings, 1920, 400, pl. 23, f. 4-6; pl. 24, f. 1-3; pl. 22, f. 3-5; Missoula, Montana.
- Juniperus hypnoides* Heer (part)=**Elatocladus macilenta** (Heer) Seward.
- Juniperus hypnoides* Heer (part)=**Elatocladus subtilis** (Heer) Seward.
- Juniperus macilenta* Heer=**Elatocladus macilenta** (Heer) Seward.
- Juniperus sabinoides** Ashlee, 1932, 78, pl. 1, f. 1; Latah: White Bird, Idaho—Dorf, 1936, 109; Idaho: near Weiser, Idaho.
- Juniperus utahensis** Lemmon. Laudermilk & Munz, 1934a, 37; Pleistocene?: Gypsum Cave near Las Vegas, Nev.
- Juniperus virginiana** Linné. □ Penhallow, 1899, 526; Taylor's Brickyard and Gaol Hill, Don Valley, Toronto, Ontario.
- Juniperus** cf. **virginiana** Linné. Berry, 1927, 21; Pleistocene: Cornfield Harbor, Md.
- Juniperus** sp. Berry, 1934c, 237; Chapapote: near Baños de Montero, Santa Clara Province, Cuba.
- Kalmia brittoniana** Hollick. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.—1920e, 405; Black Creek: North Carolina.
- Kalmia?** **elongata** Ashlee, 1932, 82, pl. 2, f. 16; Latah: Elk River, Idaho.
- Kalmia glauca** Aitland. Berry, 1922a, 139, pl. 2, f. 7; Point Grays: Vancouver, British Columbia.

Kalmia polifolia Wang. ?Hollick, 1931, 41, pl. 6, f. 2g; pl. 7, f. 1d, e; Pleistocene: Colebrook, N. H.

KETELEERIA Carrière.

Keteleeria heterophylloides (Berry) R. W. Brown, 1935, 573, pl. 67, f. 23-25; Latah: Spokane, Wash.

Grass, leaf of, Knowlton, 1926, 29, pl. 10, f. 7; Latah: Spokane, Wash.

Potamogeton heterophylloides Berry, 1929f, 240, pl. 50, f. 1-3; Latah: Spokane, Wash.—1934, 105; Latah: Clearwater River, east of Lewiston, Idaho

Kirchnera dentata Velenovsky=**Sphenopteris dentata** (Velenovsky) Seward.

Knowltonella maxoni Berry. □ Berry, 1933b, 503-505, 1 text-f.; Black Hills; west of Aladdin, Wyo.

KOELREUTERIA Laxmann.

Koelreuteria allenii (Lesquereux) Edwards, 1927, 109-112; Florissant: Florissant, Colo.—Brown, R. W., 1934, 62; Lists synonymy under *Koelreuteria viridifluminis* and suggests but does not make identity of species.

Ophioglossum allenii Lesquereux. □

Salvinia allenii (Lesquereux) Lesquereux. □

Tmesipteris allenii (Lesquereux) Hollick. □

Carpolithes allenii (Lesquereux) Cockerell, 1913a, 498-500; Florissant: Florissant, Colo.—Hollick, 1923, 207-213, pls. 10-12; Florissant: Florissant, Colo.

Phyllites allenii (Lesquereux) Florin, 1919, 250, pl. 11.

Brachyruscus allenii (Lesquereux) Cockerell, 1922a, 213, text-f. 1; Florissant: Florissant, Colo.

Koelreuteria eakini Hollick, 1936, 137, pl. 81, f. 1; south bank Yukon River above Rampart, central Yukon region, Alaska.

Koelreuteria viridifluminis (Hollick) R. W. Brown, 1934, 62, pl. 10, f. 10; Green River: Brush Creek northwest of De Beque, Colo.

Staphylea viridifluminis Hollick, 1929, 96, pl. 2, f. 3; Green River (Bridger?): De Beque, Colo.

KRANNERA Velenovsky.

Kranneria marginata (Heer) Seward, 1926, 138, pl. 11, f. 115; Nugsuak, west Greenland.

Podozamites marginatus Heer. □ Heer, 1882, 43, pl. 16, f. 10.—?Newberry, 1895, 44, pl. 13, f. 5, 6.—Berry, 1913a, 573; Tuscaloosa: Snow Plantation, Ala.

KRYNITZKIA Fischer & Meyer.

Krynitzkia auriculata Elias, 1932, 358, pl. 30, f. 5a-d; Ogallala: Wallace Co., Kans.

Krynitzkia (Oreocarya) chaneyi Elias, 1932, 357, pl. 30, f. 4a-d; Ogallala: Wallace Co., Kans.

Krynitzkia (Cryptantha) coroniformis Elias, 1932, 356, pl. 30, f. 1a-d; Ogallala: Yuma Co., Colo.

LACCOPTERIS Presl. □ Seward, 1926, 79.—Harris, 1931b, 70. Harris states that *Laccopteris* Presl is synonymous with *Phlebopteris* Brongniart, 1828. He retains the former because "it is in general use."

Laccopteris affinis (Schenk) Seward. Harris, 1931b, 77, text-f. 27; Lepidopteris Zone: Scoresby Sound, east Greenland.

Laccopteris angustiloba (Presl) Raciborski. Harris, 1931b, 74, pl. 14, f. 6-17; text-f. 26; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Laccopteris brauni Goeppert. Harris, 1931b, 70, pl. 14, f. 1, 2; ?pl. 15, f. 7; text-f. 24, 25; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Laccopteris groenlandica Harris, 1926, 62, pl. 3, f. 5, text-f. 6A-E; Rhaetic: Scoresby Sound, east Greenland.

Laccopteris dunkeri Schenk=**Laccopteris rigida** (Heer) Seward.

Lacopteris galleyi Miner, 1935a, 288, pl. 1, f. 1-4; Dakota; near Mankata, Kans.
Lacopteris groenlandica Harris=**Lacopteris brauni** Goeppert.

Lacopteris latifolia (Nathorst) Seward & Conway, 1935a, 6, pl. 1, f. 3; Atanerkdluk: west Greenland.

Nathorstia latifolia Nathorst?

Lacopteris rigida (Heer) Seward, 1926, 80, pl. 8, f. 48-56, 58-60, 62; text-f. 8.

Gleichenia rigida Heer (part), 1868, 80, pl. 44, f. 1, 1b.—White, 1898, 347, 350, 353; Kook, Kaersuk, Ujarartorsuak, Nugsuak Pen., west Greenland.

Lacopteris dunkeri Schenk, 1871, Palaeontologia, vol. 19, 219, pl. 29, f. 3-5.

Nathorstia angustifolia Heer, 1874, 7, pl. 1-6.—1880, 7, pl. 1, f. 1-6.—White, 1898, 349, 353; Pagtorfik, Ujarartorsuak, Nugsuak Pen., west Greenland.

Cyatheat hamperi Heer (part), 1882, pl. 31, f. 1, 7.

Lacopteris? sp. Wieland, 1913, 266; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 133, pl. 44, f. 3; Liassic: Mixteca Alta, Oaxaca, Mexico.

Laguncularia claiborniana Berry, 1924, 87, pl. 22, f. 2; Gosport: Claiborne Land-ing, Monroe Co., Ala.—Ball, 1931, 166; Alum Creek, Brazos Co., Tex.

Laguncularia preracemosa Berry, 1930, 119; Holly Springs: Holly Springs, Lamar Co., Miss.; Williston, Fayette Co.; Puryear, Henry Co., Tenn.

Larix laricina (Du Roy) Koch.□

Larix americana Michaux.□Penhallow, 1899, 526; Taylor's Brickyard, Price's Brickyard, Scarborough Heights, Don Valley, Toronto, Ontario.

LARREA Cavanilles.

Larrea divaricata Cavanilles. Lauderhill & Munz, 1934a, 37, pl. 3, f. 2; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.

Lastraea? *dentata* Lesquereux, 1871, 383; Golden, Colo.

Lastrea (*Goniopteris*) *fisheri*, Lesquereux not Heer=**Goniopteris lesquereuxi** Berry.

Lastrea (*Goniopteris*) *knightiana* Newberry=**Goniopteris lesquereuxi** Berry.

Lastraea arguta Lesquereux=**Dryopteris lakesii** (Lesquereux) Knowlton.

Lauraceous fruit, Berry, 1924, 188, pl. 52, f. 3; Lagrange: near Union City, Obion Co., Tenn.

LAURINOXYLON Felix.□Berry, 1924, 83.

Laurinoxylon bakeri Berry, 1924, 83, pls. 17-20; Yegua: Houston Co., Tex.—Ball, 1931, 128; Yegua: Trinity and Houston Cos., Tex.

Laurinoxylon branneri Knowlton.□Berry, 1922g, 19; Wilcox: Shreveport, La.—1924, 84, 188, pl. 21; Yegua: Somerville, Burleson Co., Tex.; Jackson: St. Francis Co., Ark.—Ball, 1931, 128; Yegua: Somerville, Burleson Co., Tex.

Laurinoxylon lesquereuxiana Knowlton.□Berry, 1924, 85; Yegua: near Wittsburg, Cross Co., Ark.

Laurinoxylon wilcoxianum Berry, 1922g, 19, pl. 13; Wilcox: Naborton, De Soto Parish, La.; Dabney, Montgomery Co., Miss.; Piney Creek, Hardeman Co., Tenn.

Laurinoxylon? sp. Knowlton.□Berry, 1924, 188; Jackson: Jefferson Co., Ark.

Laurophyllum angustifolium Newberry.□?Berry, 1913a, 573; Tuscaloosa: Snow Plantation, Ala.

Laurophyllum dubiosum Hollick=**Misanteca dubiosa** (Hollick) Hollick.

Laurophyllum elegans Hollick=**Laurophyllum plutonium** (Heer) Seward.

Laurophyllum intermedium Potbury, 1935, 67, p. 5, f. 7; La Porte, Plumas Co., Calif.

Laurophyllum merrilli Chaney & Sanborn, 1933, 72, pl. 17, f. 1, 3; Fisher: Goshen, Oreg.—MacGinitie, 1937, 138, pl. 6, f. 5; Redding Creek: Trinity Co., Calif.

Laurophyllum minus Newberry.□Berry, 1922c, 175; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Laurophyllum nervillosum Hollick. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

Laurophyllum oregonensis Chaney, 1920a, 174, pl. 21, f. 1, 2; Eagle Creek: Multnomah Co., Oreg.

Laurophyllum plutonium (Heer) Seward, 1926, 121, text-f. 26, 27; Nugsuak, West Greenland.—Seward & Conway, 1935, 27, text-f. 10; Kingigtok and Igdloukunguak: West Greenland.

Laurus plutonia Heer. □ Hollick, 1892a, 236, pl. 6, f. 1; Magothy: Glen Cove, Long Island, N. Y.—1892, 99, pl. 3, f. 3, 4.—1893, 236, pl. 6, f. 1.—White, 1898, 360; Atane, Nugsuak Pen., west Greenland.—Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottondale, Ala.—1922c, 174, pl. 38, f. 5; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Laurus angusta Heer, 1882, 76.—White, 1898, 360; Atane, Nugsuak Pen., west Greenland.

Proteoides longus Heer. □

Proteoides vezans Heer, 1874, 111.

Myrtophyllum geinitzii Heer, 1874, 116.—Hollick, 1893, 236, pl. 6, f. 2.

Eucalyptus geinitzii Heer (part), 1882, 93, pl. 46, f. 12c.

Myrica longa (Heer) Heer. □ 1882, 65, pl. 18, f. 9b; pl. 29, f. 15-17; pl. 33, f. 10; pl. 41, f. 4d.—Bartsch, 1896, 180; Dakota: Holman Cut, Woodbury Co., Iowa.—Berry, 1922c, 161, pl. 39, f. 5; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Andromeda narbonensis, Heer not Saporta, 1874, 22.

Salix proteaefolia, Lesquereux not Forbes, 1868a, 94;—1871, 379, Dakota: Decatur, Nebr.—1874a, 60, pl. 5, f. 1-4.—1878d, 29.—1883, 42, pl. 1, f. 14-16.—1884, 12; north side Cottonwood River, Brown Co., Minn.—1892, 49.—Newberry, 1895, 66, pl. 18, f. 3, 4; Raritan: Woodbridge, N. J.

Salix cf. *proteaefolia* Lesquereux. Knowlton, 1920, 190; Morrison: Morrison, Colo.

Salix lesquereuxi Berry. □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirleys Mill; near Tuscaloosa; near Cottondale; Snow Plantation; Sanders Ferry Bluff, Ala.—1920e, 400; Black Creek: North Carolina.—1922c, 162; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Salix inaequalis Newberry.

Salix proteaefolia lanceolata, Hollick not Lesquereux, 1906, 52, pl. 8, f. 1a, 2-4.

Laurophyllum elegans Hollick. □ Berry, 1920e, 404; Black Creek: North Carolina.

Eucalyptus? *angustifolia* Newberry. □

Salix proteaefolia longifolia Lesquereux. □ Bartsch, 1896, 179; Dakota: Holman Cut, Woodbury Co., Iowa.

Proteoides daphnogenoides, Newberry not Heer, 1895, 72, pl. 32, f. 11.—Hollick, 1898, 420.

Devalquea grönlandica, Newberry (part) not Heer, 1895, 72, pl. 32, f. 11.

Laurophyllum raminervum Potbury, 1935, 67, pl. 5, f. 1, 3; La Porte, Plumas Co., Calif.

Laurophyllum ripleysensis Berry, 1925, 80, pl. 18, f. 4-8; Ripley: Henry and Carroll Cos., Tenn.—1935, 51, pl. 15, f. 1, 2; Upper Ravenscrag: Loc. 33, Southern Saskatchewan.

Laurus coloradensis Knowlton (part), 1916, pl. 88, f. 5 only; Fruitland: San Juan Co., N. Mex.

Laurophyllum n. sp. Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Laurophyllum sp. (cf. *Litsea* spp.) LaMotte, 1935b, 53; Sooke: Muir Creek, Vancouver Island, British Columbia.

Laurus angusta Heer = **Laurophyllum plutonium** (Heer) Seward.

Laurus antedecens Lesquereux. □ Berry, 1922c, 175; Woodbine: Arthurs Bluff, Lamar Co., Tex.—Hollick, 1930, 81, pl. 45, f. 3; pl. 73, f. 4c; Kaltag: Lower Yukon, Alaska.

Laurus asiminoides Berry, 1925, 79, pl. 18, f. 1, 2; Ripley: Henry Co., Tenn.

Asimina eocenica?, Knowlton not Lesquereux, 1900, 57, pl. 14, f. 3; Montana Group: Wyoming.

- Laurus aspensis** R. W. Brown, 1933, 6, pl. 2, f. 1; Aspen: southwest Wyoming.
- Laurus atanensis** Berry. □ Berry, 1925, 78; Ripley: Henry and Carroll Cos., Tenn.
- Laurus brossiana** Lesquereux = **Persea brossiana** (Lesquereux) Lesquereux.
- Laurus californica** Lesquereux. □ Knowlton, 1926, 41; Latah: Spokane, Wash.—Hollick, 1936, 119, pl. 64, f. 4a; pl. 109, f. 8b; Hamilton Bay, Kupreanof Island, southeastern Alaska.
- Laurus cinnamomiformis** Brongniart = **Cinnamomum cinamomeum** (Rossmoesler) Hollick.
- Laurus collinsi** Berry, 1930, 117, pl. 19, f. 2; pl. 49, f. 9; Holly Springs: La Grange, Fayette Co., Tenn.
- Laurus coloradensis** Knowlton (part), 1916a, 340, pl. 88, f. 4 (not f. 5); Fruitland: San Juan Co., N. Mex.—1917, 268, pl. 45, f. 3; Vermejo: Rockvale, Colo.—Berry, 1925, 80; Ripley: Henry Co., Tenn.
- Laurus coloradensis** Knowlton (part) = **Laurophyllum ripleysensis** Berry.
- Laurus fremontensis** Berry, 1930d, 74, pl. 13, f. 3; so-called Bridger: Tipperary, Wind River Basin, Wyo.
- Laurus fürstenbergii** Al. Braun. □ Hollick, 1936, 119, pl. 67, f. 9; Hamilton Bay, Kupreanof Island, southeastern Alaska.
- Laurus grandis** Lesquereux. □ Scott, 1926, 405; Tesla, Calif.—Hoffman, 1932, 737; Douglas Canyon, Wash.—Berry, 1934, 120; Latah: east of White Bird, Idaho; near St. Maries, Kootenai Co., Idaho.
- Laurus grandis**, Knowlton, 1926, not Lesquereux = **Magnolia spectabilis** Knowlton.
- Laurus hamiltonensis** Hollick, 1936, 120, pl. 64, f. 3; Hamilton Bay, Kupreanof Island, southeastern Alaska.
- Laurus hardemanensis** Berry, 1930, 117, pl. 19, f. 3; Holly Springs: Pine Top, Hardeman Co., Tenn.
- Laurus hollae** Heer, 1882, 76, pl. 30, f. 17; pl. 45, f. 3; West Greenland.—Hollick, 1892a, 34, pl. 2, f. 17; Raritan: Kreischerville, Staten Island, N. Y.—Seward, 1925, 245.
- Laurus lanceolata** Knowlton. □ Knowlton, 1930, 85, pl. 38, f. 9; Dawson: Colo.
- Laurus macrocarpa** Lesquereux. □ Lesquereux, 1871, 379; Dakota: Decatur, Nebr.
- Laurus nebrascensis** (Lesquereux) Lesquereux. □
- Persea nebrascensis* Lesquereux. □ Lesquereux, 1871, 379; Dakota: Fort Ellsworth, Kans.
- Laurus nebrascensis* (Lesquereux) Lesquereux, 1884, 11; north side Cottonwood River, Brown Co., Minn.
- Laurus ocotaefolia** Ettingshausen, 1851, K. k. geol. Reichsanstalt Abh., vol. 2, pt. 3, 17, pl. 3, f. 4.—Hollick, 1936, 120, pl. 67, f. 10; Eska Creek, Matanuska Coal Field, Alaska.
- Laurus pedatus** Lesquereux = **Osmanthus pedatus** (Lesquereux) Berry.
- Laurus plutonia** Heer = **Laurophyllum plutonium** (Heer) Seward.
- Laurus primigenia** Unger. □ Lesquereux, 1888, 50; Denver: Golden, Colo.—Hollick, 1912a, 50, Chickaloon; Matanuska River below Moose Creek; Eska Creek, Alaska.—Knowlton, 1924, 86; Animas: Pagosa Quad., Colo.—1930, 83, pl. 38, f. 3, 5, 6; Dawson: Colorado Springs and Sedalia, Colo.: Denver, Golden, Colo.
- Salix media*? Heer. □ Knowlton, 1897a, 141.
- Laurus princeps** Heer. □ Chaney, 1922a, 216; Payette: Idaho.—Scott, 1926, 405; Tesla, Calif.—Berry, 1934, 120, Latah: east of White Bird, Idaho Co.; south of Juliaetta, Nez Perce Co., Idaho—Sanborn, 1935, 20, pl. 5, f. 1, 2; Comstock: Comstock, Douglas Co., Oreg.—Hollick, 1936, 120, pl. 67, f. 1; Kachemak Bay, Kenai Peninsula, Alaska.
- Laurus princeps**, Berry not Heer = **Arbutus idahoensis** (Knowlton) R. W. Brown.

Laurus princeps, Lesquereux not Heer=*Magnolia spectabilis* Knowlton.

Laurus princeps, Knowlton (part) not Heer=*Quercus simulata* Knowlton.

Laurus proteaefolia Lesquereux. □ Gress, 1922, 306; Dakota: Ellsworth Co., Kansas.

Laurus ripleyensis Berry, 1925, 80, pl. 18, f. 3; Ripley: Henry Co., Tenn.

Laurus saliciformis Knowlton & Cockerell. □ Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.—Hollick, 1936, 121, pl. 67, f. 2-8; Kachemak Bay, Kenai Peninsula; Matanuska Coal Field, Alaska.

Laurus similis Knowlton, 1900d, 48, pl. 5, f. 1-4; Comstock, Douglas Co., Oreg.—1926, 41, pl. 23, f. 4-6; pl. 24, f. 2; Latah: Spokane, Wash.—Chaney, 1920a, 173; Eagle Creek: Multnomah Co., Oreg.—Berry, 1931a, 34; Latah: Grand Coulee, Wash.—1934, 121; Latah: east of Lewiston; south of Juliaetta; east of White Bird, Idaho.—Brown, R. W., 1937, 174, Latah: Spokane, Wash.

Umbellularia lanceolata Berry, 1929f, 260, pl. 59, f. 1; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 121; Latah: east of White Bird, Idaho.

NOTE.—Brown considers that LaMotte, 1936, 127; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif., belongs in this category. I do not concur, considering it a true *Umbellularia* sp.

Laurus similis, Berry (part) not Knowlton=*Umbellularia dayana* (Knowlton) Berry.

Laurus socialis Lesquereux. □ Knowlton, 1930, 85, pl. 38, f. 4; Denver: Golden, Colo.; Dawson: Mosby, Colo.

Laurus verus Berry, 1922g, 18, pl. 16, f. 2-7; Wilcox: Mansfield, De Soto Parish, La.

Laurus wardiana Knowlton. □ Ball, 1931, 64; Indio: Earle, Bexar Co., Tex.—Berry, 1934, 132, pl. 26, f. 3; Lance: Jump Off, Harding Co., S. Dak.

Laurus n. sp. Lesquereux, 1884, 12; near New Ulm, Minn.

Laurus sp. F. M. Scott, 1926, 405; Tesla, Calif.

Laurus sp.? White, 1898, 347; Kook, Nugsuak Pen., west Greenland.

Laurus n. sp.? White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

Leaf A, Harris, 1926, 70, text-f. 9; Rhaetic: Scoresby Sound, East Greenland=*Pseudoctenis spectabilis* Harris.

Leaves, R. W. Brown, 1937, 186, pl. 49, 14-16; pl. 53, f. 12-14; pl. 54, f. 6; pl. 55, f. 1, 4, 5; pl. 59, f. 14; Mascall: Tipton, Oreg.; Latah: Spokane and Republic, Wash.; Green River: Fossil, Wyo.; Latah: Spokane, Wash.

LECYTHIDOANTHUS Berry, 1924c, 103. Genotype: *L. kugleri* Berry.

Lecythidoanthus kugleri Berry, 1924c, 103-108, 2 figs.; Trinidad, British West Indies—1925a, 120, pl. 2, f. 3; Siparia: Trinidad, British West Indies.

Lecythidophyllum couratarioides Berry, 1923b, 21, pl. 6, f. 3, 4; north of Palomares, Oaxaca, Mexico.

Legume, MacGinitie, 1937, 144, pl. 10, f. 3, 4; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Leguminosites alexanderi Berry, 1929f, 254, pl. 63, f. 16; Latah: Spokane, Wash.

Leguminosites alternans Lesquereux. □ Knowlton, 1923, 165; Green River: near mouth of White River, Wyo.

Leguminosites andiraformis Berry, 1930, 87, pl. 13, f. 4, 5; pl. 22, f. 8; Holly Springs: Pattersonville, Fayette Co., Tenn.

Leguminosites? arachioides (Lesquereux) Lesquereux. □ Cross, 1895, 211; Middle Park: Middle Park, Colo.—Berry, 1926, 196; Paskapoo: Alberta.—Knowlton, 1930, 98; Denver: Golden: Colo.; Middle Park: Middle Park, Grand Co., Colo.—Ball, 1931, 81; Wilcox: Hamilton, Sabine Co., Tex.

Leguminosites arachioides, Penhallow not Lesquereux=**Leguminosites arachioides minor** Berry.

Leguminosites cf. arachioides Lesquereux. Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.

Leguminosites arachioides minor Berry, 1930, 89, pl. 14, f. 2-6; Holly Springs: Hardeman Co., Tenn.—1935, 64; Whitemud: Loc. P 5-30; Middle Ravenscrag: Loc. 5, 34, Southern Saskatchewan.

Leguminosites arachioides, Penhallow not Lesquereux, 1908a, 61, f. 14; Finlay and Onemeca Rivers, Similkameen and Horsefly Rivers, British Columbia.

Nyssa racemosa Knowlton. Knowlton, 1924, 95; Animas: Ignacio Quad., Colo.

Sabalites fructifer Lesquereux (part), 1878; 114, pl. 11, f. 3 (fruit at base of figure), f. 3a (fruit enlarged); Post-Laramie: Black Buttes, Wyo.; Denver, Golden, Colo.

Berrya racemosa (Knowlton) Knowlton, 1930, 134, pl. 41, f. 4, 5; Denver: Golden, Colo.; Dawson: Ramah, Colo.; Black Buttes: Black Buttes, Wyo.; Raton: near Raton, N. Mex.; Animas: Ignacio Quad., Colo.

Leguminosites astragaliformis Berry, 1930, 87, pl. 39, f. 6; Holly Springs: Milan, Gibson Co., Tenn.

Leguminosites bonseri Berry=**Umbellularia dayana** (Knowlton) Berry.

Leguminosites borealis Heer, 1883, 139, pl. 84, f. 16, 17.—Berry, 1926d, 111; Joseph Creek, British Columbia.

Callistemphyllum latum Dawson. □

Leguminosites borealis, Dawson not Heer=**Leguminosites dawsoni** Berry.

Leguminosites canavaliformis Berry, 1925a, 99, pl. 6, f. 4; Morne l'enfer beds: Trinidad, British West Indies.

Leguminosites canavalioides Berry. □ Berry, 1925, 60; Ripley: Carroll and Henry Cos., Tenn.

Leguminosites carrollensis Berry, 1925, 60, pl. 11, f. 1; Ripley: Carroll Co., Tenn.

Leguminosites chesterensis Berry, 1930, 89, pl. 14, f. 7-10; Holly Springs: Taylor Farm, Chester Co., Tenn.

Leguminosites collinsi Berry, 1930, 89, pl. 13, f. 6, 7; pl. 22, f. 5; pl. 41, f. 20; Holly Springs: Mill Creek and Bolivar, Hardeman Co., Tenn.; Pattersonville, Fayette Co., Tenn.; Grenada: Cottage Grove, Henry Co.; Williston, Fayette Co., Tenn.

Leguminosites columbianus Chaney not Knowlton=**Leguminosites multnomahensis** LaMotte, new name.

Leguminosites contortus Berry, 1930, 90, pl. 48, f. 32; Grenada: Cottage Grove, Henry Co., Tenn.

Leguminosites copaiferanus Berry, 1930, 91, pl. 45, f. 16; Holly Springs: La Grange, Fayette Co., Tenn.

Leguminosites dawsoni Berry, 1926d, 112; MacKenzie River Basin, Northwest Territories.

Leguminosites borealis, Dawson not Heer. □ Homonym, Heer, 1883.

Leguminosites drepanocarpoides Berry, 1930, 86, pl. 12, f. 11-12; Holly Springs: Shandy, Hardeman Co., Tenn.

Leguminosites emarginatus Berry, 1930, 89, pl. 44, f. 3; Holly Springs: Mercer, Madison Co., Tenn.

Leguminosites falcatum Potbury, 1935, 70, pl. 6, f. 6, 7; La Porte, Plumas Co., Calif.

Leguminosites hardemanensis Berry, 1930, 89, pl. 14, f. 1; Holly Springs: Shandy, Hardeman Co., Tenn.

Leguminosites hoffmanseggiaformis Berry, 1930, 87, pl. 41, f. 9; Holly Springs: Bolivar, Hardeman Co., Tenn.

Leguminosites ingafructoides Berry, 1930, 87, pl. 13, f. 8; pl. 29, f. 1; Holly Springs: Bolivar, Hardeman Co., Tenn.

Leguminosites johnstoni Berry, 1926d, 112, pl. 12, f. 1; Kitsilano, British Columbia.

Leguminosites lesquereuxiana Knowlton. □ Brown, R. W., 1934, 58; Green River: Localities as cited by authors.

Sophora coloradensis Knowlton, 1923, 165, pl. 37, f. 14-16; pl. 40, f. 11; Green River: Little Duck Creek, Rio Blanco Co.; Camp Gulch northwest of De Beque, Colo.

Bumelia coloradensis Cockerell, 1925, 4, pl. 1, f. 5; Green River: Roan Mts., Colo.

Dalbergia knowltoni Cockerell, 1925, 5, pl. 1, f. 3; Green River: Roan Mts., Colo.

Leguminosites mexicanus Berry, 1923b, 13, pl. 4, f. 1; San José del Carmen, Vera Cruz, Mexico.

Leguminosites monospermoides Berry, 1930, 90, pl. 25, f. 15; pl. 49, f. 18; Holly Springs: Mill Creek, Hardeman Co., Tenn.

Leguminosites multnomahensis LaMotte, new name.

Leguminosites columbianus Chaney, 1920a, 177, pl. 17, f. 3; Eagle Creek: Multnomah Co., Oreg. Homonym, Knowlton, 1919.

Leguminosites omphaloboides Lesquereux. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

Leguminosites panduriformis Berry, 1930, 90, pl. 48, f. 7; Holly Springs: Purvera Cruz, Mexico.

Leguminosites perryensis Berry, 1925, 60, pl. 11, f. 2; Ripley: Henry Co., Tenn.

Leguminosites phyllocarpoides Berry, 1930, 90, pl. 43, f. 4-6; Holly Springs: Grable Pit, Henry Co.; Jackson, Madison Co., Tenn.

Leguminosites pongamioides Berry, 1930, 88, pl. 32, f. 6; Holly Springs: Bolivar. Hardeman Co., Tenn.

Leguminosites robertsi Berry, 1930, 88, pl. 27, f. 2; Holly Springs: Fayette Co.; Grand Junction, Hardeman Co., Tenn.

Leguminosites robiniiifolia Berry. □ Berry, 1920e, 403; Black Creek: North Carolina.

Leguminosites shandyensis Berry, 1930, 88, pl. 13, f. 3; Holly Springs: Shandy. Hardeman Co., Tenn.

Leguminosites silvensis Berry, 1925a, 98, pl. 6, f. 3; Morne l'enfer beds: Trinidad, British West Indies.

Leguminosites trinitensis Berry, 1925a, 99, pl. 15, f. 2; Forest: Trinidad, British West Indies.

Leguminosites vicicarpus LaMotte, 1936, 133, pl. 10, f. 3; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Leguminosites williamsi Berry, 1930c, 23, pl. 5, f. 1; Ravenscrag: Cypress Hills, Canada.

Leguminosites yukonensis Hollick, 1930, 97, pl. 73, f. 4b; pl. 74, f. 5; Kaltag: Lower Yukon, Alaska.

Leguminosites sp. Berry, 1924, 199, pl. 41, f. 3; Barnwell: Phinizy Gully, Columbia Co., Ga.

Leguminosites sp. Berry, 1930, 91, pl. 48, f. 1, 2; Holly Springs: Puryear, Henry Co., Tenn.

Leguminosites n. sp. Berry, 1930f, 64; Ravenscrag: Southern Alberta.

Leguminosites sp. Berry, 1935, 42; Upper Ravenscrag: Loc. 27, Southern Saskatchewan.

Leguminosites sp. Dorf, 1936, 119, pl. 3, f. 1; Idaho: near Weiser, Idaho.

Leguminosites sp. MacGinitie, 1933, 59, pl. 9, f. 7; Trout Creek: Trout Creek, Harney Co., Oreg.

Lejeunia eophila Cockerell, 1925, 2, pl. 1, f. 1; Green River: Roan Mts., Colo.

Lemna scutata, Lesquereux not Dawson=**Nelumbo dawsoni** Hollick.

Lemna (Spirodela) scutata Dawson. □ See **Spirodela scutata** Dawson.

LEPARGYRAEA Rafinesque.

Lepargyrea weaveri Hollick, 1936, 155, pl. 93, f. 5; Kachemak Bay, Kenai Peninsula, Alaska.

LEPIDODENDRON Sternberg, 1820, Essai Geognost.-Bot. Fl. Monde prim., pt. 1, 25. Genotype: *L. dichotomum* Sternberg.

Lepidodendron sp., Emmons=**Araucarites virginensis** (Fontaine) Wieland.

LEPIDOPTERIS Schimper, 1869, Traité de Paléontologie végétale, vol. 1, 572. Genotype: *L. Stuttgartensis* Schimper.

Lepidopteris ottonis (Göeppert) Schimper. Harris, 1926, 67, text-f. 8c-d; Rhaetic; Scoresby Sound, East Greenland.—1932, 58, pl. 5, f. 16; pl. 6, f. 2-10; pl. 7, f. 1-11; pl. 8, f. 1-3, 5, 6, 8-11; 13-15; text-f. 27, 28; **Lepidopteris Zone**; Scoresby Sound, East Greenland.

LEPIDOSPARTUM A. Gray.

Lepidospartum sp. Axelrod, 1937, 182, pl. 6, f. 7; Mt. Eden: near Beaumont, Calif.

LEPTOSPERMITES Saporta, 1862, Etudes sur la végétation du sudest de la France. Ann. Sci. Nat. (4) vol. 17, 191.

Leptospermites arcticus Seward & Conway, 1935a, 23, pl. 5, f. 23, 27, 29; Atanekrdluk: west Greenland.

LEPTOSTROBUS Heer. □ Harris, 1935, 136. Selected Genotype: *L. laxiflora* Heer.

Leptostrobus longus Harris, 1935, 138, pl. 7, f. 1-5, 11-17, 76-10; ?pl. 24, f. 8; text-f. 49, 50i; **Thaumatopteris Zone**: Scoresby Sound, east Greenland.

Leucothoe racemosa (Linné) A. Gray. □ Berry, 1924a, 22, pl. 2, f. 11-14; Pleistocene: Washington, D. C.

LIBOCEDRUS Endlicher. □ Mason, 1927, 154, discussion.

Libocedrus cretacea Heer=**Cupressinocladus cretacea** (Heer) Seward.

Libocedrus decurrens Torrey. Mason, 1927, 155, pl. 5, f. 3, 7, 9-11; Mascall: White Hills, John Day Basin, Oreg.

Libocedrus dimorpha Oliver, 1934, 15, pl. 3, f. 1; Mascall: Tipton, Oreg.

Libocedrus praedecurrens Knowlton, 1926, 28, pl. 8, f. 8; Latah: Spokane, Wash.—Berry, 1929f. 237; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 104; Latah: east of White Bird, Idaho Co., Idaho—Brown, R. W., 1937c, 516.

Scale, Chaney, 1920a, 181, pl. 22, f. 5; Eagle Creek: Multnomah Co., Oreg.

Libocedrus sp. Dorf, 1930, 74, pl. 6, f. 8; Calabazas Canyon, Contra Costa Co., Calif.

Libocedrus sp. Dorf 1936=**Cedrela oregoniana** (Lesquereux) R. W. Brown.

Licmophora sp. Penhallow, 1900, 336; Rolling River, Manitoba.

LINDERA Thunberg.

Lindera oregona Chaney & Sanborn, 1933, 73, pl. 18, f. 4; Fisher: Goshen, Oreg.—MacGinitie, 1937, 138, pl. 6, f. 6; Weaverville: Redding Creek, Trinity Co., Calif.

Liquidambar acutilobum Chaney=**Liquidambar californicum** Lesquereux.

Liquidambar californicum Lesquereux. □ Chaney, 1920a, 174; Eagle Creek: Multnomah Co., Oreg.—Berry, 1929f. 250; Latah: Mica and Spokane, Wash.—1934, 113; Latah: east of White Bird, Idaho Co.; east of Arrow Junction, Nez

Liquidambar californicum—Continued.

Perce Co., Idaho.—Oliver 1934, 21; Mascall: Tipton and Austin, Oreg.—Potbury 1935, 69, pl. 6, f. 5; La Porte, Plumas Co., Calif.—Brown, R. W., 1937, 176, pl. 61, f. 9, 10; Latah: Potlatch Creek, between Arrow Junct. and Juliaetta, Idaho.—Berry, 1938, 96, text-f. 3; Latah: Grand Coulee, Wash.

Liquidambar europaeum, American authors, not Al. Braun. □ Lesquereux, 1888a, 14; Mascall: Van Horn's Ranch, Oreg.—Knowlton, 1896, 888; Port Graham, Alaska.—Chaney, 1920a, 175, pl. 15, f. 4; Eagle Creek: Multnomah Co., Oreg.—Hollick, 1936, 123; Port Graham, Kenai Peninsula, Alaska.

Liquidambar europaeum patulum Knowlton. □

Liquidambar protensum, Lesquereux not Unger. □

Liquidambar pachyphyllum Knowlton. □ Chaney, 1920a, 174, pl. 15, f. 2, 3; Eagle Creek: Multnomah Co., Oreg.—Knowlton, 1926, 42, pl. 22, f. 7; pl. 29, f. 1; Latah: Spokane, Wash.

Liquidambar convexum Cockerell. □

Liquidambar acutilobum Chaney, 1920a, 175, pl. 15, f. 4; Eagle Creek: Multnomah Co., Oreg.

Liquidambar sp., Knowlton; 1896. □

Liquidambar sp. ? Knowlton, 1902. □

Liquidambar callarche Cockerell, 1925, 8, pl. 1, f. 6; pl. 2, f. 5; Green River: Roan Mts., Colo.

Liquidambar convexum Cockerell = **Liquidambar californicum** Lesquereux.

Liquidambar europaeum Al. Braun, in Buckland, Geol., vol. 1, 115, 1836. This European form is no longer recognized from America, and material formerly assigned has been transferred to *Liquidambar californicum* Lesquereux, q. v.

Liquidambar europaeum, American authors not Al. Braun = **Liquidambar californicum** Lesquereux.

Liquidambar europaeum Lesquereux not Al. Braun, 1888a, 36 = **Liquidambar styraciflua** Linné.

Liquidambar europaeum patulum Knowlton = **Liquidambar californicum** Lesquereux.

Liquidambar fontanella R. W. Brown, 1930, 611-615; Aspen: southwest Wyoming.—1933, 8, text-f. 2; pl. 2, f. 3; Aspen: Southwest Wyoming.

Liquidambar incerta Berry, 1923b, 11, pl. 3, f. 5; San José del Carmen, Vera Cruz, Mexico—1924, 172, pl. 51, f. 8, 9; Lagrange: Hickman, Fulton Co., Ky.; near Union City, Obion Co., Tenn.

Liquidambar integrifolium Lesquereux = **Liquidambar obtusilobatus** (Heer) Hollick.

Liquidambar obtusilobatus (Heer) Hollick. □

Liquidambar integrifolium Lesquereux. □ Lesquereux, 1871, 379; Dakota: northwest of Salina, Kans.

Liquidambar pachyphyllum Knowlton = **Liquidambar californicum** Lesquereux.

Liquidambar protensum Lesquereux = **Liquidambar californicum** Lesquereux.

Liquidambar styraciflua Linné □ Berry, 1926b, 113, pl. 56, f. 9, 10; Chouan: Neuse River, Wayne Co., N. C.

Liquidambar europaeum Lesquereux not Al. Braun, 1888a, 36.

Liquidambar wilcoxianum Berry, 1930, 72, pl. 21, f. 8; Holly Springs: Bolivar, Hardeman Co., Tenn.

Liquidambar sp. Knowlton, 1896f = **Liquidambar californicum** Lesquereux.

Liquidambar sp. ? Knowlton, 1902 = **Liquidambar californicum** Lesquereux.

Liquidambar, fruit, Knowlton, 1926, 42, pl. 10, f. 10; Latah: Spokane, Wash.—Berry, 1931a, 38; Latah: Grand Coulee, Wash.—1934, 114; east of White Bird, Idaho Co.; Linson Valley, Washington Co.; south of Juliaetta, Nez Percé Co., Idaho.

NOTE.—Berry considers these fruits as probably referable to *L. californicum* Lesquereux.

- Liriodendron dubium* Berry. □ Berry, 1920e, 403; Black Creek: North Carolina.
- Liriodendron giganteum* Lesquereux. □ Lesquereux, 1871, 380; Dakota: near Fort Ellsworth, Kans.—Bartsch, 1896, 182; Dakota: Holman Cut, Woodbury Co., Iowa.
- Liriodendron hesperia* Berry, 1929f, 249, pl. 51, f. 2, 3; Latah: Spokane, Wash.—Brown, R. W., 1935, 577, pl. 69, f. 14, 15; Latah: Spokane, Wash.
- Liriodendron intermedium* Lesquereux. □ Lesquereux, 1871, 380; Dakota: Decatur, Nebr.
- Liriodendron laramiense* Ward. □ Berry, 1925, 53, pl. 11, f. 13; pl. 23, f. 6; Ripley: Henry Co., Tenn.
- Liriodendron marcouanum* (Heer) Knowlton. □
Liriodendron primaevum Newberry. □ Hollick, 1892a, 35, pl. 3, f. 4; Raritan: Tottenville, Staten Island, N. Y.—Berry, 1920e, 403; Black Creek: North Carolina.
- Liriodendron meekii* Heer = *Dalbergites simplex* (Newberry) Seward.
- Liriodendron olbongifolium* Newberry. □ Newberry, 1895, 81, pl. 52, f. 1-5; Raritan: Woodbridge, N. J.
- Liriodendron pinnatifidum*?, Knowlton not Lesquereux = *Liriodendron quercifolium* Newberry.
- Liriodendron primaevum* Newberry = *Liriodendron marcouanum* (Heer) Knowlton.
- Liriodendron psilopites* Wodehouse, 1933a, 501, f. 28; Green River: Parachute Creek, Garfield Co., Colo.
- Liriodendron quercifolium* Newberry. □ Berry, 1922c, 166, pl. 36, f. 3; Woodbine: Arthurs Bluff, Lamar Co., Tex.
Liriodendron pinnatifidum?, Knowlton not Lesquereux, 1901f, 317.
Liriodendron snowii, Knowlton not Lesquereux, 1901f, 317.
- Liriodendron simplex* Newberry (part) = *Dalbergites simplex* (Newberry) Seward.
- Liriodendron simplex* Newberry (part) = *Liriodendropsis angustifolia* (Newberry) Newberry.
- Liriodendron snowii*, Knowlton not Lesquereux = *Liriodendron quercifolium* Newberry.
- Liriodendron trilobata* Chaney = *Acer negundoides* MacGinitie.
- Liriodendron tulipifera* Linné. □ Berry, 1926b, 112, pl. 54, f. 6-8; Wycomico: Weldon, Northampton Co., N. C.
- Liriodendron* sp. Berry, 1926d, 110; Joseph Creek, British Columbia.
- Liriodendropsis angustifolia* (Newberry) Newberry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.
- Liriodendropsis constricta* Ward. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.
- Liriodendropsis retusa* (Heer) Hollick = *Dalbergites simplex* (Newberry) Seward.
- Liriodendropsis simplex* (Newberry) Newberry = *Dalbergites simplex* (Newberry) Seward.
- Lithocarpus predensisflora* Brooks, 1935, 290, pl. 14, f. 1; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.
- Lithospermum fossilium aristatum* Berry = *Berriochloa aristata* (Berry) Elias.
- Lithospermum fossilium glabrum* Berry = *Berriochloa glabra* (Berry) Elias.
- Lithospermum fossilium rugosum* Berry = *Biorbia fossilia* (Berry) Cockerell.
- Litsaea magnifica* Saporta = *Malapoenna magnifica* (Saporta) Hollick.

Lobaria sp. MacGinitie, 1937, 131, pl. 3, f. 2; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Lomatia acutiloba Lesquereux. □ Brown, R. W., 1929, 285; Green River: northwest of De Beque, Colo.

Lomatia coloradensis (Knowlton) R. W. Brown, 1929, 285, pl. 72, f. 3-6; Green River: between Carr and Brush Creeks, 30 mi. northwest of De Beque, Colo.—1934, 56; Green River: Localities as cited by authors.

Phyllites coloradensis Knowlton, 1923, 176, pl. 38, f. 3; Green River: Little Duck Creek, Rio Blanco Co., Colo.

Pimelea spatulata Knowlton, 1923, 176, pl. 37, f. 6; Green River: Cathedral Bluff, Rio Blanco Co., Colo.

Melia coloradensis (Knowlton) Cockerell, 1925, 3; Green River: Roan Mts., Colo.

Lomatia obtusiuscula Cockerell, 1925, 7, pl. 1, f. 4; Green River: Roan Mts., Colo.

Lomatia hakeaefolia Lesquereux = **Mahonia hakeaefolia** (Lesquereux) Arnold.

Lomatia? **microphylla** Lesquereux. □ Knowlton, 1923, 162; Green River: near mouth of White River, Wyo.

Lomatia obtusiuscula Cockerell = **Lomatia coloradensis** (Knowlton) R. W. Brown.

Lomatites hakeaefolia (Lesquereux) Cockerell = **Mahonia hakeaefolia** (Lesquereux) Arnold.

Lonchocarpus anceps Berry, 1924, 171, pl. 51, f. 4-7; Lagrange: near Union City, Obion Co., Tenn.; Hickman, Fulton Co., Ky.

Lonchocarpus coriaceus Potbury, 1935, 70, pl. 7, f. 1; La Porte, Plumas Co., Calif.

Lonchocarpus oregonensis Sanborn, 1935, 21, pl. 6, f. 2, 3, 5, 8; Comstock: Comstock, Douglas Co., Ore.

Lonchocarpus praelatifolius Hollick, 1928, 207, pl. 71, f. 7a; Collazo: Porto Rico.

Lonchocarpus standleyi Sanborn, 1935, 22, pl. 7, f. 1a, 4; Comstock: Comstock, Douglas Co., Ore.

Loperia simplex Newberry. □ Loper, 1891, 429; Newark (Anterior and Posterior Shales): near Meriden, Conn.

LUCUMA Molina.

Lucuma standleyi Chaney & Sanborn, 1933, 91, pl. 34, f. 1-3; Fisher: Goshen, Ore.

Lucuma sp. Chaney & Sanborn, 1933, 92, pl. 35, f. 1-2; Fisher: Goshen, Ore.

Lycopodium cretaceum Berry. □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirleys Mill, Ala.

Lycopodium prominens Lesquereux. □ LaMotte, 1936, 142, pl. 3, f. 1; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Lycopodium redivivum Heer, 1874, 60, pl. 13, f. 1—Seward, 1925, 234. Type is indeterminate.

LYCOSTROBUS Nathorst, 1908, K. Svenska Vet. Akad. Handl., vol. 43, no. 6, 3. Genotype: *L. scotti* Nathorst.

Lycostrobus scotti Nathorst, 1908, K. Svenska Vet. Akad. Handl., vol. 43, no. 6, 3, pl. 1, 2.—Harris, 1926, 50, pl. 10, f. 1; Rhaetic: Scoresby Sound, east Greenland.—1935, 153, pl. 26, f. 6, 7, 11, 14; text f. 51k-q; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Lygodium binervatum (Lesquereux) Berry. □

Salisburyia binervata Lesquereux. □ Lesquereux, 1871, 381; Wilcox: Mississippi.

Lygodium coloradense Knowlton, 1930, 30, pl. 8, f. 8; Dawson: Ramah, Colo.

Lygodium dentoni Lesquereux. □ Knowlton, 1923, 150; Green River: mouth of White River, Wyo.

Lygodium hastataforme Berry, 1930, 50, pl. 7, f. 4; Carrizo: near La Prior, Zavala Co., Tex.

Lygodium hesperium Knowlton, 1926, 24, pl. 8, f. 7; Latah: Coeur d'Alene, Idaho.

Lygodium kaulfussii Herr. □ Knowlton, 1923, 149, pl. 36, f. 7; Green River: Green River, Wyo.; Barrel Springs, Wyo.; Little Duck Creek, Rio Blanco Co., Colo.—Berry, 1924, 39, 142, pl. 3, f. 1, 5; Gosport: Claiborne Landing, Monroe Co., Ala.; Lisbon: Newton Co., Miss.; Yegua: Nevils Prairie, Houston Co. Tex.; Forest Hill: north of Jackson, Miss.—1926d, 95; Burrard Inlet, British Columbia.—1930d, 64, pl. 7, f. 2, 3; so-called Bridger: Lenore and Tipperary, Wind River Basin, Wyo.—1932e, 7; Lysite and lower Bridger: Wind River Basin, Wyo.—Ball, 1931, 118, Yegua: Nevils Prairie, Houston Co., Tex.

Lygodium neuropteroides Lesquereux. □ Lesquereux 1871, 384; Barrel Springs, Wyo.—Dawson, 1895, 141, f. 3.

Lygodium kaulfussii neuropteroides (Lesquereux) Cockerell, 1925, 2; Green River: Roan Mts., Colo.

Lygodium kaulfussii neuropteroides (Lesquereux) Cockerell = *Lygodium kaulfussii* Heer.

Lygodium mississippiensis Berry, 1916e, 231, pl. 55, f. 3, 4; Catahoula: near King, south of Florence, Rankin Co., Miss.—1924, 142; Fayette: Trinity Co., Tex.—Ball, 1931, 146; Fayette: Trinity Co., Tex.

Lygodium neuropteroides Lesquereux = *Lygodium kaulfussii* Heer.

Lygodium trilobatum Berry, 1930, 50, pl. 7, f. 5; Holly Springs: Shandy, Hardeman Co., Tenn.; Grenada: Meridian, Miss.; Wilcox: Naborton, La.

Lygodium? sp. Lesquereux, 1871, 379; Dakota: northwest of Salina, Kans.

Lygodium sp. Lesquereux, 1871, 382; Marshall, Colo.

LYSICHITON Schott.

Lysichiton nevadensis MacGinitie, 1933, 48, pl. 7, f. 4; Trout Creek: Trout Creek, Harney Co., Oreg.

Lysichiton washingtonense Berry, 1931a, 35, pl. 11, f. 2; Latah: Grand Coulee, Wash.

Macclintockia alaskana Hollick, 1930, 74, pl. 31, f. 3; Kaltag: Lower Yukon, Alaska.

Macclintockia appendiculata Heer = *Macclintockia cretacea* Heer.

Macclintockia chignikensis Hollick, 1936, 112, f. 5b; Chignik River opposite Nun Point, Alaska Peninsula.

Macclintockia cretacea Heer, 1882, 70, pl. 36, f. 1, 2a; pl. 37, f. 2-4.—White, 1898, 362; Patoot; Nugsuak Pen., west Greenland.—Seward, 1926, 114, pl. 12, f. 123; Disko Isl., West Greenland.

Macclintockia appendiculata Heer, 1882, 71, pl. 37, f. 1.

Macclintockia electilis Hollick, 1930, 74, pl. 31, f. 4; Melozi: Lower Yukon, Alaska.

Macclintockia hallei Seward, 1925, 255, pl. c, f. 21, 22; West Greenland.

Macclintockia kanii (Heer) Seward & Conway, 1935, pl. 2, f. 16, 17, 20; text-f. 9; Kingitok and Atanekerdruk, west Greenland.

The authors synonymize the following names to this species: *Daphnogene kanii* Heer, *Macclintockia trinervis* Heer, *Cocculus kanii* (Heer) Saporta & Marion, and *Cocculites kanii* (Heer) Heer. The cataloguer has not made the combinations pending critical studies of the American citations involved.

Macclintockia lyellii Heer. □ Seward & Conway, 1935, 34, text-f. 20, 21A, 21B; Kingitok: West Greenland.

MACHILUS Nees.

Machilus americana R. W. Brown, 1937, 174, pl. 53, f. 16; Latah: Spokane, Wash.

Machilus asiminoides R. W. Brown, 1937, 174, pl. 52, f. 9, 10; Latah: Spokane, Wash.

Macrotaeniopteris cf. *gigantea* (Schenk) Nathorst. Harris, 1932, 18, pl. 2, f. 2; text-f. 10; *Lepidopteris* Zone: Scoresby Sound, East Greenland.

Macrotaeniopteris magnifolia (Rogers) Schimper.□

Taeniopteris magnifolia Rogers.□Newberry, 1876, 147, pl. 8, f. 3, 4; Triassic: Los Bronces, Sonora, Mexico.

Macrotaeniopteris sp? Humphreys, 1916, 76; Santa Clara Coal Field, Sonora, Mexico.

MAGNOLIA Linné□Ball, 1931, 72; discussion.

Magnolia alternans Heer (part)=*Dalbergites simplex* (Newberry) Seward.

Magnolia alternans Heer (part)=*Magnoliaephyllum thomsenianum* (Heer) Shotton.

Magnolia amplifolia Heer.□Hollick, 1930, 79, pl. 44, f. 2; Melozi: Lower Yukon, Alaska.

Magnolia angustifolia Newberry.□Berry, 1922g, 12, pl. 9; Wilcox: De Soto Parish, La.—Knowlton, 1924, 88, pl. 10, f. 3; pl. 16, f. 5; Animas: Pagosa Quad., Colo.—Reagan, 1926, 121, f. 2; Raton; Willow Canyon, N. Mex.—Berry, 1930, 70, pl. 38, f. 2; Wilcox: Mansfield, Naborton and Couchatta, La.; Holly Springs: Chester, Fayette, Hardeman, and Henry Cos., Tenn.—Ball, 1931, 71, pl. 44, f. 1; Indio: Bastrop Co., Tex.

Magnolia auriculata Newberry (part)=*Magnolia speciosa* Heer.

Magnolia boulayana Lesquereux.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

Magnolia brazosensis Ball, 1931, 154, pl. 28, f. 2; Fayette: Raney Hdt., Brazos Co., Tex.

Magnolia californica Lesquereux.□Sanborn, 1935, 17, pl. 2, f. 2-5; Comstock: Comstock, Douglas Co., Oreg.

Magnolia californica, Berry not Lesquereux=*Magnolia spectabilis* Knowlton.

Magnolia capellini Heer=*Magnoliaephyllum thomsenianum* (Heer) Shotton.

Magnolia cordifolia Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi.

Magnolia dakotana Berry, 1934, 130, pl. 25, f. 6, 7; Lance: Jump Off, Harding Co., S. Dak.

Magnolia dayana, Knowlton not Cockerell=*Magnolia spectabilis* Knowlton.

Magnolia hilgardiana Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi.—Knowlton, 1924, 89, pl. 16, f. 4; Animas: Pagosa Quad., Colo.—Chaney & Sanborn, 1933, 69, pl. 11, f. 4; Fisher: Goshen, Oreg.

Terminatia hilgardiana (Lesquereux) Berry.□Ball, 1931, 99; Indio: Earle, Bexar Co., Tex.

Magnolia hollicki? Berry.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.—Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Magnolia ingfieldi Heer.□Knowlton, 1912i, 51; Chickaloon: Moose Creek, lower Matanuska Valley, Alaska.—Hollick, 1936, 114, pl. 9, f. 4c; pl. 62, f. 1-4; Hamilton Bay, Kupreanof Isl., southeastern Alaska; Matanuska Coal Field; Kachemak Bay, Kenai Peninsula, Alaska.—Berry, 1938, 94; Latah: Grand Coulee, Wash.

Magnolia lacoeana Lesquereux.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Glen Allen, Ala.—1922c, 165; Woodbine: Arthur's Bluff, Lamar Co., Tex.—Hollick, 1930, 79, pl. 44, f. 1; Melozi: Lower Yukon, Alaska.

Magnolia lanceolata Lesquereux.□Knowlton, 1893b, 104; Ellensburg: Ellensburg, Wash.

Magnolia cf. *lanceolata* Lesquereux. LaMotte, 1935b, 53; Sooke: Muir Creek, Vancouver Isl., British Columbia.

- Magnolia latahensis* (Berry) R. W. Brown=*Magnolia spectabilis* Knowlton.
Magnolia laurifolia Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi.
Magnolia leei Knowlton.□Berry, 1922g, 12, pl. 10; Wilcox: Mansfield, De Soto Parish, La.—Ball, 1931, 71; Indio: Barton's Ranch, Bastrop Co., Tex.
Magnolia leei angusta Berry, 1930, 70, pl. 37, f. 2; Holly Springs: near Bolivar, Hardeman Co.; Carroll Co.; Grable Pit, Henry Co.; Tenn.—Ball, 1931, 72, pl. 8, f. 5; Indio: Barton's Ranch, Bastrop Co., Tex.
Magnolia lesleyana Lesquereux=*Terminalia lesleyana* (Lesquereux) Berry.
Magnolia longifolia Newberry=*Magnoliaephyllum newberryi* (Berry) Seward & Conway.
Magnolia longipes Newberry.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottondale, Ala.
Magnolia magnifolia Knowlton.□Knowlton, 1924, 89; Animas: Pagosa Quad., Colo.—1930, 87; Denver: Golden, Colo.
Magnolia tenuinervis Lesquereux (part), 1888, 53; Denver: Golden, Colo.
Magnolia newberryi Berry=*Magnoliaephyllum newberryi* (Berry) Seward & Conway.
Magnolia nordenskiöldi Heer.□?Berry, 1926d, 110; Joseph Creek, British Columbia.—Hollick, 1936, 115; Chignik Bay, Alaska Peninsula.
Magnolia obtusata Heer.□Berry, 1913a, 571; Tuscaloosa: Shirley's Mill, Ala.—Gress, 1922, 299; Dakota: Ellsworth Co., Kans.
Magnolia oregoniana Chaney, 1920a, 173, pl. 15, f. 1; Eagle Creek: Multnomah Co., Oreg.
Magnolia ovalis Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi (spelled *oralis*).—Hollick, 1936, 114, pl. 63, f. 1, 2; near Berg Lake, Yakutat-Copper River region, Alaska.
Magnolia palaeauriculata Hollick, 1930, 80, pl. 44, f. 3; Chignik: Alaska Peninsula.
Magnolia pulchra Ward.□Berry, 1935, 35; Upper Ravenscrag: Loc. 32, Southern Saskatchewan.
Magnolia reticulata Chaney & Sanborn, 1933, 70, pl. 13, f. 1, 2, 4; Fisher: Goshen, Oreg.
Magnolia speciosa Heer.□Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirleys Mill: near Cottondale; near Tuscaloosa, Ala.—1922c, 165, pl. 40, f. 6; Woodbine: Arthurs Bluff, Lamar Co., Tex.—Gress, 1922, 299; Dakota: Ellsworth Co., Kans.
Magnolia auriculata Newberry (part), 1895, 75, pl. 41, f. 13; pl. 58, f. 10.
Magnolia spectabilis Knowlton.□Berry, 1938, 93, text-f. 1; Latah: Grand Coulee, Wash.
Magnolia dayana, Knowlton not Cockerell, 1926, 41, pl. 24, f. 3; Latah: Spokane, Wash.—Berry, 1929f, 250; Latah: Spokane, Wash.—1934, 112, Latah: White Bird and Juliaetta, Idaho.—LaMotte, 1936b, 417; Ellensburg: Ellensburg, Wash.—Brown, R. W., 1937, 175; Latah: Spokane, Wash.
Laurus grandis, Knowlton not Lesquereux, 1926, 41, pl. 24, f. 1; Latah: Spokane, Wash.—Berry, 1929f, 259, pl. 58, f. 3; Latah: Spokane, Wash.
Laurus princeps, Lesquereux not Heer, 1883, 250, pl. 58, f. 2; Corral Hollow, Alameda Co., Calif.—Knowlton, 1926, 41, pl. 23, f. 1, 2, only; Latah: Mica and Spokane, Wash.
Magnolia sp. Knowlton, 1926, 4, pl. 27, f. 1; Latah: Spokane, Wash.—Hoffman, 1932, 737; Douglas Canyon, Wash.
Magnolia californica, Berry not Lesquereux, 1929f, 250, Latah: Vera and Spokane, Wash.
Apocynophyllum latahense Berry (part), 1929f, pl. 60, f. 7, only; Latah: Spokane, Wash.
Magnolia latahensis (Berry) R. W. Brown, 1937, 175; Latah: Spokane, Wash.

Magnolia tenuifolia Lesquereux. □ Lesquereux, 1871, 380; Dakota: Decatur, Nebr.

Magnolia tenuinervis Lesquereux. □ Lesquereux, 1871, 383; Golden, Colo.

Magnolia virginiana Linné. □ Berry & Hawkins, 1935a, 250, pl. 25, f. 1; Pensauken: near Durhams Corner, Middlesex Co., N. J.

Magnolia wormskjoldi Heer, 1883, 123, pl. 101, f. 6.—Hollick, 1936, 115, pl. 63, f. 3; Yakutat Bay, Alaska.

Magnolia sp. Arnold, 1937, 85; Carter Creek south of Finley McKenzie Ranch, Oreg.

Magnolia n. sp. Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Magnolia sp. Knowlton 1926=*Magnolia spectabilis* Knowlton.

Magnolia sp. Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.

MAGNOLIAEPHYLLUM Krasser, 1896, Beit. Paläont. Geol. Oster.-Ungarns u. des Orients, vol. 10, pt. 3, 131.—Seward, 1926, 120.

Magnoliaephyllum alternans (Heer) Seward=*Magnoliaephyllum thomsenianum* (Heer) Shotton.

Magnoliaephyllum newberryi (Berry) Seward & Conway, 1935a, 21; Atanekerdluk: west Greenland.

Magnolia newberryi Berry. □ Berry, 1920e, 403; Black Creek: North Carolina.—1913a, 571; Tuscaloosa: near Glen Allen, Ala.

Magnolia longifolia Newberry. □ Newberry, 1895, 76, pl. 55, f. 3, 5; pl. 56, f. 1-4; Raritan: Woodbridge, N. J.

Magnoliaephyllum thomsenianum (Heer) Shotton. Seward & Conway, 1935a, 19, text-f. 15, 16; Atanekerdluk: west Greenland.

Apeibopsis thomseniana Heer, 1882, 95, pl. 36, f. 5.

Magnoliaephyllum alternans (Heer) Seward, 1926, 120, text-f. 25; Nugsuak, west Greenland.

Magnolia alternans Heer. □ Heer, 1874, 115, pl. 33, f. 1-4; pl. 34, f. 4.—1882, 91, pl. 46, f. 21.—Lesquereux, 1884, 12; near New Ulm, Minn.—Fritel, 1914, 289.—Gress, 1922, 298; Dakota: Ellsworth Co., Kansas.—Berry, 19291, 62, pl. 10, f. 5; Upper Blairmore: southwest Alberta.

Magnolia capellini Heer. □ Heer, 1874, 119, pl. 33, f. 1-4.—1882, 90, pl. 24, f. 3-5; pl. 25, f. 1-3; pl. 45, f. 1.—Hollick, 1893, 234, pl. 6, f. 6; Magothy: Glen Cove, Long Island, N. Y.—Berry, 1913a, 572; Tuscaloosa: near Cottondale, Ala.—1920e, 402; Black Creek: North Carolina.—1925, 55; Eutaw: Chattahoochee Co., Ga.; Ripley: McNairy Co., Tenn.

MAGNOLIAESTROBUS Seward & Conway, 1935a, 22. Genotype: *M. gilmouri* Seward & Conway.

Magnoliaestrobis gilmouri Seward & Conway, 1935a, 22, pl. 4, f. 20; Kardlok: west Greenland.

MAHONIA Nuttall.

Mahonia eocenica (R. W. Brown) Arnold, 1936, 63; Green River: Piceance Creek, north of Rifle, Colo.

Odostemon eocenica R. W. Brown, 1934, 57, pl. 13, f. 6; Green River: Piceance Creek north of Rifle, Colo.

Mahonia florissantensis (Cockerell) Arnold=*Mahonia hakeaefolia* (Lesquereux) Arnold.

Mahonia hakeaefolia (Lesquereux) Arnold, 1936, 64, pl. 1, f. 4-5; Florissant: Florissant, Colo.

Lomatia hakeaefolia Lesquereux. □

Carduus florissantensis Cockerell, 1906, 331, text-f. 6; Florissant: Florissant, Colo.

Odostemon florissantensis (Cockerell) Cockerell. □

Lomatites hakeaefolia (Lesquereux) Cockerell. □

Odostemon hakeaefolia (Lesquereux) Knowlton, 1923a, 190, pl. 43, f. 1-6; Creede: Creede, Colo.

Mahonia florissantensis (Cockerell) Arnold, 1936, 64.

Mahonia hollicki (Dorf) Arnold, 1936, 61: Dorf's localities only.

Odostemon hollicki Dorf, 1930, 93, pl. 10, f. 7, 8; Petrified Forest near Calistoga, Calif.

Mahonia hollicki, Arnold not Dorf=**Mahonia reticulata** (MacGinitie) R. W. Brown.

Mahonia malheurensis Arnold, 1936, 63, pl. 3, f. 1-3; Trout Creek: Trout Creek, Harney Co.; Strode Ranch, Sucker Creek, Malheur Co., Oreg.

Mahonia marginata (Lesquereux) Arnold, 1936, 64; Florissant: Florissant; Creede: Creede, Colo.—R. W. Brown, 1937c, 517.

Odostemon marginata (Lesquereux) Knowlton, 1923a, 189, pl. 43, f. 7-10; Creede: Creede, Colo.

Hedera marginata Lesquereux, 1883, 177, pl. 40, f. 8; Florissant: Florissant, Colo.

Sterculia aceroides Knowlton, 1923a, 191, pl. 43, f. 12; Creede: Creede, Colo.

Mahonia reticulata (MacGinitie) R. W. Brown, 1937, 175, pl. 52, f. 4; Mascall: Tipton, Oreg.

Clematis reticulata MacGinitie, 1933, 54, pl. 6, f. 4; Trout Creek: Trout Creek, Harney Co., Oreg.

Odostemon hollicki, MacGinitie not Dorf, 1933, 55, pl. 7, f. 1, 3, 5; Trout Creek: Trout Creek, Harney Co., Oreg.

Mahonia hollicki, Arnold not Dorf, 1936, 61, pl. 2, f. 3-8; pl. 3, f. 5, 7, 9; Trout Creek: Trout Creek, Harney Co.; Rockville and Sucker Creek, Malheur Co., Oreg.

Mahonia simplex (Newberry) Arnold, 1936, 58, pl. 1, f. 1-3, 6-7; pl. 2, f. 1, 2; Trout Creek: Trout Creek, Harney Co.; Rockville and Sucker Creek, Malheur Co., Oreg.—Brown, R. W., 1937, 175, Mascall: John Day Basin, Oreg.

Berberis simplex Newberry.□

Odostemon simplex (Newberry) Cockerell.□Chaney, 1922a, 216; Payette: Idaho.—1927a, 116, pl. 14, f. 7-9, 11; Bridge Creek: Gray Ranch, Crooked River Basin; Cove Creek, Oreg.—Berry, 1932a, 40; Ballantyne Ranch, Malheur Co., Oreg.—MacGinitie, 1933, 55, pl. 9, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.—Brooks, 1935, 293; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.—Dorf, 1936, 118; Idaho: near Weiser, Idaho.—LaMotte, 1936, 126; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Ilex latahensis Ashlee, 1932, 78, pl. 1, f. 14; Latah: Elk River, Idaho.

Mahonia trainii Arnold, 1936, 62, pl. 3, f. 4, 6, 8; Rockville, Malheur Co., Oreg.

Odostemon simplex Berry (part) not Newberry, 1934, 112, pl. 23, f. 1 only; Latah, near Weiser, Idaho.

Majanthemophyllum oblongifolium (Penhallow) Berry, 1926, 193; Paskapoo: Alberta.

Clintonia oblongifolia Penhallow, 1902a, 55, text-f. 6; Paskapoo: Alberta.—1906, 392a; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.

Malapoenna carbonensis (Ward) Knowlton.□?Hollick, 1936, 119, pl. 65, f. 6; Hamilton Bay, Kupreanof Island, southeastern Alaska.

Malapoenna cretacea (Lesquereux) Knowlton.□Berry, 1913a, 572; Tuscaloosa: near Cottondale, Ala.

Malapoenna falcifolia (Lesquereux) Knowlton.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.—1922c, 172; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Malapoenna horrellensis Berry.□Berry, 1920e, 404; Black Creek: North Carolina.—1925, 78, Eutaw: Hale Co., Ala.; Chattahoochee Co., Ga.; Ripley: McNairy Co., Tenn.

Malapoenna magnifica (Saporta) Hollick, 1936, 118, pl. 66, f. 1-5; Hamilton Bay, Kupreanof Island, southeastern Alaska; near Berg Lake, Yakutat-Copper River region, Alaska.

Litsaea magnifica Saporta, 1866, Ann. Sci. nat. (Paris), sér. 5, Botanique, vol. 4, 280 (136) pl. 7, f. 6.

- Malapoenna sessiliflora** (Lesquereux) Knowlton. □ Knowlton, 1924, 87, pl. 14, f. 3; Animas: Pagosa Quad., Colo.
- Malapoenna texensis** Ball, 1931, 65, pl. 40, f. 2, 3; pl. 44, f. 5; Indio: Little Sandy Creek, Bastrop Co., Tex.
- Malapoenna** sp. Berry, 1924, 188; Barnwell: south of Macon, Twiggs Co., Ga.
- MALLOTUS** Loureiro.
- Mallotus comstocki** Sanborn, 1935, 23, pl. 6, f. 9; Comstock: Comstock, Douglas Co., Oreg.
- Mallotus oregonensis** Sanborn, 1935, 23, pl. 8, f. 6; Comstock: Comstock, Douglas Co., Oreg.
- Malus coronariafolia** Berry. □ Berry, 1926b, 113, pl. 56, f. 3; Chowan: Neuse River, Wayne Co., N. C.
- Malus idahoensis** R. W. Brown, 1935, 578, pl. 69, f. 12; Latah: Salmon, Idaho.
- Malus pseudoangustifolia** Berry. □ Berry, 1926b, 113, pl. 56, f. 1, 2; Chowan: Neuse River, Wayne Co., N. C.
- Malva?* **hesperia** Knowlton = **Carpolithus** sp. R. W. Brown.
- MALVOCARPON** Hollick, 1928, 214. Genotype: *M. clarum* Hollick.
- Malvocarpum clarum** Hollick, 1928, 214, pl. 75, f. 6; Collazo: Porto Rico.
- MANICARIA** Gaertner. □ Noé, 1936a, 444.
- Manicaria* **haydenii** Newberry = **Geonomites haydenii** (Newberry) Berry.
- Manicaria portoricensis** Hollick, 1928, 188, pl. 56, f. 24a, b; Collazo: Porto Rico.
- MANIHOT** Tournefort.
- Manihot eocenica** Berry, 1930, 95, pl. 14, f. 11, 12; Holly Springs: Shandy, Hardeman Co., Tenn.
- Manihotites georgiana** Berry. □ Berry, 1920e, 404; Black Creek: Wayne Co., N. C.—1925, 63; Eutaw: Chattahoochee Co., Ga.; Hardin Co., Tenn.; Ripley: Marion Co., Ga.; McNairy Co., Tenn.
- Marattia cretacea** Velenovsky? □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen, Ala.
- MARATTIOPSIS** Schimper, 1869, *Traité pal. veg.*, vol. 1, 607. Genotype: *M. dentatum* (Sternberg) Schimper.
- Marattiopsis hoerensis** (Schimper) Thomas. Harris, 1931b, 60, pl. 13, f. 2, 3, 5, 6, 9-11, 15, 16; text-f. 21, 22; Thaumatopteris Zone: Scoresby Sound, East Greenland.
- Marchantia yukonensis** Hollick, 1930, 37, pl. 1, f. 2; Kaltag: Lower Yukon, Alaska.
- Marchantites blairmorensis** Berry, 1929k, 34, pl. 4, f. 1, 2; Lower Blairmore: southwest Alberta.
- Marchantites?** **coloradensis** Knowlton, 1930, 16, pl. 1, f. 3; Dawson: Mosby, Colo.
- Marchantites sewardi** Berry, 1920d, 50, text-f. 2; Patapsco: Federal Hill, near Ft. McHenry, Md.
- Marchantites stevensoni** Berry, 1922g, 4, pl. 4, f. 1; Wilcox: near Jacksonville, Pulaski Co., Ark.—1924, 141, pl. 64, f. 2; Fayette: near Wellborn, Brazos Co., Tex.—Ball, 1931, 145, pl. 23, f. 1; Fayette: Boggy Creek, Brazos Co., Tex.
- Marchantites** sp., Berry, 1930c, 17; Estevan: Cypress Hills, Canada.—1930f, 63; Estevan: southern Alberta.
- Marsilea attenuata** (Lesquereux) Hollick. □ Florin, 1919, 253.
- Matonidium* **althausii**, Cockerell not Ward = **Matonidium americanum** Berry.
- Matonidium americanum** Berry, 1919f, 287, text-f. 2; McElmo: southwest Colorado.

Matonidium althausii, Cockerell not Ward, 1916, 111, f. 2; near Hovenweep Canyon, southwest Colorado.

Maytenus berryi R. W. Brown, 1929f, 289, pl. 74, f. 3; Green River: northwest of De Beque, Colo.—1934, 61, pl. 10, f. 7; Green River: Roan Creek northwest of De Beque, Colo.

Maytenus trinitensis Berry, 1925a, 106, pl. 2, f. 4; Siparia: Trinidad, British West Indies.

Megaspore, Type 2, Harris=**Triletes myrmecodes** Harris.

Megaspore, Type 3, Harris=**Triletes rexargenteus** Harris.

MEIBOMIA Heister.

Meibomia paniculata (Linné) Kuntze. Berry, 1922b, 11; Pleistocene: Tipton Co., Tenn.

MEIBOMITES Knowlton (Genus nudum), 1926, 44. Genotype: *M. lucens* Knowlton.

Meibomites knowltoni Berry=**Cercis spokaneensis** Knowlton.

Meibomites lucens Knowlton=**Cercis spokaneensis** Knowlton.

Meibomites, cf. *lucens* Brooks=**Cercis spokaneensis** Knowlton.

Melastomites angustus Berry, 1923b, 23, pl. 6, f. 5; west of Palomares, Oaxaca, Mexico.

Melastomites domingensis Berry, 1921a, 124, pl. 21, f. 7; Samaná Dist., Santa Domingo.

Melastomites miconioides Berry, 1918, 40, pl. 18, f. 2; Culebra: Gaillard Cut, Canal Zone.

Melastomites obovatus Berry, 1923b, 23, pl. 6, f. 6; San José del Carmen, Vera Cruz, Mexico.

Melastomites ovatus Berry, 1930, 118, pl. 19, f. 4, 5; Holly Springs: La Grange, Fayette Co., Tenn.

Melastomites versus (Berry) Berry, 1930, 118; Holly Springs: La Grange, Fayette Co., Tenn.—Ball, 1931, 167, pl. 18, f. 6; Jackson?: Rock Creek, Brazos Co., Tex.

Cinnamomum vera Berry. □ Ball, 1931, 63, pl. 18, f. 6; Carrizo: Dimmit Co., Tex.; Jackson? (Yegua): Rock Creek, Brazos Co., Tex.

Melia coloradensis (Knowlton) Cockerell=**Lomatia coloradensis** (Knowlton) R. W. Brown.

MELICA Linné.

Melica primaeva Brues & Brues, 1908, 170, text-f. 1; Florissant: Florissant, Colo.

MELICOCCA Linné.

Melicocca immutata Hollick, 1928, 210, pl. 73, f. 1-4; Collazo: Porto Rico.

Melicocca sp. Hollick, 1928, 211, pl. 87, f. 4; Collazo: Porto Rico.

MELIOSMA Blume.

Meliosma aesculifolia Chaney & Sanborn, 1933, 84, pl. 27, f. 1; Fisher: Goshen, Oreg.

Meliosma californica Berry, 1929d, 99-100; 2½ mi. south of San Juan, Calif.

Meliosma goshenensis Chaney & Sanborn, 1933, 84, pl. 28, f. 2, 3; pl. 29, f. 1-3; Fisher: Goshen, Oreg.—Potbury, 1935, 74, pl. 11, f. 7; La Porte, Plumas Co., Calif.

Meliosma rostrata Chaney & Sanborn, 1933, 85, pl. 30, f. 2, 4; Fisher: Goshen, Oreg.

Meniphylloides tennesseensis Berry, 1930, 49, pl. 49, f. 1-5; Grenada: Cottage Grove, Henry Co., Tenn.

Menispermites americanus Berry, 1930, 69, pl. 11, f. 1-4; Holly Springs: near Shandy, Hardeman Co., Tenn.—Ball, 1931, 74, pl. 3, f. 5; Indio: Bartons Ranch, Bastrop Co., Tex.

Menispermities belli Berry, 1935, 36; Whitemud: Locs. 7, P 5-30, southern Saskatchewan.

Ficus asarifolia, authors not Ettingshausen.□

Ficus asarifolia minor Lesquereux.□

Menispermities carolinaformis Berry, 1924, 165, pl. 50, f. 10, 11; pl. 51, f. 1; Lagrange: Columbus, Hickman Co., and Hickman, Fulton Co., Ky.

Menispermum canadense, Knowlton not Linné, 1906d, 38.

Cebatha carolina, Berry not Britton, 1915b, 300.

Menispermities cebathoides Berry, 1922g, 12, pl. 11, f. 1; Wilcox: Mansfield, De Soto Parish, La.

Menispermities communis Hollick, 1930, 78, pl. 42, f. 1, 2; Melozi: Lower Yukon, Alaska.

Menispermities cordifolius Hollick, 1930, 79, pl. 41, f. 1; Kaltag: Lower Yukon, Alaska.

Menispermities cyclophyllus Lesquereux.□Berry, 1920e, 403; Black Creek: Bladen Co., N. C.

Menispermities dentatus Heer. Seward, 1926, 116, pl. 11, f. 112; Disko Isl., West Greenland.

Menispermities hardemanensis Berry, 1930, 69, pl. 10, f. 2; Holly Springs: Shandy, Hardeman Co., Tenn.

Menispermities hederacoides Hollick, 1930, 78, pl. 42, f. 5; Melozi: Lower Yukon, Alaska.

Menispermities latahensis Berry=**Vitis washingtonensis** (Knowlton) R. W. Brown.

Menispermities menispermifolius (Lesquereux) Knowlton.□

Acerites menispermifolius Lesquereux.□Lesquereux, 1871, 380; Dakota: Decatur, Nebr.

Menispermities nordenskiöldi (Heer) Seward, 1926, 117, text-f. 23—Seward & Conway, 1935a, 22, text-f. 19; Atanekerdluk: West Greenland.

Apeibopsis nordenskiöldi Heer, 1874, 23, pl. 5, f. 6.

Populus stygia Heer, (part), 1882, 64, pl. 7, f. 5; pl. 18, f. 5; pl. 39, f. 1.

Pterospermities cordifolius Heer, 1882, 94, pl. 27, f. 2, 3.

Nuphar cordifolius (Heer) Fritel, 1914, 295.

Menispermities obtusiloba Lesquereux.□Gress, 1922, 300; Dakota: Salina, Kansas.

Dombeyopsis obtusiloba Lesquereux.□Lesquereux, 1871, 380; Dakota: 5 mi. north of Fort Ellsworth, Kans.

Menispermities reniformis Dawson.□Berry, 19291, 62, pl. 10, f. 1, 2; Upper Blairmore: southwestern Alberta.—Hollick, 1930, 78, pl. 42, f. 6; pl. 43, f. 1; Melozi, Nulato: Lower Yukon, Alaska.

Menispermities salinae (Lesquereux) Knowlton.□

Acer obtusilobum? Unger.□Lesquereux, 1871, 380; Dakota: Decatur, Nebr.

Menispermities septentrionalis Hollick, 1930, 79, pl. 42, f. 3, 4; Seventymile River: Upper Yukon; Kaltag: Lower Yukon, Alaska.

Menispermities variabilis Berry.□Berry, 1925, 56; Ripley: Henry Co., Tenn.

Menispermities wilcoxensis Berry.□Ball, 1931, 75, pl. 17, f. 3; Indio: Bartons Ranch, Bastrop Co., Tex.

Menispermities sp. Dawson=**Cinnamomoides heerii** (Lesquereux) Seward.

?**Menispermities** sp. Seward, 1926, 119, text-f. 24; Disko Isl., West Greenland.

Menispermum canadense, Knowlton not Linné=**Menispermities carolinaformis** Berry.

MENTHITES Cockerell, 1926b, 696. Genotype: *M. eocenicus* Cockerell.

Menthites eocenicus Cockerell, 1926b, 696; Green River: Roan Mts., Colo.

MENTZELIA Plumier.

Mentzelia occidentalis (Berry) R. W. Brown, 1935, 282, pl. 69, f. 16, 17; Latah: Spokane, Wash.; White Bird, Idaho.

Hibiscus? occidentalis Berry, 1929f, 258, pl. 64, f. 13-15; Latah: Spokane, Wash.—1934, 120; Latah: south of Juliaetta, Nez Percé Co., Idaho.

MENZIESIA Smith.

Menziesia knowltoni Berry, 1929f, 262, pl. 63, f. 12; Latah: Spokane, Wash.

Mertensides bullatus (Bunbury) Fontaine.□

Pecopteris bullata Bunbury.□Newberry, 1876, 143, pl. 6, f. 1, 1a; Triassic?: Los Bronces and Yaki River, Sonora, Mexico.

Mespilodaphne caudata Berry, 1924, 81, 185, pl. 15, f. 6, 7; Mt. Selman: near Elkhart, Anderson Co., Tex.; Yegua: Columbia, Caldwell Parish, La.; Nevils Prairie, Houston Co., Tex.; Rock Creek, Brazos Co., Tex.; Lagrange: Randolph Bluff, Tipton Co., Tenn.—Ball, 1931, 127, 163, pl. 22, f. 5; Mt. Selman: Elkhart, Anderson Co.; Yegua: Nevils Prairie, Houston Co.; Jackson-Fayette: Rock Creek, Fayette Co., Tex.

Mespilodaphne caudata major Berry, 1924, 185, pl. 42, f. 2; Fayette: Alum Creek, Brazos Co., Tex.—Ball, 1931, 163; Fayette: Alum Creek, Brazos Co., Tex.

Mespilodaphne columbiana Berry, 1924, 81, 186, pl. 15, f. 3-5; pl. 60, f. 5; Lisbon: near Lexington, Holmes Co.; Newton, Newton Co., Miss.; near Silas, Choctaw Co., Ala.; Yegua: Columbia, Caldwell Parish, La.; near Bienville, La.; Nevils Prairie, Houston Co., Tex.; near Stevens, Ouachita Co., Ark.; Gosport: Claiborne Landing, Monroe Co., Ala.; Jackson: near New Edinburgh, Cleveland Co., Ark.—Ball, 1931, 127, 163; Yegua: Nevils Prairie, Houston Co.; Fayette: Rocky Mound, Trinity Co., Tex.

Mespilodaphne couchatta Berry.□Berry, 1930, 117; Holly Springs: Atkins Pit, Henry Co., Tenn.—Ball, 1931, 66; Carrizo: La Prior Crossing, Zavalla Co., Tex.

Mespilodaphne culebrensis Berry, 1918, 38, pl. 17, f. 3; Culebra: Gaillard Cut, Canal Zone.

Mespilodaphne hispaniolana Berry, 1923b, 7, pl. 1, f. 11; Artibonite Group: Haiti.

Mespilodaphne jacksonensis Berry, 1924, 186, pl. 60, f. 5; Fayette: Barrera League, Brazos Co., Tex.—Ball, 1931, 164, pl. 33, f. 2; Fayette: Barrera League, Brazos Co., Tex.

Mespilodaphne palomaresensis Berry, 1923b, 19, pl. 1, f. 1; north of Palomares, Oaxaca, Mexico.

Mespilodaphne precoushatta Berry, 1924, 91, pl. 23, f. 2; Indio: Sayersville, Bastrop Co., Tex.—Ball, 1931, 66; Indio: Sayersville, Bastrop Co., Tex.

Mespilodaphne texana Berry, 1924, 185, pl. 38, f. 1; Fayette: Miraflores, Webb Co.; Barrera League, Brazos Co., Tex.; Jackson: White Bluff, Jefferson Co., Ark.; Lagrange: Randolph Bluff and near Corona, Tipton Co., Tenn.; Catahoula?: Trinity Co., Tex.—Ball, 1931, 163, pl. 33, f. 1; Catahoula?: Trinity Co.; Fayette: Miraflores, Webb Co.; Rocky Mound, Trinity Co.; Barrera League and Boggy Creek, Brazos Co., Tex.

METACUPRESSINOXYLON Torrey, 1923, 85. Genotype: *M. cupressoides* (Holden) Torrey.

Metacupressinoxylon cupressoides (Holden) Torrey, 1923, 84, pl. 14, f. 49-50; Raritan: Matteawan, N. J.

Paracupressinoxylon cupressoides Holden.□

Metopium wilcoxianum Berry.□Ball, 1931, 89; Wilcox: Old Port Caddo Landing, Harrison Co., Tex.

Metopium yeguanum Berry, MS. Ball, 1931, 160, pl. 21, f. 1; Yegua: Turkey Creek, Brazos Co., Tex.; Fayette: Boggy Creek, Brazos Co., Tex.

MICROCHEIRIS Harris, 1935, 117. Genotype: *M. enigma* Harris.

Microcheiris enigma Harris, 1935, 118, pl. 8, f. 5, 6; Thaumatopteris Zone: Scoresby Sound, east Greenland.

MICRODESMIS Hooker filius.

Microdesmis occidentalis Potbury, 1935, 74, pl. 10, f. 3, 5; La Porte, Plumas Co., Calif.

MICROMERIA Benth.

Micromeria chamissonis (Benth.) Greene. Potbury, 1932, 37, pl. 4, f. 5; San Bruno: San Mateo Co., Calif.

MICROPEDIUM Saporta, 1863, Etudes sur la Vegetation du Sud-est de la France a l'epoque tertiare, vol. 1, 137, Genotype: *M. oligospermum* Saporta.

Micropodium ovatum (Lesquereux) R. W. Brown, 1937b, 417, text-f. 2; Bridge Creek: 9 mi. northwest of Mitchell, Oreg.

Ailanthus ovata Lesquereux.□

Microtaenia paucifolia (Hall) Knowlton.□Berry, 1929j, 130; Frontier: near Cumberland, Wyo.—Brown, R. W., 1933, 4, pl. 1, f. 4; Aspen: southwest Wyoming.

Microtaenia variabilis Knowlton.□Berry, 1929j, 130; Frontier: near Cumberland, Wyo.

Mimosites acaciaefolius Berry.□Berry, 1930, 74, pl. 30, f. 5-8; Holly Springs: Hardeman Co., Tenn.

Mimosites acutifolius Potbury, 1935, 71, pl. 7, f. 2-5; La Porte, Plumas Co., Calif.

Mimosites coloradensis Knowlton, 1923, 166, pl. 40, f. 1-3; Green River: Little Duck Creek, Rio Blanco Co., Colo.—Brown, R. W., 1934, 59; Green River: localities as cited by authors.

Mimosites debequensis R. W. Brown, 1929, 286, pl. 73, f. 1-3; Green River: northwest of De Beque, Colo.

Mimosites falcatus R. W. Brown, 1929, 287, pl. 73, f. 4, 5; Green River: northwest of De Beque, Colo.

Mimosites cooperensis Berry, 1925, 57, pl. 10, f. 7; Ripley: Henry, Carroll and Chester Cos., Tenn.

Mimosites debequensis R. W. Brown=**Mimosites coloradensis** Knowlton.

Mimosites falcatus R. W. Brown=**Mimosites coloradensis** Knowlton.

Mimosites georgianus Berry.□Berry, 1924, 62, 168; Yegua: Nevils Prairie, Houston Co., Tex.; Mt. Selman, Palestine, Anderson Co., Tex.; Lisbon: Newton, Newton Co. and Lexington, Holmes Co., Miss.; Fayette: Wellborn, Brazos Co., Tex.; Barnwell: Grovetown, Columbia Co.; near Macon, Macon Co.; near Gibson, Glascock Co., Ga.—Ball, 1931, 123, 155; Mt. Selman: Anderson Co.; Yegua: Nevils Prairie, Houston Co.; Fayette: Boggy Creek, Brazos Co., Tex.

Mimosites leptophyllum MacGinitie, 1937, 143, pl. 6, f. 2; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Mimosites mississippiensis Berry, 1924, 168, pl. 33, f. 2-5; Forest Hill: north of Jackson, Hinds Co., Miss.

Mimosites spatulus Berry, 1924, 167, pl. 33, f. 1; Jackson: near El Dorado, Union Co., Ark.

Mimosites variabilis Berry.□Berry, 1922g, 14; Wilcox: Clayhatchee, Dale Co., Ala.—1930, 74, pl. 12, f. 6; pl. 32, f. 7; Holly Springs: Holly Springs, Miss.; Wickliffe, Ky.; Fayette Co., Tenn.; Puryear, Henry Co. and Hardeman Co., Tenn.; Grenada: Grenada, Miss.; Wilcox: Nevada Co., Ark.—Ball, 1931, 79; Carrizo?: Concillas Creek, Webb Co., Tex.

- Mimosites wilcoxensis** Berry, 1930, 74, pl. 38, f. 6-8; Holly Springs: Hardeman Co., Tenn.
- Mimusops anomala** Berry, 1925a, 126, pl. 5, f. 2; Siparia: Trinidad, British West Indies.
- Mimusops claibornensis** Berry, 1924, 89, pl. 22, f. 6; Yegua: Cherry Valley, Cross Co., Ark.
- Mimusops collinsi** Berry, 1928f, 447, pl. 11, f. 13; Ripley: Carroll Co., Tenn.
- Mimusops elongata** Ball, 1931, 103, pl. 16, f. 2; Indio: Bartons Ranch, Bastrop Co., Tex.
- Mimusops emarginata** (Linné) Britton. Berry, 1934c, 239, text-f. 13; Chapapote: Baños de Ciego Montero, Santa Clara Province, Cuba.
- Mimusops jumuriensis** Hollick, 1924, 314, pl. 14, f. 3, 4; Matanzas, Cuba.
- Mimusops leonii** Hollick, 1924, 314, pl. 14, f. 10; Matanzas, Cuba.
- Mimusops miocenica** Berry, 1925a, 125, pl. 12, f. 1; pl. 16, f. 2-5; Upper Forest: Trinidad, British West Indies.
- Mimusops mississippiensis** Berry. □ Ball, 1931, 103; Carrizo?: Concillas Creek, Webb Co., Tex.
- Mimusops preduplicata** Berry, 1925c, 6, pl. 2, f. 1, 3, 5; pl. 3, f. 5; pl. 4, f. 2-4; Pleistocene: Trinidad, British Indies.
- Mimusops prenuntia** Berry, 1930, 128, pl. 39, f. 1-3; Holly Springs: Atkins and Bradley Pits, Henry Co., Tenn.; Will Brooks Farm, Madison Co., Tenn.
- Mimusops preparvifolia** Berry, 1923b, 8, pl. 1, f. 10; Artibonite Group: Haiti.
- Mimusops sieberifolia** Berry. □ Ball, 1931, 103, pl. 39, f. 4; Indio: Little Sandy Creek, Bastrop Co., Tex.
- Mimusops truncata** (Lesquereux) Knowlton. □
Phyllites truncatus Lesquereux. □ Lesquereux, 1871, 382; Wilcox: Mississippi.
- MISANTECA** Chamisso & Schlechtendal.
- Misanteca dubiosa** (Hollick) Hollick, 1928, 199, pl. 68, f. 1-6; pl. 70, f. 6b?; Collazo: Porto Rico.
Laurophyllum dubiosum Hollick, 1924, 300, pl. 12, f. 1-3; Collazo: Porto Rico.
- Miscellaneous, R. W. Brown, 1937, 186, pl. 45, f. 31; pl. 60, f. 20; Green River: Fossil, Wyo.; Florissant: Florissant, Colo.
- MOHRODENDRON** Britton.
- Mohrodendron inopinum** Hollick, 1936, 162, pl. 60, f. 1b; pl. 103, f. 1a, 2; near Berg Lake, Yakutat-Copper River region; Kootznahoo Inlet, Admiralty Island, southeastern Alaska; Matanuska River below Moose Creek, Alaska.
- MOMIPITES** Wodehouse, 1933a, 511. Genotype: *M. coryloides* Wodehouse.
- Momipites coryloides** Wodehouse, 1933a, 511, f. 43; Green River: Parachute Creek, Garfield Co., Colo.
- MOMISIA** Dietrich.
- Momisia americana** Berry, 1924, 57, 158; Yegua: Nevils Prairie, Houston Co., Tex.; Barnwell: Columbia Co., Ga.—Ball, 1931, 120; Yegua: Nevils Prairie, Houston Co., Tex.
- MONHEIMIA** Debey & Ettingshausen.
- Monheimia aquisgranensis** Debey & Ettingshausen, 1859, Die urweltlichen acrobryen Kreidegebirges Aachen: K. Akad. Wiss. Wien, Denkschr., vol. 17, 211, pl. 4, f. 3-10.—Berry, 1925, 27, pl. 1, f. 1, 2; Ripley: Carroll Co., Tenn.
- Monocarpellites perkinsi** Berry, 1922g, 16, pl. 12, f. 1-6; Wilcox: Paris, Henry Co., Tenn.
- Monocotyledon of uncertain systematic affinities Hollick, 1924, 290, pl. 1, f. 3; no locality, West Indies.

Monocotyledon sp. (culm or petiole?) Hollick, 1927, 394, pl. 29, f. 2; St. Eugene silts: British Columbia.

Monocotyledon sp. (leaf?) Hollick, 1927, 394, pl. 29, f. 1; St. Eugene silts: British Columbia.

Monocotyledonous leaf, Berry, 1930d, 68; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Iris? sp. (Lesquereux.)□

MONTIA Linné. Mason, 1934, 415; discussion.

Montia fontana Linné. Mason, 1934, 157, pl. 8, f. 19; Tomales: Tomales Bay, Marin Co., Calif.

Montia howellii Watson. Mason, 1934, 158, pl. 8, f. 18; Tomales: Tomales Bay, Marin Co., Calif.

Montia perfoliata (Donn.) Howell. Potbury, 1932, 34, pl. 3, f. 3; San Bruno: San Mateo Co., Calif.—Mason, 1934, 158; Tomales: Tomales Bay, Marin Co., Calif.

Montia siberica (Linné) Howell. Mason, 1934, 159, pl. 8, f. 20; Tomales: Tomales Bay, Marin Co., Calif.

MOQUILLEA Aublet.

Moquillea mexicana Berry, 1923b, 8, pl. 3, f. 1; north of Palomares, Oaxaca, Mexico.

Moriconia americana Berry=**Moriconia cyclotoxon** Debey & Ettingshausen.

Moriconia cyclotoxon Debey & Ettingshausen.□Heer, 1882, 49, pl. 53, f. 1-9.—1883, 11, pl. 53, f. 10; pl. 54, f. 1c.—Berry, 1925, 30, pl. 3, f. 1, 2; Ripley: Henry and Carroll Cos., Tenn.—1928f, 445, pl. 11, f. 10-12; Ripley: Carroll Co., Tenn.—Seward, 1926, 101; Disko Isl., west Greenland.—Seward & Conway, 1935, 10, text-f. 1; Kingigtok, west Greenland.

Pecopteris kudlistensis Heer, 1874, 97, pl. 26, f. 18.

Moriconia americana Berry.□Berry, 1920c, 398; Black Creek: North Carolina.—1925, 31, pl. 3, f. 3, 4; Ripley: Henry Co., Tenn.

Moss, genus and species?, Knowlton, 1926, 24, pl. 8, f. 5, 6; Latah: Spokane, Wash.

Muscites? *lesquereuxi* Berry, 1928f, 442, pl. 11, f. 1-3; Ripley: Carroll Co., Tenn.

Selaginella laciniata, Berry not Lesquereux, 1925, 25; Ripley: Carroll Co., Tenn.

Muscites sternbergiana Dunker=**Sphenolepis sternbergiana** (Dunker) Schenk.

Musophyllum complicatum Lesquereux.□Knowlton, 1923, 155; Green River: 8 mi. south of Green River Station, Wyo.—Berry, 1926d, 99; Eocene: Newhykulston Creek, British Columbia—1930d, 68, so-called Bridger: Tipperary, Wind River Basin, Wyo.

Musophyllum elegans Engelhardt=**Heliconia elegans** (Engelhardt) Berry.

Musophyllum trinitense Hollick=**Heliconia elegans** (Engelhardt) Berry.

Musophyllum sp. Hollick, 1924, 290, pl. 14, f. 2; Matanzas, Cuba.

Musophyllum sp. Berry, 1926d, 192; Paskapoo: Alberta.

Musophyllum sp. Hollick, 1912a, 50; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.

Musophyllum sp. Hollick, 1928, 193, pl. 61, f. 1; Collazo: Porto Rico.

Myrcia ambiguaformis Berry, 1924, 191, pl. 63, f. 2; Fayette: Mossy Creek, Brazos Co., Tex.—Ball, 1931, 167, pl. 32, f. 11; Fayette: Boggy Creek, Brazos Co., Tex.

Myrcia bentonensis Berry.□?Berry, 1924, 192; Jackson: near New Edinburgh, Cleveland Co., Ark.

Quercus retracta Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi.

Myrcia catahouleensis Berry, 1916e, 242, pl. 60, f. 5, 6; Catahoula: Chalk Hills, near Rosefield, La.—1924, 191; Fayette: Trinity Co., Tex.; Barrera League, Brazos Co., Tex.—?Ball, 1931, 166, pl. 32, f. 6, 7; Fayette: Trinity Co., Tex.; Barrera League, Brazos Co., Tex.

Myrcia dubia Berry, 1925, 81, pl. 19, f. 3; Ripley: Henry and Carroll Cos., Tenn.

Myrcia denuntiatiua Hollick, 1928, 217, pl. 80, f. 5; Collazo: Porto Rico.

Myrcia eugenioides Hollick, 1924, 310, pl. 9, f. 6, 7; Collazo River, Porto Rico.—1928, 217; Collazo: Porto Rico.

Myrcia havanensis Berry, □Berry, 1916f, 300; Eutaw: Havana, Hale Co., Ala.—1919, 125, pl. 11, f. 4; pl. 28, f. 7; Ripley: near Camden, near Cypress, near Selmer, Tenn.—1925, 81, pl. 19, f. 9; Eutaw: Hale Co., Ala.; Ripley: Henry, McNairy and Carroll Cos., Tenn.

Myrica havanensis, Knowlton not Berry. □

Eucalyptus attenuata, Ward not Newberry, 1895, 371; Ripley: east of Pochontas, Tenn.

Myrcia pseudorostrata Hollick, 1924, 309, pl. 8, f. 6a; Siparia: Trinidad, British West Indies.

Myrcia saraviana Berry, 1923b, 21, pl. 5, f. 1; north of Palomares, Oaxaca, Mexico.

Myrcia trowbridgei Berry, 1924, 87, pl. 48, f. 3–5; Mt. Selman: Palofax, Webb Co., Tex.—Ball, 1931, 128, 167, pl. 19, f. 6; Mt. Selman: Palofax, Webb Co.; Yegua: Turkey Creek, Brazos Co.; Fayette: Boggy Creek, Brazos Co., Tex.

Myrcia vera Berry. □Berry, 1930, 118, pl. 36, f. 3; Holly Springs: Oxford, Lafayette Co., Miss.; Lagrange: Fayette Co.; near McKenzie, Carroll Co.; Puryear, Henry Co., Tenn.; Grenada: Cottage Grove, Henry Co., Tenn.; Wilcox: Boyds-ville, Clay Co.; Nevada Co., Ark.—Ball, 1931, 100; Carrizo?: La Prior Crossing, Zavalla Co., Tex.

Myrcia worthenii (Lesquereux) Berry. □

Salix worthenii Lesquereux. □Lesquereux, 1871, 382; Wilcox: Mississippi.

MYRCIOPHYLLUM Engelhardt. Berry, 1935, 52.

Myrciophyllum americanum Berry, 1935, 52, pl. 15, f. 3; Middle Ravenscrag: Loc. P 10–30, southern Saskatchewan.

Myrica acuminata Unger. □?Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Myrica acuminata, Lesquereux not Unger (part) = *Ulmus brownellii* Lesquereux.

Myrica acuminata, Lesquereux not Unger (part) = *Myrica scottii* Lesquereux.

Myrica acuminata Ball not Unger = *Myrica balli* LaMotte.

Myrica alkalina Lesquereux = *Rhus variabilis* (Newberry) Knowlton.

Myrica ashleei LaMotte, new name. This leaf does not correspond with the description of *Myrica idahoensis* Knowlton, 1898b, and appears to be a homonym.

Myrica idahoensis Ashlee, 1932, 81, pl. 2, f. 13; Latah: Elk River, Idaho. (Homonym, Knowlton, 1898b.)

Myrica balli LaMotte, new name.

Myrica acuminata, Ball not Unger, 1931, 39, pl. 13, f. 2–6; Indio: Barton's Ranch, Bastrop Co., Tex. (Homonym, Unger, 1845.)

Myrica banksiaefolia Unger. □Hollick, 1936, 75; Port Graham, Kenai Peninsula, Alaska.

Myrica banksiaefolia curta Hollick, 1936, 75, pl. 32, f. 2, 3; pl. 109, f. 14–16; Cape Douglas, Alaska Peninsula; mountain at head of north branch Russel Creek, Alaska Peninsula.

Myrica brittoniana Berry. □ Berry, 1925, 45, pl. 6, f. 9; Ripley: Henry Co., Tenn.

Myrica brittoniana obtusata Berry, 1925, 45, pl. 5, f. 1, 2; Ripley: Henry Co., Tenn.

Myrica californica Chamisso & Schlectendal. Chaney & Mason, 1930, 11; Pleistocene: Santa Cruz Island, Calif.—1933a, 59, pl. 7, f. 7, 8; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Mason, 1934, 154, pl. 7, f. 17, 18; Tomales: Tomales Bay, Marin Co., Calif.

Myrica callicomaefolia Lesquereux = *Ulmus brownellii* Lesquereux.

Myrica claiborniana Berry, 1924, 56; Gosport: Claiborne Landing, Monroe Co., Ala.

Myrica cliffwoodensis Berry. □ Berry, 1920e, 400; Black Creek: North Carolina.

Myrica cooperensis Berry, 1925, 42, pl. 6, f. 1; Ripley: Carroll Co., Tenn.

Myrica (Comptonia) cuspidata Dawson, not Lesquereux nor Knowlton = *Comptonia predryandroides* Berry.

Myrica diforme (Sternberg) Chaney, 1927a, 103, pl. 9, f. 1, 3, 5; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.

Asplenium diforme Sternberg. □

Comptonia diforme (Sternberg) Berry. □

Comptonia columbiana Dawson. □

Myrica drymeja (Lesquereux) Knowlton = *Ulmus brownellii* Lesquereux.

Myrica elegans Berry. □ Berry, 1920e, 400; Black Creek: North Carolina.

Myrica emarginata Heer. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottdale; Snow Plantation, Ala.—1922c, 161; Woodbine: Arthurs Bluff, Lamar Co., Tex.—Seward, 1925, 245; states that the type specimen is unworthy of being named.

Myrica fallax Lesquereux = *Ulmus brownellii* Lesquereux.

Myrica havanensis, Knowlton not Berry = *Myrcia havanensis* Berry.

Myrica? idahoensis Knowlton = *Arbutus idahoensis* (Knowlton) R. W. Brown.

Myrica idahoensis, Ashlee not Knowlton = *Myrica ashleei* LaMotte, new name.

Myrica insignis Lesquereux = *Dipteronia insignis* (Lesquereux) R. W. Brown.

Myrica johnstrupi (Heer) Berry, 1925, 43; Ripley: Carroll Co., Tenn.

Quercus johnstrupi Heer. □ White, 1898, 362; Patoot, Nugsuak Pen., West Greenland.—Seward, 1926, 115, text-f. 22; Nugsuak, West Greenland.

Quercus cuspidigera Heer, 1882, 25, pl. 56, f. 22.—White, 1898, 362; Patoot, Nugsuak Pen., West Greenland.

Myrica lanceolata Knowlton = *Arbutus idahoensis* (Knowlton) R. W. Brown.

Myrica langeana Heer. Hollick, 1912a, 50, Chickaloon: Matanuska River below Moose Creek, Alaska.

Myrica latiloba acutiloba Lesquereux = *Dipteronia insignis* (Lesquereux) R. W. Brown.

Myrica? lessigiana Lesquereux = *Artocarpus lessigiana* (Lesquereux) Knowlton.

Myrica? lessigii Lesquereux = *Artocarpus lessigiana* (Lesquereux) Knowlton.

Myrica lignitum (Unger) Saporta. □ Hollick, 1936, 76, pl. 32, f. 4; pl. 109, f. 13; Cape Douglas, Alaska Peninsula; mountain at head of north branch Russel Creek, Alaska Peninsula.

Myrica longa (Heer) Heer = *Laurophyllum plutonium* (Heer) Seward.

Myrica ludwigii, Lesquereux not Schimper = *Rhus variabilis* (Newberry) Knowlton.

Myrica minor Berry, 1925, 43, pl. 6, f. 2, 3; Ripley: Henry and Carroll Cos., Tenn.

Myrica minuta Knowlton, 1923, 157, pl. 37, f. 12; Green River: Greasewood Creek, 40 mi. southeast of Meeker, Colo.—Brown, R. W., 1934, 54, pl. 9, f. 1, 2; Green River: Kimball Creek northwest of De Beque, Colo.

Salix linearis Knowlton, 1923, 155, pl. 37, f. 8; Green River: 20 mi. west of Rio Blanco, Rio Blanco Co., Colo.

Myrica nervosa Knowlton. □ Berry, 1929j, 131; Frontier: near Cumberland, Wyo.

Myrica nigricans Lesquereux = *Cupanites nigricans* (Lesquereux) Berry.

Myrica oregoniana Knowlton = *Zelkova oregoniana* (Knowlton) R. W. Brown.

Myrica ornata Berry, 1925, 44, pl. 6, f. 4, 5; Ripley: Carroll Co., Tenn.—1928f, 442; Ripley: Carroll Co., Tenn.

Myrica pacifica Chaney, 1920a, 163, pl. 7, f. 5; Eagle Creek: Multnomah Co., Oreg.

Myrica praedrymeja Knowlton = *Planera nervosa* Newberry.

Myrica puryearensis Berry, 1930, 62, pl. 48, f. 36, 38; Holly Springs: Puryear, Henry Co.; McKenzie, Carroll Co., Tenn.

Myrica ripleyensis Berry. □ Berry, 1925, 41; Ripley: Henry and Carroll Cos., Tenn.

Myrica salicina Unger. □ Knowlton, 1923, 156; Green River; Green River, Wyo.

Myrica speciosa Unger, 1850, Gen. et Sp. plant. foss. 396.—1850, K. Akad. Wiss. (Wien), Math-naturwiss. Cl., Denkschr., vol. 2, 161 (31), pl. 28 (7), f. 7.—Hollick, 1936, 77, pl. 32, f. 1a; pl. 33, f. 3; Cape Douglas, Alaska Peninsula.

Myrica torreyi Lesquereux. □ Berry, 1925, 44, pl. 6, f. 6, 7; Ripley: Carroll Co., Tenn.—1928f, 442; Ripley: Carroll Co., Tenn.—Knowlton, 1922, 123, Laramie: near Crow Creek, Colo.; Post-Laramie: Black Buttes, Wyo.; Lance?: Converse Co., Wyo.; Mesa Verde: Point of Rocks, Wyo.; Vermejo: Rockvale, La Veta and Walsenburg, Colo.

Myrica torreyi, R. W. Brown not Lesquereux = *Sapindus dentoni* Lesquereux.

Myrica torreyi obtusata Berry, 1925, 45, pl. 6, f. 8; Ripley: Carroll Co., Tenn.

Myrica? *trifoliata* Newberry. □ ? Hollick, 1930, 67, pl. 31, f. 10; Melozi: Lower Yukon, Alaska.

Myrica uglowi Berry, 1926d, 100, pl. 18, f. 1; Joseph Creek, British Columbia.

Myrica undulata?, Lesquereux not Heer = *Rhus variabilis* (Newberry) Knowlton.

Myrica vindabonensis (Ettingshausen) Heer. □ Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—1936, 75; Ninilchik, Kenai Peninsula, Alaska.

Myrica wadiei Berry, 1925, 40, pl. 4, f. 4, 5; Ripley: Henry Co., Tenn.—1928f, 442; Ripley: Carroll Co., Tenn.

Myrica wadiei minor Berry, 1925, 41, pl. 4, f. 6-8; Ripley: Henry Co., Tenn.

Myrica wilcoxensis Berry. □ Ball, 1931, 39; Indio: Webb Co., Tex.

Myrica zachariensis, Lesquereux (part) not Saporta = *Rhus variabilis* (Newberry) Knowlton.

Myrica zachariensis, Lesquereux (part) not Saporta = *Ulmus brownellii* Lesquereux.

Myrica? sp. Ball, 1931, 39; Indio: Bastrop Co., Tex.

Myrica sp. Bell, 1928, 25, pl. 10, f. 1; Stikine River, British Columbia.

Myrica sp. Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.

Myrica sp. Knowlton, 1925, 157, pl. 37, f. 2 = *Rhus variabilis* (Newberry) Knowlton.

Myrica sp. Knowlton, 1923, 158, pl. 40, f. 13 (not 157, pl. 37, f. 2) = *Salix longiacuminata* Knowlton.

Myrica sp. Knowlton, 1930, 44, pl. 11, f. 7; Dawson: Ramah, Colo.

MYRICIPITES Wodehouse, 1933a, 505. Genotype: *M. dubius* Wodehouse.*

Myricipites dubius Wodehouse, 1933a, 506, f. 33; Green River: Parachute Creek, Garfield Co., Colo.

MYRIOPHYLLUM Pontedera.

Myriophyllum ambiguipites Wodehouse, 1933a, 516, f. 51; Green River: Parachute Creek, Garfield Co., Colo.

MYRISTICA Linné.

Myristica catahouleensis Berry, 1916i, 241, f. 1-6; Catahoula: Trinity Co., Tex.—1924, 163, pl. 32, f. 8-13; Catahoula?: Trinity Co., Tex.—Ball, 1931, 153, pl. 26, f. 6, 7; Catahoula? (Jackson?): Government Lock, Trinity Co., Tex.

Myristicophyllum panamense Berry, 1918, 29, pl. 13, f. 3; Culebra: Gaillard Cut, Canal Zone.

Myrsine borealis Heer=*Dalbergites borealis* (Heer) Seward.

Myrsine consobrina Heer=*Dalbergites borealis* (Heer) Seward.

Myrsine gaudini (Lesquereux) Berry.□Berry, 1913a, 571; Tuscaloosa: near Glen Allen; near Cottondale, Ala.—1920e, 405; Black Creek: North Carolina.—Hollick, 1930, 113, pl. 30, f. 1b; Kaltag: Lower Yukon, Alaska.

Myrsine pseudoferruginea Hollick, 1928, 218, pl. 82, f. 1-5a; pl. 85, f. 1a; Collazo: Porto Rico.

Myrtonium geinitzi (Heer) Berry=*Dammarites borealis* (Heer) Seward.

Myrtophyllum angustum (Velenovsky) Berry, 1925, 82, pl. 19, f. 1; Ripley: Henry, Carroll and Chester Cos., Tenn.; Buena Vista, Ga.; Eutaw: McBrides Ford, Columbus, Ga.

Eucalyptus angusta Velenovsky.□ Maiden, 1924, 226.

Myrtophyllum boreale Seward & Conway, 1935a, 24, pl. 5, f. 28; text-f. 20; Amisut: west Greenland.

Myrtophyllum geinitzi Heer=*Laurophyllum plutonium* (Heer) Seward.

Nageiopsis sp. Berry, 1929k, 50, pl. 8, f. 7; Lower Blairmore: southwest Alberta.

Nageiopsis angustifolia Fontaine.□Berry, 1929k, 49; Kootenay and Lower Blairmore: southwestern Alberta.—Hollick, 1930, 51, pl. 28, f. 2; Kaltag: Lower Yukon, Alaska.

Nageiopsis? montanensis Fontaine=*Podozamites inaequilateralis* (Fontaine) Berry.

Nageiopsis zamioides Fontaine.□Berry, 1929k, 49; Kootenay: southwest Alberta.—Hollick, 1930, 51, pl. 8, f. 3; Chignik: Alaska Peninsula.

NAJAS Linné.

Najas sp. Berry, 1924a, 17, pl. 1, f. 1-3; Pleistocene: Washington, D. C.

Nathorstia angustifolia Heer=*Lacopteris rigida* (Heer) Seward.

?*Nathorstia latifolia* Nathorst=*Lacopteris latifolia* (Nathorst) Seward & Conway.

Navicula lata, Penhallow, 1900, 336; Erie clays, Canada.

Nectandra antillanifolia Berry, 1924, 83, 187, pl. 38, f. 3; pl. 42, f. 3; pl. 52, f. 7; pl. 53, f. 1, 2; pl. 54, f. 5; Yegua: Rock Creek, Brazos Co., Tex.; Fayette: Miraflores, Webb Co., Tex.; Catahoula?: Trinity Co., Tex.; near Wellborn, Brazos Co., Tex.—Ball, 1931, 59, 164, pl. 2, f. 7; pl. 29, f. 2; pl. 30, f. 6; Fayette: near Miraflores, Webb Co.; Catahoula?: Trinity Co.; near Wellborn, Brazos Co.; near Bryan; Indio: Bartons Ranch, Bastrop Co., Tex.

Nectandra apalachicolensis Berry, 1916b, 51, pl. 9, f. 3; Alum Bluff: Alum Bluff, Liberty Co., Fla.

Nectandra areolata Engelhardt, 1895, Abh. Senck, Naturf. Gesell., vol. 19, 29, pl. 6, f. 1, 2; Santa Ana, Colombia.—Berry, 1921b, 177, pl. 27; Costa Rica.—1923b, 19, pl. 4, f. 3; north of Palomares, Oaxaca, Mexico.

- Nectandra arkansana* Berry, 1924, 82, 187, pl. 38, f. 2; Gosport: Claiborne Landing, Monroe Co., Ala.; Jackson: near El Dorado, Union Co., Ark.—Ball, 1931, 127, pl. 20, f. 1, 2; Yegua: Turkey Creek, Brazos Co., Tex.
- Nectandra curvatifolia* Engelhardt, 1895, Abh. Senck, Naturf. Gesell., vol. 19, 28, pl. 9, f. 3.—Berry, 1925a, 116, pl. 9, f. 6; Siparia: Trinidad, British West Indies.
- Nectandra elliptica* Ball, 1931, 60, pl. 16, f. 3; Indio: Bartons Ranch, Bastrop Co., Tex.
- Nectandra gosportensis* Berry, 1924, 82, pl. 16, f. 1-3; Lisbon: Newton, Newton Co., Miss.; Gosport: Claiborne Landing, Monroe Co., Ala.; Yegua: Nevils Prairie, Houston Co.; Cedar Creek, Angelina Co., Tex.; near Bienville, La.; near Stevens, Ouachita Co., Ark.—Ball, 1931, 127; Yegua: Nevils Prairie, Houston Co.; Lufkin, Angelina Co., Tex.
- Nectandra gosportensis jacksonensis* Berry, 1924, 187, pl. 35, f. 2; Catahoula?: Trinity Co., Tex.—Ball, 1931, 127, 165, pl. 20, f. 1, 2; pl. 21, f. 4; Yegua: Turkey Creek, Brazos Co., Tex.; Catahoula?: Trinity Co., Tex.
- Nectandra kügleri* Berry, 1925a, 115, pl. 12, f. 4, 5; Upper Forest: Trinidad, British West Indies.
- Nectandra lancifolia* (Lesquereux) Berry □ Knowlton, 1924, 87, pl. 13, f. 1; Animas: Pagosa Quad., Colo.
- Quercus lyellii* Heer □ Lesquereux, 1871, 382; Wilcox: Mississippi; Marshall, Colo.
- Persea lancifolia* Lesquereux □ Lesquereux, 1871, 382; Wilcox: Mississippi.
- Nectandra latifolia* Ball, 1931, 61, pl. 41, f. 1-3; Indio: Bartons Ranch, Bastrop Co., Tex.
- Nectandra parvula* Berry, 1930, 116, pl. 46, f. 3; 4; Grenada: Cottage Grove, Henry Co., Tenn.
- Nectandra presanguinea* Chaney & Sanborn, 1933, 73, pl. 18, f. 1, 2, 5, 7; Fisher: Goshen, Oreg.
- Nectandra prolifica* Berry, 1925, 78, pl. 17, f. 1-3; Ripley: Carroll Co., Tenn.—1928f, 442; Ripley: Carroll Co., Tenn.
- Nectandra pseudoantillana* Hollick, 1924, 298, pl. 15, f. 1, 2; Santa Clara, Cuba.
- Nectandra pseudocoriacea* Berry □ Ball, 1931, 62; Wilcox: Port Oak Prairie, Anderson Co., Tex.
- Nectandra puryearensis* Berry □ Ball, 1931, 61, pl. 43, f. 1; Indio: Little Sandy Creek, Bastrop Co., Tex.
- Nectandra silvarenaria* Berry, 1925a, 116, pl. 8, f. 3; Forest: Trinidad, British West Indies.
- Nectandra tehuatepecensis* Berry, 1923b, 18, pl. 1, f. 6; Palomares, Oaxaca, Mexico.
- Nectandra wilcoxensis* Berry, 1930, 116, pl. 40, f. 5, 6; Grenada, Cottage Grove, Henry Co., Tenn.—Ball, 1931, 62, pl. 2, f. 1, 2; pl. 44, f. 2, 3; Indio: Bartons Ranch and Little Sandy Creek, Bastrop Co., Tex.
- Nectandra woodringi* Berry, 1921b, 177, pl. 26, f. 1; Costa Rica.
- Negundo acutifolia* (Lesquereux) Pax □
- Negundooides acutifolia* Lesquereux □ Lesquereux, 1871, 380; Dakota: Salt Creek, Dakota Co., Nebr.
- Negundo decurrens* Lesquereux □ Knowlton, 1930, 100, pl. 45, f. 10; Denver: Golden, Colo.
- Negundo fremontensis* Berry, 1930d, 72, pl. 11, f. 1-3; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Negundo knowltoni Berry, 1930, 98, pl. 21, f. 7; pl. 42, f. 7; Grenada: near Somerville, Fayette Co., Tenn.—Ball, 1931, 83, pl. 17, f. 2; Indio: Bastrop Co., Tex.

Negundooides acutifolia Lesquereux=*Negundo acutifolia* (Lesquereux) Pax.

NELUMBITES Berry. □ Berry, 1935, 38; discussion.

Nelumbites striata Berry, 1935, 38, pl. 8, f. 1-3; Whitemud: Loc. P 5-30, southern Saskatchewan.

Nelumbium arcticum Heer, 1882, 92, pl. 40, f. 6; West Greenland.—Seward, 1925, 244.

Nelumbium lakesianum Lesquereux=*Nelumbo tenuifolia* Knowlton.

Nelumbium lakesii Lesquereux=*Nelumbo tenuifolia* Knowlton.

Nelumbium sp. Dawson, 1879a, B 186; Ninemile Creek; Tulameen River, British Columbia.

NELUMBO Adanson. □ Knowlton, 1930, 88; discussion.

Nelumbo crossii Knowlton, 1930, 93, pl. 41, f. 3; Dawson: Sedalia, Colo.

Nelumbo dawsoni Hollick. □ Berry, 1935, 36, pl. 8, f. 1; Whitemud: Loc. 7, P 5-30, southern Saskatchewan.

Nelumbo laramiense Hollick. □

Nelumbo intermedia Knowlton. □

Lenina scutata, Lesquereux not Dawson. □

Brasenia antiqua Dawson, 1885, 514; Belly River: near Medicine Hat, Alberta.

Nelumbo intermedia Knowlton=*Nelumbo dawsoni* Hollick.

Nelumbo lakesiana Knowlton=*Nelumbo tenuifolia* Knowlton.

Nelumbo laramiense Hollick=*Nelumbo dawsoni* Hollick.

Nelumbo protolutea Berry. □ ? Hollick, 1936, 113, pl. 61, f. 1-3; ten miles below Rampart, Yukon River, central Yukon district, Alaska.

Nelumbo tenuifolia Knowlton. □ Knowlton, 1922, 141, pl. 26, f. 7; Denver: Sand Creek, Colo.—1930, 92, pl. 41, f. 2; Denver: east of Denver, Colo.—Berry, 1935, 37, pl. 7, f. 2, 3; Whitemud: Loc. P 5-30; Middle Ravenscrag: Loc. 1269, southern Saskatchewan.

Nelumbium tenuifolium Lesquereux. □

Nelumbium lakesianum Lesquereux. □

Nelumbium lakesii Lesquereux. □ Lesquereux, 1888, 53; Denver: Golden, Colo.

Nelumbo lakesiana Knowlton. □ Knowlton, 1924, 88; Animas: Pagosa Quad., Colo.—1930, 91, pl. 41, f. 1; pl. 42, f. 2; Denver: Golden, Colo.; Dawson: Sedalia, Colo.

Nelumbo weymouthi R. W. Brown, 1933, 7, pl. 1, f. 1; Aspen: southwest Wyoming.

Nelumbo? sp. Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.

NEOCALAMITES Halle. □ Genotype: *N. hoerensis* (Schimper) Halle.

Neocalamites carcinoides Harris, 1931b, 25, pl. 4, f. 2, 3, 5-7; pl. 5, f. 1-5; pl. 6, f. 1-6; text-f. 5A-D; Thaumatopteris Zone; Scoresby Sound, East Greenland.

Neocalamites cf. *inopinata* (Zeiller) Harris, 1926, 51, pl. 4, f. 7; pl. 9, f. 1, 4; Rhaetic: Scoresby Sound, East Greenland.

Neocalamites carrerei (Zeiller) Halle, 1908, K. Svenska Vet. Akad. Handl., vol. 43, 6.—Humphreys, 1916a, 77; Santa Clara Coal Field, Sonora, Mexico.

Schizoneura carrerei Zeiller, 1903, Fl. Faun. des Gites de Charbon du Tonkin, 137-143, pl. 36, f. 1, 2; pl. 37, f. 1; pl. 38, f. 1-8.

Neocalamites hoerensis (Schimper) Halle. Harris, 1926, 51, pl. 4, f. 8; pl. 9, f. 2, 5; text-f. 1a; Rhaetic: Scoresby Sound, east Greenland.—1931b, 22-25, text-f. 4A-B; Lepidopteris and Thaumatopteris Zones: Scoresby Sound, east Greenland.

Neocalamites cf. *inopinata* (Zeiller) Harris=*Neocalamites carcinoides* Harris

NEPETA Rivinus.

Nepeta? pseudaeluri Cockerell, 1927a, 54, f. 1; Florissant: Florissant, Colo.

NILSSONIA Brongniart (spelled *Nilsonia* in Knowlton's catalogue), 1825, Observations sur les végétaux fossiles renfermés dans les grès de Hoer en Scanie., Ann. Sci. Nat., vol. 4, p. 200.—Harris, 1932, 40.

Nilssonina alaskana Hollick, 1930, 45, pl. 6, f. 3-6a, 7, 8a, 9, 10; pl. 7, f. 1, 2a, 3a, 5, 7-9a; Chignik: Alaska Peninsula; Nulato: Lower Yukon; Kaltag: Lower Yukon, Alaska.

Nilssonina comptula approximata Hollick, 1930, 44, pl. 6, f. 1; Kaltag: Lower Yukon, Alaska.

Nilssonina densinerve (Fontaine) Berry, 1911a, 362, pls. 57, 58; Patuxent: Maryland.—1929k, 46; Lower Blairmore: southwest Alberta.

Platypterigium densinervé Fontaine.□

Platypterigium rogersianum Fontaine.□

Nilssonina cf. *densinerve* (Fontaine) Bell, 1928b, 28, pl. 14; Mattagami: Ontario.

Nilssonina fragilis Harris, 1932, 47, 4, f. 2-4, 6, 11; text-f. 25A-E; Lepidopteris and Thaumopteris Zones: Scoresby Sound, east Greenland.

Nilssonina gibbsii (Newberry) Hollick.□

Nilssonina johnstrupi Heer.□White, 1898, 349; Pagtorfik, Nugsuak Pen., west Greenland.

Nilssonina incisoserrata Harris, 1932, 49, pl. 4, f. 1, 7-10; pl. 5, f. 1-7, 11 (top), 15; pl. 8, f. 12; text-f. 26; Thaumopteris Zone: Scoresby Sound, East Greenland.

Nilssonina polymorpha Harris (part) not Schenk, 1926, 73, pl. 5, f. 4b, 6a; text-f. 10E; Rhaetic: Scoresby Sound, East Greenland.

Nilssonina mediana Leckenby. Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

Nilssonina mehli Berry, 1929j, 132, pl. 20; Frontier: near Lander, Wyo.

Nilssonina minor Harris, 1932, 49, pl. 4, f. 5; pl. 5, f. 8; text-f. 25F-H; Lepidopteris Zone: Scoresby Sound, east Greenland.

Nilssonina nigracollensis Wieland.□Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

Nilssonina obtusa (Nathorst) Harris, 1932, 43, pl. 3, f. 5, 10, 13; text-f. 24; Thaumopteris Zone: Scoresby Sound, east Greenland.

Nilssonina polymorpha, Harris (part) not Schenk, 1926, 73, pl. 5, f. 6b; text-f. 10B, D, F, G, H; Rhaetic: Scoresby Sound, east Greenland.

Nilssonina oregonensis (Fontaine) Berry.□Berry, 1911, 361; Patuxent?: Chinkapin Hollow, Va.

Nilssonina parvula (Heer) Fontaine.□Wilson, 1914, 409; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

Nilssonina pasaytensis Penhallow=*Nilssonina schaubergensis* (Dunker) Nathorst.

Nilssonina polymorpha Schenk.□Newberry, 1888a, 349; near San Juancito, Honduras.—Harris, 1926, 73, text-f. 10A, C; Rhaetic: Scoresby Sound, east Greenland.—1932, 46; Thaumopteris Zone: Scoresby Sound, east Greenland.

Nilssonina polymorpha, Harris (part) not Schenk=*Nilssonina incisoserrata* Harris.

Nilssonina polymorpha, Harris (part) not Schenk=*Nilssonina obtusa* (Nathorst) Harris.

Nilssonina pseudopterophylloides Hollick, 1930, 44, pl. 6, f. 2; Kaltag: Lower Yukon, Alaska.

Nilssonia schaubergensis (Dunker) Nathorst. □ Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.—Berry, 1929k, 47; pl. 7, f. 5; Lower Blairmore: southwest Alberta.

Nilssonia pasaytensis Penhallow. □

Nilssonia cf. *schaubergensis* (Dunker) Nathorst. Wilson, 1914, 408; Kootenai: Pimainus Hills north of Spence Bridge, Thomson River, British Columbia.

Nilssonia serotina Heer, 1878, 19, pl. 2, f. 1a, 2-5.—Hollick, 1930, 43, pl. 4, f. 1-7; pl. 5, f. 1-5a; pl. 7, f. 6a, 6b, 10a; pl. 29, f. 3b, 5a; pl. 30, f. 2a, 3b; Chignik: Alaska Peninsula.

Nilssonia steamboatea Reagan, 1924, 141, f. 1c; Dakota: Steamboat Canyon, 18 mi. west of Ganado, Ariz.

Nilssonia yukonensis Hollick, 1930, 42, pl. 3, f. 1-7a; pl. 7, f. 4; Melozi, Kaltag: Lower Yukon, Alaska.

Nilssonia undulata Harris, 1932, 41, pl. 3, f. 3, 8, 9, 11; text-f. 23; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Nilssonia sp. Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

NIPADITES Bowerbank. □ Noé, 1936a, 444.

Nipadites burtini umbonatus Bowerbank. □ Berry, 1914e, 57; Grenada: Grenada Co., Miss.—1924, 150, pl. 64, f. 6; Fayette: Mossy Creek, Brazos Co., Tex.—Ball, 1931, 149; Fayette: Boggy Creek, Brazos Co., Tex.

Nipadites sp. Berry, 1930, 56, pl. 50, f. 11-13; no locality; Grenada: Tennessee.

Noeggerathiopsis hislopi Bunbury. Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 112, pl. 37, f. 1; pl. 38; pl. 39, f. 1; pl. 60, f. 2, 3; Liassic: Mixteca Alta, Oaxaca, Mexico.

Noeggerathiopsis sp. Newberry, 1888a, 350; near San Juancito, Honduras.

Nordenskiöldia borealis Heer. □ Knowlton, 1923, 176; Green River: Green River, Wyo.—Berry, 1930d, 76; so-called Bridger: Tipperary, Wind River Basin, Wyo.—Hollick, 1936, 169, pl. 120, f. 1, 2; Portage (Balboa) Bay, Alaska Peninsula.

Nuphar cordifolius (Heer) Fritel=*Menispermites nordenskiöldi* (Heer) Seward.

Nymphaea diatoma MacGinitie=*Nymphaeites nevadensis* (Knowlton) R. W. Brown.

NYMPHAEITES Sternberg, 1825, Flora der Vorwelt, vol. 1 (Tentamen), p. xxxix. Heer emend, Fl. Foss. Arct., vol. 2, no. 3, 65, 1870.—Hollick, 1930, 74; discussion.

Nymphaeites diatoma (MacGinitie) Arnold=*Nymphaeites nevadensis* (Knowlton) R. W. Brown.

Nymphaeites exemplaris Hollick, 1930, 75, pl. 40, f. 4; Seventymile River, Upper Yukon, Alaska.—Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Nymphaeites nevadensis (Knowlton) R. W. Brown, 1937c, 509, text-f. 10; Esmeralda: Nevada; Trout Creek: Trout Creek, Harney Co., Oreg.; Payette: west of Weiser, Idaho.

Spathyema? nevadensis Knowlton. □

Unknown plant, Knowlton. □

Nymphaea diatoma MacGinitie, 1933, 55, pl. 7, f. 6; pl. 8, f. 1; Trout Creek, Trout Creek, Harney Co., Oreg.

Nymphaeites diatoma (MacGinitie) Arnold, 1937, 85; Trout Creek: Trout Creek, Harney Co., Oreg.

Nymphaeites rotundus Arnold, 1937, 84, text-f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.

NYMPHAEOPHYLLUM Arnold, 1935, 380. No genotype designated; no description either of genus or species. *Genus nudum*.

Nymphaeophyllum sp. nov. Arnold, 1935, 380; Trout Creek: Trout Creek. Harney Co., Oreg.

Nyssa aquatica, Knowlton not Marshall=*Nyssa biflora* Walter.

Nyssa arctica Heer. □ Hollick, 1912a, 38; west of Kings River, Matanuska Valley, Alaska.—1936, 159; Unga Island off south coast of Alaska Peninsula.

Nyssa biflora Walter. □ Berry, 1926b, 115, pl. 57, f. 4; Chowan: Neuse River, Wayne Co., N. C.

Nyssa caroliniana, Hollick not Poiret. □

Nyssa aquatica, Knowlton not Marshall. □

Nyssa caroliniana, Hollick not Poiret=*Nyssa biflora* Walter.

Nyssa crenata Chaney, 1920a, 180, pl. 20, f. 1-3; Eagle Creek: Multnomah Co., Oreg.—1927a, 130, pl. 15, f. 11; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.

Nyssa curta Perkins. □ Berry, 1930, 125, pl. 19, f. 10; Holly Springs: Silerton Road, Taylor Farm, Chester Co., Tenn.

Nyssa denveriana Knowlton. □ Knowlton, 1930, 120; Denver: Golden, Colo.

Nyssa lanceolata Lesquereux (part), 1878, 245, pl. 35, f. 6 only; Denver: Golden, Colo.

Nyssa hesperia Berry, 1931a, 42, pl. 13, f. 9-11; Latah: Grand Coulee, Wash.—1934, 121; Latah: White Bird; Linson Valley, Idaho.—Brown, R. W., 1937c, 514; Latah: Spokane, Wash.

Nyssa knowltoni, R. W. Brown not Berry, 1937, 184, pl. 62, f. 1-3; Latah: Spokane, Wash.

Nyssa jacksoniana Berry, 1924, 193, pl. 65, f. 7; Fayette: Mossy Creek, Brazos Co., Tex.—Ball, 1931, 168, pl. 24, f. 7; Boggy Creek, Brazos Co., Tex.

Nyssa knowltoni Berry, 1929f, 261, pl. 59, f. 7; Latah: Spokane, Wash.—1934, 122; Latah: near White Bird, Idaho.—LaMotte, 1936a, 147; Upper Cedarville: 49 Camp, Washoe Co., Nev.—Arnold, 1937, 97, pl. 3, f. 2; Sucker Creek: Fenwick Ranch, Malheur Co., Oreg.—MacGinitie, 1937, 150, pl. 12, f. 3; pl. 14, f. 3; Weaverville: Hay Fork, Redding Creek, Big Bar and Hyampom, Trinity Co., Calif.

Phyllites sucosus LaMotte, 1936, 141, pl. 10, f. 6-8; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Nyssa knowltoni, R. W. Brown not Berry=*Nyssa hesperia* Berry.

Nyssa cf. *knowltoni* Berry. Brooks, 1935, 300, pl. 20, f. 3; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.

Nyssa lanceolata Lesquereux. □ Knowlton, 1930, 112, pl. 52, f. 2; Denver: Golden, Colo.; Dawson: Mosby, Colo.

Nyssa lanceolata Lesquereux (part)=*Nyssa denveriana* Knowlton.

Nyssa magnifica (Knowlton) Berry, 1929f, 261; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.

Carpites magnifica Knowlton, 1926, 50, pl. 29, f. 10; Latah: Spokane, Wash.

Nyssa? *obovata* Knowlton, 1930, 121, pl. 54, f. 1; Denver: Golden, Colo.

Nyssa? *racemosa* Knowlton=*Leguminosites arachnioides minor* Berry.

Nyssa·*snowiana* Lesquereux. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

Nyssa tennesseensis Berry, 1930, 125, pl. 19, f. 9; Holly Springs: Shandy, Hardeman Co., Tenn.

Nyssa texana Berry, 1924, 192, pl. 22, f. 5; pl. 39, f. 3; Yegua: near Lufkin, Angelina Co., Tex.; Catahoula?: Trinity Co., Tex.—Ball, 1931, 129, 168, pl. 20, f. 2; Yegua: Angelina and Brazos Cos., Tex.; Catahoula?: Trinity Co., Tex.

Nyssa wilcoxiana Berry. □ Berry, 1924, 89; Yegua: south of Smithville, Bastrop Co., Tex.—1930, 126, pl. 19, f. 6-8; pl. 39, f. 8-9; Wilcox: many localities.—Ball, 1931, 129; Yegua: Smithville, Bastrop Co., Tex.

Nyssidium ekmani Heer, 1870, 62, pl. 15, f. 1-7.—1883, 118, pl. 92, f. 8.—Hollick, 1936, 159, pl. 30, f. 4b; pl. 120, f. 8-12; Kootznahoo Inlet, Admiralty Island, southeastern Alaska; Matanuska Coal Field; south bank Yukon River above Rampart, central Yukon region, Alaska.

OCHROMA Swartz.

Ochroma murata R. W. Brown, 1934, 64, pl. 14; Green River: Roan Creek northwest of De Beque, Colo.

Ocotea eocernua Chaney & Sanborn, 1933, 74, pl. 19, f. 1-3, 5; Fisher: Goshen, Oreg.—Potbury, 1935, 68, pl. 6, f. 1; La Porte, Plumas Co., Calif.—MacGinitie, 1937, 138; Weaverville: Big Bar, Trinity Co., Calif.

Ocotea ovoidea Chaney & Sanborn, 1933, 75, pl. 20, f. 1-3; Fisher: Goshen, Oreg.

Ocotea pseudomartinicensis Hollick=*Persea macrophylloides* Engelhardt.

ODOSTEMON Rafinesque=**BERBERIS** (Tournefort) Linné (part)=**MAHONIA** Nuttall.

Odostemon eocenia R. W. Brown=*Mahonia eocenia* (R. W. Brown) Arnold.

Odostemon florissantensis Cockerell=*Mahonia hakeaefolia* (Lesquereux) Arnold.

Odostemon hakeaefolia (Lesquereux) Knowlton=*Mahonia hakeaefolia* (Lesquereux) Arnold.

Odostemon hollicki Dorf=*Mahonia hollicki* (Dorf) Arnold.

Odostemon hollicki, MacGinitie not Dorf=*Mahonia reticulata* (MacGinitie) R. W. Brown.

Odostemon marginata (Lesquereux) Knowlton=*Mahonia marginata* (Lesquereux) Arnold.

Odostemon reynoldsii Hollick=*Fraxinus flexifolius* (Lesquereux) R. W. Brown.

Odostemon simplex (Newberry) Cockerell=*Mahonia simplex* (Newberry) Arnold.

Odostemon simplex, Berry (part) not Cockerell=*Mahonia trainii* Arnold.

Odostemon simplex, Berry (part) not Cockerell=*Quercus browni* Brooks.

OENANTHE (Tournefort) Linné.

Oenanthe sarmentosa Presl. Mason, 1934, 169, pl. 10, f. 15-17; Tomales: Tomales Bay, Marin Co., Calif.

OENOTHERA Linné.

Oenothera sp. Laudermilk & Munz, 1934a, 37, pl. 3, f. 6; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.

Oleandra arctica Heer=*Taeniopteris arctica* (Heer) Seward.

Oleandra graminaefolia Knowlton. □ Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.—Berry, 1929k, 38, pl. 5, f. 5, 6; Kootenai: southwest Alberta.—1932h, 210; Bull Head Mt. (Gething member); Peace River Valley, British Columbia.

Pityphyllum graminaefolium (Knowlton) Bell, 1928b, 29, pl. 18, f. 1-5; Mattagami: Ontario.

Oleandra sp. Wilson, 1914, 408; Kootenai: Pimainus Hills north of Spence Bridge, Thomson River, British Columbia.

Onoclea hebradica (Forbes) Gardner & Ettingshausen=*Onoclea sensibilis* Linné.

Onoclea sensibilis Linné. Newberry, 1868, 39.—Lesquereux, 1878a, pl. 8, f. 1; pl. 9, f. 1-3.—Heer, 1883, 48, pl. 70, f. 6.—Berry, 1935a, 249, pl. 23, f. 1; Pen-

Onoclea sensibilis—Continued.

sauken: near Durhams Corner, Middlesex Co., N. J.—Hollick, 1936, 35, pl. 2, f. 2-4; Hamilton Bay, Kupreanof Isl.; Matanuska Coal Field, Alaska.

Filicites? hebridicus Forbes, 1851, Geol. Soc. London, Quart. Jour., vol. 7, pt. 1, 103, pl. 2a, b.

Woodwardites arcticus Heer, 1868, 86, pl. 1, f. 16, 16b; pl. 45, f. 2c; pl. 48, f. 9.

Onoclea hebradica (Forbes) Gardner & Ettingshausen, 1882. Mon. British Eocene Fl., vol. 1, pt. 3, 68, pl. 13, f. 5, 3a, 6, 6a.

Onoclea sensibilis arctica Heer, 1883, 260, pl. 70, f. 6.—Hollick, 1912a, 49; Chickaloon; Matanuska River below Moose Creek, Alaska.

Onoclea sensibilis fossilis Newberry. □ Berry, 1935, 16, pl. 1, f. 2, 3; pl. 2, f. 1; Middle, Upper Ravensrag: Loc. 2, 11, 17, P 10-30, 23, 27, southern Saskatchewan.

Woodwardia latiloba Lesquereux. □ Lesquereux, 1888, 43; Denver: Golden, Colo.—Cross, 1895, 211; Middle Park: Middle Park, Colo.—Knowlton, 1930, 21, Denver: Golden, Colo.; Dawson: Sedalia, Colo.

Woodwardia latiloba minor Lesquereux. 1874b, 391.—1878, 54, pl. 4, f. 9, 9a; Denver: Golden, Colo.

Onoclea sensibilis arctica Heer=**Onoclea sensibilis** Linné.

Onoclea sensibilis fossilis Newberry=**Onoclea sensibilis** Linné.

ONTHEODENDRON Sahni & Rao, 1933, Asiatic Soc. Bengal Jour. & Proc. new ser., vol. 27, no. 2, 199. Genotype: *O. florini* Sahni & Rao.

Ontheodendron sternbergi (Nilsson) Harris, 1935, 78, pl. 11, f. 5, 12-15, 18; pl. 15, f. 1, 4-11; text-f. 31a-d; Lediopteris Zone: Scoresby Sound, east Greenland.

Abies sternbergi Nilsson, 1831, K. Svenska Vet. Akad. Handl. for 1831, 350, pl. 3, f. 1, 2.

Palissya brauni, Nathorst not Endlicher, 1878, K. Svenska Vet. Akad. Handl. vol. 16, no. 7, 28.

Palissya sternbergi (Nilsson) Nathorst, 1886, Om floran i Skånes kolförande bildningar. III, Ser. C, no. 85, 107; pl. 23, f. 8-12; pl. 24; pl. 25, f. 5-8.

Onychiopsis elongata (Geyl.) Seward=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Onychiopsis goepperti (Schenk) Berry=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Onychiopsis latiloba (Fontaine) Berry=**Sphenopteris dentata** (Velenovský) Seward.

Onychiopsis mantelli Nathorst=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Onychiopsis nervosa (Fontaine) Berry. □ Hollick, 1930, 40, pl. 28, f. 5a; Kaltag: Lower Yukon, Alaska.

Onychiopsis psilotoides (Stokes & Webb) Ward=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Onychiopsis? sp. Bell, 1928b, 30, pl. 18, f. 6-9; Mattagami: Ontario.

Onychiopsis sp. Berry, 1932h, 209; Bull. Head Mt. (Gethring Member): Peace River Valley, British Columbia.

Ophioglossum allenii Lesquereux=**Koelreuteria allenii** (Lesquereux) Edwards.

Ophioglossum hastatifforme Cockerell=Sporophylls, Berry.

Oreodaphne alabamensis Berry. □ Berry, 1922c, 172, pl. 37, f. 1; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Oreodaphne brazosensis Berry, 1924, 186, pl. 60, f. 1; Fayette: Barrera League, Brazos Co., Tex.—Ball, 1931, 164, pl. 33, f. 4; Barrera League, Brazos Co., Tex.

Oreodaphne coloradensis R. W. Brown, 1934, 57, pl. 10, f. 1, 2; Green River: Parachute Creek; west of Highmore, Colo.

Oreodaphne couchatta Berry. □ Ball, 1931, 67, pl. 2, f. 8; Indio: Bartons Ranch, Bastrop Co., Tex.

Oreodaphne eocenia R. W. Brown, 1934, 57, pl. 13, f. 6; Green River: Piceance Creek north of Rifle, Colo.

Oreodaphne inequilateralis Berry, 1924, 80; Yegua: Rabb Creek, Fayette Co., Tex.—Ball, 1931, 126, 164, pl. 33, f. 3; Yegua: Nevils Prairie, Houston Co.; Jackson?: Rock Creek, Brazos Co., Tex.

Oreodaphne intermedia Berry, 1930, 116, pl. 29, f. 8, 9; Holly Springs: Harde-man Co., Tenn.

Oreodaphne knowltoni R. W. Brown=*Oreodaphne lancifolia* (Lesquereux) R. W. Brown.

Oreodaphne lancifolia (Lesquereux) R. W. Brown, 1934, 57; Green River: Uinta Co., Wyo.

Sapindus lanoifolius Lesquereux, 1883, 182, pl. 37, f. 9 only; Green River: Uinta Co., Wyo. (not Florissant, Colo.)—Knowlton, 1916b, 283; locality given in error as Florissant, Colo.

Oreodaphne knowltoni R. W. Brown, 1929, 286, pl. 72, f. 9; Green River: north-west of De Beque, Colo.

Oreodaphne litsaeformis Lesquereux.□?Chaney, 1920a, 173; Eagle Creek: Mult-nomah Co., Oreg.

Oreodaphne mississippiensis Berry.□?Hollick, 1928, 200, pl. 67, f. 8-10; Collazo: Porto Rico.

Oreodaphne obtusifolia Berry.□Berry, 1924, 80; Yegua: Rabb Creek, Fayette Co., Tex.—Ball, 1931, 67, 126, pl. 2, f. 3; Wilcox: Bartons Ranch, Bastrop Co., Tex.; Yegua: Nevils Prairie, Houston Co., Tex.; Jackson?: Rock Creek, Brazos Co., Tex.

Oreodaphne pagosensis Knowlton, 1924, 87, pl. 15, f. 5; Animas: Pagosa Quad., Colo.

Oreodaphne perseaeformis Ball, 1931, 67, pl. 17, f. 1; Indio: Bartons Ranch, Bastrop Co., Tex.

Oreodaphne pseudoguianensis Berry.□Berry, 1919g, 8, pl. 3, f. 1-3, 4a; Basal Tuffs: Barilla Mts., Tex.—Ball, 1931, 68; Basal Tuffs: Barilla Mts., Tex.

Oreodaphne puryearensis Berry.□Ball, 1931, 69; Carrizo: Carrizo Springs, Dimmit Co., Tex.

Oreodaphne salinensis Berry.□Ball, 1931, 69, Wilcox: Mansfield, De Soto Parish, La.

Oreodaphne texana Ball, 1931, 69, pl. 45, f. 1-6; Indio: Little Sandy Creek, Bastrop Co., Tex.

Oreodaphne viridiflumensis Knowlton, 1923, 163, pl. 38, f. 6; Green River: Rio Blanco Co., 40 mi. southwest of Meeker, Colo.

OREODOXITES Goepfert.□Noé, 1936a, 444.

Oreodoxites plicatus Lesquereux=*Paloreodoxites plicatus* (Lesquereux) Knowlton.

Oreopanax conditi LaMotte, 1936, 139, pl. 12, f. 1, 2; pl. 13, f. 1-3; Upper Cedar-ville: 49 Camp, Washoe Co., Nev.

Oreopanax gigantea (Knowlton) Arnold, 1937, 100.

Laurus pedatus Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi.

Oreopanax mississippiensis Berry.□Berry, 1924, 88, 192, pl. 22, f. 3, 4; Lisbon: near Lexington, Holmes Co., Miss.; Forest Hill: north of Jackson, Miss.

Oreopanax precoccinea (Brooks) Arnold, 1937, 98, pl. 10, f. 1-5; Sucker and Carter Creeks; Ballentine Ranch, Harney Co., Oreg.

Quercus precoccinea Brooks, 1935, 292, pl. 16, f. 1; Ballantyne Ranch near Home-dale, Idaho.

Oreopanax wilcoxensis Berry.□Berry, 1930, 122, pl. 20; pl. 21, f. 1-4; Holly Springs: Mill Creek, Shandy, Bolivar, Hardeman Co., Tenn.; Carrizo: La Prior, Zavalla Co., Tex.

Oreopanax wilcoxensis crenulatus Berry, 1930, 122, pl. 27, f. 3; Holly Springs: Mill Creek, Hardeman Co., Tenn.

ORONTIUM Linne.

Orontium fossile Cockerell, 1926a, 69, f. 1; Florissant: Florissant, Colo.

Osmanthus pedatus (Lesquereux) Berry.□

Laurus pedatus Lesquereux.□Lesquereux, 1871, 382; Wilcox: Mississippi.

Osmunda arctica Heer=**Cladophlebis arctica** (Heer) Seward.

Osmunda dicksonioides? Fontaine (part)=**Gleichenites nordenskiöldi** (Heer) Seward.

Osmunda doroschkiana Goeppert.□Wilson, 1916, 207; Sheep Creek, Yukon Terr.—Hollick, 1936, 40, pl. 2, f. 1a; pl. 109, f. 7; Herendeen Bay, Alaska Peninsula; Port Camden, southeastern Alaska; Unga Isl., Alaska Peninsula.

Osmunda dubiosa Hollick, 1936, 40, pl. 5, f. 2; Cape Douglas and Unga Isl., Alaska Peninsula.

Osmunda heerii Gaudin.□Wilson, 1914, 409; Kenai: Sourdough Mine, Coal Creek, Yukon Terr.

Osmunda macrophylla (Penhallow) Penhallow.□

Osmundites macrophyllus Penhallow, 1906a, 391a; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.

Osmunda obergiana Heer=**Cladophlebis frigida** (Heer) Seward.

Osmunda? *sepulta* (Newberry) Knowlton, 1923, 150; Green River: Green River, Wyo.

Pecopteris (*Phegopteris*) *sepulta* Newberry, 1883, 503; Green River: Green River, Wyo.

Pecopteris (*Cheilanthes*) *sepulta* (Newberry) Newberry, 1898; 12, pl. 62, f. 5, 5a, 6; Green River: Green River, Wyo.

Osmunda? sp. Berry, 1919b, 9; Pleistocene: McNairy Co., Tenn.

Osmundites macrophyllus Penhallow=**Osmunda macrophylla** (Penhallow) Penhallow.

OSMUNDOPSIS Harris, 1931, Biological Reviews, vol. 6, No. 2, 133.—1931b, 48. Genotype: *O. sturi* (Raciborski) Harris.

Osmundopsis plectrophora Harris, 1931b, 49, pl. 12, f. 2, 4–10; text-f. 15, 16; Thaumatopteris Zone: Scoresby Sound, East Greenland.

Ostrya oregoniana Chaney, 1927a, 106, pl. 9, f. 12; pl. 10, f. 1–4; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Berry, 1934, 107; Latah: east of White Bird, Idaho—Arnold, 1935, 380, Trout Creek: Trout Creek, Harney Co., Oreg.—LaMotte, 1936, 118, pl. 9, f. 3; Upper Cedarville: 49 Camp, Washoe Co., Nev.—Dorf, 1936, 111, pl. 2, f. 10; Idaho: near Weiser, Idaho—Arnold, 1937, 84, pl. 1, f. 2, 3; Trout Creek: Trout Creek, Harney Co.; Sucker Creek: Fenwick Ranch, Malheur Co., Oreg.—Brown, R. W., 171, pl. 48, f. 12; Latah: Spokane, Wash.

Otozamites (*Williamsonia*) *aguilariana* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 54, pl. 19, f. 7; Liassic: Mixteca Alta, Oaxaca, Mexico.

Otozamites (*Williamsonia*) *aguilariana* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 53, pl. 14, f. 7; Liassic: Mixteca Alta, Oaxaca, Mexico.

Otozamites brevifolius (Braun) Braun.□Loper, 1891, 429; Newark (Anterior Shales and doubtfully in Posterior Shales): near Meriden, Conn.

Otozamites (*Opteris*) cf. *bucklandi* Schenk. Wieland, 1914, 43, pl. 44, f. 2; Liassic: Mixteca Alta, Oaxaca, Mexico.

Otozamites cardiopteroides Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 44, pl. 39, f. 2; pl. 46, f. 4; Liassic: Mixteca Alta, Oaxaca, Mexico.

- Otozamites (Williamsonia) diazii* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 50, pl. 21; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Otozamites groenlandicus* Heer, 1874, 99, pl. 26, f. 2.—Seward, 1925, 242. Type specimen indeterminate.
- Otozamites hennoquei* Pomm. Lozano, 1916, 19, pl. 9, f. 5-7; Liassic: Huauchinango, Puebla, Mexico.
- Otozamites hespera* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 49, pl. 5 (at base of large frond), pl. 8 (the largest frond), pl. 9, f. 2, 3; pl. 10, f. 2; pl. 12, f. 3; pl. 22; Liassic: Mixteca Alta, Oaxaca, Mexico—Lozano, 1916, 7, pl. 2, f. 8; pl. 3, f. 1-3; Liassic: Huayacocotla, Vera Cruz, Mexico.
- Otozamites hespera intermedia* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 40, pl. 10, f. 1; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Otozamites hespera latifolia* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 38, pl. 4, f. 3; pl. 19, f. 1; pl. 22 (the small frond); pl. 29, f. 1, 3; pl. 33, f. 3; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Otozamites (Williamsonia) juarezii* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 51, pl. 22 (the large frond at right); Liassic: Mixteca Alta, Oaxaca, Mexico.
- Otozamites latior* Saporta. □ Loper, 1891, 429; Newark (Anterior and Posterior Shales): near Meriden, Conn.
- Otozamites linguiformis* Newberry, 1888a, 344, pl. 8, f. 9, 10; near San Juancito, Honduras.
- Otozamites macombii* Newberry. □ Humphreys, 1916a, 77; Santa Clara Coal Field, Sonora, Mexico.
- Otozamites mandelslohi* (Kurr.) Schimper, 1870, *Traité Pl. Foss.*, vol. 2, 171.—Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 27, pl. 15, f. 2-5; pl. 42, f. 3; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Otozamites molinianus* Zigno, Fl. Foss. Form. Ooliticae, pl. 36.—Wieland, 1914, 32; Liassic: Mixteca Alta, Oaxaca, Mexico—Lozano, 1916, 5, pl. 1, f. 3-6; Liassic: Huayacocotla, Vera Cruz, Mexico.
- Otozamites molinianus oaxacensis* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 34, pl. 12, f. 2; pl. 14, f. 2, 6; pl. 38, pl. 16, f. 2-5; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Otozamites oaxacense* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 52, pl. 19, f. 4, 5; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Otozamites obtusus* Lindley & Hutton. Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—Lozano, 1916, 19, pl. 9, f. 4; Liassic: Huauchinango, Puebla, Mexico.
- Otozamites obtusus liassicus* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 42, pl. 13, f. 1; Liassic: Mixteca Alta, Oaxaca, Mexico—Lozano, 1916, 7, pl. 2, f. 7; Liassic: Huayacocotla, Vera Cruz, Mexico.
- Otozamites obtusus* cf. *oolitica* Seward. Wieland, 1914, 41, pl. 40, f. 11, 12; Liassic: Mixteca Alta Oaxaca, Mexico.
- Otozamites paratypus* Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 47, pl. 16, f. 8; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Otozamites powelli* (Fontaine) Berry, 1927b, 305, text-f. 1-5; Shinarump: Garfield Co., Utah.
- Zamites powelli* Fontaine. □ Humphreys, 1916a, 77; Santa Clara Coal Field, Sonora, Mexico.
- Otozamites pterophylloides* Brongniart. □ ?Lozano, 1916, 34, pl. 3, f. 4; Liassic: Huayacocotla, Vera Cruz, Mexico.
- Otozamites reglei* (Brongniart) Saporta. Lozano, 1916, 6, pl. 2, f. 6; Liassic: Huayacocotla, Vera Cruz, Mexico.

Otozamites reglei lucerensis Wieland, 1913, 264, Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 35; Liassic: Mixteca Alta, Oaxaca, Mexico.

Otozamites reglei oaxacensis Wieland, 1914, 38, pl. 10, f. 3, 4; pl. 27, f. 7; pl. 28; Liassic: Mixteca Alta, Oaxaca, Mexico.

Otozamites schenkii (Heer) Seward, 1925, 242, pl. B, f. 13, 13A.

Glossozamites schenkii Heer, 1874, 69, pl. 16, f. 5–8.

Otozamites (**Williamsonia**) **tribulosus** Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 45, pl. 14, f. 3; Liassic: Mixteca Alta, Oaxaca, Mexico.

Otozamites sp. **A**, Harris, 1932a, 79, pl. 8, f. 11; text-f. 43; Lepidopteris Zone: Scoresby Sound, East Greenland.

Otozamites sp. Lozano, 1916, 8, pl. 3, f. 5; pl. 4, f. 1; Liassic: Huyacocotla, Vera Cruz, Mexico.

Otozamites sp. Lozano, 1916, 6, pl. 2, f. 1–5; Liassic: Huyacocotla, Vera Cruz, Mexico.

Otozamites sp., fronds, Lozano, 1916, 9, pl. 4, f. 2; Liassic: Huyacocotla, Vera Cruz, Mexico.

Otozamites, fragments of, Lozano, 1916, 19, pl. 9, f. 1–3, 8; Liassic: Huauchinango, Puebla, Mexico.

Otozamites (**Otopteris**) sp. Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.

OURATEA Aublet.

Ouratea eocenica Berry, 1930, 112, pl. 45, f. 1–3; Holly Springs: Foundry Church Pit, Henry Co.; McKenzie, Carroll Co.; Huckleberry School, McLemoresville, Carroll Co., Tenn.; Grenada: Somerville, Moses Hall, Fayette Co., Tenn.

OUROSTROBUS Harris, 1935, 116. Genotype: *O. nathorsti* Harris.

Ourostrobos nathorsti Harris, 1935, 116, pl. 23, f. 3, 6, 7, 11; pl. 27, f. 11; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Amentum masculum coniferarum Nathorst, 1878, Beit. zur fossilen Flora Schwedens., pl. 16, f. 4.

Oxycoccus macrocarpus (Aiton) Pursh. ?Hollick, 1931, 46; Pleistocene: Colebrook, N. H.

Pachystima? **cretacea** Berry □ Berry, 1925, 66; Ripley: Henry Co., Tenn.

Pagiophyllum ambiguum (Heer) Seward, 1925, 244; West Greenland.—1926, 99, pl. 9, f. 68, pl. 10, f. 104; Nugsuak, west Greenland.

Cephalotaxites insignis Heer, 1883, 10, pl. 53, f. 12.

Sequoia ambigua Heer □ White, 1890, 97, pl. 2, f. 2, 3; Marthas Vineyard, Mass.—1898, 349, 350; Pagtorfik, Kaersuk, Nugsuak Pen., west Greenland.—Berry, 1913a, 573; Tuscaloosa: Snow Plantation, Ala.—Wilson, 1914a, 423, near Steveste, Red Deer River, Alberta.—Hollick, 1930, 56, pl. 20, f. 1a, 2–4a, 5, 6, 7; Nulato: Lower Yukon: Melozi: Lower Yukon, Alaska.

Sequoia gracilis Heer (part), 1874, pl. 22, f. 10.—Fontaine, 1899, 675, pl. 162, f. 2.

Inolepis affinis Heer, 1883, 11, pl. 53, f. 2.

Sphenolepidium recurvifolium Fontaine. □

Sphenolepidium dentifolium Fontaine. □

Athrotaxopsis expansa Fontaine. □

Pagiophyllum brevifolium (Newberry) Ward. □ Loper, 1891, 429; Newark (Anterior Shales): near Meriden, Conn.

Pagiophyllum simile (Newberry) Ward. □ Loper, 1891, 429; Newark (Anterior Shales): near Meriden, Conn.

Pagiophyllum sp. Bell cf. **Geinitzia formosa** Heer. Bell, 1930, 31; Foremost: southern Alberta.

Pagiophyllum sp.? Wilson, 1916, 207; Mt. Bush, Yukon Terr.

Palaeanthus hollicki Seward & Conway, 1935, 35, pl. 2, f. 13, 14; Kingigtok: West Greenland.

Palaeanthus prindlei Hollick, 1936, 169, pl. 60, f. 2; Bryant Creek, Upper Yukon region, Alaska.

Palaeanthus tenuistriatus Seward & Conway, 1935a, 13, pl. 5, f. 26; Igdlouknuak: west Greenland.

Palaeocassia laurinea Lesquereux. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.—1922c, 167, pl. 40, f. 8; Woodbine: Arthur's Bluff, Lamar Co., Tex.—Gress, 1922, 312; Dakota: Ellsworth Co., Kans.

Palaeopotamogeton florissanti Knowlton. □ Berry, 1929f, 240; Latah: Spokane, Wash.

PALEONELUMBO Knowlton, 1930, 93. Genotype: *P. macroloba* Knowlton.

Paleonelumbo macroloba Knowlton, 1930, 93, pl. 39, f. 3; pl. 42, f. 3, 4; Dawson: Purdon Mine, Colo.

PALEONUPHAR Hollick, 1930, 75. Genotype: *P. inopina* Hollick.

Paleonuphar inopina Hollick, 1930, 75, pl. 40, f. 5; Kaltag: Lower Yukon, Alaska.

Palissya brauni, Nathorst not Endlicher=*Ontheodendron sternbergi* (Nilsson) Harris.

Palissya sternbergi (Nilsson) Nathorst=*Ontheodendron sternbergi* (Nilsson) Harris.

Palissya sp.? Hartz, 1896, 243, pl. 19, f. 6; Rhaetic: Cape Stewart, East Greenland.

Palissya? sp. Humphreys, 1916a, 78; Santa Clara Coal Field, Sonora, Mexico.

Paliurus catahoulensis Berry, 1916e, 242, pl. 60, f. 1-4; Catahoula: Chalk Hills, near Rosefield, La.—1924, 177, pl. 54, f. 8, 9; Lagrange: Hickman, Fulton Co., Ky.; near Union City, Obion Co.; Tenn.

Paliurus ceterus Hollick, 1936, 141, pl. 79, f. 7, 8; Matanuska Coal Field, Alaska.

Paliurus coloradensis Lesquereux. □ Knowlton, 1930, 108; Denver: Golden, Colo.

Paliurus columbi Heer. Knowlton, 1893b, 104; Ellensburg: Ellensburg, Wash.—1912i, 42; Moose Creek, Lower Matanuska, Alaska.—Berry, 1935, 46; Middle Ravenscrag: Locs. 2, P 10-30, P 12-30, southern Saskatchewan.—Hollick, 1936, 141, pl. 115, f. 5-7; Jaw Mountain and Portage (Balboa) Bay, Alaska Peninsula.

NOTE.—Seward & Conway, 1935, 23, text-f. 8, have transferred Heer (1868) to *Zizyphoides*. Other North American citations were not discussed. The species is in need of critical study.

Paliurus columbi, Lesquereux not Heer=*Cercidiphyllum crenatum* (Unger) R. W. Brown.

Paliurus florissanti Lesquereux. □ Brown, R. W., 1937, 181, pl. 56, f. 7; Florissant: Florissant, Colo.

Acalypha myricina Cockerell. □

Paliurus haydenii Cockerell=*Cercis parvifolia* Lesquereux.

Paliurus hesperius Berry, 1928d, 40, f. 1-3.—1929f, 257, pl. 57, f. 1; Latah: Spokane, Wash.—1931a, 39, pl. 13, f. 1-5; Latah: Grand Coulee, Wash.—1934, 119; Latah: east of Lewiston on north bank Clearwater River, Nez Percé Co., Idaho.—Hoffman, 1932, 737; Douglas Canyon, Wash.—Brown, R. W., 1937, 181, pl. 56, f. 8, 9; Latah: Spokane, Wash.

Paliurus membranaceus Lesquereux=*Cinnamomoides heerii* (Lesquereux) Seward.

Paliurus orbiculatus Lesquereux not Saporta=*Cercis parvifolia* Lesquereux.

Paliurus ovalis Dawson. □ Berry, 1929i, 63, pl. 10, f. 7; Upper Blairmore: southwest Alberta.

- Paliurus pseudopinsonensis* Hollick, 1930, 102, pl. 79, f. 5, 6; Chignik: Alaska Peninsula.
- Paliurus pulcherrimus* Ward. □ Berry, 1935, 47, pl. 11, f. 5-8; Middle Ravenscrag: Loc. 9, southern Saskatchewan.
- Paliurus tenuifolius* Heer, 1874a, pl. 122, f. 31.—Lesquereux, 1888, 55; Denver: Golden, Colo.
- Paliurus visibilis* Hollick, 1930, 102, pl. 79, f. 4; Chignik: Alaska Peninsula.
- Paliurus zizyphoides* Lesquereux. □ Lesquereux, 1888, 55; Denver: Golden, Colo.—?Knowlton, 1922, 157; Post Laramie: Black Buttes, Wyo.; Laramie?: Erie, Colo.
- Paliurus?* sp. Berry, 1930c, 25, pl. 5, f. 7; Estevan: Cypress Hills, Canada.—1930f, 64; Estevan: southern Alberta.
- Palm rays, Berry, 1918, 24; Culebra: south of Empire, Canal Zone.
- Palm rays, Berry, 1923b, 5, pl. 5, f. 4; near Palomares, Oaxaca, Mexico.
- Palm rays, Berry, 1924, 153; Lagrange: Hickman, Fulton Co., Ky.; near Corona, Tipton Co., Tenn.
- Palm rays, Berry, 1925c, 2, pl. 1, f. 1, 2; Pleistocene: Trinidad, British West Indies.
- PALMACITES** Brongniart. Noé, 1936a, 444.
- Palmacites alius* Hollick, 1928, 191, pl. 57, f. 1; Collazo: Porto Rico.
- Palmacites conformis* Hollick, 1928, 192, pl. 57, f. 2; Collazo: Porto Rico.
- Palmacites dubius* Corda=*Palmoxylon palmacites* (Sprengel) Stenzel.
- Palmacites sparsistriatus* Hollick, 1928, 192, p. 58; Collazo: Porto Rico.
- PALMOCARPON** Lesquereux. □ Noé, 1936a, 445.
- Palmocarpon acromioides* Hollick, 1924, 287, pl. 13, f. 4; Santo Domingo.—Hollick, 1928, 189, pl. 56, f. 4; Collazo: Porto Rico.
- Palmocarpon bactrioides* Hollick, 1924, 286, pl. 1, f. 4; Siparia: Trinidad, British West Indies.—Berry, 1925a, 79, pl. 1, f. 1; Trinidad, British West Indies.
- Palmocarpon butlerensis* Berry, 1922g, 8, pl. 4, f. 2-4; Wilcox: Butler Salt Dome, Freestone Co., Tex.; near Boydsville, Ark.; Carrizo: Carrizo Springs, Dimmit Co., Tex.—Ball, 1931, 34, 150; Wilcox: Butler Salt Dome, Freestone Co., Tex.; Carrizo: Dimmit Co., Tex.; Fayette: Boggy Creek, Brazos Co., Tex.
- Palmocarpon cetera* Hollick, 1928, 189, pl. 56, f. 10; Collazo: Porto Rico.
- Palmocarpon?* *corrugatum* Lesquereux. Knowlton, 1930, 42; Denver: Golden, Colo.
- Carpolithes corrugatus* (Lesquereux) Cockrell. □
- Palmocarpon exemplare* Hollick, 1928, 190, pl. 56, f. 8, 9; Collazo: Porto Rico.
- Palmocarpon fusiforme* Berry, 1925a, 80, pl. 1, f. 2; Trinidad, British West Indies.
- Palmocarpon geonomoides* Berry, 1928e, 456, text-f. 1; Uscari: Chiriqui Province, Panama.
- Palmocarpon lesquereux* Berry, 1930d, 67; so-called Bridger: Tipperary, Wind River Basin, Wyo.
- Amygdalus gracilis* Lesquereux (part), 1883, 199, pl. 40, f. 14, 15, only; Green River: Uinta Co., Wyo.
- Palmocarpon?* *lineatum* Lesquereux. □ Knowlton, 1930, 42, pl. 11, f. 5; Denver: Golden, Colo.
- Palmocarpon opinabile* Hollick, 1928, 190, pl. 56, f. 24c; Collazo: Porto Rico.
- Palmocarpon palmarum* (Lesquereux) Lesquereux. □ Knowlton, 1930, 41; Denver: Golden, Colo.
- Palmocarpon commune* Lesquereux. □ Lesquereux, 1888, 44; Denver: Golden, Colo.
- Palmocarpon rabellii* Hollick, 1928, 191, pl. 56, f. 11; Collazo: Porto Rico.
- Palmocarpon sessile* Berry, 1924, 152, pl. 61, f. 5; Fayette: Barrera League, Brazos Co., Tex.—Ball, 1931, 150, pl. 26, f. 1; Fayette: Barrera League, Brazos Co., Tex.

Palmocarpon cf. *sessile* Berry, 1930, 55; Holly Springs: Puryear, Henry Co., Tenn.

Palmocarpon subcylindricum Lesquereux. □ Knowlton, 1930, 42; Denver: Golden, Colo.

Palmocarpon syagrusioides Berry, 1930, 56, pl. 8, f. 5, 6; Holly Springs: Clover Creek, Hardeman Co., Tenn.

Palmocarpon truncatum Lesquereux. □ Knowlton, 1930, 42; Denver: Golden, Colo.—Berry, 1926a, 193; Paskapoo: Alberta.

Palmocarpon truncatum minor Lesquereux=**Ginkgo? truncata** (Lesquereux) Knowlton.

Palmocarpon sp. Berry, 1924, 54, 152; Yegua: Rock Creek, Brazos Co., Tex.; Lagrange: Fulton Co., Ky.; Obion Co., Tenn.—Ball, 1931, 150; Lagrange: Tennessee and Kentucky; Jackson?: Rock Creek, Brazos Co., Tex.

Palmocarpon sp. Berry, 1935, 24, pl. 3, f. 2; Whitemud: Loc. P 5-30, southern Saskatchewan.

PALMOPHYLLUM Conwentz, 1886, Flora d. Bernsteins, 2.—Noé, 1936a, 446.

Palmophyllum sp. Berry, 1925a, 80; Siparia and Forest: Trinidad, British West Indies.

Palmophyllum sp. (fragment of petiole?) Hollick, 1924, 286, pl. 9, f. 2; Collazo River, Porto Rico.—1928, 193; Collazo: Porto Rico.

Palmophyllum sp. Hollick, 1924, 285, pl. 9, f. 1; Collazo River, Porto Rico.—1928, 192; Collazo: Porto Rico.

PALMOXYLON Schenk. □ Berry, 1916e, 233, discussion.—Noé, 1936a, 446.

Palmoxylon cannoni Stevens, 1920, 439, f. 11-16; Denver: west of Denver, Colo.—Knowlton, 1930, 43; Denver: Denver, Colo.

Palmoxylon cellulosum Knowlton. □ Nathorst, 1893, 46, pl. 3, f. 1-3; Tlacolula, Oaxaca, Mexico.—Berry, 1916e, 235; Catahoula: Rapides Parish, La.; Bayou Pierre, Claiborne-Copiah Co. line, Miss.

Palmoxylon cheyennense Wieland. Stevens, 1920, 432, f. 1-10; Pierre: near Cheyenne River south of mouth of Battle Creek, S. Dak.

Palmoxylon lacunosum (Unger) Felix, 1883, Fossile Hölzer Westindiens, 23, pl. 5, f. 3.—Berry, 1916e, 236, pl. 57, f. 1; pl. 58; Catahoula: Pollock, Grant Parish, La.—1924, 50, 152, pl. 47; Top of Tallahatah or bottom of Lisbon: White Bluff, Clarke Co., Ala.; Jackson: near Gailbreath, Rapides Parish; near Pollock, Grant Parish, La.

Fasciculites lacunosus Unger, 1845, in Martius, Genera et species Palmarum, 58.

Palmoxylon microxylon (Corda) Stenzel. Berry, 1916e, 234; Catahoula: Rapides Parish, La.

Palmoxylon quenstedtii Felix. □

Palmoxylon mississippiense Stenzel, 1904, Fossile Palmenhölzer, 142, pl. 21, f. 254-265; Catahoula: Washington, Adams Co., Miss.—Berry, 1916e, 237; Catahoula: Washington, Adams Co., Miss.

Palmoxylon mojavensis Webber, 1933, 117, pl. 1, f. 4; pl. 2, f. 4; pl. 3, f. 4; Ricardo: near Barstow, Calif.

Palmoxylon ovatum Stenzel, 1904, Die Fossile Palmenhölzer, 119, pl. 14, f. 152-158; pl. 15, f. 159; Catahoula: Washington, Adams Co., Miss.—Berry, 1916e, 237; Catahoula: Washington, Adams Co., Miss.

Palmoxylon palmacites (Sprengel) Stenzel, 1904, Foss. Palmenhölzer, 245, pl. 20, f. 253.—Berry, 1918, 24, pl. 12, f. 1; Cucaracha: Gaillard Cut, Canal Zone.

Endogentes palmacites Sprengel, 1828, Comentatio, 39, f. 6, 6a.

Fasciculites palmacites (Sprengel) Corda, 1832, Dendrol., 49, 89, pl. 9, f. 1, 2.—Unger in Martius, 1845, 59, pl. 3, f. 6.

Palmacites dubius Corda, 1845, Beitr. 42, pl. 22.—1870, Paleont. Veg., vol. 2, 513.

Palmoxylon tenerum Felix, 1883, Foss. Hölzer Westindiens, 26, pl. 4, f. 1.

- Palmoxylon quenstedti*, Knowlton not Felix=*Palmoxylon microxylon* (Corda) Stenzel.
- Palmoxylon remotum* Stenzel, 1904, Fossile Palmenhölzer, 91, pl. 7, f. 79-81; pl. 8, f. 82; pl. 9, f. 83-85; Washington, Adams Co., Miss.—Berry, 1916e, 238, pl. 57, f. 2-5; Catahoula: Washington, Adams Co., Miss.; near Waynesboro, Wayne Co., Miss.
- Palmoxylon cf. stellatum* Unger. Nathorst, 1893, 47, pl. 3, f. 5; Tlacolula, Oaxaca, Mexico.
- Palmoxylon tenerum* Felix=*Palmoxylon palmacites* (Sprengel) Stenzel.
- Palmoxylon texense* Stenzel, 1894, Fossile Palmenhölzer, 79, pl. 6, f. 61-63.—Berry, 1916e, 235, pl. 56; Catahoula: near Jasper, Jasper Co., Tex.
- PALOREODOXITES** Knowlton, 1930, 41. Genotype: *P. plicatus* (Lesquereux) Knowlton.
- Paloreodoxites plicatus* (Lesquereux) Knowlton, 1930, 41, pl. 11, f. 1-4; Denver: Golden, Colo.
- Oreodoxites plicatus* Lesquereux.□
- Panax cretacea*. Heer.□Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.
- PANICUM** Linné.
- Panicum elegans* Elias, 1932, 342, pl. 38, f. 2a, 2b, 2c, 4; Ogallala: Wallace Co., Kans.
- PAPILIONITES** Berry, 1924, 171. Genotype: *P. erythrinaformis* Berry.
- Papilionites erythrinaformis* Berry, 1924, 171, pl. 33, f. 9; Fayette: Mossy Creek, Brazos Co., Tex.; near Miraflores, Webb Co., Tex.; Lagrange: Hickman, Fulton Co., Ky.—Ball, 1931, 155, pl. 31, f. 2; Fayette: Miraflores, Webb Co.; Boggy Creek, Brazos Co., Tex.
- PARACREDNERIA** Richter, 1905, Die Gattung *Credneria* und einige seltenere pflanzenreste, Beiträge zur Flora der oberen Kreide Quedlinburgs und seiner Umgebung, pt. 1, 12.
- Paracredneria alaskana* Hollick, 1930, 90, pl. 54, f. 2, 3; Kaltag: Lower Yukon, Alaska.
- Paracredneria crednerioides* Hollick, 1930, 90, pl. 54, f. 1; Kaltag: Lower Yukon, Alaska.
- Paracredneria? platanoides* Hollick, 1930, 90, pl. 51, f. 3; Kaltag: Lower Yukon, Alaska.
- Paracredneria? sp.* Hollick, 1930, 91, pl. 53, f. 2; Kaltag: Lower Yukon, Alaska.
- Paracupressinoxylon cupressoides* -Holden=*Metacupressinoxylon cupressoides* (Holden) Torrey.
- Paracupressinoxylon trinitense* Torrey, 1923, 85, pl. 14, f. 51; Trinity: Weatherford, Tex.
- PARAENGELHARDTIA** Berry, 1916a, 186. Genotype: *P. eocenica* Berry.
- Paraengelhardtia eocenica* Berry, 1916a, 186, pl. 17, f. 2-5; Lagrange: Puryear, Henry Co., Tenn.—1930, 60, pl. 46, f. 11, 12; Holly Springs: Whiteville, Hardeman Co.; Mercer, Madison Co.; Puryear, Henry Co., Tenn.; Grenada: Cottage Grove, Henry Co., Tenn.
- PARANYMPHAEA** Berry, 1935, 38. Genotype: *P. crassifolia* (Newberry) Berry.
- Paranymphaea crassifolia* (Newberry) Berry, 1935, 39, pl. 7, f. 4, 5; pl. 9; pl. 10, f. A, B.; Middle Ravenscrag: Locs. 4, 5, 10, 11, 13, P 1-30, P 4-30, southern Saskatchewan.
- Catalpa crassifolia* Newberry.□
- Aristolochia cordifolia* Newberry.□
- Cocculus haydenianus* Ward.□
- Cebatha haydenianus* (Ward) Knowlton.□
- Aristolochia crassifolia* (Newberry) Cockerell.□Knowlton, 1909, 203; Lance.—Berry, 1930c, 20, pl. 6, f. 1-3; Ravenscrag: southern Alberta.—1930f, 64.

PARAPHYLLANTHOXYLON Bailey, 1924, 446-447. Genotype: *P. arizonense* Bailey.

Paraphyllanthoxylon arizonense Bailey, 1924, 446-450, pl. 15.

PARKINSONIA Plumier.

Parkinsonia eocenica Berry, 1930, 77, pl. 12, f. 9; pl. 41, f. 11; Holly Springs: La Grange, Fayette Co., Tenn.

Parrotia cuneata (Newberry) Berry □ Berry, 1930, 71, pl. 12, f. 10; Wilcox: Nevada Co., Ark.; Holly Springs: Chester Co., Tenn.

Parrotia fagifolia Lesquereux not Ettingshausen = *Celastrus gaudini* Lesquereux.

Parthenocissus tertiaria (Lesquereux) Knowlton = *Ampelopsis tertiaria* Lesquereux.

Passiflora canadensis Hollick, 1927, 416, pl. 37, f. 2; St. Eugene silts, British Columbia.

PAULLINIA Linné.

Paullinia alaskana Hollick, 1936, 136, pl. 74, f. 5; Drew's Mine, north bank Yukon River, central Yukon region, Alaska.

Paullinia minutidenticulata Hollick, 1930, 101, pl. 37, f. 2; Melozi: Lower Yukon, Alaska.

Pecopteris andersoniana Heer = *Gleichenites nordenskiöldi* (Heer) Seward.

Pecopteris (*Polypodium*?) *andersoniana* Heer = *Gleichenites nordenskiöldi* (Heer) Seward.

Pecopteris arctica Heer (part) = *Gleichenites gieseckiana* (Heer) Seward.

Pecopteris argutula Heer = *Cladophlebis oerstedii* (Heer) Seward.

Pecopteris borealis (Brongniart) Heer (part) = *Cladophlebis oerstedii* (Heer) Seward.

Pecopteris borealis (Brongniart) Heer (part) = *Gleichenites gieseckiana* (Heer) Seward.

Pecopteris denticulata Brongniart = *Cladophlebis frigida* (Heer) Seward.

Pecopteris falcatus Emmons = *Asterocarpus falcatus* (Emmons) Fontaine.

Pecopteris hyperborea Heer = *Gleichenites gieseckiana* (Heer) Seward.

Pecopteris kudlistensis Heer = *Moriconia cyclotoxon* Debey & Ettingshausen.

Pecopteris mexicana Newberry, 1876, 143, pl. 6, f. 2, 2a; Triassic?: Coal mines of Los Bronces, Sonora, Mexico.

Pecopteris (*Phegopteris*) *sepulta* Newberry = *Osmunda?* *sepulta* (Newberry) Knowlton.

Pecopteris (*Cheilanthes*) *sepulta* (Newberry) Newberry = *Osmunda?* *sepulta* (Newberry) Knowlton.

Pecopteris (*Pteris*?) *socialis* Heer = *Phyllites socialis* (Heer) Seward.

Pecopteris strictinervis? Fontaine = *Gleichenites nordenskiöldi* (Heer) Seward.

Pecopteris torelli Heer (part) = *Phyllites socialis* (Heer) Seward.

Pecopteris zippei Corda = *Gleichenites gieseckiana* (Heer) Seward.

Pecopteris sp. Heer, 1868a, 66.—Hollick, 1936, 40; Keku Isl., southeastern Alaska.

PELTANDRA Rafinesque.

Peltandra n. sp. Arnold, 1935, 380; Trout Creek: Trout Creek, Harney Co., Oreg.

PELTANDRIPITES Wodehouse, 1933a, 498. Genotype: *P. davisii* Wodehouse.

Peltandripites davisii Wodehouse, 1933a, 498, f. 24; Green River: Parachute Creek, Garfield Co., Colo.

Persea alpigena Sprengel. Scott, 1926, 405; Tesla, Calif.

Persea americana Miller. Berry, 1925c, 4, pl. 1, f. 4; Pleistocene: Trinidad, British West Indies.

Persea borbonia Sprengel □ Scott, 1926, 405; Tesla, Calif.—?Berry, 1927, 27; Pleistocene: Cherokee Co., Tex.—Berry & Hawkins, 1935a, 251, pl. 25, f. 2; Pensauken: near Durhams Corner, Middlesex Co., N. J.

Persea brossiana (Lesquereux) Lesquereux. □ Knowlton, 1930, 85; Middle Park: Middle Park; Grant Co., Colo.

Laurus brossiana Lesquereux. □ Cross, 1895, 211; Middle Park: Middle Park, Colo.

Persea fructifera Berry, 1930, 115, pl. 33, f. 17; Holly Springs: Mill Creek, Hardeman Co., Tenn.

Persea gratissimifolia Berry, 1924, 79, pl. 14, f. 5; Yegua: Cherry Valley, Cross Co., Ark.; Lisbon: Newton, Newton Co., Miss.

Persea hayana Lesquereux. □ Hollick, 1930, 81, pl. 45, f. 8; Chignik: Alaska Peninsula.

Persea lancifolia Lesquereux = **Nectandra lancifolia** (Lesquereux) Berry.

Persea leconteana (Lesquereux) Lesquereux. □

Sassafras leconteanum Lesquereux. □ Lesquereux, 1871, 379; Dakota: Fort Ellsworth, Kans.

Persea lexingtonensis Berry, 1924, 79, pl. 15, f. 1, 2; Lisbon: Lexington, Holmes Co., Miss.; Yegua: Nevils Prairie, Houston Co., Tex.—Ball, 1931, 126, pl. 22, f. 4; Yegua: Nevils Prairie, Houston Co., Tex.

Persea macrophyloides Engelhardt, 1891, Abh. Senck. Naturf. Gesell. vol. 16, No. 4, 650, pl. 5, f. 3.—Idem, 1895, vol. 19, 27, pl. 5, f. 3.—?Berry, 1919, U. S. Nat. Mus. Proc., vol. 55, 292.—1925a 114 pl. 7, f. 3; Siparia: Trinidad, British West Indies.

Ocotea pseudomartinicensis Hollick, 1924, 299, pl. 7; Trinidad, British West Indies.

Persea miocenica Arnold, 1937, 86, pl. 2, f. 2; Trout Creek: Trout Creek, Harney Co., Oreg.

Persea nebrascensis Lesquereux = **Laurus nebrascensis** (Lesquereux) Lesquereux.

Persea praelingue Sanborn, 1935, 20, pl. 6, f. 1; Comstock: Comstock, Douglas Co., Oreg.—Potbury, 1935, 68, pl. 6, f. 4; La Porte, Plumas Co., Calif.

Persea preamericana Berry, 1925a, 112, pl. 2, f. 1; Forest: Trinidad, British West Indies.

Persea pseudo-carolinensis Lesquereux. □ Sanborn, 1935, 20, pl. 5, f. 3; Comstock: Comstock, Douglas Co., Oreg.—Potbury, 1935, 68, pl. 6, f. 2, 3; La Porte, Plumas Co., Calif.—MacGinitie, 1937, 139; Weaverville: Redding Creek, Hay Fork and Hyampom, Calif.

Persea dilleri Lesquereux. □

Laurus similis Knowlton, 1900d only. Sanborn considers this = to *P. pseudo-carolinensis*; R. W. Brown, 1937, does not concur.

Persea pubescens (Pursh) Sargent. □ Berry, 1926b, 115, pl. 57, f. 5; Chowan: Neuse River, Wayne Co., N. C.

Persea spatiosa Hollick, 1936, 116, pl. 65, f. 1; near Berg Lake, Yakutat-Copper River region, Alaska.

Persea spatulata Hollick, 1930, 82, pl. 45, f. 7; Kaltag: Lower Yukon, Alaska.

Persea valida Hollick. □ Berry, 1913a, 572; Tuscaloosa: near Cottondale, Ala.

Persicaria sp. Berry, 1922b, 11; Pleistocene: Tipton Co., Tenn.

Persoonia lesquereuxii Knowlton. □ Newberry, 1895, 71, pl. 42, f. 16; no locality given.—Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

PESTALOZZITES Berry, 1916e, 230. Genotype: *P. minor* Berry.

Pestalozzites minor Berry. □ Berry, 1916e, 230, pl. 55, f. 2; Catahoula: Chalk Hills, south of Rosefield, La.—1924, 141; Barnwell: Grovetown, Columbia Co., Ga.

Pestalozzites sabalana Berry, 1916e, 46, pl. 8, f. 3; pl. 9, f. 9; Hattiesburg: Raglan, Forest Co., Miss.; Alum Bluff: Alum Bluff, Liberty Co., Fla.

PETALONYX A. Gray.

Petalonyx sp. Lauder milk & Munz, 1934a, 37, pl. 9, f. 8; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.

PETREA Houston.

Petrea rotunda Potbury, 1935, 79, pl. 14, f. 3; La Porte, Plumas Co., Calif.

Phanerophlebitis knowltoni Berry, 1950, 40, pl. 7, f. 6; Holly Springs: Laconia, Fayette Co.; Grenada: Somerville, Fayette Co., Tenn.

Phaseolites coloradensis Knowlton, 1950, 97, pl. 45, f. 1; Dawson: Mosby, Colo.

Phaseolites formus Lesquereux. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Cottondale, Ala.—1920e, 403; Black Creek: North Carolina.

Phaseolites? sp. Ball, 1931, 82, pl. 9, f. 6; Indio: Little Sandy Creek; Bastrop Co., Tex.

Phegopteris alaskensis Hollick, 1930, 38, pl. 2, f. 4a, 5; Chignik: Alaska Peninsula.

Phegopteris grothiana Heer = *Sphenopteris jorgenseni* (Heer) Seward.

Phegopteris jorgenseni Heer = *Sphenopteris jorgenseni* (Heer) Seward.

Phegopteris kornerupi Heer = *Sphenopteris jorgenseni* (Heer) Seward.

PHENACOCALADUS Cockerell, 1926c, 111. Genotype: *P. hendersoni* Cockerell.

Phenacocladus hendersoni Cockerell, 1926c, 111, 1 text-f.; Green River: Roan Mts., Colo.—Brown, R. W., 1934, 51, pl. 8, f. 1; Green River: Parachute Creek north of Grand Valley, Colo.

Philadelphus bendirei (Knowlton) Chaney, 1927a, 118, pl. 17, f. 1-5; Gray Ranch, Crooked River Basin, Oreg.

Cinnamomum bendirei Knowlton. □

Philadelphus bendirei, Arnold not Knowlton = *Sassafras hesperia* Berry.

Philadelphus bendirei, Oliver not Knowlton = *Sassafras hesperia* Berry.

Philadelphus inodora Linné. Berry & Hawkins, 1935a, 250, pl. 24, f. 1; Pensauken: near Durhams Corner, Middlesex Co., N. J.

Philadelphus pardeeii (Knowlton) R. W. Brown, 1937, 176, pl. 62, f. 5-10; Latah: Spokane, Wash.

Phyllites pardeeii Knowlton, 1926, 48, pl. 29, f. 13; Latah: Spokane, Wash.

Phyllites peculiaris Knowlton, 1926, 49, pl. 29, f. 2; Latah: Spokane, Wash.

PHLOX Linné.

Phlox cf. *sibirica* Linné. Chaney & Mason, 1936c, 17, text-f. 34, 36, 42; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

PHOENICITES Brongniart. □ Noé, 1936a, 447.

Phoenicites brazosensis Ball, 1931, 149, pl. 25; Fayette: Raney Hdr., Brazos Co., Tex.

Phoenicites integrifolia Ball, 1931, 35, pl. 42; pl. 47, f. 1-3; Indio: Bastrop Co., Tex.

Phoenicites occidentalis Berry. □ Berry, 1924, 148, pl. 28, f. 8-10; Catahoula?: Trinity Co., Tex.—Ball, 1931, 149; Catahoula?: Trinity Co., Tex.

Phoenicites? sp. Berry, 1924, 150, pl. 62, f. 1; Fayette: Barrera League, near Wellborn, Brazos Co., Tex.—Ball, 1931, 149; Fayette: Barrera League and Boggy Creek, Brazos Co., Tex.

Phoenicopsis steenstrupi Seward, 1926, 97, pl. 9, f. 82, 82a; pl. 10, f. 87, 88; text-f. 11B; Nugsuak, west Greenland.

Sclerophyllina cretosa (Schenk) Heer. 1874, 59, pl. 13, f. 13, 14; pl. 17, f. 12.

Baiera cretosa Schenk. Heer, 1882, 14.

Phoenicopsis tenuis Harris = *Hartzia tenuis* (Harris) Harris.

Phoenicopsis sp. Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 111, pl. 9, f. 3; Liassic: Mixteca Alta, Oaxaca, Mexico.

PHOTINIA Lindley=**HETEROMELES** M. Roemer.

Photinia arbutifolia Lindley. Mason, 1934, 165, pl. 10, f. 5; Tomales: Tomales Bay, Marin Co., Calif.

Phragmites alaskana Heer. Berry, 1926d, 99; Newhuykulston and Joseph Creeks; Kitsilano, British Columbia.—Hollick, 1936, 55, pl. 109, f. 12; Nenana Coal Field, Alaska.

Phragmites sp. Newberry. □

Phragmites cretaceus (Lesquereux) Lesquereux. □

Arundo cretaceus Lesquereux. □ Lesquereux, 1871, 379; Dakota: Fort Ellsworth, Kans.

Phragmites prattii Berry. □ Berry, 1920e, 399; Black Creek: North Carolina.

Phragmites sp. Heer, 1868a, 63.—Hollick, 1936, 56; Port Graham, Kenai Peninsula, Alaska.

Phragmites sp. Hollick, 1912, 50; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.

Phragmites? sp. Newberry=**Phragmites alaskana** Heer.

Phyllites alchorneopsis Potbury, 1935, 81, pl. 19, f. 1, 5; La Porte, Plumas Co., Calif.

Phyllites allenii (Lesquereux) Florin=**Koelreuteria allenii** (Lesquereux) Edwards.

Phyllites amorphus Lesquereux. □ Lesquereux, 1871, 380; Dakota: Decatur, Nebr.

Phyllites amplexicaulis Knowlton=**Carplithus** sp. R. W. Brown.

Phyllites andromeda Knowlton, 1930, 129, pl. 55, f. 7; Dawson: east of Colorado Springs, Colo.

Phyllites aquaticus Berry, 1930c, 28, pl. 5, f. 5; Ravenscrag: Cypress Hills, Canada.

Phyllites arctica Knowlton. □ Hollick, 1936, 170; Herendeen Bay, Alaska Peninsula.

Phyllites aristolochioides Knowlton, 1930, 129, pl. 55, f. 6; pl. 57, f. 2; Dawson: Sedalia, Colo.

Phyllites bifurcatus Knowlton=**Acer negundoides** MacGinitie.

Phyllites borealis Seward & Conway, 1935a, 18, text-f. 14; Atanekrdluk: west Greenland.

Phyllites calhanensis Knowlton, 1930, 130, pl. 56, f. 1; Dawson: Calhan, Colo.

Phyllites cinnamomeifolia Brongniart=**Cinnamomum cinnamomeum** (Rossmassler) Hollick.

Phyllites cinnamomeus Rossmassler=**Cinnamomum cinnamomeum** (Rossmassler) Hollick.

Phyllites cinnamomiformis Brongniart=**Cinnamomum cinnamomeum** (Rossmassler) Hollick.

Phyllites cladrastifolia Arnold, 1937, 101, pl. 8, f. 2; Trout Creek: Trout Creek, Harney Co., Oreg.

Phyllites coloradensis Knowlton=**Lomatia coloradensis** (Knowlton) R. W. Brown.

Phyllites costaricensis Berry, 1921b, 178, pl. 25, f. 3; southeast Costa Rica.

Phyllites coulceanus Berry=**Amelanchier dignatus** (Knowlton) R. W. Brown.

Phyllites crassipes (Heer) Berry, 1929j, 135; Frontier: near Lander, Wyo.

Juglans crassipes Heer. □ Heer, 1883, 27, pl. 61, f. 4; pl. 65, f. 9.

Phyllites crassus Hollick, 1930, 115, pl. 74, f. 7; Kaltag: Lower Yukon, Alaska.

Phyllites cretaceus (Ettingshausen) Berry, 1929j, 135; Frontier: near Lander, Wyo.

Artocarpidium cretaceum Ettingshausen. □

Phyllites crustacea Knowlton=*Quercus simulata* Knowlton.

Phyllites cyclophylla (Lesquereux) Hollick. □ Florin, 1919, 254.

Phyllites dentata Knowlton. □ Berry, 1929j, 131; Frontier: near Cumberland, Wyo.

Phyllites denverensis Knowlton, 1930, 130, pl. 59, f. 5; Denver: Ramah, Colo.

Phyllites eocenica Knowlton, 1924, 96, pl. 13, f. 4; Animas: Pagosa Quad., Colo.

Phyllites ericoides R. W. Brown, 1934, 66, pl. 13, f. 7; Green River: Ute Trail northwest of De Beque, Colo.

Phyllites ficifolia Knowlton. □ Berry, 1929j, 131; Frontier: near Cumberland, Wyo.

Phyllites fremonti Unger. □ Knowlton, 1923, 176; Green River: Black Fork of Green River, Wyo.

Phyllites furcivena R. W. Brown, 1934, 66, pl. 13, f. 5; Green River: Roan Creek northwest of De Beque, Colo.

Phyllites glandiferus R. W. Brown, 1934, 66, pl. 11, f. 7; Green River: Piceance Creek west of Meeker, Colo.

Phyllites gosheni Chaney & Sanborn, 1933, 98, pl. 57, f. 6; Fisher: Goshen, Oreg.

Phyllites grandifolius-cretaceus (Lesquereux) Berry, 1929j, 135; Frontier: near Lander, Wyo.

Smilax grandifolia-cretacea Lesquereux. □

Phyllites grenadensis Berry, 1930, 143, pl. 45, f. 13, 14; Grenada: Cottage Grove, Henry Co., Tenn.

Phyllites herbacea Knowlton, 1924, 97, pl. 15, f. 4; Animas: Pagosa Quad., Colo.

Phyllites hydrilloides Berry, 1925, 88, pl. 22, f. 2; Ripley: Henry Co., Tenn.

Phyllites hydrocharitoides Berry=*Potamogeton hydrocharitoides* (Berry) Berry.

Phyllites innominata Knowlton, 1924, 98, pl. 19, f. 5; Animas: Pagosa Quad., Colo.

Phyllites juglandiformis Sternberg=*Juglans juglandiformis* (Sternberg) Giebel.

Phyllites juncoides R. W. Brown, 1929, 291, pl. 75, f. 5; Green River: northwest of De Beque, Colo.

Phyllites lanensis Chaney & Sanborn, 1933, 99, pl. 37, f. 3; Fisher: Goshen, Oreg.

Phyllites laportiana Potbury, 1935, 81, pl. 19, f. 4; La Porte, Plumas Co., Calif.

Phyllites massallensis Arnold, 1937, 100; Trout Creek: Trout Creek, Harney Co., 3½ mi. south of Lone Rock, Gilliam Co., Oreg.

Phyllites n. sp. Knowlton, 1901e, 303.

Phyllites oregonianus Knowlton. □ MacGinitie, 1933, 68, pl. 7, f. 2; Trout Creek: Trout Creek, Harney Co., Oreg. (Homonym, Knowlton 1900d).

Phyllites minuta Chaney, 1920a, 161, pl. 6, f. 3, 4; Eagle Creek: Multnomah Co., Oreg.

Phyllites oregonianus Knowlton, 1900d, 49, pl. 5, f. 5; 5 mi. south of Ashland, Oreg. (Not *P. oregonianus* Knowlton, 1902).

Phyllites oregonianus Knowlton 1902=*Phyllites massallensis* Arnold.

Phyllites oropouchensis Berry, 1925c, 8, pl. 1, f. 3; Pleistocene: Trinidad, British West Indies.

Phyllites ouratea R. W. Brown, 1934, 66, pl. 11, f. 6; Green River: northwest of De Beque, Colo.

Phyllites pagosensis Knowlton, 1924, 97, pl. 16, f. 2; Animas: Pagosa Quad., Colo.

Phyllites pardeeii Knowlton=*Philadelphus pardeeii* (Knowlton) R. W. Brown.

Phyllites payettensis Knowlton. □ Berry, 1934, 122; north of Weiser, Washington Co., Idaho.

Phyllites peculiaris Knowlton=*Philadelphus pardeeii* (Knowlton) R. W. Brown.
Phyllites pellucidus Knowlton, 1930, 130, pl. 39, f. 2; pl. 56, f. 4; Dawson: Calhan, Colo.

Phyllites potentilloides Knowlton, 1923a, 191, pl. 43, f. 14; Huerto: near Lake Santa Maria, Colo.

Phyllites relatus Knowlton=*Alnus relatus* (Knowlton) R. W. Brown.

Phyllites rhamnoides Rossmmaessler=*Juglans rhamnoides* (Rossmmaessler) Lesquereux.

Phyllites rhoifolius Lesquereux. □ Lesquereux, 1871, 380; Dakota: Lancaster Co., Nebr.

Phyllites rhomboides (Lesquereux) Lesquereux=*Trochodendroides rhomboides* (Lesquereux) Berry.

Phyllites ripleyensis Berry, 1925, 89, pl. 22, f. 4; Ripley: Carroll Co., Tenn.

Phyllites rutaefolius Lesquereux, 1871, 379; Dakota: Fort Ellsworth, Kans.

Phyllites saundersi Knowlton. □ Hollick, 1936, 170; Kukak Bay, Alaska Peninsula.

Phyllites socialis (Heer) Seward, 1926, 90; Upernivik Isl., west Greenland.

Pecopteris (*Pteris*?) *socialis* Heer, 1882, 34, pl. 7, f. 4; pl. 8, f. 15; pl. 32, f. 9.

Pecopteris torelli Heer (part), 1883, 53, pl. 102, f. 1-4.

Cladophlebis socialis (Heer), Berry. □

Phyllites sophoroides Knowlton=*Vaccinium sophoroides* Knowlton.

Phyllites succosus LaMotte=*Nyssa knowltoni* Berry.

Phyllites sulcatus Lesquereux. □ Lesquereux, 1871, 382; Marshall, Colo.

Phyllites tanneri Chaney, 1920a, 180, pl. 22, f. 1; Eagle Creek: Multnomah Co., Oreg.

Phyllites truncatus Lesquereux=*Mimusops truncata* (Lesquereux) Knowlton.

Phyllites umbonatus Lesquereux. □ Lesquereux, 1871, 380; Dakota: Beatrice, Gage Co., Nebr.

Phyllites winchesteri Knowlton, 1923, 175, pl. 38, f. 2; Green River: Rio Blanco Co., 20 mi. west of Rio Blanco, Colo.

Phyllites sp. Ball, 1931, 95, pl. 17, f. 5; Indio: Bartons Ranch, Bastrop Co., Tex.

Phyllites sp. Chaney, 1920a, 181, pl. 14, f. 3; Eagle Creek: Multnomah Co., Oreg.

Phyllites sp. Chaney & Elias, 1936b, 46, pl. 7, f. 9; Ogallala: Beaver Co., Okla.

Phyllites sp. Hollick, 1930, 116, pl. 30, f. 4c; Kaltag: Lower Yukon, Alaska.

Phyllites sp. Hollick, 1930, 116, pl. 30, f. 4b; Kaltag: Lower Yukon, Alaska.

Phyllites sp. Hollick, 1930, 116, pl. 6, f. 6c; Kaltag: Lower Yukon, Alaska.

Phyllites sp. Knowlton, 1900d, 50, pl. 6, f. 1; 5 mi. south of Ashland, Oreg.

Phyllites sp. 1, Knowlton, 1920, 190; Morrison: Morrison, Colo.

Phyllites sp. 2, Knowlton, 1920, 190; Morrison: Morrison, Colo.

Phyllites sp. Knowlton, 1923a, 191, pl. 43, f. 14; Creede: Creede, Colo.

Phyllites sp. Knowlton, 1923a, 191, pl. 43, f. 15; Creede: Creede, Colo.

Phyllites sp. Knowlton, 1924, 98, pl. 19, f. 1; Animas: Pagosa Quad., Colo.

Phyllites sp. Knowlton, 1926=*Salix spokanensis* (Berry) R. W. Brown.

Phyllites sp. Knowlton, 1930, 130, pl. 56, f. 3; Dawson: Mosby, Colo.

Phyllites sp. Knowlton, 1917a, □ Berry, 1929j, 131; Frontier: near Cumberland, Wyo.

Phyllites n. sp. Knowlton, 1901e=*Phyllites mascalensis* Arnold.

Phyllites sp. Seward, 1926, 137, text-f. 34a-b; Nugsuak, west Greenland.

PHYLLLOCLADITES Visiani.

Phyllocladites dubiosus Hollick, 1930, 52, pl. 2, f. 9; Chignik: Alaska Peninsula.

Phyllocladites rotundifolius Heer, 1874a, 124, pl. 35, f. 16-21b.—White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

PHYLLODERMIUM Miner, 1935, 594. Genotype: *P. reinchii* Miner.

Phyllodermium nervosum Miner, 1935, 594; Disko Isl., west Greenland.

Phyllodermium perplexum Miner, 1935, 594; Disko Isl., west Greenland.

Phyllodermium reinchii Miner, 1935, 594; Disko Isl., west Greenland.

Physagenia parlatorii, Dawson not Heer=*Equisetum arcticum* Heer.

Physagenia sp. Lesquereux=*Equisetum* sp. Knowlton, 1930.

PHYTOLACCA Tournefort.

Phytolacca decandra Linné. Berry, 1924a, 19, pl. 1, f. 26-28; Pleistocene: Washington, D. C.

PHYTORADICULARIA Hollick, 1930, 116. Genotype: *P. dubia* Hollick.

Phytoradicularia dubia Hollick, 1930, 116, pl. 2, f. 10; Chignik: Alaska Peninsula.

Picea canadensis (Miller) Britton, Sterns & Poggenberg. □ Hansen, 1935, 16, pl. 323; Aftonian: Macon Co., Mo.

Picea evanstoni Penhallow, 1892, 31, pl. 3, 4; Pleistocene: Evanston, Ill.

Picea grandivescipites Wodehouse, 1933a, 488, f. 10; Green River: Parachute Creek, Garfield Co., Colo.

Picea glauca Voss. Chaney & Mason, 1936c, 8, text-f. 8-10; Pleistocene: Cleary Creek, near Fairbanks, Alaska.

Picea harrimani Knowlton. □ Hollick, 1936, 46; Kukak Bay, Alaska Peninsula.

Picea lahontense MacGinitie, 1933, 46, pl. 3, f. 4, 6, 8; Trout Creek: Trout Creek, Harney Co., Oreg.—Dorf, 1936, 107, pl. 1, f. 2; Idaho: near Weiser, Idaho.

Picea pinifructus R. W. Brown, 1929, 282, pl. 70, f. 5; Green River: northwest of De Beque, Colo.

Picea quilchensis Penhallow. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.

Picea sitchensis (Bongard) Carrière. □ Mason, 1934, 145, pl. 5, f. 5, 6; Tomales: Tomales Bay, Marin Co., Calif.

Picea sookensis LaMotte, 1935b, 55, pl. 1, f. 1; Sooke: Whiffen Spit, Vancouver Island, British Columbia.

Picea, species of, R. W. Brown, 1937, 167, pl. 45, f. 8, 18, 19, 29, 30; Mascall: Tipton, Oreg.; Republic, Wash.

Picea? sp. Chaney=*Betula fairii* Knowlton.

Picea sp. (branches) Knowlton. □ Hollick, 1936, 46; Kukak Bay, Alaska.

Picea? sp. (seed) Knowlton. □ Hollick, 1936, 46; Kukak Bay, Alaska Peninsula.

Picea sp. Mason, 1927, 151, pl. 3, f. 2; Mascall: Tipton, Oreg.—Oliver, 1934, 13; Mascall: Tipton, Oreg.

PICEITES Goeppert, 1884, in Wimmer, Flora v. Schlesien, vol. 2, 218.

Piceites cretaceus R. W. Brown, 1935a, 445, text-f. 8; west branch of Anacostia River, Maryland.

PICEOXYLON.

Piceoxylon laricinoides Høeg, 1931, 366, pl. 1-3; pl. 4, f. 1-4, 6-7; text-f. 1, 6; Myggbukta, East Greenland.

cf. *Piceoxylon laricinoides* Høeg, 1931, 376, pl. 5, f. 1-5; Myggbukta, East Greenland.

Pimelia spatulata Knowlton=*Lomatia coloradensis* (Knowlton) R. W. Brown.

Pinites pannonicus (Unger) Goeppert. □ Hollick, 1936, 45; Unga Isl., Alaska.

Pinites sp. Goeppert, 1861, Schlesische Gesell. vaterl. Cultur, 39te Jahresber., Abh., 203.—Hollick, 1936, 45; Atka Isl., Aleutian Isls.; Cook Inlet, Alaska.

PINOXYLON Knowlton. □ Read, 1932, 174.

Pinoxylon dakotense Knowlton. □ Read, 1932, 175-186, f. 1-12; Lakota or Fuson: 3 mi. northwest of Sturgis, N. Dak.

Pityoxylon dakotense (Knowlton) Penhallow.

PINUS Linné. □ Mason, 1927, 146.—Read, 1930b, 11; discussion of wood anatomy.—Chaney & Mason, 1930, 9.—Mason, 1934, 146; discussion.

Pinus aristata crossii (Knowlton) Cockerell, 1934, 573, text-f. 1; Creede: near Creede, Colo.

Pinus crossii Knowlton, 1923a, 185, pl. 41, f. 3, 8-10; Creede: Creede, Colo.

Pinus attenuata Lemmon. □ Mason, 1927, 148, pl. 2, f. 2; Auriferous Gravels: near You Bet, Calif.—1932, 54; You Bet, Calif.

Pinus attenuata, Knowlton not Lemmon=*Pinus muricata* D. Don.

Pinus balli R. W. Brown, 1934, 53, pl. 8, f. 5; Green River: between Carr and Brush Creeks northwest of De Beque, Colo.

Pinus baumani Read, 1930b, 11, pl. 3, f. 1-6; pl. 6, f. 2; Lamar River: Specimen Ridge, Fossil Forest, Yellowstone Nat. Park.

Pinus caribaea Morelet. □ Berry, 1934c, 237, text-f. 14-15; Chapopote: Baños de Ciego Montero, Santa Clara Province, Cuba.

Pinus collinsi Berry, 1936a, 125, text-f. 2; Calvert: Plum Point, Md.

Pinus coloradensis Knowlton, 1923a, 186, pl. 41, f. 6; Creede: Creede, Colo.

Pinus crameri Heer (part) = *Sciadopitytes crameri* (Heer) Halle.

Pinus crossii Knowlton = *Pinus aristata crossii* (Knowlton) Cockerell.

Pinus echinata Miller. □ Berry, 1927, 22; Pleistocene: Talbot, Va.

Pinus eirikiana Heer = *Sciadopitytes eirikiana* (Heer) Florin.

Pinus fallax (Felix) Read, 1930b, 13, pl. 2, f. 1-6; pl. 5, f. 4, 6; pl. 6, f. 3; Lamar River: Specimen Ridge, Fossil Forest, Yancey Forest, and Crescent Hill, Yellowstone Nat. Park.

Pityoxylon fallax Felix. □

Pityoxylon aldersoni Knowlton. □

Pityoxylon amethystinum Knowlton. □ Conard, 1930, 547-553, 5 f.; Yellowstone Nat. Park.

Pinus florissanti? Lesquereux. □ Knowlton, 1923a, 186, pl. 41, f. 7; Creede: Creede, Colo.

Pinus glabra Walter. Berry, 1922b, 10; Pleistocene: Chilton Co., Ala.

Pinus hazeni Axelrod, 1937, 165, pl. 2, f. 4; Mt. Eden: near Beaumont, Calif.

Pinus kelloggi Webber, 1933, 121, pl. 1, f. 1-3; Ricardo: near Barstow, Calif.

Pinus knowltoni Chaney, 1920a, 160, pl. 5, f. 3, 4; Eagle Creek: Multnomah Co., Oreg.—1922a, 214; Payette: Idaho.—1927a, 101; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Mason, 1927, 148, pl. 2, f. 1; pl. 3, f. 6, 7; Mascall: Tipton, Oreg.—MacGinitie, 1933, 46; Trout Creek: Trout Creek, Harney Co., Oreg.—Oliver, 1934, 13; Mascall: Austin and Tipton, Oreg.—Dorf, 1936, 106; Idaho: near Weiser, Idaho.

Pinus knowltoni, Mason (part) not Chaney = *Cedrela pteriformis* (Berry) R. W. Brown.

Pinus latahensis Berry, 1929f, 238, pl. 49, f. 7; Latah: Republic, Wash.

Pinus linguiformis Mason, 1932, 50, pl. 1, f. 5; northeast of Signal Hill, Los Angeles Co., Calif.

Pinus lynni Berry, 1934b, 182, text-f. 1; Aquia: Belvedere Beach, Va.

Pinus macclurii Heer. □ Hollick, 1936, 45; Tanana, Yukon River region, Alaska.

Pinus macrophylla Berry, 1929f, 238, pl. 49, f. 9; Latah: Republic, Wash.—LaMotte, 1936b, 417; Ellensburg: Ellensburg, Wash.

Pinus cf. *macrophylla* Berry. Seward & Conway, 1935, 9, pl. 1, f. 7; Kingigtok, West Greenland.

- Pinus masoni* Dorf, 1930, 70, pl. 5, f. 4-6; Ventura, Ventura Co.; Mussel Rock, San Francisco Co., Calif.—Mason, 1932, 49, text-f. 4; Merced: near San Francisco, Calif.; Pico: near Ventura, Calif.; Santa Clara: near Palo Alto, Calif.
- Pinus monophylla* Torrey. ?Laudermilk & Munz, 1934a, 37, pl. 4, f. 1; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.
- Pinus monticolensis* Berry, 1929f, 238, pl. 49, f. 5, 8; Latah: Republic and Spokane, Wash.—1934, 104; Latah: 3.8 mi. east of White Bird, Idaho Co., Idaho.
- Pinus monticolensis*, LaMotte not Berry=*Cedrela oregoniana* (Lesquereux) R. W. Brown.
- Pinus muricata* D. Don. Scott, 1926, 407; Tesla, Calif.—Mason, 1927, 147, pl. 3, f. 1, 4, 5; Pleistocene: Rancho La Brea, Los Angeles Co.; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Chaney & Mason, 1927, 157—1933a, 54, pl. 4, f. 1; pl. 5, f. 3; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Mason, 1932, 51, pl. 1, f. 3; Pleistocene: Carpinteria asphalt deposits; Millerton: Marin Co.; Tomales: Tomales Bay, Marin Co., Calif.—1934, 147, pl. 6, f. 2; pl. 7, f. 4; Tomales: Tomales Bay, Marin Co., Calif.
- Pinus attenuata*, Knowlton not Lemmon, 1916f, 85; Pleistocene: Rancho La Brea, Los Angeles Co., Calif.
- Pinus nordenskiöldi* Heer. □ Wilson, 1916, 207; Mt. Bush, Yukon Terr.
- Pinus peterseni* Heer. White, 1898, 347, 352; Kook, Ujarartorsuak, Nugsuak Pen., west Greenland.
- Pinus pieperi* Dorf, 1930, 69, pl. 5, f. 7-10; Pliocene: Ventura, Calif.—Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.—1937, 165, pl. 2, f. 2, 3; Mt. Eden: near Beaumont, Calif.
- Pinus pretuberculata* Axelrod, 1937, 166, pl. 3, f. 3, 4; Mt. Eden: near Beaumont, Calif.
- Pinus radiata* D. Don. □ Mason, 1927, 147; Merced: Mussel Rock, 6 mi. south of San Francisco, Calif.; Millerton: Preston Point, Marin Co., Calif.; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—1932, 52, pl. 1, f. 2; Pleistocene: Carpinteria; Mussel Rock, near San Francisco; Millerton and Toms Point, Tomales Bay, Calif.—1934, 148, pl. 6, f. 3; pl. 7, f. 3; Tomales: Tomales Bay, Marin Co., Calif.—Chaney & Mason, 1927, 157.—1933a, 55, pl. 4, f. 2; pl. 5, f. 4, 9; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Webber, in Chaney & Mason, 1933, 66; Pleistocene: Carpinteria, Santa Barbara Co., Calif.
- Pinus raritanensis* Berry. □ Berry, 1913a, 572; Tuscaloosa: near Cottondale, Ala.—1920e, 398; Black Creek; North Carolina.
- Pinus remorata* (Engelmann) Mason, 1930, Madroño, vol. 2, no. 1.—Chaney & Mason, 1930, 10, pl. 6, f. 1, 2; Pleistocene: Santa Cruz Isl., Calif.—Mason, 1932, 52, pl. 1, f. 1; Pleistocene: Santa Cruz Isl., Carpinteria, Calif.—Chaney & Mason, 1933a, 56; Pleistocene: Carpinteria, Santa Barbara Co., Calif.
- Pinus rigida*, Berry not Miller=*Pinus serotina* Michaux.
- Pinus russelli* LaMotte=*Cedrela oregoniana* (Lesquereux) R. W. Brown.
- Pinus* cf. *sabiniana* Douglas. Chaney & Mason, 1933a, 56, pl. 5, f. 7, 8; Pleistocene: Carpinteria, Santa Barbara Co., Calif.
- Pinus scituatensiforme* Bailey=*Pityoxylon scituatensiforme* (Bailey) Torrey.
- Pinus scopulipites* Wodehouse, 1933a, 488, f. 8; Green River: Parachute Creek, Garfield Co., Colo.
- Pinus serotina* Michaux. Berry, 1926b, 105, pl. 45, f. 9; Chowan: Wayne Co.; Pitt Co.; Pamlico: Craven Co., N. C.
- Pinus rigida*, Berry not Miller, 1907b, 339; Neuse River, N. C.
- Pinus similis* Knowlton, 1923a, 186, pl. 41, f. 11, 12; Creede: Creede, Colo.; Huerto: near Lake Santa Maria, Colo.

- Pinus steenstrupiana* Heer. □ Berry, 1926d, 96; Eocene: Joseph Creek, British Columbia.
- Pinus strobipites* Wodehouse, 1933a, 487, f. 7; Green River: Parachute Creek, Garfield Co., Colo.
- Pinus strobus* Linné. □ ?Penhallow, 1899, 526; Price's Brickyard, Don Valley, Toronto, Ontario.
- Pinus susquaensis* Dawson. □ Berry, 19291, 61; Upper Blairmore, southwest Alberta.
- Pinus taeda* Linné. □ Berry, 1927, 23; Pleistocene: Henry Co., Tenn.
- Pinus tetrafolia* Berry, 1929f, 238, pl. 49, f. 6; Latah: Republic, Wash.—Dorf, 1936, 106; Idaho: near Weiser, Idaho.
- Pinus torreyana* Parry. Mason, 1927, 147, pl. 1, f. 3; pl. 2, f. 3; Bridge Creek: Cove Creek near Clarno Ferry, Ore.
- Pinus trunculus* Dawson. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.—Berry, 1926d, 98, pl. 10, f. 4, 5; Joseph and Darlington Creeks, British Columbia.
- Pinus tuberculata* Gordon. Frost, 1927, 75, pl. 15, f. 1, 2; Pleistocene: Rancho La Brea, Calif.
- Pinus tuberculipites* Wodehouse, 1933a, 488, f. 9; Green River: Parachute Creek, Garfield Co., Colo.
- Pinus* sp. Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.
- Pinus*, staminate aments, Berry, 1929f, 239, pl. 64, f. 17–19; Latah: Spokane, Wash.
- Pinus*, needle, Berry, 1934, 104; Latah: north of Weiser, Washington Co., Idaho.
- Pinus* sp. (leaves and stems) Brooks, 1935, 281, pl. 4, f. 2, 3; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.
- Pinus* sp. (scales of cones) Brooks, 1935, 281, pl. 4, f. 1, 4, 5; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.
- Pinus*, species of, R. W. Brown, 1937, 167, pl. 45, f. 9–17, 20, 21, 26; Thunder Mt. Idaho; Salmon, Idaho; Tipton, Ore.; Idaho City, Idaho; Latah: Spokane, Wash.
- Pinus* sp. Dorf, 1930, 71, pl. 6, f. 1; Calabazas Canyon, Contra Costa Co., Calif.
- Pinus* sp. Dorf, 1936, 106; Idaho: near Weiser, Idaho.
- Pinus* sp. Heer, 1869, 23, pl. 1, f. 11.—Hollick, 1936, 45; Port Graham, Alaska.
- Pinus?* sp. Hollick, 1930, 56, pl. 20, f. 10; Melozi: Lower Yukon, Alaska.
- Pinus* sp. Knowlton, 1900d, 39, pl. 1, f. 3, 4; 5 mi. southeast of Ashland, Ore.
- Pinus* sp. (leaves) Knowlton. □ Berry, 1932a, 40; Sucker Creek: Ballantyne Ranch, Malheur Co., Ore.
- Pinus?* sp. (leaves) Knowlton, 1904. □ Hollick, 1936, 45; Kukak Bay, Alaska Peninsula.
- Pinus?* sp. (scales) Knowlton, 1904. □ Hollick, 1936, 45; Kukak Bay, Alaska Peninsula.
- Pinus* sp. Knowlton, 1926, 26, pl. 8, f. 9; Latah: near Mica, Wash.—Berry, 1929f, 239; Latah: near Mica and at Spokane, Wash.
- Pinus* n. sp. Lesquereux, 1884, 12; near New Ulm, Minn.
- Piper arcuatile* Hollick, 1930, 62, pl. 31, f. 1, 2; Kaltag: Lower Yukon, Alaska.
- Piper chapini* Hollick, 1936, 60, pl. 115, f. 3; Eska Creek, Matanuska Coal Field, Alaska.
- Piper concavum* Hollick, 1936, 59, pl. 115, f. 1, 2; Yakutat-Copper River region; south side Hamilton Bay, Kupreanof Island, southeastern Alaska.
- Piper convertibilis* Hollick, 1936, 59, pl. 114, f. 2, 3a, 4–9; Matanuska Coal Field; west side Herendeen Bay, Alaska Peninsula; Anchorage Bay, Chignik Bay, Alaska Peninsula.

Piper disputabilis Hollick, 1936, 59, pl. 114, f. 10; Yakutat-Copper River region, Alaska.

Piper heerii Lesquereux. □ Knowlton, 1930, 43, pl. 11, f. 6; Denver: Golden, Colo.

Piper septentrionalis Hollick, 1936, 58, pl. 113, f. 1-6; pl. 114, f. 1; Lower Chignik Lake, Alaska Peninsula; Matanuska River 14 mi. above mouth of Chickaloon River; Matanuska Coal Field, Alaska.

Piperites cordatus Berry, 1921b, 171, pl. 22, f. 1; southeast Costa Rica.

Piperites cf. cordatus Berry, 1925a, 85, pl. 13, f. 9; Forest: Trinidad, British West Indies.

Piperites quinquecostatus Berry, 1921b, 171, pl. 22, f. 2; southeast Costa Rica.

Pisonia apalachicolaensis Berry, 1916b, 49, pl. 10, f. 1; Alum Bluff: Alum Bluff, Liberty Co., Fla.

Pisonia balli Berry, 1924, 162, pl. 42, f. 4; Fayette: Alum Creek, Brazos Co., Tex.—Ball, 1931, 153, pl. 27, f. 3; Fayette: Alum Creek, Brazos Co., Tex.

Pisonia chlorophylloides Berry. □

Quercus chlorophylla Unger. □ Lesquereux, 1871, 382; Wilcox: Mississippi; Marshall, Colo.

Pisonia claibornensis, Knowlton not Berry = *Pisonia claiborniana* Berry.

Pisonia claiborniana Berry, 1914, 140, pl. 28, f. 3; Barnwell: Phinizy Gully, Columbia Co., and near Macon, Ga.—1924, 61, 162, pl. 10, f. 3; Yegua: Columbia, Caldwell Parish, La.; Barnwell: Columbia and Bibbs Cos., Ga.—Ball, 1931, 153; Fayette: Alum Creek, Brazos Co., Tex.

Pisonia claibornensis Berry. Knowlton, 1919, 460.

Pisonia conditi Berry, 1921a, 119, pl. 21, f. 1; Sanchez: Samaná Dist., Santo Domingo.—1922, 5, pl. 1, f. 5; Artibonite Group: Haiti.

Pisonia cretacea Berry. □ Berry, 1920e, 402; Black Creek: North Carolina.

Pisonia fructifera Berry, 1930, 68, pl. 11, f. 5, 6; Holly Springs: Shandy, Hardeman Co., Tenn.

Pisonia jacksoniana Berry, 1924, 162, pl. 32, f. 6, 7; pl. 49, f. 3; Lagrange: near Corona, Tipton Co., Tenn.; near Union City, Obion Co., Tenn.; Jackson: White Bluffs, Jefferson Co., Ark.; Forest Hill: north of Jackson, Miss.—Ball, 1931, 152; Fayette: Alum Creek, Brazos Co., Tex.

Pisonia praejacksoniana Berry, 1930, 68, pl. 46, f. 2; Holly Springs: Grable Pit, Henry Co., Tenn.

Pistia claibornensis Berry. □ Berry, 1924, 146, pl. 28, f. 4; Barnwell: Grovetown, Columbia Co., Ga.

Pistia corrugata Lesquereux. □ Berry, 1935, 23; Whitemud: Loc. 7, P 5-30, southern Saskatchewan.

Pistia nordenskiöldi (Heer) Berry. □ Berry, 1920e, 399; Black Creek: Pitt, Wayne, and Sampson Cos., North Carolina.

Pistia n. sp. Bell, 1930, 55; St. Mary River: southern Alberta.

Pithecolobium ceterum Hollick, 1936, 127, pl. 72, f. 9b, 11b; Drews Mine, north bank Yukon River, central Yukon region, Alaska.

Pithecolobium eocenicum Berry. □ Berry, 1930, 75, pl. 32, f. 10; Holly Springs: Shandy, Hardeman Co., Tenn.

Pithecolobium eocenicum anomalum Berry, 1930, 75, pl. 44, f. 1-2; Holly Springs: Puryear, Henry Co.; McKenzie, Carroll Co., Tenn.

Pithecolobium ?imperfectum Hollick, 1928, 202, pl. 69, f. 5; Collazo: Porto Rico.

Pithecolobium oligocaenum Berry, 1916e, 239, pl. 55, f. 10; Catahoula: Chalk Hills near Rosefield, La.

Pithecolobium pseudotrapezifolium Hollick, 1924, 302, pl. 10, f. 8; Collazo River, Porto Rico.—1928, 203; Collazo: Porto Rico.

Pithecolobium samanensis Berry, 1921a, 120, pl. 21, f. 2; Samaná Dist., Santo Domingo.

Pithecolobium? *tennesseensis* Berry, 1930, 75, pl. 22, f. 6; pl. 39, f. 7; Holly Springs: Pattersonville, Fayette Co., Tenn.

Pithecolobium tenuifolium Engelhardt, 1895, Abh. Senck. Naturf. Gesell. vol. 19, 37, pl. 3, f. 21; Santa Ana, Colombia.—Berry, 1925a, 90, pl. 1, f. 5; Upper Forest: Trinidad, British West Indies.

Pithecolobium unguiscati (Linné) Benth. Berry, 1925c, 3, pl. 3, f. 4; Pleistocene: Trinidad, British West Indies.

Pithecolobium vexativum Hollick, 1924, 303, pl. 11, f. 4; Collazo River, Porto Rico.—1928, 203, pl. 71, f. 3; Collazo: Porto Rico.

PITYOLEPIS Nathorst.

Pityolepis rugosa Seward, 1926, 107, pl. 9, f. 77, 78; Upernivik Isl., West Greenland.

Pityophyllum crassum Seward, 1926, 106, text-f. 16; Nugsuak, west Greenland.

Pityophyllum graminaefolium (Knowlton) Bell=*Oleandra graminaefolia* Knowlton.

PITYOSPERMUM.

Pityospermum cedroides Seward & Conway, 1935, 10, pl. 1, f. 3; Kingigtok, West Greenland.

Pityospermum kingigtokense Seward & Conway, 1935, 9, pl. 1, f. 2, 4; Kingigtok, West Greenland.

PITYOXYLON Kraus. □ Torrey, 1923, 65. Genus redefined.

Pityoxylon alderi Knowlton=*Pinus fallax* (Felix) Read.

Pityoxylon amethystinum Knowlton=*Pinus fallax* (Felix) Read.

Pityoxylon annulatum Platen=*Pseudotsuga annulata* (Platen) Torrey.

Pityoxylon dakotense (Knowlton) Penhallow=*Pinoxylon dakotense* Knowlton.

Pityoxylon fallax Felix=*Pinus fallax* (Felix) Read.

Pityoxylon inaequale Felix. □ Hollick, 1936, 45. Yakutat-Copper River region, Alaska.

Pityoxylon macclurii (Cramer) Kraus. □ Hollick, 1936, 45; Alaska (no locality).

Pityoxylon scituatensis (Bailey) Torrey, 1923, 66, pl. 8, f. 3; Raritan: Matteawan, N. J.

Pinus scituatensis Bailey. □

Pityoxylon cf. *vateri* Platen. Torrey, 1923, 67; ash deposits: Cape Blanco, Oreg.

Pityoxylon sp. Torrey, 1923, 65; Laramie: Sentinel Butte, N. Dak.

Planera aquatica (Walter) Gmelin. □ Berry, 1926b, 111, pl. 54, f. 4, 5; Chohan: Neuse River, Wayne Co., N. C.

Planera aquaticiformis Hollick, 1936, 107, pl. 57, f. 7; near Berg Lake, Yakutat-Copper River region, Alaska.

Planera aquatica, Berry (part) not Gmelin=*Planera hickmanensis* Berry.

Planera cretacea Berry. □ Berry, 1920e, 400; Black Creek: North Carolina.

Planera gmelini, Lesquereux not Michaux=*Planera hickmanensis* Berry.

Planera hickmanensis Berry, 1924, 158, pl. 50, f. 4, 5; Lagrange: Hickman, Fulton Co., Ky.; near Union City, Obion Co., Tenn.

Planera gmelini, Lesquereux not Michaux, 1859, 365.

Planera aquatica, Berry not Gmelin, 1915b, 300.

Betula nigra, Berry not Linné, 1915b, 298.

Planera inaequilateralis (Lesquereux) Knowlton, 1923, 161; Green River: Alkali Station and Green River, Wyo.

Alnites inaequilateralis Lesquereux (part), 1876a, 381.—1876c, 307.—1878, 141, pl. 62, f. 3 only; Green River: Alkali Station, Wyo.

Alnus inaequilateralis (Lesquereux) Lesquereux.□

Planera variabilis Newberry (part), 1883, 506.—1898, 83, pl. 66, f. 5, 6; Green River: Green River, Wyo.

Planera inaequilateralis (Lesquereux) Knowlton.□Brown, R. W., 1934, 56; Green River: localities as cited by authors.

Comptonia? anomala Knowlton, 1923, 185, pl. 37, f. 1; Green River: Greasewood Creek, Rio Blanco Co., Colo.

Planera microphylla Newberry.□Berry, 1935, 28; Upper Ravenscrag: Loc. 27, southern Saskatchewan.

Planera myricaefolia (Lesquereux) Cockerell.□Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.—Knowlton, 1923a, 188, pl. 43, f. 16, 17; Creede: Creede, Colo.; Huerto: near Lake Santa Maria, Colo.

Planera nervosa Newberry.□Berry, 1926d, 109, pl. 17, f. 5; Eocene: Kitsilano, British Columbia.—Brown, R. W., 1929, 284, pl. 71, f. 7-9; Green River: between Carr and Brush Creeks, 30 mi. northwest of De Beque, Colo.—1934, 56; Green River: Locs. as cited by authors.

Ulmus pleurinervia Heer not Unger.□Hollick, 1936, 105, Port Graham, Kenai Peninsula, Alaska.

Myrica praedrymeja Knowlton, 1923, 157, pl. 36, f. 1-3; Green River: Greasewood Creek, 40 mi. southwest of Meeker, Colo.

Salix sp. Knowlton, 1923, 156, pl. 37, f. 3, 5; Green River: southwest of Meeker, Rio Blanco Co., Colo.—Berry, 1930d, 69, pl. 12, f. 5; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Dalbergia viridiflumis Knowlton, 1923, 164, pl. 40, f. 10; Green River: west of Rio Blanco, Rio Blanco Co., Colo.

Planera ungeri Ettingshausen.□Hollick, 1912a, 51; Eska Creek, Lower Matanuska, Alaska.—1936, 107, pl. 58, f. 5; Port Camden, Kuiu Isl., southeastern Alaska.

Planera variabilis Newberry (part)=**Planera inaequilateralis** (Lesquereux) Knowlton.

Planera variabilis Newberry (part)=**Rhus variabilis** (Newberry) Knowlton.

PLATANOPHYLLUM Fontaine, 1889, 316. Genotype: *P. crassinerve* Fontaine.□Seward, 1926, 129; discussion.

Platanophyllum geisleri Seward, 1926, 134, pl. 12, f. 120; Disko Isl., West Greenland.

Platanophyllum? cf. *geisleri* Seward. Seward & Conway, 1935, 23; Kingigtok, West Greenland.

Platanophyllum insigne (Heer) Seward, 1926, 130, pl. 11, f. 111; pl. 12, f. 121; text-f. 31; Nugsuak and Disko Isl., west Greenland.—Seward & Conway, 1935a, 29, text-f. 27; Igdlouknuak, Atanekerdruk, Kardiok: west Greenland.

Cissites insignis Heer.□Heer, 1867, Denksch. Allgem. Schweiz. Gesell. Naturwiss., vol. 22, 19, pl. 2, f. 3-5.

Cissites formosus Heer.□Berry, 1913a, 570; Tuscaloosa: near Glen Allen, Ala.—1922c, 170, pl. 40, f. 5; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Cissites formosus magothiensis Berry.□

Cissites dentato-lobatus Lesquereux.□

Cissites panduratus Knowlton.□Berry, 1925, 70, pl. 14; Ripley: Perry Place, Henry Co., Tenn.

Aralia groenlandica Heer.□Gress, 1922, 322; Dakota: Ellsworth Co., Kans.

Sterculia krejei, Hollick not Velenovsky.□

Araliaephyllum groenlandicum (Heer) Fritel, 1914, 21.

Aralia ravniana Berry not Heer, 1903, 92, pl. 46, f. 7; pl. 53, f. 2; pl. 57, f. 1.—1904a, 79.—1910, 27.—1916, 876, pl. 82, f. 4; pl. 83, f. 1-4.—1922d, 219, pl.

Platanophyllum insigne—Continued.

58; pl. 59, f. 4.—Hollick, 1906, 99, pl. 37, f. 1, 2; Magothy: Cliffwood, N. J.; Gay Head, Marthas Vineyard, Mass.; Grove Point, Md.; Raritan; Tottenville, Staten Island, N. Y.; Cheyenne: near Belvidere, Kiowa Co., Kans.

Sterculia snowii? Hollick not Lesquereux, 1898, 422, pl. 38, f. 4.

Aralia rotundiloba Newberry.□

Platanophyllum pfaianum (Heer) Seward, 1926, 133, pl. 10, f. 93; Nugsuak, West Greenland.

Sassafras pfaiana Heer, 1883, 29, pl. 55, f. 18.

Platanophyllum wellingtonianum (Lesquereux) Seward, 1926, 134, pl. 10, f. 102; Nugsuak, west Greenland.

Aralia wellingtoniana Lesquereux (part), 1892, 131, pl. 21, f. 1.—Newberry, 1895, 114, pl. 26, f. 1.—Berry, 1911, 202, pl. 25, f. 7.—1912b, 402; Dakota: Carneiro, Ellsworth Co., Kans.; Raritan: Woodbridge, N. J.; Woodbine: Arthurs Bluff, Lamar Co., Tex.—Gress, 1922, 321; Dakota: Ellsworth Co., Kans.—Berry, 1922c, 176, pl. 37, f. 3, pl. 38, f. 3, 4; Woodbine: Arthurs Bluff, Lamar Co., Tex.—Hollick, 1930, 109, pl. 84, f. 1; Kaltag: Lower Yukon, Alaska.

Aralia jorgenseni Heer.□

Platanophyllum sp., cf. **Platanus aceroides** Goeppert. Seward & Conway, 1935, 23, pl. 3, f. 28; Kingitok, West Greenland.**PLATANUS** Linné.□Ball, 1931, 58. Discussion.

Platanus aceroides Goeppert.□Lesquereux, 1871, 383; Rock Creek, Wyo.—1883, 227, pl. 49, f. 1.—1888, 48; Denver: Golden, Colo.—Cragin, 1891, 31; Loup Fork: near Alpine, Kans.—Knowlton, 1893b, 104; Ellensburg: Ellensburg, Wash.—1924, 86; Animas: Pagosa Quad., Colo.—Berry, 1926, 193; Paskapoo: Alberta.—Ball, 1931, 57; Indio: Bastrop Co., Tex.—Chaney & Sanborn, 1933, 78, pl. 25, f. 6; Fisher: Goshen, Oreg.—Sanborn, 1935, 21, pl. 6, f. 10; Comstock: Comstock, Douglas Co., Oreg.—Chaney & Elias, 1936b, 41, pl. 7, f. 12; Ogallala: Brown Co., Nebr.; Beaver Co., Okla.

Platanus aceroides cuneata Knowlton.□

Platanus aceroides cuneata Knowlton=**Platanus aceroides** Goeppert.

Platanus aceroides latifolia Knowlton.□Knowlton, 1924, 86, pl. 13, f. 3; pl. 14, f. 4; Animas: Pagosa Quad., Colo.—1930, 76, pl. 33, f. 1; Denver: Golden, Colo.—Berry, 1926, 194; Paskapoo: Alberta.—Ball, 1931, 58, pl. 18, f. 1; Indio: Earle, Bexar Co., Tex.—Hollick, 1936, 123, pl. 68, f. 1, 2; south bank Yukon River above Rampart, central Yukon region, Alaska.—Arnold, 1937, 88, pl. 3, f. 1; Fenwick Ranch west of Sucker Creek, Oreg.

Platanus aceroides? latior Lesquereux=**Platanus latiloba** Newberry.

Platanus affinis Lesquereux=**Platanus? newberryana** Heer.

Platanus alata Hollick, 1930, 85, pl. 49, f. 2, 3; Kaltag: Lower Yukon, Alaska.

Platanus appendiculata, Berry not Lesquereux=**Aralia republicensis** R. W. Brown.

Platanus aquehongensis Hollick=**Platanus? newberryana** Heer.

Platanus aspera Newberry (part)=**Platanus dissecta** Lesquereux.

Platanus aspera Newberry (part)=**Tilia aspera** (Newberry) LaMotte.

Platanus aspera Newberry (part)=**Platanus condoni** (Newberry) Knowlton.

Platanus asperaeformis Berry=**Platanus? newberryana** Heer.

Platanus basilobata Ward.□Berry, 1935, 32, pl. 6, f. 7; Upper Ravenscrag: Loc. P 11-30, southern Saskatchewan.

Aralia digitata Ward.□

Aralia vari ana Knowlton & Cockerell.□

Viburnum corycoides Dawson.□

Platanus nobilis, Dawson not Newberry, 1887, 24, pl. 1, f. 7; Souris River, Porcupine Creek, and Great Valley, Saskatchewan; Calgary, Alberta.

Platanus cissitifolia Gress, 1922, 310, pl. 15, f. 3, 4; Lancaster Co., Virginia?
Location may be in error as matrix resembles Dakota Sandstone.

Platanus coloradensis Knowlton, 1930, 82, pl. 37, f. 1, 2; Middle Park: Middle Park, Grand Co., Colo.

Platanus condoni (Newberry) Knowlton. □ Chaney, 1927a, 120; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.

Platanus aspera Newberry (part), 1898, pl. 42, f. 3 only; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Platanus diminutiva Lesquereux. □ Lesquereux, 1871, 379; Dakota: Beatrice, Gage Co., Nebr.

Platanus dissecta Lesquereux. □ Knowlton, 1893b, 104; Ellensburg: Ellensburg, Wash.—Chaney, 1922a, 216; Payette: Idaho—1925b, 27; Bridge Creek: Oregon—Scott, 1926, 406; Tesla, Calif.—Berry, 1929f, 248, pl. 53, f. 1, 2; pl. 61; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1932a, 40; Ballantyne Ranch, Malheur Co., Oreg.—1934, 111, pl. 21, f. 2; Latah: east of White Bird, Idaho Co.; Linson Valley, Washington Co.; Alkali Creek, Payette Co.; near St. Maries, Kootenai Co., Idaho—Oliver, 1934, 22, pl. 3, f. 3; Mascall: Tipton and Austin, Oreg.—Brooks, 1935, 294, pl. 17, f. 2-4; pl. 18, f. 1, 2; Sucker Creek: Ballantyne Ranch, Idaho—LaMotte, 1936, 129; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—1936b, 417; Ellensburg: Ellensburg, Wash.—1936c, 348, Montesano: near Aberdeen, Wash.—Arnold, 1937, 88, pl. 9, f. 1-3; Sucker and Carter Creeks, Oreg.—MacGinitie, 1937, 140; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.—Brown, R. W., 1937, 174, pl. 52, f. 1-3; Mascall: Tipton, Oreg.; Latah: Spokane, Wash.; Sucker Creek: Sucker Creek, Malheur Co., Oreg.

Celtis hesperius Berry, 1932a, 41, text-f. 1; Ballantyne Ranch, Malheur Co., Oreg.

Platanus pseudoccidentalis Hollick, 1927, 409, pls. 40-42; St. Eugene silts: British Columbia.

Platanus aspera Newberry (part), 1898, pl. 42, f. 2 only; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Acer bendirei Lesquereux (part), 1888a, 14, pl. 5, f. 5; pl. 6, f. 1; pl. 7, f. 1; (not pl. 8, f. 1); Mascall: Van Horns Ranch, John Day Basin, Oreg.

Acer merriami Knowlton. □

Acer n. sp. Knowlton, 1901e. □

Platanus guillelmae Goeppert. □ Lesquereux, 1888, 48; Denver: Golden, Colo.—Noé, 1925, pl. 21, f. 2; Dakota: Cimarron Co., Okla.—Knowlton, 1930, 76, pl. 33, f. 2; pl. 34, f. 1; Denver: Golden, Colo.—Berry, 1935, 33; Middle Ravenscrag: Loc. P 3-30, southern Saskatchewan.

Platanus guillelmae heeri Knowlton. □ Reagan, 1926, 121, f. 3; Raton: Willow Canyon, N. Mex.—Berry, 1935, 33; ?Whitemud: Loc. P 5-30; Middle Ravenscrag: Loc. 34; Upper Ravenscrag: Loc. 32, southern Saskatchewan.

Platanus guillelmae, Ward not Goeppert=**Viburnum antiquum** (Newberry) Hollick.

Platanus? grewipsoides Hollick, 1930, 85, pl. 28, f. 5b; pl. 52, f. 1; Kaltag: Lower Yukon, Alaska.

Platanus haydenii Newberry. □ Lesquereux, 1888, 48; Denver: Golden, Colo.—Knowlton, 1930, 79, pl. 36, f. 1; Denver: Golden, Colo.; Dawson: Sedalia, Colo.

Platanus heerii Lesquereux=**Platanus latiloba** Newberry.

Platanus latibasalis Hollick, 1930, 85, pl. 51, f. 1; Kaltag: Lower Yukon, Alaska.

Platanus latiloba Newberry. □ Seward, 1926, 125, pl. 11, f. 109; text-f. 29; Upernivik Isl., Nugsuak, Disko Isl., west Greenland.—Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Platanus heerii Lesquereux. □ White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.—Hollick, 1930, 84, pl. 43, f. 2; pl. 46, f. 1; pl. 55, f. 2; Melozi: Lower Yukon; Nulato: Lower Yukon; Kaltag: Lower Yukon, Alaska.

Platanus latiloba—Continued.*Sassafras recurvatus* Lesquereux.□*Platanus aceroides?* *latior* Lesquereux.□ Lesquereux, 1871, 379; Dakota: Decatur and Lancaster, Nebr.*Platanus primaeva* Lesquereux.□ Lesquereux, 1884, 12; near New Ulm, Minn.—Gress, 1922, 310; Dakota: Ellsworth, Kans.*Platanus primaeva subintegrifolia* Lesquereux.□*Platanus recurvata* Lesquereux.□*Sassafras cretaceum recurvatum* (Lesquereux) Newberry.□*Sassafras (Araliopsis) mirabile* Lesquereux.□*Platanus latior* (Lesquereux) Knowlton.□ Berry, 1913a, 572; Tuscaloosa: near Cottondale, Ala.—1922c, 164; Woodbine: Arthurs Bluff, Lamar Co., Tex.—Reagan, 1926, 122, f. 4; Raton: Willow Canyon, N. Mex.—Hollick, 1930, 84, pl. 51, f. 2; Melozi: Lower Yukon, Alaska.? *Platanus shirleyensis* Berry.□*Sassafras latilobum* (Newberry) Knowlton.□*Sassafras mirabilis* Lesquereux.□ Gress, 1922, 304; Dakota: Fort Harker and Ellsworth Cos., Kans.*Sassafras (Araliopsis) recurvatum* Lesquereux.□*Platanus latior subintegrifolia* (Lesquereux) Knowlton.□*Platanus latior* (Lesquereux) Knowlton=*Platanus latiloba* Newberry.*Platanus latior intermedia* Hollick, 1930, 84, pl. 75, f. 1; Melozi: Lower Yukon, Alaska.*Platanus latior subintegrifolia* (Lesquereux) Knowlton=*Platanus latiloba* Newberry.*Platanus marginata* (Lesquereux) Heer=*Viburnum marginatum* Lesquereux, revived.*Platanus newberryi* Lesquereux=*Platanus? newberryana* Heer.*Platanus? newberryana* Heer.□ Heer, 1883, 28, p. 59, f. 1-6; pl. 60, f. 1.—White, 1898, 362, Patoot, Nugsuak Pen., West Greenland.—Seward, 1926, p. 128, pl. 11, f. 116, text-f. 30.—Hollick, 1930, 83, pl. 46, f. 2, 3; pl. 47, f. 3; Melozi: Lower Yukon; Kaltag: Lower Yukon, Alaska.—Seward & Conway, 1935a, 28, text-f. 26; Patoot: west Greenland.*Platanus affinis* Lesquereux.□ Heer, 1882, 73; pl. 28, f. 16, 17.—1883, 23, pl. 57, f. 1-6; pl. 59, f. 7.—?White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.*Cissites affinis* (Lesquereux) Lesquereux.□*Populites affinis* Lesquereux.□*Acer caudatum* Heer, 1883, 38, pl. 65, f. 1, 2.*Acer edentatum* Heer, 1883, 38, pl. 65, f. 3.*Sterculia variabilis*, Heer not Saporta, 1883, 38, pl. 51, f. 7.*Protophyllum minus* Lesquereux.□*Protophyllum nebrascense* Lesquereux.□*Platanus aqnehongensis* Hollick.□*Platanus asperaeformis* Berry.□*Ficus newberryana* Heer (part), 1883, 28, pl. 1, f. 2 only.*Platanus? newberryana conditionalis* Hollick, 1930, 83, pl. 46, f. 4; pl. 47, f. 4; pl. 48, f. 1; Melozi: Lower Yukon, Alaska.*Platanus nobilis* Newberry.□ Newberry, 1898, 106, pl. 34; pl. 37, f. 1; pl. 50, f. 1.—Berry, 1930, 62, pl. 8, f. 4; pl. 10, f. 1; Holly Springs: Pine Top, Hardeman Co.; Bolivar, Hardeman Co.; Whiteville, Hardeman Co.; Williston and Laconia, Fayette Co., Tenn.—Hollick, 1936, 124; Topanica Creek, Norton Sound, Alaska.*Platanus nobilis*, Dawson not Newberry=*Platanus basilobata* Ward.*Platanus obtusiloba* Lesquereux.□ Lesquereux, 1871, 379; Dakota: Beatrice, Gage Co., Nebr.*Platanus occidentalis* Linné.□ Penhallow, 1899, 526; Taylor's Brickyard, Don Valley, Toronto, Ontario.—Berry, 1914d, 161—1926b, 112, pl. 55, f. 1-9; Chowan: Neuse River, Wayne Co., N. C.—Emerson, 1917, 148.—Berry & Hawkins, 1935a, 250, pl. 24, f. 4; Pensauken: near Durhams Corner, Middlesex Co., N. J.

Platanus paucidentata Dorf, 1930, 94, pl. 10, f. 4, 9; pl. 11, f. 1; pl. 12, f. 1; Pliocene: Garberville, Santa Rosa, Bennett Valley, Lakeville, St. Mary's College, Lafayette Dam, Coalinga, Calif.—Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.—1937, 174, pl. 5, f. 4, 5; Mt. Eden: near Beaumont, Calif.

Platanus platanoides (Lesquereux) Knowlton. □ Knowlton, 1930, 82, pl. 36, f. 5; Dawson: east of Colorado Springs, Colo.

Platanus primaeva Lesquereux = **Platanus latiloba** Newberry.

Platanus primaeva heerii Janko = **Platanus latiloba** Newberry.

Platanus primaeva subintegrifolia Lesquereux = **Platanus latiloba** Newberry.

Platanus pseudoccidentalis Hollick = **Platanus dissecta** Lesquereux.

Platanus raynoldsii Newberry. □ Cross, 1895, 211; Middle Park: Middle Park Colo.—Knowlton, 1924, 86; Animas: Ignacio and Pagosa Quads., Colo.—1930, 77, pl. 35, f. 1; Denver: Golden, Colo.

Populus raynoldsii, Lesquereux not Newberry, 1888, 49; Denver: Golden, Colo.

Platanus raynoldsii integrifolia Lesquereux. □ Knowlton, 1930, 78, pl. 34, f. 2; Denver: Golden, Colo.; Middle Park: Middle Park, Grand Co., Colo.

Platanus rectinervis Hollick, 1936, 123, pl. 69; south bank Yukon River above Rampart, central Yukon region, Alaska.

Platanus recurvata Lesquereux = **Platanus latiloba** Newberry.

Platanus rhomboidea Lesquereux. □ Knowlton, 1930, 75, pl. 32, f. 3; Denver: Golden, Colo.; Dawson: Purdon Mine, Colo.

Viburnum anceps Lesquereux, 1888, 51; Denver: Golden, Colo.

Populus rhomboidea, Lesquereux not Newberry, 1888, 49; Denver: Golden, Colo.

Platanus ripleyensis Berry. □ Berry, 1925, 53; Ripley: Barbour Co., Ala.

Platanus septentrionalis Hollick, 1930, 84, pl. 47, f. 1, 2; pl. 48, f. 2-4; pl. 49, f. 1; Kaltag: Lower Yukon, Alaska.

? **Platanus shirleyensis** Berry = **Platanus latiloba** Newberry.

Platanus uniformis Bell, 1928, 24, pl. 11; Stikine River, British Columbia.

Platanus valida Hollick, 1930, 84, pl. 75, f. 2; Kaltag: Lower Yukon, Alaska.

Platanus sp. Ashlee, 1932, 80, pl. 1, f. 11; Latah: Elk River district, Idaho.

Platanus sp. Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.

Platanus sp. Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Platanus n. sp. no. 1, Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Platanus n. sp. no. 2, Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Platanus n. sp. no. 3, Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Platanus sp. Berry, 1919. □ Berry, 1925, 53; Ripley: Barbour Co., Ala.

Platanus sp. Berry, 1929m, 70, pl. 12; Allison: southwest Alberta.

Platanus (flower), Berry, 1931a, 37, pl. 12, f. 1; Latah: Grand Coulee, Wash.

Platanus sp. (stipules) Berry, 1932g, 413-416; Latah: Spokane, Wash.

Platanus sp. Berry, 1935, 33; Middle Ravenscrag: Locs. 5, 6, 34, southern Saskatchewan.

Platanus sp. Cragin, 1891, 31; Loup Fork: near Alpine, Kans.

Platanus sp., leaves of, Dall, 1892, U. S. Geol. Surv. Bull. 84, 246.—Hollick, 1936, 124; Ulukuk River, Lower Yukon-Norton Sound region, Alaska.

Platanus sp. Heer. White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.

Platanus? sp. Hollick, 1930, 85, pl. 50, f. 1, 2; Seventymile River: Upper Yukon;

Kaltag: Lower Yukon, Alaska.

Platanus? sp. Knowlton, 1898d. □ Hollick, 1936, 124; Miller's (Drew's) Mine. North bank Yukon River 25 mi. above Minook Creek, central Yukon region.

Platanus sp.? Knowlton, 1930, 83, pl. 38, f. 2; Dawson: Mosby, Colo.

Platanus sp. (Lesquereux) LaMotte, new combination.

Populus sp. Lesquereux, 1888, 49; Denver: Golden, Colo.

Platanus sp. Mathiesen, 1932, 29-32, text-f. 11; Cape Dalton, East Greenland.
Platanus sp. Seward & Conway, 1935a, 28, pl. 6, f. 31, 34; Patoot and Urantok: west Greenland.

Platypterygium densinerve Fontaine=*Nilssonia densinerve* (Fontaine) Berry.
Platypterygium rogersianum Fontaine=*Nilssonia densinerve* (Fontaine) Berry.

PLUMIERA Linné.

Plumiera alia Hollick, 1924, 315, pl. 5, f. 1; Moruga: Trinidad, British West Indies.—Berry, 1925a, 128, pl. 2, f. 2; Siparia: Trinidad, British West Indies.

Plumiera evidens Hollick, 1924, 315, pl. 10, f. 5; Collazo River, Porto Rico.—1928, 224; Collazo: Porto Rico.

Poacites tenue-striatus Heer.□Berry, 1926d, 98; Newhykulston Creek, British Columbia.—Hollick, 1936, 56; Port Graham, Kenai Peninsula, Alaska.

Poacites sp. Berry, 1921a, 118; Samaná Dist., Santo Domingo.

Poacites sp. Heer, 1868a, 63.—Hollick, 1936, 56; Port Graham, Kenai Peninsula, Alaska.

Poacites sp. Hollick, 1912a, 50; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.

Poacites sp. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Poacites sp. Hollick 1899,□Berry, 1930, 53, pl. 7, f. 13; Holly Springs: Laconia, Fayette Co., Tenn.

Podocarpoxylon dakotense Torrey, 1923, 73; Laramie: Sentinel Butte, N. Dak.

Podocarpoxylon mcgeeii (Knowlton) Sinnott & Bartlett.□Torrey, 1923, 71, pl. 9, f. 15, 16; pl. 10, f. 18; Raritan: Matteawan, N. J.

Podocarpoxylon texense Torrey, 1923, 68, pl. 8, f. 7-11; Tertiary: Rockdale, Tex.

Podocarpoxylon washingtonense Torrey, 1923, 70, pl. 9, f. 12-14; Salmon Creek, Toledo, Wash.

Podogonium americanum Lesquereux.□Brown, R. W., 1934, 59, pl. 10, f. 8; Green River: northwest of Rio Blanco, Rio Blanco Co., Colo.

PODOZAMITES F. Braun.□Harris, 1935, 82; discussion.

Podozamites agardhianus. (Brongniart) Nathorst=*Podozamites* spp. indet., Harris.

Podozamites astartensis Harris, 1935, 87, pl. 16, f. 17; text-f. 35; Lepidopteris Zone: Scoresby Sound, east Greenland.

Podozamites crassifolia Newberry, 1876, 145, pl. 6, f. 10; Triassic?: Los Bronces, Sonora, Mexico.

Podozamites distans, Harris not Presl=*Podozamites* cf. *distans* (Presl) Braun.

Podozamites cf. *distans* (Presl) Braun. Harris, 1935, 94, pl. 16, f. 3, 6; text-f. 37a, h; Lepidopteris Zone: Scoresby Sound, east Greenland.

Podozamites distans, Harris not Presl, 1926, 110, text-f. 27a-d; Rhaetic: Scoresby Sound, east Greenland.

Podozamites sp. B, cf. *distans* (Presl) Braun. Harris, 1935, 95; Lepidopteris Zone: Scoresby Sound, east Greenland.

Podozamites cf. *graminaefolia*. Wilson, 1914, 408; Kootenai: Pimainus Hills north of Spence Bridge, Thomson River, British Columbia.

Podozamites haydenii (Lesquereux) Lesquereux.□

Pterophyllum haydenii Lesquereux.□Lesquereux, 1871, 379; Dakota: Decatur, Nebr.

Podozamites inaequilateralis (Fontaine) Berry.□

Nageiopsis? *montanensis* Fontaine.□Berry, 1929k, 50; Kootenai: southwest Alberta.

Podozamites knowltoni Berry□Berry, 1920e, 398; Black Creek: North Carolina.

- Podozamites lanceolatus** (Lindley & Hutton) C. F. W. Braun. □—Penhallow, 1906a, 392; Crows Nest Coal Basin, Michel Station, British Columbia.—Wilson, 1914, 408; Kootenai: Pimainus Hills north of Spence Bridge, Thomson River; Groundhog Coal Basin, Upper Skeena River, British Columbia.—Berry, 1920e, 398; Black Creek: Cumberland Co., N. C.—1922c, 159, pl. 36, f. 2; Woodbine: Arthurs Bluff, Tex.—1929k, 45, pl. 6; Kootenai: southwest Alberta.—1932h, 209; Gethring member of Bullhead Mt.: Peace River Valley, British Columbia.—Hollick, 1930, 46, pl. 6, f. 6b, 8b; pl. 7, f. 2b, 3b, 9b; pl. 8, f. 2, 4-8; pl. 9, f. 1-4; pl. 10, f. 1, 2a, 3a, 4, 5; pl. 11, f. 7b; pl. 16, f. 1b, 3b; pl. 20, f. 1b; pl. 27, f. 5, 6a; pl. 30, f. 1a, 4a; Seventymile River: Upper Yukon; Melozi: Lower Yukon; Nulato: Lower Yukon; Kaltag: Lower Yukon; Wolverine Mt.: Rampart-Tenana dist., Alaska.
- Podozamites lanceolatus**, Hartz not Lindley & Hutton=**Podozamites** spp. indet. Harris.
- Podozamites lanceolatus eichwaldi** (Schimper) Heer. □Hartz, 1896, 239, pl. 13, f. 1; Rhaetic: Cape Stewart, east Greenland.
- Podozamites lanceolatus genuinus** Heer. Hartz, 1896, 239, pl. 13, f. 6, 8; pl. 14, f. 1, 3; Rhaetic: Cape Stewart, east Greenland.
- Podozamites lanceolatus latifolius** (F. Braund) Heer. □Hartz, 1896, 239, pl. 13, f. 3; pl. 14, f. 4; Rhaetic: Cape Stewart, east Greenland.
- Podozamites lanceolatus minor** (Schenk) Heer. □Hartz, 1896, 238, pl. 13, f. 4, 5, 9; pl. 14, f. 2, 5; pl. 18, f. 1a; Rhaetic: Cape Stewart, east Greenland.
- Podozamites latipennis** Heer=**Pseudoctenis latipennis** (Heer) Seward.
- Podozamites marginatus** Heer=**Krannera marginata** (Heer) Seward.
- Podozamites minor** Herr, 1882, 44, pl. 16, f. 8.—Seward, 1925, 241; type specimens indeterminate.
- Podozamites mucronatus** Harris, 1935, 96, pl. 16, f. 4, 5, 7, 10-12, 14; text-f. 39; transitional between Lepidopteris and Thaumatopteris Zones: Scoresby Sound, east Greenland.
- Podozamites punctatus** Harris, 1935, 89, pl. 18, f. 5; text-f. 36 37b, c; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Podozamites schenki**, Hartz not Heer=**Podozamites** spp. indet. Harris.
- Podozamites stenopus** Lesquereux. □Berry, 1929l, 60, pl. 10, f. 3; Upper Blairmore: southwest Alberta.
- Podozamites stewartensis** Harris, 1926, 113, pl. 6, f. 4; pl. 13, f. 3; text-f. 28a-g; Rhaetic: Scoresby Sound, east Greenland.—1935, 84, pl. 13, f. 5, 6; pl. 16, f. 15, 16; text-f. 33, 34, 37d, e, g; Lepidopteris Zone: Scoresby Sound, east Greenland.
- Podozamites tenuinervis** Heer. □Seward, 1925, 241. Type specimens indeterminate.
- Podozamites** sp. Bell, 1932, 220; Dunvegan: Peace River, British Columbia.
- Podozamites?** sp. Berry, 1924g, 496, text-f. 7; Popo Agie Beds: near Lander, Wyo.
- ?**Podozamites** sp. A, Harris=**Desmiophyllum** sp. (Type 3) Harris.
- ?**Podozamites** sp. B, Harris=**Pterophyllum zygotacticum** Harris.
- Podozamites** spp. indet. Harris, 1935, 92, pl. 18, f. 7; pl. 20, f. 8; text-f. 28; Thaumatopteris and Lepidopteris Zones: Scoresby Sound, east Greenland.
- Podozamites schenki*, Hartz not Heer, 1896, 240, pl. 13, f. 2, 7; Rhaetic: Cape Stewart, east Greenland.—Harris, 1926, 115, text-f. 29a-d; Rhaetic: Scoresby Sound, east Greenland.
- Podozamites lanceolatus*, Hartz not Lindley & Hutton, 1896, 237, pl. 14, 18; Rhaetic: Cape Stewart, east Greenland.
- Podozamites agardhianus*, Harris not Brongniart, 1926, 112, pl. 8, f. 3, text-f. 27e-g; Rhaetic: Scoresby Sound east Greenland.

Podozamites sp. Wilson, 1914, 408; Kootenai: Pimainus Hills north of Spence Bridge, Thomson River, British Columbia.

POLYALTHIA Blume.

Polyalthia chaneyi Sanborn, 1935, 18, pl. 3, f. 4; Comstock: Comstock, Douglas Co., Oreg.

Polygonum hydropiperoides Michaux. Berry, 1924a, 19, pl. 1, f. 19–22; Pleistocene: Washington, D. C.

Polygonum sp. Berry, 1924a, 19, pl. 1, f. 23; Pleistocene: Washington, D. C.

Polygonum sp. Berry, 1926b, 112; Chowan: Neuse River, Wayne Co., N. C.

POLYPODITES Goepfert.

Polypodites sp. Potbury, 1935, 60, pl. 1, f. 1; La Porte, Plumas Co., Calif.

Polypodium fertile MacGinitie, 1937, 131, pl. 3, f. 3, 5; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Polypodium grahamianum=*Gleicheniopsis fecunda* (Heer) Tutin.

POLYPORITES Lindley & Hutton, 1833, Foss. Fl., vol. 1, 181.

Polyporites browni Wieland=*Ceratodus browni* (Wieland) R. W. Brown, 1938.

Polyporites stevensoni R. W. Brown=*Syringopore coral* R. W. Brown, 1938.

POLYTRICHITES E. G. Britton, 1926, 24. Genotype: *P. spokaneensis* E. G. Britton.

Polytrichites spokaneensis E. G. Britton, 1926, 24, pl. 8, f. 3, 4; Latah: Spokane, Wash.—Berry, 1929f, 236; Latah: Spokane, Wash.

Pontederites hesperia Knowlton=*Sparganium antiquum* (Newberry) Berry.

Pontederites thecoides Hollick=*Sparganium antiquum* (Newberry) Berry.

POPULITES Viviani, 1833, Soc. Geol. France, Mem., ser. 1, vol. 1, 133. Genotype: *P. phaetonis* Viviani.

POPULITES Goepfert, 1852, Palaeontographica, vol. 2, art. 6, 276 (20).—Massalongo, 1859, in Massalongo and Scarabelli, Studii sulla flora foss. e geologia stratigraphica del Senigalliese, 50, Imola. Genotype? *P. platyphyllus* Goepfert.

POPULITES Massalongo, Lesquereux emend., 1874a, 58, pl. 3, f. 1.—Hollick, 1930, 64. Genotype: *P. lancastriensis* Lesquereux.

Populites affinis Lesquereux=*Platanus? newberryana* Heer.

Populites? captiosus Hollick, 1930, 66, pl. 36, f. 2; Melozi: Lower Yukon, Alaska.

Populites cyclophylla (Heer) Lesquereux.□Lesquereux, 1871, 379; Dakota: Decatur, Nebr.—1884, 12; near New Ulm, Minn.

Populites elegans Lesquereux.□Lesquereux, 1871, 379; Dakota: Decatur, Nebr.—Gress, 1922, 288; Dakota: Ellsworth Co., Kans.

Populus elegans Lesquereux, 1884, 12; near New Ulm, Minn.

Populites flabellata Lesquereux=*Grewiopsis flabellata* (Lesquereux) Knowlton.

Populites lancastriensis (Lesquereux) Lesquereux.□

Populus lancastriensis Lesquereux.□Lesquereux, 1871, 379; Dakota: Decatur, Nebr.—1884, 12; near New Ulm, Minn.

Populites litigiosus (Herr) Lesquereux.□Gress, 1922, 288; Dakota: Ellsworth Co., Kans.

Populus litigiosus Heer.□Lesquereux, 1884, 12; near New Ulm, Minn.

Populites mirabilis Hollick, 1930, 67, pl. 33; Melozi: Lower Yukon, Alaska.

Populites ovata Lesquereux=*Ampelophyllites ovatus* (Lesquereux) Knowlton.

Populites platanoides Hollick, 1930, 65, pl. 34, f. 5; pl. 36, f. 3; Melozi: Lower Yukon, Alaska.

Populites pseudoelegans Hollick, 1930, 64, pl. 35, f. 2; Kaltag: Lower Yukon, Alaska.

Populites pseudolancastriensis Hollick, 1930, 65, pl. 35, f. 3; Kaltag: Lower Yukon, Alaska.

Populites quadrangularis Lesquereux=*Hamamelites quadrangularis* (Lesquereux) Lesquereux.

Populites salisburiaefolia Lesquereux=*Araliopsoidea cretacea salisburiaefolia* (Lesquereux) Berry.

Populites spatiosus Hollick, 1930, 66, pl. 32, f. 1, 2; Melozi: Lower Yukon, Alaska.

Populites vitiformis Hollick, 1930, 65, pl. 34, f. 2-4; Melozi, Kaltag: Lower Yukon, Alaska.

Populus acuminatafolia Berry, 1926d, 102, pl. 17, f. 1-3; Joseph Creek, British Columbia.

Populus aequalis Lesquereux.□Lesquereux, 1871, 383; Rock Creek, Wyo.

Populus alba Linné. ?Scott, 1926, 409; Tesla, Calif.

Populus alexanderi Dorf, 1930, 75, pl. 6, f. 9-11; pl. 7, f. 1-3; Garberville; Alturas; Santa Rosa; Bennett Valley; St. Mary's College; Lafayette Dam; Calabazas Canyon; Coalinga, Calif.—Chaney, 1938, 215, pl. 6, f. 1, 5; pl. 7, f. 2; Deschutes: Vanora Grade, near Madras, Crook Co., Oreg.

Populus amblyrhyncha Ward=*Trochodendroides cuneata* (Newberry) Berry.

Populus arctica Heer=*Trochodendroides arctica* (Heer) Berry.

Populus arctica var. b, Heer, 1868, 101, pl. 5, f. 1a, 2b, 3, 4, 7b; pl. 17, f. 5c.—Hollick, 1936, 61, pl. 117, f. 8; Chignik Bay opposite Nun Point, Alaska Peninsula.

Populus arctica, Lesquereux (part) not Heer=*Populus jacksoni* Knowlton.

Populus aspensis R. W. Brown, 1933, 5, text-f. 1; Aspen: southwest Wyoming.

Populus attenuata, Lesquereux (part) not Al. Braun=*Populus?* sp. Knowlton.

Populus balsamifera Linné.□?Penhallow, 1899, 527; Taylor's Brickyard, Don Valley, Toronto, Ontario.—Hollick, 1931, 39, pl. 3, f. 1-5; pl. 4, f. 3b; Pleistocene: Colebrook, N. H.

Populus balsamoides Goeppert.□Wilson, 1916, 206; Sheep Creek, Yukon Terr.—Arnold, 1935, 380; Trout Creek: Trout Creek, Harney Co., Oreg.—Hollick, 1936, 65, pl. 23, f. 3, 4; pl. 25, f. 1; pl. 116, f. 3, 4; south bank Yukon River above Rampart, central Yukon region: near Berg Lake, Yakutat-Copper River region; Matanuska River below Moose Creek, Matanuska-Cook Inlet region; Hamilton Bay, Kupreanof Isl., southeastern Alaska; Nenana Coal Field, Tenana region; Port Graham, Matanuska-Cook Inlet region; Kootznahoo Inlet, southeastern Alaska.

Populus balsamoides latifolia, Lesquereux not Moench=*Tilia scudderii* (Cockerell) R. W. Brown.

Populus berggreni Heer=*Dalbergites simplex* (Newberry) Seward.

Populus congerminalis Hollick, 1936, 67, pl. 116, f. 2; Kukak Bay, Alaska Peninsula.

Populus crassa (Lesquereux) Cockerell.□Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.

Populus crenata, Lesquereux (part) not Unger=*Populus nebrascensis* Newberry.

Populus crenata, Lesquereux (part) not Unger=*Quercus viburnifolia* Lesquereux.

Populus cretacea Knowlton.□Wilson, 1916, 205; Belly River: Red Deer River, Alberta.

Populus cuneata Newberry=*Trochodendroides cuneata* (Newberry) Berry.

Populus cuneata, Lesquereux not Newberry=*Trochodendroides cuneata* (Newberry) Berry.

Populus cyclomorpha Knowlton & Cockerell=*Trochodendroides cuneata* (Newberry) Berry.

Populus daphnogenoides Ward.□Berry, 1935, 64; Middle Ravenscrag: Loc P 12-30, southern Saskatchewan.

Populus delicatus Chaney, 1920a, 162, pl. 7, f. 3, 4; Eagle Creek: Multnomah Co., Oreg.

Populus denverensis Knowlton, 1930, 61, pl. 23, f. 5; Denver: Golden, Colo.

Populus elegans Lesquereux=*Populites elegans* Lesquereux.

Populus elliptica Newberry.□Hollick, 1930, 63, pl. 31, f. 5; Chignik: Alaska Peninsula.

Populus eotremuloides Knowlton.□Berry, 1934, 106; Latah: north of Arrow Junction, Nez Percé Co., Idaho.—Brooks, 1935, 282; Sucker Creek: Ballantyne Ranch, near Homedale, Idaho.—LaMotte, 1936, 114; pl. 5, f. 7, 9; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Montesano: near Aberdeen, Grays Harbor Co., Wash.; Ellensburg: Kittitas Co., Wash.—1936b, 417; Ellensburg: Ellensburg, Wash.—Brown, R. W., 1937, 169, pl. 47, f. 1; Sucker Creek: Sucker Creek, Malheur Co., Oreg.

Populus occidentalis Knowlton.□

Populus fairii Knowlton=*Cebatha heteromorpha* (Knowlton) Berry.

Populus flexuosa Hollick, 1936, 63, pl. 30, f. 5; pl. 33, f. 2; pl. 117, f. 9; Kootznahoo Inlet, Admiralty Isl., southeastern Alaska; summit of mountain $\frac{1}{2}$ mi. east of head of north branch, Russell Creek, Alaska Peninsula.

Populus gaudini Fischer-Ooster, 1856, in Heer, Fl. Tert. Helv., vol. 2, 24, pl. 64, f. 1-9.—Lesquereux, 1888, 47; Denver: Golden, Colo.—Hollick, 1936, 67, pl. 25, f. 2, 3; Eska Creek, Matanuska Coal Field, Matanuska-Cook Inlet region, Alaska.

NOTE.—Seward & Conway, 1935, 29, consider this species as equal to *Dicotylophyllum gaudini* q. v.

Populus genetrix Newberry=*Trochodendroides genetrix* (Newberry) R. W. Brown.

Populus glandulifera Heer.□Hollick, 1936, 65, pl. 31, f. 1; pl. 32, f. 5, 6; pl. 116, f. 1; south bank Yukon River above Rampart, central Yukon region: Hamilton Bay, Kupreanof Isl., southeastern Alaska; Port Graham, Matanuska-Cook Inlet region, Alaska.

Populus glandulifera, Ward not Heer=*Trochodendroides genetrix* (Newberry) R. W. Brown.

Populus grandidentata Michaux.□Penhallow, 1899, 527; Taylor's brickyard, Don Valley, Toronto, Ontario.

Populus grewiopsis Ward=*Viburnum antiquum* (Newberry) Hollick.

Populus harkeriana Lesquereux.□Berry, 1922c, 163; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Populus heliadum Lesquereux not Unger=*Ficus denveriana* Cockerell.

Populus heteromorpha Knowlton=*Cebatha heteromorpha* (Knowlton) Berry.

Populus? cf. *heterophylla* Linné, Berry, 1926b, 107; Chowan: Neuse River, Wayne Co., N. C.

Populus hookeri Heer.□Hollick, 1936, 65, pl. 24, f. 6; Bryant Creek, Upper Yukon region, Alaska.

Populus hyperborea Heer.□Bartsch, 1896, 179; Dakota: Holman Cut, Woodbury Co., Iowa.—Berry, 1913a, 572; Tuscaloosa: near Cottdendale, Ala.—Hollick, 1930, 62, pl. 29, f. 5b; Chignik: Alaska Peninsula.

Populus jacksoni Knowlton, 1930, 58, pl. 21, f. 6-8; pl. 22, f. 7; Denver: Golden, Colo.

Populus arctica, Lesquereux (part) not Heer, 1888, 47; Denver: Golden, Colo.

Populus jenningsi R. W. Brown, 1937, 506, text-f. 3; near O'Keefe Canyon, Missoula, Mont.

Populus kansaseana Lesquereux. □ Bartsch, 1896, 179; Dakota: Holman Cut, Woodbury Co., Iowa.—Gress, 1922, 287; Dakota: Ellsworth Co., Kans.

Populus kerri Bell, 1928, 25, pl. 12; Stikine River, British Columbia.

Populus knowltoni Berry in Knowlton, 1930, 61, pl. 23, f. 1-4; Dawson: Ramah, Colo.

Populus lacoeana Knowlton, 1930, 60, pl. 22, f. 5; Denver: Golden, Colo.

Populus lacustris (Knowlton) Berry, 1927c, 9; Esmeralda: Mineral Co., Nev.

Ficus lacustris Knowlton. □

Populus lamottei Chaney & Elias, 1936b, 35, pl. 4, f. 4, 5; Ogallala: Beaver Co., Okla.; Logan Co., Kans.—Brown, R. W., 1937c, 507, text-f. 4, 5; Ogallala: Beaver Co., Okla.

Cercidiphyllum crenatum, Chaney & Elias not R. W. Brown, 1936b, 35, pl. 4, f. 4, 5; Ogallala: Beaver Co., Okla.

Populus lancastriensis Lesquereux = **Populites lancastriensis** (Lesquereux) Lesquereux.

Populus latior Al. Braun. □ Dawson, 1879a, B 186; Coal Brook, North Thompson River, British Columbia; ?Ninemile Creek, Tulameen River, British Columbia.—Hollick, 1912a, 51; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.—1936, 64, pl. 25, f. 4; pl. 26, f. 1-4; Eska Creek, Matanuska Coal Field; Bryant Creek, Upper Yukon region; Port Graham, Matanuska-Cook Inlet region, Alaska.

Populus lesquereuxi Cockerell. □ Knowlton, 1923a, 187, pl. 44; Creede: Creede, Colo.

Pterocarya americana Lesquereux. □ Fide R. W. Brown, 1937, 170.

Populus lesquereuxi, Berry not Cockerell = **Salix inquirenda** Knowlton.

Populus leucophylla Unger. □ Hollick, 1936, 68; Port Graham, Matanuska-Cook Inlet region, Alaska.

Populus lindgreni Knowlton. □ Berry, 1929f, 243; Coeur d'Alene, Idaho; Vera, Bigelow Gulch, Republic, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—Hoffman, 1932, 735; Douglas Canyon, Wash.—MacGinitie, 1933, 49; Trout Creek: Trout Creek, Harney Co., Oreg.—Oliver, 1934, 17; Mascall: Tipton and Austin, Oreg.

Populus lindgreni, LaMotte not Knowlton = **Populus washoensis** R. W. Brown.

Populus lindgreni Knowlton (part) = **Vitis washingtonensis** (Knowlton) R. W. Brown.

Populus litigiosus Heer = **Populites litigiosus** (Heer) Lesquereux.

Populus microphyllus Lesquereux, 1871, 379; Dakota: Fort Ellsworth, Kans.

Populus mutabilis Heer, 1856, Fl. Tert. Helv., vol. 2, 19, pl. 53, f. 2a-d, 9a-d; pl. 60, f. 1-17; pl. 61, f. 1-15; pl. 62, f. 1-6; pl. 63, f. 1-4.—1859, Fl. Tert. Helv., vol. 3, 173, pl. 150, f. 10.—Lesquereux, 1888, 47; Denver: Golden, Colo.—Hollick, 1936, 68, pl. 33, f. 1b; Eska Creek, Matanuska-Cook Inlet region, Alaska.

Populus mutabilis repando-crenata Heer. Lesquereux, 1871, 382; Wilcox: Mississippi.

Populus nebrascensis Newberry. □ Lesquereux, 1888, 47; Denver: Golden, Colo.—Knowlton, 1930, 53; Denver: Golden, Colo.

Populus crenata, Lesquereux not Unger, 1888, 48; Denver: Golden, Colo.

"**Populus nebrascensis** Ny." (Lesquereux) = **Trochodendroides cuneata** (Newberry) Berry.

Populus nebrascensis acutidentata Lesquereux. □ Knowlton, 1930, 56, pl. 21, f. 1, 2; Denver: Golden, Colo.

Populus nebrascensis grandidentata Lesquereux. □ Knowlton, 1930, 56, pl. 19, f. 4-7; pl. 20, f. 2, 6, 7; Denver: Golden, Colo.

Populus nebrascensis longifolia Lesquereux. □ Knowlton, 1930, 56, pl. 21, f. 3-5; Denver: Golden, Colo.

Populus nebrascensis rotundata Lesquereux. □ Knowlton, 1930, 56, pl. 20, f. 1, 3, 5, 8; Denver: Golden, Colo.

"*Populus nervosa* var *β elongata* Ny." Lesquereux = *Trochodendroides cuneata* (Newberry) Berry.

Populus newberryi Cockerell. □

Populus acerifolia Newberry. □ Hollick, 1912a, 50; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.

Populus obscura Hollick, 1936, 68, pl. 27, f. 5, 6; Chignik River opposite Nun Point, Alaska Peninsula.

Populus obtrita Dawson. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.

Populus occidentalis Knowlton = *Populus eotremuloides* Knowlton.

Populus pliotremuloides Axelrod, 1937, 169, pl. 4, f. 1-5; Mt. Eden: near Beaumont, Calif.—Chaney, 1938, 214, pl. 6, f. 4; pl. 7, f. 1c, d; Deschutes: Vanora Grade, near Madras, Crook Co., Oreg.

Populus polymorpha Newberry = *Alnus carpinoides* Lesquereux.

Populus praelatior Hollick, 1930, 64, pl. 31, f. 8, 9; Melozi: Lower Yukon, Alaska.

Populus prefremontii Dorf, 1930, 77, pl. 7, f. 4; Bennett Valley; Lakeville; St. Mary's College; Lafayette Dam, Calif.—Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.

Populus primaeva Heer = *Dicotylophyllum* sp. Seward.

Populus pseudoelliptica Hollick, 1930, 63, pl. 31, f. 6; Chignik: Alaska Peninsula.

Populus pseudostygia Hollick, 1930, 63, pl. 31, f. 7; Chignik: Alaska Peninsula.

Populus raynoldsii, Lesquereux not Newberry = *Platanus raynoldsii* Newberry.

Populus rhomboidea Newberry. □ Newberry, 1863, 523; Cretaceous: Nanaimo, British Columbia.

Populus rhomboidea, Lesquereux not Newberry = *Platanus rhomboidea* Lesquereux.

Populus richardsoni Heer. □ Hollick, 1912a, 51; Chickaloon: Eska Creek, lower Matanuska Valley, Alaska.—1936, 61, pl. 27, f. 1-3; pl. 28, f. 2; pl. 29, f. 1-3; pl. 33, f. 1a; Anchorage Bay, Chignik Bay, Alaska Peninsula; Eska Creek, Matanuska Coal Field; Yukon River at Drew's Mine, Central Yukon region, Alaska.—?Wilson, 1916, 207; Sheep Creek, Yukon Terr.—Knowlton, 1930, 62, pl. 23, f. 6-8; Middle Park: Middle Park, Grand Co., Colo.

Populus rotundifolia Newberry = *Trochodendroides cuneata* (Newberry) Berry.

Populus scudderi Cockerell = *Tilia scudderi* (Cockerell) R. W. Brown.

Populus smilacifolia Newberry. □ Jennings, 1920, 409, pl. 26, f. 4; Missoula, Mont.

Populus speciosa Ward = *Trochodendroides speciosa* (Ward) Berry.

Populus stygia Heer (part) = *Menispermites nordenskiöldi* (Heer) Seward.

Populus stygia Heer (part) = *Dicotylophyllum ovale* (Lesquereux) Seward & Conway.

Populus subrotunda Lesquereux. □ Knowlton, 1930, 59, pl. 22, f. 9; Denver: Golden, Colo.

Populus subrotundatus Lesquereux. □ Dawson, 1879a, B 186; Coal Brook, North Thompson River, British Columbia.

Populus attenuata Al. Braun. □ Lesquereux, 1871, 383; Rock Creek, Wyo.—1888, 48; Denver: Golden, Colo.

Populus subrotundatus Lesquereux=*Populus subrotunda* Lesquereux.

Populus tenuinervata Lesquereux. □ Knowlton, 1930, 58, pl. 22, f. 1-4, 6; Denver: Golden, Colo.

Populus tremuloides Michaux. Chaney & Mason, 1956c, 12; text-f. 19; Pleistocene: Cleary Creek near Fairbanks, Alaska.

Populus ungeri Lesquereux. □ Lesquereux, 1888, 46; Denver: Golden, Colo.—? Ball, 1931, 38, pl. 41, f. 4; Indio: Little Sandy Creek, Bastrop Co., Tex.

Populus ungeri Lesquereux (part)=*Celastrinites populifolius* Knowlton.

Populus ungeri Lesquereux (part)=*Ficus denveriana* Cockerell.

Populus washingtonensis Knowlton=*Vitis washingtonensis* (Knowlton) R. W. Brown.

Populus washoensis R. W. Brown, 1937c, 516.

Populus lindgreni, LaMotte not Knowlton, 1936, 115, pl. 4, f. 1; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Populus wilmattae Cockerell, 1925, 3, pl. 2, f. 8; Green River: Roan Mts., Colo.

Populus xantholithensis Knowlton=*Trochodendroides speciosa* (Ward) Berry.

Populus zaddachi Heer=*Trochodendroides zaddachi* (Heer) Sanborn.

Populus zaddachi, Jennings not Heer=*Ceanothus idahoensis* R. W. Brown.

Populus zeileri (Lesquereux) Knowlton, 1930, 54, pl. 18, f. 8; pl. 19, f. 1-3; Denver: Golden, Colo.

Protoficus zeileri, Lesquereux. □

Populus sp. Arnold, 1935, 380; Trout Creek: Trout Creek, Harney Co., Oreg.

Populus sp.? (small form) Ball, 1931, 37, pl. 3, f. 4; Wilcox: Barton's Ranch, Bastrop Co., Tex.

Populus sp. Ball, 1931, 37, pl. 3, f. 6; Wilcox: Barton's Ranch, Bastrop Co., Tex.

Populus, amentiferous bract, Berry, 1929f, 243, pl. 63, f. 6; Latah: Spokane, Wash.

Populus, bud scales, Berry=Bud scales R. W. Brown.

Populus, pistillate ament, Berry, 1929f, 243, pl. 63, f. 7; Latah: Spokane, Wash.

Populus sp. Berry, 1934, 106; Latah: east of Lewiston, Nez Percé Co.; east of White Bird, Idaho Co., Idaho.

Populus sp. Berry & Johnson, 1922a, 138; Point Grays: Vancouver, British Columbia.

Populus? sp. Cragin, 1891, 31; Loup Fork: near Alkine, Kans.

Populus sp.? Hollick, 1936, 69, pl. 118, f. 4; divide between Folger Creek and Nowi River, central Yukon region, Alaska.

Populus sp.? Knowlton, 1912a, 42; Moose Creek, lower Matanuska Valley, Alaska.

Populus? sp. Knowlton, 1930, 57, pl. 21, f. 9; Denver: Golden, Colo.

Populus attenuata, Lesquereux not Al. Braun, 1888, 48; Denver: Golden, Colo.

Populus sp. Scott, 1926, 404; Tesla, Calif.

Populus sp. Wilson, 1914a, 322; Edmonton: Wigmore Ferry, Red Deer River, Alberta.

Populus sp. Wilson, 1916, 206; Sheep Creek, Yukon Terr.

Populus sp.? Wilson, 1916, 206; Sheep Creek, Yukon Terr.

Populus sp. Wilson, 1916, 207; Sheep Creek, Yukon Terr.

Porana microcalyx (Knowlton) Berry, 1929f, 263; Latah: Spokane, Wash.

Diospyros? microcalyx Knowlton, 1926, 46, pl. 22, f. 5, 6; Latah: Spokane, Wash.

Porana mirabilis Ball, 1931, 105, pl. 7, f. 6-8; Indio: Barton's Ranch and Little Sandy Creek, Bastrop Co., Tex.

Porana similis Knowlton=*Porana speirii* Lesquereux.

Porana speirii Lesquereux. □ Chaney, 1927a, 134; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Brown, R. W., 1935, 583, pl. 69, f. 1-3; Latah; Republic, Wash.; Green River, Fossil, Wyo.—1937, 185, pl. 62, f. 13; Green River: Fossil, Wyo.

Convolvulaceous? flower Kirchner, 1898, 187, pl. 15, f. 2.

Florissantia physalis Knowlton. □

Porana similis Knowlton. □

Hydrangea bendirei, Berry not Ward, 1929f, 251, pl. 52, f. 7; Latah: Republic and Spokane, Wash.

Potamogeton? *fructus* Berry, 1930, 54, pl. 49, f. 11-15; Holly Springs: Taylor Farm, Chester Co., Tenn.

Potamogeton *glücki* Berry, 1930, 54, pl. 44, f. 13, 14; Holly Springs: Mandy, Madison Co., Tenn.

Potamogeton heterophylloides Berry=*Keteleeria heterophylloides* (Berry) R. W. Brown.

Potamogeton hollickipites Wodehouse, 1933a, 496, f. 21; Green River: Parachute Creek, Garfield Co., Colo.

Potamogeton hydrocharitoides (Berry) Berry, 1928f, 446, pl. 12; Ripley: Carroll Co., Tenn.

Phyllites hydrocharitoides Berry, 1925, 88, pl. 22, f. 9; Ripley: Carroll Co., Tenn.

Potamogeton incertus Berry, 1930, 54, pl. 29, f. 5; Holly Springs: Shandy, Hardeman Co., Tenn.

Potamogeton knowltoni Berry, 1927c, 7, pl. 1, f. 5-8; Esmeralda: Mineral Co., Nev.

Potamogeton megaphyllus Berry. □ Berry, 1924, 145, pl. 28, f. 3; Barnwell: near Grovetown, Columbia Co., Ga.

Potamogeton natans Linné. □ Penhallow, 1899, 528; Taylor's Brickyard, Don Valley, Toronto, Ontario.

Potamogeton pectinatus Linné. □ Penhallow, 1900, 336; Besserers Wharf, Ottawa River, Canada.

Potamogeton perfoliatus Linné. □ Penhallow, 1900, 336; Besserers Wharf and Green's Creek, Ottawa River, Canada.

Potamogeton perryi Berry, 1921d, 420-423, 3 figs.; Ripley: Henry Co., Tenn.

Potamogeton pusillus Linné. □ Penhallow, 1900, 336; Green's Creek and Besserers Wharf, Ottawa River, Canada.

Potamogeton ripleyensis Berry, 1925, 34, pl. 3, f. 5; pl. 23, f. 1-3; Ripley: Carroll Co., Tenn.

Potamogeton rubus R. W. Brown, 1934, 53, pl. 8, f. 6; Green River: Carr Creek near Highmore, Colo.

Potamogeton rutilans Wolfgang=*Potamogeton rutilus* Wolfgang.

Potamogeton rutilus Wolfgang. □

Potamogeton rutilans Wolfgang. □ Penhallow, 1900, 336; Besserers Wharf and Green's Creek, Ottawa River, Canada.

Potamogeton sp. Berry, 1924, 145, pl. 28, f. 2; Barnwell: south of Macon, Bibb Co., Ga.

Potamogeton sp.? Hollick, 1931, 37, pl. 2, f. 1a, 1b, 2, 3; Pleistocene: Colebrook, N. H.

Potamogeton sp. Knowlton, 1926, 29, pl. 10, f. 5, 6; Latah: Spokane, Wash.

Potentilla? *byrami* Cockerell, 1925, 6, pl. 2, f. 9; Green River: Roan Mts., Colo.

Potentilla salmonensis R. W. Brown, 1935, 579, pl. 67, f. 13; Latah: Salmon, Idaho.

Potentilla villosa Lehn. Chaney & Mason, 1936c, 16, text-f. 29; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Potentilla sp. Chaney & Mason, 1936c, 16, text-f. 30, 31; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Pourouma texana Berry. □ Ball, 1931, 52; Indio: Barton's Ranch, Bastrop Co., Tex.

?*Problematicum* 3, Antevs=*Storgaardia spectabilis* Harris.

PROSOPIS Linné.

Prosopis piocenic Axelrod, 1937, 177, pl. 6, f. 2, 3; Mt. Eden: near Beaumont, Calif.

Proteoides daphnogenoides, Hollick not Heer=*Laurophyllum plutonium* (Heer) Seward.

Proteoides daphnogenoides, Newberry not Heer=*Laurophyllum plutonium* (Heer) Seward.

Proteoides longus Heer=*Laurophyllum plutonium* (Heer) Seward.

Proteoides vexans Heer=*Laurophyllum plutonium* (Heer) Seward.

Proteoides wilcoxensis Berry. □ Ball, 1931, 59; Wilcox: Butler Salt Dome, Free-stone, Tex.

Protoficus zeilleri Lesquereux=*Populus zeilleri* (Lesquereux) Knowlton.

Protodammara arctica Seward, 1926, 103, pl. 10, f. 90; Upernivik, Nugsuak, West Greenland.

Protodammara speciosa Hollick & Jeffrey. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

Protoficus inaequalis Newberry. □ Hollick, 1936, 111, pl. 118, f. 2; Matanuska Coal Field, Alaska.

PROTOPHYLLOCLADUS Berry. □ Seward & Conway, 1935a, 16; discussion.

Protophyllocladus lobatus Berry. □ Berry, 1925, 28; Ripley: Henry Co., Tenn.

Protophyllocladus obesus Hollick, 1930, 51, pl. 14, f. 6; Kaltag: Lower Yukon, Alaska.

Protophyllocladus polymorphus (Lesquereux) Berry. □ Hollick, 1930, 51, pl. 14, f. 7; Melozi: Lower Yukon, Alaska.—Seward & Conway, 1935a, 18, pl. 6, f. 32; Atanekerdluk: west Greenland.

Protophyllocladus simplex Hollick, 1930, 52, pl. 14, f. 4, 5; Kaltag: Lower Yukon, Alaska.

Protophyllocladus subintegrifolius (Lesquereux) Berry. □ Berry, 1913a, 572; Tuscaloosa: near Cottondale, Ala.—1929f, 133, pl. 21, f. 1, 2, 4; Frontier: near Lander, Wyo.—Hollick, 1930, 51, pl. 14, f. 1-3; Yukon River below Kaltag.—Seward & Conway, 1935a, 17, pl. 6, f. 30; text-f. 13; Atanekerdluk: west Greenland.

Phyllocladus subintegrifolius Lesquereux. □ Lesquereux, 1871, 379; Dakota: Decatur, Nebr.

Protophyllum boreale Dawson=*Pseudoprotophyllum boreale* (Dawson) Hollick.

Protophyllum canadensis Berry, 1935, 31, pl. 4, f. B; pl. 5, f. 1; Upper Ravenscrag: Loc. 32, southern Saskatchewan.

Protophyllum sp. Berry, 1926, 194, text-f. 1; Paskapoo: near Evansburg, Alberta.

Protophyllum crednerioides Lesquereux. □ Lesquereux, 1884, 12; near New Ulm, Minn.

Protophyllum leconteanum (Lesquereux) Lesquereux. □ Gress, 1922, 319; Dakota: Fort Harker, Kans.

Credneria leconteana Lesquereux. □ Lesquereux, 1871, 379; Dakota: Fort Ellsworth, Kans.

Protophyllum minus Lesquereux=*Platanus? newberryana* Heer.

- Protophyllum nebrascense* Lesquereux=*Platanus? newberryana* Heer.
- Protophyllum ovatum* Gress, 1922, 317, pl. 14, f. 1, 2; Dakota: Ellsworth Co., Kans.
- Protophyllum rugosum* (Lesquereux) Lesquereux.□Gress, 1922, 320; Dakota: Salina, Kans.
- Protophyllum sternbergii* (Lesquereux) Lesquereux.□Gress, 1922, 319; Dakota: Ellsworth Co., Kans.
- Protophyllum stikinensis* Bell, 1928, 24, pl. 10, f. 2; Stikine River, British Columbia.
- Protophyllum undulatum* Lesquereux=*Pseudoprotophyllum undulatum?* (Lesquereux) Bell.
- Protophyllum viburnifolium* Gress, 1922, 318, pl. 15, f. 1, 2; Dakota: Ellsworth Co., Kans.
- Protophyllum* sp. Berry 1926=*Protophyllum canadensis* Berry.
- Protophyllum?* sp. Hollick, 1930, 91, pl. 74, f. 6; Seventymile River: Upper Yukon, Alaska.
- PROTOPICEOXYLON** Gothan=**PINOXYLON** Knowlton.
- Protorhipis cordata* Heer=*Hausmannia* sp. Seward.
- Prunus aspensis* R. W. Brown, 1933, 9, pl. 2, f. 4; Aspen: southwest Wyoming.
- Prunus calvertensis* Berry, 1936a, 126, text-f. 1; Calvert: Nomini Cliff, Westmoreland Co., Va.
- Prunus coveus* Chaney, 1927a, 123, pl. 15, f. 1-4, 6; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Oliver, 1934, 23; Mascall: Austin, Oreg.—Brooks, 1935, 296; Sucker Creek; Ballantyne Ranch, Malheur Co., Oregon.
- Prunus cretacea* Lesquereux.□Lesquereux, 1871, 580; Dakota: Decatur, Nebr.
- Prunus demissa* Walpers. Scott, 1926, 406; Tesla, Calif.
- Prunus denverensis* Knowlton, 1930, 97, pl. 44, f. 3, 4, 6, 11; Dawson: Ramah, Colo.
- Prunus emarginata* (Douglas) Walpers. Potbury, 1932, 35, pl. 3, f. 8; San Bruno: San Mateo Co., Calif.—Mason, 1934, 164, pl. 10, f. 1; Tomales: Tomales Bay, Marin Co., Calif.
- Prunus hartungi aequalis* Hollick, 1936, 126, pl. 70, f. 1-3; Kachemak Bay, Kenai Peninsula, Alaska.
- Prunus irvingi* Chaney, 1938, 216, pl. 7, f. 3, 4; Deschutes: Vanora Grade, near Madras, Crook Co., Oreg.
- Prunus masóni* LaMotte, 1936, 131, pl. 10, f. 1, 2, 5; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.
- Prunus merriami* Knowlton.□Dorf, 1930, 99; St. Mary's College; Lafayette Dam; Calabazas Canyon, Calif.
- Prunus mclearnii* Berry, 1935, 41, pl. 12, f. 1, 2; Middle Ravenscrag: Loc. P. 1-30, southern Saskatchewan.
- Prunus olympica* Ettingshausen, 1869, K. Akad. Wiss. (Wien) Denkschr., vol. 29, 55, pl. 53, f. 21.—Hollick, 1936, 127, pl. 70, f. 5, 6; Kachemak Bay, Kenai Peninsula, Alaska.
- Prunus preandersonii* Axelrod, 1937, 176, pl. 4, f. 9, 10; Mt. Eden: near Beaumont, Calif.
- Prunus prefremontii* Axelrod, 1937, 176, pl. 4, f. 5, 6; Mt. Eden: near Beaumont, Calif.
- Prunus rustii* Knowlton=*Alnus corrallina* Lesquereux.
- Prunus rustii*, Berry not Knowlton=*Alnus relatus* (Knowlton) R. W. Brown.
- Prunus scottii* Heer, 1866, 279.—1868, 126, pl. 8, f. 7.—1869a, 483, pl. 55, f. 5a-c.—1880, 16, pl. 6, f. 2, 3.—1883, 137, pl. 84, f. 13.—Hollick, 1936, 126, pl. 70, f. 4; Matanuska River below Moose Creek, Alaska.

Prunus serotina Ehrhart. Berry, 1924a, 20, pl. 2, f. 2, 3; Pleistocene: Washington, D. C.

Prunus serratula Heer. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Prunus subcordata Benth. Mason, 1934, 165, pl. 10, f. 2; Tomales: Tomales Bay, Marin Co., Calif.

Prunus terrae-albae Ball, 1931, 155, pl. 29, f. 3; Fayette: Boggy Creek, Brazos Co., Tex.

Prunus variabilis Newberry □? Hollick, 1936, 127, pl. 71, f. 1, 2; near forks of Pumicestone Creek, Alaska Peninsula.

Prunus sp. Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.

Prunus sp. Chaney, 1920a, 176, pl. 17, f. 2; Eagle Creek: Multnomah Co., Oreg.

Prunus n. sp. Chaney, 1922a, 216; Payette: Idaho.

Prunus sp. Meehan, 1899, 281; Pleistocene: Port Kennedy, Pa.

Prunus sp. Penhallow, 1899, 528; Taylor's Brickyard, Don Valley, Toronto, Ontario.

PSEUDOASPIDIOPHYLLUM Hollick, 1930, 95. Genotype: Not designated by author; best material figured, *P. platanoides* Hollick.

Pseudoaspidiophyllum latifolium Hollick, 1930, 96, pl. 63, f. 3; pl. 64, f. 1, 2; Seventymile River: Upper Yukon; Melozi: Lower Yukon, Alaska.

Pseudoaspidiophyllum memorabile Hollick, 1930, 96, pl. 61; Kaltag: Lower Yukon, Alaska.

Pseudoaspidiophyllum platanoides Hollick, 1930, 96, pl. 62, f. 1, 2; Seventymile River: Upper Yukon, Alaska.

Pseudoaspidiophyllum singulare Hollick, 1930, 96, pl. 63, f. 2; Melozi: Lower Yukon, Alaska.

PSEUDOCTENIS Seward, 1911, Roy. Soc. Edinburgh, Trans., vol. 47, pt. 4, no. 23, 691.—Harris, 1932, 20. Genotype: *P. eathiensis* (Richards) Seward.

Pseudoctenis depressa Harris, 1932, 25, pl. 2, f. 3, 5; text-f. 14; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Pseudoctenis latipennis (Heer) Seward, 1925, 239, pl. B, f. 16.—1926, 93; Nugsuak, west Greenland.—Seward & Conway, 1935a, 12, pl. 3, f. 14; Unartuarssuk: west Greenland.

Podocamites latipennis Heer. □ Berry, 1929l, 59; Upper Blairmore, southwest Alberta.

Pseudoctenis spectabilis Harris, 1932, 20, pl. 2, f. 1, 4; pl. 3, f. 6; pl. 5, f. 9-13; text-f. 11, 12, 13, 35A-F; Lepidopteris and Thaumatopteris Zones: Scoresby Sound, east Greenland.

Leaf A Harris, 1926, 70, text-f. 9; Rhaetic: Scoresby Sound, east Greenland.

PSEUDOCYCAS Nathorst, 1907, 1. Genotype: *P. insignis* Nathorst.

Pseudocycas dicksoni (Heer) Nathorst, 1907, 8; west Greenland.

Cycadites dicksoni Heer, 1874, 99, pl. 27, f. 9c; pl. 28, f. 7.

Cycas dicksoni (Heer) Heer, 1882, 42, pl. 14, f. 10; pl. 16, f. 7.

Pseudocycas insignis Nathorst, 1907, 4, pl. 1, f. 1-5; pl. 2, f. 1-9; pl. 3, f. 1; Greenland.—Seward, 1926, 91; Nugsuak, west Greenland.

Pseudocycas pumilio Nathorst, 1907, 7, pl. 1, f. 6, 7.

Cycas sp. Nathorst, 1886, 262, f. 5.

Pseudocycas pumilio Nathorst = *Pseudocycas insignis* Nathorst.

Pseudocycas steenstrupi (Heer) Nathorst, 1907, 8, pl. 2, f. 10, 11; Greenland.—Seward, 1926, 90, pl. 9, f. 64, 67; Upervivik Isl., west Greenland.—Seward & Conway, 1935a, 10; Upervivik Naes: west Greenland.

Cycas steenstrupi Heer, 1882, 40, pl. 5.

Pseudocycas thomasi Seward & Conway, 1935a, 8, pl. 3, f. 13, 16; text-f. 2-4; Upernivik Naes: west Greenland.

Pseudocycas unjiga (Dawson) Berry, 1921e, 183-186, 3 figs.; Dunvegan: Moberly Lake, British Columbia—19291, 59; Upper Blairmore, southwest Alberta.—Bell, 1932, 220; Dunvegan: Peace River Valley, British Columbia.

Cycadites unjiga Dawson.□

Cycadites pungens Lesquereux.□

PSEUDOFRENELOPSIS Nathorst, 1893, 52. Genotype: *P. felixi* Nathorst.

Pseudofrenelopsis felixi Nathorst, 1893, 52, text-f. 6-9; Tlaxiaco, Oaxaca, Mexico.

PSEUDOPROTOPHYLLUM Hollick, 1930, 91. Genotype: Not selected by Hollick. Oldest described species: *P. boreale* (Dawson) Hollick; lectotype? of genus.

Pseudoprotophyllum? *basielongatum* Hollick, 1930, 95, pl. 65, f. 4; Kaltag: Lower Yukon, Alaska.

Pseudoprotophyllum boreale (Dawson) Hollick, 1930, 91.

Protophyllum boreale Dawson.□

Pseudoprotophyllum comparabile Hollick, 1930, 94, pl. 63, f. 1; pl. 70, f. 1, 2; pl. 71, f. 2; pl. 73, f. 2; Seventymile River: Upper Yukon; Melozi, Kaltag: Lower Yukon, Alaska.

Pseudoprotophyllum crassum Hollick, 1930, 93, pl. 68; Kaltag: Lower Yukon, Alaska.

Pseudoprotophyllum crenulatum Hollick, 1930, 92, pl. 66, f. 1; Melozi: Lower Yukon, Alaska.

Pseudoprotophyllum dalli Hollick, 1930, 94, pl. 71, f. 1; Kaltag: Lower Yukon, Alaska.

Pterospermites dentatus, Newberry not Heer, 1898, pl. 54, f. 4.

Pseudoprotophyllum dentatum Hollick, 1930, 93, pl. 65, f. 1, 2; pl. 66, f. 2, 3; pl. 67; pl. 73, f. 3; Seventymile River: Upper Yukon; Kaltag: Lower Yukon, Alaska.

Pseudoprotophyllum emarginatum Hollick, 1930, 92, pl. 52, f. 2a; pl. 65, f. 3; Seventymile River: Upper Yukon; Kaltag: Lower Yukon, Alaska.

Pseudoprotophyllum magnum Hollick, 1930, 95, pl. 69, f. 1, 2; pl. 70, f. 3; pl. 72, f. 1, 2; pl. 73, f. 4a; Melozi, Kaltag: Lower Yukon, Alaska.

Pseudoprotophyllum undulatum? (Lesquereux) Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Protophyllum undulatum Lesquereux.□

Pseudoprotophyllum venustum Hollick, 1930, 92, pl. 62, f. 3, 4; pl. 73, f. 1; Seventymile River: Upper Yukon, Alaska.

Pseudoprotophyllum viburnifolium Hollick, 1930, 92, pl. 62, f. 5, 6; Seventymile River: Upper Yukon; Kaltag: Lower Yukon, Alaska.

PSEUDOTSUGA Carrière.□Mason, 1927, 151; discussion.—Chaney & Mason, 1930, 8; discussion.

Pseudotsuga annulata (Platen) Torrey, 1923, 67, pl. 8, f. 4-6; volcanic ash deposits, Cape Blanco, Oreg.

Pityoxylon annulatum Platen.□

Pseudotsuga masoni MacGinitie, 1930, 47, pl. 3, f. 1-3; Trout Creek: Trout Creek, Harney Co., Oreg.—Oliver, 1934, 14; Mascall: Tipton, Oreg.—Dorf, 1936, 107, pl. 1, f. 3; Idaho: near Weiser, Idaho.

Pseudotsuga masoni, LaMotte not MacGinitie=**Cedrela oregoniana** (Lesquereux) R. W. Brown.

- Pseudotsuga premacrocampa* Axelrod, 1937, 167, pl. 3, f. 1, 2; Mt. Eden: near Beaumont, Calif.
- Pseudotsuga sonomensis* Dorf, 1930, 72, pl. 6, f. 2-4; Petrified Forest near Calistoga; Garberville; Santa Rosa; Calabazas Canyon; Mussel Rock, San Francisco Co., Calif.
- Pseudotsuga taxifolia* (Lambert) Britton. □ Mason, 1927, 151; Merced: Mussel Rock 6 mi. south of San Francisco, Calif.—1934, 145, pl. 6, f. 4; pl. 7, f. 1, 2; Tomales: Tomales Bay, Marin Co., Calif.—Potbury, 1932, 31, pl. 1, f. 2; pl. 3, f. 2; San Bruno: San Mateo Co., Calif.—Chaney & Mason, 1930, 8, pl. 3; pl. 4; pl. 5, f. 1-3; Pleistocene, Santa Cruz Isl., Calif.—1933a, 57; Pleistocene; Carpinteria, Santa Barbara Co., Calif.—Webber, in Chaney & Mason, 1933a, 68; Pleistocene: Carpinteria, Santa Barbara Co., Calif.
- Pseudotsuga taxifolioidea* Arnold, 1935, 378, text-f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.
- Pseudotsuga* sp. Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.
- PSIDIUM** Linné.
- Psidium* dissimile Hollick, 1928, 217, pl. 81, f. 1; Collazo: Porto Rico.
- Psidium*? sp. Hollick, 1924, 311, pl. 12, f. 4; Collazo River, Porto Rico.—1928, 218, pl. 81, f. 3, 4, 5a; Collazo: Porto Rico.
- Psychotria oregona* Chaney & Sanborn, 1933, 96, pl. 33, f. 4; Fisher: Goshen, Oreg.
- Ptelea eocenica* Berry, 1930, 92, pl. 41, f. 4; Holly Springs; Fayette Co.; Grand Junction, Hardeman Co., Tenn.
- Ptelea miocenica* Berry, 1931a, 39, pl. 12, f. 7; Latah: Grand Coulee, Wash.—MacGinitie, 1933, 59, pl. 11, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.—LaMotte, 1936, 133, pl. 11, f. 1, 2 only; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—Dorf, 1936, 119, pl. 2, f. 5, 6; Idaho: near Weiser, Idaho.—Brown, R. W., 1937, 178, pl. 51, f. 4, 5; Bridge Creek: Bridge Creek, Grant Co., Oreg.; Latah: Grand Coulee, Wash.
- Ulmus speciosa* Newberry (part), 1898, 80, pl. 47, f. 7 only; Bridge Creek: Bridge Creek, Grant Co., Oreg.—Chaney, 1927a, 114, pl. 12, f. 5 only; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.
- “*Ptelea miocenica*” LaMotte not Berry; in need of critical revision. LaMotte, 1936, 133, pl. 11, f. 4 only; Upper Cedarville: Pit River, Modoc Co., Calif. [It is felt that these leaflets are not referable to *Carya egregia* although they may not represent leaflets of *Ptelea*. R. S. L.]—Brown, R. W., 1937, 169, considers these leaflets as equal to *Carya egregia* (Lesquereux) LaMotte.
- Pteridophyta* (Ferns), species of, R. W. Brown, 1937, 167, pl. 45, f. 1-3; Latah: Salmon and Thunder Mt., Idaho.
- Pteris albertsii* Heer=*Cladophlebis blairmorensis* LaMotte, new name.
- Pteris aquilina* Linné. Chaney & Mason, 1933a, 54, pl. 5, f. 1, 2; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Mason, 1934, 144, pl. 5, f. 2, 3; Tomales: Tomales Bay, Marin Co., Calif.
- Pteris calabazensis* Dorf, 1930, 67, pl. 5, f. 1, 2; Calabazas Canyon, Contra Costa Co., Calif.
- Pteris dakotensis* Lesquereux=*Cladophlebis dakotensis* (Lesquereux) Berry.
- Pteris frigida* Heer=*Cladophlebis frigida* (Heer) Seward.
- Pteris inequilateralis* Hollick, 1936, 38, pl. 5, f. 1; Controller Bay region, Alaska.
- Pteris inquirenda* Berry. □ Berry, 1924, 46, 143, pl. 3, f. 2; Lisbon: Newton, Newton Co., Miss.; Barnwell: Bibb Co., Ga.; Fayette: Brazos Co., Tex.—Ball, 1931, 147; Fayette: Barrera League, Brazos Co., Tex.
- Pteris longipennis* Heer=*Cladophlebis frigida longipennis* (Heer) Seward & Conway.

- Pteris nitida* Hollick, 1930, 39, pl. 2, f. 11; Chignik: Alaska Peninsula.
- Pteris oeningensis* Unger, 1841, *Chloris protogaea*, pt. 1, 124, pl. 37, f. 6, 7; Leipzig.—?Hollick, 1936, 39, pl. 9, f. 3; Portage Bay, Alaska Peninsula.
- Pteris pennaeformis*, Cross not Heer=*Pteris pseudopinnaeformis* Lesquereux.
- Pteris pseudopinnaeformis* Lesquereux. □ Lesquereux, 1888, 43; Denver: Golden, Colo.—Cross, 1895, 211; Middle Park; Middle Park, Colo.—Knowlton, 1930, 22; Denver: Golden, Colo.—Hollick, 1936, 39, pl. 75, f. 1b; Yakutat Bay, Alaska.
- Pteris pennaeformis*, Lesquereux not Heer, 1871, 383; Henry's Fork.—Cross, 1895, 211; Middle Park: Middle Park, Colo.
- Pteris pseudopinnaeformis* Lesquereux (part)=*Salpichlaena anceps* (Lesquereux) Knowlton.
- Pteris silvicola* C. C. Hall in Chaney, 1927a, 100, pl. 8, f. 2, 4-7; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—LaMotte, 1936b, 417; Ellensburg: Ellensburg, Wash.
- Pteris sitkensis* Heer. □ Knowlton, 1896, 877.—Hollick, 1936, 39, pl. 109, f. 8a; Hamilton Bay, Kupreanof Isl., Alaska.
- Pteris* sp. Berry, 1929f, 237; Latah: Spokane, Wash.—1934, 103; Latah: east of Lewiston, Idaho.
- Fern fragment, Knowlton, 1926, 24, pl. 9, f. 10; Latah: Spokane, Wash.
- PTEROBALANUS** Berry, 1922g, 20. Genotype: *P. texanus* Berry.
- Pterobalanus texanus* Berry, 1922g, 20, pl. 15, f. 1, 2; Carrizo: Carrizo Springs, Dimmit Co., Tex.
- Pterocarya americana* Lesquereux=*Populus lesquereuxi* Cockerell.
- Pterocarya mixta* (Knowlton) R. W. Brown, 1937, 170, pl. 47, f. 2, 3; Latah: Spokane, Wash.
- Salix mixta* Knowlton (part), 1902, 32, pl. 2, f. 12 (leaflet on right only); Mascall: Van Horns Ranch, John Day Basin, Oreg.—Oliver, 1934, 17; Mascall: Austin, Oreg.—LaMotte, 1936b, 417; Ellensburg: Ellensburg, Wash.
- Juglans oregoniana*, Oliver not Lesquereux, 1934, 18; Mascall: Austin, Oreg.
- Pterocarya?* *retusa* Lesquereux. □ Knowlton, 1930, 48, pl. 14, f. 2-4; pl. 15, f. 5; Denver: Golden, Colo.
- Pterocarya septentrionale* Hollick, 1936, 84, pl. 40, f. 5-7; Matanuska River below Moose Creek, Alaska.
- PTEROPHYLLUM** Brongniart. □ Wieland, 1914, 58; discussion.—Harris, 1932a, 40; discussion.
- Pterophyllum acutipennis* (Heer) Berry, 1929k, 43; Kootenai and Lower Blairmore: southwest Alberta.—1932h, 209; Bull Head Mountain (Gethring member): Peace River Valley, British Columbia.
- Zamites acutipennis* Heer. □ White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.
- Zamites apertus* Newberry. □
- Pterophyllum alaskense* Fontaine. □ Hollick, 1930, 45; Chignik?: Alaska Peninsula.
- Pterophyllum arcticum* Goeppert=*Ptilophyllum arcticum* (Goeppert) Seward.
- Pterophyllum astartense* Harris, 1932a, 44, pl. 4, f. 10; text-f. 19-21; Lepidopteris Zone: Scoresby Sound, East Greenland.
- Pterophyllum bakeri* Berry, 1930e, 459, 2 figs.; Shinarump: Nokai Creek, Utah.
- Pterophyllum braunsii* ?Schenk. Newberry, 1888a, 348; near San Juancito, Honduras.
- Pterophyllum broncesensis* LaMotte, new name.
- Pterophyllum robustum*, Newberry not Emmons, 1876, 145, pl. 6, f. 7; Triassic?: Los Bronces, Sonora, Mexico. (Homonym, Emmons, 1857.)

Pterophyllum browni Berry, 1924g, 492, text-f. 2; Popo Agie Beds: near Lander, Wyo.

Pterophyllum concinnum Heer, 1874, 68, pl. 14, f. 15-20; pl. 15, f. 5B, 11.

Pterophyllum (Anomozamites) concinnum (Heer) Seward, 1925, 241, pl. B, f. 14.
Pterophyllum lepidum Heer, 1874, 68, pl. 16, f. 1-3.

Pterophyllum cf. contiguum Schenk. Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 60, pl. 17, f. 1, 3; Liassic: Mixteca Alta, Oaxaca, Mexico.

Pterophyllum fragile Newberry, 1876, 144, pl. 6, f. 6, 6a; Triassic?: Los Bronces, Sonora, Mexico.

Pterophyllum hanesianum Harris, 1932a, 40, pl. 4, f. 1, 5; text-f. 16, 17, 18; Lepidopteris Zone: Scoresby Sound, East Greenland.

Pterophyllum harrisi Seward & Conway, 1935a, 10, pl. 2, f. 11; pl. 3, f. 12, 15; text-f. 5-10; Kardluk and Upernivik Naes: west Greenland.

Pterophyllum haydenii Lesquereux=**Podozamites haydenii** (Lesquereux) Lesquereux.

Pterophyllum kochi Harris (part)=**Pterophyllum ptilum** Harris.

Pterophyllum kochi Harris, 1926, 89, pl. 7, f. 6; text-f. 17A-E only; Rhaetic: Scoresby Sound, east Greenland.—1932a, 58, text-f. 29; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Pterophyllum kochi Harris (part)=**Pterophyllum zygotacticum** Harris.

Pterophyllum lepidum Heer=**Pterophyllum concinnum** Heer.

Pterophyllum montanense (Fontaine) Knowlton.□

Zamites montanensis Fontaine.□Hollick, 1906d, 115, 116.

Pterophyllum münsteri. Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.

Pterophyllum nathorsti Schenk. Wilson, 1916, 207; Mt. Bush, Yukon Terr.

Pterophyllum pinnatifidum Harris, 1932a, 55, pl. 8, f. 8; text-f. 26, 27, 28; Lepidopteris Zone: Scoresby Sound, East Greenland.

Pterophyllum sp. D. Harris, 1926, 96, text-f. 21; Rhaetic: Scoresby Sound, East Greenland.

Pterophyllum propincuum Goeppert. ?Newberry, 1888a, 348; near San Juancito, Honduras.—Lozano, 1916, 11, pl. 6, f. 3, 4; Liassic: Huyacocotla, Vera Cruz, Mexico.

Pterophyllum ptilum Harris, 1932a, 61, pl. 5, f. 1-5, 11; text-f. 30, 31; Lepidopteris Zone: Scoresby Sound, East Greenland.

Pterophyllum kochi Harris (part), 1926, 89, text-f. 17F-I only; Rhaetic: Scoresby Sound, East Greenland.

Pterophyllum robustum, Newberry not Emmons=**Pterophyllum broncesensis** LaMotte, new name.

Pterophyllum rosenkrantzi Harris, 1932, 96, text-f. 37; Rhaetic: Scoresby Sound, East Greenland.

Pterophyllum sp. A, Harris, 1926, 92, text-f. 18A-E; Rhaetic: Scoresby Sound, East Greenland.—1932a, 53; text-f. 25; Lepidopteris Zone: Scoresby Sound, East Greenland.

Pterophyllum schenki Zeiller. Harris, 1926, 88, text-f. 16a-h; Rhaetic: Scoresby Sound, East Greenland.—1932a, 49, pl. 6, f. 1, 2; text-f. 22-24; Lepidopteris Zone, Scoresby Sound, East Greenland.

Pterophyllum subaequale Hartz, 1896, 236, pl. 15, f. 1, 3, (5?); Rhaetic: Cape Stewart, East Greenland.—Harris, 1926, 91; Rhaetic: Scoresby Sound, East Greenland.—1932, 96, text-f. 38 A-C; Rhaetic: Scoresby Sound, East Greenland.—1932a, 74, pl. 6, f. 8-14; text-f. 39-42; Thaumatopteris Zone: Scoresby Sound, East Greenland.

Pterophyllum sp. C, cf. *intermedium* Harris, 1926, 95, text-f. 20 A-E: Rhaetic: Scoresby Sound, East Greenland.

Pterophyllum validum Hollick, 1930, 45, pl. 8, f. 1; Kaltag: Lower Yukon, Alaska.

Pterophyllum xiphipterum Harris, 1932a, 69, pl. 5, f. 6, 8; text-f. 35-38; Lepidopteris Zone: Scoresby Sound, East Greenland.

Pterophyllum zygotacticum Harris, 1932a, 64, pl. 5, f. 7, 9, 10; text-f. 32, 33, 34; Lepidopteris Zone: Scoresby Sound, East Greenland.

Pterophyllum kochi Harris, 1926, 89; text-f. 17J only.

Podozamites sp. B, Harris, 1926, 117, text-f. 29 E-F; Rhaetic: Scoresby Sound, East Greenland.

Pterophyllum? sp., Berry, 1924g, 494, text-f. 3; Popo Agie Beds: near Lander, Wyo.

Pterophyllum sp. A, Harris=**Pterophyllum rosenkrantzi** Harris.

Pterophyllum sp. B, Harris, 1926, 93, text-f. 19a-f; Rhaetic: Scoresby Sound, East Greenland.

Pterophyllum sp. C, Harris cf. *P. intermedium* Antevs=**Pterophyllum subaequale** Hartz.

Pterophyllum sp. D, Harris=**Pterophyllum pinnatifidum** Harris.

Pterophyllum, fragments of, Lozano, 1916, 11, pl. 6, f. 6; pl. 7, f. 1-3; Liassic: Huyacocotla, Vera Cruz, Mexico.

Pterospermities alaskana Knowlton.□Berry, 1926d, 114; Newhykulston Creek, British Columbia—Hollick, 1936, 153; Kukak Bay, Alaska Peninsula.

Pterospermities alternans Heer, 1869a, 480, pl. 54, f. 3.—Hollick, 1912a, 51; Chickaloon: lower Matanuska Valley, Alaska.—1936, 151, pl. 88, f. 1; Seventy-mile Creek below Mogul Creek, upper Yukon region, Alaska.

Pterospermities auriculacordatus Hollick, 1936, 151, pl. 92, f. 1-5; pl. 93, f. 1, 2; Matanuska River below Moose Creek; Chignik Bay, Alaska Peninsula; Matanuska River west of Moose Creek, Alaska.

Pterospermities carolinensis Berry.□Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirleys Mill; near Cottondale, Ala.—1920e, 404; Black Creek: North Carolina.

Pterospermities conjunctivus Hollick, 1936, 152, pl. 90, f. 2; pl. 91, f. 1, 2; Chignik Bay, Alaska Peninsula; Hamilton Bay, Kupreanof Isl., southeastern Alaska.

Pterospermities cordifolius Heer=**Menispermities nordenskiöldi** (Heer) Seward.

Pterospermities crednerafolia Berry, 1920e, 404; Black Creek: North Carolina.

Pterospermities dentatus Heer.□Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—1936, 152; 25 mi. below Mission Creek and Yukon River, Alaska.

Pterospermities dentatus, Newberry (part) not Heer=**Credneria inordinata** Hollick.

Pterospermities dentatus, Newberry (part) not Heer=**Pseudoprotophyllum dalli** Hollick.

Pterospermities grandidentatus Lesquereux.□Knowlton, 1930, 118, pl. 50, f. 6; pl. 51, f. 3; Denver: Golden, Colo.

Pterospermities imparilis Hollick, 1936, 151, pl. 89, f. 1; pl. 90, f. 1; Matanuska River below Moose Creek; Anchorage Bay, Chignik Bay, Alaska Peninsula.

Pterospermites magnifolia Knowlton. □ Hollick, 1936, 153; Kukak Bay, Alaska Peninsula.

Pterospermites minor Ward. □ Berry, 1935, 48, pl. 11, f. 4; Middle Ravenscrag: Loc. 5, southern Saskatchewan.

Pterospermites cf. minor Ward. Berry, 1930, 109; Holly Springs: Mill Creek, Hardeman Co., Tenn.

Pterospermites penhallowi Berry, 1935, 49, pl. 13; Lower Ravenscrag: Loc. 3; Upper Ravenscrag: Loc. 1, 32, 35, southern Saskatchewan.

Pterospermites spectabilis Heer. □ ? Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—1936, 150, pl. 87, f. 2; pl. 88, f. 2; pl. 89, f. 2, 3; Matanuska Coal Field; south bank Yukon River above Rampart, central Yukon region; Chignik Bay, Alaska Peninsula; Seventymile Creek below Mogul Creek, upper Yukon region, Alaska.

Pterospermites sp. Hollick, 1912a, 51; Chickaloon: Eska Creek, lower Matanuska Valley, Alaska.

PTEROSPERMUM Schreber.

Pterospermum conforme Hollick, 1930, 108, pl. 83, f. 3; Chignik: Alaska Peninsula.

Pterospermum praeobliquum Sanborn, 1935, 25, pl. 7, f. 1b, 3; Comstock: Comstock, Douglas Co., Oreg.

PTEROZAMITES (PTEROPHYLLUM) Braun.

Pterozamites (Pterophyllum) angustifolia Leckenby, 1864, On the sandstones and shales of the Oolites of Scarborough; pl. 8, f. 3.—Wieland, 1913, 264; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 59, pl. 18, f. 3; Liassic; Mixteca Alta, Oaxaca, Mexico.

Pterozamites (Pterophyllum) munsteri Presl. Schenk, 1867, Die Fossile Flora der Grenzsichten des Keupers und Lias Frankens, pl. 39, f. 1-3, 9.—Wieland, 1914, 59, pl. 21, 22; pl. 13, f. 3; pl. 18, f. 1, 2; Liassic: Mixteca Alta, Oaxaca, Mexico.

PTILOPHYLLUM Morris. Wieland, 1914, 18. Discussion.

Ptilophyllum acutifolium maximum Feistmantel, 1880, Palaeont. Indica, Fossil Florá of the Gondwana System, vol. 1, 65, pl. 40.—Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 20, pl. 1, pl. 3, pl. 4, f. 2; Liassic: Mixteca Alta, Oaxaca, Mexico.—Lozano, 1916, 9, pl. 4, f. 3; pl. 5, f. 1-4; Liassic: Huyacocotla, Vera Cruz, Mexico.

Ptilophyllum acutifolium minor Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 23, pl. 5-7; Liassic: Mixteca Alta, Oaxaca, Mexico.

Ptilophyllum arcticum (Goeppert) Seward, 1926, 92, pl. 7, f. 43; Nugsuak, west Greenland.

Pterophyllum arcticum Goeppert, 1864, Zeit. Deutsch. Geol. Ges., vol. 16, 174.

Zamites arcticus Goeppert, 1866, Neues Jarb., 134, pl. 2, f. 9, 10.—Heer, 1868, 82, pl. 44, f. 5c; pl. 3, f. 14.—?White, 1898, 349; Pagtorfik, Nugsuak Pen., west Greenland.—Wilson, 1916, 207; Mt. Bush, Yukon Terr.

Zamites brevipennis Heer, 1874, 67, pl. 15, f. 8-10.

Ptilophyllum heeri Seward, 1925, 255, pl. b, f. 15; West Greenland.

Ptilophyllum pulcherrima Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 25, pl. 4, f. 4; pl. 5 (the uppermost leaf): Liassic: Mixteca Alta, Oaxaca, Mexico.

Ptilophyllum? sp. Lozano, 1916, 10, pl. 6, f. 3; Liassic: Huyacocotla, Vera Cruz, Mexico.

Ptilophyllum? sp. Lozano, 1916, 10, pl. 6, f. 1; Liassic: Huyacocotla, Vera Cruz, Mexico.

Ptilophyllum sp. Seward, 1925, 243; West Greenland.

Taxites pecten Heer, 1883, 9, pl. 3, f. 9.

Ptilozamites nilssoni Nathorst. Harris, 1926, 69, text-f. 8a-b, e; Rhaetic: Scoresby Sound, East Greenland.—1932, 71, pl. 8, f. 7; text-f. 29-30; Lepidopteris Zone: Scoresby Sound, East Greenland.

Ptilozamites sp.? Hartz, 1896, 235, pl. 15, f. 2, 4, 7; pl. 16, f. 1; Rhaetic: Cape Stewart, East Greenland.

PYRUS Hall=**SORBUS** (Tournefort) Linné (part).

Pyrus cretacea Newberry. □ Gress, 1922, 311; Dakota: Ellsworth Co., Kans.

Pyrus hoffmanni Chaney & Mason, 1933a, 61, pl. 7, f. 9, 10, 13; Pleistocene: Carpinteria, Santa Barbara Co., Calif.

Pyrus mckenziei Arnold, 1937, 93, pl. 4, f. 2; Carter Creek southwest of Finley McKenzie Ranch, Oreg.

Quercinium pliocaenicum Schuster, 1908, 49-54, pl. 3, 4; Clover Creek, Lincoln City, Idaho.

Quercus abnormalis Berry. □ Berry, 1926b, 109, pl. 51, f. 24; Chowan: Neuse River, Wayne Co., N. C.

Quercus acrodon Lesquereux=*Quercus lesquereuxiana* Knowlton.

Quercus acuminata Roxburgh. □ Penhallow, 1899, 528; Taylor's Brickyard, Don Valley, Toronto, Ontario.

Quercus agrifolia Née. □ Frost, 1927, 81, pl. 16, f. 4; pl. 17, f. 1, 2; pl. 19, f. 7, 8; Pleistocene: Rancho La Brea, Los Angeles Co., Calif.—Chaney & Mason, 1933a, 59, pl. 7, f. 11, 12.—Webber, in Chaney & Mason, 1933a, 68; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Mason, 1934, 153, pl. 8, f. 3, 4, 8; Tomales: Tomales Bay, Marin Co., Calif.

Quercus alaskana Trelease. □ ? Hollick, 1936, 102, pl. 44, f. 2; Matanuska River below Moose Creek, Alaska.

Quercus alba Linné. □ ? Penhallow, 1899, 526; Gaol Hill, Don Valley, Toronto, Ontario.—Meehan, 1899, 279; Pleistocene: Port Kennedy, Pa.—Berry, 1926b, 108, pl. 50, f. 1-5; Chowan: Neuse River, Wayne Co., N. C.—1934d, 482; Stewart Co., Tenn.

Quercus pseudo-alba Hollick. □

Quercus anceps Lesquereux=*Diospyros nebraskana* Knowlton & Cockerell.

Quercus applegatei Knowlton, 1900d, 42, pl. 1, f. 6, 7; 3 mi. southeast of Ashland, Oreg.—Chaney, 1920a, 171; Eagle Creek: Multnomah Co., Oreg.

Quercus approximata Jennings, 1920, 419, pl. 27, f. 3, 3a; Missoula, Mont.

Quercus artocarpites Ettingshausen. Hollick, 1936, 102, pl. 43, f. 1; pl. 56, f. 6; Matanuska River region; Portage (Balboa) Bay, Alaska Peninsula.

Quercus meriani Heer (part), 1856, Fl. Tert. Helv., vol. 2, 53.

Quercus banksiaefolia Newberry. □ Berry, 1926d, 107, pl. 16, f. 6; Kitsilano, British Columbia.

Quercus berryi Trelease. □

Quercus breweri Lesquereux. □ Knowlton, 1900d, 42, pl. 2, f. 3; 3 mi. south of Ashland, Oreg.

Quercus bicornis Ward. □ ? Berry, 1935, 27; Upper Ravenscrag: Loc. 32, southern Saskatchewan.

Quercus bockéi Dorf, 1930, 84, pl. 9, f. 1-3; Petrified Forest, near Calistoga, Calif.

Quercus bretzi Chaney, 1920a, 171, pl. 12, f. 4; pl. 13, f. 3; Eagle Creek: Multnomah Co., Oreg.—Brown, R. W., 1937c, 508, text-f. 7; Latah: Spokane, Wash.

Quercus breweri Lesquereux=*Quercus berryi* Trelease.

Quercus browni Brooks, 1935, 291, pl. 14, f. 3-8; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.—Dorf, 1936, 113, pl. 2, f. 3; Idaho: near Weiser, Idaho.

Odostemon simplex, Berry (part) not Cockerell, 1934, 112, pl. 23, f. 2 only; Latah: north of Weiser, Idaho.

Quercus calvertonensis Berry, 1911c, 313.

Quercus milleri Berry, 1909, 24, text-f. 3; Calvert: Richmond, Va.

Quercus castaneopsis Lesquereux. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.—Knowlton, 1923, 161; Green River: Uinta Co., Wyo.; also at Green River, Wyo.—Berry, 1932e, 10; Lysite: Wind River Basin, Wyo.—Brown, R. W., 1934, 55; Green River: Locs. as cited by authors.—1937, 172, pl. 50, f. 9; Green River: Fossil, Wyo.

Quercus castanoides Newberry. □

Ilex? affinis Lesquereux. □ Knowlton, 1923, 169; Green River: Alakali Station, Wyo.—Brown, R. W., 1929, 289; Green River: northwest of De Beque, Colo.

Ilex maculata Lesquereux. □ Knowlton, 1923, 169; Green River: Alakali Station, Wyo.

Quercus castanoides Newberry = **Quercus castaneopsis** Lesquereux.

Quercus celastrifolia Lesquereux. □ Knowlton, 1930, 54, pl. 18, f. 4-7; Denver: Golden, Colo.

Quercus stramineus? Lesquereux (part), 1888, 46; Denver: Golden, Colo.

Quercus chamissoni Heer. □ Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—1936, 102; Port Graham, Kenai Peninsula, Alaska.

Quercus chaneyi Knowlton = **Quercus simulata** Knowlton.

Quercus charpentieri Heer. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Quercus chignikensis Hollick, 1930, 69, pl. 37, f. 3; Chignik: Alaska Peninsula.

Quercus chlorophylla Unger = **Pisonia chlorophylloides** Berry.

Quercus chrysolepis Liebmann. □ Scott, 1926, 405; Tesla, Calif.

Quercus clarnensis Trelease. □ Chaney, 1922a, 216; Payette: Idaho.—1927a, 111, pl. 10, f. 10-13; pl. 11, f. 1-7, 9, 10; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.

Quercus cognatus Knowlton = **Quercus payettensis** Knowlton.

Quercus coloradensis Lesquereux. □ Knowlton, 1930, 54; Denver: Golden, Colo.

Quercus columbiana Chaney, 1920a, 170, pl. 13, f. 1, 2; Eagle Creek: Multnomah Co., Oreg.—Brown, R. W., 1937c, 508, text-f. 6, 12; Latah: east of Orofino, Idaho; between Arrow Junction and Juliaetta, Idaho.

Quercus duriuscula, Dorf not Knowlton, 1936, 114, pl. 2, f. 8; Idaho: near Weiser, Idaho.

Quercus conjunctiva Hollick, 1936, 101, pl. 42, f. 3, 4a; Matanuska Coal Field, Alaska.

Quercus consimilis Newberry. □ Knowlton, 1900d, 44; near Murphy's Spring, southeast of Ashland, Oreg.—Chaney, 1927a, 112; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—LaMotte, 1935b, 53; Sooke; Muir Creek, Vancouver Island, British Columbia.—1936b, 417; Ellensburg: Ellensburg, Wash.—Brown, R. W., 1937, 172, pl. 50, f. 2-5; Latah: Spokane, Wash.; Mascall: Tipton, Oreg.

Quercus simplex Newberry. Chaney, 1920a, 168, pl. 11, f. 4; Eagle Creek: Multnomah Co., Oreg.—Berry, 1926d, 107, pl. 11, f. 1-4; Burrard Inlet, British Columbia.

Quercus consimilis, MacGinitie, Oliver not Newberry = **Quercus simulata** Knowlton.

Quercus convexa Lesquereux. □ Chaney, 1920a, 169; Eagle Creek: Multnomah Co., Oreg.

Quercus coriacea Newberry. □ Berry, 1926d, 106; Kitsilano, British Columbia.

Quercus cowlesi Chaney, 1920a, 169, pl. 11, f. 5; Eagle Creek: Multnomah Co., Oreg.

Quercus crassinervis? Goeppert = *Dryophyllum tennesseensis* Berry.

Quercus cf. *cuspidata* (Rossmassler) Unger = *Dryophyllum tennesseensis* Berry.

Quercus cuspidigera Heer = *Myrica johnstrupi* (Heer) Berry.

Quercus dallii Lesquereux. □ Hollick, 1936, 103, pl. 52, f. 4; Cook Inlet, Kenai Peninsula, Alaska.

Quercus dayana Knowlton = *Quercus simulata* Knowlton.

Quercus declinata Dorf, 1930, 88, pl. 8, f. 12, 13; Santa Rosa; Bennett Valley, Calif.—1936, 114, pl. 2, f. 2; Idaho: near Weiser, Idaho.

Quercus digitata, Knowlton not Sudworth = *Quercus predigitata* Berry.

Quercus discolor Aiton. Penhallow, 1899, 528; Taylor's Brickyard, Don Valley, Toronto, Ontario.

Quercus distincta Lesquereux. □ LaMotte, 1936, 123, pl. 7, f. 2-4; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—1936b, 417; Ellensburg: Ellensburg, Wash.

Quercus voyana Lesquereux. □

Quercus goepperti Lesquereux. □

Quercus drymeja Unger. Brown, R. W., 1934, 55, pl. 8, f. 9; Green River: Northwest of De Beque, Colo.

Quercus duriuscula, Dorf not Knowlton = *Quercus columbiana* Chaney.

Quercus duriuscula Knowlton = *Quercus pseudo-lyrata* Lesquereux.

Quercus eamesi Trelease. □ Hollick, 1930, 70, pl. 35, f. 1; Melozi: Lower Yukon, Alaska.

Quercus elaeagnoides Lesquereux (part) = *Arbutus matthesii* Chaney.

Quercus? *ellsworthianus* Lesquereux. □ Lesquereux, 1871, 379; Dakota: Lancaster Co., Nebr.

Quercus etymodrys Unger, 1854, K. Akad. Wiss. (Wien), Math.-naturwiss. Cl., Denkschr., vol. 7, 175 (18), pl. 3, f. 3.—Hollick, 1936, 98, pl. 54, f. 6, 7; Nenana Coal Field, Alaska.

Quercus falcata, Knowlton not Michaux = *Quercus predigitata* Berry.

Quercus cf. *ferox* Heer. White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

Quercus flexuosa Newberry. □ Jennings, 1920, 418, pl. 31, f. 1, 1a; Missoula, Mont.

Quercus florissantensis Cockerell. □ Cockerell, 1922, 42-43, 1 fig.; Florissant: Florissant, Colo.

Quercus fosteri Chaney, 1920a, 167, pl. 11, f. 2, 3; Eagle Creek: Multnomah Co., Oreg.

Quercus? *fraxinifolia* Lesquereux. □ Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Quercus furuhjelmi Heer. □ Hollick, 1936, 98, pl. 55; Kootznahoo Inlet, Admiralty Isl., southeastern Alaska.

Quercus goepperti Lesquereux = *Quercus distincta* Lesquereux.

Quercus groenlandica Heer. □ Noé, 1925, 94, pl. 20, f. 1; Dakota: Cimarron Co., Okla.—Berry, 1926d, 106; Kitsilano and Joseph Creek, British Columbia.—Berry, 1935, 26; Upper Ravenscrag: Locs. 32, 33, southern Saskatchewan.—Hollick, 1936, 99, pl. 54, f. 3; pl. 56, f. 6; Matanuska Coal Field, Alaska.

Quercus haidingeri, Lesquereux (part) not Ettingshausen=*Quercus leonis* Knowlton.

Quercus hannibali Dorf, 1930, 86, pl. 8, f. 8-11; Pliocene: Calabazas Canyon; St. Mary's College, Calif.—Axelrod, 1937, 173, pl. 5, f. 6; Mt. Eden: near Beaumont, Calif.

Quercus haydenii Lesquereux. □ Lesquereux, 1871, 383; Rock Creek, Wyo.

Quercus hexagona Lesquereux. □ Lesquereux, 1871, 379; Dakota: Cass Co., Platte River, Nebr.

Quercus horniana Lesquereux (part) = *Quercus washingtoniana* Chaney.

Quercus horniana, Kirkham & Johnson not Lesquereux = *Quercus idahoensis* Knowlton.

cf. *Quercus horniana* Lesquereux. Oliver, 1934, 27, pl. 5, f. 5; Mascall: Tipton, Oreg. (This citation was transferred by LaMotte to *Castanea lesquereuxi* in 1936 but rejected by R. W. Brown in 1937.)—Dorf, 1936, 124; Idaho: near Weiser, Idaho.

Quercus howei Chaney & Sanborn, 1933, 65, pl. 4, f. 4, 5; pl. 5, f. 1, 2; Fisher: Goshen, Oreg.

Quercus idahoensis Knowlton. □ Knowlton, 1898b, 729, pl. 102, f. 4; Payette: Marsh, Idaho—Berry, 1932a, 40; Ballantyne Ranch, Malheur Co., Oreg.—1934, 109; Latah: near Moscow, near Lewiston, Idaho.

Quercus horniana, Kirkham & Johnson not Lesquereux, 1929, 497; Latah: Idaho.

Quercus imbricaria Michaux. Berry, 1934f, 482; Pleistocene: Stewart Co., Tenn.

Quercus juglandina Heer, 1883, 89, pl. 71, f. 19; pl. 74, f. 4-7; pl. 76, f. 12; pl. 102, f. 9a.—?Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—1936, 101, pl. 42, f. 1a, 2; pl. 43, f. 2; Matanuska Coal Field, Alaska.

Quercus kelloggii Newberry. Scott, 1926, 404; Tesla, Calif.

Quercus klamathensis MacGinitie, 1933, 52, pl. 5, f. 3; Trout Creek: Trout Creek, Harney Co., Oreg.

Quercus kootenayensis Hollick, 1927, 402, pl. 32, f. 4; St. Eugene silts: British Columbia.

Quercus laharpi Gaudin. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Quercus lakevillensis Dorf, 1930, 82, pl. 8, f. 4, 5; Pliocene: Lakeville; Bennett Valley; Petrified Forest; Calif.—Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.—1937, 172; Mt. Eden: near Beaumont, Calif.

Quercus lanensis Chaney & Sanborn, 1933, 65, pl. 33, f. 3; Fisher: Goshen, Oreg.

Quercus laurosimulans Jennings = *Quercus penhallowi* Trelease.

Quercus leonis Knowlton, 1930, 53, pl. 18, f. 2, 3; Denver: Golden, Colo.

Quercus haidingeri, Lesquereux (part) not Ettingshausen, 1888, 46; Denver: Golden, Colo.

Quercus lesquereuxiana Knowlton. □

Quercus acrodon Lesquereux. □ Lesquereux, 1871, 383; Rock Creek, Wyo.

Quercus lyellii Heer = *Nectandra lancifolia* (Lesquereux) Berry.

Quercus lyrata Walter. □ Berry, 1926b, 110, pl. 50, f. 6-9; Chowan: Neuse River, Wayne Co., N. C.—1927, 25; Pleistocene: Cherokee Co., Tex.

Quercus macrocarpa Michaux. □ ? *Penhallowi*, 1899, 529; Taylor's Brickyard, Don Valley, Toronto, Ontario.

Quercus marcyana Penhallow, 1892, 31; Pleistocene: Evanston, Ill.

Quercus marylandica, Berry not Muench = *Quercus nigra* Linné.

Quercus mccannii Berry, 1931a, 36, pl. 11, f. 5-7; Latah: Grand Coulee, Wash.—Dorf, 1936, 114; Idaho: near Weiser, Idaho.

Quercus meriani Heer (part), 1856, Fl. Tert. Helv., vol. 2, 53, pl. 76, f. 12.—Hollick, 1936, 102, pl. 44, f. 1; Matanuska region, Alaska.

Quercus meriani Heer (part), 1856=*Quercus artocarpites* Ettingshausen

Quercus merriami Knowlton.□ Chaney, 1920a, 168; Eagle Creek: Multnomah Co., Ore.—Knowlton, 1926, 35, pl. 19, f. 4, 5; Latah: Coeur d'Alene, Idaho.—Berry, 1929f, 246; Latah: Coeur d'Alene, Idaho; Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—Brown, R. W., 1937, 172; Mascall: John Day Basin, Ore.; Latah: Spokane, Wash.

Quercus ursina Knowlton.□?Berry, 1929f, 246; Latah? Spokane, Wash.—Berry, 1938, 92, text-f. 8; Latah: Grand Coulee, Wash.

Quercus n. sp. Knowlton, 1901e.□

Quercus michauxii Nuttall.□Berry, 1926b, 110, pl. 52, f. 1-4; Chohan: Neuse River, Wayne Co., N. C.

Quercus prinoides, Berry not Willdenow, 1907b, 343; Pleistocene: Neuse River, Wayne Co., N. C.

Quercus platanoides, Berry not Sudworth, 1907b, 343; Pleistocene: Neuse River, Wayne Co., N. C.

Quercus minor (Marshall) Sargent.□

Quercus obtusiloba Michaux.□Penhallow, 1894, 95; Pleistocene: Don Valley, near Toronto, Canada.

Quercus moorii Lesquereux=*Dryophyllum moorii* (Lesquereux) Berry.

Quercus myrtilloides Unger. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Quercus myrtilus Heer. White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.

Quercus neriifolia, Lesquereux (part) not Al. Braun=*Amygdalus gracilis* Lesquereux.

Quercus nevadensis Lesquereux.□Potbury, 1935, 62, pl. 1, f. 4, 8, 11; La Porte, Plumas Co., Calif.—Hollick, 1936, 99, pl. 54, f. 1, 2; south bank Yukon River above Rampart, central Yukon region, Alaska.

Quercus nigra Linné.□Berry, 1926b, 109, pl. 51, f. 1-7; Chohan: Neuse River, Wayne Co., N. C.

Quercus marylandica, Berry not Muench.□

Quercus oblongifolia Penhallow, 1900, 336; bend of Don Valley, Toronto, Ontario.

Quercus obtusa Knowlton=*Quercus simulata* Knowlton.

Quercus olafseni Heer.□Hollick, 1912a, 51; Chickaloon: Lower Matanuska Valley, Alaska.—1936, 99, pl. 52, f. 3; south of Old Tyonek, Cook Inlet, Alaska.

NOTE.—Seward & Conway, 1935, 28, have transferred this species to *Dicotylophyllum*. Pending critical studies the American citations are not transferred.

Quercus oregoniana Knowlton=*Alnus carpinoides* Lesquereux.

Quercus orindensis Dorf, 1930, 89, pl. 9, f. 6-9; Pliocene: Santa Rosa; St. Mary's College; Lafayette Dam; Coalinga, Calif.—Axelrod, 1937, 173, pl. 5, f. 7; Mt. Eden: near Beaumont, Calif.

Quercus pacifica Knowlton, 1900d, 43, pl. 1, f. 9-10; 5 mi. south of Ashland, Ore.

Quercus paleoileicoides Hollick, 1930, 69, pl. 37, f. 4, 5; Chignik: Alaska Peninsula.

Quercus palustris Du Roi. □ Berry, 1926b, 109, pl. 49, f. 4-6; Chowan: Neuse River, Wayne Co., N. C.

Quercus paucidentata Newberry. □ Chaney, 1920a, 170; Eagle Creek: Multnomah Co., Oreg.

Quercus payettensis Knowlton. □ Knowlton, 1926, 37, pl. 21, f. 5-7; Latah: Coeur d'Alene, Idaho.—Berry, 1929f, 246; Latah: Coeur d'Alene, Idaho; Spokane and Vera, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 109, pl. 20, f. 2, 3; Latah: east of Lewiston; south of Juliaetta; near White Bird; Edwards Ranch; Coeur d'Alene, Idaho.—Brown, R. W., 1937, 172, pl. 49, f. 12, 13; Payette: Jackass Creek, Boise Co., Idaho; Latah: Spokane, Wash.

Quercus cognatus Knowlton, 1926, 36, pl. 20, f. 1-4; pl. 21, f. 1, 2; Latah: Coeur d'Alene, Idaho.—Berry, 1929f, 245; Latah: Coeur d'Alene, Idaho; Vera, Hilliard and Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 109; Latah: White Bird; Juliaetta, Idaho.—Hoffman, 1932, 737; Douglas Canyon, Wash.—Brooks, 1935, 292, pl. 16, f. 2; Sucker Creek: Ballantyne Ranch, near Homedale, Idaho.—Dorf, 1936, 113, pl. 2, f. 1; Idaho: near Weiser, Idaho.

Quercus rustii Knowlton, 1926, 36, pl. 21, f. 3, 4; Latah: Coeur d'Alene, Idaho.—Berry, 1929f, 246; Latah: Coeur d'Alene, Idaho; Spokane, Wash.

Quercus praeinigrata Knowlton, 1926, 37, pl. 19, f. 6; Latah: Coeur d'Alene, Idaho. (This citation had previously been assigned to *Quercus simulata* by Berry, 1934.)

Quercus sp. Knowlton, 1926, 37, pl. 19, f. 7; pl. 22, f. 9; Latah: Coeur d'Alene, Idaho.

Quercus perplexa (Knowlton) Berry, 1932b, 171-173, text-f. 1; interlava diatomite near Richland, Baker Co., Oreg.

Salix perplexa Knowlton (part), 1902, 31, pl. 2, f. 6-8; Mascall: Van Horn's Ranch, John Day Basin, Oreg.—Penhallow, 1908a, 86; Quilchena, British Columbia.—Chaney, 1922a, 216; Payette: Idaho.

Quercus penhallowi Trelease. □

Quercus laurosimulans Jennings, 1920, 416, pl. 28, f. 3; pl. 31, f. 3, 3a; Missoula, Mont.

Quercus phellos Linné. □ Berry, 1910d, 265.—1926b, 110, pl. 51, f. 8-23; Chowan: Neuse River, Wayne Co.; Pleistocene: Dupree Landing, Pitt Co., N. C.

Quercus cf. *phellos* Berry = *Quercus phellos* Linné.

Quercus platania Heer, 1868, 109, pl. 11, f. 6; pl. 46, f. 7.—Hollick, 1912a, 42; Sheep Valley, Lower Matanuska, Alaska.—1936, 100, pl. 44, f. 5, 6; Matanuska Coal Field, Alaska.

Quercus platanoides, Berry not Sudworth = *Quercus michauxii* Nuttall.

Quercus pliopalmeri Axelrod, 1937, 174, pl. 5, f. 1-3; Mt. Eden: near Beaumont, Calif.

Quercus praegroenlandica Berry, 1935, 26, pl. 3, f. 3-7; Middle Ravenscrag: Loc. P 4-30, southern Saskatchewan.

Quercus praeinigrata Knowlton = *Quercus payettensis* Knowlton.

Quercus pratti Berry. □ Berry, 1920e, 400; Black Creek: North Carolina.

Quercus precoccinea Brooks = *Oreopanax precoccinea* (Brooks) Arnold.

Quercus predigitata Berry. □ Berry, 1914d, 162.—1919b, 9.—1926b, 109, pl. 53, f. 1-6; Chowan: Neuse River, Wayne Co., N. C.; Wycomico: Weldon, Northampton Co., N. C.; Morgantown, W. Va.

Quercus falcata, Knowlton not Michaux, 1896b, 371; Pleistocene: Morgantown, W. Va.

Quercus digitata, Knowlton not Sudworth, 1919, 524.

Quercus pregrahami MacGinitie, 1937, 135, pl. 8, f. 3; pl. 12, f. 2; Weaverville, Redding Creek, Hay Fork, Trinity Co., Calif.

Quercus primordialis Lesquereux. □ Lesquereux, 1871, 379; Dakota: Decatur, Nebr.

- Quercus prinoides*, Berry not Willdenow=*Quercus michauxii* Nuttall.
- Quercus prinus* Linné.□Berry, 1926b, 110, pl. 52, f. 5-8; pl. 54, f. 9; Chowan: Neuse River, Wayne Co., N. C.
- Quercus pseudo-alba* Hollick=*Quercus alba* Linné.
- Quercus pseudo-alnus* Ettingshausen.□Lesquereux, 1888, 46; Denver: Golden, Colo.
- Quercus pseudo-alnus*, Lesquereux not Ettingshausen=*Alnus carginoides* Lesquereux.
- Quercus pseudocastanea* Goeppert.□Hollick, 1936, 98, pl. 54, f. 4, 5; Cache Creek, Matanuska region; Nenana Coal Field, Alaska.
- Quercus pseudo-lyrata* Lesquereux.□Chaney, 1920a, 167; Eagle Creek: Multnomah Co., Oreg.—Berry, 1931a, 34; Latah: Grand Coulee, Wash.—Oliver, 1934, 20, pl. 5, f. 4; Mascall: Tipton and Austin, Oreg.—LaMotte, 1936, 121; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—1936b, 417; Ellensburg: Ellensburg, Wash.—Brown, R. W., 1937, 172, pl. 50, f. 7, 8; Mascall: John Day Basin, Oreg.; Tipton, Oreg.
- Quercus auriscula* Knowlton.□Berry, 1934, 109; Latah: southeast of Moscow, Idaho.
- Quercus* cf. *pseudo-lyrata*, Knowlton not Lesquereux=*Acer osmonti* Knowlton.
- Quercus pseudomarioni* Hollick, 1930, 69, pl. 29, f. 2a; pl. 36, f. 4; Chignik: Alaska Peninsula.
- Quercus pseudowestfalica* Berry.□Berry, 1920e, 400; Black Creek: Bladen Co., N. C.
- Quercus purdonensis* Knowlton, 1930, 52, pl. 17, f. 2; Dawson: Purdon Mine, Colo.
- Quercus* cf. *ramaleyi* Cockerell. Chaney, 1927a, 113, pl. 11, f. 8; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.
- Quercus retracta* Lesquereux=*Myrcia bentonensis* Berry.
- Quercus ricardensis* Webber, 1933, 123, pl. 3, f. 1-3; Ricardo: near Barstow, Calif.
- Quercus* cf. *rinkiana* Heer.□White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.
- Quercus rubra* Linné.□?Penhallow, 1899, 526; Gaol Hill, Don Valley, Toronto, Ontario.
- Quercus rustii* Knowlton=*Quercus payettensis* Knowlton.
- Quercus schofieldii* Hollick, 1927, 403, pl. 23; St. Eugene silts: British Columbia.
- Quercus?* *sedaliensis* Knowlton, 1930, 52, pl. 17, f. 4; Dawson: Sedalia, Colo.
- Quercus semialatus* Lesquereux=*Anisophyllum semialatum* (Lesquereux) Lesquereux.
- Quercus simplex* Newberry=*Quercus consimilis* Newberry.
- Quercus simulata* Knowlton.□Chaney, 1920a, 168, pl. 12, f. 1; Eagle Creek: Multnomah Co., Oreg.—Knowlton, 1926, 38, pl. 22, f. 3, 4; Latah: Spokane, Wash.—Berry, 1929f, 246, pl. 51, f. 9-11; Latah: Coeur d'Alene, Idaho; Spokane, Wash.—1931a, 36; Latah: Grand Coulee, Wash.—1932a, 40; Sucker Creek: Balantyne Ranch, Malheur Co., Oreg.—Hoffman, 1932, 737; Douglas Canyon, Wash.—MacGinitie, 1933, 53, pl. 6, f. 2; Trout Creek: Trout Creek, Harney Co., Oreg.—Berry, 1934a, 109, pl. 20, f. 6; Latah: near Moscow, near Lewiston, near Arrow Junction, near Juliaetta, near White Bird, Idaho—LaMotte, 1936, 122; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—Dorf, 1936, 115, pl. 1, f. 9, 10; Idaho: near Weiser, Idaho.—Brown, R. W., 1937, 173, pl. 50, f. 1; Latah: Spokane, Wash.; Mascall, Tipton, Oreg.
- Salix elongata*, Knowlton not O. Weber, 1926, 32, pl. 12, f. 4; Latah: Coeur d'Alene, Idaho.

Quercus simulata—Continued.

- Quercus chaneyi* Knowlton, 1926, 38, pl. 22, f. 1; Latah: Spokane, Wash.
Quercus obtusa Knowlton, 1926, 38, pl. 2, f. 8; Latah: Spokane, Wash.
Laurus princeps, Knowlton (part) not Heer, 1926, 41, pl. 23, f. 3; Latah: Spokane, Wash.
Phyllites crustacea Knowlton, 1926, 47, pl. 29, f. 6; Latah: Mica, Wash.
Apocynophyllum latahense Berry (part), 1929f, 263, pl. 60, f. 4 only; Latah: Spokane, Wash.
Rhus merrilli, Berry not Chaney, 1929f, 256, pl. 51, f. 8; Latah: Spokane, Wash.
Quercus simulata truncata Berry, 1927c, 9, pl. 2, f. 3; Esmeralda: Mineral Co., Nev.
Quercus dayana Knowlton □ Knowlton, 1903a, 3; Ellenburg; Kelly Hollow, Wenatchee Valley, Wash.—Chaney, 1922a, 216; Payette: Idaho.
Quercus? sp. Knowlton, 1902, 53, pl. 8, f. 3; Mascall: Van Horns Ranch, John Day Valley, Oreg.
Quercus, n. sp. Knowlton, 1901e, 308; Mascall: Van Horns Ranch; John Day Valley, Oreg.
Quercus consimilis MacGinitie not Newberry, 1933, 52, pl. 5, f. 5; pl. 6, f. 1, 5, 6, 8; Trout Creek: Trout Creek, Harney Co., Oreg.—Oliver, 1934, 30; Mascall: Tipton and Austin, Oreg. NOTE.—R. W. Brown, 1937, 172, 173, does not consider these references as equal to *Quercus simulata*. If this view is taken then the reference of the Upper Cedarville leaves from 49 Camp and Pit River must be transferred to *Quercus consimilis*. It is not clear which references to *Castanopsis consimilis* (Newberry) Brooks and *Castanopsis convexa* (Lesquereux) Brooks are considered by R. W. Brown as equal to *Quercus simulata*. Brooks' concept of these species is listed separately in this catalogue under the heading of *Castanopsis*, q. v.

Quercus simulata, Berry (part) not Knowlton = *Salix inquirenda* Knowlton.

Quercus simulata, Berry (part) not Knowlton = *Umbellularia dayana* (Knowlton) Berry.

Quercus simulata truncata Berry = *Quercus simulata* Knowlton.

Quercus spokaneensis Knowlton = *Castanea orientalis* Chaney.

Quercus spokaneensis gracilis Berry, 1934, 110, pl. 20, f. 4, 5; Latah: southeast of Montour, Gem Co., Idaho.

Quercus stantoni Knowlton. □ Berry, 1929j, 131; Frontier: near Cumberland, Wyo.

Quercus steenstrupiana Heer. □ Hollick, 1936, 100, pl. 52, f. 5b, 6; Kachemak Bay, Kenai Peninsula; Bryant Creek, Upper Yukon region, Alaska.

NOTE.—Pending critical studies this species has not been transferred to *Dicotylophyllum steenstrupianum* (Heer) Seward & Conway, q. v.

Quercus stramineus? Lesquereux (part) = *Quercus celastriifolia* Lesquereux.

Quercus suborbicularia Potbury, 1935, 63, pl. 2, f. 2, 3; La Porte, Plumas Co., Calif.

Quercus subsinuata Knowlton, 1900d, 41, pl. 2, f. 5; 5 mi. south of Ashland, Oreg.

Quercus sumterensis Berry = *Apocynophyllum sumterensis* (Berry) Berry.

Quercus tinctoria Penhallow not Bartram = *Quercus velutina* Lamarck.

Quercus traini MacGinitie, 1933, 53, pl. 5, f. 1, 2; Trout Creek: Trout Creek, Harney Co., Oreg.—Brooks, 1935, 293; Sucker Creek: Ballantyne Ranch, Malheur Co., Oreg.

Quercus treleasei Berry = *Sophora spokaneensis* Knowlton.

Quercus turbulenta Hollick, 1930, 70, pl. 38, f. 3; Chignik: Alaska Peninsula.

Quercus uglowi Berry, 1926d, 107, pl. 15, f. 8; Joseph Creek, British Columbia.

Quercus ursina Knowlton = *Quercus merriami* Knowlton.

Quercus utensis Cockerell, 1927, 94-95; Green River; Ute Trail, Roan Mts., Colo.

Quercus velutina Lamarck. □ Berry, 1926b, 111, pl. 49, f. 1-3; Chowan: Neuse River, Wayne Co., N. C.; Wicomico: Weldon, Northampton Co., N. C.

Quercus tinctoria Bartram. □ Penhallow, 1900, 336; Taylor's Brickyard and Don Valley, Toronto, Ontario.

Quercus viburnifolia Lesquereux. □ Lesquereux, 1888, 46; Denver: Golden, Colo.—Knowlton, 1930, 50, pl. 16, f. 3-8; pl. 17, f. 1; Denver: Golden and east of Denver, Colo.; Middle Park: Middle Park, Grand Co., Colo.; Dawson: Mosby and Calhan, Colo.

Populus orenata, Lesquereux not Unger, 1888, 48; Denver: Golden, Colo.

Crataegus betulaefolia Lesquereux (part), 1888, 56, Denver: Golden, Colo.

Crataegus antiqua, Lesquereux not Heer, 1888, 57; Denver: Golden, Colo.

Quercus voyana Lesquereux=**Quercus distincta** Lesquereux.

Quercus washingtoniana Chaney, 1920a, 169, pl. 12, f. 3, 4; Eagle Creek: Multnomah Co., Oreg.

Quercus horniana Lesquereux (part), 1888a, 17, pl. 5, f. 6 only.

Ulmus californica Lesquereux (part), 1883, 265, pl. 45B, f. 3, 4, 7.

Quercus whitei Lesquereux. □ Knowlton, 1930, 53, pl. 17, f. 3; pl. 18, f. 1; Denver: Golden, Colo.

Quercus whitmani Knowlton, 1930, 52, pl. 17, f. 5; Middle Park: Middle Park, Colo.

Quercus, acorns and cupules, Berry, 1931a, 34; Latah: Grand Coulee, Wash.

Quercus sp. Berry, 1929f, pl. 52, f. 8; Latah: Spokane, Wash.

Quercus sp. (unnamed leaves) Berry, 1929f, pl. 50, f. 13, 14; Latah: Spokane, Wash.

Quercus sp. (unnamed leaf) Berry, 1929f, pl. 50, f. 15=**Salix spokaneensis** (Berry) R. W. Brown.

Quercus sp. Berry, 1935, 27; Middle Ravenscrag: Loc. P 3-30, southern Saskatchewan.

Quercus sp. Chaney, 1920a, 171, pl. 13, f. 4; Eagle Creek: Multnomah Co., Oreg.

Quercus n. sp. Chaney, 1922a, 216; Payette: Idaho.

Quercus? sp. Knowlton, 1900d, 41, pl. 1, f. 8; east of Murphy's Spring south-east of Ashland, Oreg.

Quercus n. sp. Knowlton, 1901e=**Quercus merriami** Knowlton.

Quercus n. sp. Knowlton, 1901e=**Quercus simulata** Knowlton.

Quercus sp. Knowlton, 1902=**Quercus simulata** Knowlton.

Quercus n. sp. Knowlton, 1901e=**Alnus carpinoides** Lesquereux.

Quercus sp. Knowlton, 1926=**Quercus payettensis** Knowlton.

Quercus, acorn, Knowlton, 1926, 39, pl. 19, f. 8, 9; pl. 21, f. 8, 9; Latah: Spokane, Wash.

Quercus? sp. Knowlton, 1898a, 195.—Hollick, 1936, 103; Drew's Mine, north bank Yukon River, central Yukon region, Alaska.

Quercus, cup, Knowlton, 1926, 39, pl. 21, f. 10; Latah: Coeur d'Alene, Idaho.

Quercus sp. Knowlton. Berry, 1929f, 247; Latah: Coeur d'Alene, Idaho; Spokane, Wash.—1934, 110; Latah: east of White Bird, Idaho Co.; Edwards Ranch; Stanley Hill; Coeur d'Alene, Kootenai Co., Idaho.

QUERVAINIA Harris, 1932, 16. Genotype: *Q. spectabilis* Harris.

Quervainia groenlandica Harris=**Quervainia spectabilis** Harris.

Quervainia spectabilis Harris, 1932, 16, text-f. 9; Thaumatopteris Zone: Scoresby Sound, East Greenland.

NOTE.—Text-f. 9 referred to by Harris is titled *Quervainia groenlandica*. This appears to be a typographic error and the name should be considered *nomen nudum*.

Ramulus gen. et sp.?, Hollick, 1928, 225, pl. 71, f. 1b; Collazo: Porto Rico.

RANUNCULUS (Tournefort) Linné.

Ranunculus cf. *eschscholtzii* Schlechtendal. Chaney & Mason, 1936c, 16, text-f. 32, 33; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Ranunculus sp. Berry, 1924a, 20, pl. 1, f. 29-31; Pleistocene: Washington, D. C.
RAPHAELIA Debey & Ettingshausen.

Raphaelia minuta Berry, 1925, 26, pl. 1, f. 5-7; Ripley: Carroll Co., Tenn.—
 1928f, 443, pl. 11, f. 4; Ripley: Carroll Co., Tenn.

Raphaelia neuropteroides Debey & Ettingshausen=**Sphenopteris jörgenseni**
 (Heer) Seward.

Raritania gracilis (Newberry) Hollick & Jeffrey.□

Frenelopsis gracilis Newberry.□Newberry, 1895, 59, pl. 12, f. 1-3a; Raritan:
 Woodbridge, N. J.

Reynosia praenuntia Berry.□Berry, 1930, 104, pl. 41, f. 19; Holly Springs:
 Puryear, Henry Co., Tenn.

Reynosia praenuntia longepetiolata Berry, 1930, 105, pl. 46, f. 1; Holly Springs:
 Puryear, Henry Co., Tenn.

Reynosia texana Penhallow.□Berry, 1924, 75; Yegua: Somerville, Burleson Co.,
 Tex.—Ball, 1931, 125; Yegua: Somerville, Burleson Co., Tex.

RHABDOCARPUS Goeppert & Berger, 1848, De Fruct. et Sem, p. 20. Geno-
 type: *R. tunicatus* Goeppert & Berger.

Rhabdocarpus? *grandis* Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca,
 Mexico.—1914, 118, pl. 37, f. 4; Liassic: Mixteca Alta, Oaxaca, Mexico.

Rhamnacinium texanum Penhallow.□Berry, 1924, 74; Yegua: Somerville, Bur-
 leson Co., Tex.—Ball, 1931, 125; Yegua: Somerville, Burleson Co., Tex.

RHAMNIDIUM Reisseck.

Rhamnidium chaneyi Potbury, 1935, 75, pl. 11, f. 1, 3-5; La Porte, Plumas Co.
 Calif.

Rhamnidium miocenicum Berry, 1925a, 107, pl. 14, f. 6; Forest: Trinidad, British
 West Indies.

Rhamnites cornifolius Hollick, 1930, 102, pl. 78, f. 4; Kaltag: Lower Yukon,
 Alaska.

Rhamnites knowltoni Berry (part), 1922g, 16, pl. 12, f. 7; Wilcox: De Soto
 Parish, La.—1930c, 25; Ravenscrag: Cypress Hills, Canada.—1930f, 64; Ravens-
 crag: southern Alberta.—1934a, 131, pl. 26, f. 1; Lance: Jump Off, Harding Co.,
 S. Dak.—Ball, 1931, 92; Wilcox: Louisiana.

Cornus studei, Knowlton not Heer, 1900, 68, pl. 15, f. 3.—Berry, 1916a, 331,
 pl. 68, f. 3; Wilcox: Coughatta and Naborton, La.

Rhamnites knowltoni Berry (part)=**Rhamnus cleburni** Lesquereux.

Rhamnites krugiodendroides Berry, 1924, 178, pl. 52, f. 2; Lagrange: Hickman,
 Fulton Co., Ky.; Fayette: Mossy Creek, Brazos Co., Tex.—Ball, 1931, 160, pl.
 34, f. 5; Fayette: Boggy Creek, Brazos Co., Tex.

Xolisma ligustrina, Berry not Britton, 1915b, 301, pl. 12, f. 1; Hickman, Ky.

RHAMNUS Linné.□Ball, 1931, 92, discussion.

Rhamnus alaternoides, Lesquereux not Heer=**Rhamnus?** *praealaternoides*
 Knowlton.

Rhamnus apalachicolensis Berry, 1916b, 50, pl. 9, f. 8; Alum Bluff: Alum Bluff,
 Liberty Co., Fla.

Rhamnus belmontensis Knowlton & Cockerell.□Knowlton, 1922, 155; Laramie:
 Marshall (formerly Belmont), Colo.

Rhamnus brevifolius Al. Braun, 1850, in Bruckman, Ver. vaterl. Naturk. Würt-
 temberg Jahresh., vol. 6, 232.—White, 1898, 362; Patoot, Nugsuak Pen., west
 Greenland.—Hollick, 1936, 138, pl. 79, f. 3; Kachemak Bay, Kenai Peninsula,
 Alaska.

Rhamnus cannoni Knowlton, 1930, 107, pl. 46, f. 5; Middle Park: Middle Park,
 Grand Co., Colo.

Rhamnus cleburni Lesquereux. □ Lesquereux, 1888, 55; Denver: Golden, Colo.—Cross, 1895, 211; Middle Park: Middle Park, Colo.—Berry, 1922g, 15; Wilcox: De Soto Parish, La.—Knowlton, 1924, 90, pl. 17, f. 4; Animas: Pagosa Quad., Colo.—1930, 104, pl. 40, f. 6; pl. 46, f. 10, 11; Denver: Golden, Colo.; Dawson: near Colorado Springs, Colo.—Ball, 1931, 90, pl. 16, f. 6; Indio: Bastrop Co., Tex.—Berry, 1935, 45; Lower Ravenscrag: Loc. 3, southern Saskatchewan.

Cornus stuederi, Lesquereux not Heer, 1872, 9.—1878, 244, pl. 42, f. 4, 5.—1888, 52; Denver: Golden, Colo.—Cross, 1895, 211, Middle Park: Middle Park, Colo.

Rhamnites knowltoni Berry (part), 1922h, 16; that part only relating to *Cornus stuederi* Lesquereux not Heer nor Hollick nor Berry.

Rhamnus coushatta Berry. □ Ball, 1931, 91; Indio: Elm Creek, Uvalde Co., Tex.

Rhamnus crenatus Knowlton & Cockerell. □ Knowlton, 1930, 106; Denver: Golden, Colo.

Rhamnus dechenii Weber. □ Hollick, 1936, 138, pl. 78, f. 3; tributary of Glacier Creek, Yakutat-Copper River region, Alaska.

Rhamnus eoligniticus Berry. □ Ball, 1931, 90, pl. 16, f. 3; Indio: Bartons Ranch and Little Sandy Creek, Bastrop Co., Tex.

Rhamnus eridani Unger. □ Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Rhamnus gaudini Heer. □ Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—1936, 139, pl. 78, f. 4, 5; Kachemak Bay, Kenai Peninsula; Matanuska River below Moose Creek, Alaska.

Rhamnus goldianus Lesquereux. □ Lesquereux, 1888, 55; Denver: Golden, Colo.—Cross, 1895, 211; Middle Park: Middle Park, Colo.—Knowlton, 1924, 91; Animas: Ignacio Quad., Colo.—1930, 103; Denver: Golden, Colo.; Raton: Wooten, Colo.; Laramie?: Marshall, Colo.

Rhamnus herendeenensis Hollick, 1930, 102, pl. 78, f. 8–10; Chignik: Alaska Peninsula.

Rhamnus idahoensis R. W. Brown, 1935, 581, pl. 69, f. 13; Latah: Salmon, Idaho—1937, 181, pl. 56, f. 4; Latah: Spokane, Wash.; Salmon, Idaho.

Rhamnus inaequalateralis Lesquereux. □ Bartsch, 1896, 181; Dakota: Holman Cut, Woodbury Co., Iowa.—Gress, 1922, 314; Dakota: Ellsworth Co., Kans.

Rhamnus kitsilaniana Berry, 1926d, 113, pl. 19, f. 1; Kitsilano, British Columbia.

Rhamnus lesquereuxi Berry = *Gymnocladus casei* Berry.

Rhamnus marginatus Lesquereux. □ Lesquereux, 1871, 382; Wilcox: Mississippi.—Ball, 1931, 91; Wilcox: Mansfield, La.—Sanborn, 1935, 25; Comstock: Comstock, Douglas Co., Oreg.—Hollick, 1936, 140, pl. 78, f. 1, 2; near Berg Lake, Yakutat-Copper River region, Alaska.

Rhamnus marginatus apiculatus Berry. □ Berry, 1922g, 15, pl. 11, f. 2, 3; Wilcox: near Mansfield, De Soto Parish, La.—Ball, 1931, 91, 160; Indio: Sayersville, Bastrop Co.; Fayette: Raney Hdrt., Brazos Co., Tex.

Rhamnus notatus?, Lesquereux not Saporta = *Gymnocladus casei* Berry.

Rhamnus obovatus Lesquereux. □ Lesquereux, 1871, 382; Raton?: upper end of Purgatory Canyon, Colo.

Rhamnus plenus MacGinitie, 1937, 146, pl. 12, f. 4; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Rhamnus? praealaternoides Knowlton, 1930, 103, pl. 46, f. 7, 8; Denver: Golden, Colo.

Rhamnus alaternoides, Lesquereux not Heer, 1874b, 405.—1878, 278, pl. 52, f. 11, 11a; Denver: Golden, Colo.—1878b, 517.

Rhamnus pseudogoldianus Hollick, 1936, 139, pl. 79, f. 1, 2; pl. 119, f. 5; near Berg Lake, Yakutat-Copper River region; Kootznahoo Inlet, Admiralty Sound, southeastern Alaska.

Rhamnus rectinervis Heer. □ Lesquereux, 1888, 56; Denver: Golden, Colo.

Rhamnus ripleyensis Berry, 1925, 67, pl. 13, f. 3; Ripley: Henry Co., Tenn.

Rhamnus rossmaessleri Unger = *Juglans rhamnoides* (Rossmassler) Lesquereux.

Rhamnus salicifolius Lesquereux. □ Lesquereux, 1871, 382; Marshall, Colo.—Knowlton, 1930, 107, pl. 46, f. 12; Dawson: east of Colorado Springs, Colo.

Rhamnus serrata Penhallow, 1906a, 390a; Diamond Vale Company; Quilchena, British Columbia.

Rhamnus spokaneensis Berry = *Salix spokaneensis* (Berry) R. W. Brown.

Rhamnus tenax Lesquereux. □ Lesquereux, 1871, 380; Dakota: Decatur, Nebr.—Bartsch, 1896, 181; Dakota: Holman Cut, Woodbury Co., Iowa.—Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.—1922c, 169, pl. 40, f. 7; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Rhamnus terminalis Al. Braun = *Cinnamomum cinnamomeum* (Rossmassler) Hollick.

Rhamnus sp. Berry, 1924, 75, pl. 23, f. 2; Mt. Selman: Santo Tomás, Webb Co., Tex.

Rhamnus? sp. Penhallów, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.

Rhamnus sp.? Wilson, 1916, 207; Granite Creek, Yukon Terr.

RHEEDIA Linné.

Rheedia miocenica Berry, 1925a, 109, pl. 5, f. 3; Siparia: Trinidad, British West Indies.

RHINIPTERIS Harris, 1931b, 57. Genotype: *R. concinna* (Presl) Harris.

Rhinipteris concinna (Presl) Harris, 1931b, 58, pl. 12, f. 1; pl. 13, f. 4, 7, 8, 12-14; text-f. 20; Lepidopteris Zone: Scoresby Sound, East Greenland.

RHIZOCAULON Saporta.

Rhizocaulon dichotomum R. W. Brown, 1929, 292, pl. 76, f. 12; Green River: northwest of De Beque, Colo.

Rhizocaulon natans R. W. Brown, 1929, 292, pl. 76, f. 13; Green River: northwest of De Beque, Colo.

Rhizome?, fern?, Hartz, 1896, 233, pl. 16, f. 2, 3; Rhaetic: Cape Stewart, east Greenland.

RHIZOMOPTERIS, Schimper, 1869, *Traité Paleont. veg.*, vol. 1, 699. Genotype: *R. lycopodioides* Schimper.

Rhizomopters? sp. Knowlton, 1932, 43; Slates Hot Springs, Monterey Co., Calif.

Rhizophora? doctrinalis Hollick, 1928, 214, pl. 70, f. 6c; pl. 71, f. 7 b; pl. 82, f. 5b; Collazo: Porto Rico.

Rhizophora ecocenica Berry. □ Berry, 1924, 188; Barnwell: Phinizy Gully near Grovetown, Ga.; near Forest Station, Ga.; near Sandersville, Washington Co., Ga.; near Macon, Twiggs Co., Ga.

Rhizophora mangle Linné. Berry, 1925c, 5, pl. 2, f. 2, 4; Pleistocene: Trinidad, British West Indies.

RHODODENDRON Linné.

Rhododendron crassum Hollick, 1936, 160, pl. 99, f. 4; near Berg Lake, Yakutat-Copper River region, Alaska.

Rhododendron? sp. MacGinitie, 1933, 64, pl. 7, f. 4; Trout Creek: Trout Creek, Harney Co., Oreg.

RHOIPITES Wodehouse, 1933a, 513. Genotype: *R. bradleyi* Wodehouse.

- Rhoipites bradleyi* Wodehouse, 1933a, 513, f. 45; Green River: Parachute Creek, Garfield Co., Colo.
- Rhus balli* R. W. Brown, 1929, 287, pl. 73, f. 10; Green River: northwest of De Beque, Colo.
- Rhus bella* Heer=*Dicotylophyllum bellum* (Heer) Seward & Conway.
- Rhus bendirei* Lesquereux=*Carya egregia* (Lesquereux) LaMotte.
- Rhus coloradensis* Knowlton, 1924, 90, pl. 10, f. 4; Animas: Pagosa Quad., Colo.
- Rhus diluvialis* Arnold=*Acer osmonti* Knowlton.
- Rhus diversiloba* Torrey & Gray, ☐Potbury, 1932, 36, pl. 4, f. 1; San Bruno: San Mateo Co., Calif.—Chaney & Mason, 1933a, 62; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Webber in Chaney & Mason, 1933a, 68; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Mason, 1934, 166, pl. 10, f. 3; Tomales: Tomales Bay, Marin Co., Calif.
- Rhus? drymeja* Lesquereux=*Ulmus brownellii* Lesquereux.
- Rhus frigida* Knowlton, ☐Hollick, 1936, 131; Herendeen Bay, Alaska Peninsula.
- Rhus lesquereuxi* Knowlton & Cockerell, ☐Knowlton, 1923, 167; Green River: Green River, Wyo.
- Rhus longepetiolata* (Lesquereux) R. W. Brown, 1934, 60; Green River: between Carr and Brush Creeks northwest of De Beque, Colo.—1937, 179, pl. 55, f. 2, 3; Green River: Fossil, Wyo.
- Ailanthus longepetiolata* Lesquereux (part), 1883, 197, pl. 40, f. 6 only; Green River: Uinta Co., Wyo.—Knowlton (part), 1923, 166; Green River: Uinta Co., Wyo.
- Rhus myricoides*, R. W. Brown not Knowlton, 1929, 287, pl. 73, f. 9; Green River: between Carr and Brush Creeks, northwest of De Beque, Colo.
- Rhus magnifolia* MacGinitie, 1937, 144, pl. 9, f. 1, 2; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.
- Rhus merrilli* Chaney=*Cedrela merrilli* (Chaney) R. W. Brown.
- Rhus merrilli*, Berry (part) not Chaney=*Quercus simulata* Knowlton.
- Rhus mixta*, Knowlton not Lesquereux=*Astronium oregonum* Chaney & Sanborn.
- Rhus myricoides* Knowlton=*Rhus variabilis* (Newberry) Knowlton.
- Rhus myricoides*, R. W. Brown not Knowlton=*Rhus longepetiolata* (Lesquereux) R. W. Brown.
- Rhus nigricans*, Knowlton not Lesquereux=*Rhus variabilis* (Newberry) Knowlton.
- Rhus payettensis* Knowlton=*Fraxinus idahoensis* R. W. Brown.
- Rhus praeovata* Chaney, 1927a, 126, pl. 15, f. 8, 9; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.
- Rhus prelaurina* Axelrod, 1937, 180, pl. 6, f. 12; Mt. Eden: near Beaumont, Calif.
- Rhus redditiformis* Berry, ☐Berry, 1922c, 169, pl. 37, f. 2; Woodbine: Arthurs Bluff, Lamar Co., Tex.
- Rhus rotundifolia* Kirchner=*Hydrangea fraxinifolia* (Lesquereux) R. W. Brown.
- Rhus subrhomboidalis* Lesquereux=*Dipteronia insignis* (Lesquereux) R. W. Brown.
- Rhus typhinoides* Lesquereux, ☐Chaney, 1920a, 177; Eagle Creek: Multnomah Co., Oreg.
- Rhus typhinoides*, Knowlton not Lesquereux=*Salix inquirenda* Knowlton.
- Rhus uddeni* Lesquereux=*Sapindopsis magnifolia* Fontaine.

Rhus variabilis (Newberry) Knowlton, 1923, 167; Green River: Green River, Wyo.—Cockerell, 1925, 4; Green River: Roan Mts., Colo.—Brown, R. W., 1934, 59, pl. 11, f. 1-4; Green River: northwest of De Beque, Colo.

Planera variabilis Newberry (part) 1883, 508; Green River: Green River, Wyo.—1898, 83, pl. 66, f. 7 only; Green River: Green River, Wyo.

Myrica alkalina Lesquereux, 1883, 149, pl. 45A, f. 10-15; Green River; Alkali Station, Wyo.—Brown, R. W., 1929, 283, pl. 71, f. 2, 3; Green River: northwest of De Beque, Colo.

Myrica undulata?. Lesquereux not Heer, 1874b, 412; Elko, Nev.—1878, 131, pl. 17, f. 6-8; Elko, Nev.

Myrica ludwigii, Lesquereux not Schimper, 1876a, 385.—1876c, 311.—1878, 133, pl. 65, f. 9; Green River; mouth of White River, Wyo.—Knowlton, 1923, 157; Green River: mouth of White River, Wyo.—Berry, 1930d, 69; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Myrica zachariensis, Lesquereux not Saporta, 1883, 146, pl. 45A, f. 6-9 (only).—Berry, 1924, 156, pl. 28, f. 6, 7; Jackson: near El Dorado, Union Co., Ark.

Rhus nigricans, Knowlton not Lesquereux, 1923, 168; Green River: Green River, Wyo.

Rhus myricoides Knowlton, 1923, 188, pl. 37, f. 9-11; Green River: Greasewood Creek, Rio Blanco Co., Colo.

Myrica sp. Knowlton, 1923, 157, pl. 37, f. 2; Green River: Cathedral Bluff, 20 mi. west of Rio Blanco, Colo.—Berry, 1932e, 9; Lysite: Wind River Basin, Wyo.

Rhus sp. Dorf, 1930, 100, pl. 12, f. 4; St. Mary's College; Lafayette Dam, Calif.

Rhus? sp. Lesquereux, 1888.—Knowlton, 1902=*Carya simulata* (Knowlton) R. W. Brown.

Ribes fernquisti Berry=*Viburnum ribesiforme* LaMotte, new name.

Ribes protomelaenum Cockerell.□ Knowlton, 1923a, 188, pl. 42, f. 5-9; Creede: Creede, Colo.; Huerto: near Lake Santa Maria, Colo.

Ribes stanfordiana Dorf, 1930, 97, pl. 10, f. 6; Calabazas Canyon, Contra Costa Co., Calif.

Ribes sp. LaMotte, 1936, 128, pl. 9, f. 2; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Robinia alexanderi Webber, 1933, 124, pl. 4, f. 1-4; Ricardo: near Barstow, Calif.

Robinia? *idaheensis* Ashlee, 1932, 80, pl. 1, f. 10; Latah: Grangeville Mountain, Idaho.

Robinia pseudacacia Linné.□ Penhallow, 1899, 528; Taylor's Brickyard and Gaol Hill, Don Valley, Toronto, Ontario.

Robinia sp.? Knowlton, 1926, 44, pl. 28, f. 7, 7a=*Salix spokaneensis* (Berry) R. W. Brown.

RONDELETIA Linné.

Rondeletia goldmani Berry, 1918, 42, pl. 18, f. 3; Gatun: Canal Zone.

Rondeletia? sp. Berry, 1923b, 26, pl. 7, f. 3; north of Palomares, Oaxaca, Mexico.

Rosa cetera Hollick, 1936, 125, pl. 70, f. 8; Matanuska River west from Moose Creek, Alaska.

Rosa confirmata Hollick, 1936, 125, pl. 70, f. 9; Kachemak Bay, Kenai Peninsula, Alaska.

Rosa hilliae Lesquereux.□ Chaney, 1927a, 123, pl. 13, f. 8-10; pl. 14, f. 1: Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—MacGinitie, 1933, 57; Trout Creek: Trout Creek, Harney Co., Oreg.—LaMotte, 1936, 132; Upper Cedarville: Pit River, Modoc Co., Calif.

RUBIACITES Weber.

Rubiacites ixoreoides Berry, 1918, 43, pl. 18, f. 9-12; Gatun: Canal Zone.

Rubiacites? *pellicieraformis* Berry, 1930, 134, pl. 49, f. 19; Holly Springs: Pine Top, Hardeman Co., Tenn.

Rubiacites sphericus Berry, 1930, 133, pl. 45, f. 9-11; Holly Springs: Puryear and Bradley Pit, Henry Co.; Huckleberry Schoolhouse, McLeommoresville, Carroll Co., Tenn.; Bell City, Calloway Co., Ky.

- Rubiacites wilcoxensis** Berry, 1930, 133, pl. 45, f. 8; Holly Springs: Mill Creek, Hardeman Co., Tenn.; Bell City, Calloway Co., Ky.
- RUBUS** Linné. □ Mason, 1934, 162; discussion.
- Rubus idahoensis** Ashlee, 1932, 79, pl. 1, f. 4; Latah: Grangeville Mountain, Idaho.
- Rubus? inquirendus** Knowlton, 1923a, 188, pl. 43, f. 11; Creede: Creede, Coio.
- Rubus parviflorus** Nuttall. Potbury, 1932, 36, pl. 3, f. 9; San Bruno: San Mateo Co., Calif.—Mason, 1934, 163, pl. 9, f. 14–16; Tomales: Tomales Bay, Marin Co., Calif.
- Rubus spectabilis** Pursh. □ Mason, 1934, 162, pl. 9, f. 17; Tomales: Tomales Bay, Marin Co., Calif.
- Rubus vitifolius** Chamisso & Schlechtendal. □ Mason, 1934, 163, pl. 9, f. 8, 10, 12; Tomales: Tomales Bay, Marin Co., Calif.
- Rubus** sp. Ashlee, 1932, 79, pl. 1, f. 5; Latah: no locality.
- Rubus** sp. Berry, 1924a, 20, pl. 2, f. 1; Pleistocene: Washington, D. C.
- Rubus** sp. Berry, 1926b, 113, pl. 56, f. 8; Chowan: Neuse River, Wayne Co., N. C.
- Ruffordia goepperti** (Dunker) Seward. □
- Cladophlebis sphenopteroides* Fontaine. □ Penhallow, 1906a, 392a; Nordenskiöld River, Yukon Terr.
- Rulac crataegifolium** Knowlton = **Acer negundoides** MacGinitie.
- Rulac quercifolium** Hollick, 1930, 100, pl. 29, f. 1a; pl. 77, f. 1–10; pl. 78, f. 7b; Chignik: Alaska Peninsula.
- RUMEX** Linné. Mason, 1934, 156; discussion.
- Rumex occidentalis** Watson. Mason, 1934, 156, pl. 8, f. 15, 16; Tomales: Tomales Bay, Marin Co., Calif.
- Rumex persicarioides** Linné. □ Potbury, 1932, 33, pl. 3, f. 6; San Bruno: San Mateo Co., Calif.
- Rumex salicifolius** Weinmann. □ Potbury, 1932, 34, pl. 3, f. 7; San Bruno: San Mateo Co., Calif.—Mason, 1934, 156, pl. 8, f. 14; Tomales: Tomales Bay, Marin Co., Calif.
- RUPPIA** Linné.
- Ruppia maritima** Linné. □ Mason, 1934, 150, pl. 7, f. 12–15; Tomales: Tomales Bay, Marin Co., Calif.
- RUTAPHYLLUM** Berry, 1930, 92. □ Genotype: *R. trifoliatum* Berry.
- Rutaphyllum trifoliatum** Berry, 1930, 92, pl. 42, f. 3; Grenada: Somerville, Fayette Co., Tenn.
- SABAL** Adanson. □ Noé, 1936a, 447.
- Sabal communis* Lesquereux = **Sabalites grayanus** (Lesquereux) Lesquereux.
- Sabal eocenica* (Lesquereux) Knowlton = **Sabalites grayanus** (Lesquereux) Lesquereux.
- Sabal inquirenda* Knowlton = **Sabalites grayanus** (Lesquereux) Lesquereux.
- Sabal powellii* Newberry = **Sabalites powellii** (Newberry) Berry.
- Sabal? ungeri** (Lesquereux) Knowlton. □ Knowlton, 1924, 79; Animas: Pagosa Quad., Colo.—1930, 37; Dawson: near Colorado Springs, Colo.
- Sabal** sp. Reagan, 1926, 121, f. 1; Raton: Willow Canyon, N. Mex.
- SABALITES** Saporta. □ Noé, 1936a, 449.
- Sabalites apalachicolensis** Berry, 1916b, 46, pl. 8, f. 1–5; pl. 9, f. 9; Hattiesburg: Raglan, Forest Co., Miss.; near Chicoria, Wayne Co., Miss.; Alum Bluff: Alum Bluff, Liberty Co., Fla.; Boynton Bluff, Choctawhatchee River, Fla.
- Sabalites campbelli** (Newberry) Lesquereux. □ Cross, 1895, 211; Middle Park: Middle Park, Colo.—Berry, 1926d, 100; Burrard Inlet, Kitsilano, British Columbia.

Sabalites florissanti (Lesquereux) Berry, 1930d, 66, pl. 9; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Flabellaria florissanti Lesquereux. □ Knowlton, 1923, 154; Green River: Uinta Co., and Green River, Wyo.—Hollick, 1912a, 51; Chickaloon; Young Creek, lower Matanuska Valley, Alaska.—1936, 56, pl. 21; Little Kings Creek, Matanuska Coal Field, Alaska.

Sabalites fructifer Lesquereux (part) = **Sabalites grayanus** (Lesquereux) Lesquereux.

Sabalites fructifer Lesquereux (part) = **Leguminosites arachioides minor** Berry.

Sabalites grayanus (Lesquereux) Lesquereux. □ Berry, 1919g, 4, pl. 1; pl. 3, f. 5; Basal Tuffs: Barrilla Mts., Tex.—1930, 57; Wilcox: Mississippi, Tennessee, Kentucky, Arkansas, Louisiana, and Texas, 40 localities.—Knowlton, 1930, 36, pl. 9, f. 5; Denver: Golden, Colo.—Ball, 1931, 36, pl. 46, f. 7; Wilcox (Indio): Bastrop Co., Tex.

Sabal grayana Lesquereux. □ Lesquereux, 1871, 381; Wilcox: Mississippi.

Flabellaria cocenica Lesquereux. □

Flabellaria communis Lesquereux. □

Sabal communis Lesquereux. □

Sabal inquirenda Knowlton. □

Sabal? cocenica (Lesquereux) Knowlton. □

Sabalites fructifer Lesquereux (part). □ Wilson, 1914a, 324; about 80 mi. south of Regina, Saskatchewan.

Flabellaria? fructifer Lesquereux. □

Sabalites powellii (Newberry) Berry, 1930d, 67, pl. 10, f. 6, 7; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Sabal powellii Newberry. □ Knowlton, 1923, 153; Green River: Green River, Wyo.

Sabalites rhapifolius Potbury, 1935, 61, pl. 1, f. 9; La Porte, Plumas Co., Calif.

Sabalites cf. ungeri (Lesquereux) Knowlton. Berry, 1934, 129; Lance: Jump Off, Harding Co., S. Dak.

Sabalites vicksburgensis Berry, 1916e, 233; Catahoula: Chalk Hills, near Rosefield, La.—1924, 151, pl. 39; Catahoula?: Stryker, Polk Co.; Trinity Co.: Hamilton League, Fayette Co., Tex.; Fayette: Webb Co., Tex.—Ball, 1931, 150, pl. 36; Catahoula?: Polk, Trinity and Fayette Cos., Tex.; Fayette: Brazos Co., Tex.

Sabalites sp. Berry, 1916f. □ Berry, 1925, 39; Benton and McNairy Cos., Tenn.

Sabalites sp. Berry, 1924, 54; Mt. Selman: Santo Tomas, Webb Co., Tex.

Sabalites sp. Berry, 1929j, 133; Frontier: near Lander, Wyo.

Sabalites? sp. Chaney, 1920a, 161; Eagle Creek: Multnomah Co., Ore.

Sabalites sp. Chaney, 1920a, 160, pl. 5, f. 5; Eagle Creek: Multnomah Co., Ore.

SABINA Hall = **JUNIPERUS** (Tournefort) Linné (part).

Sabina linguaefolia (Lesquereux) Cockerell. □ Jennings, 1920, 404, pl. 23, f. 2; Missoula, Mont.—Knowlton, 1923a, 187; Creede: Creede, Colo.

Saccoloma gardneri (Lesquereux) Knowlton. □ Knowlton, 1930, 26, pl. 3, f. 3-8; Denver: east of Denver, Colo.; Dawson: Ramah, east of Colorado Springs, and Mosby, Colo.

Saccoloma? sp. Berry. 1935. 15: Middle Ravenscrag: Loc. 5, southern Saskatchewan.

Saccoloma sp. Knowlton, 1930, 27, pl. 3, f. 1-2; Dawson: near Colorado Springs, Colo.

SAGENOPTERIS Presl. □ Wieland, 1914, 138, pl. 40, f. 8-10; discussion.

Sagenopteris canadensis Berry, 1922j, 330, text-f. 1; Lower Blairmore: southwest Alberta.—1929k, 35; Lower Blairmore: southwestern Alberta.

Sagenopteris elliptica Fontaine. □ Berry, 1922k, 329-331.—1929k, 35, pl. 4, f. 4, 5; Lower Blairmore: southwest Alberta.

- Sagenopteris hallei* Harris, 1932a, 10, pl. 1, f. 1, 3-5; text-f. 2G-J; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Sagenopteris mantelli* (Dunker) Schenk. □ Berry, 1929k, 37, pl. 5, f. 7; Lower Blairmore: southwest Alberta.
- Sagenopteris mclearnii* Berry, 1929k, 36, pl. 4, f. 3; pl. 5, f. 8, 9; Lower Blairmore: southwest Alberta.
- Sagenopteris nilssoniana* (Brongniart) Ward. □ Harris, 1926, 77, pl. 8, f. 4-9; text-f. 12 A-H; Rhaetic: Scoresby Sound, east Greenland.—1932a, 5, pl. 1, f. 11; text-f. 1, 2 A-F; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Sagenopteris nilssoniana*, seed, Harris=*Caytonia thomasi* Harris.
- Sagenopteris nilssoniana*, stamen and pollen, Harris=*Antholithes* cf. *arbori* Thomas.
- Sagenopteris* cf. *paucifolia* (Phillips) Ward. □ Wilson, 1914, 408; Kootenai: Pimainus Hills north of Spence Bridge, Thompson River, British Columbia.
- Sagenopteris paucireticulata* Hollick, 1930, 41, pl. 2, f. 7; Chignik: Alaska Peninsula.
- Sagenopteris rhoifolia mexicana* Wieland, 1913, 266; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 1939, pl. 40, f. 8-10; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Sagenopteris serrata* Harris, 1932a, 11, pl. 1, f. 9; text-f. 3; Lepidopteris Zone: Scoresby Sound: East Greenland.
- Sagenopteris suspecta* Hollick, 1930, 41, pl. 2, f. 6; Chignik: Alaska Peninsula.
- Sagenopteris variabilis* (Velenovsky) Velenovsky. □ Hollick, 1930, 41, pl. 2, f. 8; Kaltag: Lower Yukon, Alaska.
- Sagittaria pulchella* Heer. □ Hollick, 1936, 54; Ninilchik, Kenai Peninsula, Alaska.
- Sagittaria* sp. Lesquereux. □ Hollick, 1936, 54; Alaska?
- SALISBURIA* Smith=*GINKGO* Linné.
- Salisburia binervata* Lesquereux=*Lygodium binervatum* (Lesquereux) Berry.
- Salisburia primordialis* Heer., 1874a, 100, pl. 27, f. 1; West Greenland.—Seward, 1925, 243; the specimen is indeterminate.
- Salisburia* (*Ginkgo*) *siberica*, Dawson not Heer, 1886, 8, pl. 2, f. 1=*Ginkgoites pleuripartita* (Schimper) Seward.
- Salix abbreviata* Goeppert, 1852, Deutsche geol. Gesell. Zeitschr., vol. 4, 495.—1855, Die tertiäre Flora von Schosnitz in Schlesien, 25, pl. 17, f. 4-11, Görlitz.—Hollick, 1936, 73 pl. 30, f. 2; Kachemak Bay, Kenai Peninsula, Alaska.
- Salix alaskana* Hollick, 1936, 69, pl. 31, f. 4; Kachemak Bay, Kenai Peninsula, Alaska.
- Salix angusta* Al. Braun. □ Cragin, 1891, 31; Loup Fork: near Alpine, Kans.—Hollick, 1936, 70, pl. 29, f. 4, 5; pl. 30, f. 3; Fairbanks district; Kachemak Bay, Kenai Peninsula, Alaska.
- Salix angusta*, Knowlton not Al. Braun=*Salix inquirenda* Knowlton.
- Salix angusta?*, Newberry not Al. Braun=*Eucalyptus? americanus* Lesquereux.
- Salix arctica* Pall. Chaney & Mason, 1936c, 10, text-f. 15, 18; Pleistocene: Fairbanks, Alaska.
- Salix argyrocarpa* Anderson. Hollick, 1931, 40, pl. 5, f. 8; pl. 6, f. 1a, 2a; pl. 7, f. 2a; Pleistocene: Colebrook, N. H.
- Salix barclayi* Anderson. Berry & Johnson, 1922a, 138, pl. 2, f. 1; Point Gray: Vancouver, British Columbia.
- Salix bebbianaformis* Berry, 1926b, 107, pl. 46, f. 8; Chowan: Neuse River, Wayne Co., N. C.
- Salix bryani* Knowlton=*Salix florissanti* Knowlton & Cockerell.

Salix californica Lesquereux. □ Chaney, 1920a, 162; Eagle Creek, Multnomah Co., Oreg.—1922a, 216; Payette: Idaho—1927a, 103, pl. 8, f. 8-11; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—LaMotte, 1935b, 53; Sooke: Muir Creek, Vancouver Isl., British Columbia.

Salix coalingensis Dorf, 1930, 78, pl. 7, f. 5-7; pl. 8, f. 1, 2; Garberville; Alturas; Santa Rosa; Lakeville; St. Mary's College; Lafayette Dam; Calabazas Canyon; Coalinga, Calif.—1936, 110; Idaho: near Weiser, Idaho—Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.—1937, 170, pl. 4, f. 8; Mt. Eden; near Beaumont, Calif.—Chaney & Elias, 1936b, 37, pl. 4, f. 1, 3, 6; Ogallala: Brown Co., Nebr.; Beaver Co., Okla.; Logan Co., Kans.

Salix cockerell R. W. Brown, 1934, 53, pl. 9, f. 6-10; Green River: Roan Plateau, Colo.

Salix cumberlandensis Knowlton. □ Berry, 1929j, 131; Frontier: near Cumberland, Wyo.

Salix daphnoides Villars. Chaney & Mason, 1936c, 10, text-f. 13; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Salix dayana Knowlton (part) = *Umbellularia dayana* (Knowlton) Berry.

Salix dayana Knowlton (part) = *Sophora spokanensis* Knowlton.

Salix deleta Lesquereux. □ Berry, 1922c, 163; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Salix discoloripites Wodehouse, 1933a, 506, f. 34, 35; Green River: Parachute Creek, Garfield Co., Colo.

Salix elongata, Knowlton not O. Weber = *Quercus simulata* Knowlton.

Salix eutawensis Berry. □ Berry, 1920e, 400; Black Creek: North Carolina.

Salix flexuosa Newberry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; near Tuscaloosa; Snow Plantation; Sanders Ferry Bluff, Ala.—1920e, 400; Black Creek: North Carolina.—1923c, 434, text-f. 1; Tuscaloosa: Fort Decatur, La.—Noé, 1925, 94, pl. 19, f. 2; Dakota: Cimarron Co., Okla.

Salix proteaefolia linearifolia Lesquereux. □ Gress, 1922, 289; Dakota: Ellsworth Co., Kans.

Salix florissanti Knowlton & Cockerell. □ Berry, 1929f, 242, pl. 64, f. 16; Latah: Spokane, Wash.—1934, 107; Latah: southeast of Moscow, Latah Co.; 11 mi. east of Lewiston, north bank of Clearwater River, Nez Perce Co., Idaho.—Chaney, 1938, 215, pl. 6, f. 3; Deschutes: Vanora Grade, near Madras, Crook Co., Oreg.

Salix bryant Knowlton, 1926, 33, pl. 12, f. 6; Latah: Spokane, Wash.

Salix frontierensis Knowlton. □ Berry, 1929j, 131; Frontier: near Cumberland, Wyo.

Salix gardneri Knowlton. □ ?Berry, 1925, 46, pl. 5, f. 3; Ripley: Henry Co., Tenn.

Salix glauca Linné. Chaney & Mason, 1936c, 10, text-f. 14; Pleistocene: Savage River Camp, Mt. McKinley Nat. Park, Alaska.

Salix grandifolia Weber, 1851, Palaeontographica, vol. 2, 178 (64), pl. 20 (3), f. 1a-c.—Hollick, 1936, 72, pl. 28, f. 4; pl. 30, f. 1; Kachemak Bay, Kenai Peninsula; Herendeen Bay opposite Marble Point, Alaska Peninsula.

Salix humilis Marsh. Berry & Hawkins, 1935a, 249, pl. 23, f. 2; Pensauken: near Durhams Corner, Middlesex Co., N. J.

Salix inaequalis Newberry = *Laurophyllum plutonium* (Heer) Seward.

Salix inquirenda Knowlton, 1926, 32, pl. 11, f. 1, 2; Latah: Spokane, Wash.—Berry, 1927c, 8; Esmeralda: Mineral Co., Nev.—1929f, 242; Latah: Spokane and Vera, Wash.—Arnold, 1937, 83, pl. 1, f. 4; Sucker Creek: Malheur Co., Oreg.—MacGinitie, 1937, 134; Weaverville: Hay Fork and Redding Creek, Trinity Co., Calif.—Brown, R. W., 1937, 168, pl. 47, f. 10; Latah: Spokane, Wash.

Salix inquirenda—Continued.

Salix remotidens Knowlton, 1926, 32, pl. 12, f. 7; Latah: Spokane, Wash.—Berry, 1929f, 242; Latah: Spokane, Wash.

Populus lesquereuxii, Berry not Cockerell, 1931a, 35; Latah: Grand Coulee, Wash.—1934, 106; Latah: east of White Blrd, Idaho.

Salix varians, Knowlton not Goeppert, 1902, 30; Mascall: John Day Basin, Oreg. *Quercus simulata*, Berry (part) not Knowlton, 1929f, pl. 51, f. 7 only; Latah: Spokane, Wash..

Rhus typhinioides, Knowlton not Lesquereux, 1926, 44, pl. 27, f. 5; Latah: Vera, Wash.

• *Juglans hesperia* Knowlton. □ Dorf, 1936, 110; Idaho: near Weiser, Idaho.

Ficus ungeri, Knowlton not Lesquereux (part), 1898b, 731, pl. 101, f. 5; Payette: Marsh, Idaho.

Cassia obtusa, Knowlton not Clos, 1898b, 731, pl. 100, f. 4, 5; Payette: Marsh, Idaho.

Cassia idahoensis Knowlton. □

Salix angusta, Knowlton not Al. Braun, 1900e 212, pl. 30, f. 22; Esmeralda: Emigrant Peak, Esmeralda Co., Nev.

Salix integra Goeppert=*Salix wyomingensis* Knowlton & Cockerell.

Salix kempffii Ashlee, 1932, 80, pl. 1, f. 12; Latah: Elk River district, Idaho.

Salix knowltoni Berry=*Arbutus idahoensis* (Knowlton) R. W. Brown.

Salix lancensis Berry, 1934a, 130, pl. 25, f. 8; Lance: Jump Off, Harding Co., S. Dak.

Salix lavateri Al. Braun, 1850, in Bruckmann, Ver. vaterl. Naturk. Württemberg Jahresh., vol. 6, 229. □—Hollick, 1936, 70, pl. 34, f. 7a, b; Herendeen Bay opposite Marble Point, Alaska Peninsula.

Salix lesquereuxii Berry=*Laurophyllum plutonium* (Heer) Seward.

Salix libbeyi Lesquereux. □? Hollick, 1936, 73, pl. 34, f. 4, 6b, c; Herendeen Bay opposite Marble Point, Alaska Peninsula.

Salix linearis Knowlton=*Myrica minuta* Knowlton.

Salix longiacuminata Knowlton, 1923, 155; Green River: Rio Blanco Co., 20 mi. west of Rio Blanco, Colo.—Brown, R. W., 1934, 54, pl. 8, f. 7, 8; Green River: Clear Creek 30 mi. northwest of De Beque, Colo.—MacGinitie, 1937, 134, pl. 5, f. 1, 2; Weaverville: Hay Fork and Redding Creek, Trinity Co., Calif.

Myrica sp. Knowlton, 1923, 158, pl. 40, f. 13; Green River: head of Carr Creek, Garfield Co., Colo.

Banksia cockerelli R. W. Brown, 1929, 287, pl. 72, f. 7; Green River: northeast of De Beque, Colo.

Salix macrophylla Heer. □ Hollick, 1936, 71; Port Graham, Kenai Peninsula, Alaska.

Salix media, Lesquereux not Heer=*Sapindus dentoni* Lesquereux.

Salix media?, Knowlton not Heer=*Laurus primigenia* Unger.

Salix meekii Newberry. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.

Salix minuta Knowlton. □ Hollick, 1936, 74; Herendeen Bay, Alaska Peninsula.

Salix mixta Knowlton (part)=*Carya egregia* (Lesquereux) LaMotte.

Salix mixta Knowlton (part)=*Pterocarya mixta* (Knowlton) R. W. Brown.

Salix myrtilloides Linné. Berry & Johnson, 1922a, 138, pl. 2, f. 1-5; Pleistocene: Point Grays: Vancouver, British Columbia.

Salix newberryana Hollick. □ Berry, 1920e, 400; Black Creek: North Carolina.

Salix orbicularis Penhallow. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.

Salix pedicellaris Pursh. Hollick, 1931, 41, pl. 5, f. 10; pl. 8, f. 4d?; Pleistocene: Colebrook, N. H.

Salix pellita Anderson. Hollick, 1931, 41, pl. 5, f. 9a?, 12; pl. 7, f. 1a?; pl. 8, f. a; Pleistocene: Colebrook, N. H.

Salix perplexa Knowlton (part) = *Vaccinium sophoroides* (Knowlton) R. W. Brown.

Salix perplexa Knowlton (part) = *Quercus perplexa* (Knowlton) Berry.

Salix pilosa Goeppert. □ Hollick, 1936, 73; Ninilchik, Kenai Peninsula, Alaska.

Salix proteaefolia Lesquereux = *Laurophyllum plutonium* (Heer) Seward.

Salix proteaefolia lanceolata, Hollick not Lesquereux = *Laurophyllum plutonium* (Heer) Seward.

Salix proteaefolia longifolia Lesquereux = *Laurophyllum plutonium* (Heer) Seward.

Salix cf. *proteaefolia* Lesquereux, Knowlton = *Laurophyllum plutonium* (Heer) Seward.

Salix proteaefolia linearifolia Lesquereux = *Salix flexuosa* Newberry.

Salix pseudo-argentea Knowlton = *Vaccinium americanum* (Lesquereux) Berry.

Salix raecana Heer. □ Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—1936, 72, pl. 34, f. 5, 6a; pl. 117, f. 3; Herendeen Bay, Alaska Peninsula; Kachemak Bay, Kenai Peninsula, Alaska.

Salix reesidei Knowlton, 1924, 79, pl. 6, f. 3; Animas: Pagosa Quad., Colo.

Salix remotidens Knowlton = *Salix inquirenda* Knowlton.

Salix reticulata Linné. Hollick, 1931, pl. 5, f. 11a, 13; pl. 6, f. 1b, c, 2b-d; pl. 7, f. 1b, 2b; pl. 8, f. e; Pleistocene: Colebrook, N. H.—Chaney & Mason, 1936c, 12, text-f. 17; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Salix siouxiana Knowlton & Cockerell. □ Reagan, 1924, 141, f. 1a, 1b; Dakota: Sioux City, Iowa.

Salix spokaneensis (Berry) R. W. Brown, 1937, 168 pl. 46, f. 3-6, 8; Latah: Spokane, Wash.—1937c, 516.

Robinia? sp. Knowlton, 1926, 44, pl. 28, f. 7, 7a; Latah: Spokane, Wash.

Rhamnus spokaneensis Berry, 1929f, 257, pl. 57, f. 4, 5; Latah: Spokane, Wash.

Phyllites sp. Knowlton, 1926, 49, pl. 29, f. 5; Latah: Spokane, Wash.

Vaccinium spokanense Berry, 1929f, 263, pl. 64, f. 8; Latah: Spokane, Wash.

Quercus sp., unnamed leaf, Berry, 1929f, pl. 50, f. 15; Latah: Spokane, Wash.

Salix tabellaris Lesquereux = *Apocynophyllum tabellarum* (Lesquereux) Berry.

Salix tenera Al. Braun, 1845, Neues Jahrb., 169.—Heer, 1856, Fl. Tert. Helv., vol. 2, 32, pl. 68, f. 7-11.—Hollick, 1936, 72, pl. 34, f. 8-10; Herendeen Bay opposite Marble Point, Alaska Peninsula; Kachemak Bay, Kenai Peninsula, Alaska.

Salix uva-ursi Pursh. Willard Berry, 1934, 782, text-f. 1, 1a, 2; Pleistocene: Collins Run, Butler Co., Ohio.

Salix vacciniifolia Knowlton = *Vaccinium vacciniifolia* (Knowlton) Berry.

Salix varians Goeppert. □ Knowlton, 1893b, 103; Ellensburg: Ellensburg, Wash.—1912i, 52; Chickaloon: Chickaloon River, lower Matanuska Valley, Alaska.—Hollick, 1936, 71, pl. 31, f. 5; Kachemak Bay, Kenai Peninsula, Alaska.

Salix varians, Knowlton not Goeppert = *Salix inquirenda* Knowlton.

Salix viminifolia Berry. □ Berry, 1926b, 107, pl. 47, f. 1-4; Chohan: Neuse River, Wayne Co., N. C.

Salix wimmeriana Goeppert. □ Hollick, 1936, 71; Ninilchik, Kenai Peninsula, Alaska.

NOTE.—Heer, 1869, 27, considered this species a synonym of *S. varians* Goeppert who protested and maintained the distinction. Knowlton 1894, 217, and 1896, 881, followed Heer but in 1919, 572, restored the species as valid. Hollick, 1936, maintains it distinct.

Salix worthenii Lesquereux = *Myrcia worthenii* (Lesquereux) Berry.

Salix wyomingensis Knowlton & Cockerell. □ Knowlton, 1922, 125, pl. 4, f. 3, 4, 8; Laramie: Golden, Colo.; Coal Creek, Boulder Co., Colo.; Post-Laramie: Black Buttes, Wyo.

Salix integra Goepfert. □ Hollick, 1936, 74; Ninilchik, Kenai Peninsula, Alaska.

Salix, pistillate flower, Berry, 1929f, 242, pl. 63, f. 5; Latah: Spokane, Wash.

Salix sp., stipule, Berry, 1929f, 242, pl. 52, f. 6; pl. 64, f. 9; Latah: Spokane, Wash.

Salix n. sp. Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.

Salix sp. Dorf, 1930, 79, pl. 8, f. 3; Pliocene: St. Mary's College; Lafayette Dam; Calabazas Canyon, Calif.—Axelrod, 1937, 171, pl. 4, f. 7; Mt. Eden; near Beaumont, Calif.

Salix sp. Heer, 1868a, 64.—Hollick, 1936, 74; Port Graham, Kenai Peninsula, Alaska.

Salix sp. Knowlton, 1923=*Sapindus dentoni* Lesquereux.

Salix sp. Knowlton (part), 1923=*Planera nervosa* Newberry.

Salix sp. Knowlton (part), 1923=*Apocynophyllum roanense* R. W. Brown.

Salix sp. Knowlton, 1926=*Umbellularia dayana* (Knowlton) Berry.

Salix sp.? (pistillate ament) Hollick, 1936, 74, pl. 34, f. 3; Herendeen Bay opposite Marble Point, Alaska Peninsula.

Salix sp. Knowlton, 1916b. □ MacGinitie, 1933, 49; Trout Creek: Trout Creek, Harney Co., Oreg.

Salix sp. Penhallow, 1899, 528; Taylor's Brickyard, Don Valley, Toronto, Ontario.

Salix sp. Scott, 1926, 404; Tesla, Calif.

Salix sp. Wilson, 1916, 206; Sheep Creek, Yukon Terr.

Salpichlaena anceps (Lesquereux) Knowlton. □ Knowlton, 1930, 27, pl. 7, f. 1-3; Denver: Golden, Colo.

Pteris pseudopennaeformis Lesquereux (part), 1888, 43; Denver: Golden, Colo.

SALVINIA Adanson. □ Florin, 1919, 243. Revision of fossil species.

Salvinia alleni (Lesquereux) Lesquereux=*Koelreuteria alleni* (Lesquereux) Edwards.

Salvinia elliptica Newberry. □ Florin, 1919, 245.

Salvinia formosa Heer. □ Florin, 1919, 246.

Salvinia preauriculata Berry, 1925f, 116, text-f. 1-4.—1930, 47, pl. 7, f. 2, 3; pl. 50, f. 1; Wilcox: Holly Springs: Bolivar-Jackson Road north of Clover Creek, Hardeman Co., Tenn.; Mandy, Madison Co., Tenn.—1930d, 62, pl. 6, f. 1-3; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Salvinia sp. Knowlton, 1897a. □ Florin, 1919, 256.

SAMAROOPSIS Goepfert. □ Harris, 1935, 129; discussion.

Samaropsis chalcos Harris, 1935, 129, pl. 29, f. 9, 10; text-f. 48n, o; Lepidopteris Zone: Scoresby Sound, east Greenland.

Samaropsis nathorstiana Harris, 1935, 129, pl. 18, f. 1-4; Lepidopteris Zone: Scoresby Sound, east Greenland.

Samaropsis scirrhomis Harris, 1935, 130, pl. 11, f. 1-3; text-f. 47c-f; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Sambucus canadensis Linné. Berry, 1924a, 25, pl. 2, f. 21-24; Pleistocene: Washington, D. C.

Sambucus glauca Nuttall. Frost, 1927, 83, pl. 17, f. 3, 4; pl. 18, f. 1; pl. 19, f. 9-11; Pleistocene: Rancho La Brea, Los Angeles Co., Calif.—Potbury, 1932, 38, pl. 4, f. 3; San Bruno: San Mateo Co., Calif.—Chaney & Mason, 1933a, 65; pl. 9, f. 15; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Mason, 1934, 178, pl. 11, f. 11, 12; Tomales: Tomales Bay, Marin Co., Calif.

Sambucus ?winchesteri Knowlton, 1923, 173, pl. 40, f. 8, 9; Green River: Rio Blanco Co., Colo.—?Berry, 1930d, 79, pl. 14, f. 3; so-called Bridger: Wind River Basin, Wyo.

SAMYDA Linné.

Samyda matanzensis Hollick, 1924, 309, pl. 14, f. 1; Matanzas: Cuba.

Santalum americanum Lesquereux=*Vaccinium americanum* (Lesquereux) Berry.

Sapindopsis angusta (Heer) Seward & Conway, 1935a, 29, pl. 5, f. 24; text-f. 28, 29; Atanekerdluk: west Greenland.

Cassia angusta Heer, 1882, 101, pl. 27, f. 6.—White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

Inga cottai Ettingshausen, 1867, Die Kreideflora von Niederschoena in Sachsen. K. Akad. Wiss. Wien, Sitzungsber, vol. 55, pt. 1, 235.

Sapindopsis variabilis Fontaine□Berry, 1922d, 213, pl. 55, f. 2-4; Cheyenne: near Belvidere, Kiowa Co., Kans.

Sapindopsis belviderensis Berry, 1922d, 216, pl. 49-54; Cheyenne: near Belvidere, Kiowa Co., Kans.—1929l, 65, pl. 9, f. 6; Upper Blairmore: southwest Alberta.

Sapindopsis brevifolia Fontaine.□Berry, 1922d, 216, pl. 55, f. 1; pl. 59, f. 1; Cheyenne: near Belvidere, Kiowa Co., Kans.—1929k, 54, pl. 8, f. 8, 9; Lower Blairmore: southwest Alberta.

Sapindopsis cooki Ball, 1937, 536, text-f. 6; Paluxy: near Stephenville, Erath Co., Tex.

Sapindopsis magnifolia Fontaine.□Berry, 1922d, 214, pl. 55, f. 5; pl. 56; pl. 57, f. 2; pl. 59, f. 3; Cheyenne: near Belvidere, Kiowa Co., Kans.—1929l, 64, pl. 10, f. 8; Upper Blairmore: southwest Alberta.

Rhus uddeni Lesquereux.□

Sapindopsis schultzi R. W. Brown, 1933, 10, pl. 1, f. 7; Aspen: southwest Wyoming.

Sapindopsis variabilis Fontaine.=*Sapindopsis angusta* (Heer) Seward & Conway.

Sapindopsis n. sp. Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Sapindus affinis Newberry□Berry, 1924, 72, pl. 12, f. 8; Lisbon: Lexington, Holmes Co., Miss.—1935, 44; Middle Ravenscrag: Loc. P 10-30, southern Saskatchewan.—?Hollick, 1936, 137, pl. 75, f. 5; Eska Creek, Matanuska Coal Field, Alaska.

Sapindus angustifolius, Ward not Lesquereux, 1886a, 554, pl. 51, f. 1-3.—1887, 68, pl. 31, f. 5-7; Fort Union: near Glendive, Mont.

Sapindus affinis?, MacGinitie not Newberry=*Cedrela oregoniana* (Lesquereux) R. W. Brown.

Sapindus angustifolius, Ward not Blume=*Sapindus affinis* Newberry.

Sapindus angustifolius, Lesquereux (part) not Blume=*Sapindus spokaneensis* Berry.

Sapindus cf. *angustifolius* Lesquereux. Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.

Sapindus apiculatus Velenovsky.□Hollick, 1930, 101, pl. 78, f. 2; Melozi: Lower Yukon, Alaska.

Sapindus armstrongi Berry=*Cedrela pteriformis* (Berry) R. W. Brown.

Sapindus balli Berry MS. Ball, 1931, 124, pl. 20, f. 7; Yegua: Turkey Creek, Brazos Co., Tex.

Sapindus basilicus (Unger) Unger, 1865, K. Akad. Wiss. (Wien), Math.-naturwiss. Cl., Denkschr., vol. 25, 50, pl. 16, f. 2.—Hollick, 1936, 137, pl. 77, f. 4; Hamilton Bay, Kupreanof Isl., southeastern Alaska.

Juglans basilica Unger, 1850, Gen. et sp. plant. foss., 470.

- Sapindus bentonensis** Berry. □ Ball, 1931, 88, pl. 40, f. 2 (30); Indio: Little Sandy Creek, Bastrop Co., Tex.
- Sapindus berryanus** Knowlton, 1930, 101, pl. 46, f. 1, 2; Dawson: Purdon mine, Colo.
- Sapindus brittonii** Hollick, 1928, 211, pl. 55, f. 5d; pl. 74, f. 1, 2; pl. 75, f. 5; pl. 76, f. 1b; pl. 78, f. 3a, b; pl. 79, f. 1a, 2a; pl. 86, f. e; pl. 87, f. 3?; Collazo: Porto Rico.
- Sapindus caudatus** Lesquereux. □ Lesquereux, 1888, 54; Denver: Golden, Colo.—Knowlton, 1930, 101; Denver: Golden, Colo.
- Sapindus dentoni** Lesquereux. □ Knowlton, 1923, 166; Green River: near mouth of White River, Utah.—Berry, 1924, 73, 177, pl. 12, f. 9; Claiborne (Lisbon): near Lexington, Holmes Co., Miss.; Fayette: Miraflores, Webb Co., Tex.—1930d, 71; so-called Bridger: Tipperary, Wind River Basin, Wyo.—Ball, 1931, 159; Jackson (Fayette): Miraflores, Webb Co., Tex.—Brown, R. W., 1934, 61, pl. 13, f. 3, 4; Green River: between Carr and Brush Creeks northwest of De Beque, Colo.
- Salix* sp. (*S. media* Heer, Lesquereux) Knowlton, 1923, 156; Green River: Green River, Wyo.
- Salix media*, Lesquereux not Heer, 1872a, 6.—1878, 168, pl. 22; f. 3; Green River: Green River, Wyo.; Elko, Nev.; Lagrange: Wyckliffe, Ky.
- Myrica torreyi*, R. W. Brown not Lesquereux, 1929, 283; Green River: between Carr and Brush Creeks, northwest of De Beque, Colo.
- Sapindus formosus** Berry. □ Berry, 1930, 101, pl. 36, f. 7; Holly Springs: Mandy, Madison Co., Tenn.
- Sapindus fructiferus** Berry, 1930, 102, pl. 33, f. 16; Holly Springs: Mill Creek, Hardeman Co., Tenn.
- Sapindus georgianus** Berry. □ Berry, 1924, 71, 177, pl. 34, f. 8, 9; Lisbon: Lexington, Holmes Co., Miss.; Yegua: Nevils Prairie and east of Antioch, Houston Co., Tex.; Mt. Selman: Palestine, Anderson Co., Tex.; Barnwell: Columbia Co., Ga.—Ball, 1931, 124; Mt. Selman: Palestine, Anderson Co.; Yegua: Nevils Prairie and near Antioch, Houston Co., Tex.
- Sapindus gracilentus** Hollick, 1928, 212, pl. 75, f. 3; Collazo: Porto Rico.
- Sapindus grandifoliolus** Ward. □ Berry, 1935, 44, pl. 11, f. 3; Middle Ravenscrag: Loc. 2, 24, southern Saskatchewan.
- Sapindus hispaniola** Berry, 1921a, 122, pl. 21, f. 3; Samaná district, Santo Domingo.
- Sapindus lamottei** Axelrod, 1937, 181, pl. 6, f. 6; Mt. Eden: near Beaumont, Calif.
- Sapindus lancifolius** Lesquereux (part) = *Cedrela lancifolia* (Lesquereux) R. W. Brown.
- Sapindus lancifolius** Lesquereux (part) = *Oreodaphne lancifolia* (Lesquereux) R. W. Brown.
- “**Sapindus lancifolius**,” Berry not Lesquereux, 1927c, 13, pl. 2, f. 2; Esmeralda: Mineral Co., Nev.

NOTE.—This specimen is in need of systematic review as the type material to which it has been referred has been split and transferred to other species.

- Sapindus linearifolius** Berry. □ Berry, 1930, 101, pl. 14, f. 19; Holly Springs: near Mandy, Madison Co., Tenn.—Ball, 1931, 87, pl. 7, f. 3, 3a; Indio: Bartons Ranch, Bastrop Co., Tex.
- Sapindus mississippiensis** Berry. □ Berry, 1924, 72; Gosport; Claiborne Landing, Monroe Co., Ala.; Lisbon: Newton, Newton Co.; Lexington, Holmes Co., Miss.—Ball, 1931, 88, pl. 7, f. 2; Indio: Bartons Ranch, Bastrop Co., Tex.
- Sapindus morrisoni** Lesquereux. □ Hollick, 1893, 235, pl. 6, f. 3; Magothy: Glen Cove, Long Island, N. Y.—1930, 100, pl. 78, f. 1; Melozi: Lower Yukon, Alaska.—Berry, 1922c, 168; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Sapindus cf. *morrisoni* Lesquereux. White, 1890, 99, pl. 2, f. 12; Martha's Vineyard, Mass.

Sapindus obesus Hollick, 1924, 307, pl. 10, f. 1, 2; Collazo: Collazo River, Porto Rico.

Sapindus obtusifolius Lesquereux. Knowlton, 1923, 166; Green River: 8 mi. southeast of Green River, Wyo.; Little Duck Creek, Rio Blanco Co., Colo.—1924, 90, pl. 8, f. 4; Animas: Ignacio Quad., Colo.—?1930, 102, pl. 46, f. 3; Denver: South Table Mt., Golden, Colo.—Berry, 1930d, 71; so-called Bridger: Tipperary, Wind River Basin, Wyo.—1932e, 12; Lysite: Wind River Basin, Wyo.

Sapindus oklahomensis Berry. Chaney & Elias, 1936c, 43, pl. 7, f. 1-3; Ogallala: Beaver Co., Okla.

Sapindus oregonianus Knowlton=*Castanopsis convexa* (Lesquereux) Brooks.

Sapindus oregonianus, LaMotte not Knowlton=*Cedrela oregoniana* (Lesquereux) R. W. Brown.

Sapindus pseudaffinis Berry. Ball, 1931, 89, pl. 39, f. 3, 5; Indio: Little Sandy Creek, Bastrop Co., Tex.

Sapindus pseudomarginatus Hollick, 1928, 213, pl. 73, f. 7; Collazo: Porto Rico.

Sapindus spokaneensis Berry, 1929f, 254; Latah: Spokane, Wash.

Sapindus angustifolius, Lesquereux (part) not Blume, 1874b, 415; Florissant and Middle Park, Colo.—1878, 265, pl. 49, f. 2-7; Florissant and Middle Park, Colo.—1888a, 15; Mascal: John Day Basin, Oreg.—Knowlton, 1902, 79; Mascal: John Day Valley, Oreg.—?Hollick, 1936, 137, pl. 76, f. 6; Eska Creek, Matanuska Coal Field, Alaska.

Sapindus undulatus Al. Braun=*Eugenia hilgardiana* Berry.

Sapindus undulatus Heer. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Sapindus winchesteri Knowlton, 1923, 167, pl. 38, f. 1; Green River: Smith Ranch, Greasewood Creek, Rio Blanco Co., Colo.—Berry, 1930d, 72; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Sapindus yeguanus Berry, 1924, 73, pl. 12, f. 6; pl. 43, f. 1, 2; Lisbon: Newton, Newton Co., Miss.; Yegua: Nevils Prairie and near Antioch, Houston Co., Tex.; Rock Creek, Brazos Co., Tex.—Ball, 1931, 125, 159, pl. 20, f. 6; pl. 32, f. 1; Yegua: near Antioch, Houston Co.; Turkey Creek, Brazos Co.; Jackson?: Rock Creek, Brazos Co., Tex.

Sapindus sp. Axelrod, 1934, 2; Mt. Eden: near Beaumont, Calif.

Sapindus sp. Bell, 1930, 31; Foremost: southern Alberta.

Sapindus n. sp. Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.

Sapindus sp. Cragin, 1891, 31; Loup Fork: near Alpine, Kans.

SAPIUM P. Brown.

Sapium standleyi Chaney & Sanborn, 1933, 79, pl. 23, f. 2A, 3; Fisher: Goshen, Oreg.

SAPOTA Plumier.

Sapota agnitionalis Hollick, 1928, 221, pl. 75, f. 1; Collazo: Porto Rico.

Sapotacites alaskensis Hollick, 1930, 113, pl. 85, f. 1; Kaltag: Lower Yukon, Alaska.

Sapotacites hyperboreus Heer. White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.

Sapotacites millicanensis Berry, 1924, 194, pl. 61, f. 4; Fayette: Barrera League and Mosey Creek, Brazos Co., Tex.—Ball, 1931, 169, pl. 32, f. 2; Fayette: Barrera League and Boggy Creek, Brazos Co., Tex.

Sapotacites mirafflorianus Berry, 1924, 194, pl. 40, f. 1; Fayette: Miraflores, Webb Co., Tex.—Ball, 1931, 169, pl. 32, f. 8; Fayette: Miraflores, Webb Co., Tex.

- Sapotacites nervillosus* Heer=*Dalbergites simplex* (Newberry) Seward.
Sapotacites retusus Heer=*Dalbergites simplex* (Newberry) Seward.
Sapotacites spatulatus Berry, 1916b, 52, pl. 10, f. 2; Alum Bluff: Alum Bluff, Liberty Co., Fla.
Sassafras acutilobum Lesquereux=*Cinnamomoides heerii* (Lesquereux) Seward.
Sassafras alaskanum Hollick, 1936, 117, pl. 64, f. 5; Hamilton Bay, Kupreanof Isl., southeastern Alaska.
Sassafras bradleyi R. W. Brown, 1933, 7, pl. 2, f. 5; Aspen: southwest Wyoming.
Sassafras cretaceum Newberry=*Araliopsoides cretacea* (Newberry) Berry.
Sassafras cretaceum, Penhallow not Newberry=*Sassafras selwynii* Dawson.
Sassafras (Araliopsis) cretaceum obtusum Lesquereux=*Araliopsoides cretacea salisburiaefolia* (Lesquereux) Berry.
Sassafras cretaceum recurvatum (Lesquereux) Newberry=*Platanus latiloba* Newberry.
Sassafras dissectum Lesquereux. □ Gress, 1922, 503; Dakota: Ellsworth Co., Kans.
Sassafras ferretianum, Heer not Massalongo=*Sassafras selwynii* Dawson.
Sassafras hesperia Berry, 1929f, 259, pl. 59, f. 2; Latah: Spokane, Wash.—Brooks, 1935, 299, pl. 20, f. 1; Sucker Creek: Ballantyne Ranch, Idaho.—Lamotte, 1936b, 417; Ellensburg: Ellensburg, Wash.—Arnold, 1937, 85, pl. 2, f. 3; Fenwick Ranch, west of Sucker Creek, Oreg.—Brown, R. W., 1937, 174, pl. 53, f. 7-10; Latah: Republic, Wash.; Salmon, Idaho; Mascall: Tipton, Oreg.
Philadelphus bendirei, Oliver not Knowlton, 1934, 21; Mascall: Tipton, Oreg.
Philadelphus bendirei, Arnold not Knowlton, 1937, 88 pl. 3, f. 4; Fenwick Ranch west of Sucker Creek, Oreg.
Sassafras integrifolium Lesquereux. □ Lesquereux, 1871, 380; Dakota: northwest of Salina, Kans.
Sassafras latilobum (Newberry) Knowlton=*Platanus latiloba* Newberry.
Sassafras leconteanum Lesquereux=*Persea leconteanum* (Lesquereux) Lesquereux.
Sassafras (Araliopsis) mirabile Lesquereux=*Platanus latiloba* Newberry.
Sassafras mirabilis Lesquereux=*Platanus latiloba* Newberry.
Sassafras mudgii Lesquereux. □ Lesquereux, 1871, 380; Dakota: northwest of Salina, Kans.—Berry, 1922d, 219, pl. 61, f. 3; Cheyenne: near Belvidere, Kiowa Co., Kans.—1929l, 63; Upper Blairmore: southwest Alberta.—Gress, 1922, 302; Dakota: Salinas, Kans.
Sassafras (Araliopsis) obtusum Lesquereux=*Araliopsoides cretacea salisburiaefolia* (Lesquereux) Berry.
Sassafras officinale Nees & Eberm. Berry & Hawkins, 1935a, 251, pl. 24, f. 2; pl. 25, f. 4; Pensauken: near Durhams Corner, Middlesex Co., N. J.
Sassafras pfaffiana Heer=*Platanophyllum pfaffianum* (Heer) Seward.
Sassafras recurvatum Lesquereux=*Platanus latiloba* Newberry.
Sassafras recurvatus Lesquereux=*Platanus latiloba* Newberry.
Sassafras selwynii Dawson. □ Berry, 1902a, 442.—1926d, 114, pl. 14, f. 1-4; Joseph Creek, British Columbia.
Sassafras cretaceum, Penhallow not Newberry, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.
Sassafras sp. Penhallow, 1908a, 87; Quilchena, British Columbia.
Sassafras ferretianum, Heer not Massalongo, 1869, 474, pl. 50, f. 1, 2.—1883, 103, pl. 97, f. 5.
Sassafras sp. Bell, 1932, 220; Dunvegan: Peace River, British Columbia.
Sassafras sp. Penhallow=*Sassafras selwynii* Dawson.
SAURAUJA Willdenow.

Saurauja alaskana Hollick, 1936, 155, pl. 93, f. 4; Hamilton Bay, Kupreanof Isl., southeastern Alaska.

SAUSSUREA DeCandolle.

Saussurea? sp. MacGinitie, 1933, 67, pl. 16, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.

Scale, Chaney=*Libocedrus praedecurrens* Knowlton.

SCHEFFLERA Forster.

Schefflera? elliptica Berry, 1930, 124, pl. 41, f. 10; Holly Springs: Grable Pit, Henry Co., Tenn.

Schefflera formosa Berry, 1930, 123, pl. 30, f. 9-12; pl. 44, f. 17; Holly Springs: Mill Creek, Hardeman Co.; Somersville, Fayette Co., Tenn.

SCHILDERIA Daugherty, 1934, 363. Genotype: *S. adamanica* Daugherty.

Schilderia adamanica Daugherty, 1934, 363, pl. 5; Triassic: near Adamana, Ariz. *Schizoneura carrerei* Zeiller=*Neocalamites carrerei* (Zeiller) Halle.

Schmaltzia vexans (Lesquereux) Cockerell. □ Brown, R. W., 1929, 288; Green River: between Carr and Brush Creeks, 30 mi. northeast of De Beque, Colo.

SCHMIDELIA Linné.

Schmidelia bejucensis Berry, 1918, 37, pl. 17, f. 4; Caimito: Canal Zone.

SCIADOPITYTES Goeppert. Seward, 1926, 104.

Sciadopitytes borealis (Heer) Seward & Conway, 1935, 12, pl. 3, f. 25-26; Kingitok, west Greenland.

NOTE.—The authors do not state the extent of the synonymy of *Dammara* and *Dammartites borealis* that they favor.

Sciadopitytes crameri (Heer) Halle, 1915, Geologisk. Förening Stockholm Förhand., vol. 37, pt. 5, 509, pl. 13, f. 1-13.—Seward, 1926, 1-5; Upernivik, Nugsuak, west Greenland.

Pinus crameri Heer (part), 1868, 84, pl. 44, f. 8-16, 18.—1874a, 83, pl. 23, f. 9, 10, 12-15.—1882, 17.—White, 1898, 347, 349, 352, 353; Kook, Pagtorfik, Ujarartorsuak, Nugsuak Pen., west Greenland.

Sciadopitytes eirikiana (Heer) Florin, 1922, Svensk. Bot. Tidskr., vol. 16, 263, f. 2a.—Seward, 1926, 106; Upernivik Isl., Nugsuak, west Greenland.

Pinus eirikiana Heer, 1874a, 85, pl. 2, f. 1; pl. 17, f. 6, 7; pl. 18, f. 2b; pl. 23, f. 16.—1882, 18, pl. 4, f. 1c, 2c, 8.—White, 1898, 347, 253; Kook, Ujarartorsuak, Nugsuak Pen., west Greenland.

Sciadopitytes nathorsti Halle, 1915, Geologisk. Förening Stockholm Förhand., vol. 37, pt. 5, 512, pl. 12, f. 16-29.—Johansson, 1920, Svensk. Bot. Tidskr., vol. 14, 253; f. 1d-f, 2a-c.—Florin, 1922, Svensk. Bot. Tidskr., vol. 16, 265.—Seward, 1926, 105; Nugsuak, west Greenland.

Sciadopitytes (?) axis, Seward, 1926, 106, pl. 10, f. 95; Upernivik Isl., West Greenland.

Scirpus cf. *lacustris* Linné. Berry, 1924a, 18, pl. 1, f. 12; Pleistocene: Washington, D. C.

Scirpus (or *Cyperus*) sp., Berry, 1927, 23; Pleistocene: Henry Co., Tenn.

Scirpus spp., Mason, 1934, 150, pl. 7, f. 10, 11; Tomales: Tomales Bay, Marin Co., Calif.

Sclerophyllina cretosa (Schenk) Heer=*Phoenicopsis steenstrupi* Seward.

Sclerotites? *cypericola* Knowlton, 1930, 16, pl. 1, f. 7; Dawson: near Colorado Springs, Colo.

Sclerotites? *hesperius* Knowlton, 1930, 16, pl. 1, f. 6; Dawson: Ramah, Colo.

Sclerotites rubellus (Lesquereux) Meschinelli. □ Knowlton, 1930, 15; Denver: Golden, Colo.

SCORESBY Harris, 1932, 38. Genotype: *S. dentata* Harris.

Scoresbya dentata Harris, 1932, 38, pl. 2, f. 7-9; pl. 3, f. 1; text-f. 22; Thaumopteris Zone: Scoresby Sound, east Greenland.

SEDUM Tournefort.

Sedum? hesperium Knowlton, 1923, 163, pl. 37, f. 7; Green River: Cathedral Bluff, Rio Blanco Co., Colo.

Seed A, Harris=*Vardekloeftia sulcata* Harris.

Seed B, Harris=*Allicospermum hartzi* Harris.

Seed C, Harris=*Amphorispermum rotundum* Harris.

Seed D, Harris=*Allicospermum fragilis* Harris.

Seed E, Harris=*Amphorispermum ellipticum* Harris.

Seed F, Harris=*Chitospermum stereococcus* Harris.

Selaginella arctica Heer, 1882, 39, pl. 13, f. 5.—Seward, 1925, 234. The type is indeterminate.

Selaginella berthoudi Lesquereux □ Lesquereux, 1888, 43; Denver: Golden, Colo.—Knowlton, 1930, 33; Denver: Golden, east of Denver, Colo.

Selaginella laciniata, Berry not Lesquereux=*Muscites? lesquereuxi* Berry.

SELAGINELLITES Halfe, 1907, K. Svenska Vet. Akad., Arkiv f. Bot., vol. 7, no. 5.

Selaginellites ariadnae Miner=*Triletes ariadnae* (Miner) Harris.

Selaginellites arnoldsii Miner=*Triletes arnoldsii* (Miner) Harris.

Selaginellites borealis Miner=*Triletes borealis* (Miner) Harris.

Selaginellites echinatus Miner=*Triletes echinatus* (Miner) Harris.

Selaginellites erlansonii Miner=*Triletes erlansonii* (Miner) Harris.

Selaginellites greenlandicus Miner=*Triletes greenlandicus* (Miner) Harris.

Selaginellites inornatus Miner=*Triletes inornatus* (Miner) Harris.

Selaginellites mirabilis Miner=*Triletes mirabilis* (Miner) LaMotte.

Selaginellites papillosus Miner=*Triletes papillosus* (Miner) Harris.

Selaginellites subrotundus Miner=*Triletes subrotundus* (Miner) Harris.

SEMECARPUS Linné.

Semecarpus alaskana Hollick, 1936, 130, pl. 93, f. 7; near Berg Lake, Yakutat-Copper River region, Alaska.

Semecarpus prindlei Hollick, 1936, 131, pl. 104, f. 8, 9; Bryant Creek, Upper Yukon region, Alaska.

SEQUOIA Endlicher. □ Mason, 1927, 153; discussion.—Read, 1930b, 14; discussion of wood anatomy.

Sequoia affinis Lesquereux (part), 1876a, 384.—1876c, 310.—1883, 183.—Knowlton, 1916b, 248; Florissant, Colo.—1930, 33; Middle Park: Middle Park, Grand Co., Colo.

NOTE.—Knowlton, 1919, lists 3 additional synonyms. As all figured specimens of this species have been transferred to *Glyptostrobus europaeus* and only unfigured descriptions retained, the species is in unsatisfactory condition.

Sequoia affinis Lesquereux (part) = *Glyptostrobus europaeus* (Brongniart) Heer.

Sequoia ambigua Heer = *Pagiophyllum ambiguum* (Heer) Seward.

Sequoia cf. *ambigua* Heer. Nathorst, 1893, 51, text-f. 1-3; Tlaxiaco, Oaxaca, Mexico.

Sequoia angustifolia Lesquereux = *Sequoia langsdorfii* (Brongniart) Heer.

Sequoia angustifolia, Hollick not Lesquereux = *Taxodium distichum* (Linné) Richard.

Sequoia brevifolia Heer. □ Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.—Hollick, 1936, 46, pl. 15, f. 8; pl. 78, f. 6b; Bryant Creek, Upper Yukon River region; Hamilton Bay, Kupreanof Isl., southeastern Alaska.

Sequoia burgessii Penhallow = *Sequoioxylon burgessii* (Penhallow) Torrey.

Sequoia concinna Heer=*Sequoiites concinna* (Heer) Seward.

Sequoia condita Lesquereux.□Berry, 1922d, 209, pl. 48, f. 1-11; Cheyenne: near Belvidere, Kiowa Co., Kans.—1929l, 60; Upper Blairmore: southwest Alberta.

Sequoia couttsiae Heer.□?Penhallow, 1906a, 391a; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.

Sequoia dakotensis R. W. Brown, 1935a, 447, text-f. 1-4; Lance: south of Mandan, N. Dak.

Sequoia disticha Heer, 1876, Flora Foss. Arct., vol. 4, no. 1, 63, pl. 12, f. 2a; pl. 13, f. 9-11.—Hollick, 1936, 47, pl. 15, f. 7; Anchorage Bay, Chignik Bay, Alaska Peninsula.

Sequoia fairbanksi Fontaine.□Knowlton, 1932, 43; Slates Hot Springs, Monterey Co., Calif.

Sequoia fastigiata (Sternberg) Heer (part)=*Sequoiites concinna* (Heer) Seward.

Sequoia fastigiata, Hollick not Heer=*Sequoiites concinna* (Heer) Seward.

Sequoia formosa Lesquereux.□Lesquereux, 1871, 379; Dakota: Decatur, Nebr.

Sequoia gigantea Lindley. Mason, 1927, 153. Discussion.

Sequoia gracillima (Lesquereux) Newberry (part).□Newberry, 1898, 19, pl. 14, f. 6; pl. 26, f. 9?; Dakota: Whetstone Creek, New Mexico.

Glyptostrobus gracillimus Lesquereux, 1868a, 92.—1871, 397; Dakota: Dakota Co., Nebr.—1874a, 52, pl. 1, f. 8, 11, 11f.—1883, 32, pl. 1, f. 6, 6b; Dakota: near Sioux City, Iowa.

Sequoia gracillima, Newberry not Lesquereux (part)=*Geinitzia formosa* Heer.

Sequoia gracilis Heer (part)=*Pagiophyllum ambiguum* (Heer) Seward.

?*Sequoia gracilis* Heer (part)=*Cyparissidium gracile* (Heer) Heer.

Sequoia haydenii (Lesquereux) Cockerell=*Juniperus? haydenii* (Lesquereux) Knowlton.

Sequoia heerii Lesquereux.□Hollick, 1936, 47; Kukak Bay, Alaska Peninsula.

Sequoia heterophylla Velenovsky.□Hollick, 1892a, 30, pl. 1, f. 21; Raritan: Kreischerville, Staten Island, N. Y.—Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; Whites Bluff, Ala.—1920e, 398; Black Creek: North Carolina.—? Berry, 1929m, 70; Allison: southwest Alberta.

Sequoia langsdorffii (Brongniart) Heer.□Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.—Knowlton, 1900d, 39; one mile east of Murphys Springs, Oreg.; 5 mi. north of and 3 mi. east of Ashland, Oreg.—1926, 26, pl. 9, f. 3-6; Latah: Coeur d'Alene, Idaho; Spokane and Mica, Wash.—Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek; Eska Creek; north side of Red Mountain, Lower Matanuska, Alaska.—1936, 47, pl. 9, f. 1a, 2, 4b; pl. 10, f. 2b, 3a; pl. 12, f. 2-5; pl. 13, f. 1, 4a; pl. 15, f. 1-6; pl. 32, f. 1b; pl. 33, f. 1c; pl. 86, f. 2b; pl. 108, f. 2; pl. 110, f. b.; Kenai Peninsula; Admiralty Isl.; Hamilton Bay, Kupreanof Isl.; Matanuska Coal Field; Divide between Herendeen Bay and Port Moller; Anchorage Bay; Chignik Bay; Bryant Creek, upper Yukon region; Cape Douglas, Alaska Peninsula; Chignik River; Zarembo Isl., southeastern Alaska; Ninilchik, Matanuska region; Keku Isl., southeastern Alaska: Unga Isl., Alaska Peninsula.—Wilson, 1914, 409; Kenai; Sourdough Mine, Coal Creek, Yukon Terr.—1916, 206; Sheep Creek, Granite Creek, Yukon Terr.—Nathorst, 1915, 9, pl. 1, f. 1-15; Ellesmereland.—Berry, 1924, 48; Yegua: Sommerville, Burleston Co., Tex.—1926d, 69; Kitsilano and Joseph Creeks, Chu Chua district, British Columbia.—1929f, 237; Latah: Mica, Vera, and Spokane, Wash.; Coeur d'Alene, Idaho.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 104; Latah: 11 mi. east of Lewiston on north bank Clearwater River; near Arrow Junction and south of Juliaetta, Nez Percé Co.; near White Bird, Idaho Co.; Edwards Ranch, Stanley Hill, Coeur d'Alene, Kootenai Co., Idaho.—Mason, 1927, 153, pl. 5, f. 4, 8; Bridge Creek, Oreg.—Chaney,

Sequoia langsdorfii—Continued.

1927a. 102; Crooked River, Oreg.—Dorf, 1930, 73, pl. 6, f. 5, 6; Petrified Forest; Bennett Valley; Garberville; Santa Rosa, Calif.—1936, 108; Idaho: near Weiser, Idaho.—Ball, 1931, 118, 147; Claiborne and Jackson, Tex.—Oliver, 1934, 15; Mascall: Tipton and Austin, Oreg.—R. W. Brown, 1935, 573, pl. 67, f. 1, 2, 10; Latah: Republic, Wash.; Potlatch Creek, Idaho.—1937, 168, pl. 45, f. 25; Mascall: Tipton, Oreg.—LaMotte, 1936, 111; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Sequoia angustifolia Lesquereux, 1873, 372; Elko Station, Nev.—1878, 77, pl. 7, f. 6–10.—1883, 240, pl. 1, f. 5; Elko Station, Nev.; Corral Hollow, Calif.—Knowlton, 1900d, 39; Coal Creek, Oreg.—1902, 24; Mascall: Van Horn's Ranch, John Day Basin, Oreg.—Penhallow, 1908a, 88; Quilchena, Similkameen, Horsefly and Tulameen Rivers, British Columbia.

NOTE.—Seward & Conway, 1935, 12, refer certain specimens to *Sequoiites langsdorfii*, q. v.

Sequoia langsdorfii (Brongniart) Heer (part) = *Elatocladus smittiana* (Heer) Seward.

Sequoia cf. *langsdorfii* (Brongniart) Heer. Wilson, 1917, 300; Hazelton-Aldermere Area, British Columbia.

Sequoia magnifica Knowlton. □ Read, 1930b, 14, pl. 1, f. 1–6; pl. 4, f. 6; pl. 5, f. 5; pl. 6, f. 1; Lamar Flora: Specimen Ridge; Fossil Forest; Yancey Forest; Crescent Hill, Yellowstone Nat. Park.

Cupressinoxylon eutreron Felix. □

Sequoia minor Velenovsky. □ Berry, 1920e, 398; Black Creek: North Carolina.

Sequoia nordenskiöldii Heer. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.—Hollick, 1912a, 50; Chickaleen: Matanuska River below Moose Creek; Eska Creek, Alaska.—Berry, 1930f, 63, 64; Estevan: southern Alberta; Ravenscrag: southern Alberta.—1934a, 129; Lance: Jump Off, Harding Co., S. Dak.—1935, 18; Whitemud: Loc. 7, 30; Middle Ravenscrag: Loc. 2, 13, 38, P 3–30, P 12–30; Upper Ravenscrag: Loc. P 6–30; Estevan: Sec. 16, T 7, R 29 W, 3rd M, southern Saskatchewan.

Sequoia nordenskiöldii, Lesquereux not Heer = *Glyptostrobus europaeus* (Brongniart) Heer.

Sequoia oblongifolia Jennings, 1920, 400, pl. 23, f. 1, 1a; Missoula, Mont.

Sequoia obovata Knowlton. □ Hollick, 1930, 58, pl. 25, f. 10–12; pl. 29, f. 2b; Chignik: Alaska Peninsula.

Sequoia reichenbachii (Geinitz) Heer. □ White, 1898, 347, 350, 352, 353; Kook, Kaersuk, Ujarartorsuak, Nugsuak Pen., west Greenland.—Berry, 1913a, 570; Tuscaloosa: near Iuka, Miss.; near Cottdendale; Snow Plantation; Whites Bluff, Ala.—1920e, 398; Black Creek: North Carolina.—1929j, 133; Frontier: near Lander, Wyo.—Wilson, 1914, 408; Kootenai: Pimainus Hills north of Spence Bridge, Thomson River, British Columbia.—Gress, 1922, 286; Dakota: Jack Creek Canyon, Madison Mountain, Mont.—Knowlton, 1922, 114, pl. 20, f. 1, 2; Laramie: Boulder Co., Colo.; Mt. Carbon, Morrison, Colo.; Crow Creek near Greeley, Colo.—Hollick, 1930, 57, pl. 22, f. 3–5; pl. 27, f. 4; Wolverine Mt.; Rampart-Tenana district; Melozi, Nulato: Lower Yukon, Alaska.

Sequoia reichenbachii, Hollick not (Geinitz) Heer, 1892a = *Cyparissidium gracile* (Heer) Heer.

Sequoia reichenbachii (Geinitz) Heer (part) = *Sequoiites concinna* (Heer) Seward.

Sequoia cf. *reichenbachii* (Geinitz), Heer. Nathorst, 1893, 52, text-f. 4–5; Tlaxiaco, Oaxaca, Mexico.

Sequoia rigida Heer. □ ?Hollick, 1930, 58, pl. 19, f. 7a; pl. 25, f. 7; Chignik: Alaska Peninsula; Melozi: Lower Yukon, Alaska.

Sequoia subulata Fontaine not Heer. □ White, 1898, 347; Kook, Nugsuak Pen., west Greenland.

Sequoia rigida Heer (part) = *Elatocladus smittiana* (Heer) Seward.

Sequoia rigida spinifolia Hollick, 1930, 58, pl. 22, f. 1, 2; Kaltag: Lower Yukon, Alaska.

Sequoia schmittiana Heer = *Elatocladus smittiana* (Heer) Seward.

Sequoia sempervirens Endlicher. □ Mason, 1927, 153; Petrified Forest, Calistoga, Calif.; Merced: Mussel Rock, 6 mi. south of San Francisco, Calif.; Berkeley Hills, Contra Costa Co., Calif.—Chaney & Mason, 1933a, 57; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Webber in Chaney & Mason, 1933a, 68; Pleistocene: Carpinteria, Santa Barbara Co., Calif.

Sequoia smittiana Heer = *Elatocladus smittiana* (Heer) Seward.

Sequoia spinosa Newberry. □ Hollick, 1936, 48; Cook Inlet, Alaska.

Sequoia subulata Heer (part) = *Elatocladus subulata* (Heer) Seward.

?*Sequoia subulata* Heer (part) = *Sequoiites concinna* (Heer) Seward.

Sequoia subulata Fontaine not Heer = *Sequoia rigida* Heer.

Sequoia sp. (cones) Hollick, 1930, 59, pl. 20, f. 8, 9; pl. 23, f. 1-10; Melozi, Nulato, Kaltag: Lower Yukon, Alaska.

Sequoia? sp. Knowlton, 1926, 27; Latah: Spokane and near Medical Lake, Wash.

Sequoia sp. (cone) Knowlton, 1904. □ Hollick, 1936, 48; Kukak Bay, Alaska Peninsula.

Sequoia n. sp. Lesquereux, 1884, 12; near New Ulm, Minn.

Sequoia sp. Wilson, 1914a, 322; Edmonton: Wigmore Ferry, Red Deer River, Alberta.

Sequoia sp. Wilson, 1916, 206; Sheep Creek, Yukon Terr.

Sequoia sp. Wilson, 1916, 207; Sheep Creek, Yukon Terr.

Sequoia sp.? Wilson, 1916, 207; Granite Creek, Yukon Terr.

SEQUIOITES Brongniart.

Sequoiites concinna (Heer) Seward, 1926, 102, pl. 9, f. 69, 72, 73, 79, 80.—Bell, 1932, 220; Dunvegan: Peace River, British Columbia.—Seward & Conway, 1935a, 15, pl. 4, f. 18, 21; Ujaragsugssuk, west Greenland.

Sequoia concinna Heer, 1883, 13 pl. 49, f. 8; pl. 50, f. 1b; pl. 51, f. 2-10; pl. 52, f. 2, 3; pl. 53, f. 1b. □ White, 1898, 362; Patoot, Nugsuak Pen., west Greenland.—Hollick, 1930, 57, pl. 22, f. 6-8; pl. 27, f. 1-3; Melozi: Lower Yukon; Kaltag: Lower Yukon, Alaska.

Sequoia fastigiata (Sternberg) Heer (part), 1874a, pl. 27, f. 6.—1882, pl. 3, f. 9; pl. 41, f. 4a, 5.—White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.—Berry, 1913a, 573; Tuscaloosa: Snow Plantation, Ala.—Hollick, 1930, 57, pl. 21, f. 1-4; Melozi, Kaltag: Lower Yukon, Alaska.

Sequoia reichenbachii (Geinitz) Heer (part), 1868, pl. 28, f. 2.

?*Sequoia subulata* Heer (part), 1874a, pl. 34, f. 1a.

Sequoiites langsdorffii Seward & Conway, 1935, 12, pl. 1, f. 5, 9, 10; Kingigtok and Kagdlunguak, West Greenland.

NOTE.—It does not appear advisable to transfer all North American citations of *Sequoia langsdorffii* to *Sequoiites* nor does it appear to be the intention of Seward and Conway to so do.

SEQUIOIOXYLON Torrey, 1923, 74. ?Genotype: *S. montanense* Torrey.

Sequioioxylon burgessii (Penhallow) Torrey, 1923, 79, pl. 11, f. 32; pl. 12, f. 33-36; Laramie: Colorado Springs, Colo.

Sequoia burgessii Penhallow. □

Cupressoxylon sp. A, Dawson. □

- Sequoioxylon dakotense* Torrey, 1923, 77, pl. 10, f. 24; pl. 11, f. 25-28; Laramie: Wilton, N. Dak.
- Sequoioxylon laramense* Torrey, 1923, 78, pl. 11, f. 29-31; Laramie: Plentywood, Mont.
- Sequoioxylon montanense* Torrey, 1923, 74, pl. 10, f. 19-23; Laramie: Culbertson, N. Dak.
- Sequoioxylon pearsallii* Andrews, 1936, 440, text-f. 1; pl. 20, f. 1-5; pl. 21, f. 6-9; Florissant: near Florissant, Colo.
- SERENOA** Hooker filius. □ Noé, 1936a, 451.
- SERENOPSIS** Hollick. □ Noé, 1936a, 451.
- Sideroxylon aequale* Hollick, 1928, 221, pl. 84, f. 5 (6?); Collazo: Porto Rico.
- Sideroxylon mastichodendroides* Berry, 1925a, 124, pl. 13, f. 4-8; Forest: Trinidad, British West Indies.
- SILENE** Linné.
- Silene acaulis* Linné. Chaney & Mason, 1936c, 13, text-f. 38, 41; Pleistocene: head of Goldstream, near Fairbanks, Alaska.
- Silene* sp. Chaney & Mason, 1936c, 13, text-f. 11, 37, 39, 40; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.
- Silene* sp. Potbury, 1932, 35, pl. 4, f. 4; San Bruno: San Mateo Co., Calif.
- Simaruba eocenica* Berry. □ Berry, 1930, 93, pl. 22, f. 7; pl. 29, f. 6; Holly Springs: Bolivar, Hardeman Co., Tenn.
- Simaruba haitensis* Berry, 1922, 6, pl. 1, f. 8; Artibonite Group: Haiti.
- Simaruba veracruziana* Berry, 1923b, 16, pl. 7, f. 6; San José del Carmen, Vera Cruz, Mexico.
- SIMARUBITES** Berry, 1930, 93. Genotype: *S. eocenicus* Berry.
- Simarubites eocenicus* Berry, 1930, 94, pl. 44, f. 15, 16; Holly Springs: La Grange, Fayette Co., Tenn.
- SIPARUNA** Aublet.
- Siparuna ovalis* Chaney & Sanborn, 1933, 71, pl. 15, f. 2-4; Fisher: Goshen, Oreg.
- Siparuna standleyi* Chaney & Sanborn, 1933, 71, pl. 16, f. 2-5; Fisher, Goshen, Oreg.
- SMILACIPITES** Wodehouse, 1933a, 499. Genotype: *S. echinatus* Wodehouse.
- Smilacipites echinatus* Wodehouse, 1933a, 500; f. 27; Green River: Parachute Creek, Garfield Co., Colo.
- Smilacipites herbaceoides* Wodehouse, 1933a, 500, f. 26; Green River: Parachute Creek, Garfield Co., Colo.
- Smilacipites molloides* Wodehouse, 1933a, 500, f. 25; Green River: Parachute Creek, Garfield Co., Colo.
- Smilax?* *coloradensis* Knowlton. □ Berry, 1929j, 130; Frontier: near Cumberland, Wyo.
- Smilax fayettensis* Berry, 1924, 147, pl. 61, f. 1, 2; Fayette: near Millican, Brazos Co., Tex.—Ball, 1931, 148, pl. 24, f. 4, 5; Fayette: near Millican, Brazos Co., Tex.
- Smilax goshenensis* Chaney & Sanborn, 1933, 64, pl. 4, f. 1, 3; pl. 39, f. 3a; Fisher: Goshen, Oreg.—Potbury, 1935, 62; La Porte, Plumas Co., Calif.
- Smilax grandifolia-cretacea* Lesquereux = *Phyllites grandifolius-cretaceus* (Lesquereux) Berry.
- Smilax herendeenensis* Hollick, 1930, 61, pl. 7, f. 7; Chignik: Alaska Peninsula.
- Smilax?* *inquirenda* Knowlton. □ Knowlton, 1922, 118, pl. 4, f. 5; Laramie: Popes Bluff, Pikeview, Colo.—Berry, 1935, 23; Whitemud: Loc. P 5-30, southern Saskatchewan.
- Smilax lamarensis* Knowlton. □ Berry, 1929f, 240, pl. 63, f. 15; Latah: Spokane, Wash.—1934, 105, pl. 19, f. 7; Latah: 3.8 mi. east of White Bird, Idaho Co., Idaho.—MacGinitie, 1937, 133, Weaverville: Redding Creek, Trinity Co., Calif.

Smilax magna Chaney, 1920a, 161, pl. 6, f. 1; Eagle Creek: Multnomah Co., Oreg.—MacGinitie, 1933, 49; Trout Creek: Trout Creek, Harney Co., Oreg.—Brown, R. W., 1937, 168, pl. 46; f. 15; Latah: Spokane, Wash.; White Bird, Idaho.

Aristolochia whitebirdensis Ashlee, 1932, 78, pl. 1, f. 3; Latah: White Bird, Idaho.

Smilax praelaurifolia Ashlee, 1932, 82, pl. 2, f. 18; Latah: Elk River district, Idaho.

Smilax reticulata Heer, 1869, Beiträge zur Naturkunde, Preussens, no. 2, 62, pl. 16, f. 4, 5, Königsberg.—Hollick, 1936, 58, pl. 22, f. 1; south bank Yukon River above Rampart, Alaska.

Smilax wilcoxensis Berry, 1930, 57, pl. 10, f. 3; Holly Springs: La Grange, Fayette Co., Tenn.

Smilax? sp. Berry, 1927, 24; Pleistocene: Henry Co., Tenn.

Smilax sp. Dorf, 1930, 74, pl. 6, f. 7; Petrified Forest, near Calistoga, Calif.

Solanites crassus Berry, 1930, 131, pl. 25, f. 34-36; Holly Springs: Mill Creek, Hardeman Co., Tenn.

Solanites pusillus Berry, 1930, 132, pl. 48, f. 21-23; Holly Springs: Grable Pit, Henry Co., Tenn.; La Grange, Fayette Co., Tenn.

Solanites sarrachaformis Berry, 1930, 131, pl. 25, f. 31; Holly Springs: Mill Creek, Hardeman Co., Tenn.

SOLIDAGO (Vaillant) Linné.

Solidago praeconcinna Cockerell, 1933a, 72, text-f.; Creede: near Creede, Colo.

Sophora alexanderi Knowlton=*Sophora spokaneensis* Knowlton.

Sophora balli Berry, 1924, 65, pl. 43, f. 4; Yegua: Rock Creek, Brazos Co., Tex.—Ball, 1931, 155, pl. 27, f. 7; Jackson?: Rock Creek, Brazos Co., Tex.

Sophora claiborniana Berry.□Berry, 1924, 64, 171, pl. 10, f. 9, 10; pl. 34, f. 1-3; Lisbon: Newton, Newton Co., Miss.; 171, pl. 34, f. 1-3; Barnwell: Columbia Co., Ga.; near Gibson, Glascock Co., Ga.; Fayette: near Miraflores, Webb Co., Tex.—Ball, 1931, 123, 155, pl. 22, f. 10, 11; Indio: southwestern Texas; Fayette: Miraflores, Webb Co.; Alum Creek, Brazos Co., Tex.

Sophora coloradensis Knowlton=*Leguminosites lesquereuxiana* Knowlton.

Sophora cookei Berry, 1921a, 121, pl. 21, f. 12; Azua district, Santo Domingo.

Sophora mucronata Berry.□Berry, 1930, 86, pl. 32, f. 1-3; pl. 44, f. 24; Holly Springs: Bolivar, Hardeman Co.; Grable Pit and Puryear, Henry Co., Tenn.

Sophora multiformis Hollick, 1936, 129, pl. 72, f. 1, 2, 7, 9, 9a, 10, 11a, 12, 13; Drew's Mine, north bank Yukon River, central Yukon region, Alaska.

Sophora puryearensis Berry.□Knowlton, 1930, 98, pl. 45, f. 8; Dawson: Ramah, Colo.

Sophora repandifolia Berry.□Ball, 1931, 82; Wilcox: Freestone Co., Tex.—Potbury, 1935, 71, pl. 8, f. 3; La Porte, Plumas Co., Calif.

Sophora richardsoni Knowlton, 1930, 97, pl. 45, f. 7; Dawson: Mosby, Colo.

Sophora spokaneensis Knowlton, 1926, 44, pl. 28, f. 6; Latah: Spokane, Wash.—Berry, 1929f, 253, pl. 56, f. 5, 6; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 116; Latah: near White Bird; Edwards Ranch: Stanley Hill, Coeur d'Alene, Idaho.

Sophora alexanderi Knowlton, 1926, 43, pl. 28, f. 3-5; Latah: Coeur d'Alene, Idaho.—Berry, 1929f, 253, pl. 56, f. 2, 3; Latah: Coeur d'Alene, Idaho: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 116; Latah: White Bird; Edwards Ranch: Stanley Hill, Coeur d'Alene, Idaho.

Cassia idahoensis, Berry not Knowlton, 1929f, 252, pl. 55, f. 2, 3; Latah: Vera and Spokane, Wash.—1934, 114; Latah: near White Bird, Idaho.

Cassia sophoroides, Berry not Knowlton, 1929f, 253, pl. 56, f. 1; Latah: Coeur d'Alene, Idaho; Spokane, Wash.—1934, 114; Latah: near White Bird, near Juliaetta, Idaho.—MacGinitie, 1937, 142, pl. 7, f. 4, 5; Weaverville: Hyampom, Trinity Co., Calif.

Sophora spokaneensis—Continued.

Salix dayana Knowlton (part), 1926, 32, pl. 12, f. 2 only; Latah: Spokane, Wash.

Quercus treleasei Berry, 1929f, 247, pl. 52, f. 1-3; Latah: Vera and Spokane, Wash.—1931a, 37; Latah: Grand Coulee, Wash.—1932a, 40; Ballantyne Ranch, Malheur Co., Oreg.—1934, 110; Latah: east of White Bird, Idaho.—Hoffman, 1932, 737; Douglas Canyon, Wash.

Sophora? suspecta Hollick, 1924, 304, pl. 10, f. 3; Collazo: Collazo River, Porto Rico.—1928, 208, pl. 69, f. 7; Collazo: Porto Rico.

Sophora wilcoxiana Berry. □ Berry, 1924, 65, 171, pl. 10, f. 11; Yegua; Nevils Prairie, Houston Co., Tex.; Barnwell: near Gibson, Glascock Co., Ga.—Ball, 1931, 82, 123, pl. 22, f. 9; Indio: Dimmitt and Webb Cos., Tex.; Yegua: Nevils Prairie, Houston Co., Tex.

SORBUS (Tournefort) Linné. □ See also **PYRUS** (Tournefort) Linné and **PIRUS** Hall.

Sorbus alaskana Hollick, 1930, 97, pl. 74, f. 1; Chignik: Alaska Peninsula.

Sorbus alvordensis MacGinitie, 1933, 57, pl. 9, f. 4; Trout Creek: Trout Creek, Harney Co., Oreg.

Sorbus chaneyi LaMotte = *Fagus washoensis* LaMotte.

Sorbus decorafolia Berry, 1926d, 111, pl. 19, f. 2; Joseph Creek, British Columbia.

SOROSACCUS Harris, 1935, 145. Genotype: *S. gracilis* Harris.

Sorosaccus gracilis Harris, 1935, 145, pl. 24, f. 3-7, 11, 12; pl. 28, f. 11; text-f. 50e, f. h; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Sorosaccus minor Harris, 1935, 146, pl. 27, f. 2; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Sparganium antiquum (Newberry) Berry, 1924h, 346, f. 1-7; near Lander, Wind River Basin, Wyo.—1930d, 64, pl. 8, f. 5, text-f. 5; so-called Bridger: Tipperary, Wind River Basin, Wyo.—Brown, R. W., 1934, 53; Green River: as cited in other papers.

Brasenia ?antiqua Newberry. □ Hollick, 1912a, 50; Chickaloon; Matanuska River below Moose Creek, Alaska.—Knowlton, 1923, 163; Green River: Green River, Wyo.

Pontederites hesperia Knowlton, 1923, 154, pl. 36, f. 6; Green River: Greasewood Creek, Rio Blanco Co., Colo.

Pontederites thecoides Hollick, 1929, 94, pl. 2, f. 1; Green River (Bridger part): De Beque, Colo.

Sparganium aspensis R. W. Brown, 1933, 4, pl. 2, f. 2; Aspen: southwest Wyoming.

Sparganium cretaceum Heer, 1874a, 105, pl. 28, f. 12; West Greenland.—Seward, 1925, 245. Probably not *Sparganium* fruits, may be cones of conifers.

Sparganium eocenicum R. W. Brown, 1929, 282, pl. 71, f. 1; Green River: northwest of De Beque, Colo.

Sparganium eurycarpum Engelman. Berry, 1924a, 16, pl. 1, f. 26; Pleistocene Washington, D. C.—Potbury, 1932, 32, pl. 3, f. 5; San Bruno: San Mateo Co., Calif.

Sparganium praesimplex LaMotte, 1936, 113-114, pl. 5, f. 8; Upper Cedarville: 49 Camp, Washoe Co., Nev.

Sparganium stygium Heer. □ Berry, 1935, 22; Upper Ravenscrag: Loc. 32, southern Saskatchewan.

Sparganium sp. Berry, 1926b, 106; Chowan: Neuse River, Wayne Co., N. C.

Sparganium? sp. Berry, 1930, 54, pl. 8, f. 1; Holly Springs: Puryear, Henry Co., Tenn.

Sparganium sp. Heer, 1868a, 66.—Hollick, 1936, 53; Ninilchik River, Kenai Peninsula, Alaska.

Spathyema? nevadensis Knowlton=*Nymphaeites nevadensis* (Knowlton) R. W. Brown.

SPERMATITES Miner, 1935, 597. Genotype: *S. elongatus* Miner.

Spermatites arcuatus Miner, 1935, 598; Disko Isl., West Greenland.

Spermatites ellipticus Miner, 1935, 599; Disko Isl., West Greenland.

Spermatites elongatus Miner, 1935, 597; Disko Isl., West Greenland.

Spermatites nanus Miner, 1935, 598; Disko Isl., West Greenland.

Spermatites orbicularis Miner, 1935, 598; Disko Isl., West Greenland.

Spermatites ovatus Miner, 1935, 598; Disko Isl., West Greenland.

Spermatites pylophorus tMiner, 1935, 599; Disko Isl., West Greenland.

SPHAERALCEA A. St. Hilaire.

Sphaeralcea ambigua Gray. Laudermilk & Munz, 1934a, 37; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.

Sphaerites claibornensis Berry □ Berry, 1924, 140; Barnwell: Grovetown, Columbia Co., and near Macon, Twiggs Co., Ga.—Ball, 1931, 145; Fayette: Alum Creek, Brazos Co., Tex.

Sphaerites gloeosporoides Ball, 1931, 31, pl. 46, f. 3: Indio: Bastrop Co., Tex.

Sphaerites myricae (Lesquereux) Meschinelli=*Sphaerites*, species of, R. W. Brown.

Sphaerites, species of, R. W. Brown, 1934, 51; Green River.

Spheria myricae Lesquereux, 1873, 390.—1878, 34, pl. 1, f. 4; Green River: Green River Station, Wyo.; Post Laramie: Black Buttes, Wyo.

Sphaerites myricae (Lesquereux) Meschinelli □ Knowlton, 1923, 149; Green River: Green River, Wyo.

Caenomyces eucalyptae Knowlton, 1923, 148, pl. 36, f. 8, 9; Green River: Cathedral Bluff, Rio Blanco Co., Colo.

Caenomyces sapindicola Knowlton, 1923, 148, pl. 36, f. 10; Green River: Smith Ranch, Greasewood Creek, 40 mi. southeast of Meeker, Colo.

Caenomyces planerae R. W. Brown, 1929, 281; Green River: northwest of De Beque, Colo.

SPHAEROSTROBUS Harris, 1935, 143. Genotype: *S. clandestinus* Harris.

Sphaerostrobos clandestinus Harris, 1935, 143, pl. 29, f. 1-4, 6, 11; text-f. 50c, d; Lepidopteris Zone: Scoresby Sound, east Greenland.

Sphagnum sp. Meehan, 1899, 281; Pleistocene: Port Kennedy, Penna.

Sphenolepidium dentifolium Fontaine=*Pagiophyllum ambiguum* (Heer) Seward.

Sphenolepidium recurvifolium Fontaine=*Pagiophyllum ambiguum* (Heer) Seward.

Sphenolepidium sternbergianum (Dunker) Heer=*Sphenolepis sternbergiana* (Dunker) Schenk.

Sphenolepidium sternbergianum densifolium Fontaine (part)=*Sphenolepis sternbergiana* (Dunker) Schenk.

Sphenolepidium sp. Wilson, 1914, 408; Kootenai: Pimainus Hills, north of Spence Bridge, Thomson River, British Columbia.

Sphenolepis kurriana (Dunker) Schenk □ Berry, 1911a, 432, pl. 74, f. 2, 3;

Patuxent: New Reservoir, Ivy City, D. C.; Fredericksburg, Potomac Run; Trents Reach; Dutch Gap; Lorton; Cockpit Point; Kankey's, Va.; Arundel: Bay View; Arlington, Md.; Patapsco: Federal Hill; Vinegar Hill, Md.; near Brooks, 72-mile post; Mt. Vernon; Hell Hole, Va.

Sphenolepis sternbergiana (Dunker) Schenk, 1871, Palaeont., vol. 19, 243, pl. 37, f. 1, 2, 4; pl. 38, f. 3-13.—Berry, 1911a, 435, pl. 75, f. 1, 2; Patuxent; Fredericksburg; Lorton; Potomac Run; Alum Point; Cockpit Point; Woodbridge, Va.; Arundel: Langdon, D. C.; Hanover; Tiptop; Soper Hill, Md.; Patapsco: Grays Hill; Fort Foot; Stump Neck, Md.; Mt. Vernon; White House Bluff; Hell Hole; Chinkapin Hollow; 72-mile post; Dumphries Landing; near Widewater; Aquia

Sphenolepis sternbergiana—Continued.

Creek, Va.—1911d, 293.—1929k, 52; Lower Blairmore: southwest Alberta.—Hollick, 1930, 60, pl. 25, f. 1–6; Kaltag: Lower Yukon, Alaska.

Muscites sternbergianus Dunker, 1846, Mon. Norddeutsch. Weald-Bild., 20, pl. 7, f. 10.

Sphenolepidium sternbergianum Heer. □ Ward, 1895, 359, pl. 3, f. 1; Knowlton, 1908f, 386.

Sphenolepidium sternbergianum densifolium Fontaine (part), 1889, 261, pl. 118, f. 7; pl. 121, f. 5, 7, 9; pl. 125, f. 2; pl. 129, f. 3; pl. 130, f. 1, 3; pl. 132, f. 4.—
 1893, 268, pl. 36, f. 10.—1906b, 507, 524, 546, pl. 109, f. 8, 9; pl. 112, f. 1, 10; pl. 115, f. 1.

Sphenolepis sp. Berry, 1952h, 209; Bull Head Mt. (Gethring member): Peace River Valley, British Columbia.

SPHENOPTERIS Brongniart. □ Seward, 1926, 82, discussion.

Sphenopteris affinis Wieland, 1914, 128, pl. 44, f. 1; Liassic: Mixteca Alta, Oaxaca, Mexico.

Sphenopteris baieraformis Nathorst=**Ginkgoites minuta** (Nathorst) Harris.

Sphenopteris (*Gymnogramme*?) **blomstrandi** Heer=**Dennstaedtia blomstrandi** (Heer) Hollick.

Sphenopteris blomstrandi Heer=**Dennstaedtia americana** Knowlton.

Sphenopteris dentata (Velenovsky) Seward, 1926, 85, pl. 7, f. 39, 39a; Nugsuak, West Greenland.

Kirchnera dentata Velenovsky, 1888, Abh. K. Böhm. Ges. Wiss. Ser. 7, vol. 2, 16, pl. 2, f. 12–16.

Onychiopsis latiloba (Fontaine) Berry. □

Sphenopteris eocenica Ettingshausen=**Dryopteris lakesii** (Lesquereux) Knowlton.

Sphenopteris fragilis Heer. ?White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

Sphenopteris gervilloides Heer=**Sphenopteris** (*Onychiopsis*?) **johnstrupi** (Heer) Seward.

Sphenopteris goepperti Schenk=**Sphenopteris** (*Onychiopsis*?) **psilotoides** (Stokes & Webb) Halle.

Sphenopteris groenlandica (Heer, part) Seward & Conway, 1935a, 7, pl. 4, f. 17; Patoot: west Greenland.

Dicksoniana groenlandica Heer. □ Berry, 1913a, 571; Tuscaloosa: Shirleys Mill; Snow Plantation, Ala.

Sphenopteris (*Asplenium*?) **johnstrupi** Heer (part)=**Sphenopteris** (*Onychiopsis*?) **johnstrupi** (Heer) Seward.

Sphenopteris (*Asplenium*?) **johnstrupi** Heer=**Asplenium johnstrupi** (Heer) Heer (part)

Sphenopteris (*Onychiopsis*?) **johnstrupi** (Heer) Seward, 1926, 84, pl. 7, f. 33; pl. 10, f. 105, 106; Upernivik Isl., Nugsuak, west Greenland.—Seward & Conway, 1935a, 7; Kook: west Greenland.

Sphenopteris (*Asplenium*?) **johnstrupi** Heer (part), 1868, 78, pl. 43, f. 7.

Jeanpaulia lepida Heer (part), 1874, pl. 2.

?*Sphenopteris gervilloides* Heer, 1874a, 34, pl. 11, f. 10–11.—White, 1890, 97, pl. 2, f. 1; Martha's Vineyard, Mass.

Dicksonia groenlandica Heer. □

Sphenopteris jørgenseni (Heer) Seward, 1926, 86; Nugsuak, Disko Isl., west Greenland.

Phegopteris jørgenseni Heer, 1882, 32, pl. 30, f. 1–3.

Phegopteris korerupi Heer, 1883, 3, pl. 49, f. 3.

Raphaelia neuropteroides (Debey & Ettingshausen) Heer, 1883, 6, pl. 60, f. 5.—Berry, 1925, 26, pl. 1, f. 8; Ripley: Henry and Carroll Cos., Tenn.—1928f, 443, pl. 11, f. 5; Ripley: Carroll Co., Tenn.

Phegopteris grothiana Heer. □

- Sphenopteris lakesii* Lesquereux=**Dryopteris lakesii** (Lesquereux) Knowlton.
Sphenopteris latiloba Fontaine=**Sphenopteris dentata** (Velenovsky) Seward.
Sphenopteris lepida Heer. White, 1898, 347; Kook, Nugsuak Pen., west Greenland.
Sphenopteris mantelli Brongniart=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.
Sphenopteris membranacea Lesquereux=**Dryopteris lakesii** (Lesquereux) Knowlton.
Sphenopteris (Onychiopsis?) psilotoides (Stokes & Webb) Halle, 1913, K. Svenska Vet.-Akad. Handl., vol. 51, no. 3, 29, pl. 2, f. 9, 10.—Seward, 1926, 82, pl. 7, f. 36, 37, 42, 44-47; Upernivik Isl., Nugsuak, west Greenland.

Hymenopteris psilotoides Stokes & Webb.□

Sphenopteris goepperti Schenk (part).□

Asplenium foersteri Debey & Ettingshausen.□Heer, 1874a, 93, pl. 26, f. 1.—Hollick, 1930, 38, pl. 1, f. 3-5; Yukon River, north bank 6 mi. above Nahochatilton, Alaska.

Asplenium johnstrupi Heer (part), 1874a, 32, pl. 1, f. 6, 7.

Asplenium nordenskiöldi Heer, 1874a, 33, pl. 2, f. 17a, b.

Dicksonia johnstrupi Heer, 1882, 1 pl. 2.—White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.

Asplenium dicksonianum Heer.□Heer, 1882, 3, 33, pl. 2, f. 2; pl. 32, f. 1-8.—White 1898, 350, 353; Kaersut, Ujarartorsuak, Nugsuak Pen., west Greenland.—Berry, 1913a, 571; Tuscaloosa: Shirleys Mill, Ala.—?Wilson, 1917, 301; Bankhead Coal Mine, Alberta; northeast of Anthracite Station; south of Pocaahontas, Alberta.—Berry, 1922d, 207; Cheyenne: near Belvidere, Kiowa Co., Kans.—1929l, 57; Upper Blairmore: southwest Alberta.

Asplenium pingellianum Heer, 1882, 4, pl. 48, f. 9.

Asplenium pulaskense Heer, 1883, 53, pl. 107, f. 4a.

Aspidium oerstedii, Lesquereux not Heer (part).□

Sphenopteris mantelli Brongniart.□

Thyrsopteris alata Fontaine.□

Thyrsopteris angustifolia Fontaine.□

Thyrsopteris angustiloba Fontaine.□

Thyrsopteris bella Fontaine.□

Thyrsopteris decurrens Fontaine.□

Thyrsopteris densifolia Fontaine.□

Thyrsopteris dentifolia Fontaine.□

Thyrsopteris distans Fontaine.□

Thyrsopteris elliptica Fontaine.□

Thyrsopteris inaequipinnata Fontaine.□

Thyrsopteris insignis Fontaine.□

Thyrsopteris insignis angustipennis Fontaine.□

Thyrsopteris meekiana angustiloba Fontaine.□

Thyrsopteris microloba Fontaine.□

Thyrsopteris microloba alata Fontaine.□

Thyrsopteris microphylla Fontaine.□

Thyrsopteris pachyrachis Fontaine.□

Thyrsopteris pinnatifida Fontaine.□

Thyrsopteris rarincervis Fontaine.□

Thyrsopteris rhombifolia Fontaine.□

Thyrsopteris rhombiloba Fontaine.□

Thyrsopteris varians Fontaine.□

Thyrsopteris virginica Fontaine.□

Onychiopsis mantelli (Brongniart) Nathorst, 1890, Denks. K. Akad. Wiss. Wien., vol. 57, 15.—Seward, 1894, Cat. Mesozoic Pls. Brit. Mus., Wealden Fl. pt. 1, 41, pl. 2, f. 1; pl. 3, f. 1-4.

Onychiopsis elongata (Geyl.) Seward, 1894, Cat. Mesozoic Pls. Brit. Mus., Wealden Fl., pt. 1, 55, pl. 2, f. 5.

Onychiopsis goepperti (Schenk) Berry.□Berry, 1920k, 38; Lower Blairmore: southwest Alberta.

Onychiopsis psilotoides (Stokes & Webb) Ward.□Berry, 1929k, 37; Kootenai and Lower Blairmore: southwest Alberta.

Sphenopteris (*Anemia*?) *stricta* (Newberry) Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Anemia stricta Newberry.□

Sphenopteris cf. *williamsoni* Wieland, 1913, 266; Liassic: Mixteca Alta, Oaxaca, Mexico.

Sphenopteris (*Onychiopsis*?) n. sp. Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

Sphenopteris sp. cf. *Coniopteris* Seward & Conway, 1935a, 7, text-f. 1; Igdlukunguak: west Greenland.

Sphenozamites? *grandis* Newberry, 1888a, 347; near San Juancito, Honduras.

Sphenozamites *oblanceolatus* Penhallow.□Penhallow, 1906a, 391a; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.

Sphenozamites *robustus* Newberry, 1888a, 347, pl. 8, f. 12-14; near San Juancito, Honduras.

Sphenozamites *rogersianus* Fontaine.□Humphreys, 1916, 57, pl. 170; San Juancito, Honduras.

Sphenozamites sp. Lozano, 1916, 28, pl. 9, f. 10; Liassic: Huauchinango, Puebla, Mexico.

Spheria myricae Lesquereux=**Sphaerites**, species of, R. W. Brown.

Spiraea *andersoni* Heer.□Hollick, 1936, 124; Port Graham, Kenai Peninsula, Alaska.

Spiraea *weaveri* Hollick, 1936, 124, pl. 70, f. 7; Kachemak Bay Kenai Peninsula, Alaska.

Spiraea sp. Heer, 1868a, 65.—Hollick, 1936, 125; Port Graham, Kenai Peninsula, Alaska.

Spiraea? sp. MacGinitie, 1933, 56, pl. 9, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.

Spirodela *scutata* Dawson.□Berry, 1935, 23; Middle Ravenscrag: Loc. 10, 13, P 10-30, southern Saskatchewan.

SPONDIAS Linné.

Spondias *lutea* Linné. Berry, 1934c, 238, text-f. 1-10; Asphalt Pit: Sabanilla de las Palmas, Matanzas Province, Cuba.

SPORONITES Miner.

Sporonites *montanensis* Miner, 1935, 619, pl. 24, f. 13-16; Kootenai: Cascade Co., Mont.

Sporophylls, Berry, 1930d, 78; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Ophioglossum hastatifforme Cockerell, 1924, 19; Green River: Green River, Wyo.
Danaea coloradensis, Berry not Knowlton, 1924e, 49; Green River: Green River, Wyo.

Xantholithes hastatifformis (Cockerell) Cockerell, 1926, 11; Green River: Green River, Wyo.

STACHYOTAXUS Nathorst, 1886, Stockholm Sveriges Geol. Undersökn., ser. C, no. 85, 98.—Harris, 1925, 51; discussion.

Stachyotaxus *elegans* Nathorst, 1908, K. Svenska Vet. Akad. Handl. vol. 43, no. 8, 13, pl. 2, f. 1-9, 12-24, 27; pl. 3, f. 10-12.—Harris, 1926, 119, pl. 10, f. 2-4; pl. 12, f. 1, 2, 6; pl. 13, f. 5; text-f. 30e, f. i, j; Rhaetic: Scoresby Sound, east Greenland.—1935, 52, pl. 10, f. 1-3, 6-9, 11, pl. 21, f. 1-3; pl. 27, f. 7, text-f. 23; Lepidopteris and Thaumatopteris Zones: Scoresby Sound, east Greenland.

Stachyotaxus septentrionalis, Hartz not Agardh, 1896, 242, pl. 19, f. 2-4; (5?); pl. 13, f. 4a; Rhaetic: Cape Stewart, east Greenland.

Carpolithes septentrionalis (Agardh) Nathorst, 1878, K. Svenska Vet. Akad. Handl. vol. 16, no. 7, 32, pl. 3, f. 15-17.

Cyparissidium septentrionale (Agardh) Nathorst, 1878, K. Svenska Vet. Akad. Handl. vol. 16, no. 7, 29, pl. 4, f. 8-14.

?*Stachyotaxus elegans* Nathorst (part) = *Stachyotaxus septentrionalis* (?not Agardh) Nathorst.

Stachyotaxus septentrionalis, Hartz not Agardh = *Stachyotaxus elegans* Nathorst. *Stachyotaxus septentrionalis* (not Agardh) Nathorst, 1908, K. Svenska Vet. Akad. Handl. vol. 43, no. 8, 71, pl. 3, f. 1-9.—Harris, 1935, 56, pl. 9, f. 11, 12, 14-17; pl. 10, f. 4, 5, 10, 12, 13; Lepidopteris Zone: Scoresby Sound, east Greenland.

?*Stachyotaxus elegans* Nathorst (part), 1908, K. Svenska Vet. Akad. Handl. vol. 43, no. 8, pl. 2, f. 10, 11 only.

STACHYPTERIS Pomel.

Stachypteris inenarrabilis Hollick, 1930, 40, pl. 1, f. 9; Kaltag: Lower Yukon, Alaska.

Staminate aments? Newberry, 1895, 134, pl. 46, f. 23-27; Raritan: South Amboy, N. J.

STANGERITES Bornemann, 1856, Ueber Organische Reste der Lettenkohlen-gruppe Thüringens, Leipzig, 59.—Wieland, 1914, 55; discussion.

Stangerites oaxacense Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 57, pl. 40, f. 5; Liassic: Mixteca Alta, Oaxaca, Mexico.

STAPHIDIOPHORA Harris, 1935, 114. Genotype: *S. secunda* Harris.

Staphidiophora? exile Harris, 1935, 116, pl. 19, f. 9; Lepidopteris Zone: Scoresby Sound, east Greenland.

Staphidiophora secunda Harris, 1935, 114, pl. 8, f. 3, 4, 9, 10, 11; text-f. 45; Lepidopteris Zone: Scoresby Sound, east Greenland.

Staphylea? fremonti Knowlton, □Berry, 1929j, 131; Frontier: near Cumberland, Wyo.—Brown, R. W., 1933, 9, pl. 1, f. 8; Aspen: southwest Wyoming.

Staphylea viridifluminis Hollick = *Koelreuteria viridifluminis* (Hollick) R. W. Brown.

STENOMISCHUS Harris, 1935, 144. Genotype: *S. athrous* Harris.

Stenomischus athrous Harris, 1935, 144, pl. 24, f. 1, 2, 9, 10; text-f. 50j; Thaumatopteris Zone: Scoresby Sound, east Greenland.

STENOPTERIS Saporta, 1870, Paleont. Francaise, Pl. Jurassiques, vol. 1, 290. Genotype: *S. desmovera* Saporta.

Stenopteris astartensis Harris, 1932, 77, text-f. 32; Lepidopteris Zone: Scoresby Sound, East Greenland.

Stenopteris dinosaurens Harris, 1932, 75, pl. 8, f. 4; text-f. 31; Thaumatopteris Zone: Scoresby Sound, East Greenland.—1935, 35, pl. 5, f. 8, 9; text-f. 18; Thaumatopteris Zone: Scoresby Sound, East Greenland.

?*Baiera cf. angustiloba*, Antevs not Heer, 1919, K. Svenska Vet. Akad. Handl., vol. 59, no. 8.

STENORACHIS Saporta.

Stenorachis canadensis Berry, 1929k, 45, pl. 7, f. 8-11; Lower Blairmore: southwest Alberta.

Sterculia aceroides Knowlton = *Mahonia marginata* (Lesquereux) Arnold.

Sterculia aperta Lesquereux, □Gress, 1922, 316; Dakota: Ellsworth Co., Kans.

Sterculia atwoodi Hollick, 1930, 108, pl. 83, f. 6; Kaltag: Lower Yukon, Alaska.

Sterculia basiauriculata Hollick, 1930, 108, pl. 83, f. 5; Melozi: Lower Yukon, Alaska.

Sterculia coloradensis R. W. Brown, 1929, 290, pl. 74, f. 6, 7; Green River: northwest of De Beque, Colo.—1937, 182, pl. 61, f. 13; Green River: Fossil, Wyo.

Sterculia drakei Cummings = *Sterculia townieri* (Lesquereux) Berry.

Sterculia cf. engleri Kirschner. Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.

Sterculia heterodonta Knowlton, 1930, 116, pl. 50, f. 5; pl. 51, f. 4, 8; Dawson: east of Colorado Springs, Colo.

Sterculia knowltoni Berry, 1950, 108, pl. 46, f. 9, 10; Holly Springs: Paris, Henry Co.; Mercer, Madison Co.; Spring Creek, Madison Co., Tenn.; Bell City, Calloway Co., Ky.

Sterculia krejeii, Hollick not Velenovsky=*Platanophyllum insigne* (Heer) Seward.

Sterculia labruscoides Berry, 1924, 76, pl. 14, f. 1; Lisbon: Newton, Newton Co., Miss.; Yekua; Nevils Prairie, Houston Co., Tex.; Columbia?, Caldwell Parish, La.—Ball, 1931, 125, 162, pl. 22, f. 7; Yegua: Nevils Prairie, Houston Co.; Catahoula?: Stryker, Polk Co., Tex.

Sterculia cf. *labruscoides* Berry, 1924, 182; Catahoula?: Stryker, Polk Co., Tex.—Ball, 1931, 162, pl. 22, f. 7; Catahoula?: Stryker, Polk Co., Tex.

Sterculia libbeyi Knowlton, 1930, 117, pl. 53, f. 2; Denver: Golden, Colo.

Sterculia lugubris Lesquereux.□Berry, 1922c, 171, pl. 36, f. 6; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Sterculia mucronata Lesquereux.□Berry, 1922d, 218; Cheyenne: near Belvidere, Kiowa Co., Kans.—Gress, 1922, 316; Dakota: Ellsworth Co. and Fort Harker, Kans.—Noé, 1925, 95, pl. 23, f. 1; Dakota: Cimarron Co., Okla.

Sterculia ovata Potbury, 1935, 76, pl. 10, f. 1; La Porte, Plumas Co., Calif.

Sterculia puryearensis Berry (part).□Berry, 1930, 109, pl. 24; Grenada: Grenada, Miss.; Holly Springs: Bolivar, Hardeman Co.; Puryear, Henry Co., Tenn.; Wilcox: Naborton, La.

Sterculia puryearensis Berry (part)=*Sterculia wilcoxensis* Berry.

sterculia reticulata Lesquereux=*Aralia formosa* Heer.

Sterculia saportanea Knowlton.□Knowlton, 1930, 117, pl. 53, f. 6; Denver: Golden, Colo.

Sterculia snowii Lesquereux=*Sterculia towneri* (Lesquereux) Berry.

Sterculia snowii?, Hollick not Lesquereux=*Platanophyllum insigne* (Heer) Seward.

Sterculia snowii tennesseensis Berry.□Berry, 1925, 73; Ripley: McNairy Co., Tenn.

Sterculia towneri (Lesquereux) Berry, 1922d, 217, pl. 57, f. 1; pl. 60; pl. 61, f. 1; Cheyenne: Kansas.—1929j, 135; Frontier: near Lander, Wyo.

Aralia towneri Lesquereux.□Hollick, 1897c, 132, pl. 14, f. 11, 12.

Sterculia drakei Cummings.□

Sterculia snowii Lesquereux.□Gress, 1922, 315; Dakota: Fort Harker and Ellsworth Co., Kans. Noé, 1925, 95, pl. 22: pl. 24, f. 2; Dakota: Cimarron Co., Okla.

Araliaephyllum towneri (Lesquereux) Fritel, 1914a, 21.

Araliaephyllum snowii (Lesquereux) Fritel, 1914a, 22.

Sterculia variabilis, Heer not Saporta=*Platanus? newberryana* Heer.

Sterculia wilcoxensis Berry, 1922g, 17, pl. 14, f. 1, 2; pl. 15, f. 3, 4; Lagrange: Puryear, Henry Co., Tenn.; Wilcox: near Mansfield, De Soto Parish, La.; Carrizo: Carrizo Springs, Dimmit Co., Tex.—1930, 107, pl. 26; pl. 27, f. 5; Holly Springs: Pine Top, Hardeman Co., Tenn.—Ball, 1931, 94; Wilcox: Mansfield, La.

Sterculia puryearensis Berry (part), 1916a, pl. 72, f. 3 only.

Sterculia zavalana Berry, 1930, 107, pl. 18, f. 3; Carrizo: La Prior, Zavalla Co., Tex.

Sterculiarpus coloradensis Berry, 1932, 120, text-f. 1, 2; Dawson: Big Sandy Creek, Colo.

Sterculiarpus eocenicus Berry.□Berry, 1922g, 17, pl. 15, f. 5; pl. 16, f. 1; Wilcox: Mansfield, De Soto Parish, La.—Ball, 1931, 95; Wilcox: Mansfield, La.

Sterculiocarpus sphericus Berry, 1930, 109, pl. 25, f. 19; pl. 48, f. 9-14; Holly Springs: La Grange, Fayette Co.; Grable and Atkins Pits, Henry Co.; Jackson, Madison Co., Tenn.; Grenada: Cottage Grove, Henry Co., Tenn.

Stipa kansasensis Elias, 1932, 344, pl. 28, f. 5a, b, 6-9, 12; Ogallala: Wallace Co., Kans.

STORGAARDIA Harris, 1935, 58. Genotype: *S. spectabilis* Harris.

Storgaardia spectabilis Harris, 1935, 58, pl. 11, f. 17; pl. 12, f. 7, 8; pl. 16, f. 1, 2; text-f. 24-26; Thaumatopteris Zone: Scoresby Sound, east Greenland.

?*Problematicum* 3, Antevs, 1919, K. Svenska Vet. Akad. Handl. vol. 59, no. 8, 55, pl. 6, f. 24, 25.

STRYCHNOS Linné.

Strychnos? sp. Chaney & Sanborn, 1933, 93, pl. 36, f. 1; Fisher: Goshen, Oreg.

STYLOGYNE A. DeCandolle.

Stylogyne? *fragmenta* Hollick, 1924, 313, pl. 10, f. 6; Collazo: Collazo River, Porto Rico.—1928, 219, pl. 85, f. 2; Collazo: Collazo River, Porto Rico,

Styrax crenatus MacGinitie, 1937, 151, pl. 15, f. 4, 5; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Styrax curvatus Potbury, 1935, 78, pl. 14, f. 1; La Porte, Plumas Co., Calif.

Styrax? *laramiensis* Lesquereux. □ Knowlton, 1930, 123, pl. 52, f. 7; Denver: Golden, Colo.

Styrax? *lehneri* Berry, 1925a, 22, pl. 8, f. 1; Morne l'enfer beds: Trinidad, British West Indies.

SWEDENBORGIA Nathorst, 1876, K. Svenska Vet. Akad. Handl. vol. 14, no. 3, 66.—Harris, 1935, 107; discussion.

Swedenborgia cryptomerioides Nathorst, 1876, K. Svenska Vet. Akad. Handl. vol. 14, no. 3, 66.—Harris, 1935, 108, pl. 18, f. 8, 10-18, 21, 22; pl. 19, f. 5-8, 20-22; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Swedenborgia major Harris, 1935, 109, pl. 18, f. 19, 20; pl. 19, f. 10-12; text-f. 44a; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Swedenborgia minor Harris, 1935, 109, pl. 19, f. 13, 14, 17; Thaumatopteris Zone: Scoresby Sound, east Greenland.

SWIETENIA Jacquin.

Swietenia? sp. Hollick, 1924, 305, pl. 15, f. 1; Santo Domingo.

SYMPHORICARPOS Dillenius.

Symphoricarpos albus (Linné) Blake. Potbury, 1932, 39, pl. 4, f. 2; San Bruno: San Mateo Co., Calif.—Mason, 1934, 177, pl. 11, f. 8; Tomales: Tomales Bay, Marin Co., Calif.

Symphoricarpos salmonensis R. W. Brown, 1935, 583, pl. 69, f. 7; Latah: Salmon, Idaho.

SYMPLOCOS Jacquin.

Symplocos oregona Chaney & Sanborn, 1933, 93, pl. 37, f. 1, 2, 4, 5; Fisher: Goshen, Oreg.

SYRINGA Linné.

Syringa coloradea R. W. Brown, 1934, 64, pl. 10, f. 4; Green River: Uinta Co., Wyo.

TABERNAEMONTANA Plumier.

Tabernaemontana intermedia Potbury, 1935, 78, pl. 13, f. 1, 3, 4; La Porte, Plumas Co., Calif.

Taeniopteris arctica (Heer) Seward, 1926, 89, pl. 7, f. 40, 41; text-f. 10; Nuggsuak, West Greenland.

Taeniopteris (Oleandra) arctica (Heer) Nathorst, 1897, K. Svenska. Vet. Akad. Handl., vol. 30, no. 1, 51.

Oleandra? arctica Heer. □

Taeniopteris (Oleandra) arctica (Heer) Nathorst=*Taeniopteris arctica* (Heer) Seward.

Taeniopteris cf. *danaeoides* Royle. Wieland, 1913, 266; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 133, pl. 17, f. 4; Liassic: Mixteca Alta, Oaxaca, Mexico.

Taeniopteris elegans Newberry, 1876, 147, pl. 8, f. 1; Triassic?: Los Bronces, Sonora, Mexico.

Taeniopteris glossopteroides Newberry, 1876, 147, pl. 8, f. 2, 2a; Triassic?: Los Bronces, Sonora, Mexico.—1888a, 345; near San Juancito, Honduras.

Taeniopteris groenlandica Harris=*Taeniozamites groenlandica* (Harris) Harris.

Taeniopteris cf. *orovillensis* Fontaine. Wilson, 1914, 408; Kootenai: Pimainus Hills, north of Spence Bridge, Thomson River, British Columbia.

Taeniopteris tenuinervis Braun. Harris, 1932, 34, pl. 3, f. 2; text-f. 20; Lepidopteris Zone: Scoresby Sound, East Greenland.

Taeniopteris (Zeilleri) tonkinensis Wieland, 1914, 132, pl. 43; Liassic: Mixteca Alta, Oaxaca, Mexico.

Taeniopteris vittata Brongniart=*Taeniozamites vittata* (Brongniart) Harris.

Taeniopteris cf. *vittata* Brongniart. Wieland, 1913, 266; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 131, pl. 15, f. 4; Liassic: Mixteca Alta, Oaxaca, Mexico.

Taeniopteris zeilleri. Wieland, 1913, 266; Liassic: Mixteca Alta, Oaxaca, Mexico.

Taeniopteris sp. Berry, 1925, 27, pl. 1, f. 3, 4; Ripley: Henry and Carroll Cos., Tenn.

Taeniopteris sp. A, Harris, 1926, 98, pl. 6, f. 3, 5; Rhaetic: Scoresby Sound, East Greenland.—1932, 34; Thaumatopteris Zone: Scoresby Sound, East Greenland.

Taeniopteris or *Oleandra* sp. Wilson, 1914, 408; Kootenai: Pimainus Hills, north of Spence Bridge, Thomson River, British Columbia.

TAENIOXYLON.

Taenioxylon multiradiatum Felix, 1883, Die fossilen Hölzer Westindiens, Samml. Palaeont. Abh., Ser. 1, Heft 1, 11, pl. 1, f. 10, 11; pl. 2, f. 10; Antigua, British West Indies.—Berry, 1918, 30, pl. 14, 15; Bohio, Cucuracha: Gaillard Cut; Orbitoid Limestone of David, Panama: Culebra: Canal Zone.

TAENIOZAMITES Harris, 1932, 33.—1932a, 34. Genotype: *T. vittata* (Brongniart) Harris.

Taeniozamites ajorpokensis Harris, 1932a, 39, pl. 4, f. 4, 7, 9; text-f. 15; Lepidopteris Zone: Scoresby Sound, East Greenland.

Taeniozamites groenlandica (Harris) Harris, 1932a, 34, text-f. 13; Lepidopteris Zone: Scoresby Sound, East Greenland.

Taeniopteris groenlandica Harris, 1926, 97, pl. 5, f. 1, 2; text-f. 22A-D; Rhaetic: Scoresby Sound, East Greenland.

Taeniozamites jourdyi (Zeiller) Harris, 1932a, 36, pl. 4, f. 2, 6, 8; text-f. 14; Lepidopteris Zone: Scoresby Sound, East Greenland.

Taeniozamites vittata (Brongniart) Harris, 1932, 101.

Taeniopteris vittata Brongniart.□

TALISIIPITES Wodehouse, 1933a, 513. Genotype: *T. fischeri* Wodehouse.

Talisiipites fischeri Wodehouse, 1933a, 513, f. 46; Green River: Parachute Creek Garfield Co., Colo.

Taonurus sp. White, 1898, 349; Pagtorfik, Nugsuak Pen., west Greenland.

Tapeinidium? *undulatum* (Hall) Knowlton.□Berry, 1929j, 130; Frontier: near Cumberland, Wyo.—Bell, 1932, 220; Dunvegan: Peace River, British Columbia.

TAPIRIRA Aublet.

Tapirira trinitiana Berry, 1925a, 103, pl. 14, f. 4; Forest: Trinidad, British West Indies.

TARAXACUM Linné.

Taraxacum ceratophorum (Led.) DeCandolle. Chaney & Mason, 1936c, 17, text-f. 49-54; Pleistocene: head of Goldstream, Buried Forest, near Fairbanks, Alaska.

Taxites eocenica R. W. Brown, 1929, 282, pl. 70, f. 4; Green River: northwest of De Beque, Colo.

Taxites microphyllus Heer. □ Hollick, 1936, 44; Port Graham, Alaska.

Taxites olriki Heer. □ Hollick, 1912a, 50; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.—1936, 44, pl. 16, f. 2, 6-8; pl. 48, f. 4b; Fairbanks district; Matanuska River; Kupreanof Isl.; Matanuska Coal Field; Copper Basin, Alaska.

Taxites pecten Heer = **Ptilophyllum** sp. Seward.

Taxites validus Heer. Hollick, 1912a, 49; Chickaloon: Matanuska River below Moose Creek, Alaska.

Taxites? sp. Berry, 1930, 52, pl. 36, f. 1-2; Holly Springs: Henry Co., Tenn.

Taxites sp. A, Harris = **Elatocladus lacunosus** Harris.

Taxites sp. Hartz, 1896, 243, pl. 17, f. 5; Rhaetic: Cape Stewart, East Greenland.

Taxodites europaeus Endlicher = **Glyptostrobus europaeus** (Brongniart) Heer.

Taxodium crassum Hollick, 1936, 48, pl. 16, f. 9; pl. 64, f. 4b; Anchorage Bay; Chignik Bay, Alaska Peninsula; Hamilton Bay, Kupreanof Isl., southeastern Alaska.

Taxodium cuneatum, Dawson not Newberry = **Elatocladus smittiana** (Heer) Seward.

Taxodium distichum (Linné) Richard. □ Berry, 1924a, 15, pl. 1, f. 37-42; Pleistocene: Washington, D. C.—1926b, 105, pl. 45, f. 1-8; Chowan: Neuse River above Seven Springs, Wayne Co.; Pamlico: Bertie and Craven Cos., N. C.—1927, 22; Pleistocene: Washington, D. C.—Richards, 1931, 1, pl. 1; Pleistocene Swamp, Philadelphia, Pa.

Sequoia angustifolia, Hollick not Lesquereux, 1906b, 219, pl. 71, f. 16, 17; Pleistocene (Sunderland): head of Island Creek, Calvert Co., Md.

Taxodium dubium (Sternberg) Heer. □ Knowlton, 1926, 27, pl. 9, f. 2, 7-9; pl. 10, f. 2; Latah: Coeur d'Alene, Idaho; Spokane, Wash.—Berry, 1924, 144; Langrange: near Hickman, Fulton Co., Ky.; near Union City, Obion Co., Tenn.; Jackson: south of New Edinburgh, Cleveland Co., Ark.—1926, 190; Paskapoo: Alberta.—1926d, 97; Joseph Creek, British Columbia.—1929f, 237; Latah: Coeur d'Alene, Idaho; Spokane, Republic and Vera, Wash.—1930c, 18; Ravenscrag: Cypress Hills, Canada.—1930f, 64; Ravenscrag: southern Alberta.—1931a, 34, pl. 11, f. 1; Latah: Grand Coulee, Wash.—1934, 103; Latah: near White Bird, Idaho Co.; near Arrow Junction, Nez Percé Co., Edwards Ranch near St. Maries; Coeur d'Alene, Kootenai Co., Idaho.—1935, 19; Middle Ravenscrag: Loc. 9, P 3-30; Upper Ravenscrag: Loc. 1, 32, P 6-30, southern Saskatchewan.—Ball, 1931, 34, pl. 37; Indio: Bastrop Co., Tex.—Hollick, 1936, 48, pl. 16, f. 5; pl. 51, f. 5a; Eska Creek, Matanuska Coal Field; Port Camden Bay, Kuiu Isl., southeastern Alaska.—MacGinitie, 1937, 132, pl. 3, f. 4; Weaverville: Hay Fork, Redding Creek, Big Bar and Hyampom, Trinity Co., Calif.

Taxodium nevadensis Lesquereux. □ Mason, 1927, pl. 5, f. 2, 5, 6; Mascall: White Hills, Oreg.

Taxodium distichum miocenum Heer. □ Dawson, 1879a, 186B; Vermillion Cliff; Tulameen River; Ninemile Creek, British Columbia.—Penhallow, 1906a, 389a; Diamond Vale Company, Quilchena, British Columbia; Coal Gully, near Coutlee, British Columbia; Red Deer River Valley, mouth of Blind Man River, Northwest Territories—Knowlton, 1912i, 42; Moose Creek, Lower Matanuska, Alaska.—Wilson, 1916, 206; Sheep Creek, Yukon Terr.—LaMotte, 1936b, 417; Ellensburg: Ellensburg, Wash.

Taxodium dubium longifolium Massalongo, 1859, in Massalongo and Scarabelli; *Studi sulla flora fossile e geologia stratigraphica del Senigalliese*, 150, pl. 6, f. 4.—Hollick, 1936, 49, pl. 16, f. 4; Kootznahoo Inlet, Admiralty Isl., south-eastern Alaska.

Taxodium dubium normale Massalongo, 1859, in Massalongo and Scarabelli; *Studi sulla flora fossile e geologia stratigraphica del Senigalliese*, 150, pl. 5, f. 11; pl. 6, f. 1, 5, 10; pl. 40, f. 4.—Hollick, 1936, 50, pl. 13, f. 4b; pl. 16, f. 1; Katchemak Bay, Kenai Peninsula; Matanuska-Cook Inlet region; Fairbanks district, Tenana region, Alaska.

Taxodium europaeum Brongniart=**Glyptostrobus europaeus** (Brongniart) Heer.

Taxodium hiatipites Wodehouse, 1933a, 493, f. 17; Green River: Parachute Creek, Garfield Co., Colo.

Taxodium occidentale Newberry. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.—Hollick, 1912a, 51; Chickaloon: Kings River, Lower Matanuska Valley, Alaska.—1936, 50, pl. 16, f. 3; pl. 109, f. 9, 10; Matanuska Coal Field; Hamilton Bay, Kupreanof Isl.; Nenana Coal Field; California Creek, Tenana region, Alaska.—Berry, 1926, 190; Paskapoo: Alberta.—1926d, 97, pl. 10, f. 1; Newhykulston and Joseph Creeks, British Columbia.—1935, 19; Middle Ravenscrag: Loc. P. 3-30; Upper Ravenscrag: Loc. 1, 31, 32, P. 6-30, southern Saskatchewan.

Taxodium tinajorum Heer. □ Heer, 1869, 22, pl. 1, f. 1-5a, b.—Hollick, 1936, 50, pl. 10, f. 4; pl. 13, f. 2-6; pl. 18, f. 5b; Port Camden Bay, Kuiu Isl.; Hamilton Bay, Kupreanof Isl.; Kachemak Bay, Kenai Peninsula; Chinitna Bay, Matanuska region; Cook Inlet, Matanuska region, Alaska.—Knowlton, 1912i, 42; Moose Creek, Lower Matanuska, Alaska.

Taxodium tinajorum, var., Eichwald. □

Taxodium tinajorum, var., Eichwald=**Taxodium tinajorum** Heer.

Taxodium wilcoxianum Berry, 1930, 53, pl. 7, f. 10-12; Holly Springs: Taylor Farm, Chester Co., Tenn.

Taxodium sp. Berry, 1916a. □

Taxodium, staminate ament, Berry=**Taxodium**, male aments, Knowlton.

Taxodium sp. Berry 1916a=**Taxodium wilcoxianum** Berry.

Taxodium, cone, Berry, 1934, 103, pl. 19, f. 4; Latah: east of White Bird, Idaho Co.; south of Juliaetta, Nez Percé Co., Idaho.

Taxodium, seed, Berry, 1934, 98; Latah: Idaho locality not stated.

Taxodium sp. Grewingk, 1850, 114, 364; Kenai Peninsula and Unalaska Isl., Alaska.—Hollick, 1936, 51; Kenai Peninsula and Unalaska Isl., Alaska.

Taxodium sp. Heer, 1868a, 63; Port Graham, Kenai Peninsula, Alaska.—Hollick, 1936, 51; Port Graham, Kenai Peninsula, Alaska.

Taxodium? sp. Knowlton. Berry, 1929m, 70; Allison: southwest Alberta.

Taxodium sp. Knowlton, 1918a, 33.—Hollick, 1930, 60; Wolverine Mt.: Rampart-Tenana district; Kaltag: Lower Yukon, Alaska.

Taxodium, male aments, Knowlton, 1926, 28, pl. 10, f. 4; Latah: Spokane, Wash.—Berry, 1931a, 34; Latah: Grand Coulee, Wash.

Taxodium, staminate ament, Berry, 1929f, 237, pl. 63, f. 2; Latah: Spokane, Wash.

Taxodium sp. Mathiesen, 1932, 57; text-f. 21; Sabine Isl., east Greenland.

Taxodium sp. Wilson, 1916, 206; Sheep Creek, Yukon Terr.

Taxus baccata canadensis, Penhallow not Gray=**Taxus minor** (Michaux) Britton.

Taxus minor (Michaux) Britton. □

Taxus baccata canadensis Gray. Penhallow, 1894, 94; Pleistocene: Don Valley, near Toronto, Canada.

Taxus sp. Mason, 1927, 146, pl. 1, f. 4; Bridge Creek: Crooked River Basin, Oreg.—Chaney, 1927a, 102; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Oliver, 1934, 16; Mascall: Tipton, Oreg.

Tecoma preradicans Berry. □ Berry, 1924, 196, pl. 54, f. 1-7; Lagrange: Hickman, Fulton Co.; Columbus, Hickman Co., Ky.

TELAPHRAGMOXYLON Torrey, 1921, 73.—1923, 86. Definition and genotype: *T. brachyphylloides* Torrey.

Telaphragmoxylon brachyphylloides Torrey, 1923, 86, pl. 14, f. 52-55; Trinity: Weatherford, Tex.

Telephragmoxylon comanchense Torrey, 1923, 88, pl. 14, f. 56; pl. 15, f. 57-60; Comanchean sands: Weatherford, Tex.

TEMPSKYA Corda. □ Kidston & Gwynne-Vaughan, 1911, Russ. k. min. Gesell. Verh., vol. 48, 1-20, pls. 1-3.—Read & Brown, 1937, 108.

Tempskya grandis Read & Brown, 1937, 114, pl. 29, f. 2; pl. 32, f. 2-5; pl. 33, f. 1-4; pl. 34, f. 1-4; pl. 35, f. 1-4; pl. 41, f. 4, pl. 42, f. 1-3; pl. 43, f. 1, 4-7; Aspen: Afton Quad. and in Lincoln Co., Wyo.

Tempskya knowltoni Seward, 1924, 485-507, 2 pls., 3 figs.; Kootenai: Harlowtown, Mont.—Brown, R. W., 1936, 45-52, f. 5.—Read & Brown, 1937, 112, pl. 28, f. 1-3; pl. 29, f. 3; pl. 30, f. 1, 2; pl. 31, f. 1, 2; pl. 32, f. 1; pl. 42, f. 4; pl. 43, f. 2, 3; Colorado: near Harlowtown, Mont.

Tempskya minor Read & Brown, 1937, 117, pl. 29, f. 1; pl. 36, f. 1-4; pl. 37, f. 1-4; pl. 38, f. 1-4; pl. 39, f. 1-4; pl. 40, f. 1-4; pl. 41, f. 1-3; pl. 42, f. 5; Aspen: Afton Quad.; Lincoln Co.; Hoback Creek, Wyo.; near Fossil, Wyo.; Wynan, Idaho.

Tempskya whitei Berry. □ Read & Brown, 1937, 119; Patapsco: near Severn, Anne Arundel Co., Md.

Tempskya sp. Read & Brown, 1937, 119; Dakota?: La Cal Mountains, Utah.

Terminalia claibornensis Berry, 1924, 86, pl. 22, f. 1; Gosport: Claiborne Landing, Monroe Co., Ala.; Lisbon: near Lexington, Holmes Co., Miss.

Terminalia indiocola Ball, 1931, 98, pl. 14, f. 4; Indio: Bartons Ranch, Bastrop Co., Tex.

Terminalia lesleyana (Lesquereux) Berry, 1916a, 323, pl. 89, f. 4; Ackerman: Hurleys, Benton Co., Miss.; Lagrange: near Grand Junction, Fayette Co., Tenn.; Wilcox: near Naborton, De Soto Parish, La.; Calaveras Creek, Wilson Co., Tex.—1922g, 19, pl. 16, f. 8; Wilcox: Goss Pit near Mansfield, De Soto Parish, La.—1924d, 91, pl. 22, f. 3; Indio: Sayersville, Bastrop Co., Tex.—Ball, 1931, 99; Indio: near Uteley and Little Sandy Creek, Bastrop Co., Tex.

Terminalia radobojensis, Lesquereux not Heer. □

Magnolia lesleyana Lesquereux. □ Lesquereux, 1871, 382; Wilcox: Mississippi.—Knowlton, 1917, 313, pl. 82, f. 1, 2; Raton: near Trinidad; Fishers Peak, N. Mex.; Riley Canyon near Cokedale; near Wooton, Weston and Berwind, Colo.

Terminalia phaeocarpoides Berry. □ Berry, 1924, 189, pl. 38, f. 4; pl. 39, f. 1; pl. 46; Barnwell: Grovetown, Columbia Co., Ga.; Fayette: Miraflores, Webb Co.; Alum Creek, Brazos Co., Tex.—Ball, 1931, 165, pl. 29, f. 1; Fayette: Miraflores, Webb Co.; Jackson?: Rock Creek, Brazos Co., Tex.

Terminalia radobojensis, Lesquereux not Heer=*Terminalia lesleyana* (Lesquereux) Berry.

Terminalia trinitense Berry, 1925a, 118, pl. 16, f. 1; Upper Forest: Trinidad, British West Indies.

Terminalia vera Berry, 1926c, 61, f. 1-5; Holly Springs: Western Kentucky and Tennessee.—1930, 119, pl. 49, f. 21-27; Holly Springs: Grable Pit and Puryear, Henry Co.; McKenzie, Carroll Co., Tenn.; Bell City, Calloway Co., Ky.

- Terminalia** sp.? Hollick, 1936, 155, pl. 93, f. 6; near Berg Lake, Yakutat-Copper River region, Alaska.
- Ternstroemites claibornensis** Berry, 1924, 78, 184, pl. 14, f. 4; Yegua: Cherry Valley, Cross Co., Ark.; Fayette: near Miraflores, Webb Co., Tex.—Ball, 1931, 163; Fayette: Miraflores, Webb Co., Tex.
- Ternstroemites crassus** Berry, 1930, 110, pl. 28, f. 1-3; pl. 38, f. 3; Holly Springs: Fayette Co.; Grand Junction and Bolivar, Hardeman Co., Tenn.
- Ternstroemites cretaceus** Berry, 1925, 75, pl. 16, f. 2; Ripley: Henry and Carroll Cos., Tenn.
- Ternstroemites crowleyensis** Berry, 1924, 77, pl. 14, f. 2, 3; Yegua: Cherry Valley, Cross Co., Ark.; Columbia, Caldwell Parish, La.
- Ternstroemites idahoensis**, Berry not Knowlton=**Gordonia hesperia** Berry.
- Ternstroemites idahoensis** (Knowlton) Berry=**Gordonia idahoensis** (Knowlton) Berry.
- Ternstroemites lanceolatus** Berry. □ Berry, 1930, 110, pl. 44, f. 18; Grenada: Grenada, Miss.; Holly Springs: Mill Creek, Hardeman Co.; Puryear and Atkins Pit, Henry Co., Tenn.
- Ternstroemites ripleysensis** Berry, 1925, 74, pl. 15, f. 3, 4; pl. 16, f. 1; Ripley: Henry Co., Tenn.
- Ternstroemites tennesseensis** Berry, 1925, 74, pl. 16, f. 3; Ripley: Carroll Co., Tenn.
- Ternstroemites variabilis** Berry, 1924, 183, pl. 52, f. 4-6; Lagrange: near Union City, Obion Co., Tenn.
- Ternstroemites viridiflumensis** R. W. Brown, 1929, 290, pl. 74, f. 5; Green River: eastern border of Carr Creek, Garfield Co., Colo.
- TETRACENTRONITES** Mathiesen, 1932, 5. Genotype: *T. hartzi* Mathiesen.
- Tetracentronites hartzi** Mathiesen, 1932, 7-16; text-f. 1-3; Cape Dalton, East Greenland.
- TETRACERA** Linné.
- Tetracera castaneaefolia** MacGinitie, 1937, 148, pl. 10, f. 5: pl. 11, f. 1, 2; Weaverville: Hay Fork, Redding Creek, Big Bar and Hyampom, Trinity Co., Calif.
- Dillenites* sp. Chaney & Sanborn, 1933, 86, pl. 31, f. 1; Fisher: Goshen, Ore.
- Tetracera oregona** Chaney & Sanborn, 1933, 87, pl. 31, f. 5-7; pl. 32, f. 1; Fisher: Goshen, Ore.
- Tetracera spokaneensis** R. W. Brown, 1937, 182, pl. 63, f. 6, 7; Latah: Spokane, Wash.
- TETRAPHYLLUM** Griffith.
- Tetraphyllum oblongum* Heer=**Carpolithus oblongus** (Heer) Seward.
- TETRAPTERIS** Cavanilles.
- Tetrapteris harpyrium** Unger, 1850, Gen. et sp. plant. foss., 455.—Hollick, 1936, 130, pl. 93, f. 3; west side Yakutat Bay, Alaska.
- THALLITES** Walton, 1925, Ann. Bot., vol. 39, no. 155, 564.
- Thallites** sp. Harris, 1931b, 4, pl. 1, f. 1, 2, 5; Thaumatopteris Zone: Scoresby Sound, East Greenland.
- THAUMATOPTERIS** Goeppert, 1841, Gattungen der fossilen Pflanzen, Lief. 2, 1.
- Thaumatopteris brauniana** Popp. Harris, 1931b, 94, pl. 16, f. 5; pl. 18, f. 4, 6-11, 13; text-f. 36; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Hausmannia* sp. A. Harris, 1926, 66, text-f. 7C; Thaumatopteris Zone: Scoresby Sound, east Greenland.
- Thaumatopteris schenki** Nathorst. Harris, 1931b, 93, pl. 17, f. 6-8; pl. 18, f. 1, 2; text-f. 35; Thaumatopteris Zone: Scoresby Sound, east Greenland.

THECopteris Miner, 1935, 590. Genotype: *T. major* Miner.

Thecpteris major Miner, 1935, 591; Disko Isl., West Greenland.

Thecpteris minor Miner, 1935, 591; Disko Isl., West Greenland.

THOUINIA Poiret.

Thouinia eocenica R. W. Brown, 1929, 289, pl. 74, f. 4; Green River: northwest of De Beque, Colo.

THRINAX Linné. □ Noé, 1936a, 451.

Thrinax eocenica Berry, 1924, 51, 151, pl. 8, f. 1, 2; pl. 30; Claiborne; Fort Gaines, Clay Co., Ga.; Yegua: Fayette Co., Tex.; Columbia, Caldwell Parish, La.; Lisbon: Newton, Newton Co., Miss.; Mt. Selman: Palestine, Anderson Co., Tex.; Barnwell: Columbia Co., Ga.; Jackson: Cleveland Co., Ark.—Ball, 1931, 119; Yegua: Fayette Co., Tex.; Mt. Selman: Anderson Co., Tex.

Thuites (Chamaecyparis) alaskensis Lesquereux. □ Hollick, 1936, 53; Coal Harbor, Unga Isl., Alaska Peninsula.

Thuites ehrenswardi Heer, 1869, Bibliothèque universelle, vol. 34, 535, Lausanne.—1878, 22, pl. 2, f. 10c.—Hollick 1936, 53, pl. 20, f. 9; Yukon River above Rampart, Alaska.

Thuites sp. Knowlton. □ MacGinitie, 1933, 48, pl. 3, f. 7; Trout Creek: Trout Creek, Harney Co., Oreg.—Brown, R. W., 1937, 168, pl. 45, f. 6, 7; Latah: Spokane and Republic, Wash.

Thuja garmani Lesquereux. □ Mason, 1927, 155; Mascall: White Hills, John Day Basin, Oreg.—Dorf, 1936, 109, pl. 1, f. 1; Idaho: near Weiser, Idaho.

Thuja interrupta Newberry. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia.—Berry, 1935, 21, pl. 3, f. 1; Middle Ravenscrag: Loc. P 10-30, P 12-30, P 4-30; Upper Ravenscrag: P 11-30, southern Saskatchewan.

Thuja sp. Dawson, 1879a, B 186; Ninemile Creek, Tulameen River, British Columbia.

Thuyopsis gracilis Heer, 1883, 59, pl. 20, f. 16; Greenland.—Jennings, 1920, 426, pl. 33, f. 3, 3a, 4, 4a; Missoula, Mont.

Thyrsopteris alata Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Thyrsopteris angustifolia Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Thyrsopteris angustiloba Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Thyrsopteris bella Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Thyrsopteris brevipennis Fontaine=**Sphenopteris dentata** (Velenovsky) Seward.

Thyrsopteris crenata Fontaine=**Sphenopteris dentata** (Velenovsky) Seward.

Thyrsopteris decurrens Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Thyrsopteris densifolia Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Thyrsopteris dentifolia Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Thyrsopteris distans Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Thyrsopteris divaricata Fontaine=**Sphenopteris dentata** (Velenovsky) Seward.

Thyrsopteris elliptica Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

Thyrsopteris inaequipinnata Fontaine=**Sphenopteris (Onychiopsis?) psilotoides** (Stokes & Webb) Halle.

- Thyrsopteris insignis* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris insignis angustipennis* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris* cf. *mackiana* Heer. Penhallow, 1906a, 392a; Crows Nest Coal Basin, Michel Station, British Columbia.
- Thyrsopteris meekiana angustiloba* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris microloba* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris microloba alata* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris microphylla* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris murrayana* (Brongniart) Heer. □ Wilson, 1916, 207; Mt. Bush, Yukon Terr.
- Thyrsopteris pachyrachis* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris pinnatifida* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris rarinervis* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris rhombifolia* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris rhombiloba* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris varians* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris virginica* Fontaine=*Sphenopteris* (*Onychiopsis?*) *psilotoides* (Stokes & Webb) Halle.
- Thyrsopteris* n. sp. White, 1898, 350; Kaersuk, Nugsuak Pen., west Greenland.
- Thyrsopteris* sp. Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, upper Skeena River, British Columbia.
- Tilia alaskana* Heer. □ Hollick, 1936, 144; Port Graham, Kenai Peninsula, Alaska.
- Tilia americana* Linné. □ Penhallow, 1899, 528; Taylor's Brickyard and Gaol Hill, Don Valley, Toronto, Ontario.
- Tilia aspera* (Newberry) LaMotte, 1935a, 45, pl. 1, f. 1-3; pl. 2, f. 1, 2; Bridge Creek: Bridge Creek, Grant Co.; Gray Ranch, Crooked River Basin, Oreg.; Eagle Creek: Multnomah Co., Oreg.; Latah: Spokane, Wash.; Trout Creek: Trout Creek, Harney Co., Oreg.; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—1936, 138; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif.—Brown, R. W., 1937, 182, pl. 62, f. 4; Bridge Creek: Bridge Creek, Grant Co., Oreg.; Latah: Spokane, Wash.—1937c, 514, text-f. 13; Sucker Creek: Malheur Co., Oreg.
- Platanus aspera* Newberry (part), 1883; Bridge Creek: Bridge Creek, Grant Co., Oreg.—1898, pl. 42, f. 1 (not f. 3); pl. 59, f. 3; pl. 44, f. 5; Bridge Creek: Bridge Creek, Grant Co., Oreg.—Chancy, 1920a, 175; Eagle Creek: Multnomah Co., Oreg.—1924a, 131.—1925a, 16, 17.—1927a, 120; Bridge Creek: Bridge Creek, Grant Co., Oreg.—Berry, 1929f, 248, Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.
- Tilia pedunculata* Chaney, 1920a, 179, pl. 19, f. 3, 4; Eagle Creek: Multnomah Co., Oreg.
- Tilia hesperia* Berry, 1929f, 258, pl. 57, f. 3; Latah: Spokane, Wash.—1934, 119; Latah: near Arrow Junction, Idaho.

Tilia aspera—Continued.

Vitis chaneysi MacGinitie, 1933, 63, pl. 14, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.

Tilia oregona LaMotte (part) 1935a, pl. 3, f. 6 only; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Tilia sp. Arnold, 1937, 94, pl. 4, f. 1; Carter Creek, southwest of Finley McKenzie Ranch, Oreg.

Tilia crassipites Wodehouse, 1933a, 515, f. 48; Green River: Parachute Creek, Garfield Co., Colo.

Tilia cretacea Hollick, 1930, 106, pl. 82, f. 3; Kaltag: Lower Yukon, Alaska.

Tilia grewioidea Hollick, 1936, 144, pl. 81, f. 4, 5; Kootznahoo Inlet, Admiralty Isl., southeastern Alaska.

Tilia hesperia Berry=*Tilia aspera* (Newberry) LaMotte.

Tilia? *incerta* Hollick, 1927, 414, pl. 43, f. 3; St. Eugene silts: British Columbia.

Tilia inaequalis MacGinitie, 1937, 146, pl. 8, f. 5; pl. 13, f. 5; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Tilia jacksoniana Berry, 1924, 180, pl. 63, f. 5; pl. 64, f. 5; Fayette: Mossy Creek, Brazos Co., Tex.—Ball, 1931, 161, pl. 28, f. 4; Fayette: Boggy Creek, Brazos Co., Tex.

Tilia malmgreni Heer, 1866, K. Svenska Vet.-Akad. Öfvers. Förh., vol. 23, no. 6, 151.—1868, 160, pl. 33, f. 1, 2.—1878, 37, pl. 9, f. 7, 8.—1880a, 17, pl. 3, f. 2, 3.—Hollick, 1936, 144, pl. 103, f. 1c; Kootznahoo Inlet, Admiralty Isl., southeastern Alaska.

Tilia notabilis Hollick, 1936, 145, pl. 82; Kootznahoo Inlet, Admiralty Isl., southeastern Alaska.

Tilia oregona LaMotte, 1935a, 47, pl. 3, f. 1-5; Bridge Creek: Bridge Creek, Grant Co., Oreg.—Brown, R. W., 1937, 182; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Tilia sp. Chaney, 1924a, 131; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Corylus macquarrii, Newberry not Heer, 1898, 61, pl. 48, f. 4 only; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Tilia oregona LaMotte (part) = *Tilia aspera* (Newberry) LaMotte.

Tilia pendunculata Chaney = *Tilia aspera* (Newberry) LaMotte.

Tilia scudderii (Cockerell) Brown, R. W., 1934, 63; Green River; locality not given.

Populus balsamoides latifolia Lesquereux, 1883, 158, pl. 31, f. 4; Green River, not Florissant: locality uncertain.

Populus scudderii Cockerell, 1906, 307.—1906a, 172; Green River, not Florissant: Colo.; locality not stated.

Tilia tetraforaminipites Wodehouse, 1933a, 516, f. 50; Green River: Parachute Creek, Garfield Co., Colo.

Tilia vespites Wodehouse, 1933a, 516, f. 49; Green River: Parachute Creek, Garfield Co., Colo.

Tilia sp. Arnold = *Tilia aspera* (Newberry) LaMotte.

Tilia sp. Chaney 1924a = *Tilia oregona* LaMotte.

Tilia sp.? Hollick, 1936, 145, pl. 81, f. 6; Kootznahoo Inlet, Admiralty Isl., southeastern Alaska.

Tithymalus phenacodorum Cockerell = ? *Celtis willistoni* (Cockerell) Berry.

Tithymalus willistoni Cockerell = *Celtis willistoni* (Cockerell) Berry.

TMEMATOSTROBUS Harris, 1935, 119. Genotype: *T. eremus* Harris.

Tmematostrobos eremus Harris, 1935, 119, pl. 23, f. 5; pl. 28, f. 6; Lepidopteris.

Zone: Scoresby Sound, east Greenland.

Tmesipteris alleni (Lesquereux) Hollick = *Koelreuteria alleni* (Lesquereux) Edwards.

TODEA Willdenow.

Todea williamsonii Brongniart. Hartz, 1896, 232, pl. 12, f. 4, 4a; Rhaetic: Cape Stewart, east Greenland.

TODITES Seward, 1900, The Jurassic Flora, Pt. 1, Catalogue of the Mesozoic Plants in the Dept. of Geology British Museum, London. Genotype: *T. williamsonii* (Brongniart) Seward.—Harris, 1931b, 30–31. *Todites* is said to be a synonym of *Acrostichites* Goeppert (1836) and *Cladotheca* Halle (1911). Harris retains *Todites* because "it is now in general use."

Todites goeppertianus (Münster) Krasser. Harris, 1931b, 31, pl. 11, f. 3, 8: text-f. 6, 7; Lepidopteris and Thaumatopteris Zones: Scoresby Sound, east Greenland.

Todites cf. *williamsoni* Harris not (Brongniart) Seward. Harris, 1926, 55, text-f. 2F; Rhaetic: Scoresby Sound, east Greenland.

Todites hartzi Harris, 1931b, 44, pl. 10, f. 1–6; text-f. 13–14; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Cladophlebis nebbensis, Harris not Brongniart, 1926, 60; Rhaetic: Scoresby Sound, east Greenland.

Todites princeps (Presl) Gothan. Harris, 1931b, 35, pl. 11, f. 1, 2, 4, 9; pl. 12, f. 3; text-f. 8, 9; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Todites cf. *princeps* Harris, 1926, 56, pl. 12, f. 5; text-f. 2A–E; Rhaetic: Scoresby Sound, east Greenland.

Todites cf. *princeps* Harris=**Todites princeps** (Presl) Gothan.

Todites recurvatus Harris, 1931b, 39, pl. 9, f. 1–4, 6–8, 11; pl. 9, f. 7–11; text-f. 10–11; Thaumatopteris Zone: Scoresby Sound, east Greenland.

Todites scoresbyensis (Harris) Harris, 1931b, 42, pl. 8; text-f. 12; Lepidopteris Zone: Scoresby Sound, east Greenland.

Cladophlebis scoresbyensis Harris, 1926, 59, pl. 2, f. 4; text-f. 4A–D; Rhaetic: Scoresby Sound, east Greenland.

Todites cf. *williamsoni*, Harris not (Brongniart) Seward=**Todites goeppertianus** (Münster) Krasser.

Todites sp. A, Harris, 1931b, 47, pl. 10, f. 12, 13; Liassic or Rhaetic: Scoresby Sound, east Greenland.

Todites sp. B, Harris, 1931b, 47, pl. 7, f. 5–8, 10, 11; Thaumatopteris Zone: Scoresby Sound, east Greenland.

TORELLIA Heer, 1870, K. Svenska Vet. Akad. Handl. vol. 8, no. 7, 44.—Harris, 1935, 44. Genotype: *T. rigida* Heer.

FEILDENIA Heer.□Heer, 1878, Mem. Acad. Imp. St. Petersburg, ser. 7, vol. 25, no. 6, 20.

Torellia ephela Harris, 1935, 46, pl. 8, f. 7, 8, 12, 13; text-f. 21; Thaumatopteris Zone: Scoresby Sound, east Greenland.

TORREYA Arnott. See also **TUMION** Rafinesque.

Torreyia antiqua Boeshore & Gray, 1936, 525, text-f. 1–14; Black Creek: near Fayetteville, N. C.

Torreyia bonseri (Knowlton) LaMotte, 1936, 108, pl. 3, f. 9; Upper Cedarville: 49 Camp, Washoe Co., Nev.—Brown, R. W., 1937, 167, pl. 45, f. 22; Latah: Spokane, Wash.; Mascall: Tipton, Oreg.

Tumion bonseri Knowlton, 1926, 25, pl. 10, f. 3; Latah: Spokane, Wash.—Berry, 1929f, 237; Latah: Spokane and Republic, Wash.

Torreyia sp. Mason, 1927, 146, pl. 1, f. 5, 6; Bridge Creek: Cants Ranch, John Day Basin, Oreg.

Torreyia californica Torrey. Mason, 1934, 144, pl. 5, f. 7; Tomales: Tomales Bay, Marin Co., Calif.

Torreya dicksoniana Heer=*Elatocladus dicksoniana* (Heer) Seward.

Torreya dicksonioides Dawson=*Elatocladus smittiana* (Heer) Seward.

Torreya parvifolia Heer=*Elatocladus smittiana* (Heer) Seward.

Torreya sp. Mason=*Torreya bonseri* (Knowlton) LaMotte.

Toxylon pomiferum Rafinesque.□

Machura aurantiaca Nuttall.□Penhallow, 1899, 526; Taylor's Brickyard and Gaoi Hill, Don Valley, Toronto, Ontario.

Trapa americana Knowlton.□Berry, 1927c, 13, pl. 2, f. 5, 6; Esmeralda: Mineral Co., Nev.—Brown, R. W., 1935, 581, pl. 67, f. 17; Latah: Potlatch Creek, Idaho.—1937, 183, pl. 55, f. 5, 6; Payette: Idaho City, Idaho.

Trapa? occidentalis Knowlton.□

Trapa prenatans Dorf, 1936, 122, pl. 3, f. 6; Idaho: near Weiser, Idaho.

Trapa borealis Heer.□Hollick, 1936, 156; Port Graham, Kenai Peninsula, Alaska.—MacGinitie, 1937, 150; Weaverville: Hay Fork, Trinity Co., Calif.

Trapa? microphylla Lesquereux.□Berry, 1926, 197; Paskapoo: Alberta.—1930, 25; Estevan: Cypress Hills, Canada.—1930f, 63; Estevan: southern Alberta.—1935, 61, pl. 19, f. 1-11; Whitemud: Loc. P 5-30; Middle Ravenscrag: Locs. P 4-30, P 1-30; Upper Ravenscrag: Loc. P 11-30, southern Saskatchewan.—Hollick, 1930, 109, pl. 84, f. 4; Chignik: Alaska Peninsula.—Bell, 1930, 55; St. Mary River: southern Alberta.

Trapa? occidentalis Knowlton=*Trapa americana* Knowlton.

Trapa prenatans Dorf=*Trapa americana* Knowlton.

Trapa n. sp. Bell, 1930, 55; St. Mary River: southern Alberta.

Tricalycites papyraceus Newberry.□Newberry, 1895, 132, pl. 46, f. 30-38; Riantan: Woodbridge, N. J.—Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirleys Mill; Snow Plantation, Ala.—1922c, 179, pl. 40, f. 9; Woodbine: Arthurs Bluff, Lamar Co., Tex.

TRICHILIA P. Browne.

Trichilia evidens Hollick, 1928, 208, pl. 72, f. 7; Collazo: Porto Rico.

Trichilia hirtaformis Berry, 1925a, 101, pl. 14, f. 1, 2; pl. 15, f. 6; Siparia: Trinidad, British West Indies.

Trichilia pseudohirta Hollick, 1928, 209, pl. 72, f. 1; Collazo: Porto Rico.

Trichilia pseudobakerii Hollick, 1928, 209, pl. 72, f. 5; Collazo: Porto Rico.

Trichilia spatulata Hollick, 1928, 210, pl. 72, f. 3; Collazo: Porto Rico.

TRIGONOCARPUS Brongniart, 1828, Prod. d. Hist. Veg. Foss, 137. Genotype: *T. parkinsoni* Brongniart.

Trigonocarpus oaxacense Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 118, pl. 37, f. 2, 3; Liassic: Mixteca Alta, Oaxaca, Mexico.

TRILETES Reinsch, 1884, Microphytologia formationes Carboniferae.—Bennie & Kidston, 1886, Proc. Roy. Physical Soc. Edinburgh, vol. 9, 86.—Harris, 1935, 154; discussion.

Triletes ales Harris, 1935, 163, pl. 25, f. 2, 8, 9, 11; text-f. 53a-e; Lepidopteris and Thaumopteris Zones: Scoresby Sound, east Greenland.

Triletes areolatus Harris, 1935, 158, pl. 26, f. 3, 10; text-f. 51a-f; Thaumopteris Zone: Scoresby Sound, east Greenland.

Triletes ariadnae (Miner) Harris, 1935, 155.

Selaginellites ariadnae Miner, 1932, 505, f. 26-31; Patoot: west Greenland.

Triletes arnoldsii (Miner) Harris, 1935, 155.

Selaginellites arnoldsii Miner, 1932, 505, f. 26-31; Patoot: west Greenland.

Triletes aurantium Harris, 1935, 164, pl. 25, f. 5; pl. 26, f. 5; text-f. 52h-i; Lepidopteris Zone: Scoresby Sound, east Greenland.

Triletes borealis (Miner) Harris, 1935, 155.*Selaginellites borealis* Miner, 1932, 500, f. 13-21; Patoot: west Greenland.**Triletes echinatus** (Miner) Harris, 1935, 155.*Selaginellites echinatus* Miner, 1932, 500, f. 6; Patoot: west Greenland.**Triletes erlansonii** (Miner) Harris, 1935, 155.*Selaginellites erlansonii* Miner, 1932, 500, f. 1-3; Patoot: west Greenland.**Triletes greenlandicus** (Miner) Harris, 1935, 155.*Selaginellites greenlandicus* Miner, 1932, 500, f. 10-11; Patoot: west Greenland.**Triletes inornatus** (Miner) Harris, 1935, 155.*Selaginellites inornatus* Miner, 1932, 505, f. 7, 8; Patoot: west Greenland.**Triletes ionthus** Harris, 1935, 166, pl. 26, f. 8; text-f. 52e-g; Lepidopteris Zone: Scoresby Sound, east Greenland.**Triletes litchi** Harris, 1935, 159, pl. 25, f. 1, 7; text-f. 53k-n; Lepidopteris Zone: Scoresby Sound, east Greenland.**Triletes mensura** Harris, 1935, 160, pl. 26, f. 2, 9; text-f. 53j; Lepidopteris Zone: Scoresby Sound, east Greenland.**Triletes mirabilis** (Miner) LaMotte, new combination.*Selaginellites mirabilis* Miner, 1935, 618, pl. 23, f. 1-6; Ft. Union: Bear Creek Carbon Co., Mont.**Triletes myrmecodes** Harris, 1935, 160, pl. 26, f. 4; text-f. 52m-q; Lepidopteris Zone: Scoresby Sound, east Greenland.

Megaspore type 2, Harris, 1926, 50, text-f. 1b; Rhaetic: Scoresby Sound, east Greenland.

Triletes papillosus (Miner) Harris, 1935, 155.*Selaginellites papillosus* Miner, 1932, 500, f. 9; Patoot: west Greenland.**Triletes pendinacron** Harris, 1935, 165, pl. 27, f. 6, text-f. 52s, t; Lepidopteris Zone: Scoresby Sound, east Greenland.**Triletes persimilis** Harris, 1935, 165, pl. 25, f. 4; text-f. 52r; Lepidopteris Zone: Scoresby Sound, east Greenland.**Triletes pinguis** Harris, 1935, 166, pl. 25, f. 3, text-f. 52a-d; Lepidopteris Zone: Scoresby Sound, east Greenland.**Triletes rexargenteus** Harris, 1935, 156, pl. 26, f. 13; text-f. 51g-j; Lepidopteris Zone: Scoresby Sound, east Greenland.

Megaspore type 3, Harris, 1926, 51, text-f. 1c, d; Rhaetic: Scoresby Sound east Greenland.

Triletes stenoxysmatodes Harris, 1935, 167, pl. 25, f. 6; Lepidopteris Zone: Scoresby Sound, east Greenland.**Triletes subrotundus** (Miner) Harris, 1935, 155.*Selaginellites subrotundus* Miner, 1932, 505, f. 4, 5; Patoot: west Greenland.**Triletes tylotus** Harris, 1935, 162, pl. 26, f. 1, 12; text-f. 53f-i; Lepidopteris Zone: Scoresby Sound, east Greenland.**Triletes** sp. A, Harris, 1935, 163, pl. 25, f. 12; Lepidopteris Zone: Scoresby Sound, east Greenland.**TROCHODENDROIDES** Berry, 1922c, 166. Genotype: *T. rhomboideus* (Lesquereux) Berry.

Trochodendroides arctica (Heer) Berry, 1926, 195; Paskapoo: Alberta.—1926d, 109, pl. 13, f. 1-4; Kitsilano; Newhykulston Creek, British Columbia.—Seward & Conway, 1935, pl. 3, f. 22, 23; pl. 4, f. 30; pl. 5, f. 39; Kagdlunguak, West Greenland.

Populus arctica Heer. □ Dawson, 1879a, B186: Coal Brook, north Thompson River, British Columbia; Ninemile Creek, Tulameen River, British Columbia.—Lesquereux, 1888, 47; Denver: Golden, Colo.—Cross, 1895, 211; Middle Park: Middle Park, Colo.—Hollick, 1912a, 42, 51; Sheep Creek, Matanuska Valley, Alaska; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.—1936, 60, pl. 22, f. 5a; pl. 23, f. 1, 2; pl. 24, f. 1-3; pl. 27, f. 4; pl. 117, f. 4-8; pl. 118, f. 5; Chignik Bay, head of Herendeen Bay, Matanuska Coal Field; Portage (Balboa) Bay, Alaska Peninsula; Seventymile Creek, upper Yukon region; Chignik River opposite Nun Point, summit of mountain southwest of forks of Pumicestone Creek, Alaska Peninsula; Divide between Folger Creek and Nowitna River, central Yukon region, Alaska.—Mathieson, 1932, 60, text-f. 23; Sabine Isl., East Greenland.

Trochodendroides cuneata (Newberry) Berry, 1930c, 20, pl. 5, f. 2, 3; Ravenscrag: Cypress Hills, Canada.—1930f, 64; Ravenscrag: southern Alberta.—1935, 182, pl. 6, f. 1-6; Middle Ravenscrag: Locs. 2, 5, 9, 34, 37, 38, P 1-30, P 10-30; Upper Ravenscrag: Locs. 23, 27, P 11-30, southern Saskatchewan.

Populus cuneata Newberry. □ Penhallow, 1906a, 391a; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.

Populus cyclomorpha Knowlton & Cockerell. □

Populus rotundifolia Newberry. □

"*Populus nervosa* var. *β elongata* Ny" Lesquereux. □

"*Populus nebrascensis* Ny" Lesquereux. □

Populus cuneata Newberry. □

Populus amblyrhyncha Ward. □ Hollick, 1936, 63, pl. 25, f. 5a; pl. 28, f. 1; pl. 30, f. 4a; pl. 116, f. 7; Chignik River opposite Nun Point, Alaska Peninsula; Kootznahoo Inlet, Admiralty Island, southeastern Alaska; Nenana Coal Field; Eska Creek, Matanuska region, Alaska.

Trochodendroides genetrix (Newberry) R. W. Brown, 1935, 577 (in discussion of *Cercidiphyllum crenatum*).

Populus genetriæ Newberry. □ Hollick, 1936, 63, pl. 26, f. 5; Yukon River south bank above Rampart, central Yukon region, Alaska.

Grewia crenata, Ward not Unger. □ Lesquereux, 1888, 54; Denver: Golden, Colo.—Berry, 1935, 50; Whitmud: Loc. P 5-30; Upper Ravenscrag: Loc. 32, southern Saskatchewan.

Grewia obovata, Ward not Heer. □

Populus glandulifera, Ward not Heer. □

Trochodendroides rhomboideus (Lesquereux) Berry, 1922c, 166, pl. 36, f. 5; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Ficus? rhomboideus Lesquereux, 1868a, 96; Dakota: Decatur, Nebr.—1871, 379; Dakota: Decatur, Nebr.

Phyllites rhomboideus (Lesquereux) Lesquereux. □

Trochodendroides speciosa (Ward) Berry, 1926, 196; Paskapoo: Alberta.—1930c, 22, pl. 5, f. 8; Ravenscrag: Cypress Hills, Canada.—1930f, 64; Ravenscrag: southern Alberta.

Populus speciosa Ward. □ Wilson, 1914a, 322; Edmonton: Wigmere Ferry, Red Deer River, Alberta.—Hollick, 1936, 62, pl. 31, f. 2; south side Hamilton Bay, Kupreanof Isl., southeast Alaska.

Populus xantholithensis Knowlton. □

Trochodendroides zaddachi (Heer) Sanborn, 1935, 16, pl. 3, f. 2; Comstock: Comstock, Douglas Co., Oreg.

Populus zaddachi Heer. □ Lesquereux, 1878, 176, pl. 22, f. 13.—1878c, 11, pl. 8, f. 1-8.—1888, 47; Denver: Golden, Colo.—Knowlton, 1900d, 40, pl. 1, f. 11; left bank of Columbia River near mouth of Moffats Creek, Oreg.—1930, 60, pl.

Trochodendroides zaddachi—Continued.

22, f. 8; Middle Park: Middle Park, Grand Co., Colo.—Hollick, 1912a, 51; Chickaloon: Young Creek, Lower Matanuska Valley, Alaska.—Chaney, 1920a, 161, pl. 8, f. 1, 2; Eagle Creek: Multnomah Co., Oreg.—?Hollick, 1936, 69, pl. 24, f. 4, 5; pl. 116, f. 5, 6; Seventyninemile Creek below Mogul Creek, Upper Yukon region; Matanuska and Nenana Coal Fields, Alaska.

Trochodendroides sp. Berry, 1930c, 22; Estevan: Cypress Hills, Canada.—1930f, 63; Estevan: southern Alberta.

Trochodendroides sp. LaMotte, 1935b, 53; Sooke: Muir Creek, Vancouver Isl., British Columbia.

Tsuga latahensis Berry=Bud scales, R. W. Brown.

Tsuga viridi-fluminipites Wodehouse, 1933a, 491, f. 14; Green River: Parachute Creek, Garfield Co., Colo.

TUMION Rafinesque. See also **TORREYA** Arnott.

Tumion bonseri Knowlton=**Torreya bonseri** (Knowlton) LaMotte.

Tumion carolinianum Berry, 1920e, 398; Black Creek: North Carolina.

Tumion dicksonioides (Dawson) Knowlton=**Elatocladus smittiana** (Heer) Seward.

Tumion gracillimum Hollick, 1930, 55, pl. 10, f. 3b; pl. 17, f. 6; pl. 18, f. 1-11; pl. 28, f. 3; Melozi, Kaltag: Lower Yukon, Alaska.

Tumion? *suspectum* Hollick, 1930, 55, pl. 19, f. 4-6a; pl. 29, f. 1b; Chignik: Alaska Peninsula.

Typha lesquereuxi Cockerell.□Jennings, 1920, 405, pl. 24, f. 4; Missoula, Mont.—Chaney, 1927a, 102; Bridge Creek: Crooked River, Oreg.—Berry, 1927c, 6, pl. 1, f. 13-15; Esmeralda: Hawthorne, Nev.—1932a, 40; Miocene: Ballantyne Ranch, Malheur Co., Oreg.—1934, 105; Latah: near Arrow Junction, Nez Percé Co., north of Weiser, Washington Co., Idaho.—MacGinitie, 1933, 48; Trout Creek: Trout Creek, Harney Co., Oreg.—1937, 133; Weaverville: Hay Fork, Redding Creek, Big Bar and Hyampom, Trinity Co., Calif.—LaMotte, 1936, 113; Upper Cedarville: 49 Camp. Washoe Co., Nev.; Pit River and Rattlesnake Butte, Modoc Co., Calif.—1936b, 417; Ellensburg: Ellensburg, Wash.—Dorf, 1936, 110; Idaho: near Weiser, Idaho.—Chaney & Elias, 1936, 34; Ogallala: Brown Co., Nebr.; Beaver Co., Okla.; Logan Co., Kans.—Axelrod, 1937, 169; Mt. Eden: near Beamont, Calif.

Typha? sp. Knowlton, 1926, 28, pl. 9, f. 11; Latah: Spokane, Wash.—Berry, 1929f, 239; Latah: Spokane, Wash.

Typha sp. Berry, 1930d, 64; so-called Bridger: Tipperary, Wind River Basin, Wyo.

Typha sp. Hollick, 1912a, 50; Chickaloon: Eska Creek, Lower Matanuska Valley, Alaska.

Typha? sp. Knowlton, 1926=**Typha lesquereuxi** Cockerell.

Typha sp. Lauder milk & Munz, 1934a, 37; pl. 3, f. 4; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.

Typha sp. Mathiesen, 1932, 58; Sabine Isl., East Greenland.

Typha sp. Penhallow.□Berry, 1926, 192; Paskapoo: Alberta.

Typha sp. Scott, 1926, 403; Tesla, Calif.

Ulmus alata Michaux.□Berry, 1926b, 111, pl. 54, f. 1, 2; Chowan: Neuse River, Wayne Co., N. C.

Ulmus alnoides Hollick, 1930, 71, pl. 38, f. 4; Chignik: Alaska Peninsula.

Ulmus americana Linné.□Penhallow, 1899, 528; Taylor's Brickyard and Gaol Hill, Don Valley, Toronto, Ontario.—1900, 336; Don River, Gaol Farm, Taylor's Brickyard, Don Valley, Toronto, Ontario.

Ulmus antedecens Lesquereux.□Knowlton, 1930, 62, pl. 23, f. 7; Denver: Golden, Colo.

Ulmus borealis Heer=*Dicotylophyllum boreale* (Heer) Seward & Conway.

Ulmus braunii Heer.□?Hollick, 1936, 105, pl. 58, f. 6-12; Cape Douglas and near forks of Pumicestone Creek, Alaska Peninsula.

Ulmus brownellii Lesquereux.□Lesquereux, 1883, 160, pl. 28, f. 2, 4; Florissant: Florissant, Colo.; White River, Wyo.—Chaney, 1927a, 113, f. 3, 6-8; pl. 13, f. 1, 3, 4, 6; Bridge Creek: Gray Ranch, Crooked River, Oreg.—Berry, 1934, 111; Latah: south of Juliaetta, Nez Percé Co., Idaho.

Myrica acuminata, Lesquereux (part) not Unger.□

Rhus? drymeja Lesquereux.□

Callicoma microphylla, Lesquereux not Ettingshausen.□

Ulmus hilliae Lesquereux.□

Myrica callicomaeifolia Lesquereux.□

Myrica fallax Lesquereux.□

Myrica zachariensis, Lesquereux (part) not Saporta.□

Ceratopetalum americanum Ettingshausen.□

Myrica drymeja (Lesquereux) Knowlton.□

Ulmus brownellii, Dorf not Lesquereux=*Ulmus moorei* Chaney & Elias.

Ulmus californica Lesquereux (part).□Knowlton, 1893b, 104; Ellensburg: Ellensburg, Wash.—Chaney, 1922a, 216; Payette: Idaho.

Ulmus californica Lesquereux (part)=*Quercus washingtoniana* Chaney.

Ulmus carpinoides Goeppert, 1855, Die tertiäre Flora von Schnossnitz in Schlesien, 28, pl. 13, f. 4-9 (not pl. 14, f. 1), Görlitz.—Hollick, 1936, 105, pl. 51, f. 1, 2; Port Camden Bay, Kuiu Isl., southeastern Alaska.

Ulmus columbianus Penhallow.□Berry, 1926d, 108, pl. 15, f. 7; Joseph Creek, British Columbia.

Ulmus diptera Steenstrup, 1859, in Heer, Fl. Tert. Helv., vol. 3, 319.—?Hollick, 1936, 107, pl. 48, f. 4a; Copper Basin east of Ankona glacier, Yakutat-Copper River region, Alaska.

Ulmus eolaciniata MacGinitie, 1937, 136, pl. 5, f. 3; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.

Ulmus fernquisti Knowlton=*Zelkova oregoniana* (Knowlton) R. W. Brown.

Ulmus floridana Berry, 1916b, 47, pl. 9, f. 5-7; Hattiesburg: Raglan, Forest Co., Miss.; Alum Bluff: Alum Bluff, Liberty Co., Fla.

Ulmus hilliae Lesquereux=*Ulmus brownellii* Lesquereux.

Ulmus longifolia Unger, 1845, Chloris protogea, pt. 6, 80.—1847, pt. 8-10, 101, pl. 26, f. 5 (leaf), 6 (fruit).—Hollick, 1936, 107; Eska Creek, Matanuska Coal Field, Alaska.

Ulmus moorei Chaney & Elias, 1936b, 39, pl. 6, f. 1-5; Ogallala: Beaver Co., Okla., Logan Co., Kans.

Ulmus brownellii, Dorf not Lesquereux, 1930, 92, pl. 10, f. 1-3, 10; Lafayette Dam, Contra Costa Co., Calif.

Ulmus newberryi Knowlton=*Ulmus speciosa* Newberry.

Ulmus oblongifolia Hollick, 1930, 70, pl. 37, f. 1; Chignik: Alaska Peninsula.

Ulmus oregoniana Knowlton, 1900d, 44, pl. 2, f. 1, 2; 5 miles south of Ashland, Oreg.

Ulmus pleurinervia, Heer not Unger=*Planera nervosa* Newberry.

Ulmus praecursor Dawson=*Viburnum asperum* Newberry.

Ulmus pseudobraunii Hollick, 1936, 105, pl. 58, f. 1-3; near Berg Lake, Yakutat-Copper River region, Alaska.

Ulmus pseudo-fulva Lesquereux.□Knowlton, 1893b, 104; Ellensburg: Ellensburg, Wash.—Potbury, 1935, 63; La Porte, Plumas Co., Calif.

Ulmus? quercifolia Unger?□Knowlton, 1930, 62, pl. 23, f. 10; Denver: Golden, Colo.

Ulmus sorbifolia Goeppert. □ Hollick, 1936, 106, pl. 57, f. 3-5; Hamilton Bay, Kupreanof Isl., southeastern Alaska; Kachemak Bay, Kenai Peninsula, Alaska.

Ulmus speciosa Newberry, 1898, 80, pl. 45, f. 2-8. □ Penhallow, 1906a, 390a; Diamond Vale Company, Quilchena, British Columbia—Chaney, 1920a, 171; Eagle Creek. Multnomah Co., Oreg.—1927a, 114; Crooked River, Oreg.—Knowlton, 1926, 39, pl. 18, f. 6; Latah: Spokane, Wash.—Berry, 1929f, 247; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.—1934, 110; Latah: east of Arrow Junction, Nez Perce Co.; southeast of White Bird, Idaho Co.; Linson Valley, Washington Co., Idaho—Hoffman, 1932, 737; Douglas Canyon, Wash.—LaMotte, 1936, 124, Upper Cedarville: 49 Camp, Washoe Co., Nev.—1936b, 417; Ellensburg: Ellensburg, Wash.—Dorf, 1936, 116; Idaho: near Weiser, Idaho—Brown, R. W., 1937, 173; Latah: Spokane and Grand Coulee, Wash.; Bridge Creek: Bridge Creek, Grant Co., Oreg.

Ulmus newberryi Knowlton. □

Ulmus n. sp. Knowlton, 1901e. □

Ulmus tanneri Chaney, 1920a, 172, pl. 14, f. 1, 2; Eagle Creek; Multnomah Co., Oreg.

Ulmus, fruit of, Berry, 1929f, 247, pl. 51, f. 1; pl. 64, f. 3, 4; Latah: Spokane, Wash.

Ulmus speciosa Newberry (part) = *Ptelea miocenica* Berry.

Ulmus tanneri Chaney = *Ulmus speciosa* Newberry.

Ulmus wardii Knowlton & Cockerell. □ ? Berry, 1935, 27; Middle Ravenscrag: Loc. 2, southern Saskatchewan.

Ulmus, fruit of, Berry 1929f = *Ulmus speciosa* Newberry.

Ulmus sp. Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.

Ulmus n. sp. Knowlton 1901e = *Ulmus speciosa* Newberry.

Ulmus sp. Penhallow, 1906a, 391a; Coal Gully, near Coulee, British Columbia.

UMBELLIFEROSPERMUM Berry, 1929f, 261. Genotype: *U. latahense* Berry.

Umbelliferospermum latahense Berry, 1929f, 261, pl. 64, f. 10-12; Latah: Spokane, Wash.

UMBELLULARIA Nuttall.

Umbellularia californica Nuttall. Scott, 1926, 405; Tesla, Calif.—Chaney & Mason, 1933a, 60, pl. 7, f. 4; Pleistocene: Carpinteria, Santa Barbara Co., Calif.—Mason, 1934, 160, pl. 9, f. 1-7, 13; Tomales: Tomales Bay, Marin Co., Calif.

Umbellularia dayana (Knowlton) Berry, 1929f, 260 (not pl. 58, f. 4); Latah: Coeur d'Alene, Idaho; Spokane, Wash.—1934, 121; Latah: Edwards Ranch; Stanley Hill; Coeur d'Alene; east of Arrow Junction, Idaho.—Brown, R. W., 1937, 174, pl. 52, f. 13; Latah: Spokane, Wash.; Salmon, Idaho.

Salix dayana Knowlton. □ Knowlton, 1926, 32, pl. 12, f. 1 only; Latah: Coeur d'Alene, Idaho.

Salix sp. Knowlton, 1926, 33, pl. 12, f. 3; Latah: Coeur d'Alene, Idaho.

Laurus similis, Berry not Knowlton, 1929f, 259, pl. 58, f. 2; Latah: Spokane, Wash.

Quercus simulata, Berry not Knowlton, 1929f, 246, pl. 51, f. 6 only; Spokane, Wash.

Leguminosites bonseri Berry, 1929f, 254, pl. 56, f. 4; Latah: Spokane, Wash.—Hoffman, 1932, 737; Douglas Canyon, Wash.

Umbellularia dayana, Berry (part) not Knowlton = *Cedrela pteriformis* (Berry) R. W. Brown.

Umbellularia lanceolata Berry = *Laurus similis* Knowlton.

Umbellularia lanceolata, LaMotte not Berry = ? *Umbellularia oregonensis* (Knowlton & Cockerell) Chaney.

Umbellularia oregonensis (Knowlton & Cockerell) Chaney, 1925d, 60, pl. 1, f. 1, 3, 5, 7; Bridge Creek: Bridge Creek, Grant Co.; Gray Ranch, Crooked River Basin, Oreg.—1927a, 117, pl. 14, f. 2; Bridge Creek: Gray Ranch, Crooked River Basin, Oreg.—Dorf, 1930, 94, pl. 10, f. 5; Petrified Forest, Sonoma Co.; Garberville, Calif.—Oliver, 1934, 21; Mascall: Tipton and Austin, Oreg.—Brooks, 1935, 299, pl. 19, f. 6; Sucker Creek: Ballantyne Ranch near Homedale, Idaho.—LaMotte, 1936b, 417; Ellensburg: Ellensburg, Wash.

NOTE.—Oliver and Brooks citations were considered equal to *Umbellularia lanceolata* Berry by LaMotte. This synonymy is hereby rejected and they are returned to their original status. R. S. L.

Fraxinus oregonensis Knowlton & Cockerell.□

Fraxinus integrifolia, Newberry not Moench.□

Umbellularia lanceolata, LaMotte not Berry, 1936, 127; Upper Cedarville: 49 Camp, Washoe Co., Nev.; Pit River, Modoc Co., Calif. (Note: R. W. Brown, 1937, has transferred these leaves to *Laurus similis* Knowlton. I am unable to concur. The specimens seem to be surely placed in *Umbellularia* although there may be some doubt that they are specifically *oregonensis*. This doubt as to the specific reference applies equally to the citations of Oliver and Brooks. R. S. L.)

Undeterminable leaf, Berry, 1930, 143, pl. 25, f. 21; Holly Springs: Bolivar, Hardeman Co., Tenn.

"Undeterminable leaf," Berry=*Apocynophyllum sumterensis* (Berry) Berry. Unknown plant, Knowlton=*Nymphaeites nevadensis* (Knowlton) R. W. Brown. Unnamed fruit, Ashlee, 1932, 82, pl. 2, f. 19; Latah: no locality.

URTICA (Tournefort) Linné.

Urtica alaskana Hollick, 1930, 73, pl. 39, f. 1; Chignik: Alaska Peninsula.

Urtica exemplaris Hollick, 1930, 73, pl. 29, f. 4b; pl. 39, f. 2; Chignik: Alaska Peninsula.

Vaccinium alaskanum Knowlton.□Hollick, 1936, 160; Kukak Bay, Alaska Peninsula.

Vaccinium americanum (Lesquereux) Berry, 1929f, 262; Latah: Coeur d'Alene, Idaho; Spokane, Wash.

Santalum americanum Lesquereux.□

Salix pseudo-argentea Knowlton.□

Vaccinium salicoides Knowlton, 1926, 46, pl. 28, f. 9, 9a; Latah: Coeur d'Alene, Idaho.

Vaccinium angustifolium Aiton. Hollick, 1931, 45, pl. 7, f. 2e; pl. 8, f. j; Pleistocene: Colebrook, N. H.

Vaccinium arboreum Marshall.□Berry, 1926b, 116, pl. 57, f. 7; Chowan: Neuse River, Wayne Co., N. C.

Vaccinium bonseri Berry, 1929f, 262, pl. 59, f. 5; Latah: Spokane, Wash.

Vaccinium bonseri serrulatum Berry, 1929f, 262, pl. 63, f. 19-20; Latah: Spokane, Wash.—Brown, R. W., 1937, 184, pl. 61, f. 8; Latah: Thunder Mountain, Idaho.

Vaccinium corymbosum Linné.□Berry, 1926b, 116, pl. 57, f. 8, 9; Chowan: Neuse River, Wayne Co., N. C.; Pamlico: Old Mill Landing, Roanoke River, Bertie Co., N. C.

Vaccinium ellipticum Berry, 1927c, 14, pl. 2, f. 4; Esmeralda: Mineral Co., Nev. *Vaccinium friesii* Heer.□Hollick, 1936, 160; Port Graham, Kenai Peninsula, Alaska.

Vaccinium hollicki Knowlton.□Hollick, 1936, 160; Cook Inlet, Alaska.

Vaccinium ovalifolium J. E. Smith. Berry & Johnson, 1922a, 139, pl. 2, f. 9; Point Grays: Vancouver, British Columbia.

- Vaccinium ovatum** Pursh. Mason, 1934, 176, pl. 11, f. 6, 9, 10; Tomales: Tomales Bay, Marin Co., Calif.
- Vaccinium palaeocorymbosum** Jennings, 1920, 426, pl. 33, f. 3, 3a, 4, 4a; Missoula, Mont.
- Vaccinium pseudocorymbosum** Hollick, 1927, 417, pl. 37, f. 3; St. Eugene silts: British Columbia.
- Vaccinium salicoides** Knowlton=**Vaccinium americanum** (Lesquereux) Berry.
- Vaccinium sophoroides** (Knowlton) R. W. Brown, 1937, 184, pl. 61, f. 1-3, 11; Latah: Spokane, Wash.
- Phyllites sophoroides* Knowlton, 1926, 48, pl. 26, f. 8; Latah: Coeur d'Alene, Idaho.
- Cassia sophoroides* (Knowlton) Berry, 1929f, 253 only; Latah: Coeur d'Alene, Idaho.
- Diospyros princetoniana*, Berry not Cockerell, 1929f, 263, pl. 59, f. 6; pl. 60, f. 1-3; Latah: Spokane, Wash.
- Salix perplexa* Knowlton (part), 1926, 32, pl. 2, f. 5; Latah: Spokane, Wash.
- Arctostaphylos knowltoni* Berry, 1929f, 261, pl. 59, f. 4; Latah: Spokane, Wash.
- Vaccinium spatulatum** Berry.□Berry, 1926b, 116, pl. 56, f. 3; Chohan: Neuse River, Wayne Co.; N. C.
- Vaccinium spokaneense** Berry=**Salix spokaneensis** (Berry) R. W. Brown.
- Vaccinium vaccinifolia** (Knowlton) Berry, 1927c, 15; Esmeralda: Nevada.
- Salix vaccinifolia* Knowlton.□
- Vaccinium** sp. Heer, 1868a, 65.—Hollick, 1936, 160; Port Graham, Alaska Peninsula.
- VARDEKLOEFTIA** Harris, 1932a, 107. Genotype: *V. sulcata* Harris.
- Vardekloeftia conica** Harris, 1932a, 107, pl. 16, f. 1-12; pl. 17, f. 3-10; text-f. 49A, 50; Lepidopteris Zone: Scoresby Sound, East Greenland.
- Vardekloeftia sulcata** Harris, 1932a, 109, pl. 15, f. 1, 4, 5, 12; pl. 17, f. 1, 2; pl. 18, f. 1-15; text-f. 49B-C; Lepidopteris Zone: Scoresby Sound, East Greenland.
- Seed A. Harris, 1926, 125, text-f. 31A-D.
- Interseminale scale A, Harris, 1926, 98, pl. 2, f. 5; Rhaetic: Scoresby Sound, East Greenland.
- VIBURNUM** Linné.□Berry, 1935, 55; discussion.
- Viburnum alnifolium** Marshall. Berry & Hawkins, 1935a, 251, pl. 23, f. 4; Pensauken: near Durhams Corner, Middlesex Co., N. J.
- Viburnum antiquum** (Newberry) Hollick.□Knowlton, 1924, 96, pl. 18, f. 1-3; Animas: Pagosa Quad., Colo.—Berry, 1926, 200; Paskapoo: Alberta.—1926d, 116; Eocene: Joseph Creek, Kitsilano, British Columbia.—1935, 58, pl. 17; pl. 18, f. A, B; Whitemud: Locs. 7, P 5-30; Middle Ravenscrag: Locs. 2, 5; Upper Ravenscrag: Locs. 1, 32, 35, southern Saskatchewan.—Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—1936, 166, pl. 106, f. 3; Bryant Creek, Upper Yukon River region, Alaska.
- Viburnum elongatum* Ward.□Berry, 1926, 200; Paskapoo: Alberta.
- Platanus guillelmae*, Ward not Goeppert.□
- Grewiopsis viburnifolia* Ward.□
- Populus grewiopsis* Ward.□Cragin, 1891, 30, Loup Fork: near Alpine, Kans.
- Viburnum limpidum* Ward.□Berry, 1930c, 26; Ravenscrag: Cypress Hills, Canada—1930f, 64; Ravenscrag: southern Alberta.
- Tilia antiqua* Newberry.□?Lesquereux, 1888, 53; Denver: Golden, Colo.
- Viburnum antiquum trinervium** Berry, 1935, 60, pl. 7, f. 6; pl. 15, f. 6; Middle Ravenscrag: Loc. P 10-30, southern Saskatchewan.
- Viburnum asperum** Newberry.□?Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek, Alaska.—Berry, 1926, 199; Paskapoo: Alberta.—1935, 56, pl. 16; Lower Ravenscrag: Loc. 3; Middle Ravenscrag: Locs. 38,

Viburnum asperum—Continued.

P 1-30; Upper Ravenscrag: Locs. 23, 27, southern Saskatchewan.—Brown, R. W., 1934, 65; Green River: near Green River, Wyo.

Viburnum lanceolatum Newberry.□

Viburnum castrae Knowlton & Cockerell.□Berry, 1935, 56, pl. 15, f. 5; Middle Ravenscrag: Loc. 2, southern Saskatchewan.

Viburnum nordenskiöldi, Ward not Heer.□

Ulmus praeursor Dawson.□

Alnus kefersteinit, Lesquereux not Goeppert, 1878, 140, pl. 64, f. 11 only; Green River: near Green River, Wyo.; not Florissant, Colo.

Viburnum finale Ward.□Berry, 1930c, 27, pl. 5, f. 4; Ravenscrag: Cypress Hills, Saskatchewan.—1930f, 64; Ravenscrag: southern Alberta.

Viburnum newberryanum Ward.□Hollick, 1912a, 51; Chickaloon: Eska Creek, lower Matanuska Valley, Alaska.—Berry, 1926, 200; Paskapoo: Alberta.—Hollick, 1936, 165, pl. 106, f. 2; Eska Creek, Matanuska Coal Field, Alaska.

Viburnum castrae Knowlton & Cockerell=**Viburnum asperum** Newberry.

Viburnum contortum Lesquereux.□Knowlton, 1930, 127, pl. 55, f. 1; Calhan, Colo.—Hollick, 1936, 165, pl. 106, f. 1; Matanuska Coal Field, Alaska.

Viburnum dichotomum, Lesquereux not Buch-Ham=**Viburnum marginatum** Lesquereux, revived.

Viburnum duriusculum Hollick, 1936, 168, pl. 105, f. 9; between Herendeen Bay and Port Moller, Alaska Peninsula.

Viburnum elongatum Ward=**Viburnum antiquum** (Newberry) Hollick.

Viburnum eocenicum Chaney & Sanborn 1933, 96, pl. 40, f. 1, 2; Fisher: Goshen, Oreg.

Viburnum evexum Hollick, 1936, 166, pl. 119, f. 2; Chignik Bay, Alaska Peninsula.

Viburnum fernquisti Berry, 1929f, 264, pl. 63, f. 10; Latah: Spokane, Wash.—1931a, 34; Latah: Grand Coulee, Wash.

Viburnum fernquisti R. W. Brown not Berry=**Viburnum ribesiforme** LaMotte, new name.

Viburnum finale Ward=**Viburnum asperum** Newberry.

Viburnum goldianum Lesquereux.□Knowlton, 1930, 129; Denver: Golden, Colo.

Viburnum grossecrenatum Hollick, 1930, 115, pl. 86, f. 4; Nulato, Kaltag: Lower Yukon, Alaska.

Viburnum? *heterodontum* Knowlton, 1930, 127, pl. 55, f. 2; Denver: Golden, Colo.

Viburnum lakesii Lesquereux.□Knowlton, 1930, 128, pl. 55, f. 3; Denver: Golden, Colo.

Viburnum lanceolatum, Newberry not Hill=**Viburnum asperum** Newberry.

Viburnum lantanifolium Berry, 1929f, 264, pl. 60, f. 6; Latah: Spokane, Wash.—Oliver, 1934, 27, pl. 5, f. 1, 2; Mascall: Tipton, Oreg.—Brown, R. W., 1937, 185, pl. 63, f. 1; Latah: Spokane, Wash.; Mascall: Tipton, Oreg.

Aesculus hesperia Berry, 1929f, 256, pl. 56, f. 8; Latah: Spokane, Wash.

Viburnum lesquereuxii Ward.□Gress, 1922, 326; Dakota: Ellsworth Co., Kans.

Viburnum lesquereuxii commune Lesquereux.□Gress, 1922, 327; Dakota: Ellsworth Co., Kans.

Viburnum lesquereuxii lanceolatum Lesquereux.□Gress, 1922, 328; Dakota: Ellsworth Co., Kans.

Viburnum limpidum Ward=**Viburnum antiquum** (Newberry) Hollick.

Viburnum cf. limpidum Ward. Wilson, 1914a, 322; Edmonton: Wigmores Ferry, Red Deer River, Alberta.

Viburnum magnum Knowlton.□Berry, 1926, 199; Paskapoo: Alberta.

Viburnum marginatum Lesquereux, revived. Berry, 1935, 57; Whitemud: Locs. 7, P 5-30, southern Saskatchewan.

Viburnum marginatum Lesquereux.□

Platanus marginata (Lesquereux) Heer.□Cross 1895, 211; Middle Park: Middle Park, Colo.—Knowlton, 1930, 81, pl. 36, f. 2, 3; Dawson: Mosby, Colo.—Ball, 1931, 57, pl. 5, f. 1, 2; Indio: Bartons Ranch, Bastrop Co., Tex.

Viburnum dichotomum, Lesquereux not Buch-Ham.□

Viburnum melaenum Knowlton & Cockerell.□Knowlton, 1930, 128, pl. 55, f. 5; Dawson: Mosby, Colo.

Viburnum whymperi? Lesquereux not Heer.□

Viburnum marginatum ravenescragensis Berry, 1935, 58; Middle Ravenscrag: Loc. 34, Upper Ravenscrag; Loc. 35, southern Saskatchewan.

Viburnum meluenum Knowlton & Cockerell=**Viburnum marginatum** Lesquereux, revived.

Viburnum molle Michaux. Berry, 1926b, 117; Chowan: Neuse River, Wayne Co., N. C.

Viburnum cf. molle Berry.□

Viburnum cf. molle Berry=**Viburnum molle** Michaux.

Viburnum multinervis Heer. White, 1898, 362; Patoot: Nugsuak Pen., west Greenland.

Viburnum newberryanum Ward=**Viburnum asperum** Newberry.

Viburnum nordenskiöldi Heer.□Heer, 1869, 36, pl. 3, f. 13.—Lesquereux, 1883, 230, pl. 46A, f. 6, 7.—Knowlton, 1893d, 545; Kenai?: Ninilchik, Alaska.—1894, 225.—Hollick, 1912a, 50; Chickaloon: Matanuska River below Moose Creek; Eska River, Alaska.—1936, 167, pl. 107, f. 1-3; Chignik Bay, Alaska Peninsula; Nenana Coal Field, Alaska.

Viburnum nordenskiöldi, Ward not Heer=**Viburnum asperum** Newberry.

Viburnum nudum Linné.□Berry, 1914d, 160.—1917f, 662.—1922b, 11.—1924a, 23, pl. 2, f. 25.—1926b, 117; Chowan: Neuse River, Wayne Co., N. C.; Pleistocene: Washington, D. C.; Tipton Co., Tenn.

Viburnum obliquum Hollick, 1936, 165, pl. 105, f. 7, 8; Eska Creek, Matanuska Coal Field, Alaska.

Viburnum ovatum Penhallow.□Penhallow, 1906a, 391a; Red Deer River Valley, mouth of Blind Man River, Northwest Territories.

Viburnum ozyccoides Dawson=**Platanus basilobata** Ward.

Viburnum palmatum Chaney & Sanborn, 1933, 97, pl. 40, f. 3, 4; Fisher: Goshen, Oreg.

Viburnum perfectum Ward=**Viburnum antiquum** (Newberry) Hollick.

Viburnum ribesiforme LaMotte, new name.

Ribes fernquisti Berry, 1929f, 251, pl. 63, f. 21; Latah: Spokane, Wash.—1931a, 39, pl. 12, f. 4-6; Latah: Grand Coulee, Wash.

Viburnum fernquisti R. W. Brown not Berry, 1937, 185, pl. 56, f. 2; Latah: Spokane, Wash.; Grand Coulee, Wash.; Coeur d'Alene, Idaho. (Homonym, Berry 1929f.)

Viburnum richardsoni Knowlton, 1930, 126, pl. 52, f. 8; pl. 53, f. 1, 3-5; pl. 54, f. 2, 3; Dawson: near Colorado Springs; Sedalia, Colo.; Denver: Golden, Colo.

Crataegus betulaefolia Lesquereux (part), 1888, 56; Denver: Golden, Colo.

Viburnum robustum Lesquereux.□Berry, 1922c, 179, 39, pl. 39, f. 4; Woodbine: Arthurs Bluff, Lamar Co., Tex.—Gress, 1922, 328; Dakota: Ellsworth Co., Kans.

Viburnum rotundifolium Lesquereux.□Knowlton, 1924, 96, pl. 16, f. 1; Animas: Ignacio Quad., Colo.

- Viburnum schmidtianum* Heer, 1878, Fl. Foss. Arct., vol. 5, no. 3, 43, pl. 11, f. 4-8.—1883, 114, pl. 89, f. 10; pl. 94, f. 4.—Hollick, 1936, 167, pl. 106, f. 4; north of upper Nenana River west of Wells Creek, Tenana region, Alaska.
- Viburnum simile* Knowlton.□?Hollick, 1930, 114, pl. 85, f. 8; Chignik: Alaska Peninsula.
- Viburnum solitarium* Lesquereux.□Knowlton, 1950, 129; Denver: Golden, Colo.
- Viburnum speciosum* Knowlton.□Knowlton, 1924, 96, pl. 16, f. 3; Animas: Pagosa Quad., Colo.
- Viburnum sphenophyllum* Knowlton.□Gress, 1922, 327; Dakota: Ellsworth Co., Kans.
- Viburnum thomae* Chaney & Sanborn, 1933, 98, pl. 40, f. 5, 6; Fisher: Goshen, Oreg.
- Viburnum whitebirdensis* Ashlee, 1932, 82, pl. 2, f. 17; Latah: Whitebird, Idaho.
- Viburnum whymperei* Heer.□Hollick, 1936, 167, pl. 107, f. 4-7; Mission Creek above junction with Excelsior Creek, upper Yukon region; Seventymile Creek below mouth of Mogul Creek, upper Yukon region, Alaska.
- Viburnum whymperei*? Lesquereux (part) not Heer=*Viburnum melaenum* Knowlton.
- Viburnum whymperei*? Lesquereux (part) not Heer=*Viburnum marginatum* Lesquereux, revived.
- Viburnum zizyphoides* Heer, 1883, 34, pl. 60, f. 2.—Hollick, 1930, 115, pl. 85, f. 9; Kaltag: Lower Yukon, Alaska.
- Viburnum* sp. Berry, 1929m, 71; Allison: southwest Alberta.
- Viburnum* sp. Berry, 1924a, 23, pl. 2, f. 30; Pleistocene: Washington, D. C.
- Viburnum* or *Celastrus* sp. Berry, 1930, 64; Ravenscrag: southern Alberta.
- Viburnum* sp. Berry, 1935, 61, pl. 19, f. 12; Whitemud: Locs. 7, P 5-30, southern Saskatchewan.
- Viburnum* sp. Hollick, 1912a, 51; Chickaloon: Kings River, lower Matanuska Valley, Alaska.
- Viburnum* sp. Hollick, 1930, 115, pl. 85, f. 6, 7; Chignik: Alaska Peninsula.
- Viburnum* sp.? fruit, Hollick, 1936, 168, pl. 107, f. 8, 9; Matanuska River below Moose Creek, Alaska.
- Viburnum* sp. MacGinitie, 1937, 151; Weaverville: Redding Creek, Hay Fork, Trinity Co., Calif.
- VINCETOXICUM** Ruppius.
- Vincetoxicum*? *trinervata* MacGinitie, 1933, 66, pl. 15, f. 1; Trout Creek: Trout Creek, Harney Co., Oreg.
- Vitigene cissoides* Saporta=*Cissus cissoides* (Saporta) Hollick.
- VITIPITES** Wodehouse, 1933a, 514. Genotype: *V. dubius* Wodehouse.
- Vitipites dubius* Wodehouse, 1933a, 514, f. 47; Green River: Parachute Creek, Garfield Co., Colo.
- Vitis alaskana* Cockerell.□Hollick, 1936, 142; Admiralty Inlet (Isl.), southeastern Alaska.
- Vitis alia* Hollick, 1927, 413, pl. 42, f. 1; St. Eugene silts: British Columbia.
- Vitis atwoodi* Hollick, 1936, 142, pl. 80, f. 4; Kootznahoo Inlet, Admiralty Isl., southeastern Alaska.
- Vitis bonseri* Berry, 1931a, 41, pl. 13, f. 6; Latah: Grand Coulee, Wash.
- Vitis chaneysi* MacGinitie=*Tilia aspera* (Newberry) LaMotte.
- Vitis cordifolia* Michaux. Berry, 1924a, 21, pl. 2, f. 6-9; Pleistocene: Washington, D. C.
- Vitis crenata* Heer=*Vitis heeriana* Knowlton & Cockerell.
- Vitis dakotana* Berry, 1934a, 130, pl. 26, f. 4-6; pl. 27; Lance: Jump off, Harding Co., S. Dak.—1935, 47, pl. 12, f. 1, 2; Whitemud: Loc. 7, southern Saskatchewan.

- Vitis florissantella* Cockerell. □ Knowlton, 1923a, 189, pl. 42, f. 4; Creede: Creede, Colo.
- Vitis heeriana* Knowlton & Cockerell. □ ? Hollick, 1936, 142, pl. 80, f. 3; Nenana Coal Field, Alaska.
- Vitis crenata* Heer. □ ? Wilson, 1916, 206; Sheep Creek, Yukon Terr.
- Vitis inequilateralis* Hollick, 1930, 104, pl. 80, f. 1; Kaltag: Lower Yukon, Alaska.
- Vitis innominata* Knowlton. □ Ball, 1931, 93, pl. 37, f. 6; Indio: Little Sandy Creek, Bastrop Co., Tex.
- Vitis olriki* Heer. □ Cross, 1895, 211; Middle Park: Middle Park, Colo.—Knowlton, 1930, 115, pl. 49, f. 6; pl. 50, f. 4; Dawson: Ramah, Colo.—Hollick, 1936, 142, pl. 81, f. 2; Hamilton Bay, Kupreanof Isl., southeastern Alaska.
- Vitis paleotruncata* Hollick, 1930, 104, pl. 80, f. 3; Kaltag: Lower Yukon, Alaska.
- Vitis populoides* Hollick, 1930, 104, pl. 79, f. 1; Chignik: Alaska Peninsula.
- Vitis tricuspidata* Heer = *Cissus lesquereuxii* Knowlton.
- Vitis venusta* Hollick, 1930, 104, pl. 80, f. 4; Melozi: Lower Yukon, Alaska.
- Vitis washingtonensis* (Knowlton) R. W. Brown, 1937, 181, pl. 56, f. 5, 6; pl. 57, f. 1, 2; Latah: Spokane, Wash.; Whitebird, Idaho.
- Populus washingtonensis* Knowlton, 1926, 31, pl. 15, f. 1; Latah: Coeur d'Alene, Idaho.—Berry, 1931a, 34; Latah: Grand Coulee, Wash.—Hoffman, 1932, 735; Douglas Canyon, Wash.
- Populus lindgreni* Knowlton (part), 1926, 31, pl. 14, f. 4-7; Latah: Coeur d'Alene, Idaho.—Berry, 1934, 106; Latah: White Bird; Arrow Junction; Edward Ranch, Idaho.
- Acer merriami* Knowlton (part), 1926, 45, pl. 28, f. 1; Latah: Mica, Wash.
- Acer* sp. Berry, 1929f, pl. 57, f. 6 (not discussed); Latah.
- Menispermites latahensis* Berry, 1929f, 249, pl. 52, f. 4; Latah: Vera and Spokane, Wash.—1931a, 38, pl. 12, f. 4-6; Latah: Grand Coulee, Wash.
- Cercis idahoensis* Berry (part), 1930b, 240, pl. 9, f. 4 only; Latah: Whitebird, Idaho.—1934, 114, pl. 21, f. 1; pl. 22, f. 4 only; pl. 23, f. 3, 4, only; Latah: Whitebird, Idaho.
- Vitis* sp. Berry, 1926b, 115, pl. 57, f. 6; Chowan: Neuse River, Wayne Co., N. C.
- Vitis* sp. Lesquereux, 1888, 52; Denver: Golden, Colo.
- VOLTZIOXYLON** Torrey, 1923, 62. Genotype: *V. dockumense* Torrey.
- Voltzioxydon dockumense* Torrey, 1923, 64, pl. 8, f. 1, 2; Dockum: Spur, Tex.
- Weichselia reticulata* (Stokes & Webb) Ward. □ Berry, 1928, 1-5, 1 text-f.; Frederickburg?: Nolan Co., Tex.
- Widdringtonia* sp. Heer, 1868a, 66.—Hollick, 1936, 52; Keku Isl., Alaska.
- Widdringtonites gracilis* Heer = *Cyparissidium gracile* (Heer) Heer.
- Widdringtonites reichii* (Ettingshausen) Heer. □ Newberry, 1895, 57, pl. 8, f. 1-5; Raritan: Woodbridge, South Amboy, and Sayerville, N. J.—White, 1898, 353; Ujarartorsuak, Nugsuak Pen., west Greenland.—Berry, 1913a, 571; Tuscaloosa: near Glen Allen; Shirleys Mill; Snow Plantation; Whites Bluff, Ala.—1925, 29; Ripley: Carroll Co., Tenn.—Bell, 1932, 220; Dunvegan: Peace River, British Columbia.
- Widdringtonites subtilis* Heer = *Elatocladus subtilis* (Heer) Seward.
- WIELANDIELLA** Nathorst, 1909, K. Svenska Vet. Akad. Handl., vol. 45, no. 4, Stockholm, 21.
- Wielandiella angustifolia* Nathorst. Harris, 1932a, 86, pl. 1, f. 6-8, 10; pl. 2, f. 3-5, 7-13; pl. 3, f. 2-6, 9-11, 13, 14; pl. 14, f. 7; text-f. 48B, Lepidopteris zone: Scoresby Sound, East Greenland.
- Wielandiella* sp. Harris (part), 1926, 82, pl. 7, f. 1-3; text-f. 14A, B, D, E, I only; Rhaetic; Scoresby Sound, East Greenland.

Wielandiella sp. Harris (part) = *Bennetticarpus crossospermus* Harris.

Wielandiella sp. Harris (part) = *Wielandiella angustifolia* Nathorst.

Williamsonia centeotl Wieland, 1914, 96, pl. 27, f. 3; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia cūauhtemoci Wieland, 1914, 82, pl. 23, f. 2; pl. 24; pl. 25; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia elocata Lesquereux. □ Seward, 1917, Fossil Plants, vol. 3, 462.—Wieland, 1928, 39, f. 5, 6; Dakota: Kansas.

Williamsonia ?hespera Wieland, 1928, 41, f. 7-10; Dakota: Kansas.

Williamsonia ?huitzilopochtli Wieland, 1914, 98, pl. 27, f. 7; pl. 28; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia sp. Wieland, 1911, 457, text-f. 15a.

Williamsonia ipalnemoani Wieland, 1914, 92, pl. 31, f. 3, 6, 7; pl. 46, f. 1, 2; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia mexicana Wieland, 1911, 461.—1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 100, pl. 22; pl. 23, f. 2; pl. 29, f. 1; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia sp. Wieland, 1909, 429.

Williamsonia nathorstii Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 85, pl. 30, f. 1-3 Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia netzahualcoyotl Wieland, 1914, 89, pl. 21; pl. 22; pl. 31, f. 1, 2, 4, 5; pl. 33, f. 3, 5, 6; pl. 30, f. 6, 7; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia sp. Wieland, 1911, 457, f. 14.

Williamsonia quetzalcoatl Wieland, 1914, 93, pl. 26; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia tecatzoncatl Wieland, 1914, 98, pl. 37, f. 4; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia tlazolteotl Wieland, 1914, 97, pl. 26, f. 6; pl. 30, f. 4; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia xicotancatl Wieland, 1914, 84, pl. 23, f. 1; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia xipe Wieland, 1914, 98, pl. 30, f. 5; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia sp. Müllerried, 1933, 45; Triassic?: Coatepec, Puebla, Mexico.

Williamsonia sp. Wieland, 1914, 88, pl. 30, f. 8, 9; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia spp., fruit series, Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 80, pl. 22, 32; Liassic: Mixteca Alta, Oaxaca, Mexico.

Williamsonia spp., stem series, Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.—1914, 70, pl. 34, 35, 36; Liassic: Mixteca Alta, Oaxaca, Mex.

Williamsonia sp. Wieland = *Williamsonia netzahualcoyotl* Wieland.

Williamsonia sp. Wieland = *Williamsonia? huitzilopochtli* Wieland.

Williamsonia sp. Wieland = *Williamsonia mexicana* Wieland.

WOODSIA P. Brown.

Woodsia bonseri Berry, 1929f, 236, pl. 64, f. 21, 22; Latah: Spokane, Wash.

Woodwardia bennetti Dorf, 1930, 68, pl. 5, f. 3; Bennett Valley, Calif.

Woodwardia latiloba Lesquereux = *Onoclea sensibilis* Linné.

Woodwardia latiloba minor Lesquereux = *Onoclea sensibilis* Linné.

Woodwardia latiloba serrata Knowlton, 1930, 22, pl. 2, f. 1, 2; Middle Park: Middle Park, Grand Co., Colo.

- Woodwardia maxoni** Knowlton. □ Berry, 1926d, 95, pl. 10, f. 2, 3; Newhykulston Creek, Chu Chua Area, British Columbia.
- Woodwardia praeradicans** Berry, 1929f, 236, pl. 64, f. 22, 23; Latah: Spokane, Wash.
- Woodwardites arcticus** Heer=**Onoclea sensibilis** Linné.
- Xanthium calvum** M & S. Chaney & Mason, 1933a, 66, pl. 9, f. 14; Pleistocene: Carpinteria, Santa Barbara Co., Calif.
- XANTHOLITHES** Ward, 1913, 150. Genotype: *X. propheticus* Ward.
- Xantholithes hastatifomis** (Cockerell) Cockerell=**Sporophylls**, Berry.
- Xantholithes propheticus** Ward, 1915, 150; Fort Union: Montana.—Berry, 1935, 65, pl. 20; Middle Ravenscrag: Loc. 13, southern Saskatchewan. Vegetable organism. Ward, 1889a, 99–201.
- Xolisma ligustrina** (Linné) Britton. □ Berry (part), 1926b, 116, pl. 57, f. 12; Chowan: Neuse River, Wayne Co., N. C.
- Xolisma ligustrina**, Berry (part) not Britton=**Rhamnites krugiodendroides** Berry.
- Xylomites cycadeoideae** Chrysler & Haenseler, 1936, 35, text-f. 1–7; Raritan: Woodbridge, N. J.
- Yucca baccata** Torrey. Lauder milk & Munz, 1934a, 37; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.
- Yucca brevifolia** Engelmann. Lauder milk & Munz, 1934a, 37; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.
- Yucca mohavensis** Sargent. Lauder milk & Munz, 1934a, 37; Pleistocene?: Gypsum Cave, near Las Vegas, Nev.
- Yuccites oaxacensis** Wieland, 1914, 116, pl. 39, f. 2; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Yuccites schimperianus** Zigno, Flora Foss. Form Oolithicae, vol. 2, pl. 26.—Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico—1914, 115, pl. 39, f. 3; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Zamia collazoensis** Hollick, 1928, 184, pl. 53, f. 1, 5, 7?—1932, 173, pl. 7, f. 5, 6; Collazo River, Porto Rico.
- Zamia mississippiensis** Berry. □ Hollick, 1932, 173, pl. 6, f. 1a–c; Wilcox: Lauderdale Co., Miss.
- Zamia mississippiensis macrophylla** Potbury, 1935, 60, pl. 1, f. 7; La Porte, Plumas Co., Calif.
- Zamia noblei** Hollick, 1928, 185, pl. 53, f. 9, 10; pl. 54, f. 1, 3a; pl. 55, f. 1–3, 4a, 5a.—1932, 174, pl. 6, f. 3, 4; Collazo River, Porto Rico.
- Zamia tennesseana** Berry, 1930, 51, pl. 32, f. 8; Holly Springs: Bolivar, Hardeman Co., Tenn.—Hollick, 1932, 173, pl. 13 f. 4; Wilcox: Hardeman Co., Tenn.
- Zamia wilcoxensis** Berry. □ Hollick, 1932, 173, pl. 6, f. 6; Wilcox: De Soto Parish, La.
- Zamiostrobus emmonsi** Fontaine=**Araucarites emmonsi** (Fontaine) Wieland.
- Zamiostrobus virginienensis** Fontaine=**Araucarites virginienensis** (Fontaine) Wieland.
- Zamiostrobus** sp. Fontaine=**Araucarites virginienensis** (Fontaine) Wieland.
- Zamites acutipennis** Heer=**Pterophyllum acutipennis** (Heer) Berry.
- Zamites albertensis** Berry, 1929m, 68, pl. 11, f. 1, 2; Allison: southwest Alberta.
- Zamites apertus** Newberry=**Pterophyllum acutipennis** (Heer) Berry.
- Zamites arcticus** Goepfert=**Ptilophyllum arcticum** (Goepfert) Seward.
- Zamites brevipennis** Heer=**Ptilophyllum arcticum** (Goepfert) Seward.
- Zamites cipertus** Newberry=**Pterophyllum acutipennis** (Heer) Berry.
- Zamites cf. confusus** Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.
- Zamites globuliferus** Heer=**Carpolithus globuliferus** (Heer) Seward.

Zamites (Otozamites) leggetti Newberry, 1888a, 343, pl. 8, f. 3, 4; near San Juancito, Honduras.

Zamites mariposana Wieland, 1929b, 303-323, text-f. 1, 19; Mariposa: Moccasin Creek, Tuolumne Co., Calif.

Zamites montana Dawson. □ Wilson, 1914, 408; Kootenai: Groundhog Coal Basin, Upper Skeena River, British Columbia.

Zamites montanensis Fontaine = **Pterophyllum montanense** (Fontaine) Knowlton.

Zamites powelli Fontaine = **Otozamites powelli** (Fontaine) Berry.

Zamites (Pterophyllum) rolkeri Newberry, 1888a, 343, pl. 8, f. 1, 2; near San Juancito, Honduras.—Wieland, 1913, 265; Liassic: Mixteca Alta, Oaxaca, Mexico.

Zamites speciosus Heer. White, 1898, 349, 353; Pagtorfik, Ujaratorsuak, Nugsuak Pen., west Greenland.

Zamites weedii Fontaine = **Ptilophyllum arcticum** (Goeppert) Seward.

Zamites sp. Dawson 1886 = **Ptilophyllum arcticum** (Goeppert) Seward.

Zamites sp. Berry, 1924g, 495, text-f. 4; Popo Agie: near Lander, Wyo.

Zamites? sp. Berry, 1924g, 496, text-f. 5, 6; Popo Agie: near Lander, Wyo.

Zamites (Otozamites?) sp.? Humphreys, 1916a, 77; Santa Clara Coal Field, Sonora, Mexico.

Zamites sp. Lozano, 1916, 4, pl. 1, f. 1; Liassic: Huayacocotla, Vera Cruz, Mexico.

ZELKOVA Spach.

Zelkova oregoniana (Knowlton) R. W. Brown, 1937, 173, pl. 51, f. 11-15; Mascall: John Day Basin, Oreg.; Latah: Spokane and Republic, Wash.

Myrica oregoniana Knowlton. □ Chaney, 1920a, 163; Eagle Creek: Multnomah Co., Oreg.

Ulmus fernquisti Knowlton, 1926, 39, pl. 19, f. 2; Latah: Spokane, Wash. (Note: This species was considered equal to *Ulmus speciosa* by LaMotte, 1936.)

Fagopsis longifolia, Berry not Hollick, 1929f, 245, pl. 50, f. 7; Latah: Spokane, Wash.—1934, 108; Latah: north of Weiser, Idaho.

Zingiberites alaskensis Hollick, 1930, 61, pl. 27, f. 8; Kaltag: Lower Yukon, Alaska.

Zingiberites dubius Lesquereux. □ Knowlton, 1930, 43; Denver: Golden, Colo.

ZIZYPHOIDES Seward & Conway, 1935, 23. Genotype: *Z. columbi* (Heer) Seward & Conway.

Zizyphoides columbi (Heer) Seward & Conway, 1935, 23, text-f. 8; Kagdlunguak, West Greenland.

Paliurus columbi Heer, 1868, 122, pl. 17, f. 2d; pl. 19, f. 2-4. (Note: Seward and Conway do not transfer other North American citations of this species to the new name. The cataloguer does not do so pending more critical revision of the forms involved.)

Zizyphus abnormalis Hollick, 1930, 103, pl. 79, f. 8; Kaltag: Lower Yukon, Alaska.

Zizyphus beckwithii Lesquereux. □ Knowlton, 1930, 110, pl. 47, f. 3; Denver: Golden, Colo.

Zizyphus cinnamomoides (Lesquereux) Lesquereux. □ Knowlton, 1923, 170; Green River: Green River, Wyo.—Brown, R. W., 1934, 63; Green River: Green River, Wyo.

Zizyphus longifolia Newberry. □ Knowlton, 1923, 169, pl. 40, f. 7; Green River: Green River, Wyo.; Greasewood Creek southwest of Meeker, Colo.

Ilex wyomingiana Lesquereux. □ Knowlton, 1923, 169; Green River: Green River, Wyo.

Zizyphus claibornensis Berry, 1924, 74, pl. 12, f. 10, 11; Yegua: Columbia, Caldwell Parish, La.; Lisbon: Lexington, Holmes Co., Miss.

Zizyphus coloradensis Knowlton. □ Berry, 1935, 45; Whitemud and Middle Ravenscrag: Loc. 7, P 10-30, southern Saskatchewan.

Zizyphus daphnogenoides Knowlton, 1924, 91; Animas: Pagosa Quad., Colo.—1930, 109, pl. 48, f. 5, 6; Denver: Golden, Colo.

Daphnogene angelica?, Lesquereux not Heer. □

Zizyphus fibrillosus (Lesquereux) Lesquereux, 1878, pl. 52, f. 6 only.

Zizyphus distortus Lesquereux (part). □ Lesquereux, 1874b, 404.—1878, 275, pl. 51, f. 8, 9 only; Denver: Golden, Colo.—Knowlton, 1930, 110, pl. 47, f. 2; pl. 52, f. 1; Denver: Golden, Colo.; Dawson: east of Colorado Springs, Colo.

Zizyphus distortus Lesquereux (part) = *Zizyphus fibrillosus* (Lesquereux) Lesquereux.

Zizyphus electilis Hollick, 1930, 103, pl. 79, f. 7; Chignik: Alaska Peninsula.

Zizyphus fibrillosus (Lesquereux) Lesquereux. □ Lesquereux, 1888, 55; Denver: Golden, Colo.—Knowlton, 1924, 91; Animas: Pagosa Quad., Colo.—1930, 108, pl. 46, f. 6, 9; Denver: Golden, Colo.; Dawson: Ramah, Colo.

Zizyphus distortus Lesquereux (part), 1878, pl. 51, f. 7 only; Denver: Golden, Colo.

Zizyphus fibrillosus (Lesquereux) Lesquereux (part) = *Zizyphus daphnogenoides* Knowlton.

Zizyphus hesperius Knowlton, 1930, 111, pl. 46, f. 2; Denver: Golden, Colo.

Zizyphus hyperboreus, Lesquereux (part) not Heer, 1888, Denver: Golden, Colo.

Zizyphus hyperboreus Heer, 1868, 134, pl. 49, f. 2, 2b?—1869a, 482, pl. 50, f. 20.—1883, 130, pl. 67, f. 6.—?Hollick, 1936, 140, pl. 79, f. 5, 6; southwest of forks of Pumicestone Creek and at Jaw Mountain, Alaska Peninsula.

Zizyphus hyperboreus, Lesquereux (part) not Heer = *Zizyphus hesperius* Knowlton.

Zizyphus lamarensis Berry. □ Berry, 1913a, 571; Tuscaloosa: near Glen Allen, Ala.—1932c, 170, pl. 36, f. 4; Woodbine: Arthurs Bluff, Lamar Co., Tex.

Zizyphus lanceolatus Knowlton, 1924, 93, pl. 15, f. 3; Animas: Pagosa Quad., Colo.

Zizyphus laurinifolius Berry. □ Berry, 1925, 67, pl. 13, f. 4; Ripley: Carroll Co., Tenn.

Zizyphus lesquereuxii Knowlton. □ Knowlton, 1930, 111; Denver: Golden, Colo.

Zizyphus longifolia Newberry = *Zizyphus cinnamomoides* (Lesquereux) Lesquereux.

Zizyphus meekii Lesquereux. □ Cross, 1895, 211; Middle Park: Middle Park, Colo.

Zizyphus meigsii (Lesquereux) Berry. □ ?Hollick, 1936, 140, pl. 31, f. 3a; pl. 79, f. 4; Chignik River opposite Nun Point, Alaska.

Ceanothus meigsii Lesquereux. □ Lesquereux, 1871, 382; Wilcox: Mississippi.

Zizyphus perryi Berry, 1925, 69, pl. 13, f. 10; Ripley: Henry Co., Tenn.

Zizyphus pipéroides Lesquereux. □ Chaney, 1921a, 91; Puente: Los Angeles Co., Calif.

Zizyphus pseudochloroxylon Hollick, 1928, 213, pl. 77, f. 1-4; Collazo: Porto Rico.

Zizyphus pseudomeeki Hollick, 1930, 103, pl. 29, f. 6b; pl. 79, f. 3; Chignik: Alaska Peninsula.

Zizyphus ripleyensis Berry, 1925, 68, pl. 13, f. 5-9; Ripley: Henry and Carroll Cos., Tenn.—1928f, 442; Ripley: Carroll Co., Tenn.

Zizyphus sérrulatus Ward. □ Berry, 1935, 45; Middle Ravenscrag: Loc. 2, southern Saskatchewan.

Zizyphus townsendi Knowlton. □ Hollick, 1936, 140; Herendeen Bay, Alaska Peninsula.

Zizyphus varietas Hollick, 1930, 103, pl. 78, f. 6, 7a; Chignik: Alaska Peninsula.

Zizyphus wyomingianus Berry, 1930d, 73, pl. 11, f. 6, 7; so-called Bridger: Wind River Basin, Wyo.

Zizyphus sp. Hollick, 1924, 307, pl. 14, f. 5; Matanzas: Cuba.

Zizyphus sp. Lesquereux, 1888, 55; Denver: Golden, Colo.

ZYGOPHYLLUM Linné.

Zygophyllum? *eocenicum* Berry, 1930, 94, pl. 31, f. 1; Holly Springs: Mill Creek, Hardeman Co.; Tenn.

ERRORS AND OMISSIONS IN BULLETIN 696

In all citations from Newberry, J. S., *The flora of the Amboy clays*, read U. S. Geol. Survey Mon. 26, 1895 [1896], not Mon. 27 nor Mon. 35.

In all citations from Knowlton, F. H., *Fossil plants of the Esmeralda formation*, U. S. Geol. Survey 21st Ann. Rept., pt. 2, 1900, for 1901 read 1900.

In all citations from Berry, E. W., *Lower Cretaceous of Maryland*, Maryland Geol. Survey, Lower Cretaceous, 1911, for 1912 read 1911.

In all citations from Knowlton, F. H., *Fossil floras of the Vermejo and Raton formations of Colorado and New Mexico*, U. S. Geol. Survey Prof. Paper 101, 1917, for 1918 read 1917.

In all citations from Knowlton, F. H., *The Laramie flora of the Denver Basin of Colorado, with a review of the Laramie problem*, U. S. Geol. Survey Prof. Paper 130, add 1922 and page numbers.

Page SPECIES

- 40 Newberry, J. S.; before last entry, insert —The flora of the Amboy clays. U. S. Geol. Survey Mon. 26, 1895 [1896], pp. 1-260, pls. 1-58. A post-humous work, edited by Arthur Hollick.
- 45 *Abies nevadensis*; line 1, for *distichum miocenium* read *dubium*.
- 52 *Acer spicatum* Lamareck. Dawson; line 1, for 1866 read 1868.
- 53 *Acer*, fruit of, Dawson; line 1, for 1890 read 1891.
- 54 *Acerates amboyensis*; line 7, for Sherleys read Shirleys.
- 58 *Acrostichopteris longipennis*; line 3, for cxii read xcii.
- 58 *Acrostichopteris parvifolia*; line 5, for f. 4 read f. 3, 4; pl. clxxii, f. 14.
- 64 *Alnus kefersteinii*; line 9, delete period after Statu and read 1838 for 1837.
- 71 *Andromeda latifolia* (2nd synonym); line 1, for 1902 read 1895.
- 74 ANEMIA; spell ANEIMIA, here and in all subsequent species.
- 74 *Anemia elongata*; line 20, add Cretaceous?: Pt. Doughty, Orcas Island, Wash.
- 75 *Anemia supercretacea*; line 3, after page 248, add pl. 30, f. 5.
- 83 *Aralia looziana*; line 3, for f. 10-12, read 9; line 4, insert f. 2.
- 86 *Aralia triloba*; line 4, for p. 121 read p. 123.
- 87 *Aralia wardiana*; line 3, insert pl. xlviii, f. 10-12; for f. 2-5 read f. 1.
- 87 *Aralia wellingtoniana*; line 3, for Mon. 35 read Mon. 26; line 6, for Mon. 16 read Mon. 26.
- 91 *Araucaria bladenensis*; read *bladenensis*.
- 104 *Asplenium cecilensis*; line 2, after Upper Cret., insert 1916.
- 116 *Betula prisca*; line 3, for f. 3-6 read f. 3-7.
- 117 *Betula stevensonii*; line 3, insert pl. xxxiv, f. 1b.
- 126 *Bumelia florissanti*; line 2, for f. 4 read f. 4, 5.
- 129 *Callicoma microphylla*; line 1, for *drymeia* read *drymeja*.
- 131 *Carex clarkii*; line 5, for 1911 read 1916.
- 132 *Carex servata*; line 2, for f. 13c, d, read f. 13, 13a, d.
- 132 *Carex* sp., Lesquereux; line 1, for 1867 read 1887.
- 133 *Carpinus pseudo-caroliniana*; line 2, for p. 225 read p. 220.
- 146 *Cassia fischeri*; line 1, for *florissantimus* read *florissantianus*.

- 153 *Celastrphyllum arcinerve*; line 2, for cxliv read cxlvi.
 157 *Celastrus confluens*; line 2, for pl. ii read pl. xii.
 160 *Celastrus wardii*; line 7, for Lance: read Lebo:
 160 *Celtis lingualis*; line 3, for 1897 read 1797.
 177 *Cissus lesquereuxii*; line 2, insert after (Heer) the name Schimper.
 177 *Cissus tricuspidata*; line 1, for Lesquereux read Schimper.
 179 *Cladophlebis browniana*; line 25, for *ovodentata* read *ovatodentata*.
 180 *Cladophlebis constricta*; line 2, for f. 11 read f. 11, 12.
 189 *Combretum obovalis*; line 1, for *obovalis* read *obovale*.
 189 *Combretum ovalis*; line 1, for *ovalis* read *ovale*.
 189 *Combretum wilcoxensis*; line 1, for *wilcoxensis* read *wilcoxense*.
 189 *Comptonia diforme*; line 3, for vol. 2 read vol. 1.
 192 CONIOSPERMITES; line 1, for CONIOSPERMITES read CONOSPERMITES.
 192 *Coniospermities ellipticus*; line 1, for *Coniospermities* read *Conospermities*.
 198 *Cotinus fraterna*; line 1, for vol. 5, 1905 read vol. 6, 1906.
 199 *Crataegus betulaefolia*; line 1, for vol. 3 read vol. 16.
 199 *Crataegus engelhardti*; line 1, for vol. 3 read vol. 16.
 219 *Cyadeospermum rotundatum*; line 5, after Md. Geol. Surv. insert Lower Cret., 1911; delete 1912.
 230 *Dennstaedtia americana*; line 2, for vol. 53 read vol. 52.
 232 *Dicksonia oregonensis*; add the following synonym:
Aspidium monacarpum Fontaine, U. S. Nat. Mus. Proc., vol. 15, p. 490, pl. 83, f. 4-6a; pl. 84, f. 3, 3a, 1892; Kootenai: Great Falls, Mont.
 237 *Diospyros brachysepala*; line 16, for 1906 read 1908.
 238 *Diospyros? ficoidea*; line 6, add Knowlton, Washington Acad. Sci. Proc., vol. 11, p. 211, 1909; line 7, add Black Buttes, Wyo.; line 9, add Lance.
 243 DORYANTHES; line 1, for DORYANTHES read DORYANTHITES.
 243 *Doryanthes cretacea*; line 1, for *Doryanthes* read *Doryanthites*.
 246 *Dryophyllum subfalcatum*; line 5, add Washington Acad. Sci. Proc., vol. 11, p. 211, 1909; line 9, add Lance?
 248 *Dryopteris montanensis*; line 5, for pl. 83, f. 1-3a read pl. 83, f. 2, 3, 3a.
 251 *Dryopterites virginica*; line 4, for f. 14 read f. 7; pl. xxi, f. 14.
 265 *Fagopsis longifolia*; line 6, add —Lesquereux, U. S. Geol. Survey Terr. Rept., vol. 8, p. 161, pl. 29, f. 1-13, 1883.
 265 *Fagus americana*; line 1, for vol. 5, 1905 read vol. 6, 1906.
 266 *Fagus americana*; line 3, for Torreya, vol. 5 read vol. 15.
 266 *Fagus deucalionis*; line 2, for p. 447 read p. 446, pl. viii, f. 1.
 267 *Fagus polycladus*; line 1, for *polycladus* read *polyclada*.
 269 *Ficophyllum crassinerve*; line 22, for f. 3 read f. 8.
 271 *Ficus artocarpoides*; line 4, for 1907, p. 186 read 1909, p. 185.
 271 *Ficus asarifolia*; line 5, for pl. xli read pl. lxi.
 273 *Ficus cowanensis*; line 2, insert 1922, p. 139; for pl. 9, f. 3, 4 read pl. 9, f. 2, 3.
 284 *Ficus planicostata*; line 9, add 1922, p. 131. Washington Acad. Sci. Proc., vol. 11, p. 211, 1909; line 17, add Lance:.
 286 *Ficus pseudo-populus* read *pseudopopulus*.
 288 *Ficus speciosissima*; line 1, for *speciosissima* read *speciosissima*.
 290 *Ficus trinervis*; line 7, for lxxvii read xlvii.
 293 *Ficus* sp. Knowlton (2nd from top of page); line 2, add p. 185; line 3, add Forsyth, and 22 mi. south of Lismas, Mont.
 294 *Fontinalis* sp. Dawson; line 1, for 1868 read 1866.
 301 *Ginkgo adiantoides*; line 7, after pp. insert 185.

- 308 *Glyptostrobus europaeus*; line 21, after Birch Bay insert Bellingham Bay; line 25, insert Florissant: Florissant, Colo.
- 309 *Glyptostrobus ungeri*; line 5, for 1900 read 1902.
- 311 *Grewiopsis eocenica*; line 6, for *saportanea* read *saportana*.
- 312 *Grewiopsis saportanea*; line 1, for *saportanea* read *saportana*.
- 313 *Halymenites major*; line 7, for p. 84 read p. 87.
- 316 *Hedera obliqua*; line 1, for 1891 (1892) read 1895 (1896).
- 319 *Hicoria antiquora*; line 5, add .—Lesquereux, U. S. Geol. Survey Terr. Rept., vol. 7, pp. 289–299, pl. 57, f. 1–5; pl. 58, f. 2, 1878; line 16, for York read Yule.
- 325 *Hypnum revalvens*; line 1, for *revalvens* read *revolvens*.
- 327 *Ilex microphyllina*; line 1 for Knowlton and Cockerell, n. name read Cockerell, Torrey, vol. 11, 1911, p. 264.
- 331 *Juglans arctica*; line 1, for pl. xi, f. 2 read pl. xi, f. 2; pl. xli, f. 4c; pl. xlii, f. 1–3; pl. xliii, f. 3.
- 334 *Juglans hesperia*; line 1, for *oregonian* read *oregoniana*.
- 334 *Juglans leconteana*; line 6, insert 1922, p. 121; delete line 10 and substitute Black Buttes, Wyo.
- 336 *Juglans rhannoides*; line 1, insert (Rossmäessler) before Lesquereux.
- 336 *Juglans rugosa*; line 3, for pl. 54, f. 4, 5 read pl. 54, f. 5, 14;.
- 343 *Laurophyllum angustifolium*; line 1, for Mon. 27 read Mon. 26.
- 348 *Laurus primigenia*; line 8, delete Hollick citation; line 16, delete.
- 350 *Laurus utahensis*; line 2, for pl. xxvi read pl. 36.
- 351 *Leguminosites alternans*; line 5, for Wyo. read Utah.
- 351 *Leguminosites? arachioides*; line 2, delete 13.
- 353 *Leguminosites lesquereuxiana*; line 3, for lxxix read lxxxix.
- 371 *Magnolia cordifolia*; to read *Magnolia cordifolia* Lesquereux=*Combretum ovale*.
- 374 *Magnolia magnifolia*; line 2, for pl. lxxxv read pl. 84.
- 375 *Magnolia ovalis*; to read *Magnolia ovalis* Lesquereux=*Combretum ovale*.
- 377 *Magnolia tenuinervis*; line 3, after pl. xlv, f. insert 4?.
- 379 *Malapoenna harrellensis* spell *horrellensis*.
- 383 *Menispermites menispermifolius*; line 3, for *Acorites* read *Acerites*.
- 391 Between *Myrcia granadensis* and *Myrcia parvifolia* insert entry for *Myrcia havanensis* taken from p. 395, after correcting *Myrica* to read *Myrcia*, as noted below under page 395.
- 393 *Myrica diversifolia*; line 3, add pl. 50, f. 10=*Crataegus newberryi* Cockerell.
- 395 *Myrica havanensis*, correct spelling to read *Myrcia havanensis* and transfer entry to page 391.
- 396 *Myrica ludwigii*; line 5, for Wyo. read Utah.
- 396 *Myrica nigricans*; line 3, for 1883 read 1878.
- 398 *Myrica studeri?*; line 3, for Wyo.? read Utah.
- 398 *Myrica torreyi*; line 9, add Washington Acad. Sci. Proc., vol. 11, p. 207, 1909.
- 404 *Nectandra lancifolia*; line 6, for *Ieyelli* read *lyellii*.
- 405 *Nelumbites tenuinervis*; line 4, for clxii read clxxii.
- 407 *Nelumbo* sp. Knowlton (3rd species); line 2, after p. insert 189.
- 408 *Neuropteris angulata*; for *Trapa microphylla?* read *Trapa? microphylla*.
- 408 *NILSONIA* spell *NILSSONIA*, here and in all subsequent species.
- 411 *Nyssa biflora*; line 1, for vol. 5, 1905 read vol. 6, 1906.
- 417 *Onychiopsis göpperti*; line 30, for f. 7 read f. 6, 7.
- 424 *Otozamites macombii*; line 3, add Los Bronces and Yaki River, Sonora.
- 429 *Paliurus colombi*; line 8, for p. 269 read p. 369.
- 431 *Paliurus pealei*; line 3, add Knowlton, Washington Acad. Sci. Proc., vol. 11, p. 203, 1909; line 5, insert Lance:.

- 432 *Palmocarpus palmarum*; line 3, after p. 204 insert, 207.
 435 *Pecopteris ovoidentata*; for *ovodentata* read *ovatodentata*.
 439 *Persoonia lesquereuxii*; line 6, for 1892 read 1895.
 440 *Phaseolites juglandinus*; line 4, for Wyo. read Utah.
 441 *Phoenicopsis angustifolia*; line 3, for pl. liii read p. 52.
 448 *Phyllites rhomboideus*; line 2, for f. 7 read f. 8.
 450 *Phyllites* sp. Hollick read *Phyllites*? sp. Hollick.
 450 *Phyllites* n. sp. Knowlton, in Calvert; line 2, for p. 16 read p. 198.
 453 *Pieris scrobiculata* read *scrobiculata*.
 458 *Pinus* sp. Hollick (3rd species from bottom of page) read *Pinus* sp. ?Hollick.
 461 *Pityoxylon aldersoni*; line 2, for 1898 read 1899.
 467 *Platanus condoni*; line 5, after Mon. insert 35.,
 468 *Platanus haydenii*; line 8, for p. 16 read p. 198.
 470 *Platanus marginata*; line 10, after p. 361 insert, 370, 371.
 471 *Platanus raynoldsii*; line 10, delete 207..
 474 *Podogonium acuminatum*; line 2, add pl. xl, f. 9.
 475 *Podogonium americanum*; line 2, for f. 5 read f. 2.
 476 *Podozamites distantinervis*; line 2, for f. 9 read f. 5.
 481 *Polygonum* sp. Knowlton; line 2, for p. 199 read p. 198.
 482 *Populites lancastriensis*; line 2, for vii read iii.
 484 *Populus amblyrhyncha*; line 4, after pp. insert 185; line 5, after 202 insert 203, 207, 211, 213, 215.
 484 *Populus arctica*; line 2, for f. 5f read f. 5b; add pl. 19, f. 7b; pl. 48, f. 2b.
 486 *Populus cuneata*; line 2, for Ward read Newberry; line 3, insert Ward before U. S.
 489 *Populus glandulifera*; line 2, for lxxviii read lxxiii.
 492 *Populus monodon*; to read *Populus monodon*.
 493 *Populus nebrascensis rotunda* read *rotundata*.
 496 *Populus richardsoni*; line 2, for f. 1-5 read f. 1-5, 6b.
 498 *Populus zaddachi*; line 1, add Zaddach, Phys.-Öken. Ges. Königsberg, vol. 1, 1860, pp. 27-30, pl. 4; line 2, add Heer, vol. 1, 1868, p. 98, pl. 6, f. 1-4; pl. 15, f. 1b; line 3, add Lesquereux, Mus. Comp. Zool. Mem., vol. 6, No. 2, 1878, p. 11, pl. 8, f. 1-8.—U. S. Geol. Survey Terr. Rept., vol. 7, 1878, p. 176, pl. 22, f. 13; line 6, add Knowlton, U. S. Geol. Survey 20th Ann. Rept., pt. 3, 1900, p. 40, pl. 1, f. 11.
 501 *Potentilla anserina*; line 5, for 1878 read 1868.
 501 **PRAEENGELHARDTIA**; read **PARAENGELHARDTIA**.
 501 *Praeengelhardtia eocenica*; for *Praeengelhardtia* read *Paraengelhardtia*.
 502 *Proteaephyllum reniforme*; line 4, insert Fifteenth Ann. Rept., 1895, p. 360, pl. 4, f. 5, 6.
 512 *Pteris pinnaeformis*; read *pennaeformis* and *pseudopennaeformis*.
 512 *Pteris pseudopinnaeformis*; line 1, read *pseudopennaeformis*; lines 2 and 3, delete the Newberry citation; line 7, read *pennaeformis*; line 8, insert the Newberry citation.
 513 *Pteris* sp. Knowlton; read *Pteris*? sp.; line 1, insert 1922, p. 112.
 513 *Pterocarya americana*; line 4, delete, and insert Miocene: Florissant, Colo.
 516 *Pterospermites dentatus*; read *Pterospermites*.
 522 *Quercus chamissonis* read *chamissoni*.
 523 *Quercus cinereoides*; line 2, insert Knowlton, Washington Acad. Sci. Proc., vol. 11, 1909, p. 207.
 532 *Quercus milleri*; delete the entire citation and substitute: *Quercus milleri* Berry=*Quercus calvertonensis* Berry.

- 534 *Quercus palustris*; line 3, after idem, insert Torreya.
- 538 *Quercus sumpterensis*; read *sumterensis*.
- 539 *Quercus velutina*; lines 1 and 2, delete the Penhallow citation.
- 539 *Quercus viburnifolia*; line 3, for p. 207 read p. 191, 207; line 4, insert 1922, p. 127.
- 541 *Quercus* sp. Knowlton (6th species from bottom of page); line 2, for p. 197 read p. 185, 197; line 3, insert , 60 mi. south of Glasgow, Mont.
- 541 *Quercus* sp. Knowlton (5th species from bottom of page); line 1, for vol. 9 read vol. 11.
- 541 *Quercus* sp. Knowlton (3rd species from bottom of page); line 1, for p. 157 read p. 133.
- 541 Insert between 2nd and 3rd *Quercus* sp. Knowlton from bottom of page: *Quercus* sp. Knowlton, Washington Acad. Sci. Proc., vol. 11, 1909, p. 207 (2 species).
- 549 *Rhamnus salicifolius*; line 5, insert 1922; line 6, insert p. 155.
- 552 *Rhus mixta*; line 2, for pl. i, f. 5-8 read pl. ix, f. 13; line 4, add .—Knowlton, U. S. Geol. Survey 20th Ann. Rept., pt. 3, p. 49, pl. 3, f. 2, 3; pl. 6, f. 2, 3, 1900.
- 552 *Rhus myricaefolia*; line 2, for pl. ix, f. 13, read pl. i, f. 5-8.
- 556 *Ruffordia acrodenta*; line 2, for f. 5, 6 read f. 3, 4.
- 556 *Ruffordia göpperti*; line 5, for f. 3, 4 read f. 5, 6.
- 557 *Sabal grandifolia*; line 3, for p. 16 read p. 198; line 8, delete Carbon County, Wyo.
- 558 *Sabal rigida*; line 2, add Knowlton, Washington Acad. Sci. Proc., vol. 11, 1909, p. 207.
- 558 *Sabal? ungeri*; line 13, insert Eocene?: Bellingham Bay, Wash.
- 559 *Sabalites grayanus*; line 4, add Washington Acad. Sci. Proc., vol. 11, 1909, p. 204.
- 564 *Salix angusta*; line 7, for 1901 read 1900; line 9, for p. 207 read pp. 197, 207.
- 568 *Salix lavateri* Heer read *Salix lavateri* (Alexander Braun) Heer.
- 572 *Salix worthenii*; line 1, for *Myrica* read *Myrica*.
- 577 *Sapindus affinis*; line 5, for pl. xxxi read pl. 30; line 15, for west read east.
- 578 *Sapindus coloradensis*; line 5, insert p. 265 after 1878.
- 579 *Sapindus grandifoliolus*; line 5, following 1909 read pp. 189, 190, 195, 198, 203, 213, 214.
- 583 *Sassafras acutilobium*; line 3, insert Newberry, U. S. Geol. Surv., Mon. 26, 1895, p. 87, pl. xxv, f. 1-10; pl. xxvi, f. 2-6.
- 587 *Schizaeopsis americana*; line 1, for 1917 read 1911.
- 591 Insert *Sequoia brevifolia* Heer (part). Lesquereux=*Sequoia obovata*.
- 592 *Sequoia fastigiata*; line 9, for 1883 read 1888.
- 593 *Sequoia heeri*; line 6, after p. 152 add pl. 22, f. 1; line 13, for Lisner read Lismas.
- 595 *Sequoia longifolia*; line 6, insert Paper 130, 1922, p. 115.
- 595 *Sequoia nordenskiöldii* read *nordenskiöldi*.
- 596 *Sequoia reichenbachii*; line 2, after 5a add 8, 8b.
- 600 *Sequoia* sp.?; after 257 add 1905.
- 604 *Sparganium stygium*; line 8, for Dayton read Ranchester.
- 606 *Sphenolepidium sternbergianum*; line 4, insert Ward, Fifteenth Ann. Rept., 1895, p. 359, pl. 3, f. 1.
- 617 *Taxodium dubium*; line 2, for f. 3-15 read f. 5-15; line 22, for *Taxodium* read *Abies*; line 23, for 1873[1874] read 1872[1873].
- 618 *Taxodium occidentale*; line 6, after pp. insert 185; line 17, add Birch Bay and Bellingham Bay, Wash.

330 MESOZOIC AND CENOZOIC PLANTS OF NORTH AMERICA, 1919-37

- 623 *Thuja occidentalis*; line 2, for 1885 read 1868.
627 *Trapa?* *microphylla*; line 6, for p. 761 read 661; line 11, delete the ?.
634 *Ulmus newberryi*; line 3, for Mon. 26 read Mon. 35.
636 *Ulmus speciosa*; line 2, for Mon. 26 read Mon. 35.
640 *Viburnum antiquum*; line 4, for Bull. 47, p. 16 read Bull. 471, p. 198;
line 13, for Lisner read Lismas.
644 *Viburnum newberryanum*; line 4, for p. 313 read 213; add U. S. Geol.
Survey Bull. 471, 1912, p. 196.
659 *Zamites* sp. Dawson; line 1, for 1885 read 1886.
661 *Zizyphus meigsii*; line 1, after (Lesquereux) add Schimper.

