# SUPPLEMENT TO THE MONOGRAPH OF THE NORTH AMERICAN UMBELLIFERAE. 4

By JOHN M. COULTER and J. N. Rose.

# INTRODUCTION.

In 1888 we published the Revision of this family, and in 1900 our Monograph appeared. Since the latter publication enough material has accumulated to justify a short Supplement. It is to be remembered that the area covered is North America north of Mexico. This Supplement includes a record of all new species described since 1900 and of all transfers made by others which have seemed to us justifiable; descriptions of two new genera and six new species; the entry of a well-established introduced species; certain transfers which have seemed to us necessary; and a bibliography for the period since 1900. We have not included all changes that have been proposed, either because our material does not warrant an opinion, or because they do not seem to us to be justified. It is to be understood, therefore, that we have made no changes in the names used in the Monograph except as they are indicated in this Supplement.

#### BIBLIOGRAPHY.

The following citations include all publications of new species and varieties, within our range, since the appearance of the Monograph; and also the transfers from one genus to another in so far as they seem to us to be justified:

Blankinship, J. W. Mont. Agric. Coll. Sci. Studies 1: 89-94, 1906. Six species.

Bush, B. F. Trans. Acad. Sci. St. Louis 12: 57-63. 1902. Three species.

Elmer, A. D. E. Bot. Gaz. 41: 312. 1906. One species.

Jones, Marcus E. Contributions to Western Botany .12: 16-42. 1908. One hundred species.

Mackenzie, Kenneth K. Torreya 3: 158, 159, 1903. One species.

Nelson, Aven. Bull. Torr. Club 28: 223-227. 1901. Four species.

OSTERHOUT, GEORGE E. Bull. Torr. Club. 30: 236. 1903. One species.

OSTERHOUT, GEORGE E. Bull. Torr. Club. 31: 358. 1904. One species.

OSTERHOUT, GEORGE E. Muhlenbergia 5: 36, 1909. One species.

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The family name Apiaceae has been in general use in the Contributions, but we have retained the name Umbelliferae on account of the relation of this paper to the two preceding ones. Under the Vienna rules, it is made an exception to the rule for the formation of family names.

Piper, C. V. Bull. Torr. Club 29: 223, 224, 1902. Two varieties.

Piper, C. V. Contr. Nat. Herb. 11: 423. 1906. One species.

Rose, J. N. Proc. U. S. Nat. Mus. 29: 441, 442, 1905. One species.

Rose, J. N. Proc. Biol. Soc. Wash. 19: 96. 1906. One species.

Rydberg, P. A. Mem. N. Y. Bot. Gard. 1: 284-293. 1900. Two species.

Rydberg, P. A. Bull. Torr. Club 31: 573-575. 1904. Four species.

RYDBERG, P. A. Bull. Torr. Club 33: 147. 1906. Three species.

SMALL, J. K. Fl. Southeast. U. S. 856-876, 1903. Three species.

Suksdorf, W. N. Allg. Bot. Zeitsch. 12: 5, 6, 1906. Two species.

## GENERA AND SPECIES.

# HYDROCOTYLE L. Sp. Pl. 234, 1753.

Hydrocotyle rotundifolia Roxb. Hort. Beng. 21. 1814.

This species is native of Tropical Asia and Africa. It is grown in many places as a carpet plant under the name of Sibthorpia europea and is now an escape in a few places in this country. It was observed a number of years ago by J. N. Rose in Washington, where it now appears every year in the grounds about the National Museum; again in lawns in West Chester, Pennsylvania, by F. Wendle; and more recently at Louisville, Kentucky, by H. Garman, who states that it is a pest in a cemetery there. For further comment see Bailey's Cyclopedia of American Horticulture.

## ERYNGIUM L. Sp. Pl. 232, 1753.

Dr. J. K. Small has described the following species, which is closely related to E. diffusum:

Eryngium compactum Small, Fi. Southeast. U. S. 863, 1903.

#### **SANICULA** L. Sp. Pl. 235, 1753.

Sanicula serpentina Elmer, Bot. Gaz. 41: 312. 1906.

We have not seen this species, which comes from California.

Sanicula tripartita Suksdorf, Allg. Bot. Zeit. 12: 5, 1906.

We have not seen this species, which comes from Washington.

#### CHAEROPHYLLUM L. Sp. Pl. 258, 1753.

Mr. B. F. Bush has prepared a most excellent monograph of this genus, which was published in the Transactions of the Academy of Science of St. Louis.

His key to the species is as follows:

Leaves coarse	ely	divided.	Northern	species.
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Leaves finely divided. Southern species.

Fruit beaked, smooth.

Ribs narrower than the intervals.

A new species was published by him and two varieties were raised to specific rank, as follows:

Chaerophyllum floridanum (C. & R.) Bush, Trans. Acad. Sci. St. Louis 12: 62. 1902.

Chaerophyllum reflexum Bush, loc. cit.

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Chaerophyllum shortii (T. & G.) Bush, op. cit. 59.

WASHINGTONIA Raf. Am. Month. Mag. 2: 176, 1818.

Washingtonia longistylis villicaulis (Fernald) C. & R.

Osmorhiza longistylis villicaulis Fernald, Rhodora 10: 52, 1908.

MUSINEON Raf. Journ. Phys. 91: 71, 1820.

Musineon pedunculatum Nelson, Bull. Torr. Club 28: 225, 1901.

Musineon vaginatum Rydberg, Mem. N. Y. Bot. Gard. 1: 288, 1900.

BUPLEURUM L. Sp. Pl. 236, 1753.

Bupleurum purpureum Blankinship, Mont. Agric. Coll. Sci. Studies 1: 89. pl. 3. 1905.

This species is said by Blankinship to differ from B. americanum in its low sub-acaulescent habit, shorter leaves, wider obtuse involuced bractlets, smaller heads, smaller dark purple flowers, and shorter mericarp with fewer oil tubes in the intervals, and in its alpine habitat.

ZIZIA Koch, Nov. Act. Caes. Leop. Acad. 12: 128. 1824.

The following species of Zizia from Georgia has been described since the publication of our Monograph:

Zizia arenicola Rose, Proc. U. S. Nat. Mus. 29: 442. 1905.

CARUM L. Sp. Pl. 263, 1753.

Carum montanum Blankinship, Mont. Agric. Coll. Sci. Studies 1: 89. pl. 4. 1906. According to Blankinship it differs from C. gairdneri in its larger size, larger leaves, pinnately incised leaflets, large fruit, and longer styles.

Carum garrettii A. Nelson, sp. nov.

From a fascicle of fusiform roots, 60 to 100 cm. high; stem stouter than that of *C. gairdneri*; leaves simply pinnate or the uppermost simple, on long petioles gradually dilated into the broad base; leaflets from narrowly to broadly lanceolate or oblanceolate, or even ovate, 2 to 6 cm. long, from sessile to long-petioled; bracts 1 or 2; bractlets several, small, subulate; rays 6 to 12, 2 to 4 cm. long; raylets about 20, the pedicels very slender, less than 1 cm. long; fruit ovate, about 2 mm. long; stylopodium low-conical; oil tubes very large, filling the whole interval, only two on the narrow commissure; seed terete but for the depressions below each oil tube.

All the specimens were secured by Mr. A. O. Garrett, of the Salt Lake City High School; no. 2053 (in fruit), Wasatch Mountains, Utah, September 6, 1906 (type); no. 2158 (in flower), City Creek Canyon, Utah, July 25, 1907. Mr. Garrett is growing the species in his garden and reports that it retains the characters as given above.

Type in the Rocky Mountain Herbarium, Laramie, Wyo. Photographs and fragments of type in the National Herbarium (no. 506631).

HARPERELLA Rose, Proc. Biol. Soc. Wash. 19: 96, 1906.

HARPERIA Rose, Proc. Nat. Mus. 29: 441, 1905, not Fitzgerald, 1904.

This genus has been described since the publication of our Monograph, and is represented by the following species from Georgia and Alabama:

Harperella nodosa Rose, Proc. Biol. Soc. Wash. 19: 96. 1906.

ALETES C. & R. Rev. N. Am. Umbell. 27, 1888.

Aletes obovata Rydberg, Bull. Torr. Club 31: 573. 1904.

PTILIMNIUM Raf. Am. Month. 4: 192. 1819.

Discopleura DC, Mém. Ombell, 38, 1829.

Ptilimnium costatum. (Ell.) C. & R.

Ammi costatum Ell. Bot. S. C. & Ga. 1: 350, 1821.

Discopleura capillacea costata DC. Mém. Ombell. 39. pl. 8. f. B. 1829.

Discopleura costata Chap. Fl. South. U. S. 162, 1860,

Stems stout and erect, 120 to 150 cm. high, 1 cm. in diameter, hollow, strongly fluted; leaves long-petioled, somewhat rigid, finely dissected, the segments very numerous, crowded, and appearing verticillate; pedancles short and stout, 10 cm. long or less; involucial bracts simple or deeply cleft; involuced bractlets linear, entire, short; umbels few, large; rays 4 cm. long; pedicels 7 mm. long; flowers autumnal, white; fruit ovate, 4 to 5 mm. long, the dorsal and intermediate ribs prominent; style slender, much longer than the prominent stylopodia.

"Swamps along the margin of the Ogeechee River," Georgia (type locality), and swamps near Wilmington, North Carolina.

When the Monograph was written, our only material of this form consisted of flowering specimens from G. McCarthy, collected in swamps near Wilmington, North Carolina, and attention was called to the stouter habit and the leaf characters in which it differed from P. capillaceum. Edwin B. Bartram has now sent us fruiting material from Wilmington which confirms Elliott's statement as to its autumnal habit and larger fruit with more prominent ribs. Mr. Bartram's letter is as follows:

In your Monograph of the Umbelliferae I notice a reference to a species of Ptilimnium from Wilmington, North Carolina, that had not at that time been collected in good fruiting condition. While collecting in this region last fall, I noted this plant with particular interest and was fortunate in securing one head with mature fruit. The plants I observed had finely dissected, rather rigid leaves, and stout hollow stems about 1 cm. in diameter at the base and averaged about 12 dm. in height. It seems to be very distinct from P. capillaceum of the coastal plain, and the long recurved styles as well as the size and shape of the fruit and general habit rather suggest some specific if not generic distinction.

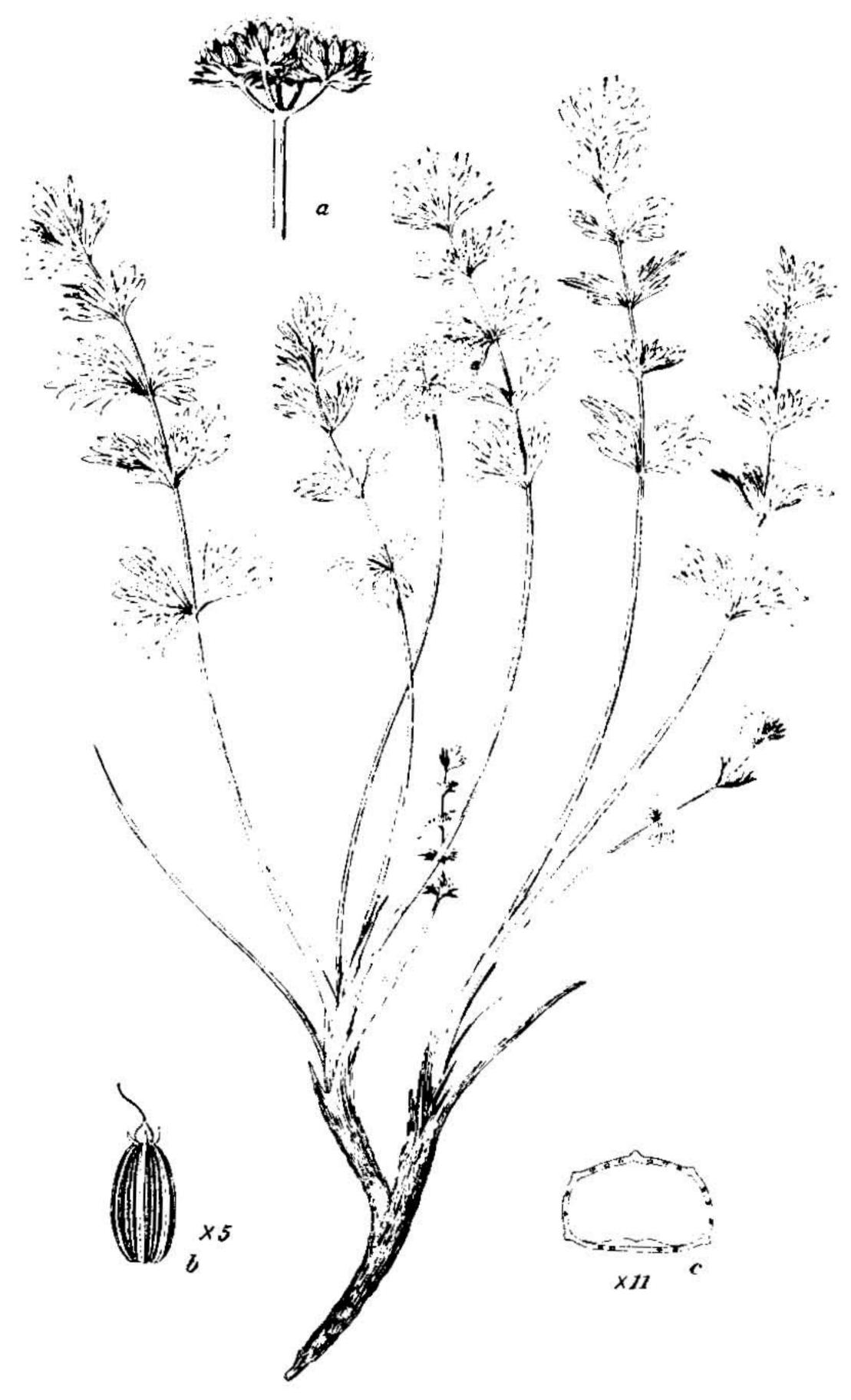
#### Ptilimnium missouriense C. & R. sp. nov.

Stems stout, 60 to 90 cm. high, somewhat fluted; leaves short-petioled, finely dissected; peduncles 16 cm. long or less; involucral bracts simple or cleft, linear or with linear lobes; involuced bractlets linear, entire; rays 10 to 35, nearly equal in each umbel, 2 to 5 cm. long; pedicels 3 to 8 mm. long; flowers autumnal, white; calyx teeth acute, prominent but shorter than the stylopodium; fruit broadly ovate, 2 to 3 mm. long; dorsal and intermediate ribs filiform; stylopodia prominent; styles long, slender.

Collected by George W. Lettermann at Allenton, Missouri, August 27, 1878 (type), and by B. F. Bush in Butler County, Missouri, October 16, 1905 (no. 3709).

Type in U. S. National Herbarium no. 140648.

This species has been distributed as P. nuttallii, but its very different fruit justifies our giving it specific rank.



LIGUSTICELLA EASTWOODAE C. & R.

## Ptilimnium texense C. & R. sp. nov.

Stems slender, erect, 70 to 90 cm. high, somewhat branching near the top; leaves short-petioled, finely dissected, the segments numerous and filiform; pedancles slender, 10 cm. long or less; involucial bracts numerous, 3-parted, the lobes linear; involuced bractlets linear, entire; rays about 20, nearly equal, 4 cm. long; pedicels 6 to 8 mm. long; flowers autumnal, white; calyx teeth large; fruit oblong, 2 mm. long; dorsal and intermediate ribs filiform; stylopodia prominent, crowned by the short styles.

Collected by F. W. Thurow, near Hockley, Texas, September, 1890.

Type U. S. National Museum no. 41256.

A reexamination of this material has convinced us that this is a good species, combining, as stated in the Monograph, the cleft involucral bracts, characteristic fruit ribs, and shorter styles of *P. capillaceum* with the stouter habit, smaller fruit, and larger calvx teeth of *P. mutallii*.

# LIGUSTICUM L. Sp. Pl. 250. 1753.

The following species has been segregated from L. simulans C. & R.:  $^a$ 

Ligusticum affine A. Nelson, Bull. Torr. Club 28: 223, 1901.

# LIGUSTICELLA (!. & R. gen. nov.

Calyx teeth evident; fruit ovate, flattened laterally, glabrous; carpel with filiform ribs, the laterals no more prominent than the dorsals; stylopodium conical; oil tubes 2 or 3 in the intervals, 4 on the commissural side; seed considerably broader than thick, with nearly plane face.

Low, glabrous, acaulescent perennials, with small, simply pinnate leaves, no involucre (rarely 1 or 2 caducous bracts), involucels of broad, toothed bractlets, and yellowish green flowers in few-rayed, compact umbels.

The genus is founded on Ligusticum eastwoodae C. & R., and differs from Ligusticum in its acaulescent habit, simply pinnate leaves, small and compact few-rayed umbels, yellowish flowers, and equal filiform ribs of the fruit. It resembles Orumbella in habit and foliage; but that genus has a conspicuous involucre, prominently ribbed fruit, and purple flowers. Furthermore, Orumbella is an Alaskan coast plant, white Ligusticella is a high alpine plant of Colorado.

#### Ligusticella eastwoodae C. & R.

PLATE LXXXII.

Ligusticum eastwoodae C. & R. Contr. Nat. Herb. 3: 320. pl. 13, 1895.

High mountains of Colorado.

EXPLANATION OF PLATE LXXXII.—Plant: a, fruiting umbel: b, dorsal view of carpel: c, cross section of carpel. Plant natural size: a, natural size: b, scale 5: c, scale 11.

# ORUMBELLA C. & R. gen. nov.

Calyx teeth small, but evident; fruit shortly oblong, flattened laterally, glabrous; carpel with prominent ribs, the lateral ones slightly broader; stylopodium conical; oil tubes 2 or 3 in the intervals, 2 to 4 on the commissural side; seed with round back and plane face.

Low, glabrous, acaulescent perennials, with small, simply pinnate leaves, conspicuous involucre, involucels of narrow bractlets, and purple flowers in few-rayed umbels.

The genus is founded on Ligusticum macounii C. & R., and differs from Ligusticum in its acaulescent habit, simply pinnate leaves, conspicuous involucre, small few-rayed umbels, and minor differences in the fruit.

The name Orumbella refers to the coastal habitat of the plant.

#### Orumbella macounii C. & R.

Ligusticum macounii C. & R. Contr. Nat. Herb. 1: 289. pl. 23. 1893. Only known from Cape Vancouver, Alaska.

#### CONIOSELINUM Hoffm, Gen. Umb. XXVIII, 1814.

Conioselinum scopulorum (Gray) C. & R. Contr. Nat. Herb. 7: 151, 1900.

Conioselinum coloradense Osterhout, Muhlenbergia 5: 36. 1909.

Mr. George E. Osterhout has proposed a new species of Conioselinum which we are unable to separate from C. scopulorum.

# ANGELICA L. Sp. Pl. 250, 1753.

# Angelica dilatata A. Nelson, sp. nov.

Glabrous, one-half to one meter high; lower leaves ternate, then pinnate; the upper nearly simply pinnate, with greatly dilated petioles, sometimes the uppermost reduced to the dilated petiole or the petiole tipped with a diminutive biternate leaf; leaflets broadly obovate to ovate, glaucous beneath, nearly or quite sessile, obscurely and somewhat irregularly serrate, or rarely with a basal lobe on one side; the dilated petioles 10 to 20 cm. long, 5 to 6 cm. broad when spread out; umbel about 30-rayed, the involucre wanting or represented by 1 or 2 more or less conspicuous bracts; involucels none; rays 5 to 8 cm. long, nearly or quite glabrous; fruit oblong-elliptic, obscurely and sparsely hirsute, less than 5 mm. long; lateral wings broader than the low dorsal and intermediate ones; oil tubes solitary in all the intervals; pedicels unequal, usually much longer than the fruits.

Collected by A. O. Garrett near mountain streams in City Creek Canyon, Salt Lake City, Utah, July 25, 1907, no. 2127; fruiting specimens same station in 1908.

Most nearly allied to A. kingii (Wats.) C. & R., which differs in being an aquatic, with narrower leaflets, with only 5 to 10 rays, and with pedicels and fruit subequal.

Type in Rocky Mountain Herbarium, Laramie, Wyoming; fragments and photograph in U.S. National Herbarium.

#### PHELLOPTERUS Nutt. in Torr. & Gr. Fl. 1: 623, 1840.

Phellopterus camporum Rydberg, Bull. Torr. Club 31: 574, 1904. We have not seen this species.

#### AULOSPERMUM C. & R. Contr. Nat. Herb. 7: 174, 1900.

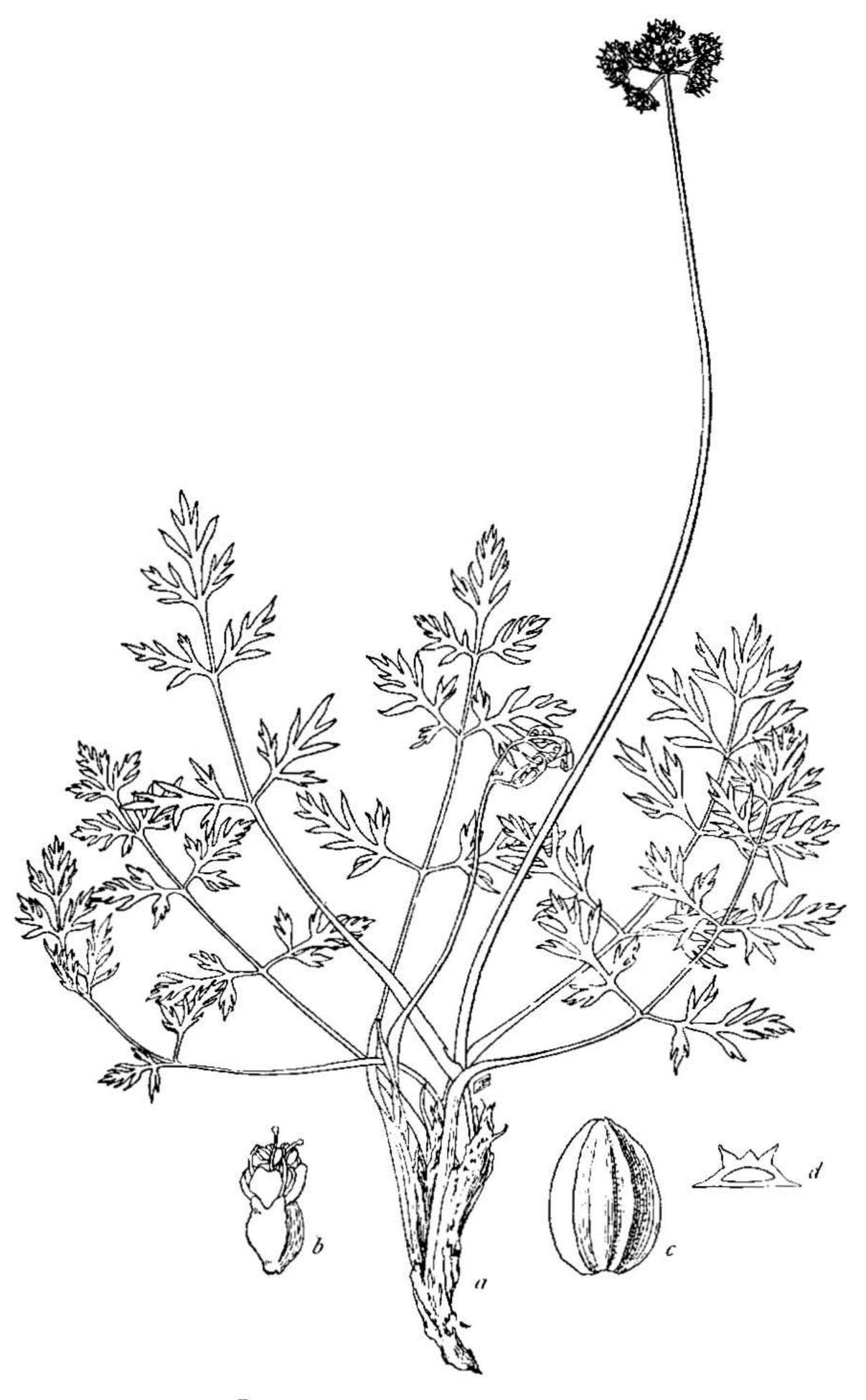
Mr. George E. Osterhout has described the two following species from Colorado:

Aulospermum angustatum Osterhout, Bull. Torr. Club 31: 358. 1904.

Aulospermum planosum Osterhout, Bull. Torr. Club 30: 236, 1903.

# CYMOPTERUS Raf. Journ. Phys. 89: 100, 1819.

Mr. Jones has merged under Cymopterus the following genera of our Monograph: Aulospermum C. & R., Oreoxis Raf., Phellopterus Nutt., Pseudocymopterus C. & R., Pteryxia Nutt., and Rhysopterus C. & R. This wholesale merging of distinct groups of species is based on a conception with which we can not sympathize. In this same spirit Otto Kuntze united Cereus and Opuntia, Aster and Solidago, etc. The taxonomic work of to-day is moving away from the idea of con-



PSEUDOCYMOPTERUS TIDESTROMII C. & R.

solidating into one comprehensive and ill-defined genus a number of sharply distinguished groups. We see no reason why the genera thus merged should not continue to be recognized as defined in the Monograph.

The following new species and varieties described by Mr. Jones under Cymopterus we have had no opportunity to study:

Cymopterus aboriginum Jones, Contr. Western Bot. 12: 22. 1908.

Cymopterus aboriginum oblongus Jones, loc. cit. 23.

Cymopterus aboriginum ovalis Jones, loc. cit. 22.

Cymopterus aboriginum subternatus Jones, loc. cit. 23.

Cymopterus basalticus Jones, loc. cit. 16.

Cymopterus humboldtensis Jones, loc. cit. 21.

Cymopterus lapidosus deserti Jones, loc. cit. 21.

Cymopterus owenensis Jones, loc. cit. 26.

PSEUDOCYMOPTERUS C. & R. Rev. N. Am. Umbell. 20. 1888.

Pseudocymopterus aletifolius Rydberg, Bull. Torr. Club 31: 574. 1904.

Pseudocymopterus multifidus Rydb. Bull. Torr. Club 33: 147. 1906.

Pseudocymopterus montanus multifidus Rydb. Bull. Torr. Club 31: 574. 1904.

Pseudocymopterus purpureus (C. & R.) Rydb. Bull. Torr. Club 33: 147. 1906.

Pseudocymopterus sylvaticus A. Nelson, Bull. Torr. Club 28: 224. 1901.

Pseudocymopterus tenuifolius (A. Gray) Rydb. Bull. Torr. Club 33: 147, 1906.

Pseudocymopterus tidestromii C. & R. sp. nov. Plate LXXXIII.

Mostly acaulescent, from a multicipital caudex; leaves once pinnate, usually less than 10 cm. long; leaflets ovate to lanceolate in outline, more or less deeply incised (this sometimes resulting in a second pinnation), the ultimate lobes narrowly lanceolate to linear, sharp-pointed, the lower ones often cleft again; peduncles slender, usually less than 20 cm. long; umbel 8 to 10-rayed, with involucels of numerous conspicuous, linear (mucronately tipped) bractlets longer than the deep-yellow flowers; rays rather unequal, the longest about 10 mm. long; pedicels about 1 mm. long.

Collected by Ivan Tidestrom on slopes of Mount Terrell, Wasatch Mountains, altitude 3,075 meters, August 27, 1908, no. 1811.

Type U. S. National Herbarium no. 506215.

Nearest P. multifidus Rydb., but mostly acaulescent and with different leaf dissection.

EXPLANATION OF PLATE LXXXIII.—a, Plant; b, flower; c, dorsal view of carpel; d, cross section of immature carpel. a, Natural size; b, c, d, scale b.

#### PLEIOTAENIA C. & R.

Polytaenia DC. Mém. Ombell. 53, 1829, not Polytaenium Desv. Mem. Soc. Linn. Paris 6: 218, 1827.

Mr. William R. Maxon has called our attention to the fact that the name of the Umbelliferous genus Polytaenia had been given to a genus of ferns two years before its publication by De Candolle. While some would hesitate to rename Polytaenia

simply because it is a homonym, all will admit the necessity of doing so since the Polytaenium Desv., long relegated to synonymy, should doubtless be restored.

The genus contains a single species and a variety.

Pleiotaenia nuttallii (DC.) C. & R.

Polytaenia nuttallii DC. Mém. Ombell. 54. pl. 13. 1829.

Pleiotaenia nuttallii texana C. & R.

Polytaenia nuttallii texana C. & R. Contr. Nat. Herb. 7: 192. 1899.

PSEUDOTAENIDIA Mackenzie, Torreya 3: 158. 1903.

This genus has been described since the publication of the Monograph, and is represented by the following species from the mountains of Virginia and West Virginia:

Pseudotaenidia montana Mackenzie, loc. cit. 159.

LEPTOTAENIA Nutt. in Torr. & Gr. Fl. 1: 629, 1840.

Cusickia Jones, Contr. Western Bot. 12: 39, 1908.

In the generic description published in the Monograph, the range in number of oil tubes was not changed from its original statement. The newer species showed that this range must be changed from "3 to 6 in the intervals," to read "1 to 6 in the intervals, and sometimes none (L. anomala)."

Mr. Jones has established a new genus Cusickia, based upon our L. minor. A reexamination of the genus has not shown us any more than specific differences between this species and the other species of Leptotaenia; and Mr. Jones has not called attention to the differential characters he has in mind.

COGSWELLIA Sprengel in Roem. & Schult. Syst. Veg. 6: xlviii. 1820.

LOMATIUM Raf. in Journ. Phys. 89: 101. 1819, not Lomatia R. Br. 1810.

In the preparation of our Monograph the fact that Lomatium Raf. was a homonym escaped us, though made evident by Schultes's observation appended to Sprengel's description: "Nomen mutandum, cum jam sit Lomatia Rob. Brown." In consequence of this, Mr. Marcus E. Jones has very properly transferred to Cogswellia most of our species of Lomatium. We append a list of the species of Cogswellia, with such modification of the list of Mr. Jones as seems to us necessary. We can not follow him, however, in the merging of Euryptera Nutt. and Cynomarathrum Nutt. under Cogswellia, for the general reason intimated under Cymopterus above.

Cogswellia alata C. & R.

Lomatium alatum C. & R. Contr. Nat. Herb. 7: 228, 1900.

Cogswellia ambigua (Nutt.) Jones, Contr. Western Bot. 12: 32, 1908.

# Cogswellia angustata C. & R.

Peucedanum martindalei angustatum C. & R. Bot. Gaz. 13: 143. 1888. Lomatium martindalei angustatum C. & R. Contr. Nat. Herb. 7: 225. 1900. Cogswellia martindalei angustata Jones, loc. cit. 34.

Cogswellia anomala Jones, loc. cit. 32.

# Cogswellia argensis (Jones) C. & R.

Peucedanum argense Jones, Contr. Western Bot. 8: 30, 1898.

## Cogswellia artemisiarum (Piper) C. & R.

Lomatium macrocarpum artemisiarum Piper, Bull. Torr. Club 29: 223. 1902. Lomatium artemisiarum Piper, Contr. Nat. Herb. 11: 423. 1906.

Cogswellia austinae (C. & R.) Jones, 12: 35, 1908.

Cogswellia bicolor (S. Wats.) Jones, loc. cit. 33,

Cogswellia brecciarum Jones, loc. cit. 32

Cogswellia brevifolia (C. & R.) Jones, loc. cit. 32.

Cogswellia canbyi (C. & R.) Jones, loc. cit. 33.

Cogswellia caruifolia (Hook. & Arn.) Jones, loc. cit. 34.

Cogswellia caruifolia patens Jones, loc. cit. 34.

Cogswellia circumdata (S. Wats.) Jones, loc. cit. 33.

Cogswellia congdoni (C. & R.) Jones, loc. cit. 34.

Cogswellia cous (S. Wats.) Jones, loc. cit. 33.

Cogswellia cusickii (S. Wats.) Jones, loc. cit. 32.

Cogswellia dasycarpa (Torr. & Gr.) Jones, loc. cit. 34.

Cogswellia daucifolia (Nutt.) Jones, loc. cit. 34.

Cogswellia decipiens Jones, loc. cit. 38.

Cogawellia donnellii (C. & R.) Jones, loc. cit. 34.

Cogswellia elliptica (T. & G.) Jones, loc. cit. 33.

Cogswellia farinosa (Hook.) Jones, loc. cit. 33.

## Cogswellia flava (Suksdorf) C. & R.

Lomatium placum Suksdorf, Allg. Bot. Zeitsch. 12: 6. 1906.

Lomatium macrocarpum semivittatum Piper, Bull. Torr. Club 29: 224, 1902.

# Cogswellia foeniculacea (Nutt.) C. & R.

Ferula foeniculacea Nutt. Gen. 1: 183, 1816.

Cogswellia villosa Spreng, in Roem. & Schult. Syst. 6: 588, 1820.

Lomatium foeniculaceum C. & R. Contr. Nat. Herb. 7: 222, 1900.

Cogswellia geyeri (S. Wats.) Jones, loc. cit. 33.

Cogswellia gigantea (C. & R.) Jones, loc. cit. 32.

Cogswellia gormani (Howell) Jones, loc. cit. 33.

## Cogswellia grayi C. & R.

Lomatium grayi C. & R. Contr. Nat. Herb. 7: 229, 1900.

Cogswellia millefolia Jones, loc. cit. 35.

Peucedanum millefolium S. Wats. Bot. King Surv. 129, 1871, not Sonder, 1861-62.

Cogswellia hallii (Watson) Jones, loc. cit. 35.

Cogswellia hendersonii (C. & R.) Jones, loc. cit. 33.

Cogswellia jaredii (Eastwood) C. & R.

Peucedanum jaredii Eastwood, Zoe 5: 88. 1900.

Cogswellia jonesii (C. & R.) Jones, loc. cit. 34.

Cogswellia juniperina Jones, loc. cit. 34.

Cogswellia laevigata (Nutt.) Jones, loc. cit. 32.

Cogswellia leibergi (C. & R.) Jones, loc. cit. 35.

Cogswellia lemmoni (C. & R.) Jones, loc. cit. 33.

Cogswellia leptocarpa (Nutt.) Jones, loc. cit. 33.

Cogswellia macdougali (C. & R.) Jones, loc. cit. 34.

Cogswellia macrocarpa (Nutt.) Jones, loc. cit. 33.

Cogswellia marginata (Benth.) Jones, loc. cit. 35.

Cogswellia martindalei (C. & R.) Jones, loc. cit. 34.

Cogswellia microcarpa (Howell) Jones, loc. cit. 35.

Cogswellia mohavensis (C. & R.) Jones, loc. cit. 34.

Cogswellia montana (C. & R.) Jones, loc. cit. 34.

Cogswellia nevadensis (S. Wats.) Jones, loc. cit. 33.

Cogswellia nevadensis cupulata Jones, loc. cit. 33.

Cogswellia nevadensis pseudorientalis Jones, loc. cit. 37.

Cogswellia nudicaulis (Pursh) Jones, loc. cit. 31.

Cogswellia oregana (C. & R.) Jones, loc. cit. 35.

Cogswellia orientalis (C. & R.) Jones, loc. cit. 33.

#### Cogswellia parishii C. & R.

Lomatium parishii C. & R. Contr. Nat. Herb. 7: 235, 1900. Cogswellia nevadensis parishii (C. & R.) Jones, loc. cit. 33.

Cogswellia piperi (C. & R.) Jones, loc. cit. 33.

Cogswellia platycarpa (Torr.) Jones, loc. cit. 32.

# Cogswellia platyphylla C. & R.

Peucedanum latifolium Nutt. in Torr. & Gr. Fl. 1: 625, 1840, not DC, 1830. Cogswellia latifolia Jones, loc. cit. 31.

Lomatium platyphyllum C. & R. Contr. Nat. Herb. 7: 238, 1900.

Cogswellia plummerae (C. & R.) Jones, loc. cit. 34.

# Cogswellia robustior C. & R.

Lomatium robustius C. & R. Contr. Nat. Herb. 7: 228, 1900. Cogswellia triternata robustior Jones, loc. cit. 32.

Cogswellia sandbergii (C. & R.) Jones, loc. cit. 35.

Cogswellia serpentina Jones, loc. cit. 42.

# Cogswellia simulans C. & R. sp. nov.

Caulescent, 30 to 40 cm. high, more or less tomentose, leaves twice-ternate, then pinnately compound; ultimate segments linear-oblong, apiculate, strongly nerved; umbel 6 to 8-rayed, the rays becoming equal, with conspicuous involucels of lance-olate, acute, scarious-margined bractlets; rays 4 to 6 cm. long; flowering pedicels very short, fruiting ones 5 to 7 mm. long; flowers lilae; calyx teeth evident, green; ovary floccose-pubescent; fruit oblong, somewhat pubescent, 15 to 17 mm. long, 7 to 8 mm. broad, with wings about as broad as body, and filiform dorsal and intermediate ribs; oil tubes very indistinct; seed and carpel very much flattened.

Collected by J. W. Congdon, "West Water Ditch," Mariposa, California, May 8 and 25, 1894, no. 117 (type); same collector, west side of Mariposa Valley, May 10, 1903.

Type U. S. National Herbarium no. 265776.

Related to C. macrocarpa, but differing in its very pubescent ovary, pubescent fruit, and its decidedly lilac-colored flowers.

Cogswellia sonnei (C. & R.) Jones, loc. cit, 34.

Cogswellia suksdorfii (S. Wats.) Jones, loc. cit. 32.

Cogswellia tomentosa (Benth.) Jones, loc. cit. 35.

Cogswellia torreyi (C. & R.) Jones, loc. cit. 35.

Cogswellia triternata (Pursh) Jones, loc. cit. 32.

Cogswellia utriculata (Nutt.) Jones, loc. cit. 34.

Cogswellia vaginata (C. & R.) Jones, loc. cit. 34.

#### Cogswellia vaseyi C. & R.

Lomatium vaseyi C. & R. Contr. Nat. Herb. 7: 216, 1900. Cogswellia caruifolia vaseyi Jones, loc. cit. 41.

## Cogswellia watsoni (C. & R.) Jones, loc. cit. 33.

Lomatium purpureum A. Nelson, Bull. Torr. Club 28: 226. 1901, is based upon material which we had referred to Pseudocymopterus (Monograph 188). We have had no opportunity to examine it, and append it as a possible Cogswellia.