

the area visited, and several collections that are of more than casual interest.

HOUSTONIA PARVIFLORA Holzinger.—This rare species is represented by a single number that is worthy of record: TEXAS: Corpus Christi, April 2, 1930, *Benke* 5198. Corollas very small, purple; plants small and spreading.

HOUSTONIA LANCEOLATA (Poir.) Britton, f. **albiflora**, f. nov. A forma typica corollis albis differt.—ARKANSAS: Mena, high situations in the high mountains, April 20, 1930, *H. C. Benke* 5206 (Herb. Field Mus., TYPE).

At the same locality there were obtained two collections of typical *H. lanceolata*, Nos. 5200 and 5202. In the former the corollas were red-purple; in the latter pale, and almost white.

HOUSTONIA TENUIFOLIA Nutt., f. **leucantha**, f. nov. Corollae albae.—ARKANSAS: Mena, rocky mountain tops, April 20, 1930, *H. C. Benke* 5207 (Herb. Field Mus., TYPE).

The typical form, represented by Nos. 5201 and 5204 from Bethesda Springs, Arkansas, has light rose-purple or light red-purple corollas. It grows in dry pine woods on mountain sides.

HOUSTONIA PUSILLA Schoepf, f. **albiflora**, f. nov. A forma typica tantum corollis albis differt.—LOUISIANA: New Iberia, March 16, 1930, *H. C. Benke* 5191 (Herb. Field Mus., TYPE), 5194.

The ordinary form of the species, with blue corollas, was growing at the same locality, the two forms in separate colonies. *Houstonia pusilla* was collected also at Fisher and Lake Charles, Louisiana, Mena, Arkansas, and Corpus Christi, Texas.

LATHYRUS JAPONICUS VERSUS L. MARITIMUS

M. L. FERNALD

THE Beach Pea has been so universally known as *Lathyrus maritimus*, either of Bigelow, “(L.) Bigelow” or (L.) Fries, that the change of name forced upon it by the alteration in the International Rules of Nomenclature adopted in 1930 seems at least unfortunate. By the original International Rules *L. maritimus* might be maintained as the correct name; but, with the intrusion into the Rules of the principle that the publication of a name (even though it be a taxonomic synonym or otherwise unavailable) prevents the transfer into the genus of an earlier published species under an identical trivial or specific name,

the combination *L. maritimus* has to be excluded and we must take up for the Beach Pea of Europe, North and South America and Asia the name *L. japonicus* Willd. The situation, both taxonomically and nomenclaturally, is confused and in order that the discussion of these matters may be as clear as possible it is necessary first to define the entities involved. The following synopsis of the chief varieties of this circumpolar (or circumboreal) species gives the leading diagnostic character.

- a. Stems 1-3 (rarely -10) dm. long, 0.5-2.5 mm. thick (in dried specimens): leaflets thin, submembranaceous, green and not strongly glaucous; the better developed ones (on each plant) 1-4 (-5) cm. long, 0.7-2.5 cm. broad; tendrils mostly simple: peduncles filiform, 0.5-1.5 mm. thick, often equaling or exceeding the subtending leaves: corolla 1.8-3 cm. long. *b.*
- b.* Plant glabrous or essentially so throughout. *L. japonicus* (var. *typicus*).
- b.* Plant more or less pubescent; the stem, lower leaf-surfaces, peduncles, pedicels and calyx all or nearly all densely pilose. Var. *aleuticus*.
- a. Stems 0.2-1.5 m. or more long, 2-5 mm. thick (in dried specimens): leaflets subcoriaceous or fleshy, glaucous; the better developed ones (on each plant) 2-7 cm. long, 1.5-4 (in the rare forma *acutifolius* down to 0.5) cm. wide; tendrils mostly fork-ing: peduncles stoutish, 1-2 mm. thick, definitely shorter than the subtending leaves: corolla 1.5-2.5 cm. long. *c.*
- c.* Stems and leaves glabrous or sparsely pilose and glabrate: rachis (of raceme), pedicels and calyx glabrous (or calyx-lobes merely ciliolate). *d.*
- d.* Leaflets elliptic or obovate, 1.5-4 cm. broad. Var. *glaber*.
- d.* Leaflets elliptic-lanceolate, acute, 0.5-1 cm. broad. Var. *glaber*, forma *acutifolius*.
- c.* Stems (at least above), lower surfaces of leaflets, peduncles, rachises, pedicels and calices densely pilose. Var. *pellitus*.

L. JAPONICUS Willd., var. **typicus**. *L. pisiformis* Houttuyn, Pfl. Syst. viii. 608, t. 65, fig. 1 (1782), not *L.* (1753). *L. japonicus* Willd. Sp. Pl. iii². 1092 (1803). *L. maritimus*, var. *Thunbergianus* Miquel, Ann. Mus. Bot. Lugd.-Bat. iii. 45—reprinted as Prol. Fl. Jap. 233 (1867).—Northeastern Siberia and Alaska, south to Japan, north-eastern China and Oregon; very locally also in Greenland and Labrador and in southern Chile. The following are characteristic. GREENLAND: Igaliko, 1906, *Chr. Deichmann*. LABRADOR: Chateau Bay, July 14, 1891, *Bowdoin College Exped.*, no. 58. ALASKA: Kuskokwim R., 1884, *Weinmann*; Attu Island, June 26, 1873, *W. H. Dall*; Akutan, *E. C. Van Dyke*, no. 320, in part (mixed with var. *aleuticus*); Karluk, *C. Rutter*, no. 73; mouth of Ankow R., *Funston*, no. 20; Burroughs Bay, *Walker*, no. 1014. WASHINGTON: Golden Gardens, Seattle, *J. W. Thompson*, no. 5247; Roft R., *Conard*, no. 324. OREGON: mouth of Columbia R., June, 1886, *Henderson*; mouth of Chetco R., June, 1884, *Howell*. SIBERIA: Karaginok (collector unknown). JAPAN: Simoda, *C. Wright*; Zenibako, July, 1882, *Takenobu*; Iwanai, July, 1882,

Takenobu; Atoika, near Kusuri, July 2, 1884, *Miyabe*; Nagasaki, *Oldham*, no. 365; Yokohama, 1862, *Maximowicz*. KOREA: Port Hamilton, 1859, *Wilford*; Korean Archipelago, 1863, *Oldham*. CHILE: Port Melinka, November 23, 1868, *Cunningham* (not quite typical).

Southward in the Northern Hemisphere passing to var. *glaber*: northward, in subarctic and arctic areas, more generally represented by

Var. **aleuticus** (Greene), n. comb. *Pisum maritimum* L. Sp. Pl. ii. 727 (1753), in small part (Lapland plant). *L. maritimus aleuticus* Greene in T. G. White. Bull. Torr. Bot. Cl. xxi. 450 (1894).—Southern Greenland, Labrador, arctic and subarctic northwestern America, arctic northeastern Siberia, and arctic Europe, south to Newfoundland, eastern Saguenay Co., Quebec, James Bay (northern Ontario), southern Alaska and southern Kamtchatka. The following belong here. GREENLAND: Julianehåb, 1855, *Rink*, 1889, *Hartz*; Igdlorssuit, Prins Christians Sund, 60° 10' N., *A. E. & M. P. Porsild*. LABRADOR: Nain, *Sornborger*, no. 220; Assizes Harbor, *C. S. Sewall*, no. 186; Cape Harrigan, *Bishop*, no. 404^a; Windy Tickle, *Bishop*, no. 404^b; Manak's Island, *Bishop*, no. 405; Mallijak, *Sornborger*, no. 221; Hopedale, *Bowdoin College Exped.* no. 223; Red Islands, *Bishop*, no. 404; Gready Island, *Bishop*, no. 406; Hawkes Harbor, *Abbe & Hogg*, no. 464; Petty Harbor, *Bishop*, no. 407; Rodney Mundy Island, *Abbe & Hogg*, no. 465; Lake Melville, *Bowdoin College Exped.* no. 117; Rigolet, *Wetmore*, Nat. Herb. Can., no. 102,993; Northwest River, *Wetmore*, Nat. Herb. Can. no. 102,994; White Bear River, *Woodworth*, no. 294; Battle Harbor, *Bowdoin College Exped.* no. 92; Battle Island, July 23, 1913, *Ekblaw*; Dumpling Harbor, July 16, 1864, *B. P. Mann*; Red Bay, *Bowdoin College Exped.* no. 24; Forteau, *Fernald & Wiegand*, no. 3642. NEWFOUNDLAND: Baccalieu Island, June 28, 1902, *Sornborger*; Barred Islands, August 13, 1903, *Sornborger*; Isthmus Cove, Pistolet Bay, *Wiegand, Gilbert & Hotchkiss*, no. 28,631; Flower Cove, *Fernald, Long & Dunbar*, no. 26,812; Grassy Island, St. John Bay, *Fernald, Long & Fogg*, no. 1839 (with forking tendrils of var. *glaber*); Port à Port, *Mackenzie & Griscom*, no. 10,333. QUEBEC: Archipel Ouapitagone, *St. John*, Herb. Geol. Surv. Can. no. 90,573; east coast of Hudson Bay, June 24, 1896, *Low*. ONTARIO: Moose Factory, Hudson Bay, *W. Haydon*, no. 36. ALASKA: Nome, *C. N. Powers*, no. 13; Golovin Bay, 1881, *J. Muir*; Unakakleet, Norton Sound, *Johnston & Palmer*, no. 12; Fort St. Michael, Norton Sound, 1865–66, *Bannister*; St. Paul Island, August, 1893, *C. H. Townsend*; Unimak Island, *Murie*, no. 65; Dutch Harbor, Unalaska, *Van Dyke*, nos. 8, 107; Atka Island, 1880, *Turner*; Nazan Bay, Atka Island, *Van Dyke*, no. 236; Kyska Island, July 4, 1873, *Dall*; Kodiak Island, *ex Acad. Petrop.*; Sitka, 1865–66, *Fisher*. SIBERIA: Arakamtchetchene Island, Bering Straits, *C. Wright*; Copper Island and Bering Island, *Stejneger*, no. 211; Bering I., July, 1891, *Grebnitsky*; Kamtchatka, *Beechy Voyage*; Petropavlovsk, June 3, 1928,

Eyerdam. RUSSIAN LAPLAND: "Lapponia," *Schrenck*; Gross Renntier Insel (or Bolschoj Olenij Ostrow), Kola-Fjord, July 7, 1927, *A. Tolmatchew*. NORWAY: "prope Uvebakken Finmarkia occidentalis." *Blytt*.

Var. *aleuticus*, characterized by its dense pubescence, is, it will be noted, the northernmost extreme of the species. While all the material of *L. japonicus* at hand from Japan, Washington and Oregon is glabrous, nearly all the material from Kamtchatka, Alaska, Labrador and Greenland is definitely pubescent, and all which I have seen from Newfoundland and from arctic Europe is also pubescent. The typical glabrous form of *L. japonicus* is sometimes found with var. *aleuticus* in Kamtchatka, Alaska, Greenland and Labrador, but it is there decidedly exceptional; but var. *aleuticus* is, very evidently, the common extreme in the subarctic and arctic floras. This conclusion is supported by Hultén's statement in regard to the inclusive *L. maritimus*: "The hairiness of the species varies a good deal, here [in Kamtchatka] as well as in other parts of its area. . . . On the whole, more northern specimens are more hairy, although this is not always the case."¹ Then Hultén adds: "Most of our [Kamtchatka] specimens should be referred to f. *velutinus* Fr."

The latter comment suggests that Fries had a forma *velutinus*, but I have been unable to find a satisfactory diagnosis of it. In 1846, in a tabulation of the Scandinavian occurrence of vascular plants, Fries used for a Lapland plant the name *Lathyrus maritimus*, var. *velutinus* Fries, *Summa Veg. Scand.* 46 (1846), a *nomen nudum*, quite without characterization. By inference, since Fries referred to a Lapland plant, it might be assumed that he had the arctic and subarctic extreme which I am here calling *L. japonicus*, var. *aleuticus*; but, unless his var. *velutinus* was published elsewhere with a diagnosis, the name cannot stand. Greene's *L. maritimus*, var. *aleuticus* was well described, with "stipules and leaflets thin, pubescent on the lower surface," "A fairly constant variety of the North Pacific coasts," and it rests upon definite type material.

Just as typical glabrous *Lathyrus japonicus* is represented southward by the coarser and thick-leaved, glaucous, shorter-peduncled and smaller-flowered var. *glaber*, so var. *aleuticus* gives way on the Atlantic coast of North America to var. *pellitus*, which, on the coast from the lower St. Lawrence to New Jersey, entirely replaces it and is much more common than the smooth var. *glaber*.

¹ Hultén, *Fl. Kamtch. and Adj. Isl.* iii. 115 (1929).

Var. **glaber** (Ser.), n. comb. *Pisum maritimum* L. Sp. Pl. ii. 727 (1753), for the most part. *P. dasigynum* Raf. Am. Mo. Mag. iv. 194 (1819). *L. maritimus* Bigel. Fl. Bost. ed. 2: 268 (1824), as a new species, not based on *Pisum maritimum* L. but purposely (though erroneously) differentiated from it. *P. maritimum*, β . *glabrum* Ser. in DC. Prodr. ii. 368 (1825). *L. californicus* Dougl. in Lindl. Bot. Reg. xiv. t. 1144 (1828). *Orobis maritimus* (L.) Reichenb. Fl. Germ. Excurs. 538 (1832). *L. maritimus* (L.) Fries, Fl. Scand. 106 (1835), direct transfer of *Pisum maritimum* L. *L. maritimus*, var. *glaber* (Ser.) Eames, RHODORA, xi. 95 (1909).—Temperate coasts of northwestern Europe from Finland, Sweden and Norway to Germany, Holland, Belgium, northwestern France, (Spain?), and the British Isles; Atlantic coast of North America from Newfoundland (lat. 50°) and the lower St. Lawrence (inland to the Isle of Orleans), Quebec, south to Long Island; inland on Lake St. John (Quebec), Oneida Lake (New York), the Great Lakes (southern Ontario, northern and western New York, northern Ohio, northern Indiana, Michigan, northern Illinois, Wisconsin and Minnesota), and Lake Winnipeg and the Lower Saskatchewan R. (Manitoba); Pacific North America from southern British Columbia to Humboldt Co., California; Japan. The following, selected from a very large series, are characteristic. NEWFOUNDLAND: Cow Head, *Fernald & Wiegand*, no. 3641; Shag Cliff, Bonne Bay, *Fernald, Long & Fogg*, no. 1841; French (or Tweed) Island, Bay of Islands, *Fernald, Long & Fogg*, no. 309. QUEBEC: Marten River, Gaspé Co., *Fernald & Pease*, no. 25,173; Tadousac, August 7, 1892, *G. G. Kennedy*; Ile-aux-Couleuvres, Lac St.-Jean, *Victorin*, no. 16,092; Ste. Anne de Kamouraska, *Svenson & Fassett*, no. 2013; Ile à Deux Têtes, *Victorin*, no. 25,524; St.-Laurent de l'Île d'Orleans, *Victorin*, no. 16,093. MAGDALEN ISLANDS: Alright Island, *Fernald, Long & St. John*, no. 7701; Ile du Hâvre-aux-Maisons, *Victorin & Rolland*, no. 9704. NEW BRUNSWICK: Miscou Island, *Blake*, no. 5585; Shediac, July 4, 1914, *F. T. Hubbard*; Quaco, *Fassett*, no. 2284; Harvey, *Fassett*, no. 2283. NOVA SCOTIA: Yarmouth, *Howe & Lang*, no. 7; Sand Beach, *Fernald & Linder*, no. 21,724. MAINE: Perry, *Fernald*, no. 1954; Brooklin, *A. F. Hill*, no. 629; Deer Isle, *Hill*, no. 2094; Camden, July 12, 1902, *G. G. Kennedy*; Monhegan Island, *Jenney, Churchill & Hill*, no. 3199; Wells, July 14, 1894, *Parlin*. NEW HAMPSHIRE: Newcastle Island, September 19, 1901, *E. F. Williams*; Rye, *B. L. Robinson*, no. 694. MASSACHUSETTS: Plum Island, August 4, 1899, *E. F. Williams*; Gloucester, June 7, 1896, *Rand & Robinson*; Revere, *Pease*, nos. 766, 7755; Weymouth, July 29, 1928, *Knowlton*; Plymouth, *Fernald, Hunnewell & Long*, no. 9755; Harwich, *Fernald & Long*, no. 16,697; Chilmark, 1891, *S. Harris*. RHODE ISLAND: Newport, *Mearns*, no. 594; South Kingston, June 11, 1927, *Bill & Emerton*; Westerly, August 21, 1913, *Bissell, Harger & Weatherby*; Block Island, *Fernald & Long*, no. 9754. CONNECTICUT: Old Lyme, June 13, 1912, *Blewitt*; Saybrook Point, September 7, 1908, *Blewitt*. NEW YORK: Flushing,

Long Island, June 21, 1887, *Poggenburg*; Oneida Lake, *Haberer*, no. 2623; Lake Ontario, Woodville, *House*, no. 8175; L. Ontario, Sterling, *Whetzel*, no. 12,341. PENNSYLVANIA: Presqu' Isle, Erie Co., *Pease*, no. 12,977, *Dickey*, no. 28. ONTARIO: Pt. Abino, June 15, 1901, *ex Biltmore Herb.*; Stevens Point, *MacMillan & Sheldon*, no. 1264. OHIO: Lake Erie, Ashtabula Co., September 12, 1914, *MacDaniels*; Lake Erie, Lake Co., August 12, 1922, *R. J. Webb*. INDIANA: Lake Michigan, Edgemoor, *Lansing*, no. 2596. MICHIGAN: Lake Huron, near Port Huron, July 23, 1899, *C. K. Dodge*; Lake Superior, Keweenaw Co., *Farwell*, no. 750; Lake Michigan, Stevensville, *Lansing*, no. 3232. WISCONSIN: Lake Michigan, Door Co., *E. J. Palmer*, no. 28,805. MINNESOTA: Grand Marais, *Rosendahl & Butters*, no. 4669. MANITOBA: Lake Winnipeg Valley, 1857, *Bourgeau*; Saskatchewan R. 1857-8, *Bourgeau*. BRITISH COLUMBIA: District of Renfrew, Vancouver Island, *Rosendahl & Butters*, no. 52; Nitinat Lake, west coast of Vancouver I., *W. R. Carter*, no. 139. WASHINGTON: San Juan Islands, *S. M. & E. B. Zeller*, no. 908; Pt. Ludlow, September 15, 1890, *F. Binns*; Bellingham Bay, Whatcom Co., *Suksdorf*, no. 1823 (transition to var. *typicus*). OREGON: Fidalgo Island, 1858, *Lyall*; Curry Co., *M. E. Peck*, no. 8746 (transition to var. *typicus*). CALIFORNIA: "N. W. Am.," *L. californicus* Dougl. cult. at Kew; Eureka, Humboldt Co., *Tracy*, no. 3736. JAPAN: Jahikari, Hokkaido, September 10, 1903, *Arimoto*. LATVIA: nördlich v. dem Kriedshafen bei Libau, *Grøntred*, no. 088. SWEDEN: Ystad, Sc. austro. *Ringius*; Tobbisborg, Skåne, July 17, 1928, *Asplund*. NORWAY: Klaüver in Insö, July 7, 1925, *Resvoll-Holmsen*. GERMANY: Baltic sea near Warnemünde, *Detharding* in Fl. Germ. Exsicc. no. 350, *Griewank* in F. Schulz, Herb. Norm, no. 774. FRANCE: St. Valery, Somme Distr., July, 1849, *Cosson*. ENGLAND: Kingsdown, Kent, June 15, 1837, *N. B. Ward*, August 17, 1907, *Raine*; Walmer, Kent, September, 1860, *John Stuart Mill*. IRELAND: Rosbigh, Kerry, *Andrews*, no. 311.

Var. GLABER, forma **acutifolius** (Bab.), n. comb. *L. maritimus*, β . *acutifolius* Bab. Man. Brit. Bot. 82 (1843).

Originally described from Unst, Shetland Islands: "Leaflets elliptic-lanceolate, acute, petioles straight, stems slender, straggling." I have seen no authentic material, but since Hooker, describing *L. maritimus* as "Glaucous, glabrous" (Hook. Stud. Fl. Brit. Isl. 104 (1870)) and Syme, similarly describing it "glabrous and glaucous" (Engl. Bot. ed. Syme, iii. 110 (1874)) both include var. *acutifolius* under it, without indication that it is not glabrous, I take var. *acutifolius* to be a form with narrow and acute leaflets such as rarely occurs within the normal range of the var. *glaber*. The only American material I have seen is from NEWFOUNDLAND: White Point, Bonne Bay, *Fernald, Long & Fogg*, no. 1840.

Var. **pellitus**, n. var., a var. *glabro* differt caulibus foliorum paginis inferioribus stipulis pedunculis rhachibus pedicellis calycibusque plerumque dense pilosis.—More common than var. *glaber* on the coast of North America from Newfoundland and the Gulf of St. Lawrence to New Jersey, inland on Lake St. John (Quebec) and Lake Champlain (Vermont); in Atlantic America commonly mistaken for typical *L. maritimus*. The following, from a very large representation, are characteristic. NEWFOUNDLAND: Dildo Run, Notre Dame Bay, *Fernald, Wiegand & Bartram*, nos. 5805, 5806; Ship Cove, Avalon Peninsula, 1928, *Agnes M. Ayre*; Great Barachois (or Barasway Bay), *Fernald, Long & Fogg*, no. 310; Grassy Island, St. John Bay, *Fernald, Long & Fogg*, no. 1838; Wild Cove, Bay of Islands, *Fernald & Wiegand*, no. 3640. ST. PIERRE ET MIQUELON: Anse à Henry, St. Pierre, *Arsène*, no. 321. QUEBEC: Ile à Marteau, Archipel de Mingan, *Victorin & Rolland*, no. 18,476; Clarke City Landing, *Fernald & Long*, no. 28,630; Moisie R., *P. W. Bowman*, no. 226; St. Alphonse, Ha-Ha Bay, Saguenay R., August 5, 1902, *E. F. Williams*; Baie de St. Prime, Lac St.-Jean, *Victorin*, no. 16,091; Cap à l'Aigle, *J. Macoun*, no. 66,817; Rivière du Loup, *Victorin*, no. 94; Ilet Brulé, Bic, *Rousseau*, no. 26,625; La Peninsule, Baie de Gaspé, *Victorin, Rolland, Brunel & Rousseau*, no. 17,249. MAGDALEN ISLANDS: Wolf Island (Pointe du Loup), *Fernald, Bartram, Long, & St. John*, no. 7700; Brion Island, *St. John*, no. 1918. NEW BRUNSWICK: St. Andrew's, June 28, 1900, *J. Fowler*. NOVA SCOTIA: St. Paul Island, *Perry & Roscoe*, no. 271 (TYPE in Gray Herb.); Bird Island, Cape Breton, *Nichols*, no. 584; Baddeck, *J. Macoun*, no. 19,056; Pictou, *Howe & Lang*, no. 480; Pembroke Shore, *Fernald & Linder*, no. 21,721; Sable Island, *St. John*, nos. 1265, 1266. MAINE: Moose Island, Passamaquoddy Bay, *Fernald*, no. 1958; Roque Bluffs, July 17, 1913, *Knowlton*; Little Duck Island, July 16, 1901, *Rand*; Swan's Island, *A. F. Hill*, no. 749; Matinicus, June 12, 1919, *C. A. E. Long*; Harpswell, *J. E. Dinsmore*, no. X264; Great Chebeague Island, *Fernald*, no. 1953; Kittery, *Fernald & Long*, no. 13,969. VERMONT: Lake Champlain, Burlington, June 14, 1897, *Eggleston*; South Burlington, June 26, 1912, *Knowlton*; Maquam Bay, Lake Champlain, Swanton, *S. F. Blake*, no. 3204. MASSACHUSETTS: Rockport, *L. B. Smith*, no. 651; Plymouth, September 2, 1911, *R. A. Ware*; Swansea, *S. N. F. Sanford*, no. 10,091; Bourne, *F. S. Collins*, no. 2846; Dennis, June 10, 1916, *Hunnewell & Blake*; Provincetown, *Fernald & Long*, no. 18,643; Penikese, *Fogg*, no. 1432; Cuttyhunk, *Fogg*, no. 2263. RHODE ISLAND: Tiverton, *E. A. Mearns*, no. 284; Little Compton, *S. N. F. Sanford*, no. 10,037; Westerly, August 31, 1919, *Weatherby & Collins*; Block Island, *Fernald & Long*, no. 9753. CONNECTICUT: Guilford, June 14, 1906, *G. H. Bartlett*; Madison, *Eames & Godfrey*, no. 8742; Stratford, *Blewitt*, no. 1747; Fairfield, August 22, 1898, *Eames*. NEW YORK: Fisher's Island, *St. John*, no. 2773; Riverhead, *St. John*, no. 2774. NEW JERSEY: Woodbridge, July, 1887, *Lighthipe*.

Var. *pellitus* may possibly occur throughout the range of var.

glaber. European descriptions, not distinguishing between the arctic *L. japonicus*, var. *aleuticus* and the more southern var. *glaber*, often define *L. maritimus* as glabrous or pubescent, though in descriptions based solely on the southern extreme in Europe, like those of Hooker and of Syme (cited in the discussion of forma *acutifolius*), we find the common European plant described as "glabrous." I have seen no convincing material of var. *pellitus* from Europe, temperate Asia, Pacific North America nor the Great Lakes, in most (or all) of which areas var. *glaber* is abundant. On the coast from the Maritime Provinces of Canada to Long Island var. *pellitus* is the common Beach Pea, the collections made in this area, without special selection, by botanists of the past century and represented in the herbaria before me showing 108 sheets of var. *pellitus*, 70 of var. *glaber*.

No one can regret more than I the necessity to abandon for the familiar Beach Pea, known to every observing visitor to our coasts and to the dunes of the Great Lakes, the unusually appropriate and very familiar name *Lathyrus maritimus*. But, unfortunately, this well known plant is the very exceptional victim of a system which in the main is aimed at conservation of established and familiar names, but in this case fails; and if it had been possible, as many hoped could be done, to win sufficient support in the International Congress at Cambridge for conservation of specific names, there would be hope of retaining *Lathyrus maritimus*. In summary, the bibliographic situation, regardless of varieties, is as follows:

PISUM MARITIMUM L. Sp. Pl. ii. 772 (1753).

LATHYRUS JAPONICUS Willd. Sp. Pl. iii². 1092 (1803).

PISUM DASIGYNUM Raf. Am. Mo. Mag. iv. 194 (1819).

LATHYRUS MARITIMUS Bigel. Fl. Bost. ed. 2: 268 (1824), published as a wholly distinct new species, which Bigelow purposely distinguished from *Pisum maritimum* L. (1753), saying: "it has been often taken for the *Pisum maritimum* of Europe. It is, however, decidedly a *Lathyrus*."

LATHYRUS CALIFORNICUS Dougl. in Lindl. Bot. Reg. xiv. t. 1144 (1828).

OROBUS MARITIMUS (L.) Reichenb. Fl. Germ. Excurs. 538 (1832).

LATHYRUS MARITIMUS (L.) Fries, Fl. Scand. 106 (1835), direct transfer of *Pisum maritimum* L. (1753).

The bibliography should make it clear that Bigelow in 1824 published as a wholly NEW SPECIES, *Lathyrus maritimus*, based on a wholly NEW TYPE,¹ the plant of the Boston region ("Beach, Dorchester, Chelsea"), and particularly emphasized that the Boston

¹ Bigelow's citation with doubt, of the "*Syn. PISUM MARITIMUM, Pursh?*," referred, of course, to the eastern American plant.

plant is not the European *Pisum maritimum* because it is “decidedly a *Lathyrus*.” The circumstance that *Pisum maritimum* L. was later found by Fries to be a *Lathyrus* and that in 1835 he published it as *L. maritimus* (L.) Fries in no way changes the fact that the name *L. maritimus* was already preëmpted by Bigelow for a plant which he purposely published as a new and different species. Under the original International Rules it was possible to argue (as some of my most discriminating nomenclatural correspondents have done) that, since Bigelow’s plant is *taxonomically* conspecific with *Pisum maritimum*, *Lathyrus maritimus* Bigel. (1824) is *taxonomically* synonymous with *Pisum maritimum* L. and that, therefore, the proper name for the aggregate-species is *L. maritimus* (L.) Fries (1835). Under the International Rules before their alternation at Cambridge such a solution was perhaps possible. But, with the newer emphasis on the TYPE, it becomes clear that Bigelow’s name, based on a wholly different type, is not at all a *nomenclatural* synonym of *Pisum maritimum*. Consequently, when Fries, in 1835, transferred *P. maritimum* into *Lathyrus*, the name *L. maritimus* was already preoccupied by a plant *validly published* as a different species, so that there was no place (under the now existing rules) for a *L. maritimus* based on a type different from that of Bigelow. It follows, therefore, that *L. maritimus* (L.) Fries is untenable, while the current citation of the authors of the combination, “(L.) Bigel.” very definitely misrepresents Bigelow’s intent; and, since two of the phases of the variable species had still earlier and available names, there is no course open, under the existing rules, but to adopt for the aggregate-species the earliest name not preëmpted, *LATHYRUS JAPONICUS* Willd. (1803).

It may further be stated that, although I am here treating *Lathyrus maritimus* Bigel. (under the name *L. japonicus*, var. *glaber*) as essentially the same as *Pisum maritimum* L. of Europe, there are really slight differences between them—enough so that extreme “splitters” might at any moment maintain that they are different species. Rafinesque, Bigelow, Douglas and Lindley have all done so! The foliage of the American plant averages rather larger than in the European: in the altogether too limited representation of European *L. japonicus*, var. *glaber* before me, the largest leaflets measure 4 cm. long and 2.3 cm. broad and the largest stipules are 2 cm. broad (Hooker says “*Leaflets* 1–2 in.”; Gams in Hegi, “2 bis 4 cm lang und $\frac{1}{2}$ bis gegen 2 cm breit”); but in the plant of the New England

coast (*L. maritimus* Bigel. *sen. str.*) the lower leaflets of each leaf are commonly 4–7 cm. long and 2–4 cm. broad, with the stipules up to 3.5 cm. broad. Consequently, although I am not myself separating the coarser, glabrous extremes from temperate Europe and temperate North America, it cannot be said that they are strictly identical. In fact, Nuttall, having var. *glaber* from the Great Lakes and calling it *Pisum maritimum*, said “differs from the European species in having a pubescent legume”;¹ whereupon Rafinesque, in a review of Nuttall’s work, promptly seized the opportunity: “*Pisum maritimum*, N., is not that of L.; it must be called *P. dasigynum*.”² The slight difference in the legume emphasized by Nuttall and capitalized by Rafinesque is not constant but when Lindley got hold of material of the coarser glabrous plant of temperate North America he did not hesitate to treat it as a distinct species, *L. californicus* of Douglas’s Journal ined. (Lindl. Bot. Reg. xiv. t. 1144), without a suggestion that it is a large development of the Sea Pea of Britain, the North Sea and the Baltic.

In view of the facts that *Lathyrus maritimus* Bigel. was by its author considered a new species, that Rafinesque had previously treated it as a new species, and that Lindley, getting apparently the same plant, also treated it as a distinct species, and in view, also, of the well known tendency of some taxonomists to see “species” where others see only varieties or minor forms, the provision of the revised International Rules is wise, that an earlier specific name cannot be transferred if “the resulting binary combination has been previously and validly published for a different species.”³ *Lathyrus maritimus* Bigel. was the name “validly published” for what Bigelow considered a different species, and it is sufficiently different so that by some other taxonomists it was independently treated as a new species and it may again be taken up as such. At any rate its *taxonomic* reduction is a matter of individual judgment; *nomenclaturally* it is a different species.

The identification of the various specific and varietal names involved in this discussion has, in the main, presented few difficulties; the most difficult is *Pisum maritimum* L. Typical *Lathyrus japonicus* Willd. is clearly the slender glabrous plant of Japan and adjacent

¹ Nutt. Gen. ii. 95 (1818).

² Raf. Am. Mo. Mag. iv. 194 (1819).

³ Art. 58 of the Proposals by the British Imp. Bot. Congr. adopted as Art. 48bis at Cambridge.

coasts, well illustrated by Houttuyn, whose plate was cited by Willdenow. Miquel's *L. maritimus*, var. *Thunbergianus* goes back to the same sources and to a specimen from Thunberg. The identity of Greene's *L. maritimus*, var. *aleuticus* is clear. As I point out in the discussion of it, it is possible that there is an earlier valid name for it in *L. maritimus*, var. *velutinus* Fries; but, as Fries originally published it, this was a *nomen nudum*.

Pisum maritimum L. Sp. Pl. ii. 727 (1753) was a mixture of at least two varieties. The Lapland element, judging from the material at hand from Lapland, was the small and slender, thin-leaved and large-flowered arctic plant which I am treating as *Lathyrus japonicus*, var. *aleuticus*. From this plant Linnaeus presumably derived the *pubescent* character emphasized in his description in Fl. Suec. no. 608 (1745). Most of the references given by Linnaeus in 1753 are to the coarser, glabrous and glaucous plant which grows from Finland and southern Scandinavia to Germany, France and Britain, the "English Sea-Pease" of Ray and other early authors cited by Linnaeus.

Rafinesque's *Pisum dasigynum* rested solely on Nuttall's *Pisum maritimum* from "shores of Lakes Erie, Huron and Michigan" and is consequently the common glabrous-leaved plant of the Great Lakes. Bigelow's description of his *Lathyrus maritimus* (1824) was characteristically complete and it unquestionably belongs to the common plant of "glaucous aspect" of Bigelow's region. This, as already pointed out, may be somewhat coarser than the common European plant, but enough smaller plants are found in America to bridge over the slight difference. *Pisum maritimum*, β . *glabrum* Seringe (1825) was simply and clearly characterized: "foliis glabris.—In Canada," and can be only the common glabrous plant of eastern Canada.

Phylogenetically *Lathyrus japonicus*, var. *aleuticus*, occurring as a tolerably uniform plant around the arctic and subarctic areas, would seem to be the primitive or ancestral type, which, pushing southward into more temperate conditions, has become modified into the glabrous but thin-leaved *L. japonicus*, var. *typicus* and into the two coarser and heavier-leaved extremes of temperate regions, vars. *glaber* and *pellitus*.

GRAY HERBARIUM.

PICEA GLAUCA, FORMA PARVA

M. L. FERNALD AND C. A. WEATHERBY

PICEA GLAUCA (Moench) Voss, forma **parva** (Victorin), comb. nov.
P. canadensis, forma *parva* Vict. Gymnosp. Quebec, 73 (1927).