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13
Alsinaceae.

Key to the Genera.

Calyx of united sepals.

Calyx with one or more pairs of bracts at the base.

Dianthus.

Calyx without bracts at the base.

Calyx 5-nerved, strongly 5-angled in fruit;
styles 2.

Vaccaria.

Calyx 10-nerved, not strongly angled
in fruit; styles more than two.

Usually with a tuft of radical leaves;
styles 5.

Lychnis.

Usually without a tuft of radical leaves;
styles 3 (rarely 4 or 5).

Silene.

Calyx of distinct sepals.

Stipules present; leaves ^{with or without others clustered} ~~commonly fascicled~~ in the
axils.

Axillary cluster of leaves present or wanting
but not appearing verticillate; styles 3.

Lissa.

2,
Axillary cluster of leaves present, appearing
verticillate; styles 5.

Spergula.

Stipules wanting; leaves not fascicled in the
axils.

Petals deeply 2-cleft or rarely absent.

Capsule cylindric, commonly curved.

Cerastium.

Capsule oblong or ovoid, not
curved.

Aline.

Petals entire or merely emarginate.

Leaves fleshy

Arumolonia.

Leaves very slightly or not at all
fleshy.

Capsule depressed globose.

Murchia.

Capsule ovoid or oblong.

Styles as many as the sepals.

Sagina.

Styles fewer than the sepals.

Leaves oblong or oval

Blackringia.

Leaves linear, setaceous,

Conoclinium.

~~half linear~~
linear.
Petals minute, less than
half as long as the calyx
lobes. Churlinia.

Petals oblong or ovate or
lanceolate, ~~nearly~~ or
equalling or exceeding
the calyx lobes.

Leaves oblong or oval.
Machonia.

Leaves linear, setaceous
or lanceolate.
Arenaria

Dianthus L.

Narrow - often connate - leaved herbs; calyx finely many striate; styles 2; Capsule dehiscent by four valves. About 200 species, mainly natives of the Mediterranean region, only one species reaching arctic Asia and Alaska.

Dianthus repens Willd.

Dianthus repens Willd. Sp. Pl. 2^d: 681, 1799.

Stems usually several from a woody base, simple, ^{commonly 1-flowered} glabrous; involueral bracts acuminate, nearly equaling the calyx; petals obovate, cress-dentate. Reported along the coast, ^{but apparently not common,} from Cape Lisburne southward to Ft. St. Michaels. It was originally described from Siberia but occurs only in the eastern portion.

Locality Known. - Fort St. Michaels, H. M. Bannister, 1865-66.

Vaccaria Medic.

Annual branched herbs, with ovate or ovate-lanceolate leaves and rather small flowers in terminal cymes; petals exceeding the calyx, ^{styles 2; capsule dehiscent by 4 teeth} not appressed, ^{about 3 species, natives of Europe and Asia.}

Vaccaria vaccaria (L.) Britton.

Lapomaria vaccaria L. Sp. Pl. 1: 409. 1753.

Vaccaria vaccaria Britton in Britton & Brown, Ill. Fl. 2: 18. 1897.

Stem 30 to 60 cm. high; leaves connate at the base; flowers pale red. Introduced at Dawson and reported to range from British Columbia eastward to Ontario, southward to Louisiana and Florida. It is a native of Europe, having been originally described from France and Germany.

[see specimen
at N.Y.]

Lychnis L.

Mainly erect herbs with simple stems; calyx
ovoid or inflated, 10-nerved; petals small, ~~and~~
included or slightly exerted; ovary 1-celled ~~or~~
~~incompletely several-celled at the base~~; styles
normally 5. About 35 species, natives of the
northern hemisphere.

Key to the species.

Calyx much inflated; petals normally purple, included.

L. apetal.

Calyx scarcely inflated; petals white or pinkish,
exserted.

Plant glabrous throughout.

L. funstoni.

Plant pubescent and glandular at least above,
tomentose.

L. triflora.

Glandular hairy at least above, not
tomentose.

~~Calyx 12 mm~~

Stems rarely branched at the
top; ^{to 3 flowered} calyx 12 mm. or more long.

L. affinis.

Stems commonly branched ~~at~~ near
the top, the branches 1 to 3 flowered;
calyx 8 mm. long.

Lychnis aetnala L.*Lychnis aetnala* L. Sp. Pl. 1: 487, 1753.

Stems commonly tufted, 5 to 20 cm. high, glandular pubescent above; flowers nodding, erect in fruit; calyx ovoid with very conspicuous purple veins; petals with blade usually 1 to 1.5 mm. long, narrower than the upper part of the claw, appendages minute or wanting. Reported from the northern shores between Point Barrow and the Mackenzie River, and ranges southward on the tundra near sea level to Seward Peninsula. It occurs on the islands of Bering Sea, in the mountains of the Shumagin Islands and the main land opposite, thence it is reported to extend southward in the mountains to Montana and Utah, and to extend eastward to Greenland and Labrador. It was originally described from northern Europe and Siberia and is reported to ~~extend southward~~ occur in various forms southward in Asia to the Himalayas in northeastern India.

The elaboration of this species by Cham. & Schlecht.¹ and by Regel² does not seem to be ^{entirely} warranted from

Cham. & Schlecht. *Linnaea* 1: 42, 1826,
Regel, Bull. Soc. Nat. Mosc. 34²: 570, 1861.

the material at hand, ^{the} both American and Old World; the var. *glabra* being the only one here regarded as of sufficient importance to receive varietal rank.

Vicinity of Port Clarence, F.A. Walpole, 1801 (Nos. 15317, 1773, 1743) 7.

Kward Peninsula, 16 miles west of Nome City.

J.B. Flett 1900 (No. 1673),

Hall Island.

— Canille & Kearney (No. 2081),

St. Mathew Island, — Canille & Kearney (No. 2134),

Pribilof Islands, —

St. Paul Island, C.A. Merriam

Aug. 8, 1891, J. M. Macaun, Aug. 1891, Wm Palmer, 1890
(Nos. 549, 726), Tine & Puntiss, 1895 (No. 46),

Shumagin Islands, —

Papof Island, Saunders,

July 75-18, 1899.

8.

Lychnis apicala glabra Regel.

Lychnis apicala glabra Regel, Bull. Soc. Nat. Mosc.
342: 1573. 1861.

Differs from the species only in being perfectly glabrous. Collected at Cape Espenberg and on the Shumagin Islands and reported also from St. Paul Island. It was originally described from the Rocky Mountains.

Arctic Alaska. - Cape Espenberg, J. T. White,
July 28. 1894.

Shumagin Islands - M. W. Harrington, 1891-92.

[Robinson says Russian plant has broader leaves
than Bourge's specimens from Rocky Mts. They are
10 mm. broad on 1 plant & 5 mm. broad on 2 others.
See Harvard specimens.]

9.

Lychnis funstoni Wright sp. nov.

Stems 1 to 3 flowered, several from the base, 20 to 30 cm. high, the internodes very long more than twice as long as the stem leaves; leaves all glabrous, the radical ones oblanceolate and acute or obtuse and spatulate, attenuate to a slender petiole, 3 to 6 cm. long, 4 to 10 mm. broad, cauline usually 2^{or} 3 pairs, the upper linear lanceolate, the lower usually oblanceolate, acute or acutish, 2 to 6 cm. long, 2 to 8 mm. broad; flowers in the axils of reduced leaves, the pedicels squalling or exceeding the subtending leaf; calyx ovoid, about 10 mm. high in dried specimens, 6 mm. broad, the teeth triangular, acute or acutish; petals white, the blade obovate, emarginate, about 4 mm. long, 3 mm. broad, appendages 5 to 15 mm. long, oblong, obtuse; seeds not seen.

Type specimen in the ^{United States} National Herbarium, collected June 19, 1893, on Coal Creek Hill, Yukon River, by Frederick Funston (No. 81).

L. funstoni rather closely resembles the taller specimens of *L. affinis* but is entirely glabrous, has longer internodes and has a somewhat smaller calyx.

Lychnis triflora R. Br.

Lychnis triflora R. Br.

Stems usually several from a multicapital caudex, 10 to 20 cm. high; leaves linear-oblong, ^{commonly} ~~often~~ conspicuously ciliate; petals white or pinkish, the blade about 13 mm. long, 2.5 mm. broad. Collected at West Dawson in the Upper Yukon and occurs in Greenland and the islands adjacent. It was originally described from

Upper Yukon. — Stream by West Dawson,
Williams

[R. Br. gives only the name in
App. Ross' Voy. cxliii, 1879.
Look up Williams' specimen at NY.]

11.

Lychnis alpinus Vahl.

Lychnis alpinus Vahl; Fries, Mant. 3: 36. 1842.

Stems 8 to 30 cm. high, pubescent, glandular above, commonly 2 to 3 flowered; calyx ovoid; petals white, the blade obovate, emarginate, broader than the claw, about 4 mm. long, appendages oblong, about 1 mm. long. Collected on cliffs, Kodiak Island and at Cook Inlet. It ^{is reported to} range from Greenland to Labrador, was originally described from Finmark and occurs also in Siberia.

Kodiak Island. - W.H. Evans, 1897 (No. 364).

Cook Inlet - Halibut Cove, Caville & Kearney
(No. 2446)

[See material at V. H. & Harvard.
Specimens much taller than most
plants from Greenland etc and
perhaps distinct.

See t. 2173 in Flora Danica
cited by Fries in description]

Lychnis Taylorae Robinson,

Lychnis Taylorae Robinson, Proc. Am. Acad. 28: 130,
1898,

See material at Harvard,

Silene L.

Herbs with red, pink or white flowers; ovary 1-celled or incompletely 3-celled at the base. Known 250 species widely distributed in both hemispheres. For technical characters very difficult of separation from Cychnis but Alaskan ~~material~~ species are here more leafy stems. ~~and usually more~~

Key to the Species.

Densely tufted or matted; leaves .5 to 1.5 cm. long.

S. acaulis.

Erect herbs, not matted; leaves 1 to 5 cm. long.

Pubescent; calyx purplish; capsule long-stipitate.

S. repens.

Viscid-pubescent; calyx not purplish; capsule not stipitate or inconspicuously so.

Leaves 1 to 2 cm. long, ovate to lanceolate; cymes few-flowered.

S. williamsii.

Leaves 1 to 3 cm. long commonly narrowly lanceolate; cymes usually axillary flowered.

S. tenax.

Silene acaulis L.

Silene acaulis L. Sp. Pl. ed. 2. 1: 603. 1762.

Stems numerous, very short; leaves linear, acabrous or hispid on the margins, pubescent at least on the upper surface, about 1 mm. wide; flowers pink or purplish, conspicuous. Common in rocky ~~places~~ alpine meadows and on moraines near sea level in southern Alaska and on the drier parts of the tundra in northern Alaska. It ranges from Point Barrow southward ^{Edward King's data} through the islands of Bering Sea and the Aleutians and southward to Juneau, thence across the continent to the White Mts. in New Hampshire, and ^{southward} in the Rocky Mts. to Arizona and in the Cascade Mts. It is found in Europe where it was originally described, and in Asia.

Seward Peninsula. — Port Clarence, Coville and Kearney (No. 1908). Teller Reindeer Station, James T. White, July 3, 1894, ^{(F. A. Walpole, 1901 (nos. 1483, 1762, 1892, 1948))} Five miles north of Nome City, J. B. Flitt, 1900 (No. 1666).

Pribilof Islands. — St. Paul Island, Wm. Palmer, 1890 (No. 833), True & Peuntiss, 1895 (No. 67), B. W. Evermann, 1892 (No. 81), C. H. Merriam, Aug. 8, 1891.

Alutian Chain — Adun Island, C. H. Townsend, Aug. 31, 1893. Unalaska, Coville & Kearney (No. 2207).

Alaska Peninsula. — Port Moller, C. H. Townsend, July, 1890. Kukak Bay, Coville & Kearney, (No. 1666).

South eastern Alaska. — Point Gustavus, Glacier Bay, Coville & Kearney (No. 739). Juneau, Coville & Kearney (No. 5543), Grace E. Cooley, July 24, 1891.

Pilime repens Patr.*Pilime repens* Patr. in Pers. Syn. 1: 500. 1803.*Pilime purpurata* Greene, Pitt. 2: 229. 1872.

Stems usually simple, purplish, 10 to 35 cm. high, pubescent but not glandular; leaves linear or linear-lanceolate, usually attenuate both ways, glabrous except the ciliate margins; calyx about 12 mm. long, the limb of the corolla exceeding the calyx 4 to 5 mm. Upper Yukon valley and reported from central Montana. It occurs in the Caucasus Mts. and in northern Asia, having been originally described from the vicinity of Lake Baikal.

Upper Yukon Valley: Ft. Selkirk, J. B. Silliman, 1879 (No. 129 h.), M. W. Gorman, 1879 (No. 1044). Walker Gulch, Aug. 16, 1879.

17.

Silene williamsii Britton.

Silene williamsii Britton, Bull. N. Y. Bot. Gard. 2:
168, 1901.

Stems 10 to 30 cm. high, branched; sepals calyx
about 10 mm. long; petals with or without appendages,
lateral teeth present, inconspicuous. Upper Yukon
valley.

Upper Yukon. — Dawson, R. S. Williams, July 14,
1899. Fifty miles above Stewart River, J. B. Farleton,
1899 (No. 163).

Silene tenax Wright sp. nov.

Perennial, viscid-pubescent, ^{branched} stems, apparently
 several from a woody base, 10 to 20 cm. high, 1 to 5
 flowered; leaves 1 to 3 cm. long, usually narrowly
 lanceolate, acuminate, acute, rather abruptly
 contracted at the sessile base, pubescent on
 both surfaces; calyx thin, becoming scarious, 8 to
 10 mm. long, the teeth about 2 mm. long, acute, the
 tube very slightly contracted below the capsule; petals
 white, the blade biciliate, without appendages
 either with or without lateral teeth, very little ex-
 ceeding the calyx; carpophore about 1 mm. long.

Type specimen in the United States National
 Herbarium, collected August 6, 1893, on Forty Mile
 Creek, a tributary of the Yukon, by Frederick
 Funston (no. 149).

Silene tenax is apparently most nearly re-
 lated to *S. williamsii* but differs from that
 species in the shape of its leaves, its more
 numerous flowers and in the entire absence
 of appendages from its petals.

Upper Yukon. — Forty Mile Creek, Frederick
 Funston, 1893 (No. 149).

Lissa Adams.

Low, usually slightly fleshy herbs with small pink or whitish axillary flowers; stamens 2 to 10; capsuled 1-celled. About 20 species widely distributed, mainly on saline shores or marshes.

Lissa marina (L.) Britton.

Amuraria subra marina L. *Sp. Pl.* 1: 423, 1753.

Lissa marina Britton, *Bull. Torr. Bot. Club* 16: 126, 1889.

usually much branched, stems prostrate or rarely erect, three to eight cm. high; leaves linear, thickish, pedicels equalling or slightly exceeding the calyx. Usually sea-shores overflamed at high tide from Cook Inlet to the southern border, thence southward along the coast to California, on the eastern coast from New Brunswick to Florida and at Salina New York. It also occurs in Europe and Asia. Originally described from the sea-shore but the type locality not given.

Cook Inlet. - Kalidut Cove, Couille & Kearney (No. 2455)

Southeastern Alaska. - Foggy Bay near Cape Fox, Couille & Kearney (No. 2542).

Spargula L.

with serrulate leaves; stems
Annual herbs, branched from the base; flowers
in terminal cymes, white; ^{stamens 10 or 5.} A genus of two or three
species all natives of the Old World.

Spargula arvensis L.

Spargula arvensis L. Sp. Pl. 1: 440, 1753.

Stems about 15 cm. high, glabrous or sparingly
pubescent; leaves 1 to 4 cm. long; pedicels
slender. Introduced at Sitka and occurring in
various places throughout the continent—especially in the east.
^{Originally described from Europe.}
Saukicestem Alaska. — Sitka, W. H. Evans,
1897 (No. 261).

Cerastium L.

Annual or perennial mostly pubescent herbs with white flowers; stamens 10; styles 3 to 5. About 150 species mainly in the northern hemisphere with a few species in the mountains of the tropics and one in Australia.

Key to the Species.

Leaves linear to narrowly lanceolate.

Leaves about 1 cm. long, ^{usually} ~~often~~ fascicled in the axils; flowers about 15 mm. in diameter.

C. arvense.

Leaves 2 to 10 cm. long, not fascicled in the axils; flowers about 30 mm. in diameter.

C. maximum.

Leaves elliptic-ovate, ovate, oblong or even obovate.

Petals equaling the sepals.

C. vulgatum.

Petals conspicuously longer than the sepals.

C. alpinum.

Cerastium arvense L.*Cerastium arvense* L. Sp. Pl. 1: 438, 1753.

Stems several, usually somewhat tufted, 75-150 cm. high; leaves linear or narrowly lanceolate, mostly on the lower half of the stem; capsule little longer than the calyx. Upper Yukon, thence southward to Labrador and south to California, Nevada, Missouri and Georgia. It occurs also in Europe where it was originally described and in Asia.

Upper Yukon. - Charge Island, J. B. Carleton, 1899 (no. 46). Dry Lake, M. W. Fernald, 1899 (No. 1012).

Cerastium maximum L.*Cerastium maximum* L. Sp. Pl. 1: 439, 1753.*Cerastium grande* Greene, Pitt. 2: 229, 1892.

Stems few, or only one, not tufted, 30-50 cm. high; leaves linear or narrowly lanceolate and acuminate; capsule at least twice as long as the calyx, the teeth circinate-revolute from the top, the margins not revolute. In the interior from the Koyukuk River to the Upper Yukon and collected also on Alaska. It was originally described from Siberia. *C. grande* was described from material collected on the Porcupine River, Alaska.

Koyukuk River to Fort Yukon. - Guss de Lange & Koyukuk Rivers, F. C. Schrader, 1899.

Upper Yukon. - Fort Mile Creek, Laramie, Carleton, 1899 (no. 1012). Banks of the Yukon above Stewart River, J. B. Carleton,

Alutian Chain. - Unalaska, M. W. Harrington, 1871-72,
1899 (No. 158a). Near Fort Selkirk, M. W. Gorman, 1899 (No. 106).

Alutian Chain. - Unalaska, M. W. Harrington, 1871-72.

Cerastium vulgatum L.

Cerastium vulgatum L. Fl. Suec. ed. 2. 155, 1755.

Perennial, 15 to 40 cm. high, erect or decumbent, slightly viscid; leaves 10 to 20 mm. long; sepals about 6 mm. long usually purplish tipped, the margins involute at the apex and appearing acute; capsule at length nearly twice as long as the calyx. Probably introduced at least along the coast, occurring about dwellings and wharves from Unalaska to the southeastern border. It has been collected also in the upper Yukon and is common in the United States and eastern Canada. It is common in Europe, was originally described from Scandinavia, and extends eastward through Asia to Kamtschatka.

Alutian Chain. - Unalaska, C. H. Merriam, Aug. 12, 1871.

Kodiak Island. - Kodiak, W. H. Evans, 1877 (No. 413),
Coville & Kearney (No. 2299).

Southeastern Alaska. - Sitka, W. H. Evans, 1877 (No. 797),
Coville & Kearney (No. 817). Wrangel, W. H. Evans, 1877 (No. 63).

Upper Yukon. - Ranch Creek, M. W. Gorman, 1899 (No. 336).

Crastium alpinum L.Crastium alpinum L. Sp. Pl. 11438. 1753.Crastium beringianum Cham. & Schlecht. Linnaea 1: 62, 1826.Crastium alpinum beringianum Regel, Bull. Soc. Nat. Mosc., 35: 315. 1862.

Stems 6 to 20 cm. high usually rather weak; lower leaves ~~sometimes~~ ^{oblong or} spatulate, the upper ones oblong to ovate, 6 to 25 mm. long. From toward Crastium ~~varies considerably~~

Penninula and the Bering sea islands southward near the coast to the Aleutian Islands and southeastern Alaska. It is reported to range through Arctic America to Greenland ~~and~~ ^{thence} southward to Labrador, the Hudson Bay region and the Rocky Mts. It was originally described from the alps of Europe where it occurs at alpine and subalpine elevations, ~~it~~ ^{and} is reported to range through ~~the~~ arctic Russia and Siberia. C. beringianum was described from Eschscholtz Bay "sinus Eschscholtzii" et bonae spei."

C. alpinum varies considerably in size, but Alaskan material does not show differences that will permit of the varietal distinction of what has apparently ~~been known~~ passed as C. alpinum beringianum. The more condensed, very pubescent forms pass insensibly into typical C. alpinum.

Seward Peninsula. - Cape Espenberg, J. T. White, July 28, 1894,
Eighteen miles west of Nome City, J. B. Felt, 1900 (No. 1669).

Islands of Bering Sea. - St. Lawrence Island, J. T. White, Aug. 27,
1894, Hall Island, Coville & Kearney (No. 2069), St. Matthews Island,
Coville & Kearney (No. 2109), J. M. Maclean, Aug. 10, 1891.

Pribilof Islands. - St. George Island, Tane & Puntis, 1890 (No. 597),
B. W. Evermann, 1892 (No. 93). St. Paul Island, Wm. Palmer, 1890 (Nos. 388,
482), Tane & Puntis, 1890 (No. 58), C. H. Townsend, 1895, Aug. 1893,
C. H. Merriam, Aug. 7, 1891, Coville & Kearney (No. 1820a)

'a very pubescent form.'

Alutian Chain. - Unalaska, B. W. Evermann, 1892 (No. 41),
Coville & Kearney (No. 1755). Unga Island, W. B. Dall, 1865-66.
~~Popof Island, Unalaska~~

Alaska Peninsula. - Port Moller, C. H. Townsend, July,
1890, Skirudeen Bay, C. H. Townsend, July, 1890, Kupak Bay,
Coville & Kearney (No. 1607).

Kodiak Island. - Sturgeon River, Coville & Kearney (No. 2249).

Yakutat Bay. - Dis in Chantment Bay, Frederick Funston,
1892 (No. 55). Egg Island, Coville & Kearney (No. 1049).

Southeastern Alaska. - Glacier Bay, Coville & Kearney
(No. 745). Juneau, Coville & Kearney (No. 2484), Grace Cooley,
Aug. 6, 1891. Sitka, W. H. Evans, 1897 (Nos. 2202, 2392).

Vicinity of Port Clarence, F. A. Walpole, 1901 (Nos. 1804, 1860
in part, 1754, 1976, 2042.)

Cerastium alpinum fischerianum (Kr.) Torr. & Gray,

Cerastium fischerianum Kr. in Dr. Prodr. 1149, 1824,

Cerastium alpinum fischerianum Torr. & Gray, Fl. 1151, 1838.

This form apparently differs from the species only in its larger size, its usually much larger leaves, and slightly more rigid pubescence on the calyx lobes. Islands of Bering Sea, on the main land at Norton Sound and Bristol Bay, ^{on the island of} Alaska and reported to extend southward to Humboldt Co. California. It occurs in Siberia, having been originally described from Kamtschatka, and in Japan.

Islands of Bering Sea. - St. Matthew Island

Norton Sound. - Ft. St. Michael, H. M. Bannister, 1865-66.

Bristol Bay. - Nushagak, C. L. McKay, Aug. 24, 1881.

Alutian Chain. - Alaska, Wm. Grease, 1879 (No. 3650).

C. H. Townsend, July, 1890, June 29, 1893, Camille & Kearney (No. 1756), J. B. Lett, 1900 (No. 1790), M. W. Harrington, 1891-92, Anga, W. H. Evans, 1897 (No. 564). Pape Island, Saunders, July 7 to 18, 1900.

Without special locality, L. M. Turner, July 10, 1880. W. H. Dall, 1873.

[Look up *C. arcticum* Lange]
[at N. Y. + Harvard.]

Alsiue L.

Usually low or spreading, small-flowered annual or perennial herbs, sometimes slightly succulent; styles commonly 3, sometimes 4 or 5; ovary 1-celled. About 75 species mostly in the colder portions of the northern hemisphere.

Key to the Species.

Leaves broadly ovate to ovate-lanceolate, rarely oblong.

Stems pubescent above;

Leaves at least the lower ones conspicuously petioled; stems A. media.

Stems usually glabrous; leaves all sessile or nearly so.

Leaves conspicuously acuminate, their margins delicately crisped, not ciliate, usually glabrous, A. europ.

Leaves acute or acutish, when acuminate at least the upper ones ciliate on the margins, not crisped.

Upper leaves ciliate on the margins; flowers in dried specimens about 5 mm. in diameter, A. calycantha.

Leaves all glabrous; flowers in dried specimens 8 to 10 mm. in diameter, A. humifusa.

Leaves lanceolate to linear-lanceolate, or in one species oblanceolate or subspatulate,

Leaves oblanceolate or subspatulate, closely imbricated on the stem.

A. dieranioides.

Leaves lanceolate to linear, not closely imbricated on the stem.

20

Stems usually 2 to several flowered; the bracts of the cyme foliaceous (in solitary or ^{sometimes} few flowered in individuals A. longipes is ~~perianth~~ ^{is} without scarious bracts), ^(bracts thick, fleshy, attenuate at the base)

25

Leaves small, 6 to 15 mm. long; petals, ^{equaling or slightly} exceeding the sepals; buds roughened.

A. crassifolia.

25

(not fleshy, ~~scarcely~~ ^{completely} ~~contracted~~ ^{contracted} at the base) Leaves larger, 6 to 30 or even 40 mm long; petals when present shorter than or merely equaling the sepals; buds smooth.

A. borealis.

20 Stems 1 to 2 flowered or when several flowered

the bracts of the cyme scarious, ^(of the stem) Leaves ~~not crowded at the base~~

25 — Pedicels widely spreading; sepals about 3 mm. long.

A. longifolia.

Leaves ~~crowded at the base~~ ^(of the stem)

25 — Pedicels erect; sepals about 4 mm. long.

A. longipes.

Alsine media L.*Alsine media* L. Sp. Pl. 1: 272, 1753.

Stems pubescent in lines; leaves ^{broadly ovate,} usually rounded at the base; sepals glandular pubescent; petals shorter than the sepals. Low ground about dwellings, wharves and waysides, everywhere appearing as if introduced. St. Paul Island, ^{common throughout N. America and in the old world. Originally described from Europe.} ~~Mushagak~~ and from Unalaska to Sitka. ^{Islands.} - St. Paul Island, Coville & Kearney (No. 1804), Tine & Pruntiss, 1895 (No. 92)

Alutian Chain. - Unalaska, B. W. Evemann, 1892 (No. 126).

Kodiak Island. - Kodiak, Coville & Kearney* (No. 2301).

Cook Inlet. - Kenai, H. P. Nielsen, 1901 (No. 63).
Kasilof, W. H. Evans 1898 (No. 712)

Alsine crispa (Cham. & Schlecht.) Holzinger.
Stellaria crispa Cham. & Schlecht. Linnaea 1: 51, 1826.
Alsine crispa Holzinger, Contr. U. S. Nat. Herb. 3: 216, 1893.

Stems prostrate; leaves thin; flowers solitary, axillary, petals small or wanting; capsule considerably exceeding the sepals. Moist soil, grassy banks and borders of woods from Unalaska ^{the type locality} to the southeastern boundary and thence to the mountains of northern California.

Alutian Chain.— Unalaska, Conille & Kearney
(No. 1763).

Kodiak Island.— Dr. Kellogg, 1867, Woody
Island near Kodiak Island, W. H. Evans 1897 (No. 569).

Yakutat Bay.— Russell Field, Conille & Kearney (No. 963).

Southeastern Alaska.— Juneau, Conille &
Kearney (No. 2523), Sitka, Tilling, 1867, Tatish
Islands, J. B. Flitt, 1901 (No. 1979), New Mt. Yakatla,
Annette Island, Conille & Kearney (No. 366), Wrangel,
Conille & Kearney (No. 428).

Alsine calycantha ^(Lidib.) Ry. db. 1815
Arumaria calycantha Lidib. Mem. Acad. Petrosb. Histoire 5: 534, n.
Stellaria calycantha Bang, Mem. Acad. Petrosb. II. Math. & Nat.
2: 127. 1831.

Alsine calycantha Ry. db. Bull. Torr. Bot. Club 24: 244,
1897, ^{Menophras} ~~usually~~ leaves ~~stout~~ or sometimes

~~Sometimes~~ slightly fleshy; the leaves
commonly ovate-lanceolate; flowers small,
apetalous or nearly so. Moist soil, borders of
woods and thickets and mossy places ~~from~~ in
the Pribilof Islands, Alaska Peninsula and
southeastern Alaska, thence southward to
Mt. Shasta in California. It occurs also in
Siberia where it was originally described.

Rebutel of A. calycantha differs from A. borealis
with which it has been confused by its more
or less ciliate leaves and by its broadly ovoid
to nearly globose, obtuse capsule, little or not
at all exceeding the sepals.

Inward Peninsula. - Vicinity of Port Clarence, 32 6.
F.A. Watsale, 1901 (Nos. ¹²⁰ 1883).

Pribilof Islands. - St. Paul Island, True & Penn-
tis, 1895 (No. 90)

Cook Inlet. - Kaslof, W. H. Evans, 1895
(No. 680). Halibut cove, Caville & Kearney
(No. 2449).

Prince William Sound. - Near Area, Caville
& Kearney (No. 1338).

Southeastern Alaska. - Helm Bay, Chacand
Peninsula, J. B. Flett, 1901 (No. 1977).

Alaine dicranoides (Cham. & Schlecht.) ^{Hellm.} ~~Wight.~~
Chuleria dicranoides Cham. & Schlecht, Linnaea 1: 63,
1826.

Stellaria dicranoides Fenzl in Ledeb. Fl. Russ. 1: 393 -
1842.

Alaine dicranoides Heller, Cat. N. Am. Plants 3, 1898.

Dwarf and tufted, flowers small, terminal.
Collected at Cape Lisburne Alaska and orig-
inally described from St. Lawrence Bay, Siberia.
~~Apparently the only two localities so far~~
~~recorded.~~ It is reported to occur in several locali-
ties in Siberia.

Alaine crassifolia (Chrk.) Britton.

Stellaria crassifolia Chrk. Hannov. Mag.

Alaine crassifolia Britton, ^{Mun.} ~~Britt.~~ Torr. Bot. Club 5: 150, 1894.

Low, stems ^{numerous} ~~many~~, weak; ~~internodes short~~ ^{oblonger}, rarely ~~attenuate~~ ^{attenuate} leaves, oblong-lanceolate, acute or acutish. Collected at Port Clarence, on Kodiak Island and in the upper Yukon. It extends southward to Colorado and northern Illinois and eastward to Labrador and is also found in northern Europe and Asia. Originally described from

Although this plant has been reported from other than the above stations in Alaska ^{at least} some of the determinations ~~at least~~ were incorrect and the range is therefore given to include ^{only} stations ~~only~~ from which specimens have been seen.

Barrow Peninsula. - Teller Reindeer Station, F. A. Walpole, 1901 (ms. 2030).

Kodiak Island. - Sturgeon River, L. J. Cole, July 19, 1899.

Upper Yukon. - Fine Finger Rapids, J. B. Tarleton, 1899

(ms. 86a).

Alisma borealis (Rigel.) Britton,

Stellaria borealis Rigel, Fl. Bost. ed. 2, 182, 1824,

Alisma borealis Britton, Mem. Torr. Club 5: 149, 1894,
^{apparently few,}

Stems commonly erect or nearly so,
15 to 30 or even 50 cm. high; leaves
^{or sometimes from scuminate}
~~or linear lanceolate, commonly~~ lanceolate, ^{attenuate}, ~~sometimes linear~~
lanceolate; capsule ^{narrowly} 1 1/2 to 2 times as long
as the sepals, ovoid, purplish or greenish
at maturity. Moist grassy places, meadows
thickets, borders of woods, moist grassy
meadows and banks of brooks from
Seward Peninsula & southward through
the Aleutian chain to the southeastern
boundary and in the interior from Cook
Inlet to the upper Yukon. It extends
southward to Mendocino Co. California and
across the continent to New England
and New Jersey. It was originally
described from the White Mountains,
^{collected in Alaska}

The plants identified as Stellaria aquatica
Pollich, by Cham. & Schlicht. should doubtless
Cham. & Schlicht. Linnaea 1: 50, 1826,

be referred to this species, ~~as~~ There is no
other Alaskan species recorded with "foliis
aequipallicatis longioribus", except the
very narrow leaved A. longifolia ^{that is} ~~Stellaria longifolia~~
Seward Peninsula, - fifteen miles west of
Nome City, J. B. Flitt, 1900 (No. 1674).

which the plant identified as S. graminea by Cham. & Schlicht.
is referred by Regel has not since been collected, so far
as the present plant is concerned.

and
Stellaria graminea L.

Alutian chain, — Unalaska, Camille & Kearney (Nos 1745, 1746), Pofut, Papof Island, Shumagin Islands, Saunders July 7 to 15, 1899

Alaska Peninsula, — Kukuk Bay, Camille & Kearney (No. 1597),

Kodiak Island, — Sturgeon River, Camille & Kearney (No. 2237),

Cook Inlet, — Kalikut Cove, Camille & Kearney (No. 2442), Kasilof, W. H. Evans, 1898 (No. 630),

Prince William Sound, — W. H. Evans July 9, 1897.

Yakutat Bay, — Head of Russell Fjord, Camille & Kearney (No. 945), Egg Island, Disenchantment Bay, Camille & Kearney (No. 1078)

Southeastern Alaska, — Point Gustavus, Glacier Bay, Camille & Kearney (No. 770), Sitka, W. H. Evans, 1897 (No. 237), Satosh Islands, J. B. Flett, 1901 (No. 1978),

Between Cook Inlet & The Tanana River, — Capt. E. F. Glenn, 1899.

Upper Yukon, — Dawson, R. S. Williams, July 23, 1899, Five Finger Rapids, J. B. Tarleton, 1899 (No. 866),

Alsine longifolia (Muhl.) Britton.

Stellaria longifolia Muhl. Cat. 45, 1873.

Alsine longifolia Britton, Mem. Torr. Club 5: 150, 1877.

Stems sharply 4-angled; leaves linear, 2 mm. or less wide, 10 to 30 mm. long, narrowed at each end. Collected at New Metlakatla in Southeastern Alaska. Reported from Sitka and though doubtless erroneously so, from Ketchikan Sound. It extends eastward to Newfoundland, southward to Kentucky and Louisiana and was originally described from Pennsylvania. It occurs also in northern Europe and Asia.

Southeastern Alaska. - New Metlakatla,
Grace C. Cooley, Aug. 16, 1891.

Alpine longipes (Goldie) Caville.

Stellaria longipes Goldie, Edinb. Phil. Journ. 6: 327,
1821-22.

Alpine longipes Caville, Contr. U.S. Nat. Herb. 4: 80, 1893,
<sup>bunched but not sharply so,
usually erect</sup>

Stems 5-35 cm. high, ^{usually} smooth
and shining, ^{or rarely} somewhat pubescent; leaves lanceolate
or linear-lanceolate 8 to 35 mm. long 2 to 3
mm. broad, usually erect, ^{long pedicels,} rarely somewhat
spreading; ^{sometimes solitary,} flowers usually several, irregularly
cymose; ^{in lax racemes} calyx lanceolate or ovate-lanceolate;
petals ~~equaling~~ slightly exceeding the ^{calyx} ~~sepals~~
anthers normally purple; capsule dark
purple, exceeding the calyx; seeds smooth.
Collected at Cook Inlet ^{in Alaska,} and Reported
to range southward ~~to~~ in the mountains
to California and Colorado, ~~to~~ and
southeastward to Minnesota, northern
Michigan northern New England and
eastward to Nova Scotia and Labrador.
It was originally described from near
Lake Ontario and has been collected
in Greenland. It occurs also in Northern
Asia.

→ *Cook Inlet*. — Homer, W. & Evans,
1897 (No. 298.)

Steward Peninsula. — Quincy of Port Clarence, F. A. Wolf, etc.,
1901 (Nos. 1560, 1635, 1660, 1951).

Exceeding variable and forms intergrading
into the foregoing rather freely diffuse rarely

Alpine longipes nitida (Hook.) Wight.

Stellaria nitida Hook. in *Bearesb. Journ. Voy. North Whale*
Fish. App. 411. 1823.

Stellaria laeta Richards. App. Frankl. Journ. 738, 1823.

Stellaria edwardsii R. Br.; Richards. App. Frankl. Journ. 738, 1823.

Alpine longipes edwardsii Britton, Mem. Torr. Club 5: 180, 1874.

Alpine laeta Rydb. Mem. U. S. Bot. Gard. 1: 144, 1900.

Differs from the species in being usually smaller, the leaves sometimes broader at the base occasionally ^{upper} becoming ovate; in the absence of scarious bracts, and in being solitary or few-flowered. Throughout Alaska and Arctic America and southward in the Rocky Mountains to Wyoming. It was originally described from Greenland and has been reported from Siberia. *S. laeta* was described from "the Barren Grounds from Point Lake to the Arctic Sea," and *S. edwardsii* from the same region although Robert Brown's description published a year later in the appendix to Parry's 1st Voyage, was based on material from Melville Island.

The name nitida is here restored ~~as~~^{for} it is undoubtedly earlier than either laeta or edwardsii ~~since~~^{as it is cited as a doubtful synonym in the work in which the latter two are published, since} Hooker's discussion of these names and the speci-

'Hook. App. Parry, Journ. 2nd. Voy. 391, 1825.

~~The plants~~ on which to which these names were applied nitida has almost invariably been accepted as a synonym of edwardsii. The name laeta on the other hand, has been retained as representing something different from the former. The only character in the original descriptions which could serve to distinguish Dr. Richardson's specimens from those of Robert Brown is the shape of the leaf which is described as linear-lanceolate in the one case and ovate-lanceolate in the other. The material at hand shows the shape of the leaves to vary from ovate to linear-lanceolate in different specimens and from ovate to lanceolate in the same specimen. Moreover Hooker l.c., says he finds in both Dr. Richardson's specimens and his own some leaves linear-lanceolate and others ovate-lanceolate, and he ~~further~~^{also} says "I find myself much at a loss to distinguish some individuals of this species [A. edwardsii] from A. laeta of Dr. Richardson." ~~And since a careful study~~^{studied} of the material at hand reveals no other varietal distinction the name laeta has also been added to the synonymy.

[Look up R. Brown's specimen at
Harvard,

Arctic Alaska. - Point Barrow, Murdoch, 1883.
Cape Sabine, J. T. White, Aug. 12, 1884. Cape Eschsch-
burg, J. T. White, July 25, 1884.

Ft. Norton Sound. - Ft. St. Michaels, H. M. Bannister,
1865-66.

Bristol Bay. - Chukchak, C. L. McKay, 1887

Kodiak. - W. B. Evans, 1897 (No. 412).

Cook Inlet. - Kenai, A. P. Phillips ~~sen~~, 1901 (No. 21)

Yakutat Bay. - Hidden Glacier, Russell Ford, Caville
& Kearney (No. 987). Munatah Glacier, Russell Ford, W.
Dall, June 20, 1899.

Southeastern Alaska. - Kilmer Pass Basin near
Juneau, Grace E. Cooley, Aug. 6, 1891.

Kayahuk River Valley to the Yukon. - Dall
River trail, W. C. Minnshall, June 29, 1901, Ram-
part, Yukon River, Isaac Jones, 1901 (Nos. 11, 532).

Upper Yukon. - Forty Mile Creek, Frederick Finston,
1893 (No. 46), White Horse Rapids, G. B. Tarleton,
1899 (No. 36). Ft. Reliance, M. W. Looman, 1892 (No. 982).

Seward Peninsula. - Vicinity of Port Clarence,
F. A. Walpole, 1901 (Nos. 1560 ^{in part} 1637, 1660, 1961).

Armodium Patrin.

A perennial herb with creeping rootstock; flowers axillary or terminal; styles 8 to 5; capsule globose, seeds large, very minutely roughened. A single species of maritime habitat and confined to the northern hemisphere.

Armodium peploides major (Hook.) Wight.

Armaria peploides major Hook. Fl. Bor. Am. 1: 102. 1830.

Poukneya oblongifolia Tan. & Gray, Fl. 1: 176. 1858.

Armodium major Heller, Cat. N. Am. Pl. 4: 1878.

Stems branched, smooth; leaves oblong, oblanceolate or rarely ovate, acute or sometimes even mucronulate. On the Pribilof Islands and Aleutian Islands and from the southern shore ofeward Peninsula to southeastern Alaska, thence to the coast of Oregon. Originally described from the Straits of Fuca. Specimens are also in the United States National Herbarium from Kayne Island, the Commander Islands and Japan.

Although there is some variation in the shape and size of the leaves in Alaskan specimens they have all been referred to the above variety, which differs from the species in most of the leaves being longer and narrower at the base. In general the variety increases in size and the leaves become longer and narrower toward the southern extent of its range.

Pacific Islands.— St. Paul Island, C. H. Merriam,
Aug. 4, 1891, Wm. Palmer, ~~July 4, 1890~~ (547), True & Paenters, 1895
(Nos. 104, 105).
Vicinity of Port Clarence, F. A. Walpole, 1901 (Nos. 1587, 1588).

Guadalupe Peninsula.— Sixteen miles west of Nome City,
J. B. Flitt, 1900 (no. 1665).

Alutian Chain.— Alaska, M. W. Harrington, 1891-92,
B. W. Evermann, 1892
(no. 26). Attu Island, W. H. Jacobs, 1894. Adak Island, C. H. Townsend,
July 1, 1893. Agkun Island, C. H. Townsend, Aug. 31, 1893.
Atka Island, L. M. Turner, July 6, 1899.

Cook Islet.— Kasilof, W. H. Evans, 1898 (No. 733)

Yakutat Bay.— Kautaa Island, Frederick Funston, 1892
(no. 37). Egg Island, Canille & Kearney (no. 1104).

Southeastern Alaska.— Faggy Bay, near Cape Fox, Canille
& Kearney (no. 2575). Muir Islet, Muir Bay, Canille & Kearney
(no. 610). Dyse, Wm. M. Canby, 1897 (no. 25). Harbor Island,
Sitka, B. W. Evermann, 1892 (no. 488). Wrangel, W. H. Evans, 1897
(no. 31). Back Bay, M. W. Luman, 1895 (no. 154). Gros Bay, Canille,
1895 (no. 1614). Tatakash Islands, J. B. Flitt, 1901 (no. 1980).

Murckia Cham. & Schlecht.

Perennial; stylos 3 to 5, ovary 3 to 5 celled; seeds without a spongy appendage when young. A single species of northwest North America and northeast Asia.

Murckia physodes Fisch.

Amuraria physodes Fisch.; DC. Prodr. 1: 413, 1824.

Murckia physodes Fisch.; DC. Prodr. 1: 413, 1824.

Low, slightly glandular-pubescent or glabrate, stems weak, 4 to 20 cm. long, the stems and foliage sometimes darkening in drying; leaves ovate or elliptical, acute or sometimes, even cuspidately pointed; flowers white, solitary, axillary or terminal. Reported from Point Barrow and ranges from Noatak River and toward Puninula through the interior to the Porcupine River and the Upper Yukon. It is found also in northeast Asia and was originally described from Kamtschatka.

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Arctic Alaska. — Noatak River, G. M. Stoney

Inward Peninsula. — Port Clarence, Cassille & Kearney (No. 1920), ^{W. Walpole, 1901 (No. 566, 1919, 1977).} Eighteen miles west of Nome City, 1900 (No. 1671)

Koyukuk River to Porcupine River. — Along Old Man Creek, W. C. Mendenhall, July 8, 1901. Rampart, Isaac Jones, 1901 (No. 556), Porcupine River, J. H. Turner, 1891.

Upper Yukon. — Frederick Fauntleroy, 1873 (No. 80), Mouth of the Klondike, R. S. Williams, July 9, 1879. Banks of the Yukon above Stewart River, J. B. Tarleton, 1879 (No. 164).

Sagina L.

Low herbs usually caespitose or tufted herbs with filiform stems and narrow, linear or subulate leaves. About 10 species chiefly of the temperate and arctic regions of the northern hemisphere.

Key to the Species, 1.

Stems comparatively stout, commonly 5 to 8 cm. long, rarely only 2 to 3 cm. long; basal leaves usually 8 to 20 mm. long; pedicels usually straight, at least not recurved at the end; sepals very rarely purplish; mature capsule about 4 mm. long.

S. caespitosa.

Stems filiform, commonly 1 to 5 cm. long; basal leaves usually 8 to 15 mm. long; pedicels straight, curved or recurved at the end; ^{in S. saginoides} sepals usually tinged with purple; mature capsule about 3 mm. long.

Stems 3 to 5 cm. long; pedicels, commonly 2 to 20 mm. long, recurved at the end after anthesis.

S. saginoides.

Stems 1 to 2 cm. long; pedicels 2 to 10 mm. long, straight or curved, rarely recurved after anthesis.

S. nivalis.

1. The species are very closely related and difficult of separation by technical characters.

Sagina crassicaulis Wats.

Sagina crassicaulis Wats. Proc. Am. Acad. 18: 191.

Stems decumbent, commonly branched, the branches 1 to 3 flowered; pedicels 5 to 25 mm. long; calyx about 2.5 mm. long; capsule $\frac{1}{3}$ to $\frac{1}{2}$ longer. A littoral plant ranging from the Shumagin Islands to the southern border and thence to Monterey Bay in California. Originally described from specimens collected "on Dillon's Beach, Marin County, California."

Alutian Chain. — Pofarof Island, ^{Trelase} Trelase & Saunders (No. 3706).

Kodiak Island. — W. H. Evans, 1897 (No. 456). Long Island near Kodiak Island, Trelase, 1899 (No. 3695).

Gakutat Bay. — Gakutat Mission, Trelase, 1899 (No. 3701).

Southeastern Alaska. — Sitka, Killag, 1867, Liliup, 1867 (no. 402). Japonski Island, B. W. Eummann, 1872 (no. 254). Farragut Bay, Camille & Kearney (No. 477). Fort Wrangel, Com. M. Canby, 1897 (no. 26). Hawkam, W. H. Evans, 1897 (no. 134). Sparrows Bay, M. W. Gorman, 1895 (no. 184). Helm Bay, J. B. Flett, 1901 (no. 1987).

Sagina saginaoides (L.) Britton.

Spergula saginaoides L. *Sp. Pl.* 1:441. 1753.

Sagina saginaoides Britton, *Mun. Terr. Club* 5: 134. 1894.

Tufted or matted, stems decumbent, sometimes rooting at the nodes and producing lateral rosettes; basal flowering branches commonly simple, 1 to 4-flowered; ~~petioles~~ capsule at maturity about $\frac{1}{3}$ longer than the calyx. Rocks along the coast within reach of high tide. Reported from Eschscholtz Bay and collected on the Pribilof Islands ^{and} the Aleutian Islands and on the main land from Alaska Peninsula to Glacier Bay. It is reported to extend southward in the mountains to Southern California ^{and New Mexico} and to occur in Greenland, ^{and Anticosti Island} and Labrador. It is found ~~in~~ in arctic and alpine Europe and in Asia, having been originally described from France and Siberia.

Pribilof Islands.—St. Paul Island, Coville & Kearney (nos. 1809, 1809a), E. H. Merriam, Aug. 8, 1891, J. M. Macoun, July 28, 1891.

Aleutian Chain.—Unalaska, M. W. Harrington, 1891-92.

Kodiak Island.—Long Island near Kodiak, Trelease, 1899 (no. 3404).

Alaska Peninsula.—Kukak Bay, Saunders, 1899 (no. 3105), Coville & Kearney (no. 1608).

Yakutat Bay.—Egg Island, Coville & Kearney (no. 1023).

Southeastern Alaska.—Muir Inlet, Glacier Bay, Coville & Kearney (nos. 611, 630).

Sagina nivalis (Lindbl.) Fries.

Spergula nivalis Lindbl. Phys. Källsk. Tidskr. 128, 1838.

Sagina nivalis Fries, Mant. 3: 31, 1842.

Much resembling the preceding but reduced; usually a single tuft, rarely forming lateral rosettes; branches commonly 1 flowered, sometimes 2- or ~~three~~ 3 flowered. Apparently rare, collected in the Aleutians and in Southeastern Alaska. Also collected in Utah, Colorado and in Greenland and reported to range through northern Europe from Iceland to Arctic Russia and Spitzbergen. Originally described from

Aleutian Chain. — Atka Island, L. M. Turner, 1879 (No. 1449). Attu Island, J. M. Macoun, Aug. 29, 1879.

Southeastern Alaska. — Muir Glacier, L. A. Fisher, 1879 (No. 6).

Without special locality, Dall, 1873.

Cherleria L.

Perennial herbs forming dense, cushion-like mats; leaves closely overlapping or imbricated on the stems; flowers solitary, terminal or apparently so; disc fleshy, conspicuous under a lens, five-lobed, the lobes short and rounded; petals ^{entire} minute or sometimes wanting; ~~capsule~~ oblong or ovoid; styles 3 or rarely 4; capsule oblong or ovoid, 3- or 4-valved. Two or three species occurring in the mountains of central and southern Europe, in Scotland and in the extreme northeast of Siberia and northwest America.

A genus first published by Haller and later recognized by Linnaeus, Adanson, Persoon, Michx and DeCandolle but by later authors with the exception of Nyman, usually referred to ~~Stem-~~
~~gracilis~~ *gracilis* or *Alpine*. Its strongly developed disc, its minute petals and very condensed habit would seem, however, to entitle it to generic rank in a family where the genera are so ill defined as in ~~this~~ the Caryophyllaceae.

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Cherleria dicranoides Cham. & Schlecht.

Cherleria dicranoides Cham. & Schlecht. Linnaea 11: 63, 1826.

Stellaria dicranoides Fenzl in Ledeb. Fl. Ross. 1: 395. 1842.

Alnus dicranoides Heller, Cat. M. Am. Plants 3, 1898.

Leaves ~~oblanccolate or subpatalate~~ ^{acute or acutish} glabrous usually 5 to 6 mm. long, glabrous; peduncles scarcely exceeding the terminal leaves of the branches; sepals ~~lanceolate~~ ^{ovate-lanceolate}, acute, about 3 mm. long; petals about .3 mm. long, resembling a short sterile filament; capsule about equalling the calyx. Apparently very rare. Originally described from St. Lawrence Bay Siberia and ^{since} collected ~~since~~ by Reumann at Cape Lisburne, ~~etc.~~ and by Walpole at Port Clarence, Alaska.

Seward Peninsula. — Near Fuller River Station, ~~to~~ L. A. Walpole, 1901 (Nos. 1448 in part, 1862).

Mackenzia L.

Low, perennial herbs with solitary or few-flowered cymes; seeds ^{and when young} smooth, with a spongy appendage at the hilum, ~~at least when young~~. About 20 species, all natives of the northern hemisphere.

Mackenzia latiflora (L.) Fenzl.

Artemisia latiflora L. Sp. Pl. 1: 423, 1753.

Artemisia hankiana Benth in Presl, Rel. Haussk. 2: 15, 1830.

Mackenzia latiflora Fenzl. Berber. Alpin. 838.
^{shrub, 6 to 20 or even 25 cm. high, simple or branched,}

Herbs, decumbent or erect, pubescent, leaves thin, usually bright green, pubescent or at least roughened under a lens, the veins beneath and margins usually pubescent; flowers, long, slender peduncles; the petals white, about 5 mm. long, 2 to 3 times as long as the sepals; capsule at maturity about twice as long as the calyx. ~~Apparently common~~ ^{distributed} ~~and widely distributed~~ from the Kowak River in Arctic Alaska throughout the interior to the upper Yukon and southward along the coast to the Aleutian Islands and the southeastern and ^{and California} ~~and California~~ boundary, thence it extends to Oregon, in the south and across the continent to New England and New Jersey. It occurs in northern Europe and was originally described from Siberia. *A. hankiana* was described from Nootka Sound and Port Mudge. The species has been elaborated by Regel, Bull. Soc. Nat. Mosc. 35: 257, 1862.

- Arctic Alaska. - Valley of Kowak River, F. M. Storer,
June 8, 1886. ^{vicinity of} Gward Peninsula. - Port Clarence, F. A. Walpole, 1901 (no. 1679).
- Kayak River to Fort Hamlin. - Doll River, 35
miles above the mouth, W. C. Mendenhall, June 2, 1901.
- Between Cook Inlet and the Tanana. - Johnson
River, E. F. Glenn, June 27, 1899.
- Upper Yukon. - Forty Mile Creek, Furston, 1873
(no. 67). Dawson, R. F. Williams, July 16, 1879, Five Finger
Rapids, J. B. Tarterton, 1879 (no. 63).
- Bristol Bay. - Nushagak, C. L. McKay July 27, 1881.
- Alaska Peninsula. - Nelson Lagoon, F. A. Golder, 1900
(no. 67). Kukak Bay, + Conille + Kearney (no. 1520).
- Alutian Chain. - Adaknak Island, B. W. Evermann,
1892 (no. 168). Unalaska, B. W. Evermann, 1892 (no. 124).
Popof Island, Saunders, July 7 to 18, 1879.
- Kodiak. - W. H. Evans, 1877 (no. 353).
- Cook Inlet. - Kasilof, W. H. Evans, 1878 (no. 655).
Kenai, H. P. Nielsen, 1901 (no. 48).
- Uyakulot Bay. - Khamtrak Island, Furston, 1882
(nos. 18, 19).

Arnica L.

Mainly tufted or matted herbs usually with narrowly-linear or acerose leaves; and nakedness, more or solitary white flowers. About 150 species, very widely distributed.

Key to the species.

Petals slightly exceeding or shorter than the sepals,

Stems 2 to 15 cm. high; sepals acuminate,

A. verna.

Stems 15 to 30 cm. high; sepals merely acute,

A. lawsonensis.

Petals conspicuously exceeding the sepals.

Fertile branches 2 to several flowered.

A. laricifolia.

Fertile branches with a single terminal flower.

Leaves glabrous or rarely minutely hispid or ^{hispid} ciliate on the margins; capsule about 2 mm. rarely 4 mm. longer than the calyx; seeds slightly roughened and crested,

A. arctica.

Leaves ciliate, usually conspicuously so under a lens; capsule 4 to 8 mm. longer than the calyx; seeds very minutely roughened and conspicuously crested under a lens.

A. macrocarpa.

Arenaria verna L.*Arenaria verna* L., Mant. 1: 72, 1767.*Arenaria hirta* Wimmsh. & L. Don. t. 1646.

Uplifted or matted perennials, glabrous or more commonly pubescent; stems simple or branched, 1 to 4-flowered; leaves ^{rarely basifixed in the axils of the leaves} 3-nerved, linear, obtusish; flowers with filiform peduncles, petals scarcely equaling or slightly exceeding the sepals, ovate, ovate-lanceolate or oblong, Cliffs and sandy or gravelly banks from Swatara River in ^{central} Pennsylvania to Juneau in the southeastern Alaska, and has been collected in the interior of

the Porcupine River. It extends eastward to Greenland and southward in the ^{west to the} mountains of Arizona and Colorado and to Vermont in the east. It appears to be widely distributed in Europe having been originally described from the alps of southern Europe and appears to be widely distributed in the central and northern part of the continent, and occurs also in Siberia.

A. verna varies greatly in size and degree of pubescence, but the variations do not appear to be sufficiently constant to deserve varietal rank with the exception of *A. verna umbellata*.

Swatara River. - Port Clarence, Cavillet & Kearney (no. 1944), White Mountain, A. J. Collier, July 5, 1900.

Porcupine River. - J. H. Turner, 1897.

Alaska Peninsula. - Kukak Bay, Cavillet & Kearney (no. 1536).

Alutian Chain. - Papek Island, Kirkaid, July 26-29, 1899.

Unga Island, M. W. Harrington, 1891-92.

Southwestern Alaska. - Pigeon, Cavillet & Kearney (no. 2469).

Arumaria uerna rubella (Wahl.) Hook.

Alaine rubella Wahl. Fl. Lapp. 128. t. 6, 1812,

Arumaria rubella Hook. in Parry, ^{2nd} Voy. App. 391. 1825,

Arumaria uerna rubella Hook.; Wats. Bibl. ~~Bot~~ Ind. 77, 1878.

Differs from the species apparently only in the purplish tinged peduncles and sepals, and in the latter usually being less conspicuously nerved. Collected at Port Clarence and near Nome City on Seward Peninsula and extends eastward through arctic America. It occurs in northern Europe, having been originally described from north Russia, and in Siberia.

Seward Peninsula, — Port Clarence, Canille & Kearney (No. 1952), ¹ 7 1/2 miles north of Nome City, J. B. Flett, 1900 (1668).

F. A. Wolpole, 1901 (Nos. 1321, 1526, 1527).

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Armaria dawsonensis Britton.

Armaria dawsonensis Britton, Bull. U. S. Bot. Gard., 2: 168, 1909.

Glabrous, the stems ~~decumbent~~, upper 1 or 2 internodes very long, 4 to 6 cm.; leaves 10 to 15 mm. long, the lower ~~are~~ sometimes with fascicles of smaller ones in the axils, the upper reduced to bracts; petals oblong. Collected at Dawson, the type locality.

Upper Yukon. - Dawson, R. S. Williams, July 16, 1899.

Armaria laricifolia L.*Armaria laricifolia* L. Sp. Pl. 1: 424. 1753.

slightly woody at the base; sterile shoots clothed with acicose, minutely-hispid ^{nearly tasteless} leaves; the latter ~~nearly tasteless~~ fertile shoots commonly with 3 to several pairs of lanceolate, acute or acutish, glandular-pubescent leaves; sepals linear oblong, strongly 3-nerued, glandular-pubescent; seeds roughened. On dry or rocky ground in the interior of Alaska from the Koyukuk and Porcupine rivers to the upper Yukon, thence southward in the mountains to Washington and Idaho. It was originally described from the mountain regions of Central Europe and has been reported from Siberia.

While some of the specimens here referred to *A. laxa* this species have previously been referred to *A. biflora* (L.) Wats. there seems to be ~~little~~ ^{no} evidence of the occurrence of that plant in Alaska. European specimens of *A. biflora* in the U. S. Nat. Herb. are less woody, have shorter flowering branches, smooth seeds, a nearly or quite glabrous calyx and ~~much~~ shorter sepals and petals than the Alaskan plant. The latter, however, differs from European specimens of *A. laricifolia* only in some of the plants having shorter leaves on the sterile shoots and fewer flowers than many of the European specimens.

See Wilder's 9th
A. repens

Koyukuk River to Porcupine River. — Old Man
Creek, about 20 miles below Caribou Mountain, W.C.
Mendenhall, July 9, 1901. Porcupine River J. H. Turner
1891.

Upper Yukon. — Upper slope of Coal Creek Hill,
Funston, 1893 (No. 89). Dawson, R. S. Williams,
Aug. 6, 1899, Red Mountain, Lat. $62^{\circ}50'$, M. W.
Looman, 1899 (No. 1094). Liberge Island J. B. Tarleton,
1899 (No. 41).

Armaria arctica Steud.; DC. Prodr., 1: 404. 1824.

Commonly much branched from a woody caudex; leaves on the sterile shoots slightly sheathing at the base, 1-nerved, glabrous or very nearly so; the

1. The 1-nerved character in this and the 3-nerved character in the next species is best seen in the old leaves, near the base of the stem, where through the decay or shrinking of the softer tissue the nerves become more prominent. In *A. arctica* the nerve is frequently all that remains.

the flowering branches ^{glabrous or glaucous/pubescent} commonly exceeding the sterile ones 1 to 6 cm., their leaves shorter and broader than the narrowly linear ones of the sterile shoots; ~~glabrous~~ sepals oblong, 3-nerved; the petals commonly about twice as long as the sepals. In the interior of arctic Alaska, on Ruward Peninsula, the islands of Bering Sea and the Alutian Islands. It has been reported from the shores of the Arctic Sea and was originally described from Siberia where it appears to be widely distributed from Altai and Baikal to the eastern shores and northward to the Arctic regions.

Kayakuk River Valley.

Arctic Alaska. - Baird Group of Mountains, G. M. Stanley, Aug. 2, 1885.

Kayakuk River Valley. - Dall River Trail near Dall City, W. C. Mindenhall, July 1, 1901.

Ruward Peninsula. - ⁴⁹⁷Port Clarence, Camille & Kearney (no. 1898), J. T. White July 3, 1894, ⁴⁹⁸White Mountains, A. J. Collins, July 5, 1900.

Bering Sea Islands. - Hall Island, Camille & Kearney (no. 2022). St. Matthews Island, Camille & Kearney (no. 2107).

Pribilof Islands. - St. Paul Island, Wm. Palmer, 1890 (no. 635).

Alutian chain. - Unalaska, F. A. Golder, 1920 (no. 96), W. H. Evans, 1897 (no. 588). Pofaf Island, Kirkland, July 15, 1899.

Arumaria macrocarpa Pursh.*Arumaria macrocarpa* Pursh, Fl. 1: 318, 1814.

Branched and matted as in the preceding; the leaves ~~are~~ ^{the sterile shoots} rather closely imbricated, linear or linear-oblong, ~~to~~ ^{commonly 3 mm.} to 1.5 mm. broad, usually slightly broader than in the two preceding species; flowering branches 4 cm. or less long, the leaves ~~are~~ slightly or not at all broader than those on the sterile shoots; sepals rather inconspicuously 3-nerved; petals nearly twice as long as the sepals. From Seward Peninsula to Cook Inlet and on the Pribilof and Aleutian Islands. It was originally described from "the north-west coast of America," and is found in Siberia.

^{overuses}
The lateral ^{overuses} sometimes very inconspicuous

Seward Peninsula. - Part Clarence, Conille & Kearney (No. 1877a). Sixteen miles west of Nome City, J. B. Flett, 1900 (No. 1667). Eighteen miles west of Nome City, J. B. Flett, 1900 (No. 1670). Amiel Mt., J. B. Flett, July 5, 1900.

Pribilof Islands. - St. George Island, B. W. Courmann, 1872 (No. 104), J. M. Macaun, July 31, 1891, C. A. Merriam, Aug. 7, 1891.

Bristol Bay. - ~~Part~~ Abane Nashagak, C. L. McKay, July 21, 1891.

Alutian Chain. - Nagai Island, M. W. Huntington, 1871-72. Unga W. B. Evans, 1877 (No. 556). Popof Island, Shimadzu group, Linkard, July 5-9, 1877.
Kodiak Island. - Eagle Bay, Conille & Kearney (No. 1458).

Alaska Peninsula. - Hendon Bay, C. L. Townsend, July, 1890. Kukak Bay, Conille & Kearney (No. 1575).

Between Cook Inlet and the Tanana. - Keeshatno River, J. S. Herron, July 18, 1899.