+– Seeds granulate, conspicuously strophiolate or arillate at the hilum.

**L.* Tweédyi,** Robinson, n. comb. Caudex and root very thick: leaves obovate, fleshy (2 to 4 inches long, including the winged petiole, and inch or two wide), rather shorter than the 1–3-flowered fructiferous scapes: fructiferous sepals orbicular, or broadly ovate, obtuse, somewhat scarious and colored (5 lines long) and with the alternate narrower bracts of the scape entire and glandless: petals apparently inch long: stamens 10 or 11: capsule 20–30-seeded, 3-valved from below upward; seeds with a large loose scalelike round-reniform arillus rather than strophiole. — *Calandrinia Tweedyi*, Gray, Proc. Am. Acad. xxii. 277. *Oreobroma Tweedyi*, Howell, l. c. 32. — Alpine region, on the sides of Wenatchee Mountains, Yakima region, Washington, at 6,000–7,000 feet alt., *Tweedy*, *Brandegee*.

+– +– Seeds obscurely or not at all strophiolate, mostly very smooth and shining.

++ Plant rarely a span high, from an oblong-conical root: scapes 1–3-flowered, mostly with a pair of bracteal small leaves, not surpassing the linear or spatulate-lanceolate moderately fleshy radical leaves.

**L.* Nevadénsis,** Robinson, n. comb. Sepals ample, in fruit 4 or 5 lines long, entire: petals 6 to 8, white, half inch long, unequal: stamens 6 to 9: ovules 30 to 40. — *Calandrinia Nevadensis*, Gray, Proc. Am. Acad. viii. 623, xxii. 276; Brew. & Wats. Bot. Calif. i. 75. *Talinum pygmæum*, Wats. Bot. King Exp. 42, in part. *Oreobroma Nevadensis*, Howell, l. c. 33. — Sierra Nevada, California, from San Bernardino Co., northward, east to the Wasatch Mts. in Utah, and north to Washington; first coll. by *Watson*.

**L.* pygmæa,** Robinson, n. comb. Smaller: scapes less stout: sepals erose-dentate at the quasi-truncate summit, the teeth gland-tipped: petals 6 to 8, rose-red: stamens about as many: ovules 15 to 20: otherwise as in the preceding. — *Talinum pygmæum*, Gray, Am. Jour. Sci. ser. 2, xxxiii. 407; Wats. l. c., in part. *Calandrinia pygmæa*, Gray, Proc. Am. Acad. viii. 623, xxii. 276, not Muell. *C. Grayi*, Britton, Bull. Torr. Club, xvii. 312. *Oreobroma pygmæa*, Howell, l. c. — Alpine region of the Rocky Mountains, Montana and Wyoming to Colorado (first coll. by *Parry*), west to the Cascade Range, northward to the British boundary, and southward to the Sierra Nevada of California.

++ ++ Scapes or scapiform stems a span or two high from a thick multicipital caudex on a long and thick root, paniculately several–many-flowered: sepals (as in the last preceding species) rounded or subtruncate and erose-dentate or fimbriate, much shorter than the obovate rose-red petals.

= Caulescent: a pair or two of opposite or subopposite foliar oblanceolate leaves on the stem not far from the base: calyx-teeth and floral bracts glandless.

**L.* oppositifólia,** Robinson, n. comb. Leaves narrowly oblanceolate, the radical and lower cauline similar, 18 lines to 3 inches long, acutish: flowers few, large, long-pedicelled, shortly racemose or subumbellately clustered: bracts of the inflorescence ovate-oblong, somewhat scarious, subentire or erose-denticulate, but with teeth glandless. — *Calandrinia oppositifolia*, Wats. Proc. Am. Acad. xx. 355; Gard. Chron. ser. 3, iv. 601, f. 83; Garden, xl. 485, with fig.; Hook. f. Bot. Mag. t. 7051. *Oreobroma oppositifolia*, Howell, l. c. 32. — Bare moist hillsides, near Waldo, Oregon, and on the Coast Mts. of Del Norte Co., Calif., *Howell*.

= = Foliar leaves essentially basal; those of the stem much reduced and bractlike; floral bracts and calyx with fine glandular-tipped teeth.

*a.* Leaves fleshy but flattened, obovate to spatulate, rather large, 2 or 3 inches long, usually half inch or more in breadth.

**L.* Cotylédon,** Robinson, n. comb. Leaves obovate-spatulate; those of the cymosely several-flowered scape very few and reduced to small oblong alternate or subopposite bracts: petals about 10, large and red: stamens 7 or 8; their filaments dilated and more or less coherent at the base: ovules 15 to 20. — *Calandrinia Cotyledon*, Wats. Proc. Am. Acad. xx. 355. *Oreobroma Cotyledon*, Howell, l. c. — Siskiyou Mountains of N. California, *Howell*.

**L.* Howéllii,** Robinson, n. comb. Leaves narrower, spatulate, with margins scarious and crisped: flowers large, "red, streaked with orange": stamens nearly or quite free to the base. — *Calandrinia Howellii*, Wats. l. c. xxiii. 262. *Oreobroma Howellii*, Howell, l. c. — Moony Mountains, Josephine Co., Oregon. Perhaps only a form of the last.

# SYNOPTICAL

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FASCICLES I AND II.

POLYPETALÆ FROM THE RANUNCULACEÆ TO THE POLYGALACEÆ.

(THALAMIFLORÆ ET DISCIFLORÆ.)

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