

APIUM (AMMOSELINUM) BUTLERI, Engelm. in herb. A low glabrous annual, branching from the base: leaves ternate-quinate, the short segments narrowly oblong: umbels sessile opposite to the leaves, the rays and pedicels very short (2 or 3 lines or less); involucl of 1 to 3 narrow bracts: petals entire, concave: fruit ovate, acute, a line long, strongly ribbed, the ribs acute and smooth or slightly scabrous, and the lateral ribs continuous over the commissure as a thin corky margin; seed semiterete, slightly concave on the face and somewhat channelled beneath the solitary vittæ of the intervals. — Texas, in wet grounds near Houston, E. Hall (n. 244), March, 1872, and near Dallas, J. Reverchon, March and April, 1874; Indian Territory, south of the Arkansas, G. D. Butler, 1876. It has been distributed as *Apium Popei* both in Hall's Texan collection and in the sets of A. H. Curtiss, but differs in the nearly sessile umbels and in the much smaller and smoother fruit, the corky commissural margin of which is much less developed.

FERULA PURPUREA. Nearly acaulescent, the 2 or 3 stout stems (about a foot high) from a thick root: leaves few, glabrous, large and very much dissected, the ultimate segments linear and often short: rays 8 to 20, becoming 3 or 4 inches long; involucl of several linear acuminate bracts: flowers purple: fruit elliptical, 9 to 12 lines long by 5 wide, about equalling the pedicels, with a thick corky margin and numerous vittæ. — On rocky hillsides near the lower Columbia River; in Klickitat County and the Simcoe Mountains, Washington Territory, collected by W. N. Suksdorf and the Howell Brothers, and at Hood River in Oregon by Mrs. P. G. Barrett.

PEUCEDANUM COUS. Acaulescent, from a nearly globose tuber ($\frac{1}{2}$ to 1 inch in diameter), glabrous or very slightly puberulent: leaves quinate-pinnate, the leaflets 3-5-parted or -cleft or sometimes entire, the segments linear-oblong (2 to 4 lines long): scapes exceeding the leaves (3 to 6 inches high), roughish; rays unequal (2 inches long in fruit, or less); involucl of about 12 short oblong-ovate scariously margined bracts: flowers yellow: fruit nearly sessile, somewhat puberulent, oblong to rather broadly elliptical, strongly ribbed, 3 or 4 lines long; vittæ filling the broad intervals. — Eastern Oregon; collected in John Day's Valley by Thomas Howell (n. 270), May, 1880, and at Antelope (n. 418), and by W. C. Cusick (n. 358) in Union County. The plants are known to the Indians as "Cous," and the roots collected for food.

— **PEUCEDANUM CUSICKII**. Dwarf, caulescent (apparently from a branching rootstock), glabrous: leaves once or twice ternate, the seg-

ments with 3 to 5 linear acute lobes (3 or 4 lines long): stem exceeding the leaves (2 to 4 inches high), bearing a single leaf and an umbel of 1 to 3 short fertile rays; involuclers unilateral, of 2 or 3 narrow acuminate bracts: fruit very shortly pedicellate, oblong-elliptical, 4 or 5 lines long, the thin wings as broad as the body; vittæ narrow, solitary in the intervals, 4 to 6 on the commissure. — On the highest summits of the Eagle Creek Mountains, Union County, Oregon; W. C. Cusick, September, 1885, in fruit. Flowers probably white. Resembling small forms of *P. simplex*, but the leaf-segments ternate or quinate, and the vittæ more than a single pair on the commissure.

PARONYCHIA WILKINSONI. Perennial, with numerous stems from the branching caudex, puberulent throughout: stems $1\frac{1}{2}$ to 3 inches high, with numerous very short nodes: leaves linear-subulate, nerveless, attenuate from near the base to the pungent apex, 2 or 3 lines long, the narrow scarious stipules as long and at length spreading: flowers in close terminal cymes, $1\frac{1}{2}$ lines long, the white awns half the length of the sepals and soon spreading. — On gravelly hills south of Chihuahua, first found by Edward Wilkinson, a collector in natural history at that place; C. G. Pringle (n. 341). Resembling *P. Jamesii*, from which it differs especially in the much shorter internodes, the attenuate nerveless leaves with comparatively longer stipules, the larger flowers, and longer and more spreading awns.

IREGINE LAXA. Herbaceous, tall (3 to 5 feet high) and slender, tomentose: leaves lanceolate, acuminate, rounded or slightly cuneate at base, shortly petiolate, densely tomentose beneath, greener and finely pubescent above, 3 to 5 inches long, those upon the very slender and lax flowering branches very narrowly lanceolate and more attenuate at base, an inch or two long: heads of flowers small, alternate and mostly pedunculate along the opposite branchlets of the diffuse panicle, only the uppermost nearly sessile: bracts villous-pubescent, equalling the densely long-silky perianth; staminate flowers unknown. — In shaded places in the Jimulco Mountains, Coahuila; C. G. Pringle (n. 141), April, 1885.

ERIOGONUM JONESII. Of the *Corymbosa* group, a woody-based branched tomentose perennial, $2\frac{1}{2}$ feet high or less: leaves alternate, ovate, white-tomentose beneath, greener above, the blade $\frac{1}{2}$ to $1\frac{1}{2}$ inches long, shorter than the petiole: bracts subtending the open dichotomous corymb, somewhat foliaceous: involucre mostly sessile and solitary, tomentose, scarcely a line long: flowers a line long, slightly exserted, glabrous, white or pinkish, the inner sepals oblong, the outer obovate and emarginate. — Collected at Cosnino, Arizona, a station on the