

in texture, round-cordate, with shallow crenate lobes, 1 inch broad, on petioles of $1\frac{1}{2}$ inches: scapes several, 12 to 18 inches high, naked below, racemose above: calyx obconic, the tube coherent with the ovary, in age oblong, $\frac{1}{4}$ inch long, constricted under the short lobes: petals white, obovate, entire, 2 or 3 lines long including the slender claw: stamens 5: stigmas 2, sessile on the scarcely beaked lobes of the ovary, these when mature scarcely exerted from the calyx: seeds smooth or slightly rugose.

Obtained near Deer Lodge, Montana, May 30th, 1889, by Rev. F. D. Kelsey. Nuttall appears to have had a manuscript *Lithophragma nudicaulis*; and this was referred by Gray to *Mitella trifida*. Our plant is from Nuttall's locality; but it is far from having either the petals or the capsule of any section of *Mitella*. It is a true *Lithophragma* in all respects save that the stems are leafless and scape-like.

SAXIFRAGA HOWELLII. Perennial, slender, 3 to 5 inches high, glabrous: leaves very thin, oblong, mostly less than an inch long, tapering to a slender petiole of $1\frac{1}{2}$ inches, the margin coarsely and evenly dentate: scapose stem corymbose-cymose at summit, the branchlets and pedicels subtended by small linear bracts: calyx cleft to the base, the segments narrowly oblong, obtuse, spreading in flower, reflexed in fruit: petals oblong, obtuse, white, changing to purplish: filaments linear-filiform, becoming purple: carpels divergent: seeds obscurely tuberculate.

On the Coquell River, Oregon, April 20th, 1891, Mr. Joseph Howell. A near relative of *S. occidentalis*, but a much smaller plant, the herbage of a purplish hue, the small white petals and filaments fading purplish.

SAXIFRAGA MARSHALLII, Greene, *Pittonia*, i. 159. This excellent species, founded upon a small specimen from Humboldt County, California, appears to be common in Southern Oregon. Large and beautiful specimens of it were obtained in 1889, on Rogue River, by Mr. Thomas Howell; others nearly

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tomentose beneath: inflorescence loosely corymbose at the ends of the erect branches: heads 3 or 4 lines high and, with the expanded rays, 1 inch broad; involucre bracts 6 or 8, coriaceous, ovate; rays 6 or 8: achenes with a few short hispidulous hairs; paleæ of the pappus in 2 unequal sets, those of the inner circle much longer.

Mountains south of Livermore, California, May, 1891, W. L. Jepson. A strikingly well-marked species, combining the habit of *E. confertiflorum* and the scattered large heads of *E. cæspitosum*.

SENECIO HESPERIUS. Low, subcaulescent, apparently caespitose, 6 to 10 inches high, leafy only at the decumbent base, sparingly floccose-tomentose when young, in age nearly glabrous: leaves rather firm, from round-oval to oblong and oblong-lanceolate, $\frac{1}{2}$ to 1 inch long, tapering to a short or long petiole, almost entire, or repandly or crenately few-toothed: scapose stem monocephalous, usually with one or more small sessile lanceolate bracts: head $\frac{1}{2}$ inch high, with the expanded rays 1 inch broad; involucre campanulate, the bracts linear, outer calyculate ones few or none: rays 10 or 12, deep yellow: style-tips slightly penicillate.

Mountains of southern Oregon, Thomas Howell. Species recalling by its foliage *S. rapifolius* of Montana and Wyoming; intermediate between that and *S. Greenei* of middle California.

SENECIO RAWSONIANUS. Perennial, leafy at base, robust, 2 or 3 feet high, somewhat canescent with scattered short woolly hairs: leaves 6 or 8 inches long, ovate to lanceolate, acute, sinuately or laciniately toothed, or the upper repandentate: heads very numerous, in a somewhat fastigiata compound corymb; involucre nearly cylindrical, 4 lines high, the bracts oblong-linear, abruptly acuminate, the calyculate ones few and short: rays none: tubular corollas salmon-color, soon concealed by the accrescent and copious white pappus.

Forests of Fresno County, California, at middle elevations