

var.  $\beta$ , Torr. and Gr. Fl., verging towards the next. 324. *S. ANDINUS*, Nutt. ? from the locality (but the heads resemble those of the last, and are of equal size), or an undescribed species, if Nuttall's *S. andinus* is Hooker's *S. serra*; intermediate between the latter and *S. triangularis*. Fremont collected a single specimen of it in his second expedition. 327. *S. EREMOPHILUS*, Richards. 328. *S. LONGILOBUS*, Benth., from the plains, with pinnately-parted leaves (Parry's No. 407); with a mountain form, having the leaves all entire and the heads narrow. The latter is the same as Parry's No. 406. The variations of *S. filifolius*, *longilobus*, *spartioides* and *Riddellii*, are now wholly inextricable. 330. *S. CANUS*, Hook., a form with large heads and the leaves all entire, the same as Parry's No. 20; "alpine and subalpine." 229. *S. AUREUS* var. *alpinus*, Gray, Enum. Pl. Parry, No. 63. This holds its character; but the heads are sometimes as many as three in a corymb. Different from *S. aureus* as it appears, it is inseparably connected with it through the var. *borealis*. 313. *S. AUREUS*, var. *alpinus*, *werneriaefolius*,\*—very peculiar, truly alpine form, which would almost anywhere be regarded as a very distinct new species; but I think it runs into the last and into Wright's 403, &c. These forms all teach that *S. subundus*, DC., and *S. resedifolius*, Less., will also pass into *S. aureus*. Indeed, I know not where the species will stop. 332. *S. AUREUS*, L. ? var. *croceus*. Middle Park, &c. Both Dr. Parry (who has it as No. 405) and Mr. Hall note this as a form of the common *S. aureus* with copper-colored or saffron-colored flowers, and I cannot gainsay it, after reviewing a suite of specimens. Some of Hall and Harbour's specimens, except in the anomalous color of the flowers, very much resemble *S. aquaticus* of the Old World. One form is discoid. 333. *S. AUREUS*, var. *borealis* and var. *Balsamite*, Torr. and Gr.; glabrate or woolly, in various forms. "A common and very variable species, at all localities and heights, except strictly alpine. Some of the specimens are passing to *S. Fendleri*, Gray.

334. *ARNICA ANGUSTIFOLIA*, Vahl.; broad-leaved forms of *A. alpina*, Læst. "A variable species, from the low middle to the alpine region, flowering early and late." 335. *A. MOLLIS*, Hook.; "alpine and subalpine." 336. *A. CORDIFOLIA*, Hook., mixed with some *A. LATIFOLIA*, Bongard, (which Dr. Parry abundantly gathered in Berthoud's Pass; No. 408 of his collection); the latter known by the sessile cauline leaves, the narrower heads, and the almost glabrous achenia. 337. *A. CHAMISSONIS*, Less. South Park, &c. Passes into leafy forms of *A. angustifolia*. 338. *A. ANGUSTIFOLIA* ? var. *eradiata*, or perhaps a distinct species. This is Parry's No. 10, resembling some rough-hirsute forms of *A. angustifolia*, approaching *A. mollis*, but the cauline leaves decreasing upwards; and the rayless character holds in the numerous specimens gathered in 1862: the achenia are glabrate, although the ovaries are pubescent. It can hardly be a form of the Californian *A. discoidea*; but it needs farther comparison with that species.\*

339. *CIRSIUM ACAULE*, All., var. *Americanum*. "Subalpine; common in wet

\* *SENECIO AUREUS*, L., var. (*ALPINUS*) *WERNERIEFOLIUS*: multicapiti-cæspitosus, primum arachnoideus; foliis radicalibus confertis spatulato-oblancoelatis seu spatulato-linearibus basi attenuatis erectis coriaceis rigidis aveniis integerrimis marginibus sæpissime revolutis mox glabratibus (cum petiolo 2-4-poll. longis 2-3 lin. latis); scapo aphylo, (3-5-poll. cari) bracteis paucis subulato-setaceis lana obvolutis instructo corymboso-3-5-cephalo; capitulis, etc., *S. aurei*. The leaves may be likened to those of *Werneria* or of *Culcitium longifolium* or *nivale*.

The following might be thought to be a form of this, or of Wright's 403; but, besides the small leaves, the achenia are papillose-hirsute, instead of perfectly glabrous.

*SENECIO THURBERI* (sp. nov.): cæspitosus, cano-tomentulosus mox glabrescens; foliis plerisque radicalibus confertis angustissime linearibus basi sensim attenuatis (cum petiolo circiter pollicem longis) rigidulis integerrimis vel obsolete 2-3-dentatis marginibus quandoque revolutis; scapo spithamæo 3-5-cephalo foliis perpaucis subulatis bracteis instructo; capitulis fore *S. aurei*, sed acheniis crebre papilloso-hirtellis! *S. canus*, var. *pygmaeus*, Gray, in Bot. Mex. Bound. p. 103. Santa Rita del Cobre, New Mexico, Prof. Thurber, Dr. J. M. Bigelow.

† *TETRADYMIA CANESCENS*, DC., the form with rather smaller heads and shorter leaves (*T. inermis*, Nutt.), was collected in the Middle Park by Dr. Parry, No. 416.

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