

tacle alveolate, the alveoli fimbriolate-hirsute : pappus sordid, short-plumose : perennial.

S. CICHORIACEA, Gray, Proc. Am. Acad. l. c.

§ 2. STEPHANOMERIA proper. Heads 3–20-flowered : receptacle quite naked : pappus-bristles slender, or paleaceous-dilated only at base.

\* Heads fully half an inch high, 10–20-flowered, somewhat corymbosely disposed,

+ Terminating leafy stems and branches : pappus sordid, of rather long-plumose bristles : involucre a little imbricated, i. e. having one or two bracts intermediate between the principal ones and those of the calyculus, 10–12-flowered.

S. PARRYI. Low, widely branched from the base ; leaves run-

auricles adnate-decurrent (a quarter of an inch), those of the short branches little or not at all so. Alaman's plant, described by DeCandolle (with "auriculis adnatis" in the generic character), is manifestly of the same species ; and good specimens, evidently only elongated branches, have been received from Schultz (under the mss. name of *Trixis Pipitzahuac*), collected by Schaffner in the valley of Toluca, near "Tinancinopo" and near "Venancingo" (the same doubtless cited by Hemsley, l. c. 256, under *P. fruticosa*, to which Schultz first referred it); the base of leaves little if at all adnate. My conjectural reference of this species to *P. fruticosa* Llav. & Lex., cannot be sustained, nor can DeCandolle's *Acourtia formosa* be the same.

P. PLATYPHYLLA, Gray, Pl. Fendl. 111, & Pl. Wright. l. c., is probably, but not certainly, a thinner-leaved and less rigid state of the following.

P. RIGIDA, Gray, l. c. Glaberrima, glaucescens, robusta ; foliis crasso-coriaceis rigidis oblongis vel inferioribus obovato-oblongis, basi parum angusta subcordata sagittato-auriculata, summis parvulis nunc integerrimis ; capitulis nudatim cymosis ; involucre oblongo-campanulato 9–11- (-15-) flo. — *Acourtia rigida*, DC. Prodr. vii. 66. *A. formosa*, Hook. & Arn. Bot. Beech. 437, i. e. "*Trixis latifolia*," Hook. & Arn. l. c. 300, but char. of "spinescent scales of the involucre" does not accord : probably some admixture of specimens. *Acourtia formosa*, DC. l. c., non Don, is probably the same species. It occurs in various collections.

++ ++ Capitula 5-flora, raro 6-flora, numerosa, in glomerulis paniculata : involucri cylindracei bracteæ obtusissimæ : corollæ pallidæ : folia coriacea, oblonga, basi angusta sæpius acuta.

P. RETICULATA, Gray, l. c. 128. *Proustia reticulata*, Lag. ex Don, l. c. 200 ; DC. l. c. 27. A well-marked species, in various Mexican collections ; said to be shrubby, but none of my specimens show it, nor have they the base of the stem.

P. FRUTICOSA, Llav. & Lex. i. 26, remains wholly doubtful. It is described as an alpine shrub, of the height of a man, with amplexicaul and roundish leaves, cylindrical and many-flowered involucre, and rose-colored corollas, the outer radiant and the inner small : so that it is a very doubtful member of this genus.

cinate-pinnatifid; pappus-bristles rather stout, naked at base, these often connate in pairs or threes.

S. LACTUCINA, Gray, l. c. Pappus-bristles slender and plumose to base.

+ + Naked-paniculate: pappus bright white, soft, very plumose to base: involucre merely calyculate.

S. THURBERI, Gray, Pl. Thurb. 325, & Bot. Mex. Bound. 105.

S. ELATA, Nutt. Pl. Gamb. 173, from Sta. Barbara, California, remains unrecognized. Said to have 10-flowered heads, which *S. virgata*, Benth. may sometimes have; but seems to be excluded from that by "involucre and branchlets sprinkled with resinous dots."

\* \* Heads smaller, a quarter to a third of an inch high, rarely larger but narrow, normally 5-flowered, by depauperation sometimes 3-4-flowered, or in stronger plants occasionally 6-8- (or 10-?) flowered. — *Jamesia*, Nees, not Torr. & Gray.

+ Perennials from tortuous roots or a lignescent base, with junciform branches: pappus-bristles slender to base.

S. RUNCINATA, Nutt. Distinguishable from the following by generally stouter habit, larger heads, which are scattered along the main branches, and dull white pappus, the plume not descending quite to the base.

S. MINOR, Nutt. More slender, and leaves often filiform; the heads terminating the branchlets; the pappus bright white and very plumose down to the base. This is the *Jamesia pauciflora*, Nees in Neuwied Trav., from the Upper Missouri.

S. MYRIOCLADA, Eaton, Bot. King Exped. 198, t. 20. A much tufted and very slender-stemmed species, with scattered small heads, akenes striate at maturity; the bristles of the bright white pappus naked at the base. It has recently been rediscovered in Nevada by Mr. Marcus E. Jones.

+ + Annuals or biennials.

++ Pappus bright white and soft; the bristles slender and plumose to the base: stems, &c. not rarely puberulent or tomentulose.

S. WRIGHTII. Seemingly biennial: stem rather slender and tall, corymbosely paniculate above, bearing naked-pedunculate terminal heads, with involucre almost half an inch long: leaves all very narrow, cauline linear-filiform: akenes contracted under the summit, smooth, as long as the long-plumose pappus. — *S. runcinata*, var., Gray, Pl. Wright. ii. 103, no. 1301. — W. Texas, *Wright*.