XXIII.—Contributions *towards a* Flora *of* South America, *and the Islands of the* Pacific. By Sir W. J. Hooker, K.H., LL.D., and G. A. Walker Arnott, Esq., LL.D.

I. Extra-Tropical South America.

(*Continued from page* 47, *of the present Volume.*)

Trib. VIII. Senecionideæ, *Less.**

1121. (1.) Xanthium *macrocarpum*, *DC. Fl. Fr. et Prodr.* v. *p.* 523.—*X. orientale*, *Linn. fil.*—Buenos Ayres; *Tweedie.* Quillota, Chili; *Bridges*, (*n.* 514). Mendoza; *Dr Gillies.*

1122. (2.) X. *spinosum*, *L.*—*DC. Prodr.* v. *p.* 523.—X. *catharticum*, *H.B.K. Nov. Gen. Am.* iv. *p.* 274. *DC. Prodr. p.* 523.—Desaguadero, Province of San Luis, and Mendoza; *Dr Gillies.* Chili; *Bridges*, (*n.* 511.) *Cuming*, (*n.* 90.) Buenos Ayres; *Tweedie.*—We scarcely think Humboldt's plant can be distinct from ours. Cathartic powers are stated by Humboldt to be attributed to it. Tweedie remarks that it has the property of rendering meat that has been almost putrid, sweet.

1123. (3.) X. *ambrosioides* (Hook. et Arn.); spinosum tomentoso-incanum, caule procumbente, foliis bipinnatifidis, segmentis oblongis obtusis margine revolutis, capituli fœminei solitarii aculeis tenuibus setiformibus patentibus apice uncinatis, spina terminali valida recta.—β. capituli fœm. spina valida nulla.—Los Caldanes, Province of Cordova; *Dr Gillies.* Buenos Ayres; *Tweedie.*—This very distinct species has the finely cut foliage of *Ambrosia*, and the fruit of *Xanthium.* The terminal spine of the female capitulum is frequently wanting.

1124. (1.) Ambrosia *tenuifolia*, *Spr.*—*DC. Prodr.* v. *p.* 527.—Saladillo to El Morro, province of San Luis; *Dr Gillies.* Buenos Ayres and Maldonado; *Tweedie*, (*n.* 1055.)

* It will be borne in mind that our general arrangement of the *Compositæ*, is that of Lessing; our mst. having been prepared, and much of it printed before the publication of the 5th and 6th volumes of De Candolle's *Prodromus.*

1125. (2.) A. *Chilensis* (H. et A.); caule incano, foliis pinnatifidis supra pubescentibus subtus canescentibus laciniis oblongis inferioribus sæpe inciso-pinnatifidis superioribus inciso-serratis, segmentis ultimis serraturisque acutis, racemis solitariis.—Valparaiso; *Cuming*, (*n.* 784). Coquimbo; *Macrae.*

1126. (3.) A. *scabra* (H. et A.); caule scabro, foliis pinnatis supra calloso-scabris subtus hirsuto-pubescentibus, laciniis lineari-lanceolatis acutis inferioribus inciso-pinnatifidis, racemis solitariis in paniculam foliosam quandoque dispositis. —*A.* fruticosa, β. *DC. Prodr.* v. *p.* 526?—α. *tenuior*; foliorum segmento terminali lineari-acuminato.—β. *robusta*; foliorum laciniis latioribus, segmento terminali lanceolato.—α. Buenos Ayres and Entra Rios, in pasture-fields; *Tweedie.*—β. Buenos Ayres; *Tweedie.*—Probably this is the *A. fruticosa* β. *intermedia*, of De Cand.; but we nevertheless think it a distinct species.

1127. (4.) Blennosperma *Chilense*, *Less. Syn. p.* 276.—*DC. Prodr.* vii. *Mant. p.* 288.—Apalus anthemifolius, *DC. Prodr.* v. *p.* 508.—"Unxia anthemifolia, *Bert. Herb.*" *Colla Mem. Acad. Taur.* 38. *p.* 37. *n.* 77. *t.* 32.—Soliva radiata, *Poep. Fl. Exsicc. n.* 210.—Valparaiso and Quepay, Chili; *Mathews*, (*n.* 251.) *Bridges*, (*n.* 447 and 448.) *Cuming*, (*n.* 694.)—Lessing places this genus among the *Artemisieæ*; De Candolle near *Unxia.* We have followed the latter author, on account of the conspicuous ligulate florets of the ray.

1128. (1.) Parthenium *Hysterophorus*, *L.*—*DC. Prodr.* v. *p.* 532.—Argyrochæte bipinnatifida, *Cav.*—Province of San Luis and Mendoza; *Dr Gillies.* Buenos Ayres, Parama, Uraguay and N. Patagonia; *Tweedie*, (*n.* 1054.)

Subtrib. II. HELIANTHEÆ. *Less.*

1129. (1.) Zinnia *pauciflora*, *L.*—*DC. Prodr.* v. *p.* 535.—Province of San Luis; *Dr Gillies.*

1130. (1.) Jægeria *hirta*, *Less.*—*DC. Prodr.* v. *p.* 544.—Acmella hirta, *Lag.*—Moist woods of the Bande Orientale; *Tweedie.*

1131. (1.) Pascalia *glauca*, *Orb. Dec.* iv. *p.* 39. *t.* 4.—*DC.*

Prodr. v. *p.* 549.—Mendoza and La Aguadita, province of San Luis; *Dr Gillies.* Buenos Ayres and Monte Video; *Tweedie*, (*n.*372.)—Pappi paleæ paucæ, breves, 1—2 longiores ut in *Heliantho*, sect. *Harpalio*, at omnes in pappum coroniformem coalitæ, haud, ut in *Heliantho*, liberæ.—All authors indicate Chili as the native country of this plant; probably Mendoza is meant in those cases; for we have not seen any specimens from the Chilian side of the Andes.

Scalesia.* *Arn.*

Capitulum homogamum. *Involucrum* subbiseriale. *Receptaculum* paleaceum. *Paleæ* lineares. *Antheræ* nigricantes, exsertæ, ecaudatæ, alis cordato-oblongis. *Stylus* Tagetis (i. e. alte bifidus, ramis sursum latioribus, cono acuto superatis, pube e coni basi sursum adscendente deorsumque descendente.) *Achænium* compressum, obcordatum, omnino calvum, conforme, glabrum, disco epigyno inconspicuo.—Frutex *ex insulis Gallipagensibus.* Folia *lineari-lanceolata, utrinque attenuata, alterna, supra scabriuscula, subtus pubescentia, integerrima.* Capitula *basi subintrusa, axillaria, breviter pedunculata.*

1132. (1.) Scalesia *atractyloides*, *Arn. in Lindl. Nat. Syst. p.* 443. *DC. Prod.* vii. *p.* 308.—*Hook. ic. ined.*—Gallipagos; *Cuming*, (*n.* 106.).—A very distinct genus unlike any with which we are acquainted. Leaves 4—6 inches long, much attenuated at both extremities, subsessile, penninerved, scabrous above, downy and paler beneath. Capitula nearly an inch broad. Involucre campanulate, slightly downy. Corollas all tubular, pale, apparently white. Anther-tube exserted, black, tipped with white. *Paleæ* nearly as long as the florets, linear, rigid.

1133. (1.) Encelia *oblongifolia*, *DC.* v. *p.* 567.—Chili; *Hænke. Gaudichaud. Macrae.* Coquimbo; *Cuming*, (*n.* 909.)—Intermediate, as it were, between *E. parvifolia*, and *E. canescens.*

1134. (1.) Leptocarpha *rivularis*, *DC. Prodr.* v. *p.* 495.

* This ought, strictly speaking, to be excluded from the Flora we are now describing.

Helianthus rivularis, *Poep. Pl. Exsicc. n.* 716.—Tetrachæte Chilensis, (*H. et A.*) mst.—Banks of the River Valdivia, Chili; *Bridges*, (*n.* 764.)—The leaves are slightly scabrous on the upper side; the ovaries in our specimens are young, but appear to have a pappus of four equal bristles, so very caducous, that we have seldom been able to detect the whole number, although the marks where the others have existed are visible. De Candolle describes the mature achenium with only two bristles. The branches of the style of the disk are tipped with a very short fleshy cone, on which account we have placed the genus with the *Senecionideæ*, while De Candolle places it in *Asteroideæ*, near *Siegesbeckia*.

Leighia. *Cass.*

* *Foliis alternis.*

1135. (1.) Leighia *anchusæfolia* (*DC. Prodr.* v. *p.* 580); herbacea strigoso-pubescens, foliis alternis sessilibus calloso-strigosis lineari-oblongis subintegerrimis triplinervibus, nervis lateralibus prope margines, pedunculis corymbosis elongatis parve-foliatis, involucri 3—4-serialis strigosi disco brevioris foliolis oblongo-lanceolatis ext. minoribus apice recurvis, achenio parce sericeo.—Top of the hill of Monte Video; *Tweedie*, (*n.* 865.)

1136. (2.) L. *stenophylla* (H. & A.); herbacea strigoso-hispida, foliis alternis subsessilibus linearibus integerrimis trinerviis, nervis lateralibus marginalibus subobsoletis, pedunculo solitario paullo ante apicem aphyllo, involucri disco brevioris canescentis pluriserialis foliolis lanceolatis acuminatis ext. apice recurvis, achenio parce sericeo.—Buenos Ayres and Monte Video; *Tweedie*, (*n.* 870 and 875.)—Perhaps our plant is the same as *L. immarginata*, *DC. Prodr. p.* 581.; but the stem is scabrous, and the marginal nerves of the leaves can always be traced.

1137. (3.) L. *Gilliesii* (H. & A.); suffruticosa? scabra, foliis alternis brevi-petiolatis anguste lanceolatis attenuatis basi in petiolum acuminatis integerrimis trinerviis, nervis lateralibus prope marginem, pedunculo solitario valde elon-

gato longe ante apicem aphyllo, involucri discum subæquantis setis copiosis scabri pluriserialis foliolis omnibus acuminatis exterioribus recurvis, achenio parce sericeo, paleis receptaculi apice hirsutis mucronatis.—Helianthus heteropappus, *Gill. mst.*—San Pedro, Mendoza; *Dr Gillies.*

1138. (4.) L. *Tucumanensis*, (H. et A.); ramis fruticosis glabris sulcato-angulatis, foliis alternis lineari-elongatis utrinque attenuatis integerrimis sessilibus uninervibus supra scabris subtus læviusculis, pedunculis elongatis bracteatis glabris ex axillis prope apicem ramorum folium subæquantibus, involucri discum subæquantis foliolis ovato-acuminatis profunde striatis inferne glabriusculis erecto-imbricatis versus apicem herbaceis pubescenti-ciliatis subrecurvis, acheniis glabris marginibus obscure sericeis.—Near Tucuman; *Tweedie*, (*n.* 1203.)—Leaves frequently 6-7 inches long. Involucral scales deeply furrowed, and almost wholly glabrous. Pappus of 4-5 unequal acuminated paleæ.

** *Foliis oppositis.*

1139. (5.) L. *buphthalmiflora*, (De Cand. *Prodr.* 5. *p.* 583?) herbacea hispida, foliis oppositis plus minusve linearibus v. oblongis acutis v. acuminatis subinciso-serratis supra subtusque inter venas glabris, pedunculo elongato solitario, involucro discum subæquante biseriali, foliolis subæquilongis hispidis adpressis oblongis foliaceis, achenio subpiloso, pappo brevi, paleis receptaculi membranaceis acuminatis.—L. buphthalmoides. ! *Hook. et Arn. mst.*—β. foliis linearibus.—Banda Orientale, San Isidro, Rio Grande, and Buenos Ayres, and Uraguay; *Baird; Tweedie; M. Isabelle.*—β. Maldonado; *Tweedie.*—Flowers large, showy. The leaves are certainly very variable both in the toothing and in breadth. Perhaps *L. calendulacea*, *DC.*, may be a state of this very common plant of South Brazil and the Platte river.

1140. (6.) L. *Silphioides* (H. & A.); herbacea? hispida, foliis petiolatis oppositis in petiolum decurrentibus, caulinis sagittato-ovatis inciso-dentatis angulatisque, superioribus hastato-oblongis serratis, omnibus supra venisque subtus calloso-hispidis subtus inter venas velutinis vel dense pubescen-

tibus, pedunculis subternis, involucro discum subæquante biseriali hispido, foliolis æquilongis lineari-oblongis acutis, achenio parce piloso.—Buenos Ayres; *Tweedie; Dr Gillies.*

1141. (1.) Flourensia *thurifera*, *DC. Prodr. p.* 592.—Helianthus thurifer, *Mol.*—H. glutinosus, *Hook. et. Arn. Bot. Beech. Voy. p.* 32.—Conception; *Mr Caldcleugh; Mr Cruickshanks.* Valparaiso; *Bridges*, (n. 234.) *Cuming*, (n. 631.)

1142. (2.) F. *corymbosa*, *DC. Prodr. p.* 592.—Helianthus corymbosus, "*Poep. Pl. exsicc*, (*n.* 791.)"—H. Cumingii, *H. & A. mst.*—Chili; *Poeppig.* Maule province; *Cuming*, (*n.* 849.)

1143. (1.) Bidens *glaberrina*, *DC. Prodr. p.* 601.—Buenos Ayres; *Tweedie.*

1144. (2.) B. *bipinnata*, L.—*DC. Prodr.* 5. *p.* 603.—Mendoza and Buenos Ayres; *Dr Gillies; Tweedie.* Valparaiso; *C. Darwin, Esq.*, (*n.* 382); *Bridges*, (*n.* 661); *Cuming*, (*n.* 646.)

1145. (3.) B. *Chilensis*, *DC. Prodr. p.* 683.—Chili; *Cruickshanks.*

1146. (4.) B. *helianthoides*, *Kunth.*—*DC. Prodr. p.* 596; Marshes, Quillota; *Bridges*, (n. 67.) Buenos Ayres; *Dr Gillies; Tweedie.*

1147. (1.) Verbesina *glabrata*, (H. & A.); ramis herbaceis, foliis alternis oblongo-lanceolatis acuminatis basi in petiolum longiuscule attenuatis pubescentibus demum glabris sinuato-serratis, serraturis calloso-apiculatis, corymbis multifloris, involucri glabri foliolis exterioribus obtusis interioribus acutiusculis, acheniis radii discique biaristatis.—St Catharine, Brazil; *Tweedie.*—Leaves 4-5 inches long. Its place will be near *V. sordescens*, *DC.*

1148. (2.) V. *sordescens*, *DC. Prodr.* 5. *p.* 613.—Plentiful in the mountains of Rio Jacquety; *Tweedie*, (n. 878.)

1149. (3.) V. *auriculata* (H. & A.); herbacea, foliis (ramorum) alternis sessilibus oblongo-lanceolatis subpanduriformibus basi auriculatis versus apicem calloso-serratis supra pubescentibus subtus incano-subvelutinis, corymbis multifloris, involucri canescentis foliolis exterioribus obtusis interioribus acutis, acheniis radii discique biaristatis.—V. subcordata, *DC. Prodr. p.* 614?—Buenos Ayres; *Tweedie.*

1150. (4.) V. *helianthoides* (H. & A.); herbacea? foliis (ramorum) oppositis hirsutis inferioribus oblongis superioribus lineari-lanceolatis dentatis, pedunculis solitariis versus apicem villosis, involucri laxi foliolis exterioribus villosis spathulatis acutis basi attenuatis internis glabriusculis acuminatis, radio discum superante, acheniis radii triaristatis disci biaristatis.—Dry pasture-fields in the interior of Entro Rios; *Tweedie.*

1151. (1.) Oligogyne? *Synedrelloides*, (H. & A.); herbacea parce strigilloso-pubescens, foliis oppositis petiolatis ovatis acutis serratis, pedunculis petiolum raro superantibus in dichotomia solitariis ad ramorum apices ternis, involucro subbiseriali, foliolis exterioribus majoribus elliptico-oblongis acutis, radio brevi, acheniis obcompressis radii brevissime disci longiuscule biaristatis.—Rio Grande; *Tweedie.*—This may possibly be the *O. Megapotamica, DC. Prodr.* 5. *p.* 629; but the involucre is not decidedly in a single row as he characterizes the genus. It has quite the habit of *Synedrella nodiflora.*

1152. (1.) Ximenia *microptera*, *DC. p.* 627.—X. enceloides, *Don, in litt.* (*non Pav.*)—Cerro del Diamante, Mendoza; *Dr Gillies.* Buenos Ayres; *Tweedie.*—Herba annua, canescens. Folia opposita et alterna, sublonge petiolata, integra, subangulato-ovata, inæqualiter serrata, subtus incano-strigillosa, basi in petiolum subdecurrentia. Petioli basi exauriculati. Pedunculi 1—3-ni, terminales.—This differs from *X. enceloides*, Cav., at first sight, by the petioles not expanding into foliaceous auricles at the base. The bristles at the apex of the ovary are very small, inconspicuous, and easily broken off, but we fear that character is not constant. Indeed Cavanilles himself has represented the original species in the same way, although in the cultivated specimens of it, in our Herbarium, we find always very decided awns. Kunth describes the ray as neuter in the new species he refers to this genus: Cavanilles makes it female, as does Lessing, who, however, suspects the achenium to be unfertile; but we possess specimens having the achenia of the ray perfect. It is ovoid, much warted and wrinkled, without any wing. It

is therefore probable that the species with a neuter ray ought to be referred to *Coreopsis*, or that *Simsia* ought again, as Cassine and De Candolle suggest, to be restored for them.

1153. (1.) Spilanthes (Salivaria) *Macræi* (H. & A.); stolonifera, foliis lineari-spathulatis obtusiusculis sessilibus utrinque glabris vel pilis brevibus raris adspersis versus basin ciliatis, pedunculo foliis vix duplo longiore pilis brevibus plus minusve adsperso, involucri foliolis ovalibus interioribus apice erosis, radio nullo, disco hemispherico.—S. leiocarpa, *DC. Prodr.* 5. *p.* 626?—Conception, Chili; *Macrae.*—*S. leiocarpa*, DC. agrees tolerably well with this, and it is also a plant of Macrae; but, as stated by De Candolle, discovered "ad Sinum Chorillo in Peru," whereas ours is from Chili.

1154. (2.) S.(Salivaria) *pusilla*, (H. & A.); repens, foliis spathulato-linearibus obtusiusculis basi in petiolum attenuatis glaberrimis, pedunculo foliis duplo longiore versus apicem subpubescente, involucri foliolis late ovalibus margine scariosis minute fimbriatis, radio nullo.—Road-sides about Buenos Ayres; *Dr Gillies.* Banda Orientale; *Tweedie.*

1155. (3.) S. (Acmella) *helenioides*, (H. & A.); erecta glabra, foliis oblongis lineari-lanceolatis linearibusve calloso-apiculatis basi attenuatis integerrimis vel utrinque sub-dentatis, pedunculis valde elongatis, radii flosculis patenti-recurvis apice trifidis disco subcylindrico longioribus.—Mendoza and Buenos Ayres; *Dr Gillies.* Uraguay and Rio Grande; *Tweedie*, (*n.* 864, 858, and 867.)

1156. (4.) S. (Acmella) *affinis*, (H. & A.); decumbens, caule glabro, foliis linearibus utrinque attenuatis calloso-apiculatis hinc inde calloso-denticulatis, pedunculis elongatis versus apicem dense pubescentibus, flosculis radii discum conicum subæquantibus obtuse tridentatis.—Los Loamos in N. Patagonia; *Tweedie* (*in Herb. Arn.*)—Very nearly allied to *S. stenophylla*, and to *S. helenioides*, but the florets of the ray are only toothed, not trifid.

1157. (5.) S. (Acmella) *stenophylla*, (H. & A.); decumbens glabra, foliis angustissime linearibus calloso-apiculatis hinc

inde minutim denticulatis, pedunculis subelongatis, *flosculis* radii patentibus apice minute tridentatis discum conicum subæquantibus.—Buenos Ayres; *Tweedie.*—Leaves very narrow, crowded.

1158. (6.) S. *wedelioides*, (H. & A.); decumbens, caule pedunculis petiolisque strigoso-pubescentibus, foliis obovato-oblongis trinerviis basi in petiolum breviusculum paullum attenuatis glabris margine scabridis integerrimis, pedunculo gracili, capitulo basi subtruncato, flosculis radii (pallidis) oblongis involucrum haud superante, rachidis bracteolis subulatis corollas disci superantibus, ovarii marginibus inferne glabriusculis apice villosiusculis, setis perbrevibus mucroniformibus!, styli ramis subtruncatis pube descendente obsessis!—Within the tide of La Plata. *Tweedie*, (*in Herb. Arn.*)—The style has no appendage or cone; but its pubescence is not manifestly longer than the apex, as in the true species of the genus. The external appearance of the style is thus more of the *Asteroideæ* than of the *Senecionideæ*; but the stigmatic lines reach to about the apex, and therefore much beyond the commencement of the pubescence.

ADENOSPERMUM. *H. & A.*

Adenocarpus. *Don, mst.* (*non DC.*)

GEN. CHAR. *Capitulum* heterogamum. *Involucrum* duplici ordine 10-phyllum, æquale, foliolis oblongis obtusis margine membranaceis. *Styli rami radii* lævissimi breves exappendiculati, *disci* appendiculis linearibus longissimis superati. *Achenium* verrucosum erostre, *radii* cylindricum exalatum calvum, *disci* obcompressum bialatum, alis apice in mucrones tuberculiformes brevissimos ac lævissimos excurrentibus. *Rachis* bracteolata.

1159. (1.) A. *tuberculatum*, (H. & A.)—Adenocarpum tuberculatum, *Don, mst.*—Province of Cordova; *Dr Gillies.* Cordova; *Tweedie*, (*n.* 1109).—A small, procumbent, herbaceous plant, with the habit of *Heterospermum pinnatum.* Leaves alternate, on long petioles, tripinnatifid, strongly nerved and reticulated, pellucid in the areolæ; segments linear-lan-

ceolate, very acute or mucronate. Capitula small, hemispherical, on axillary and terminal peduncles. The genus is very closely allied in character to *Isostigma* of Lessing, and indeed only to be distinguished by the achenia and styles: but in habit the two genera are totally dissimilar.

1160. (1.) Thelesperma *scabiosoides*, Less.—*DC. Prodr.* v. *p.* 634.—Bidens paradoxa, *Don, mst.*—B. megapotamia, *Spr.*—Uraguay and N. Patagonia; *Baird; Tweedie.* Province of Cordova; *Dr Gillies.*

1161. (1.) Isostigma *peucedanifolium*, Less.—Tragoceras peucedanifolium, *Spr.*—Dry hills of the Jacquety, Rio Grande and Portalegre; *Tweedie.*—Lessing remarks that the corolla of the ray is more or less 3-toothed; in one specimen before us it is trifid, and in another almost tripartite.

Subtrib. III. Flaverieæ.

1162. (1.) Flaveria *Contrayerba*, *Pers. Sims. Bot. Mag. t.* 2400.—*DC. Prodr.* v. *p.* 635.—F. Bonariensis? *DC. Prodr.*—Chili; *Menzies*; *Cuming*, (*n.* 778); *Bridges*, (*n.* 491); Mendoza; *Dr Gillies*, (who observes that the plant is commonly used immersed in a solution of alum for dyeing yellow or green.) Buenos Ayres; *Tweedie.*

Subtrib. IV. Tagetineæ. *Less.*

1163. (1.) Tagetes *glandulifera*, *DC. Prodr.* v. *p.* 644. T. minuta, *L.*—Mendoza; *Dr Gillies.* Valparaiso; *Cuming*, (*n.* 777.); *Bridges.* Buenos Ayres; *Tweedie.* Valparaiso; *Menzies; Bridges.*

1164. (2.) T. *pauciloba*, *DC. Prodr.* v. *p.* 644.—Cerro del Diamante, Mendoza; *Dr Gillies.* South Chili? *C. Darwin, Esq.*, (*n.* 280.)

1165. (3.) T. *micrantha*, *Cav.*—*DC. Prodr.* v. *p.* 646.—Mendoza; *Dr Gillies.*

1166. (1.) Lasthenia *Kunthii*.—Hymenatherum Kunthii, *Less. Comp. p.* 237. *DC. Prodr.* v. *p.* 642.—Rancagua Bridgesii, *Poepp. et Endl. Nov. Gen. t.* 25.—Lasthenia obtu-

sifolia; β. Bridgesii, *DC. Prodr.* v. *p.* 665.—Valparaiso and Quepay; *Bridges*, (*n.* 449.); *Cuming*, (*n.* 724.)—Our plant is certainly the *Hymenatherum Kunthii* of Lessing, and we prefer his specific name as he is the first describer of it. It is certainly the *Rancagua Bridgesii* of Endlicher and Poeppig, although our plant is not glabrous, and the paleæ of the pappus are narrow linear-subulate, and very obscurely and simply serrated. The *R. Feuillei*, Endl. and Poepp., (*Lasthenia obtusifolia*, α. of DC.) has a different structure of the paleæ of the pappus, which are much shorter than the corolla, though the two plants are in other respects very similar.

1167. (1.) Hymenatherum *Candolleanum* (H. & A.); perennis pubescens, ramis simpliciusculis, foliis oppositis sessilibus ad basin subpalmatis pinnato-partitis lobis sub 5 spinoso-filiformibus rigidis integerrimis inferioribus minoribus terminali elongato, pedunculis elongatis 1-cephalis nudis, involucro biseriali 14—20-dentato, pappi uniserialis squamellis 10 omnibus basi membranaceis apice trifidis, lobo medio setiformi scabro, lateralibus brevibus membranaceis.—H. Belenidium, *DC. Prodr.* vii. *p.* 292.—Belenidium Candolleanum, *Arn. in DC. l. c.*—Pectis acicularis, *Don, mst.*—Mendoza; *Dr Gillies.*—Summit of high dry rocks of Los Loamos, N. Patagonia; *Tweedie.*—We almost incline to think that this may be the same as Cassini's *H. tenuifolium*, (from "Chili,") and the same as what De Candolle had from Née, (probably from Mendoza,) both of which De Candolle is inclined to refer to his *H. tenuilobum*, a Mexican plant. Lessing's genus *Hymenatherum*, it will be observed, is very different from this of Cassini, and is Cassini's *Lasthenia.*

Subtrib. V. Helenieæ. *Less.*

1168. (1.) Bahia *ambrosioides*, Less.—*DC. Prodr.* v. *p.* 657.—Valparaiso; *Cuming*, (*n.* 769.) *Bridges*, (*n.* 60.) *Mathews*, (*n.* 168.)—Fruticulus dense pubescens. Folia opposita bipinnatim secta; segmentis cuneato-oblongis, acutis. Capitula corymbosa, heterogama, radio 5—9-flavo. Involucrum sub-

biseriale, sub-9-phyllum foliolis cuneato-rotundatis. Styli disci rami cono brevi carnoso glabriusculo apiculato superati. Achenium tetragonum, basi longe attenuatum, glabriusculum. Pappi paleæ 8—10, cuneato-obovatæ, æquilongæ, latitudine inæquales, apice obtusæ, vel truncatæ et eroso-dentatæ, corneo-membranaceæ.—Perhaps the genus *Bahia* ought to be restricted to this plant. *B. artemisiæfolia*, and probably all the other species from California and Mexico have truncated styles, as Lessing indeed defines *Bahia*, and belong to *Eriophyllum*, Lag., from which *Trichophyllum*, Nutt., is not distinct. *Erioph. trolliifolium*, having a pappus of 4 acute paleæ, seems to belong to *Hymenoxys*.

AMBLYOPAPPUS. *H. et A.*

Capitulum homogamum. *Receptaculum* epaleaceum. *Involucri squamæ* 5, uniseriales, cuneato-obovatæ, obtusissimæ. *Corolla* brevis, 5-dentata. *Styli* rami cono brevi hirsuto superati. *Achenia* breviter turbinata, tetragona, glabriuscula. *Pappi* paleæ 8—10, cuneato-obovatæ, æquilongæ, latitudine paullo inæquales, obtusæ, muticæ, corolla paullo breviores, corneo-membranaceæ, pinnatifido-striatæ, eroso-denticulatæ. —Herba *annua pusilla glabra apice corymbose ramosa. Folia inferiora opposita, superiora alterna, subpedatim secta, segmentis angustissime linearibus obtusis. Capitula solitaria breviter pedunculato.*

1169. (1.) A. *pusillus*, (H. et A.)—Coquimbo, *Cuming*, (*n.* 885.)—This genus differs from *Achyropappus*, in the form of the style, the want of a ray, and habit; from *Florestina* by the absence of the subulate hairy appendages to the style; and from *Hymenopappus* by the involucre, the style, and the achenia. In character it is most allied to the original *Bahia*, but there is no ray, and the habit is totally dissimilar.

1170. (1.) Schkuhria *Bonariensis*, (H. et A.); puberula, foliis alternis 1—2-pinnatim sectis segmentis filiformibus, capitulis longe pedunculatis, involucro biseriali sub-7-phyllo, foliolis duobus exterioribus minoribus, flore femineo unico, corollis disci 5-dentatis, achenio basi hirsuto, pappi paleis 8

scariosis basi crassinerviis, 4 aristulatis, 4 obtusis paullo brevioribus.—S. abrotanoides, *Don*, (*non auct.*)—Pampas of Buenos Ayres; *Dr Gillies*. Buenos Ayres; *Tweedie*.—In this and the next species, the branches of the style are tipped with a short cone, and the achenia are remarkably hirsute at the very base, and sprinkled upwards with a few stiff hairs.

1171. (2.) S. *multiflora*, (H. et A.); strigoso-pubescens, foliis inferioribus oppositis superioribus alternis subtripinnatisectis, segmentis anguste linearibus obtusis, capitulis sublonge pedunculatis multifloris homogamis? involucro subtriseriali 12—18-phyllo foliolis subæqualibus, corollis 5-dentatis, achenio basi hirsuto, pappi paleis 8 subæqualibus scariosis basi crassinerviis, 4 obtusis v. acutiusculis, 4 setigeris. —Achyropappus schkuhrioides, *Don*, (*non Link.*)—Mendoza; *Dr Gillies*.—We do not find any ligulate floret in this species; but the ligules may have fallen off, as our specimens are considerably advanced.

1172. (1.) Jaumea *linearifolia*, *Pers.*—*DC. Prodr.* v. *p.* 663. —Kleinia linearifolia, *Juss. in Ann. Mus.* ii. *p.* 424. *tab.* 61. *f.* 1. (*non Linn.*)—In salt marshes of St Lucia and Monte Video, also at Bahia Blanca, N. Patagonia; *Tweedie*.—De Candolle, who does not appear to have seen the plant, describes the pappus of 8—10 squamellæ; but Jussieu correctly figures and describes the squamellæ as numerous.

1173. (1.) Cercostylis *scabiosoides*, (Arn.); foliis oblongo-lanceolatis acutis vel semel bisve pinnatifidis,—*Arn. in DC. Prodr.* vii. *p.* 293.—Cephalophora scabiosioides, *Don*, *mst.* (*ex parte.*)—El Morro, Province of San Luis, and at Saladillo, province of Cordova; *Dr Gillies*. Los Loamos of Bahia Blanca, N. Patagonia; *Tweedie*.

1174. (1.) Hymenoxys *anthemoides*, (Cass.?); herbacea glabra humilis divaricato-ramosa, foliis biternatim sectis vel superioribus alte trifidis segmentis filiformibus, involucro fructus connivente, squamis ovalibus obtusis serie interiore exteriorem superante, capitulis discoideis, pappi paleis ovalibus subiter acuminatis.—*DC. Prodr.* v. *p.* 661.—Buenos Ayres; *Tweedie*.—We have little doubt of this being Cassini's

plant, and the *Hymenopappus anthemoides* of Juss., although the remarkable tendency of the involucre to become connivent by age, has not been observed by any of these botanists. If it be really a distinct species, it may be named *H. connivens*. The branches and peduncles are deeply striated as in *H. Hænkeana*, from which it is distinguished by its more compound leaves.

1175. (2.) H. *Tweedei*, (H. et A.); herbacea glabra sub elongata decumbens, foliis anguste linearibus obtusis vel ad medium 2—3-fidis, capitulis radiatis, involucro campanulato squamis oblongo-ovalibus obtusis serie interiore subæquilongo, pappi paleis 5—6 oblongis sensim acuminatis.—Rio Grande, and dry pastures, road sides of Los Loamos, N. Patagonia; *Tweedie*, (*n.* 859.)—In this and the last species the inner leaflets of the involucre are coriaceous and flat, the outer ones slightly carinate at the base.

1176. (1.) Cephalophora *glauca*, *Cav.*—*DC. Prodr.* v. *p.* 662.—Valparaiso and Conception; *Cuming*, (*n.* 126, and 553.) *Bridges*, (*n.* 220.) Valdivia; *Bridges*, (*n.* 651.)—Casa Blanca, Chili; *Dr Gillies.*

1177. (2.) C. *aromatica*, *DC. Prodr.* v. *p.* 662.—Græmia aromatica, *Hook.*—Valparaiso; *Bridges*, (*n.* 219.) Buenos Ayres (cultivated;) *Tweedie.*—Although in deference to De Candolle, we retain these two species as distinct, we believe they are mere varieties, and that his *C. plantaginea* is another form. The difference pointed out in the shape of the leaves is certainly not permanent, and the only one we know lies in the annual or biennial duration of the root, and the size of the capitula; but this last is likewise variable. Both vary from glabrous to canescent; the lower leaves are toothed, the upper entire; those at the base of the ramifications, particularly in our specimens from Tweedie, are slightly decurrent.

1178. (3.) C. *heterophylla*, (*Less.*—*DC. Prodr.* v. *p.* 662); suffruticosa ramosa canescens, foliis linearibus vel dentato-pinnatifidis, involucri squamis adpressis, corollis radii 3-lobatis pallidis, disco purpurascente, pappi paleis circiter 10 elongatis, achenio argenteo-sericeo.—Buenos Ayres; *Tweedie*,

(*n.* 889.)—De Candolle has inadvertently made it a part of the generic character that the leaves of the involucre are always reflexed; whereas the greater part of his section *Actinella*, to which this and the next species belong, has them adpressed.

1179. (4.) C. *Doniana*, (H. et A.); canescens suffruticosa, foliis linearibus integris acutiusculis, involucri squamis adpressis, corollis radii trilobatis discoque concoloribus, pappi paleis 6—8 breviusculis, achenio fulvo-sericeo.—C. suffruticosa, *Don, mst.*—C. elongata, *Don, mst.* (*ex parte.*)—San Isidro, Mendoza, and Saladillo, province of Cordova; *Dr Gillies*, (*n.* 64, and 62, partly.)—Our specimens from Dr Gillies of what he informed us Mr Don has called *C. elongata*, belong partly to this species, and partly to *Cercostylis scabiosoides*. Several other species are suffrutescent, whence we have rejected the unpublished name given by Mr Don.

1180. (1.) Calea *pinnatifida*, *Br.—Less. in Linn.* v. *p.* 158, (*cum synon.*); *DC. Prodr.* v. *p.* 674.—St Catharines; *Tweedie*, (*n.* 1022.)—Some of our specimens from St Catharines, have the upper leaves quite entire, and agree with the description of *C. glabra*, DC., found there by Gaudichaud; but our plant has the leaves always more or less scabrous on the upper side.

1181. (2.) C. *cymosa*, *Less. l. c. DC. Prodr.* v. *p.* 674.—S. Brazil; *Tweedie*, (*n.* 1066, 1069.)—Our specimens accord with De Candolle's specific character, except that the upper leaves are occasionally slightly obtuse, and that the scales of the involucre are either obtuse or acute in the same corymb: the leaves are scabrous on both sides.

1182. (3.) C. *uniflora*, *Less. l. c. p.* 159.—*DC. Prodr.* v. *p.* 674.—Banda Orientale; *Tweedie*, (*n.* 865.)

1183. (4.) C. *pedunculosa*, *DC. Prodr.* v. 673.—C. uniflora, forma discoidea, (*Less. l. c. p.* 158.)—Banda Orientale; *Tweedie*, along with the last species.—Lessing is probably correct, when he unites these two species; the only difference lies in the presence or absence of a ray. The following description applies to both.—Folia sessilia, ovata vel ovato-

lanceolata, grosse dentata, utrinque scabra vel hirsuta, triplinervia: involucri foliola vittis longitudinalibus 5—7 purpureis oleo farctis lineolata: pappi paleæ utrinque attenuatæ, sæpissime secus strias pinnatifido-laceræ; receptaculi bracteolæ subsetaceæ, corneæ.

1184. (1.) Galinsogea *parviflora*, *Cav—DC. Prodr.* v. *p.* 677.—Wiborgia Acmella, *Roth.*—Valparaiso; *Cuming*, (*n.* 629.) *Bridges*, (*n.* 203.) Coquimbo; *Beechey.* Mendoza; *Dr Gillies.* Buenos Ayres; *Tweedie*, (*n.* 1092.)

Subtrib. VI. Chrysanthemeæ. *Less.*

1185. (1.) Anthemis *nobilis*, *L.—DC. Prodr.* vi. *p.* 6.—Buenos Ayres; *Tweedie.*—No doubt this and the two following were introduced from Europe.

1186. (1.) Maruta *fœtida*, *Cass. DC. Prodr.*—Anthemis cotula, *L.*—Mendoza; *Dr Gillies.* Buenos Ayres; *Tweedie.*

1187. (1.) Pyrethrum *Parthenium*, *L.—DC. Prodr.*—Mendoza; *Dr Gillies.*

1188. (1.) Cotula *Montevidensis*, *Spr.—DC. Prodr.* vi. p. 78.—Banda Orientale, within tidemark, opposite Monte Video; *Tweedie*, (*n.* 860.)

1189. (1.) Artemisia *Absinthium*, *L.—DC. Prodr.* vi. *p.* 125. —β. foliis subcarnosis.—A. andicola, *Don. mst.*—In a hedge at St Pedros of Rio Grande; *Tweedie*, (n. 1051.)—β. San Isidro, Andes of Mendoza, and frequent in the Quebradas above Mendoza, "where it is in common used as a medicine instead of wormwood;" *Dr Gillies.*—We cannot see that the *A. andicola* of Don's mst. is really different from the *A. Absinthium*, and the plant is probably an introduced one in the above stations. There is a South Brazilian species called *A. Montevidense* by Sprengel, very imperfectly described, and we doubt if any *Artemisia* has been found in a perfectly wild state in the southern hemisphere.

1190. (1.) Myriogyne *elatinoides*. *Less. in Linn.* vi. *p.* 219. *DC. Prodr.* 6. *p.* 139.—Moist places near Osormo, Prov. of Valdivia; *Bridges*, (*n.* 788.)

1191. (1.) Leptinella? *acænoides* (H. & A.); stolonifera

subvillosa, foliis spathulatis pinnatifidis segmentis ovalibus *hinc vel utrinque margine inciso-dentatis inferioribus minoribus discretis superioribus majoribus arcte approximatis, involucri foliolis* 5 uniserialibus margine scariosis.—Cape Horn, Staten Land; *Dr Eights.* Cape Tres Montes; *C. Darwin, Esq.—β. major;* minus villosa, foliis glabriusculis segmentis magis discretis, capitulis majoribus.—Fields at Chumpulla, near Valdivia; *Bridges,* (*n.* 756.)—In our specimens from Mr Bridges, there are no traces of ligulate or marginal female florets, but those of the disk are male in as far as the styles are simple, as in *Blennospermum.* Ovaries of the male flowers, obovate, compressed, glabrous, and apparently bialate.

1192. (1.) Soliva *sessilis, R. P.—DC. Prodr. vi. p.* 143.—Valparaiso; *Cuming,* (*n.* 475.); *Bridges,* (*n.* 539.) Buenos Ayres; *Dr Gillies, Tweedie.*—The wing of the achenium has, as it were, a piece cut out on each side near the base; and we are of opinion, that the *Soliva pterosperma,* Less., and DC., (*Gymnostylis, Juss.*) and the *Gymnostylis Chilensis* and *alata* of Sprengel, all belong to this species.

1193. (2.) S. *araulis* (H. & A.); Acaulis, foliis longe petiolatis pilosiusculis bipinnatisectis, segmentis anguste oblongo-linearibus, acutis, capitulis sessilibus radicalibus congestis, acheniis anguste oblongis alis crassiusculis transversim rugulosis apice villosis in cornua brevissima patentia excurrentibus.—Buenos Ayres; *Tweedie.* This seems to be very closely allied to *S. Lusitanica,* Less. (*Hippia stolonifera,* Brot.) Is it not possible that this, the only species accounted European, may have been introduced by the Portuguese from Buenos Ayres? We have not seen any plant agreeing with *S. nasturtiifolia,* (Juss.) said to be from Buenos Ayres.

Subtrib. VIII. Gnaphalieæ, Less.

1194. (1.) Helichrysum (Sect. I. Less.); *Chilense* H. & A. araneoso-lanata, caule simplici vel ad apicem solummodo corymboso polyphyllo, foliis inferioribus spathulatis obtusis superioribus sensim minoribus acutiusculis, capitulis glomera-

tis, glomerulis solitariis vel corymbosis, involucri turbinati basin attenuati squamis subæqualibus erectis imbricatis obtusis undulatis opacis sordide albis exterioribus ovatis lanatis, interioribus oblongis glabris.—About Valparaiso; *Bridges*, (who finds it on cliffs near the sea.) *Cuming*, (*n.* 63.)—The root is woody, fusiform, branching above. *Stems* ten inches to a foot long; *capitula crowded, dirty yellow, or cream-coloured*; not glossy, but rather opaque; each about four inches long, broad above, and tapering into the short pedicel.

GNAPHALIUM, *Don. DC.*

Sect. 1. EUGNAPHALIUM. § I. Xanthina.

* *Foliis decurrentibus.*

1195. (1.) G. *cheiranthifolium*, *Lam.—DC. Prodr.* vi. *p.* 223.—Monte Video and N. Patagonia; *Tweedie*, (*n.* 1031.) Valle del Rio Tinguirica, Chili, and in the Andes of Chili; *Dr Gillies.* Valparaiso, (and probably throughout all Chili;) *Cuming*, (*n.* 446.) *Bridges*, (*n.* 279.) Juan Fernandez; *Bertero*, (*n.* 1462.) *Dr Scouler.*—6. foliis supra viridibus subtus albidis.—G. citrinum, *Hook. et Arn. in Bot. of Beech. Voy.*, *p.* 31. *DC. Prodr.* vi. *p.* 223.—Uraguay and N. Patagonia; *Tweedie.* El Aguadita, and El Morro, Prov. of San Luis; *Dr Gillies.*—May not G. *paniculatum* Colla and DC. be a var. of this species?

1196. (2.) G. *cymatoides, Kunze in Poepp. Coll. Chil. n.* 21.—*G. ulophyllum*, *H. & A. Bot. of Beech. Voy.*, *p.* 31.—Valparaiso; *Bridges*, (*n.* 229.) Chronos Archipelago; *C. Darwin, Esq.* (*n.* 332.)—We adopt the name of Kunze, which, according to De Candolle, was given in Poeppig's collection of dried specimens the year before our description appeared in the Botany of Beechey's Voyage. We believe that a very limited number of that dried collection was on sale, if they were on sale at all; and we have long endeavoured to obtain access to a set, but in vain. De Candolle gives *G. Piravira* of Lessing as the same as this, and he places it, though we think incorrectly, in his § AXANTHINA.

§ II. Axanthina, *DC.*

* *Capitulis corymboso-congestis.*

1197. (1.) G. *puberulum*, *DC. Prodr.* vi. *p.* 224.—Chili; *Bertero*, (*n.* 299.)—We are unacquainted with this species.

1198. (2.) G. *Vira-vira*, *Mol. Chil.*—*DC. Prodr.* vi. *p.* 324. *Less. in Linn.* 1821. *p.* 227, (*excl. var.*).—Elichrysum, *Feuill. obs.* 3. *p.* 18. *t.* 13. *f.* 2.—Playa aucta, Valparaiso; *Bridges*, (*n.* 232.) *Cuming*, (*n.* 690.)

** *Capitulis in spicam racemosam dispositis.*

1199. (3.) G. *spicatum*, *Lam. DC. Prodr.* vi. *p.* 233.—G. coarctatum; *Hook. et Arn. Bot. of Beech. Voy.*, *p.* 31.—Buenos Ayres; *Tweedie.* Uspallata, Andes of Mendoza, to the Pampas of Buenos Ayres; *Dr Gillies.* Conception, Chili; *Cuming*, (*n.* 128.) Valdivia, (*n.* 643, 644.) and Valparaiso; *Bridges.* Chronos Archipelago; *C. Darwin, Esq.*, (*n.* 333.)—A very variable species assuredly: we possess specimens from six inches to a foot and a half full, and leaves from one to six inches long. We fear that *Gn. Americanum* is not distinct from this, and we believe it will be found very general on the North and South American continents. We have specimens from Peru, Columbia and Mexico, West Indies, &c., and they have a striking similarity with the *G. sylvaticum* and its varieties of Europe.

2000. (4.) G. *falcatum*, *Lam. De Cand. Prodr.* vi. *p.* 233.—G. Chilense; *Hook. et Arn. in Bot. of Beech. Voy.*, *p.* 31.—G. Berteroanum, *DC.?* (who quotes our *G. Chilense* under this, as well as under *G. falcatum.*)—Conception; *Beechey*, *Cuming*, (*n.* 129.) Valparaiso; *Bridges*, (*n.* 231.) *Mathews*, (*n.* 278.) *Cuming*, (*n.* 364.) Mas Afuera; *Cuming*, (*n.* 1353.) Andes of Mendoza; *Dr Gillies.* Maldonado; *Dr Gillies.* Buenos Ayres; *Tweedie.* Port George, Patagonia; *King's Voyage.*—This again is sometimes difficult to be distinguished from the preceding. The glomerules of capitula are less compactly spiked; but it seems to pass into *G. spicatum*, and it is hardly possible accurately to define any of the species of De Candolle's group, "*Capitulis in spicam racemosam dispo-*

sitis." Probably some of our varieties of that and the preceding species may be found to answer to the *G. stachydifolium*, Lam. and DC., and *G. Chamissonis*, DC.; the first a native of Monte Video; the second of Chili.

2001. (5.) *G. alienum*, (H. et A.); ramis sterilibus densis brevibus cæspitosis floralibus elongatis gracilibus simplicibus foliisque albo-lanatis, foliis lineari-spathulatis superioribus linearibus, capitulis in spicas terminales interruptas dispositis basi densissime lanosis, involucri cylindracei basi attenuati pulcherrime rosei squamis oblongis acutis erectis imbricatis. —Chili. *Cuming*, (*n.* 64.)—This has altogether a very peculiar aspect, something like that of our European *Xeranthemum*, and quite unlike that of any American *Gnaphalium*. Perhaps it should form a second species of *Helichrysum* of that country. The female florets are in several series in the circumference; the hermaphrodite, about six, in the centre; the receptacle is small, naked? The root is small, woody, fusiform; from its top spring many dense, short, leafy branches, 1—2 inches long, and from among them, 4—6 flowering branches, 5—6 inches high, slender, and like the whole plant, except the involucre, clothed with short, white, compact wool; at the base of the involucre the wool is loose and very copious, forming a dense white tomentose cup from which the glossy deep rose-coloured scales of the involucre arise.

2002. (1.) Filago *Gallica*, *L.*—*DC. Prodr.* vi. *p.* 248.—Oglifa Gallica, *Less.*—Logfia subulata, *Cass.*—Gnaphalium Gallicum, *L.*—Valparaiso; *Cuming*, (*n.* 576); *Bridges*, (*n.* 228.)

Subtrib. IX. Senecioneæ. *Less.*

2003. (1.) Balbisia *Berterii*, *DC. Prodr.* vi. *p.* 447. *Deless. ic. sel.* iv. *t.* 62.—*De Caisne in Ann. Sc. Nat. N. S.* i. *p.* 29. —Ingenhouzia thurifera, *Bert. Mst.*—Juan Fernandez; *Bertero*, (*n.* 1467); *Cuming*, (*n.* 1392. *masc.*)—The male plant has not been seen by Bertero. In it we find as follows:—Corolla ut in planta fœminea, at pappo longior. Antheræ lineares, coalitæ, inclusæ. Stylus inclusus, ramis erectis bre-

vissimis sursum dilatatis exappendiculatis obtusis parte dilatata papillosis. Ovaria inania, albida, pilosa.

2004. (1.) Robinsonia *thurifera, De Caisne in Ann. Sc. Nat. N. S.* i. *p.* 28.—*DC. Prodr.* vi. *p.* 448. *Deless. ic. sel.* iv. *t.* 63.—Senecio thurifer; *Bertero*, (*n.* 1511.)—Juan Fernandez; *Bertero; Douglas.*—Nom. Vern. *Resino macho.*

2005. (2.) R. *Gayana, De Caisne, l. c. DC. l. c. Deless. l. c. t.* 64.—Senecio thurifer, *var.?* *Bert.* (*n.* 1511.)—Juan Fernandez; *Bertero.* Nom. Vern. *Resino hembra.*

2006. (3.) R. *gracilis, De Caisne, l. c.—DC. l. c.*—Senecio stenophyllus; *Bertero*, (*n.* 1510.)—Juan Fernandez; *Bertero.* —Nom. Vern. *Resinillo.*

Senecio.

§ 1. *Fruticosi vel suffruticosi.* Sect. 1. Radiati.

* *Folia subintegerrima, nunc rarius divisa.*

2007. (1.) S. *subulatus*, (*Don. mst.*); fruticosus ramosissimus glaber foliis lineari-subulatis mucronato-aristatis integris vel pinnatifidis, capitulis subcorymbosis, involucri latocylindracei foliolis acutis costatis vix sphacelatis basi bracteolis parvis subulatis, ligulis sub 14 linearibus disci (multiflori) diametrum vix superantibus.—*α. prostratus;* ramis numerosissimis brevibus multifloris, foliis plurimis pinnatifidis lobis paucis elongatis.—Frequent near Capiz, province of Mendoza. Nom Vern. "*Romerillo.*" *Dr Gillies.*—*β. elatior;* ramis elongatis foliis plurimis pinnatifidis lobis paucis brevibus, involucro angustiori.—El Posito, Prov. San Juan; *Dr Gillies.* —*γ. erecta;* ramis elongatis erectis, foliis plerisque indivisis siccitate nigrescentibus.—Port-Belgrave, entrance to Bahia Blanca, N. Patagonia; *Tweedie.*—*δ. macrantha;* ramis elongatis erectis, foliis longioribus siccitate nigrescentibus omnibus indivisis, capitulis majoribus.—Bahia Blanca, coast of Patagonia; *C. Darwin, Esq.*, (*n.* 351.)—A very variable plant assuredly; and we think we are correct in bringing the above several varieties under this species. Leaves 2—3 inches long, tipped with a soft mucro, fleshy, and as it were compressed, when recent.

2008. (2.) S. *vaginatus*, (H. et A.); caule erecto fruticoso? glabro subsimplici, foliis carnosis lineari-subulatis acutis erecto-patentibus glabris supra canaliculatis subtus teretibus basi dilatato-vaginatis in axillis (supremis præcipue) lanatis, capitulis paucis subcorymbosis, involucri lato-campanulati subpubescentis foliolis acutis non sphacelatis basi bracteolis paucis parvis subulatis, ligulis 14—15 oblongo-linearibus discum multiflorum subæquantibus.—Berkeley Sound, Falkland Island; *C. Darwin, Esq.*, (*n.* 362. and 376.)—A very singular species. The leaves are one and a half to two inches long, rigid, and almost black in the dry state. Involucre short in proportion to its breadth. Flowers rather large.

2009. (3.) S. *farinifer*, (H. et A.); fruticosus pubescenti-tomentosus, ramis elongatis erectis gracilibus subangulatis, superne subaphyllis, foliis lineari-subulatis mucronatis planis integerrimis uninerviis, capitulis solitariis v. corymbosis; involucri campanulati farinoso-glanduliferi foliolis acuminatis non sphacelatis basi pauci-bracteolatis, ligulis 10—12 lato-linearibus discum æquantibus.—Near Vina de la Mar, Chili; *Bridges*, (*n.* 223). Valparaiso; *Cuming*, (*n.* 583.)—This is a very peculiar plant, of which we find no description among the numerous Chilian species of *Senecio*, described by De Candolle. The branches are from six inches to a foot long. The flowers moderately large; in the older specimens more than an inch across.

2010. (4.) S. *Chilensis*, *Less.*—*DC. Prodr.* vi. *p.* 415.—Cineraria Montevidensis, *Spr.* (*fide Lehm. in Herb. Nostr.*)—S. cuspidatus, *DC. Prodr.* vi. p. 419.—Monte Video; *Tweedie.*—Maule Province; *Cuming*, (*n.* 337.)—We can perceive no difference between the specimens found on the Pacific and the Atlantic side of America.

2011. (5.) S. *phagnalodes*, *DC. Prodr.* vi. *p.* 415.—S. gummifer; *H. et A. mst.*—Conception; (*D'Urville*); *Cuming*, (*n.* 825.)—This has smaller and much more crowded leaves than *S. Chilensis*, and the flowering branches are more elongated and almost leafless. There is too in our specimens, a

viscid substance, which causes particles of fine black sand to adhere to the branches and leaves.

2012. (6.) *S. ceratophyllus*, (*Don, mst.*); suffruticosus lana arachnoidea decidua vestitus, ramis angulatis superne subaphyllis monocephalis, foliis lineari-spathulatis mucronatis planis apice tridentatis supremis nunc integerrimis, involucri campanulati foliolis subulatis basi pauci-bracteolatis non sphacelatis sub-14 lato-linearibus.—*α. major;* ramis foliisque elongatis, foliis superioribus integerrimis.—Bahia Blanca, N. Patagonia; *Tweedie*, (*n.* 40.) *C. Darwin, Esq.*, (*n.* 368).—*β. nana;* ramis brevissimis dense foliatis, foliis omnibus tridentatis carnosis. S. Chili; *Captain Reynolds.*—The capitula are alike in both these varieties; our β may, perhaps, form a distinct species. Our *α.* is closely allied to *S. Chilensis*, and may possibly be a state of it with trifid leaves.

2013. (7.) S. *Donianus*, (H. et A.); suffruticosus? dense *albo-lanatus lana demum decidua, foliis remotiusculis subcarnosis* lato-lanceolatis basi attenuatis grosse dentato-pinnatifidis, corymbis oligocephalis, involucri campanulati foliolis acuminatis, ligulis. . . .?—*S. lanuginosus*, Don, (*non Spr.*)—Summit of the Cumbre, and Paramillo de las Cuevas, Andes of Mendoza; *Dr Gillies.*—Our specimens of this plant are very imperfect; we are even doubtful if the capitula be not discoid rather than radiate, and if the stems be not herbaceous; but the leaves are very peculiar, and about an inch long.

2014. (8.) S. *Eightsii*, (H. et A.); humilis fruticosus valde ramosus, ramis brevibus erectis glabris inferne nudis cicatricatis superne dense foliosis, foliis spathulatis apice æqualiter profunde trifidis subtus deciduo-tomentosis marginibus subrevolutis laciniis linearibus obtusis, capitulis solitariis terminalibus sessilibus, involucri campanulati foliolis acutis apice nigro-sphacelatis glabris basi paucibracteolatis tomentosis, ligulis sub-12.—Staten Land, Cape Horn; *Dr Eights*, *n.* 39.)—A small, well marked species, 4—6 inches high, with copious, alternate, erect branches; very leafy above, bare beneath, and marked with the scars of fallen leaves. Flowers

about three-fourths of an inch across. Scales of the involucre tipped with deep black.—It cannot be the *S. trifurcatus*, DC. (*Cineraria*, Spr.), from the Straits of Magellan; for that has an herbaceous and scapiform stem.

2015. (9.) S. *Darwinii*, (H. et A.); humilis fruticosus dense albo-arachnoideo-lanatus, ramis apice subaphyllo monocephalo, foliis patentibus obovato-spathulatis coriaceis apice trifidis, involucri late campanulati foliolis acuminatis demum glabris basi pauci-bracteolatis, ligulis 12—14 lato-linearibus distincte 3-nerviis disco brevioribus.—South part of Terra del Fuego; *C. Darwin, Esq.*, (*n.* 359.)—β. *laxus*; foliis remotis basi sublonge attenuatis.—Same locality; *C. Darwin, Esq.*

2016. (10.) S. *heterotrichus*, *DC. Prodr.* vi. *p.* 419.—Puerto Bravo, S. Brazil; *Tweedie*, (*n.* 1353.)—This is well named and well described by De Candolle. In some specimens the toothing of the leaves is very distinct, and the teeth terminated by a black gland.

** *Foliis pinnatifidis, lobis magis minusve profundis.*

2017. (11.) S. *limbardioides*, (H. et A.); fruticosus glaber, ramis elongatis striatis copiose foliatis, foliis lanceolatis basi attenuatis subcoriaceis enerviis pinnato-lobatis lobis brevibus integerrimis acutis, corymbis terminalibus pedunculis pedicellisque gracilibus, involucri campanulati basi calyculati foliolis acutis vix sphacelatis, ligulis lato-oblongis discum multiflorum superantibus nervosis.—Sandy hills about Quintero; *Bridges*, (*n.* 393.)—β. foliis angustioribus lobis paucioribus nunc integerrimis.—Valparaiso; *Cuming*, (*n.* 614.)—This must, we should think, be described in De Candolle, yet we do not find that the character of any of his species corresponds with it. The leaves are two inches long, half an inch broad, narrower in β., and less pinnatifid; indeed this latter is as much entitled to rank in the preceding as in the present group.

2018. (12.) S. *Berterianus*, *Colla.—DC. Prodr.* vi. *p.* 417.—Coquimbo; *Cuming*, (910.)—Habit of the last; but with a

glandular pubescence, longer and narrower leaves, the lobes more numerous, short, but frequently toothed, as well as the rachis, giving a ragged appearance to the margin of the leaves. Our *S. bipinnatifidus, Bot. of Beech. Voy. p.* 32, is probably not different from this.

2019. (13.) S. *alcicornis*, (H. & A.); fruticosus glaber, ramis elongatis strictis striatis superne subaphyllis, foliis lanceolatis acuminatis irregulariter laciniato-pinnatifidis laciniis elongatis lineari-acuminatis foliorum supremorum angustissimis, corymbis terminalibus 4-8-cephalis, involucri lato-campanulati foliolis acutis non sphacelatis basi bracteolis tenuibus, ligulis sub-10 latiusculis nervosis disco brevioribus.—Coquimbo; *Cuming*, (*n.* 859.)—The very ragged appearance of the leaves, from the irregular manner in which they are divided, is quite peculiar, as far as we know, to this species: the segments are much acuminated. The texture is thin, and there is an indistinct reticulated venation. Yet there is a good deal of similarity of habit in this and the two preceding species.

2020. (14.) S. *barbatus*, (Don. mst.); humilis fruticosus dichotome ramosus, ramis pedunculis foliis axillisque præcipue laxa densissima laxa demum decidua vestitis, foliis brevibus coriaceo-carnosis acutis bipinnato-lobatis subtus canaliculatis, lobis brevibus acutis rachibusque lato-linearibus, capitulo solitario terminali, involucri campanulati foliolis paucis (sub-10) acutis margine diaphanis basi calyculatis lanatis non sphacelatis, ligulis 10 brevibus ovali-oblongis.—Ascent of El Alto de los Manantiales, Andes of Mendoza; *Dr Gillies.*—A very singular looking, tortuous, little, shrubby plant; so woolly, especially in the axils of the leaves, that the branches look like those of some of the South American woolly *Talina*. Leaves short, scarcely half-an-inch long, rigid, pungent. Leaflets of the involucre singularly pale, and diaphanous at the margins.

2021. (15.) S. *glandulosus*, (Don. mst.); fruticosus pubescenti-glandulosus, foliis remotiusculis lineari-lanceolatis acutis pinnato-lobatis marginibus reflexis, lobis paucis brevibus acutis, capitulis terminalibus solitariis vel 2-4 subcorymbosis,

involucri campanulati foliolis acutis glandulosis basi calyculatis, ligulis . . . . ?—Andes of Mendoza; *Dr Gillies.*—Base of the plant quite woody; the flowering branches, except at the base, herbaceous and pubescenti-glandular. Our specimens are not very perfect; but we know of nothing which will accord with it.

2022. (16.) S. *Bridgesii, H. & A. in Bot. of Beech. Voy., p.* 57. *DC. Prodr.* vi. *p.* 416.—Valparaiso, to the Andes of Chili; *Bridges; Cuming,* (*n.* 65); *Dr Gillies.*—Readily distinguished from all in this section, by its comparatively small, narrow, cylindrical involucres, its very compound corymbs of copious capitula, and from the following of the section; moreover, by the plane (not thick or fleshy) and one-nerved leaves.

2023. (17.) S. *Uspallatensis,* (H. & A.); fruticosus glaber, ramis numerosis brevibus usque ad apicem foliosis, foliis coriaceo-carnosis canaliculatis bipinnatifidis rachide lobisque linearibus acutis brevibus simplicibus vel divisis, corymbis in ramis brevibus terminalibus oligocephalis, involucri glabri cylindracei foliolis acutis non sphacelatis, ligulis sub-10 brevissimis.—Uspallata, Andes of Mendoza; *Mr Cruikshanks.*—*β. tenuior;* foliis ramisque tenuioribus.—Andes of Mendoza; *Dr Gillies.*—*γ. retroflexus;* foliis bipinnatifidis lobis recurvatis.—Frequent on Paramillo, Andes of Mendoza, where it is called *Pachochomo,* and where an infusion is drunk by the miners instead of Mate; *Dr Gillies.*—This is a very woody-looking plant, even nearly to the extremity of the smaller branches; but the capitula have a great resemblance to those of the following, and the leaves are so variable on others of this genus, that we know not where to draw the limits of the species.

2024. (18.) S. *pinnatus, Poir.—DC. Prodr.* vi. *p.* 419.—S. Megapotamicus, *Spr.?*—Pampas of Buenos Ayres, and lower margin of the Jarillal above Mendoza; *Dr Gillies.* Banda Orientale; *Tweedie.* St Julian and Bahia Blanca, N. Patagonia; *C. Darwin, Esq.,* (*n.* 392. and *n.* 396.) N. Patagonia; *Tweedie.*—We have copious specimens of this plant from various localities on the Atlantic side of extratropical South

America, and from the Andes of Mendoza; but we hardly see how it is to be distinguished from the *S. haheæfolius* on the Pacific side. In our specimen, the lobes of the leaf are more usually entire than in the following species.

2025. (19.) S. *Haheæfolius, Bert. Herb.—DC. Prodr.* vi. *p.* 416.—Valparaiso; *Bridges,* (*n.* 387); *Cuming,* (*n.* 695.)—*β. viscidus;* caule superne viscoso, foliorum laciniis compositis.—S. glaber, *Less. in Linnæea,* 1831. *p.* 248. *DC. Prodr.* vi. *p.* 416.—*S. viscosissimus, Colla? DC. Prodr.* vi. *p.* 416.—Valparaiso; *Cuming,* (*n.* 360.) Quintero and Collina, Chili; *Bridges,* (*n.* 390.)—*γ. adenophyllus;* foliis ramisque junioribus glanduloso-viscosis.—Sierra Bella vista Aconcagua; *Bridges,* (*n.* 389); Cordillera of Chili; *Cuming,* (*n.* 281.)—The *S. Haheæfolius,* to which De Candolle attributes quite entire lobes to the leaves, in our specimens, passes gradually into those states with variously compound leaves; indeed entire leaves, and pinnatifid, and bipinnatifid, may often be seen on one and the same plant: we doubt if the viscid character of the branches (by no means constant,) can be considered a distinctive character or even the glands in our var. *γ.*

2026. (20.) S. *bahioides,* (H. & A.); fruticosus ramis crassiusculis teretibus striatis, foliis sessilibus pinnatifidis lato-linearibus laciniis longiusculis dentato-pinnatifidis, corymbis compositis, capitulis majusculis, involucri lato-campanulati foliolis acutis non sphacelatis basi calyculatis, ligulis sub-10 latis ovalibus nervosis disco longioribus.—*α. lanosus;* caule foliis involucrisque magis minusve lanatis, foliorum laciniis acutis.—Valparaiso; *Cuming,* (*n.* 616.)—*β. glaber;* foliorum laciniis obtusiusculis.—Renam et Quintero, Chili; *Bridges,* (*n.* 388.)—This is a stouter plant than most of the preceding, with much larger flowers, an inch and a-half across, and peculiarly large ray in proportion to the disk, which, nevertheless, is, like the involucre, broad also.

2027. (21.) S. *glabratus, H. & A. Bot. of Beech. Voy. p.* 32.—*DC. Prodr.* vi. *p.* 417.—S. auriculatus; *Poepp.*—S. Valparadisaicus; *Colla,* (*fide DC.*)—Valparaiso; *Bridges,* (*n.* 385); *Cuming,* (*n.* 598.)

Sect. II. Herbacei.

2028. (22.) S. *pulcher*, (H. & A.); simplex vel ramosus arachnoideo-tomentosus lana decidua, foliis oblongo-lanceolatis crenato-dentatis radicalibus æquilonge petiolatis caulinis remotis sessilibus superioribus semiamplexicaulibus paululumque decurrentibus, capitulis magnis corymbosis involucri latissime campanulati subhæmisphærici foliolis calyculatis non sphacelatis pubescenti-lanatis obtusis, ligulis sub-20 latis (purpureis) disco longioribus.—Moist places at the foot of the Sugar-loaf mountain, near Maldonado, and at Aldoa, west of Portalegre, S. Brazil; *Tweedie*, (*n.* 1071, 1072.) This is a splendid plant, from one to three or four feet high, with flowers two inches and more in diameter, the ray purple.

2029. (23.) S. *Brunonianus*, (H. & A.); annuus albo-pubescenti-tomentosus ramosus, ramis striatis, foliis inferioribus lanceolato-spathulatis integris reliquis lineari-lanceolatis obtusis pinnatifidis lobis brevibus inæqualibus, corymbis foliosis, involucri campanulati glabri bracteolis minutis calyculati foliolis acuminatis sphacelatis, ligulis lato-linearibus sub-12 disco longioribus.—Coquimbo; *Cuming*, (*n.* 898.)—This has a small annual tap-root, throwing up three or four stems, which are a span to a foot high, and dichotomously branched every where, as well as the leaves hoary with whitish tomentum, more lax and arachnoid on the branches, and terminated by many yellow flowers, an inch and a half in diameter.

2030. (24.) S. *adenotrichius*, (*DC. Prod.* vi. *p.* 416?); elatus totus hirsuto-vel pubescenti-glandulosus, caule striato, foliis sessilibus pinnatifidis ac inciso-lobatis segmentis acutis, corymbis amplis polycephalis foliosis, capitulis magnis, involucri calyculati late campanulati foliolis acutis exterioribus subulatis laxis interiora subæquantibus, ligulis numerosis angustis vix discum æquantibus.—Chili, near Quillota; *Bridges*, (*n.* 391.) Andes of Chili; *Cuming*, (*n.* 168.)—A very tall growing plant, with thick, herbaceous, striated, or almost angular stems, and numerous copiously leafy branches. Leaves three,

four, or five inches long. Flowers yellow, an inch and a-half in diameter. Our specimens have no great resemblance to the figure of De Candolle's plant, given in the *Bot. Reg. t.* 1190, under the name of *Adenotrichia amplexicaulis;* but as that represents it in a state of cultivation, they may prove the same.

2031. (25.) S. *sinuatilobus, DC. Prodr.* vi. *p.* 417.—S. mollis; *Poepp.* (*non Willd.*)—Valparaiso; *Cuming,* (*n.* 610.) Concon and Colmo; *Bridges,* (*n.* 392.)—This plant so entirely agrees with the description of *S. sinuatilobus,* that we hardly doubt it being the same, though our specimens are certainly herbaceous.

2032. (26.) S. *Cumingii,* (H. & A.); elatus, caule hirsuto-glanduloso, ramis sparse pubescenti-glandulosis, foliis (amplis) late ovatis obtusis pinnatifidis sinuato-lobatisque, inferioribus petiolatis petiolis lato-alatis basi auriculato-amplexicaulibus, intermediis sessilibus lato-auriculatis, supremis acuminatis dentatis, corymbis terminalibus subaphyllis, pedicellis elongatis superne incrassatis, involucro lato-campanulato non sphacelato hirto-glanduloso, ligulis latis discum subæquantibus. Valparaiso; *Cuming,* (*n.* 329.)—Leaves large, two and three inches broad. Flowers large, with broad ligules. Involucre and pedicels very glandular, the latter with several subulate bracteas.

2033. (27.) S. *Saltensis,* (H. & A.); totus pubescenti-glandulosus, caule dichotomo, ramis patentibus, foliis linearilanceolatis acuminatis dentato-pinnatifidis basi auriculatis semiamplexicaulibus summis integris, corymbo patente, involucri campanulati calyculati foliolis sub-20, ligulis sub-10 latiusculis discum æquantibus.—Salto, near Tucuman; *Tweedie.*—Flowers about an inch across. The ray seems to be reflexed, and even when dry, of a bright deep lemon-colour. Flowers about an inch across.

2034. (28.) S. *doroniciflora,* (H. & A.); totus hirsuto-glandulosus gummifer, ramis flexuosis angulatis, foliis inferioribus . . . . . ? superioribus lineari-oblongis acutis inæqualiter grosse serrato-dentatis basi latioribus semiamplectantibus,

corymbis oligocephalis parce foliosis, capitulis maximis, involucri lato-campanulati calyculati foliolis sub-20 acuminatis, ligulis sub-20 latiusculis discum æquantibus.—Banda Orientale; *Tweedie.*—Mr Tweedie notes upon this, that it is a strongly scented gummy biennial. Our specimen is evidently only an upper branch. This is every-where, as well as the involucre, thickly clothed with viscid, patent, glandular hairs. The flowers are very large, nearly three inches in diameter; the ligules deep yellow.

2035. (29.) S. *nigrescens, H. & A. Bot. of Beech. Voy. p.* 32. *DC. Prodr.* vi. *p.* 415.—S. chamædryfolius; *Less.*—Nilgue; *Feuill. Chil.* 2. *t.* 44.—South Chili; Conception; *Beechey; Macrae; Cuming,* (*n.* 799.)—St Mary, South Pacific Ocean; *Dr Eights,* (*n.* 81.)

2036. (30.) S. *denticulatus, DC. Prodr.* vi. *p.* 416.—Cineraria denticulata, *H. & A. Bot. of Beech. Voy. p.* 29.—Cineraria Americana; *Linn. Suppl.,* (*fide DC.*)—Danaa Yegua; *Colla. Art. Turin.* 38. *p.* 29. *t.* 28.—Conception; *Beechey; Macrae.* Valparaiso; *Cuming,* (*n.* 336.) Banks of the river of Valdivia and in woods; *Bridges,* (*n.* 596.) South Chili; *Capt. Reynolds,* (*n.* 39, 107.)—Six to twelve feet high, with copious corymbs or panicles of flowers; but the flowers are small in proportion to the size of the plant: leaves of the involucre few, (6-7) and the ligules only three or four, very small. We had thought this a shrubby plant, but on a more careful inspection, our specimens appear to be truly herbaceous, like the following, which is a nearly allied, though totally distinct species.

2037. (31.) S. *otites, Kunze in Poepp. Coll. Pl. Chil.* iii. *p.* 190.—*DC. Prodr.* vi. *p.* 416.—S. hastæfolius, *H. & A. mst.*—Andes of Antuco; *Poeppig.* Banks of the river, and in the woods of Valdivia; *Bridges,* (595). Chiloe; *Cuming,* (*n.* 59.) Araucania; *Capt. Reynolds,* (*n.* 37.)—Six to eight feet high, according to Mr Bridges. The leaves vary much in breadth; from one to four inches in some specimens.

2038. (32.) S. *Tweediei,* (H. & A.); elatus glaberrimus, caule striato, foliis radicalibus longe petiolatis elliptico-obo-

vatis integerrimis caulinis lineari-oblongis sessilibus acutis vel acuminatis longe remote dentatis, corymbi pedicellis elongatis parce bracteatis, capitulis magnis, involucri late cylindraceo-campanulati calyculati foliolis 18-20 acuminatis non sphacelatis, ligulis latiusculis discum superantibus.—Ditch-sides of Buenos Ayres; *Tweedie.*—Flowers large. Involucre perfectly glabrous.

2039. (33.) S. *Hualtata*, *Bert. in DC. Prodr.* vi. *p.* 417.—Cineraria gualtata; *Gill. mst.*—S. fistulosus; *Poepp. DC. Prodr.* vi. *p.* 418, (*an etiam S. Dombeyanus, DC.*?)—Rancagua and Quintero; *Poeppig.* Frequent among standing water in the Cienegas of Totoral and Capis, Mendoza; *Dr Gillies.* Marshes, Quillota; *Bridges*, (*n.* 490.) Valparaiso; *Cuming*, (*n.* 348.)

2040. (34.) S. *ochroleucus*, (H. & A.); elatus arachnoideus demum glaber, caule erecto striato, foliis radicalibus oblongo-ellipticis crenato-dentatis longissime petiolatis, caulinis remotis lanceolatis longe inæqualiter dentatis superioribus sensim minoribus sessilibus acuminatis, corymbo composito polycephalo, involucri campanulati calyculati foliolis subdecem acuminatis striatis, ligulis latis discum superantibus.—Marshy places, province of Valdivia; *Bridges*, (*n.* 587.)—*β.* corymbo simplici.—Buenos Ayres; *Tweedie.*—A very fine new species, two to four feet high. Radical leaves a span long, and thin petioles still longer. Corymbs large or long, almost naked stalks, which are again divided. Involucre with rather broad acuminated leaflets, nearly black when dry. We do not find any specific difference between the plant of Tweedie from Buenos Ayres, and that from Valdivia.

2041. (35.) S. *Bonariensis*, (H. & A.); erectus glaberrimus simplex, caule striato fistuloso parce folioso, foliis oblongo-lanceolatis obtusiusculis subdentatis, radicalibus longe petiolatis petiolo basi dilatato, caulinis sessilibus basi latis subsagittatis, corymbo denso, pedicellis bracteatis, involucri calyculati foliolis sub-14 acutis lanceolatis subsphacelatis, ligulis sub-12 latis disco brevioribus subenerviis.—Buenos Ayres; *Tweedie.*—Scarcely a foot high. Leaves three, four, and five inches long, the radical ones on stalks equal to the

blade in length, upper ones gradually smaller, bracteiform. Flowers scarcely an inch across, pale yellow, almost cream-coloured, opaque, so that the nerves are scarcely visible.

2042. (36.) S. *canabinæfolius*, (H. & A.); glaberrimus, ramis flexuosis striatis, foliis profunde bi-tripinnatifidis vel rarius pinnatim sectis laciniis paucis lineari-lanceolatis acuminatis serratis, corymbis compositis aphyllis parce bracteatis, involucri ovato-cylindracei calyculati foliolis sub-20 acutis non sphacelatis, ligulis 8-10 latiusculis disco brevioribus.—Marshes of La Plata, near Buenos Ayres; *Tweedie*.—β. foliorum laciniis 4-6 angustioribus subtus inter marginem et costam tomentosis.—Banda Orientale; *Tweedie*.—The leaves of this plant are very peculiar, generally of about three inches long, unequal, narrow acuminated laciniæ. Our *var.* β. may prove a distinct species, but evidently allied to this.

2043. (37.) S. *crassiflorus*, *DC. Prodr.* vi. *p.* 412.—Cineraria crassiflora; *Lam. Ill. t.* 675. *f.* 4.—C. vestita; *Spreng.*—On the sandy shores of the Uraguay, "creeping among the sand to a great width," and on a quicksand on the Arroy de Los Vagues, Banda Orientale; *Tweedie*, (*n.* 887, and 888.)—This is a very handsome species, every part densely hoary with white tomentum, except the large bright yellow corollas. Flowers solitary, or two together.

2044. (38.) S. *arnicoides*, *H. & A. Bot. of Beech. Voy. p.* 32.—S. plantagineus; *Bert. in Colla*, *Mem. Acad. Turin.* xxxviii. *p.* 32.—Aster plantagineus, "*Poepp. Pl. exsicc.* (*n.* 265.)"—Chili; *Bridges*. Conception; *Beechey*. Valparaiso; *Matthews*, (*n.* 243.) *Cuming*, (*n.* 516.)

2045. (39.) S. *trifurcatus*, *Less.*—*DC. Prodr.* vi. *p.* 435.—Cineraria trifurcata: *Spr.*—Woollaston Island, Cape Horn; *C. Darwin, Esq.*, (*n.* 381.)—A small plant, five inches to a span high, with a perennial root of long thick descending fibres. Stem scapiform, but leafy, with a solitary capitulum. Radical leaves several, spathulate, somewhat fleshy, 3-5 lobed at the apex, lobes ovate obtuse, with a somewhat callous point; the base is dilated, and sheathing. Cauline leaves linear-subulate, with a membraneous almost sheathing base. This seems

to answer to the *Cineraria trifurcata*, Spr., as far as the lower leaves are concerned, and it is from pretty near the same locality. We may observe, however, that the structure of the stem-leaves is very similar to that of our *S. vaginatus*. The flower is about an inch across. Involucre campanulate, scarcely calyculate, not sphacelate, of about 10-12 sharp glabrous leaflets, and with about as many yellow ligules.

2046. (40.) S. *zosteræfolius*, glaberrimus parvus annuus, radice fibrosa, caule scapiformi simplici folioso gracili monocephalo, foliis radicalibus linearibus obtusissimis enervibus basi dilatatis diaphanis subvaginantibus, caulinis sensim brevioribus subulatis, involucro lato-campanulati ecalyculati foliolis sub-14 acutis non sphacelatis, ligulis totidem brevibus obtusis estriatis integerrimis.—Margins of the Laguna de Ranco, near Valdivia; *Bridges*, (*n.* 632.)—This is a very remarkable looking plant, and has all the appearance of being an aquatic; the texture of the leaves is very similar to that of *Zostera*. Flower about three-fourths of an inch across, probably yellow where recent, but greenish where dry.

Sect. III. Discoidei.

* *Tomentosi.*

2047. (41.) S. *depressus*, (H. et A.); nanus cæspitosus subacaulis totus dense cano-tomentosus, foliis imbricatis oblongis acutis integris vel apice tridentatis, capitulo terminali solitario, involucri lanati ecalyculati? foliolis numerosis (sub-24) subulatis apice sphacelatis, corollis pappo immersis, —Culcitium depressum, *Don, mst.*—Summit of Planchon and Valle de los Ciegos, Andes of Mendoza; *Dr Gillies.*—Our plants are scarcely three inches high. Leaves three-fourths of an inch long, dense, and imbricated; some entire, others 3-toothed at the apex.

2048. (42.) S. *Poeppigii*, (H. et A.); humilis cæspitosus multiceps ubique dense cano-tomentosus, caulibus basi foliosis apice pedunculiformibus monocephalis, foliis oblongis subspathulatis obtusis puncto nigro terminatis laxe imbricatis integerrimis margine subrevolutis, pedunculo bracteato, invo-

lucri campanulati basi acuti calyculati foliolis 16 dense tomentosis subulatis apicibus nudis nigro-sphacelatis.—Cinearia; *Poepp.*—Senecio micropifolius, *β.* monocephalus, *DC. Prodr.* vi. *p.* 413.—Culcitium candidum, *Don, mst.*—Cerro de la Polcura; Andes of Mendoza; *Dr Gillies.*—Root somewhat fusiform, woody. Stems severed from the summit of the root, 4—6 inches high, clothed in the lower half with leaves an inch long, above, naked and pedunculiform, bearing a solitary capitulum and a few linear bracteas. Corollas numerous, about as long as the involucre and the pappus. It seems to be the *S. micropifolius, β. monocephalus* of De Candolle.

2049. (43.) S. *Magellanicus*, (H. et A.); herbaceus sericeo-tomentosus, caule erecto scapiformi monocephalo foliis radicalibus lineari-lanceolatis acuminatis inferne attenuatis basi longissime lateque membranaceo-vaginantibus, caulinis remotis linearibus, involucri lato-campanulati calyculati foliolis sub-20 dense sericeo-tomentosis lineari-lanceolatis apicibus sphacelatis.—Cape Negro, Straits of Magellan; *C. Darwin, Esq.*, (*n.* 367). Port Famine, Patagonia; *Capt. King's Voyage.*—This, and the two preceding, have a good deal the appearance of *Culcitia*. The present one is about a foot high, with long narrow radical leaves which have singularly long sheathing bases, and a scapiform stem. Capitulum about an inch in diameter.

2050. (44.) S. *Gilliesii*, (H. et A.); canescens arachnoideo-lanatus lana demum decidua caule paucifolio scapiformi mono-dicephalo, foliis radicalibus ovali-oblongis crasso-carnosis dentatis in petiolum longum attenuatis caulinis sessilibus superioribus linearibus; capitulis magnis, involucri lato-campanulati calyculati foliolis sub-30 lineari-acuminatis vix sphacelatis.—Culcitium dentatum, *Don, mst.*—Valle del Rio Atuel and Cerro de la Polcura; *Dr Gillies.*—A fine and very distinct species, with a fusiform root and rather stout, herbaceous and apparently succulent scapiform stem, ten inches high. Leaves thick and fleshy; radical ones numerous, including the flattened petiole, cauline ones small, distant. Capitula an inch and a half across. The whole plant appears

in a young state to have been covered with a cobwebby wool, and on its falling away, the plant has the peculiar hoary tint which is seen on many species of *Atriplex*, and other marine plants, yet there is no appearance of tomentum or of scales or any mealy covering.

2051. (45.) S. *fasciculatus*, (H. et A.); fruticosus subdichotome ramosus albo-tomentosus, foliis remotiusculis linearibus obtusis carnosis marginibus revolutis, axillis fasciculos foliorum vel ramos breves folios gerentibus, capitulo terminali solitario, involucri ecalyculati foliolis sub-18 subulatis apice subsphacelatis, acheniis elongatis glaberrimis pappi longitudine.—Valparaiso; *Cuming*, (without No.)—A solitary specimen of this was in Mr Cuming's Herbarium from Valparaiso, and in an imperfect state. It seems, however, a very distinct and well-marked species.

2052. (46.) S. *albicaulis*, (H. et A.); fruticosus incano-tomentosus demum nudiusculus, ramis albidis lævissimis, foliis linearibus obtusis subcarnosis marginibus subcarnosis integerrimis vel rarius pinnatifidis, corymbis compositis, involucri cylindraceo-campanulati corollis brevioris foliolis sub-14 linearibus acutis apice subsphacelatis.—α. *Gilliesii;* foliis integerrimis incanis.—Mountains of Villavicenzia, above Mendoza; "odour of honey," *Dr Gillies*.—β. *subglaber;* foliis integerrimis nudiusculis.—East coast of Patagonia; *Dr Eights*, (*n.* 50.)—γ. *lobulatus;* foliis subpinnatifidis, lobis 1—2-brevibus.—Santa Cruz (Patagonia?) and Port Desire; *C. Darwin, Esq.*, (*n.* 380 and 398.)—δ. *pinnatifidus;* foliis pinnatifidis laciniis linearibus elongatis.—With α. *Dr Gillies*. Los Loamos, N. Patagonia; *Tweedie*.—Like many other of the Senecios, this is very variable in the form of the leaves, pinnatifid or entire, though usually the latter. Capitula elongated, twice as long as broad. Involucre tapering at the base, always shorter than the corollas.

2053. (47.) S. *Patagonicus*, (H. et A.); fruticosus arachnoideo-tomentosus lana magis minusve decidua, foliis linearioblongis acutiusculis marginibus revolutis integerrimis supra canaliculatis, corymbis oligocephalis, involucri lato-campanu-

lati calyculati foliolis oblongis acuminatis (atro-fuscis) corollis brevioribus.—Port Famine, Patagonia; *Captain King's Voyage*.—Leaves 1—3 inches long. Branches and under-side of the leaves and peduncles, white with dense wool; involucre and upper side of the leaves frequently almost naked. Involucre broader than long.

2054. (48.) S. *caricifolius*, (H. et A.); fruticosus junior (ut videtur) albo-tomentosus demum glaber, ramis fasciculatis elongatis, foliis lineari-subulatis acutis integerrimis margine revolutis, corymbis compactis capitatis, involucri cylindracei fusci calyculati foliolis 10—12 anguste linearibus nitidis exphacelatis.—Bahia Blanca, coast of Patagonia; *C. Darwin, Esq.*, (*n.* 366).—Leaves crowded, less so towards the flowers. Involucres about the size of those of *Senecio vulgaris*.

2055. (49.) S. *Candolleanum*, (H. et A.); fruticosus totus albo-tomentosus velutinus, foliis petiolatis (petiolo plano) circumscriptione latissime ovatis profunde pinnatifidis laciniis 6—7 lato-linearibus patentibus acutiusculis tenui-costatis, corymbis dense oligocephalis subcapitatis, involucri densissime lanati late campanulati calyculati foliolis sub-18 obtusis corollis brevioribus.—Coast of Patagonia; *C. Darwin, Esq.; Tweedie*.—A very distinct species, with leaves like some coarse *Artemisia*, and flowers three-fourths of an inch across, and with a short bell-shaped densely woolly involucre.

** *Glaberrimi.*

2056. (50.) S. *leptophyllus*, (H. et A.); herbaceus, ramis erectis angulato-striatis glaberrimis, foliis linearibus profunde pinnatifidis laciniis elongatis anguste lineari-subulatis planis flexuosis, corymbis laxis, pedicellis elongatis nudis, involucri laxi ecalyculati foliolis lineari-lanceolatis margine scariosis corollis brevioribus.—Valparaiso; *Cuming*, (*n.* 582.)—Stems about a foot high, the lower part of the stem appears almost woody; the upper part of the branches and flower-stalks are peculiarly slender. The capitula broader than long, almost three-fourths of an inch across.

2057. (51.) S. *linearilobus*, (H. et A.); herbaceus, ramis angulato-striatis, foliis linearibus profunde pinnatifidis laciniis remotis lineari-elongatis acutis flexuosis, corymbis polycephalis, involucri hemisphærico-campanulati ecalyculati foliolis lanceolatis acutis striatis apice sphacelatis corollis brevioribus.—Buenos Ayres; *Tweedie*.—*β*. foliis capitulisque majoribus, Chili; *r Cruikshanks*.—Leaves 2—3 inches long, the laciniæ 1½ inch long. Leaves and involucres a good deal resembling those of the preceding *C. leptophyllus*; but the lobes of the former are not at all subulate, and the scales of the latter are much broader. In our var. *β*. the leaves and capitules are larger.

2058. (52.) S. *chrysocomoides*, (H. et A.); fruticosus glaberrimus, ramis fasciculatis, foliis linearibus rectis profunde pinnatifidis laciniis anguste linearibus paucis (2—4) brevibus rectis, corymbis oligocephalis (capitulis 2—5) bracteatis (bracteis acerosis), involucri ovati basi acuti longe calyculati foliis subdecem laxis subulatis corollis brevioribus.—East coast of Patagonia; *Dr Eights*, (*n*. 54.)—Apparently a small and very distinct plant. Branches fascicled, a span high. Capitula, broadest upward, about one-fourth of an inch in diameter.

2059. (53.) S. *vulgaris*, L.—*Gaudin. in Ann. Sc. Nat.* v. *p.* 104.—Berkeley Sound; Falkland islands; *C. Darwin, Esq.*, (*n*. 364.)—Probably introduced by means of European vessels.

2060. (54.) S. *trifidus*, (H. et A.); fruticosus nanus glaberrimus, ramis brevibus crassis tortuosis, foliis carnosis linearibus apice trifidis supra canaliculatis segmentis obtusis, capitulo terminali solitario subsessili, involucro . . . .?—Summits of the Andes of Mendoza; *Dr Gillies*.—A small woody species with thick wool, and short crooked branches scarcely rising above the surface of the soil and densely covered with fleshy leaves half an inch long, and about half a line wide. The capitula are too imperfect for description, but we believe the plant is certainly of this genus.

2061. (55.) S. *tricuspidatus*, (H. et A.); fruticosus glaber-

rimus ramis striatis foliosis, foliis linearibus planis costatis superne latioribus trifidis marginibus revolutis laciniis cuspidato-acuminatis, pedunculis bracteatis terminalibus simplicibus monocephalis vel divisis dicephalis, involucri ovati calyculati foliolis sub-18 angustis acutis apice sphacelatis corollis brevioribus.—Santa Cruz (Patagonia?) *C. Darwin, Esq.*, (*n.* 386.)—Leaves rather crowded, especially towards the upper part of the branches where the flower-stalks arise.

2062. (56.) S. *crithmoides*, (H. et A.); glaberrimus humilis, ramis brevibus fasciculatis basi suffruticosis superne pedunculiformibus bracteatis monocephalis, foliis carnosis spathulatis seu obovatis petiolatis integris dentatis 3—5-fidisve laciniis acutis, involucri lato-campanulati calyculati foliis lineari-oblongis acuminatis laxis vix sphacelatis corollis parum brevioribus.—Andes of Mendoza; *Dr Gillies.*—Extremely variable in the leaves, yet there is a peculiar habit by which it may be recognised. Leaves, an inch or more long, some linear-spathulate and entire, some ovato-spathulate and more or less toothed or 3—5-fid. Capitula, an inch in diameter.

2063. (57.) S. *limbardioides*, (H. et A.); glaber fruticosus, ramis strictis striatis subdense foliosis, foliis lato-linearibus subspathulatisve acutis planis subtus costa distincta integerrimis, corymbo polycephalo, pedicellis bracteatis (bracteis subulatis); involucri lato-campanulati calyculati foliolis sub-16 lineari-subulatis non sphacelatis corollis brevioribus.—Port-Gregory, Patagonia; *King's Voyage.*—*β. major*; foliis capitulisque paullo majoribus pedicellis bracteis numerosis.—Port-Famine, Patagonia; *C. Darwin, Esq.*, (*n.* 388.)—Leaves, $1\frac{1}{2}$—2 inches long, three lines wide. Capitula, three-fourths of an inch across.

2064. (58.) S. *bracteolatus*, (H. et A.); fruticosus glaber, foliis linearibus acutis planis integerrimis, corymbis densis polycephalis, pedicellis multibracteolatis bracteolis parvis subulatis apice glandula albida, involucri ovati basi attenuati calyculati foliolis sub-10 lanceolatis acutis subsphacelatis corollis brevioribus.—Buenos Ayres; *Dr Gillies.*—Leaves

about an inch long. Capitula, longer than broad, numerous, crowded, each about half an inch across. The most striking feature of this species is in the numerous bracteolæ of the pedicels, each tipped with a minute white callous point or gland.

2065. (1.) Werneria *pygmæa*, (Gill. mst.); radice præmorsa, caule subnullo, foliis linearibus opacis obtusis basi dilatatis in axillis dense tomentosis, capitulo sessili, involucri glabri foliolis sub-14 lanceolatis acutiusculis.—Valle de los Ciegos, Andes of Mendoza; *Dr Gillies*.—This has quite the habit of *W. pumila*, H. B. K.; but in that the leaves are rigid and glossy, and there is no wool in the axils.

2066. (1.) Erechthites *hieracifolia*, *Raf. in DC. Prodr.* vi. *p.* 294.—E. prælta, *Less.*—Senecio hieracifolius, *L.*—Sonchus agrestis, *Sw.*—South Brazil; *Tweedie*.

2067. (2.) E. *valerianæfolia*, *DC. Prodr.* vi. *p.* 295.—Senecio valerianæfolius, *Wulf.*—*Reichenb. Ic. Exot.* i. *p.* 59. *t.* 85.—Crassocephalum valerianæfolium, *Less.*—" Senecio," *Salzman, Herb. Bahiæ.*—Shores of the Parama; *Tweedie*, (*n.* 1095.)—Pappus, of a beautiful purple colour. Leaves resembling those of *Valeriana officinalis*.

(*To be continued.*)

XXIV.—BOTANICAL INFORMATION.

Latest Intelligence from Mr Gardner.

Rio de Janeiro, *Nov.* 18*th*, 1840.

My Dear Sir,—It gives me much pleasure to be able to inform you of my safe arrival at this place, with all the collections which I have been making since July of 1839. I remained in Minas Geraës till the beginning of October, and I arrived here on the first of this month. My headquarters in Minas, was Morro Velho, and from it I made several excursions, one of which was to the top of the Serra de Pudado, which is the highest in Minas, and notwithstanding that my journey was made at the very worst season, I found some