of a Potato; when so ripe as to split, it has a mealy subacid taste.

Mesembryanthemum equilaterale; Pig-faces, called by the Aborigines by the more elegant name of *Canagong*. The pulp of the almost shapeless but somewhat obconical fleshy seed-vessel of this plant is sweetish and saline; it is about an inch and a half long, of a yellowish, reddish, or green colour.

Polygonum adpressum (Bot. Mag. t. 3145). The *Macquarie Harbour Vine*, either as an insignificant trailing plant, or as a magnificent climber, according to soil and situation, is found on the coast of various parts of Van Diemen's Land, and also as far inland as within four miles of New Norfolk. This plant has a small but sweet fruit, formed of the thickened divisions of the calyx of the flower, enclosing a triangular seed of unpleasant flavour.

Gaultheria hispida, the *Wax-Cluster*, abundant in the middle region of Mount Wellington, and in other elevated and moist situations of the Colony. This fruit is formed by the thickened divisions of the calyx, enclosing the small seed-vessel, which, when ripe, is of a snowy white. The flavour is difficult to describe, but not unpleasant; in tarts it somewhat resembles young gooseberries, with a slight degree of bitterness.

Astroloma humifusa (Bot. Mag. t. 1439). The *native Cranberry* has a fruit of a green, reddish, or whitish hue, about the size of a black currant, consisting of a viscid, apple-flavoured pulp, enclosing a large seed; this fruit grows singly on the trailing stems of a small shrub resembling Juniper, bearing beautiful scarlet blossoms in autumn.

Leucopogon Gnidium (probably *Leucopogon Richeii*, Bot. Mag. p. 325.—Ed.) A large bush, with numerous harsh leaves, growing along the sea-shore with some other smaller inland shrubs of the same tribe, produces very small white berries of a sweetish and rather herbaceous taste. These are called, promiscuously, *Red* or *White Currants* in the Colony. There are in the mountains some dry red-berried shrubs allied to this, the fruit of which may serve to allay hunger, but is too disagreeable to be eaten under other circumstances.

Oxalis microphylla, *Yellow-flowered Sorrel*. This little plant, which displays its lively yellow blossoms on almost every grassy spot in the Colony, and has acid leaves resembling in form those of Clover, is very pleasant, eaten raw, to allay thirst, and when made into tarts is almost equal to the Barberry.

Casuarina torulosa. The *She Oak*. The young fruit and young shoots afford an agreeable acid by chewing, which allays thirst.

Leptospermum lanigerum, *Hoary Tea-Tree*.—*Acacia decurrens*, *Black Wattle*.—*Correa alba*, *Cape Barren Tea*.—The foliage of all these has been used for tea in the Colony, as have also the leaves and bark of *Cryptocarya glaucescens*, the Australian Sassafras.

I do not think it necessary to enter upon any description of the *Barilla Shrubs*, (*Atriplex Halimus*, *Rhagodia Billardieri*, and *Salicornia Arbuscula*,) which, with some others, under the promiscuous name of *Botany Bay Greens*, were boiled and eaten along with some species of sea-weed by the earliest settlers, when in a state of starvation. The thick young shoots of some of the humbler species of *Salicornia*, would, no doubt, like that of the *S. annua* (*Glass-wort*, or *Marsh Sampire* of England) be serviceable for pickling.

CONTRIBUTIONS TOWARDS A FLORA OF SOUTH AMERICA AND THE ISLANDS OF THE PACIFIC.

By Sir W. J. Hooker, LL.D. and G. A. W. Arnott, Esq., A.M. F.R.S.E.

I. Extra-Tropical South America.

(*Continued from Vol. I. p. 244, of this Work.*)

In addition to the collections of *extratropical South American plants*, mentioned at p. 234 of our first volume, as having been lately received by us, we have now

the pleasure to announce another, which we owe to the kindness of the Rev. Professor Henslow. It was formed by C. Darwin, Esq., of H. M. S. Beagle, in various countries between Maldonado, in the North, and Terra del Fuego, in the South, including the Falkland Islands,[1] and hence, as may be supposed, it has afforded several new plants, and new localities for some rarities which had been described before.

In order to render our Catalogue as complete as opportunities will allow, we have thought it best, before printing the continuation of the *Compositæ*, to introduce several plants recently received, which belong to such groupes of this family as have already been treated of in the first volume of this Work.

HYPOCHÆRIDEÆ. *Less.—Hook. et Arn. hujusce vol. p.* 30.

735. (4.) Seriola *aparioides*, Less.—Var. *glabra*.—Add, an Hypochæris arenaria? *Gaudich. in Freyc. Voy. p.* 46.—Falkland Islands and Port Desire, *C. Darwin, Esq.* (*n.* 338.) Port Gregory, Patagonia. (*Herb. nostr.*)

737. (7.) Add, Seriola *incana* (Hook. et Arn.) *n. sp.;* tota tomento deciduo canescens, caule simplici monocephalo, foliis radicalibus anguste linearibus subulato-pungentibus subsessilibus exterioribus integerrimis intimis pinnatifidis segmentis remotis linearibus brevibus, involucri foliolis lanceolato-acuminatis obtusis.—St. Julian, *C. Darwin, Esq.* (*n.* 347.)—A small annual plant, three to four inches high, with the scapiform stem scarcely twice as long as the radical leaves, and bearing one or two leafy bracteas.

739. (1.) Macrorhynchus *Chilensis*, Less.—Add, Falkland Islands, *C. Darwin, Esq.* (*n.* 335.)

740. (1.) Sonchus *oleraceus*, L.—Add, Bahia Blanca, coast of Patagonia, *C. Darwin, Esq.* (*n.* 342.)

751. (1.) Picrosia *longifolia*, Don.—Add, S. Chili, *Mr. Reynolds.* (*n.* 45.)

751* (1.) Add Hedypnois *rhagadioloides*, Willd.—Banda Orientale, *Tweedie.*—Probably introduced.

758. (5.) Trixis *discolor*, Gill.—Add, Woods of Tucuman, *Tweedie.* (*n.* 1157.)

759. (6.) Trixis *papillosa*, Gill.—Add, St. Jago and Tucuman, frequent, *Tweedie.* (*n.* 1129.)

761* (2*.) Add Perezia (Homœanthus) *squarrosa*, Less. *in Linnæa, v.* 5. *p.* 13.—Perdicium squarrosum, *Vahl, in Skrivt. Nat. Selsk. v.* 1. *p.* 11. *t.* 6.—Homœanthus ambiguus, *Cass.*—Chætanthera ciliata, *Spr.* (non *R. et P.*)—Banks of the Uraguay, near Salta, *Tweedie*, who observes that the flowers have the odour of violets.—Lessing describes this plant as having the foliola of the involucre entire: but they are not so in our plant, nor in the original one of Vahl, according to the latter author.

763.* (4.*) Add, Perezia (Stenophyllum) *recurvata*, Less. *in Linnæa, v.* 5. *p.* 21. *Syn. Comp. p.* 412.—Perdicium recurvatum, *Vahl, in Skrivt. Nat. Selsk. v.* 1. *p.* 10. *t.* 7.—Homœanthus echinulatus, *Cass. Dict. v.* 38. *p.* 455.—Port Desire, *C. Darwin, Esq.* (*n.* 311.) Port George, Patagonia. (*Herb. nostr.*)

763.** (4.**) Add, Perezia (Stenophyllum) *linearis*, Less. *Syn. Comp. p.* 412.—Add, Araucania, *Mr. Reynolds.* (*n.* 16.)

763.*** (6.*) Add, Perezia *lanigera* (Hook. et Arn.), *n. sp.;* nana, subacaulis, cæspitosa, foliis subulatis rigidis pungentibus marginibus revolutis glabris integerrimis basi dilatato-amplexantibus axillis dense lanigeris, involucri foliolis oblongis mucronatis omnibus integerrimis.—Port Desire, *C. Darwin, Esq.* (*n.* 314.)—A very small, cæspitose plant, scarcely an inch high, with rigid, subulate leaves, longer than the stem. The nearest affinity of this is with the section "*Stenophyllum*," Less.; but the leaves and involucres are quite destitute of teeth or ciliæ.

764. (5.) Perezia (Euperezia) *Magellanica*, Less.—Add, Cape Tres Montes, *C. Darwin, Esq.* (*n.* 369.)

767.* (9.) Add, Perezia (Clarionia) *lactucoides*, Less. *in Linnæa, v.* 5. *p.* 22. *Syn. Comp. p.* 413.—Perdicium lactucoides, *Vahl, in Skrivt. Nat. Selsk. v.* 1. *p.* 10. *t.* 5.—Straits of Magellan, at Cape Negro, *C. Darwin, Esq.* (*n.* 315.)

769. (1.) Leuchæria *senecionides*, Hook. et Arn.—Add, Araucania, *Mr. Reynolds.* (*n.* 20.)

773. (5.) Leuchæria *runcinata*, Gill.—Add, Araucania, *Mr. Reynolds.* (*n.* 1.)

776.* (8.*) Add, Leuchæria *volcanica* (Hook. et Arn.), *n. sp.;* caule arachnoideo albo-tomentoso subsimplici eglanduloso, foliis lineari-lanceolatis pinnatifidis basi attenuatis superioribus integerrimis segmentis patenti-recurvis mucronato-acuminatis, involucri campanulati foliolis oblongo-lanceolatis acumi-

[1] Some interesting extracts from the letter addressed by this gentleman to Professor Henslow, chiefly relating to the Geology of the countries, have been printed by the latter for private distribution.

natis eglandulosis, ligula oblonga.—Volcano of Antuco, S. Chili, at an elevation of six thousand feet above the level of the sea, *Mr. Reynolds.* (*n.* 103.)—Allied in general habit to *L. Gilliesii*, but the leaves are different, and it altogether wants the glandular hairs of that species.

776.** (8.*) Add, Leuchæria (Cassiopea) *achillæifolia* (Hook. et Arn.); caule gracili dichotome ramoso puberulo, foliis remotis bipinnatifidis segmentis parvis ovatis obtusis, axillis rachibusque præcipue dense lanosis, involucri campanulati foliolis lineari-oblongis obtusiusculis puberulis, ligula oblonga.—Port Desire, *C. Darwin, Esq.* (*n.* 391.)—This plant is about six to eight inches high, and differs remarkably from the other species of this section and genus.

779.* (12.) Add, Leuchæria (Lasiorrhiza) *purpurea*, Less.—Perdicium purpureum, *Vahl, in Skrivt. Nat. Selsk. v.* 1. *t.* 3.—E. coast of Terra del Fuego, *C. Darwin, Esq.* (*n.* 376.)

779.* (13.) Add, Leuchæria (Lasiorrhiza) *gossypina* (Hook. et Arn.); dense lanata, caule simplici folioso unifloro, foliis radicalibus—?, caulinis plurimis lato-lanceolatis acuminatis supra subdenudatis, involucri campanulati foliolis oblongo-lanceolatis obtusis, ligula oblonga.—East Falkland islands, *C. Darwin, Esq.* (*n.* 355.)—A very remarkable plant, of which we do not possess the root-leaves. The stem and cauline leaves, and, especially, the involucre, which is nearly as long as the florets, are clothed with very thick and fine cottony wool, which seems partially to wear off from the upper side of the foliage.

784.* (4.) Add, Panargyrum (Piptostemma) *Darwini* (Hook. et Arn.); cæspitosum basi ramosum, foliis lineari-subulatis pungentibus integerrimis appresso-sericeis, capitulis congestis.—Port Desire, *C. Darwin, Esq.* (*n.* 313.) Port Gregory, Patagonia, near the Straits of Magellan. (*Herb. nostr.*)—Very different from *P. spinosum*, which has the nearest affinity with it, in the unarmed leaves, and their white silky surface. The pappus is very plumose and silky and exceedingly caducous.

784.* (5.) Add, Panargyrum (Pipto-) stemma, Don,) *abbreviatum* (Hook. et Arn.) *n. sp.*; cæspitosum basi ramosum, foliis patenti-recurvis lineari-acuminatis mucronatis integerrimis glabris basi ciliatis, axillis tomentosis, capitulis congestis.—Fort Gregory, Patagonia. (*Herb. nostr.*)—This is not dissimilar in habit to the other individuals of the section (*Piptostemma*); but its pappus, as in the preceding species (*P. Darwini*) is much more plumose than in the original *P. plumosum*, although much less so than in *Caloptilion*, in which last the pappus is also deciduous; so that were it not for the difference in habit, the Piptostemma-group might be united with *Caloptilion*.

788.* (2.) Add, Acanthophyllum *rosulatum* (Hook. et Arn.); nanum cæspitosum, e basi ramosum, foliis sublanosis primariis lato-subulatis spinescentibus basi amplexantibus, secundariis brevissimis obtusis concavis rosulatis caulis partes inferiores densissime tegentibus, capitulis subglomeratis lateralibus brevipedunculatis.—Port Desire, *C. Darwin, Esq.* (*n* 324.)—This is a most remarkable looking little plant, with the secondary leaves forming beautiful rosulæ in the axils of their primary ones, which latter they soon obliterate, and clothe entirely the old parts of the stems.

789.* (1.) Triptilion *spinosum*, R. et P. —Add, South Chili; *Mr. Reynolds.* (*n.* 105.)

790.* Add, Triptilion *capillatum*, Hook. et Arn.—Nassauvia capillata, *Don in Phil. Mag. Apr.* 1832, *p.* 390; *in Guill. Arch. v.* 2. *p.* 465.—Baths of Collina, Chili, *Mr. Macrae.*—Pappus as in *Triptilion spinosum*; but the habit of the plant is more slender than that species, more diffuse, the leaves thinner, their laciniæ or serratures furnished with a much longer and less rigid point.

790.** (1.) Mastigophorus *Gaudichaudi*, Cass. *Dict. Sc. Nat. v.* 34, *p.* 222.—Nassauvia Gaudichaudi, *Cass. in Gaudich. Ann. Soc. Nat. v.* 5. *p.* 103. *t.* 3. *f.* 3.—Falkland Islands, *C. Darwin, Esq.* (*n.* 327, 328.)

MUTISIACEÆ. *Cass.—Hook. et. Arn. l. c. p.* 102.

796. (2.) Chevreulia *stolonifera*, Cass.—Add, Banda Orientale, *Tweedie.*

801. (1.) Leria *nutans, DC.*—Add, Bahia Blanca, Coast of Patagonia, *C. Darwin, Esq.* (*n.* 349.)

806.* Trichocline *maxima*, Less. *in Linnæa, v.* 5. *p.* 290.—Rio Grande do Sul, S. Brazil, *M. Isabelle.*

806.** (7.) Add, Trichocline *foliosa* (Hook. et Arn.), *n. sp.*; caule folioso albo-tomentoso, foliis lineari-spathulatis integerrimis subtus albo-tomentosis, involucri foliolis uniformibus folia subsi-

mulantibus squarroso-patentibus oblongo-acuminatis subtus albo-tomentosis. —Rio Grande do Sul, S. Brazil, *M. Isabelle*.—The portion of the stem which we have is rather more than a foot long, bearing leaves to the summit, where they become smaller, but more crowded, and pass gradually into the leaflets of the involucre, which are all alike, and singularly lax, large, and very patent.

828*. (1*.) Add, Mutisia *truncata*, Don, *in Linn. Trans. v.* 16. *p.* 269.—Province of Maule, *Cuming* (*n.* 83.); St. Mary, S. Patagonia, *Dr. Eights*; Antuco, in S. Chili, *Mr. Reynolds*. (*n.* 105. 38.) —Upon a close comparison of this plant with *M. spinosa*, we are inclined to consider it distinct from that species. It has a more southern locality; its leaves are thinner, less toothed, they turn black in drying, and the peduncle is longer. Our South Patagonia and Maule stations of *M. spinosa*, must now be referred to this plant.

833. (6). Mutisia *subspinosa*, Cav.—Add, Araucania? *Mr. Reynolds*. (*n.* 15.)—Our specimens of this are too imperfect to enable us to decide with certainty as to the species.

834 (7.) Mutisia *subulata*, R. et P.—and *Cavanillesii*, Valley of Antuco, S. Chili, *Mr. Reynolds*. (*n.* 16. 106.)

845. (6.) Gochnatia (Nardophyllum) *revoluta*, Don.—We have now seen flowers of this plant, and find the anthers to be *ecaudate*; so that it must be removed from the present genus (as now constituted), and we would propose for it the following name and character:

NARDOPHYLLUM, *Hook et Arn.*
(Nov. Gen.)

Capitulum 5—6-florum, homogamum, homocarpum. *Rachis* ebracteolata.) *Flosculi* 5—6, tubulosi regulares. *Filamenta* lævia glabra. *Antheræ*, ecaudatæ. *Stylus* glaberrimus elongatus. *Achenium* sericeo-villosum. *Pappus* conformis pluriserialis subplumosus. *Involucrum* involucratum, foliolis scariosis acuminatis.—Frutices, *ramis junioribus albo-tomentosis*. Folia linearia, *rigida*. Capitula *terminalia solitaria*.

1. Nardophyllum *revolutum*, Hook. et Arn.—Gochnatia revoluta, *Don.*—*Hook. et Arn. l. c.*—To this genus we have to add a second species.

2. Nardophyllum *obtusifolium* (Hook. et Arn.) *n. sp.*; foliis teretibus obtusissimis patenti-recurvis subdecurrentibus dorso sulcatis.—Port Desire, *C. Darwin, Esq.* (*n.* 325.—This is a small shrubby species, three to four inches high, much branched upwards. Leaves one and a half line long.—It may readily be distinguished from the preceding by the very rounded, blunt, and somewhat decurrent leaves.

849. (4.) Chuquiraga *oppositifolia*, Gill.—Add; Port Desire, *C. Darwin, Esq.* (*n.* 312.)

853. (5.) Chuquiraga *erinacea*, Gill.—Add, Bahia Blanca, Coast of Patagonia, *C. Darwin, Esq.* (*n.* 329.)

VERNONIEÆ. *Less.—Hook. et Arn.: l. c. p.* 236.

875*. (6.*) Add, Vernonia *squamulosa* (Hook. et Arn.), *n. sp.*; fruticosa, foliis oblongis subcoriaceis brevi-petiolatis integerrimis v. subserratis supra scabris subtus puberulis, capitulis corymbosis, involucri turbinati squamis oblongis obtusis erectis inferioribus numerosissimis minutis squamæformibus imbricatis longe descendentibus, achenio pubescente, pappo exteriore brevi latiore.—Plentiful in woods of Tucuman, *Tweedie*. (*n.* 1224).—A very remarkable species, with the base of the involucre singularly attenuated into a stalk, and clothed with minute closely imbricated scales.

889* (21?) Add, Vernonia *cinerea*, Less. Hab.?—*C. Darwin, Esq.*—The station of this is not indicated upon the ticket If found in extratropical S. America, it is probably introduced. We had previously only seen East Indian specimens.

918*. (16*.) Add, Eupatorium *dodoneæfolium* (Hook. et Arn.), *n. sp.*; fruticosum ubique glutinosum, foliis alternis anguste lanceolatis in petiolum brevem attenuatis dentatis coriaceis glanduloso-punctatis pinnatim-nervosis, corymbis densis terminalibus, involucri oblongi pluriserialis foliolis nitidis glabris exterioribus brevibus oblongo-ovatis, intimis linearibus acuminatis flosculos æquantibus.—Plentiful in the plains of St. Jago and Mendoza, *Tweedie*. (*n.* 1208.).

920. (18.) Eupatorium *tremulum*; β. Hook. et Arn.—Add, Plains of Mendoza, *Tweedie*. (*n.* 1207.)

940. (38.) Eupatorium *glechonophyllum*, Less.—Add, Valparaiso, *C. Darwin, Esq.* (*n.* 377.)

If the species now mentioned (23) be added to those already noticed, it will make the number 976; so that we continue our memoir with *n.* 977.

TRIB. VII.—ASTEROIDEÆ.—*Less.*

SUB-TRIB. I.—ASTEREÆ.—*Less.*

977. (1.) Chilotrichium *amelloides*, Cass. —Berkeley Sound, Falkland Islands. *C. Darwin, Esq.* (*n.* 321.)

978. (1.) Grindelia *speciosa*, Gill.; "suffruticosa glutinosa, foliis petiolatis cuneato-lanceolatis acutis dentatis planis, involucro subgloboso squarroso foliolis basi ovatis appressis coriaceis apice elongato-subulato recurvato-patenti ligulis dimidio breviore." *Don.*—Foot of the Andes of Mendoza, *Dr. Gillies.*

Caulis erectus, bi-tripedalis, purpurascens. *Folia* 2—3-pollicaria. *Capitulum* solitarium, magnum. *Radii* aurei: *flosculi* pollicares. *Don.*

979. (2.) Grindelia[1] *puberula* (Hook. et Arn.); suffruticosa, tota puberula, ramis usque ad capitulum foliosis, foliis obovato-ellipticis semiamplexicaulibus basi auriculatis mucronatis argute dentato-serratis, involucri foliolis lanceolato-subulatis fusco-puberulis, radio involucrum plus duplo superante.—Dry woods in the colony of Victoria, *Tweedie.*

980. (3.) Grindelia *diffusa*, Gill.; "suffruticosa ramosissima glutinosa, foliis sessilibus angusto-oblongis mucronatis spinuloso-dentatis, involucro globoso squarroso foliolis e basi appressa lanceolato-subulatis revolutis, radio involucrum duplo superante." *Don.*—Province of San Luis, San Isidro, and Andes of Mendoza, *Dr. Gillies;* Fort Argentino, Patagonia, *Tweedie;* Port Desire, *C. Darwin, Esq.* (*n.* 383.)

981. (4.) Grindelia *discoidea* (Hook. et Arn.); fruticosa subglutinosa, foliis oblongo-linearibus mucronatis spinuloso-dentatis, involucri hemisphærici squarrosi foliolis exterioribus e basi appressa linearibus recurvis, radio nullo.—Monte Video and Maldonado. *Tweedie.*—Perhaps this may be a variety of *G. diffusa*, of which it has the habit; but none of our specimens from different localities, and gathered at different periods, possess any ray to the capitula.

982. (5.) Grindelia *scorzonerifolia* (Hook. et Arn.); suffruticosa, foliis anguste linearibus sessilibus semiamplexicaulibus basi æqualibus v. paulo latioribus apice acuminatis mucronatis subintegerrimis, involucri foliolis e basi ovata breviter subulatis, radio involucrum duplo superante.—Parana, Buenos Ayres, and Rio, *Tweedie.*—A dwarf plant, with singularly narrow leaves, and very slightly branched stems.

983. (6.) Grindelia *resinosa*, Gill.; "suffruticosa glutinosa, foliis lineari-lanceolatis acutis spinuloso-dentatis integerrimisve basi in petiolum attenuatis involucro hemisphærico ligulis dimidio breviore, foliolis e basi ovato elongato-subulatis." *Don.*—Abundant near Las Arbolitas, Mendoza; *Dr. Gillies.*

984. (7.) Grindelia *foliosa*, Don; "suffruticosa glutinosa, foliis basi attenuatis lanceolatis acutis dentatis vel integerrimis undulatis, involucro hemisphærico radio subdimidio breviore foliolis e basi ovata subbreviter subulatis." *Don.*—Andes of Chili and Mendoza, and banks of Rio Diamante, *Dr. Gillies.*—This species appears to us to be too closely allied to the last, differing only by the broader leaves, which have an inclination to become wavy; by the larger capitula; and by the broader leaflets of the involucre, which have shorter points.

985. (8) Solidago *odora*, Willd. (*ex Lessing in Linnæa, v.* 6. *p.* 125.)—S. Chilensis, *Kunze.*—α. *glabriuscula;* acheniis sparse et breviter pilosis. S. Bonariensis. *Don*, MSS. Buenos Ayes; Laguenilla, near Mendoza, *Dr. Gillies;* Chili, *Cuming* (*n.* 68.), *Bridges.*—β. *scabra;* acheniis sparse pilosis.—Monte Video, *Tweedie.*—γ. *glabra;* acheniis glabris.—S. repens. *Don*, MSS.—Mendoza, and banks of the Rio Uspallata, *Dr. Gillies;* Buenos Ayres, Maldonado, and N. Patagonia, *Tweedie;* Chili, *Mr. Cruikshanks;* Sta. Cruz of Buenos Ayres, *C. Darwin, Esq.* (*n.* 354.)

986. (9.) Diplopappus *foliosus* (Hook. et Arn.); fruticosus glutinosus, ramis crassis densissime foliosis, foliis obovato-spathulatis reflexis rigidis dentato-spinosis, floribus solitariis terminalibus, involucri foliolis erectis linearibus obtusis membranaceis margine scariosis, achenio parce pubescente, pappi serie exteriore dimidio breviore conformi.—Fissures of rocks near the bay, Villa de la Mar, Chili, *Bridges, Cuming.* (*n.* 66.)

987. (10.) Diplopappus *mucronatus*, (Hook. et Arn.)—Baccharis mucronata, *Hook. et Arn. Bot. of Beech. Voy. p.* 30.—Coquimbo, *Messrs. Lay et Col-*

[1] All the North American species called *Donia*, have the anthers without awns at the base, and belong therefore to *Grindelia*. Lessing's *Donia Canariensis* alone agrees with his generic character, and the name may be retained for it. Of *Grindelia*, the best characters of the species seem to be taken from the shape of the involucre; but it must be confessed that it is very difficult to define their limits in a satisfactory manner.

lie; Valparaiso, *Cuming*, (*n.* 73.) *Macrae.*

988. (11.) Diplopappus *foliosus* (Hook. et Arn.); fruticosus glutinosus, ramis usque ad apicem foliosis, foliis obovato-rotundatis sessilibus coriaceis, mucronato-dentatis resinoso-punctatis, capitulis terminalibus subglomeratis, involucri foliolis oblongis erectis obtusis scarioso-marginatis interioribus augustioribus, achenio lineari-elongato sericeo, pappi serie exteriore interiore plusquam dimidio breviore conformi. — Exothamnus ilicifolius, *Don*, MSS.—Andes of Mendoza, *Dr. Gillies.*—In all Dr. Gillies' specimens there is no ray to the flowers, on which account it appears Mr. Don made it a new genus: but the habit is so much that of *D. mucronatus*, which has usually a ray, that we are unwilling to separate it from *Diplopappus*.

989. (12.) Diplopappus *spinulosus* (Hook. et Arn.); fruticosus humilis subsimplex, foliis obovato-lanceolatis acutis mucronatis spinoso-dentatis rigidis reticulatis ciliatis, pedunculo solitario terminali elongato bracteato pubescenti-tomentoso monocephalo, involucri foliolis imbricatis subpubescentibus lineari-oblongis exterioribus brevioribus mucronatis, achenio sericeo, pappi serie exteriore conformi interiore subduplo breviore.—Las Cuevillas, Andes of Mendoza.—*β.* foliis hirsuto-pubescentibus. Port Desire, *C. Darwin, Esq.* (*n.* 310.)

990. (13.) Diplopappus *inuloides*, (Hook. et Arn.); fruticosus subramosus, foliis obovato-lanceolatis acutis mucronatis spinoso-dentatis rigidis reticulatis ciliatis, pedunculo terminali solitario elongato bracteato subglabro monocephalo, involucri foliolis numerosis imbricatis glabriusculis lineari-subulatis pungentibus uniformibus, achenio sericeo.—Cliffs, Valparaiso; *Bridges, Cuming*, (*n.* 404.)

991. (14). Diplopappus *grindelioides* (Less); caule herbaceo ramoso glabro, foliis obovato-spathulatis obtusis inæqualiter spinoso serratis submembranaceis obscure reticulatis glabris, pedunculis elongatis terminalibus remote bracteatis monocephalis, involucri glabri foliolis numerosis imbricatis lineari-subulatis subpungentibus uniformibus, achenio sericeo.—D. grindelioides, *Less. in Linnæa, v.* 6. *p.* 115.—Valparaiso, *Cuming* (*n.* 502.) *Mathews* (*n.* 331.)—This is decidedly a herbaceous plant, with very obtuse spathulate leaves, and capitula which are an inch and a half in diameter. The original species of Lessing seems to differ by the pubescent leaves.

992. (15.) Diplopappus *cuneatus* (Hook. et Arn.); pumilus fruticosus glaber, caule brevi dense folioso, foliis obovato-cuneatis coriaceis subpetiolatis obtuse dentatis dentibus brevi-mucronulatis obscure reticulatis, pedunculo terminali remote bracteato monocephalo, involucri imbricati foliolis lineari-oblongis mucronulatis subundulatis uniformibus exterioribus brevioribus, achenio sericeo.—Aplopappus diversifolius, *Don, MSS.*—Cumbre of the Cordillera of the Andes, *Dr. Gillies.*—A small and apparently very distinct plant, with the peduncle equal in length with the very leafy stem. Capitula an inch and a quarter in diameter.

993. (16.) Diplopappus *bellidifolius* (Hook. et Arn.); fruticosus glaber glutinosus, caule brevi ramosissimo dense folioso, foliis obovato-spathulatis in petiolum angustum attenuatis grosse acute dentatis obtusis rigidis, pedunculis gracilibus parcissime bracteatis monocephalis, involucri imbricati foliolis lineari-subulatis subpungentibus uniformibus exterioribus multo brevioribus, achenio sericeo.—Cordillera of Chili, *Cuming* (*n.* 233.); Los Ojos de Agua, *Bridges* (*n.* 224.—Scarcely larger than the preceding, very much branched, with numerous slender peduncles almost destitute of bracteas. Capitula nearly an inch in diameter.

994. (17.) Diplopappus *macrocephalus*, Pœpp.; caule fruticoso subnullo, foliis rosulatis obovato-spathulatis obtusis basi in petiolum gracilem attenuatis glutinosis rigidis argute ciliato-serratis ciliis spinescentibus albis, pedunculo scapiformi 1—2-bracteato vernicoso monocephalo, involucri imbricati foliolis numerosis lineari-subulatis pungentibus exterioribus minoribus uniformibus, achenio sericeo.—*Less. in Linnæa, v.* 6. *p.* 114.—Maule province, *Cuming* (*n.* 840.); S. Chili, *Mr. Reynolds.* (*n.* 152.)—This is a very beautiful and well-marked species, which we think is the one described by Lessing under the above name: but we must confess that in the present, and in numerous other instances of the like kind, we find the greatest difficulty in discriminating that author's species, on account of the very diffuse descriptions, and the total absence of specific characters.

995. (18.) Diplopappus *coronopifolius*, Less.; fruticosus glaber, caule brevi decumbente, ramis numerosis cæspitosis

valde foliosis, foliis lineari-spathulatis rigidis pinnatifidis subbipinnatifidisque laciniis oblongis acutis mucronatis, pedunculis gracilibus nudis v. hic illic bracteolatis monocephalis, involucri glabri foliolis imbricatis lineari-subulatis subpungentibus exterioribus minoribus uniformibus, achenio sericeo.—*Less. in Linnæa, v.* 6. *p.* 112.—Aplopappus glutinosus, *Cass.* (*ex Less.*)—Conception, *Cuming* (*n.* 818.); Valdivia, shady places near rivers in Los Andes, *Bridges.* (*n.* 640.)—This likewise is a small, but very distant and well-marked species, with copious foliage of a pale and almost glaucous hue.

996. (19.) Diplopappus *Coquimbensis* (Hook. et Arn.); fruticosus pubescens, ramis elongatis, foliis obovato-lanceolatis coriaceis grosse dentato-serratis in petiolum attenuatis, pedunculis elongatis bracteatis v. nudis monocephalis, involucri pubescentis foliolis imbricatis lineari-subulatis acuminatissimis exterioribus uniformibus, radio involucrum superante, achenio sericeo, pappo rufo.—Coquimbo, *Cuming* (*n.* 892.); Valparaiso (?) *Macrae.*—Closely allied to the following, but the leaves are shorter, broader upwards, more petiolated, and the pappus is of a very red-brown colour. Mr. Macrae's specimen precisely accords with that from Mr. Cuming, whence we are led to infer that it may probably have been gathered in the same locality.

997. (20.) Diplopappus *canescens* (Hook. et Arn.); fruticosus, ubique canescenti-tomentosus, foliis lanceolatis coriaceis in petiolum attenuatis grosse acute dentatis dentibus subrecurvis, pedunculis elongatis bracteatis v. subfoliosis monocephalis, involucri pubescentis foliolis lineari-acuminatis exterioribus minoribus angustioribus, radio involucrum superante, achenio sericeo, pappo testaceo.—Chilian Andes, *Cuming* (*n.* 177.); Baths of Collina, *Macrae.*—This seems to be a Cordillera plant, distinguishable from the following by its more downy leaves and stem, not in the least glutinous.

998. (21.) Diplopappus *Donianus* (Hook. et Arn.); fruticosus læviter pubescens subglutinosus, foliis lanceolatis coriaceis grosse acute dentatis in petiolum attenuatis, pedunculis elongatis bracteatis monocephalis, involucri villoso-pubescentis foliolis lineari-acuminatis exterioribus minoribus angustioribus, achenio sericeo, pappo testaceo.—Valparaiso, *Cuming* (*n.* 785.)—β. radio nullo. Valparaiso, *Cuming* (*n.* 786.), *Bridges.*—In this we can distinguish no ray to the flowers: the stems and leaves are much less downy than the preceding, but the upper part of the peduncle is more so.

999. (22.) Diplopappus *Pœppigianus* (Hook. et Arn.); fruticosus ubique tomentoso-sericeus, foliis lanceolatis acutis rigidiusculis inferne attenuatis omnino integerrimis, pedunculis elongatis bracteatis (demum glabris) monocephalis, involucri pubescenti-tomentosi foliolis lineari-subulatis exterioribus gradatim minoribus magisque subulatis, radio nullo, achenio sericeo, pappo testaceo.—Cordillera of Chili, *Cuming.* (*n.* 203.)

1000. (23.) Diplopappus *integerrimus* (Hook. et Arn.); fruticosus glaberrimus glutinosus dense foliosus, foliis lanceolatis acutis rigidis integerrimis inferne attenuatis, pedunculis elongatis remote bracteatis monocephalis, involucri glaberrimi viscidi foliolis subulatis apicibus recurvis exterioribus minoribus uniformibus, radio perbrevi, achenio sericeo, pappo testaceo.—San Felipe de Aconcagua, *Bridges* (*n.* 222.); Cordillera of Chili, *Cuming.* (*n.* 258.)—A very distinct and well-marked species.

1001. (24.) Diplopappus *glutinosus*, Pœpp.? fruticosus glaberrimus glutinosus, foliis obovato-lanceolatis subspathulatis coriaceis obtusis in petiolum attenuatis superne dentato-serratis, pedunculis elongatis subnudis monocephalis, involucri puberuli glutinosi foliolis arcte imbricatis lineari-subulatis exterioribus minoribus angustioribus, radio involucrum superante, achenio sericeo, pappo testaceo.—Valparaiso, *Bridges* (*n.* 225.); Cordillera of Chili, *Cuming.* (*n.* 285.)—Leaves almost exactly spathulate.

1002. (25.) Diplopappus *setiger* (Hook. et Arn.); fruticosus glaber glutinosus, foliis densis linearibus rigidis pinnatifidis segmentis rigido-setigeris, pedunculis elongatis multibracteatis bracteis subulatis setigeris, involucri pubescentis foliolis spinoso-setigeris subulatis intimis lineari-oblongis, radio obsoleto, achenio setigero, pappo fulvo.—Baths of Collina, *Macrae;* Questa de Chuenboco, *Bridges* (*n.* 221.); Chilian Andes, *Cuming* (*n.* 178.)

1003. (26.) Diplopappus *sericeus* (Less.); herbaceus glanduloso-pubescens vel sericeo-villosus subramosus, radice perenni, foliis radicalibus petiolatis lanceolato-spathulatis, caulinis lanceolatis sessilibus, involucri foliolis pauciseria-

libus pubescenti-glandulosis linearibus acutis intimis membranaceis margine coloratis, radio purpureo, achenio nervoso pubescente, pappo fulvo.—*Less. in Linnæa, v. 6. p.* 110.—D. candidus, *Gill. et Don, MSS.*—D. vestitus, *Gill. MSS.*—Near Valparaiso and Talca, *Dr. Gillies, Cuming* (*n.* 67.); Las Animas, near Valdivia, *Bridges* (*n.* 749.); Buenos Ayres and Pampas of Santa Fée, *Dr. Gillies;* Island of Los Morinheros, Entre Rios and North Patagonia, *Tweedie.*—*β. glandulosa;* caule foliisque minus villosis magis minusve glandulosis.—Aplopappus lividus. *Gill. et Don, MSS.*—Peral, Chili, *Dr. Gillies;* Sierras de San Isidro, Quillota, Chili, *Bridges.* (*n.* 299.)

1004. (27.) Diplopappus *diffusus* (Hook. et Arn.)—Erigeron diffusus. *Pers.*—El Morro, Prov. of St. Luis, *Dr. Gillies.*—This is more branched than the preceding, with smaller leaves and a much deeper (dark purple-brown) pappus. In this and all the preceding species of *Diplopappus*, the achenium is silky or hairy, both the rows of the pappus pilose, though the outer one be shorter than the inner: hence belonging to the genus or group of *Aplopappus* of Cassini.

1005. (28.) Diplopappus *pinnatifidus* (Hook. et Arn.); fruticosus glaberrimus glutinosus, foliis pinnatifidis, segmentis paucis elongatis subdistantibus anguste linearibus mucronatis, pedunculis elongatis parce foliosis monocephalis, involucri hemisphærici foliolis oblongis mucronatis, achenio glabro, pappi setis inæqualibus rigidis subcorneis serrulato-ciliatis.—Province of Maule, *Cuming* (*n.* 848.)—This has a very peculiar habit, with fleshy leaves, resembling some maritime species of *Senecio*, large capitula, with a white (?) ray and a singularly harsh and rigid pappus.

1006. (29.) Diplopappus *hispidus*, Gill.; perennis hispido-pilosus, caule herbaceo striato, foliis erectis lineari-oblongis linearibusve, pedunculis rariter foliosis monocephalis, involucri foliolis anguste linearibus acuminatis pilosis adpressis, ligulis anguste linearibus, acheniis scabris, pappo exteriore paleaceo 3—4-plo breviore.—Villavicenzio, El Rio Diamante, and Andes of Mendoza, *Dr. Gillies;* Las Loamas of Bahia Blanca in North Patagonia, Uraguay, and Banda Orientale, *Tweedie.*—This and the two next have quite a different habit from the others we have described: the ray likewise appears to consist of several rows, as in *Erigeron*, but the outer paleaceous pappus removes it entirely from that genus.

1007. (30.) Diplopappus *villosus* (Hook. et Arn.); annuus molliter villosus arcte foliosus superne ramosus, foliis latolinearibus acutis integerrimis radicalibus spathulatis, pedunculis terminalibus foliosis monocephalis, involucri hirsuti foliolis pauciserialibus linearibus acutis ligulis angustis (albis), achenio sericeo, pappo exteriore anguste paleaceo.—Rio Grande do Sul, S. Brazil, *M. Isabelle.*—Similar in habit to the last, but smaller in all its parts, clothed with softer hairs, and decidedly an annual plant.

1008. (31.) Diplopappus *stenophyllus* (Hook. et Arn.); perennis? caule herbaceo dense folioso, foliis angustissime linearibus ciliatis, pedunculis nudiusculis monocephalis, involucri foliolis linearisubulatis pilosis, ligulis angustis, acheniis scabris, pappo exteriore paleaceo 3—4-plo breviore. — Uraguay, *Tweedie.*—*β.* foliis minus ciliatis. Rio Grande, *Tweedie.*

1009. (32.) Diplopappus *pinifolius* (Hook. et Arn.); caule subherbaceo, foliis erectis filiformibus acutis glaberrimis, pedunculis nudiusculis monocephalis, involucri foliolis linearibus glabris.—Rio Grande, *Tweedie.*—Of this we possess but an imperfect specimen, but that has much the habit of the preceding species. The leaves, however, are short and filiform, quite glabrous.

1010. (33.) Diplopappus? *corymbosus* (Hook. et Arn.); perennis, caule herbaceo subsimplici, foliis lineari-lanceolatis erectis rigidiusculis acutis parce pilosis integerrimis subtus trinerviis, pedunculo terminali corymboso, involucri glabri foliolis pauciserialibus linearibus acutis albo-marginatis, radio nullo.—Rio Grande, *Tweedie.*—This differs somewhat in habit from all our other species of *Diplopappus*, especially in the corymbose inflorescence. The capitula are small. Pappus and achenia too young to be satisfactorily described.

1011. (1.) Aster *erigeroides* (Hook. et Arn.); ramosissimus glaber valde foliosus basi fruticosus, foliis lineari-lanceolatis membranaceis subtrinerviis acuminatis sessilibus inciso-serratis, paniculis corymbosis densis, involucri pubescentis foliolis pauciserialibus imbricatis linearisubulatis exterioribus minoribus, radio subpluriseriali albo.—Juan Fernandez, in rocky places, *Douglas, Cuming.* (*n.* 1334.)—*β. proliferus;* foliis 3—4-plo majoribus inciso-subpinnatifidis, corym-

bis quasi lateralibus. Stony elevated woods, Juan Fernandez, *Bertero.*—This seems to have as much claim to a place in the genus *Erigeron* as in *Aster*: and in some flowers, the florets of the ray appear to be in more than one series.

1012. (2.) Aster *subulatus*. Mich.—A. inconspicuus. *Less. in Linn. v. 5. p.* 143. A. scorzonerifolius. *Less. Comp. p.* 182. Tripolium subulatum, *Nees. Ast. p.* 156. Erigeron dracunculoides, *Don, MSS.* E. flexuosus. *Gill.* Conyza graminifolia! *Spr. Syst. Veget. v.* 3. *p.* 515. Quillota and Valparaiso. *Bridges* (*n.* 183. 185.), *Cuming* (*n.* 654.); Monte Video, Buenos Ayres, Uraguay, North Patagonia, *Tweedie;* San Luis, *Dr. Gillies.*—A very variable plant; but in all our specimens the scales of the involucre are broader and less acuminated than in the original *A. subulatus* from N. America. It is probably a common plant on the sea-shore, and by the margins of salt lakes throughout the greater part of N. and S. America, both intra- and extra-tropical.

1013. (3.) Aster *Vahlii* (Hook. et Arn.); herbaceus glaberrimus pauce ramosus, foliis lineari-lanceolatis integerrimis obtusiusculis basi semiamplectantibus infimis spathulatis basi subvaginantibus subseriatis, capitulis solitariis, involucri pauciserialis foliolis glaberrimis imbricatis linearibus acutis, radio purpureo, pappo cinereo.—Erigeron Vahlii. *Gaudich. Ann. des S. Nat. v.* 5. *p.* 104. Diplopappus glabellus. *Gill. et Don, MSS.*—Andes of Chili, *Dr. Gillies;* Chiloe, *Cuming* (*n.* 55.); Valdivia, *Bridges* (*n.* 623.); Cape Negro, Straits of Magellan (*n.* 390.), and Falkland Islands (*n.* 389.), *C. Darwin, Esq.*—It was in this latter country that this species was first detected by Gaudichaud.

1014. (4.) Aster *Gilliesii* (Hook. et Arn.); piloso-scaber, caulibus erectis subramosis angulatis, foliis linearibus obtusis integerrimis obtusis basi sublonge attenuatis, pedunculis paucis terminalibus monocephalis, involucri hispido-strigosi foliolis pauciserialibus linearis acuminatis imbricatis, radio (purpureo) subuniseriali discum triplo superante, achenio strigoso, pappo fulvo.—Diplopappus elongatus. *Gill. et Don, MSS.*—Quebrado de Rios, Andes of Chili and Mendoza. *Dr. Gillies.*

1015. (1.) Sommerfeldtia *spinulosa*, Less. *Compos. p.* 190.—Conyza spinulosa, *Spreng.*—Rio Grande, *Tweedie.* Microgyne *trifurcata*. Less. *Comp. p.* 190.—Erigeron trifurcatus. *Gill. et Don, MSS.*—Pampas of Buenos Ayres, Rio Saladillo, *Dr. Gillies.* Buenos Ayres, Maldonado and N. Patagonia, *Tweedie.*

1016. (1.) Erigeron *Canadensis*, L.—E. sordidus, *Don et Gill. MSS.*—Valparaiso, *Dr. Gillies, Cuming* (*n.* 1435.), *Bridges* (*n.* 188.); Buenos Ayres, *Dr. Gillies;* Uraguay and N. Patagonia, *Tweedie;* Cape Negro, Straits of Magellan, *C. Darwin, Esq.*—Valparaiso. (*n.* 387.) of *Cuming* has the ligula of the ray about one-fourth the length of the tube, while in the others it is scarcely one-sixth.

1017. (2.) Erigeron *spiculosus* (Hook. et Arn.), *Bot. of Beech. Voy. p.* 32.—Chilian Andes, *Cuming* (*n.* 159, 160, and 227.) Valdivia (*n.* 504.); α. Valparaiso, *Bridges* (*n.* 184. 186.), *Cuming.* (*n.* 432 and 407.)—β. *glabellus.* Port Gregory, Patagonia (*Herb. nostr.*).—A most variable plant, nearly allied to the preceding, but having the capitula twice as large, and forming a broad terminal panicle. The leaves are sometimes entire, sometimes serrated and even sinuated, the ligule of the ray is sometimes short, about one-sixth the length of the tube, at other times it occupies about one-half the length of the floret: but their diversities do not appear to be accompanied by other distinguishing characters. The short form of the ligula belongs to our *Conyza ambigua*, Hook. et Arn. *in Bot. of Beech. Voy. p.* 32.

1018. (3.) Erigeron *stenophyllus* (Hook. et Arn.); suffruticosus, radice crassa fusiformi lignosa multicipite, caulibus foliisque cano-pubescentibus, his angustissime linearibus obtusiusculis integerrimis, involucri foliolis linearibus acuminatis interioribus majoribus membranaceis coloratis, achenio parce strigoso.—α. radio perbrevi, caulibus vix angulatis.—Valparaiso, *Cuming* (*n* 74.), *Bridges* (*n.* 182.).—β? radio discum duplo superante, caulibus angulatis, minus pubescentibus.—Valparaiso, *Dr. Gillies, Cuming* (*n.* 406.)—Our var. α. approaches very closely to the next species, but the root is of a more woody nature, the stems shorter, more slender, but more wiry and harder, and the pubescence more minute, but more copious and white. Of our var. β. we have not seen the root: it is a much taller plant, and is probably a distinct species.

1019. (4.) Erigeron *strictus* (Hook. et Arn.); herbaceus perennis pubescens,

caulibus usque ad florescentiam simplicibus angulatis, foliis inferioribus lineari-lanceolatis basi longe attenuatis serratis, superioribus angusto-linearibus acutis integerrimis, involucri foliolis linearibus acuminatis interioribus majoribus membranaceo-marginatis, radio perbrevi, achenio parce strigoso.—Valparaiso, *Cuming*. (*n*. 589.) Juan Fernandez, *Dr. Scouler*.

1020. (5.) Erigeron *canescens* (Hook. et Arn.); cano-pubescens, caulibus virgatis usque ad florescentiam simplicibus, foliis anguste spathulato-linearibus inferioribus paucidentatis superioribus integerrimis apiculatis, involucri foliolis linearibus acuminatis interioribus longioribus submembranaceis coloratis, radio (albo) discum duplo superante, achenio strigoso.—Valparaiso, *Cuming*. (*n*. 75.)

1021. (6.) Erigeron *cinereus* (Hook. et Arn.); piloso-hispidus, caule brevi decumbente 1—3—5-cephalo, foliis integerrimis radicalibus spathulatis caulinis lineari-lanceolatis, involucri tomentoso-hirsuti foliolis imbricatis pauciserialibus linearibus acutis subæqualibus, radio discum duplo superante, achenio pappi longitudine compresso-ancipiti glaberrimo, pappi subbiserialis serie exteriore brevissimo. — Diplopappus cinereus. *Don et Gill. MSS*.—*α*. caule 2—5-cephalo, Los Palomares, Andes of Mendoza, *Dr. Gillies*.—*β*. caule monocephalo, involucro colorato. San Pedro Nolasco, Andes of Chili, *Dr. Gillies*.

1022. (7.) Erigeron *uniflorus*, Linn.—E. myosotoides? *Juss*.—Diplopappus bellidioides, *Gill. et Don, MSS*.—Quebrado de Rios, Andes of Chili, *Dr. Gillies*.—*β*. foliis glabris (petiolis ciliatis exceptis) involucrique colorati foliolis nudiusculis. Cordillera of Chili, *Cuming*. (*n*. 195.)—Strange as it may appear, we are quite unable to distinguish this plant from the Europæan *E. uniflorum*. The achenium is slightly hirsute, short in proportion to the length of the pappus, by which characters it is chiefly distinguished from the preceding.

1023. (8.) Erigeron *othonnæfolius* (Hook. et Arn.); ubique densissime piloso-pannosus, caule brevi erecto monocephalo, foliis omnibus spathulatis integerrimis, superioribus sensim minoribus, involucri foliolis linearibus acutis pannosis, radio (albo) discum vix duplo superante.—Maule Province, *Cuming* (*n*. 831.)—Our specimens of this appear to be truly distinct from the two preceding, in the densely matted covering of hairs on the stem and foliage.

[Allied to the three last are the following specimens of *Erigeron* in our Herbarium:—1, caule ramoso polycephalo. from Patagonia—2, caule bifloro simplici. Cape Negro, Straits of Magellan, *C. Darwin, Esq*. (*n*. 394.)—3, radice tenui elongato, caule gracili 1—2-floro foliis elongatis. Gregory Bay, Straits of Magellan. *C. Darwin, Esq*. (*n*. 385.): all are too imperfect to describe from.]

1024. (9.) Erigeron *Tweediei* (Hook. et Arn.); caule erecto elongato striato glabro, foliis remotis oblongo-acuminatis basi cordatis amplexantibus glanduloso-punctatis integerrimis marginibus callosis denticulato-ciliatis, paniculis terminalibus paucifloris glomeratis, pedicellis pilosis, involucri foliolis oblongo-linearibus exterioribus ciliatis, radio brevi (flavo), pappo rufo-fulvo.—Maldonado, in boggy ground. *Tweedie*. (*n*. 1058.)—A very fine and remarkable plant, one and a half to two feet high, and the leaves four to five inches long: the flowers yellow, those of the disk marked with purple lines.

PODOPAPPUS. *Hook. et Arn.*

Involucrum imbricatum, foliolis angustissimis linearibus acuminatis. *Capitulum* heterogamum: *flores fœm.* pluriseriales in ambitu, corollis tenuibus ligulas angustas gerentibus; *reliqui* hermaphroditi. *Antheræ* ecaudatæ. *Rachis* ebracteolata. *Achenium* oblongum compressum margine incrassatum, rostro tenui longiusculo instructum. *Pappus* pilosus pluriserialis.—Herbæ *simpliciusculæ*. Folia *alterna*.—Forsan idem genus ac *Podocoma*, Cass. (cui certe valde affine, quam propter nomen affine datur), at illi, secundum Lessingium, radius uniserialis.

1025. (1.) P. *hirsutus* (Hook. et Arn.); hirsuto-pilosus, caule subsimplici, foliis inferioribus (magnis) elliptico-oblongis sinuato-dentatis, superioribus amplectantibus valde decrescentibus angustioribus, summis integerrimis, capitulis corymboso-racemosis, pedicellis capitulo subbrevioribus, involucro glabriusculo, radio 4—6-seriali involucrum vix superante.—Rio Grande, and Guardia Argentino in North Patagonia; *Tweedie*.

1026. (2.) P. *pubescens* (Hook. et Arn.); hispido-pubescens, caule versus apicem ramoso, foliis caulinis oblongis vel cordato-ovatis sessilibus integerrimis, rame-

alibus sursum decrescentibus et angustioribus, capitulis corymbosis pedicellis inferioribus capitulo triplo longioribus, involucro pubescente, radio biseriali involucrum longe superante. — Buenos Ayres, *Tweedie*.

1027. (3.) P. *tomentosus* (Hook. et Arn.); foliis dense approximatis linearibus sessilibus et involucro albide lanato-tomentosis, capitulis (magnis) solitariis, radio involucrum duplo superante.—Province of Rio Grande do Sul; *M. Isabelle*.—It is impossible for us to say whether our specimen be a branch of a large plant, or whether the stem be one-flowered. The flowers are fully two inches across, while in the two preceding they are scarcely so large as in *Conyza Chilensis*.

1028. (1.) Lepidophyllum *cupressiforme* Cass. *Dict. Sc. Nat. v.* 26. *p.* 37, Less. *Comp. p.* 191.—Baccharis cupressiformis, *Pers.* — Conyza cupressiformis, *Lam.*—Port Desire, *C. Darwin, Esq.* (*n.* 323.)

1029. (1.) Gutierrezia *linearifolia* (Lag.); foliis linearibus planiusculis, capitulis turbinatis 5—10-radiatis, pappi paleis linear-elongatis acutis.—α. foliis angustis papilloso-scabris.—Galinsogea? resinosa. *Hook. et Arn. in Bot. Beech. Voy. p.* 32.—Villa Vicenzio, Andes of Mendoza, *Dr. Gillies;* Valparaiso, *Cuming*, (*n.* 71); Coquimbo, *Messrs. Lay and Collie*.—β. foliis angustis lævibus.—Aguadite, prov. of San Luis, *Dr. Gillies*.—γ. foliis latioribus subtrinerviis papilloso-scabris.—Los Tolditas, El Guindo, and Los Chacaes, Andes of Mendoza, *Dr. Gillies;* East Coast of Patagonia, *Dr. Eights;* Port Desire, *C. Darwin, Esq.* (*n.* 319.)

"*Planta* suffruticosa. *Caulis* spithamæus vel pedalis, gracilis, flexuosus, plerumque ramosissima. *Rami* angulati, scabri, viminei. *Folia* sparsa, linearia, mucronulata, impresso-punctata, sæpius papilloso-scabra, supra canaliculata, pollicaria; superiora subulata. *Capitula* laxe corymbosa, paniculata, turbinata, unguicularia. *Pedunculi* angulati, scabri, bracteis subulatis subadpressis ornati. *Involucrum* multiplici ordine polyphyllum, imbricatum: *foliolis* ovato-oblongis, recurvato-mucronatis, cartilaginis, margine scariosis, ciliatis. *Rachis* haud favosum, ebracteolatum. *Corollæ radii* 5—10, elliptico-oblongæ, cartilagineæ, rigidæ, femineæ: *disci* 8—12, infundibuliformes, 5-dentatæ, hermaphroditæ, 5-dentatæ, dentibus ovatis, recurvatis, glabris. *Filamenta* complanata, glabra, gracilia. *Antheræ* in tubum coalitæ, semiexsertæ, basi muticæ, appendicula ovata acutiuscula membranacea coronatæ. *Styli* hermaphroditorum rami lineares, obtusi, dense papillosi, exappendiculati; femineorum lineari-lingulati, obtusi, læves. *Achenia* cuneata, angulata, pilosa. *Pappi* radii paleacei, lineares, acuti, biseriales, apice erosodenticulati." *Don. in litt.*

1030 (2.) Gutierrezia *laricifolia* (Don,); foliis lineari-angustissimis canaliculatis, capitulis globosis multiradiatis, involucri foliolis subulato-acuminatis, pappi paleis truncatis brevissimis.—Coquimbo, *Mr. Caldcleugh*.

Planta suffruticosa, erecta, glutinosa, sesqui-v. bipedalis. *Caulis* dense foliosus, corymboso-ramosissimus. *Rami* numerosi, elongati, plerumque monocephali. *Folia* anguste linearia, mucronulata, canaliculata, patentia, 1—2-pollicaria. *Capitula* triplo majora quam in præcedente, globosa, multi- (30—40)-flora. *Involucri foliola* scariosa, apice elongato-subulata, recurvo-patentia. *Receptaculum* breviter paleaceo-fimbrilliferum. *Radii* copiosi, ligulati, revoluti, aurei? *Achenia* angulata, sericea. *Pappus* polyphyllus, brevissimus, truncatus." *Don, in litt.*—This we have not seen, nor does Mr. Don state whether the pappus consists of one or two rows of paleæ. *Brachyris* of Nuttall has much of the character of this genus, and appears to differ only by the pappus being in a single row.

1031. (1.) Lagenophora *Commersonii*, Cass. *Dict. Sc. Nat. v.* 25. *p.* 160; *Less. Compos. p.* 193.—Calendula pumila, *Frost.*—C. magellanica, *Willd.*—Cape Horn, *Dr. Eights.*—β. *hirsuta;* foliis hirsutis.—L. hirsuta, *Less.? in Linn. v.* 6. *p.* 131.—Cape Horn, *C. Darwin, Esq.* (*n.* 346.)—We are doubtful about Lessing's *L. hirsuta*, as he says that the whole plant is hirsute, while in our β, the peduncle is glabrous as in α; this variety being thus intermediate between the two South American species.

1032. (1.) *Madia viscosa*, Cav.—M. mellosa, *Mol.*—Province of San Luis, *Dr. Gillies;* Valparaiso, *Dr. Gillies, Cuming*, (*n.* 409, 410.) *Bridges;* Conception, *Mr. Caldcleugh;* Antuco, *Mr. Reynolds.*—*M. stellata*, Fisch. and Mey. Ind. Sem. Petrop. p. 32, appears to be the same species. If *M. sativa*, Mol., of which Cassini has constituted his genus *Biotia*, be distinct, we are unacquainted with it.

1033. (1.) Crinitaria *Linosyris*, Less.—Buenos Ayres, *Tweedie*; (perhaps cultivated.)

1034. (1. Kleinia *Porophyllum*, Willd.—Rio Grande, Rio Parana, St. Catherine's, and woods of Tucuman, *Tweedie* (*n.* 1163.)

1035. (2.) Kleinia *linifolia* (Gill. et Don,); suffruticosa erecta ramosissima glauca, ramis virgatis, foliis remotiusculis linearibus calloso-mucronatis carnosis, involucri foliolis mucronatis pappum subæquantibus acheniis subhirsutis. — Rio Quarto, Provinces of Cordova, and Jarillal, Mendoza, *Dr. Gillies*; Rio Grande, *Tweedie*.—Perhaps this may prove to be *K. obscura*, Spr., but the description differs in several particulars.

1036. (3.) Kleinia *filifolia* (Spr. ?); suffruticosa erecta ramosissima glauca, ramis virgatis, foliis crebriusculis angustissimis subfoliformibus, pedunculis subgeminis, involucri foliolis oblongis submucronatis pappum dimidium attingentibus, acheniis subhirsutis.—Island of Los Morinheros of Rio Grande, *Tweedie*.—The leaves of our plant are not fascicled, hence arise our doubts as to whether Sprengel's plant may not be distinct.

1037. (4.) Kleinia *exserta* (Hook. et Arn.): suffruticosa erectiuscula ramosissima glauca, ramis virgatis, foliis crebriusculis angustissimis subfiliformibus, pedunculis geminis, involucri foliolis cuneato-oblongis obtusis achenia hirsutula æquantibus.—Fields and hedge-sides of Portalegre, *Tweedie*.—Readily distinguished from the last by the short and proportionally broader leaflets of the involucre.

1038. 5.) Kleinia *pumila* (Hook. et Arn.); suffruticosa adscendens multicaulis glauca, ramis simpliciusculis, foliis crebris linearibus vel subfiliformibus, pedunculis solitariis elongatis, involucri foliolis mucronulatis pappum æquantibus, acheniis hirsutulis.—*α.* foliis elongatis; Monte Video, *Tweedie*.—*β.* foliis abbreviatis; Parana and Buenos Ayres, *Tweedie*.

1039. (6.) Kleinia *brevifolia* (Hook. et Arn.); suffruticosa diffusa ramosissima valde glauca, ramis flexuosis, foliis spathulato-linearibus mucronatis, pedunculis solitariis, involucri foliolis mucronulatis pappum dimidium superantibus, acheniis hirsutulis.—Rocky point of Gorrita on the coast of Maldonado, *Tweedie*.

(To be continued.)

ILLUSTRATIONS OF INDIAN BOTANY; PRINCIPALLY OF THE SOUTHERN PARTS OF THE PENINSULA.

By R. Wight, M. D. F.L.S. & G. A. W. Arnott, Esq., &c.

(*Continued from p.* 228, *Vol. I.*)

Oxystelma *esculentum;* foliis lineari-lanceolatis venosis, corolla margine ciliata, folliculis oblongis acuminatis. (Tab. XXIV.) *Roem. et Sch. Syst. Veget. 6. p.* 89. *Spreng. Syst. Veget. p.* 850. *Wall. Asclep. n.* 94. *Wight, Cat. n.* 1547. *Wight, Contrib. to the Bot. of Ind. p.* 54.

Periploca esculenta. *Linn. fil. Suppl. p.* 168. *Willd. Sp. Pl. v.* 1. *p.* 1250. *Roxb. Cor. v.* 1. *p.* 13. *t.* 14.

Asclepias rosea. *Roxb. Fl. Ind. v.* 2. *p.* 40. *Pluk. t.* 359. *f.* 6.

Root fibrous. *Stems* filiform, round, smooth, green, voluble. *Leaves* shortly petioled, opposite, linear-lanceolate, acute, rounded and subcordate at the base, entire, smooth, deep green above, paler and veined beneath, deciduous? from two to three inches long, by about half an inch broad. *Racemes* axillary, long-peduncled, bearing from three to eight large, subcampanulate, five-cleft *flowers;* their segments triangular, acute, externally of a pale rosy hue, internally purplish, marked with darker lines. *Column of fructification* prominent; crown of five inflated leaves, broad, and somewhat compressed at the base, tapering to a sharp incurved point. *Anthers* terminated by a membrane. *Pollen-masses* compressed, attached by their attenuated apex, pendulous. *Stigma* large, flat, covered on the edges by the membranous lips of the anthers. *Pericarps* two, large, inflated *follicles:* these consist of two coats or layers, loosely attached to each other, and it is between these that the inflation takes place, as the inner coat is of a firm texture, and closely embraces the *seeds*, which are numerous and comose.

This plant always grows near water, or even with its roots in water; its stems twining round whatever support they can