

the middle of the venules (lateral). Besides the affinity that *Mesochlæna* has with the above mentioned genera, it also, in appearance, exhibits some similarity in habit and form of the sori to those species of *Diplazium* which have regular bipinnatifid fronds and short sori; but the latter genus is readily distinguished by having a laterally attached indusium on each side of the venules, whereas in *Mesochlæna*, the venules produce only a simple sorus, with the indusium attached along the centre of the venule, and like the generality of *Aspidiæ* is very fugacious."

J. SMITH.

III.—*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., LL.D.

I. EXTRA-TROPICAL SOUTH AMERICA.

(Continued from page 254 of Vol. II. of the Companion to the Botanical Magazine.)

Subtribe II. BACCHARIDÆ. Less.

PLAGIOCHEILUS. H. et A. De Cand. Prodr. vi. p. 142.

*Involucrum* subtriseriale foliolis obovato-oblongis. *Rachis* hemisphærica. *Flores* fœminei multiseriales in ambitu, reliquis paucis masculis. *Achenium*-calvum, oblongo-obovatum, compressum, puberulum, erostre. *Ovarium fl. masc.* nullum. *Corolla fœm.* tubo brevissimo, limbo obliquo subbilabiato, labio exteriore horizontaliter patulo, tubum subæquante, interiore brevissimo utroque integerrimo; *masc.* tubo breviusculo gracili, limbo campanulato.—Herba ramosa, erecta, pilosula. Folia alterna, interrupte pinnatifida, laciniis inciso-pinnatifidis, basi auriculata, auriculis incisis, amplectantibus. Capitula subglobosa, corymboso-paniculata, lutea, vix Grangææ magnitudine.

1039. (1.). *P. tanacetoides*, H. et A.—De Cand. Prodr. v. vi. p. 142.—Coast of the Parana, in sandy places. Tweedie.—The female florets are very remarkable, resembling the mouth of an ewer. What we here speak of as an inner lip to the

corolla, is a mere gibbosity; it becomes therefore difficult to say whether it ought not to be considered as a ligulate floret, in which case the genus would rank next to *Solenogyne*; but considering that the central florets are sterile, we prefer placing it near *Dichrocephalus* (*Centipeda*, Less.), and *Grangea*, with which it agrees much in habit.

Professor De Candolle has adopted this Genus, which was communicated to him in mst. and has placed it in the "*Compositæ Senecionideæ*," adding a second species, thus:—

(1. *P. tanacetoides* (Hook. et Arn.); erectus ramosus pilosulus, foliis interrupte pinnati-partitis basi amplexicaulauriculatis partitionibus inciso-serratis, capitulis corymbosis.

2. *P. solivæformis*, (DC.); glabriusculus demissus ramosus repens, foliis petiolatis pinnati-partitis, partitionibus linearibus parce lobatis, ultimis apice trilobis, capitulis solitariis longe pedicellatis.—Hab. in Republica Bolivaria. *Pentland*. Pili pareissimi secus ramos et folia novella sparsi. Achenia parce glandulosa glabra. (DC.)

1040. (1.) *Conyza Chilensis*, Spr.—DC. *Prodr.* v. p. 378.—*C. longifolia*, Cass.—Chili. *Bridges* (n. 624). Maldonado and Entro Rios. *Tweedie* (n. 1077).—To this, and not to *C. albida*, we are inclined to refer *Erigeron Bonariense*, Linn. and Dill. *Hort. Elth.* t. 257, f. 334, in bud; although De Candolle considers that a species of *Erigeron* with which he is unacquainted.

1041. (2.) *C. albida*, Willd. DC. *Prodr.* v. p. 378.—*Erigeron Canadense*, Don, Mst. (non Linn.). *E. tramontanus*, Gill. mst.—Mendoza. *Gillies*. (n. 156). Buenos Ayres and North Patagonia. *Tweedie*. Valparaiso. *Bridges*, (n. 987). *C. linearis*, DC. *Prodr.* v. p. 378, is our *Erigeron stenophyllus*, a.; and our *Conyza ambigua*, Bot. of Beech. *Voy.* p. 57, is an imperfect state of our *E. spiculosus*.—See our observations on *Erigeron* and *Conyza*, in *Comp. Bot. Mag.* v. ii. p. 254.

1042. (3.) *C. diversifolia*, (Weinm. in *Flora*, 1820, p. 611); herbacea ad collum suffruticosa erecta tota villosocinerea, caule simplici pilis confertissimis hirsuto, foliis pube breviori velutino-villosis subtus hirsutis elongato-linearibus acutis,

infer. hinc inde grosse serratis cæteris integerrimis, panicula oligocephala pubescente, capitulis pedicellatis, invol. squamis linearibus pube appressa parva vix cinereis.—*DC. Prodr. v. p. 378.*—In pascuis Chilensibus ad Fernando. *Bertero.*—We are unacquainted with this, unless it be our *Erigeron strictus* (n. 1019), which Dr Scouler found in Juan Fernandez, and Mr Cuming at Valparaiso. De Candolle refers to it, with a question, our *Conyza ambigua* (*Erigeron spiculosus*).

1043. (4.) *C. triplinervia*, *Less. in Linnæa. 1831. p. 137. DC. Prodr. v. p. 377:*—South Brazil. *Tweedie* (n. 955.).—This has completely the habit of *Baccharis*, especially of some species in the first section.

*BACCHARIS. L. (including MOLINA, R. et P. and Less.).*

§ 1. *Trinervatæ, nempe foliis tri- aut triplinerviis non imbricatis, nec cuneatis, ramis apteris.*—*DC.*

1044. (1.) *B. longipes* (*Kunze in Poepp. Coll. ii. n. 104.*)—*DC. Prodr. v. p. 401.*—Stony inundated places, Rio de Chili. *Poeppig.*—Of this, with which we are unacquainted, De Candolle says, “proxime accedit ad *B. glutinosam*, et præsertim ad *B. parvifloram*, et si hybridæ facile admittendæ essent, ut utriusque proles mixta fere videtur.

1045. (2.) *B. racemosa* (*DC. Prodr. v. p. 401*); fruticosa ramis striatis patentibus, foliis sessilibus rigidis ovatis acutis basi obtusis triplinerviis reticulato-venosis usque ad basin spinuloso-serratis supra glabris subtus pubescenti-scabris et valde elevatim nervosis, panicula copiosa pyramidato-corymbosa, involucri campanulati squamis lineari-oblongis obtusis margine scarioso-pallidis.— $\beta$ . foliis angustioribus.—*Molina racemosa, R. et Pav. Syst. p. 209.*—*Baccharis sessilifolia, Less.*—*DC. Prodr. v. p. 418.*—*B. rigida, Hook. et Arn. in Bot. of Beech. Voy. p. 57.*—*B. riparia, Poepp. Coll. Chil. n. 209.*—Woods and groves in Chili. *Ruiz and Pavon. Poeppig. Valparaiso. Macrae. Bridges (n. 57.  $\beta$ .) Mr Cruikshanks. Beechey. Cuming (n. 790  $\alpha$ . and  $\beta$ .), Chamisso.*—Our plant is extremely common in Chili, and one of the best marked of species. It is undoubtedly the *B. sessiliflora* of Lessing

and De Candolle, which latter author places it in his section "*Oblongifoliae*," although the leaves are truly 3-nerved. We think it is equally certainly the *Molina racemosa* of Ruiz and Pavon, and therefore adopt the name of those authors though not strictly characteristic. De Candolle makes our *B. rigida* a var. of *B. oblongifolia*, a very obscure species of Sprengel.

1046. (3.) *B. eupatorioides* (Hook. et Arn.): elata fruticosa erecta, ramis angulato-sulcatis pubescenti-glandulosis, foliis sessilibus submembranaceis oblongis acuminatis remote spinuloso-dentatis (dentibus angustis) basi integerrimis trinerviis supra glabris margine nervisque modice elevatis subtus pubescenti-scabriusculis, panicula corymboso-pyramidata, involucri campanulati squamis lineari-oblongis acutiusculis margine pallidis.— $\alpha$ . (*masc.*) foliis quadripollicaribus latis fere ovato-oblongis, siccitate nigrescentibus. Isle la Moche, South Pacific Ocean. *Dr Eights*.— $\beta$ . foliis quadripollicaribus angustioribus. Chiloe. *Cuming* (n. 56).— $\gamma$ . foliis bipollicaribus angustioribus. Fields near Valdivia. *Bridges* (n. 578).—This seems to be a very southern species, and also a most distinct one, although ranking next *B. racemosa*. Its leaves are very much larger and longer; there is nothing of the harsh and rigid character of the preceding species, nor of the copious broad triangular teeth reaching quite to the base.

1047. (4.) *B. ovata* (Hook. et Arn.); fruticosa, ramis striatis pubescentibus, foliis exacte ovatis submembranaceis acutiusculis trinerviis fere ad basin obtusissimam denticulato-serratis brevissime petiolatis, petiolo late alato nervisque subtus læviter elevatis pubescentibus, paniculis densis corymboso-pyramidatis, involucri campanulati squamis lineari-oblongis interioribus apice ad marginem eroso-fimbriatis.—St Mary, S. Pacific Ocean. *Dr Eights*.—Leaves 12–14 lines long, 8–10 broad, decidedly petiolated, exactly ovate, rather closely and very regularly denticulato-serrate. In habit it approaches the preceding.

1048. (5.) *B. serrulata* (Pers.); herbacea erecta glabra, caule basi tereti apice angulato, foliis petiolatis lato-lanceo-

latis acuminatis ciliato-serratis trinerviis minutissime punctulatis, corymbo composito terminali fastigiato, invol. ♂ campanulati squamis lanceolatis acutiusculis.—*DC. Prodr.* v. p. 402. *Conyza serrulata* Lam. *Diet.*?—β. foliis linearibus.—Buenos Ayres, Banda Orientale and N. Patagonia. *Tweedie*.—β. St Mary, S. Pacific Ocean. *C. Darwin, Esq. Monte Video. Isabelle*.—Scales of the involucre lanceolate or linear-lanceolate, pale, with a darker greenish line down the centre. The corymb and young upper leaves are often glutinous. Pappus tawny, sometimes almost rufous.

1049. (6). *B. Pingræa* (*DC. Prodr.* ii. p. 420); herbacea erecta glutinosa; caule basi tereti apice angulato, foliis petiolatis lineari-lanceolatis acuminatis basi attenuatis trinerviis punctatis remote dentatis summis linearibus integerrimis, corymbo composito terminali, involucri campanulati squamis lanceolatis acutiusculis marginibus pallidis fimbriato-ciliatis.—β. foliis angustissimis.—*Molina linearis. Less. et Cham.* (*Herb. nostr.*) in *Linnaea*, non *R. et P.*; non *Baccharis linearis. H. et A.*—Chili, frequent in moist places. Valparaiso. *Bridges* (n. 59). *Chamisso. Conception. Cuming* (n. 800).—β. Chili. *Cuming* (n. 72.). *Gillies* (n. 189.).—2—4 feet high, with a decidedly herbaceous stem and annual root. Habit of *Conyza*. De Candolle describes it as a suffruticose plant, and omits to notice the three nerves and hence probably lost sight of its affinity with his *B. serrulata*, a species so nearly allied to it, that except the usually broader foliage of the latter, and its more close narrow serratures (almost ciliæ) not teeth, directed upwards, we can scarcely point out any difference. Capitula exactly the same in both. It is undoubtedly the *Molina linearis* of Chamisso and Lessing, and according to De Candolle of Poepp. (*Coll. Chil.* 2. n. 103). The original *linearis*, as we believe, is a shrubby plant, well known by its vernacular name of "Romero," or Rosemary bush.

1050. (7). *B. marginalis* (*DC. Prodr.* v. p. 402); suffruticosa resinosa subviscosa glabra, foliis lineari-lanceolatis utrinque acutis integerrimis aut parce serratis trinerviis, nervis lateralibus margini approximatis, corymbis compositis foliosis

polycephalis, invol. campanulati squamis lanceolatis ciliatosis ♂ latioribus magis fimbriatis, ♀ angustioribus, achænio glabro. DC.—Molina parviflora. *R. et P.*? Baccharis parviflora, *Pers. non Poir.*—Valparaiso. *Gaudichaud.*—De Candolle seems to have drawn up his character from Chilian specimens, and doubts if those from Peru should be considered the same species.

1051. (8). *B. Feuillei* (DC. *Prodr.* v. p. 403); frutescens, pube minutissima subpulverulenta, ramis teretibus substriatis, foliis breviter petiolatis lanceolatis utrinque attenuatis grosse serratis triplinerviis, capitulis ♂ in corymbos compositos terminales subaphyllos digestis 18—20 floris, invol. ovati squamis lanceolatis acutis stramineis. DC.—*Feuill. Per. et Chil.* ii. p. 750. t. 37.—Chili?—De Candolle does not indeed give this as an inhabitant of Chili, but the species is founded on the *Conyza frutescens*, &c. of Feuillée, which, though not expressly stated, we believe to be a native of Chili, and the same with *B. glutinosa*, *Pers.*, under which species De Candolle again quotes it in the *Prodromus*. Perhaps *B. Feuillei* and *B. marginalis* ought both to be referred to *B. glutinosa*.

1052. (9). *B. glutinosa* (*Pers. Syn.* ii. p. 425); suffruticosa glaberrima viscosa, foliis lanceolatis coriaceis grosse serratis punctatis trinerviis et penninerviis basi attenuatis apice acutis, corymbo breviter pedunculato, capitulis ♀ campanulatis, involucri squamis ovati-lanceolatis margine eroso-fimbriatis.—Chilca. *Feuill.* 2. t. 37. (*excl. Syn.*) Molina viscosa, *R. et Pav. Hook. et Arn. in Beech. Voy.*—Chili. Valparaiso. *Macrae.*—*Mathews* (n. 217.) *Cuming* (n. 788.) *C. Darwin, Esq.* Quillota, where it is called “Chilcoa Quilco.” *Bridges* (n. 53.) Concepcion. *Beechey.* Near Mendoza. *Dr Gillies.* Wood-sides of Cordova (foliis latioribus), Tucuman and Buenos Ayres. *Tweedie* (n. 1210.)—An extensively dispersed and variable plant. The leaves are more or less broad, more or less dense, toothed and entire, more or less viscid, and more or less coriaceous. The involucre of the female capitula resembles the male's. In all, it is broadly campanulate, somewhat squarrose, of a singularly dry character; the scales are ovate, stramineous,

destitute of nerve, but having a discoloured spot towards the apex; the margin is scariose and eroso-fimbriate. Pappus of the female capitula very white and silky.

1053. (10). *B. sphærocephala* (Hook. et Arn.); fruticosa glabra, ramis angulatis, foliis (subquadripollicaribus) obovato-lanceolatis membranaceis subtriplinerviis reticulatisque acutis grosse dentatis basi attenuatis sessilibus impunctatis, corymbis polycephalis foliis brevioribus, capitulis ♂ et ♀ depressos sphaericis, involucris hemisphaericis squamis ovato-lanceolatis acutis dorso carinatis uninerviis marginibus præcipue versus apicem eroso-fimbriatis.—Chiloe. *Cuning* (n. 58). Between Osorno and El Rio de Maullin, Valdivia. *Bridges* (n. 579.)—A shrub from 4 to 8 feet high, according to Mr. Bridges, with large membranaceous coarsely toothed and dense corymbs of comparatively large capitula (6 lines broad) which are shorter than the leaves.

1054. (11). *B. melastomæfolia* (Hook. et Arn.); fruticosa? glaberrima, ramis sulcatis, foliis coriaceis (3—4—pollicaribus) ovato-lanceolatis serratis triplinerviis reticulatisque serratis brevi-petiolatis supra rugosis subtus pallidioribus nervis prominentibus, corymbis terminalibus axillaribusque pedunculatis aphyllis, involucris squamis paucis laxis, ext. brevibus, int. linearibus obtusis uninerviis, acheniis sulcatis glaberrimis, pappo ♀ flavescente sericeo uniseriale involucre longè excedente.—Moist woods of Tucuman. *Tweedie* (n. 1185.)—A very distinct and well-marked species, with deeply furrowed branches and broad serrated leaves, wrinkled by the copious reticulations, and resembling those of many *Melastomaceæ*. Female capitula nearly three-fourths of an inch in diameter.

1055. (12). *B. anomala* (DC. *Prodr.* v. p. 403); suffruticulosa ramosa, caule tereti, ramis pubescentibus, foliis petiolatis ovatis basi obtusis apice acute dentato-serratis trinerviis supra sparse puberis subtus dense villosis, paniculis ramos terminantibus laxis, invol. ♂ squamis oblongo-linearibus acutis, fl. masc. stylum exsertum gerentibus. DC.—Rio Grande, St Catharine's and woody shores of Lagoa, S. Brazil. *Tweedie*.—Leaves an inch long, exactly ovate, obtuse at the

base, on petioles two lines long. Stems, as De Candolle well observes, apparently climbing, so as, in conjunction with the form of the petiolated leaves, to give the appearance of a *Clematis*. Capitula small. Scales of the involucre slightly eroso-ciliate at the margin, with a dark green nerve down the middle. Pappus of the male flowers rufous.

1056. (13). *B. Doniana* (Hook. et Arn.); fruticosa, ramis erectis pubescentibus, foliis anguste lanceolatis subcoriaceis acutis punctatis obscure trinerviis integerrimis rarissime hic illic dente solitario instructis, pedicellis (bilinearibus) pubescentibus nudis monocephalis, involucri campanulati squamis uninerviis, ext. ovatis pubescentibus, int. oblongis glabriusculis apice fimbriato-ciliatis.—S. Brazil. *Tweedie* (n. 975.) Rio grande do Sul. *Isabelle*.—This seems very different from any described species. The pappus of the female plant is tawny, longer than the styles, twice as long as the involucre.

§ 2. *Cuneifoliæ, nempe foliis obovatis cuneatisve uninerviis aut triplinerviis non imbricatis, ramis apteris.* DC.

1057. (14). *B. hirta* (DC. *Prodr.* v. p. 405); suffruticosa undique piloso-hispida, caule sulcato erecto apice corymboso ramoso, foliis coriaceis sessilibus cuneato-oblongis apice grosse inciso-dentatis trinerviis reticulatisque, corymbis densis subglobosis, involucri ♂ squamis lato-lanceolatis acutiusculis subpubescentibus uninerviis margine pubescenti-ciliatis.—*B. verbenæfolia*. *Hook. et Arn. mst.*—Pappus rufous, its hairs clavate in the male flower. Maldonado. South Brazil. *Tweedie*.—De Candolle places this very well-marked plant in the first division, but in the cuneate leaves it accords well with the present section, though it must be confessed it has little natural affinity with the following species. The rough coarsely toothed leaves, with the very prominent nerves on the under-side, give the plant a great resemblance to some N. American species of *Verbena*.

1058. (15). *B. Magellanica* (*Pers. Syn.* ii. p. 425); fruticulosa demisso-cæspitosa glabra viscosa, ramulis angulatis, foliis sessilibus confertis coriaceis obovato-cuneatis obtusis aliis integerrimis aliis apice obtuse tridentatis, capitulis soli-



tariis ad apices ramulorum sessilibus, invol. ovati squamis margine ciliato-fimbriatis, ♂ ovali-lanceolatis, ♀ angustius lanceolatis acuminatis, acheniis striatis glabris. *DC.*—*B. tridentata*. *Gaud. Fl. Mal.* p. 15. *Conyza Magellanica*. *Lam. Dict.*—Straits of Magelhaens (*Lamarck*), at Port Egmont and Deseado. (*Née*.) Falkland islands. *Gaudichaud*. E. Falkland Island (masc.) and Berkeley Sound; Falkland islands (fœm.) *C. Darwin, Esq.* (n. 322 and 326.)—A humble dwarf shrub, with something the habit of *Salix herbacea*. Leaves small, and almost spatulate in our female plant, viscid and quite entire; in our male, shining as if varnished, some of them tridentate.

1059. (16.) *B. cuneifolia* (*DC. Prodr.* v. p. 406); fruticulosa demissa glabra viscosa ramosissima, ramulis subangulatis, foliis sessilibus confertis coriaceis obovato-cuneatis obtusis ad apicem obtuse repando-subdentatis, capitulis ad apices ramulorum sessilibus confertis. *DC.*—*Conyza cuneifolia*. *Lam. Dict.*—Straits of Magelhaens (*Lamarck*); at Port Egmont. (*Née*.) I think there can be little doubt that this is the same with the preceding. De Candolle is properly disposed to reject the Brazilian specimens which have been referred to this. They perhaps belong to our following species.

1060. (17.) *B. tridentata* (*Vahl, Symb.* iii. p. 98); glabra fruticosa, ramis angulato-striatis, foliis sessilibus cuneato-spathulatis obtusis punctatis trinerviis (nervis lateralibus obsoletis) infra apicem utrinque unidentatis, capitulis ♂ et ♀ sessilibus axillaribus cylindræis subsexfloris versus apicem ramorum subglomeratis, involucri squamis paucis exterioribus ovatis int. oblongis enerviis.—*DC. Prodr.* v. p. 409.—South Brazil. *Tweedie.* (n. 994).—The young leaves are glutinous, all of them of a reddish-brown in the dry state, the form between cuneate and spatulate, with 2 lateral opposite and one larger intermediate or terminal tooth. Pappus in the female flowers reddish, longer than the involucre. It seems to agree well with De Candolle's character and that of Vahl. But there is probably more than one species from the different localities given by De Candolle under this plant.

1061. (18.) *B. Baldwinii* (*Hook. et Arn.*); fruticosa glabra, caule prostrato ramisque angulato-striatis, foliis sessilibus lanceolatis basi cuneatis subcoriaceis uninerviis impunctatis acutis supra medium utrinque uni-vel bidentatis, capitulis pedicellatis solitariis in folios supremos ramorum racemos foliosos formantibus, involucri cylindraneo-campanulati 8-10-flori squamis ext. ovatis, int. oblongis marginibus nudis.—*M. prostrata. Herb. Baldw. (non R. et P.) Maldonado. Dr Baldwin. Tweedie.* Shores of Lagoa and Los Moranhos, S. Brazil. *Tweedie*, (n. 982.) La Reducion do la puerta del Sauce, Pampas of Buenos Ayres. *Dr Gillies*, (n. 169.)

1062. (19.) *B. vernicosa* (*Hook. et Arn.*); glabra fruticosa vernicosa, ramis striatis, foliis spathulatis obtusis punctatis coriaceis uninerviis aliis integerrimis aliis (plerumque majoribus) obtuse tri-quinquedentatis, floribus paucis sessilibus terminalibus solitariis vel binis, involucri cylindrici pauciflori squamis ext. ovatis, int. oblongis.—Uruguay, in marshy woods. *Tweedie*.—Apparently a small twiggy shrub, much branched. Leaves, some small, 3-4 lines long, generally entire, others much larger, nearly an inch long, more or less toothed; all as it were varnished, distinctly dotted, and having no trace of lateral nerves.

1063. (20.) *B. axillaris. De Cand. Prodr. v. p. 407.—β. dentata*; foliis cuneatis omnibus apice 3-5 dentatis. *DC. l. c.*—Via Monte in S. Brazil, *Tweedie. Uruguay, Baird*.—What we take for this plant has the leaves about  $\frac{3}{4}$  of an inch long, broadly cuneate, with 3 nerves, the lateral nerves obscure or sometimes obsolete, not dotted, the margins a little thickened or revolute, deeply and coarsely toothed. In the female capitula the pappus is pale reddish, much longer than the involucre, the styles much exerted.

1064. (21.) *B. flabellata* (*Hook. et Arn.*); fruticosa erecta glabra, ramis angulatis junioribus viscosis, foliis flabelliformibus coriaceis grosse angulato-dentatis obscure 3-nerviis obsolete punctatis basi in petiolum attenuatis, capitulis sessilibus axillaribus glomeratis, involucri ovati squamis ovatis uninerviis int. longioribus.—Aguadita, province of San Luis. *Dr*

*Gillies* (n. 170.) Remarkable for the broad leaves, coarsely toothed or angled, tapering into a petiole. Capitula small.

1065. (22.) *B. pedicellata* (DC. *Prodr.* v. p. 407); fruticosa ramosissima glabra viscosa, ramis teretiusculis, foliis obovato-cuneatis sessilibus apicem versus paucidentatis coriaceis sub-3-nerviis, nervis lateralibus tenuibus aut subnullis, pedicellis axillaribus subnudis striato-sulcatis-cephalis, invol. ♀ squamis ovali-lanceolatis acutis apice subciliatis. DC.—Chili. *Hænke*. “Folia fere *B. cuneifoliæ* aut *B. concavæ*, viscoso-nitida, 8-9-lin. longa, 4 lin. lata. Pedicelli bracteola 1-2 instructi, 7-9 lin. longi, involucraque pallida.” We have seen no Chilean *Baccharis* which corresponds with this.

1066. (23.) *B. Patagonica* (*Hook. et Arn.*); glabra fruticosa, ramis angulatis junioribus viscidis, foliis sessilibus ovali-cuneatis crassis uninerviis punctato-rugosis superne 3-7-dentatis, pedicellis folio brevioribus axillaribus solitariis vel binis bracteatis monocephalis, involucri campanulati ♂ et ♀ squamis ext. ovatis enerviis, int. oblongis nervo viridi omnibus margine obscure fimbriatis.—Port Famine, Patagonia (*Capt. King's Voy.*). Cape Negro, Straits of Magelhaens. *C. Darwin, Esq.* (n. 356.)—Apparently a small shrub, with erect stout rigid branches, and leaves  $\frac{3}{4}$  of an inch (scarcely more) long, in shape approaching those of the following, but of a far more coriaceous texture and wrinkled, with more teeth, but smaller, only one-nerved. In the bracteated pedicels it appears to approach the preceding species. Pappus, in the male plant, copious, tawny, very long.

1067. (24.) *B. incisa* (*Hook. et Arn.*); gracilis fruticosa glabra, ramis angulatis, foliis sessilibus ovalibus trinerviis (subtus conspicue) impresso-punctatis vix coriaceis basi subcuneatis apice inciso, 3-5-dentatis dentibus erectis, pedicellis solitariis axillaribus monocephalis nudis longitudinis dimidio folii, involucri ♂ 6-7-floris ovalis squamis paucis (7-8) ovatis uninerviis marginibus tenuiter membranaceis.—Uruguay. *Baird*.—Sent mixed with *B. axillaris*, but undoubtedly distinct. Leaves 5-6 lines long, almost exactly oval, rather acute than wedge-shaped, cut only at the apex into from 3

to 5 erect teeth. Lateral nerves on the upper side obsolete, beneath conspicuous and prominent. Pedicel of the capitulum about half the length of the leaf, quite destitute of bractea.

1068. (25.) *B. Bairdii* (*Hook. et Arn.*) arachnoideo-pubescentis fruticosa, ramis erectis angulatis, foliis remotiusculis sessilibus subcoriaceis ellipticis basi cuneatis obtusis obscure trinerviis apice equaliter serratis, capitulis axillaribus solitariis sessilibus, involucri campanulati squamis ext. ovatis, int. oblongo-lanceolatis subuninerviis margine obscure fimbriatis.—Uruguay. *Baird.*—Difficult as it may be, in words, to describe correctly the varied forms of the leaves of this genus; those of this plant are very distinct from any others; they are almost exactly elliptical except at the base; and the apex only, or for not more than one-fourth of the way down, is moderately serrated with equal serratures. The capitula occupy the axils of several of the rather remote leaves in regular succession, and are completely sessile and constantly solitary. Pappus (female plants) tawny, half as long again as the involucre. Styles slightly exerted.

1069. (26.) *B. foliosa* (*Gill. mst.*); humilis subprostrata glaberrima, ramis brevibus angulatis copiose foliosis, foliis sessilibus oblongis coriaceis supra uninerviis subtus obsolete trinerviis (nervis utrinque exsculptis) basi cuneatis grosse regulariter serratis, pedicellis axillaribus solitariis monocephalis nudis longitudine fere foliorum, involucri squamis ovatis acutis uninerviis.—Cordillera of the Andes. *Dr Gillies, (n. 167.)* A small alpine shrub, the branches clothed with copious harsh leaves, scarcely an inch long. The flowers are in a very imperfect state, but the plant seems to be decidedly a *Baccharis* and very distinct in its characters.

1070. (27.) *B. umbelliformis*, *DC. Prodr. v. p. 410.* "*Poepp. Pl. exsicc.* 860 and 695." *Baccharis obovata. Hook. et Arn. Bot. of Beech. Voy. p. 30, (non Molina obovata R. et Pav.)* Conception. *Beechey.*—The name of *obovata* being previously applied to a Peruvian *Baccharis* (*Molina obovata, R. et Pav.*) we gladly adopt that of *De Candolle* given to a *Baccharis* of

Poeppig (from Chili?) which by the description seems to accord sufficiently with our plant. The scales of the involucre indeed are not "dense ciliatæ," but in the var.  $\beta$  of De Candolle, they are described as "minus ciliatæ." The leaves of our plant are an inch and an inch and a half long, coarsely serrated from the apex to below the middle, in reality three-nerved, the lateral nerves are very flexuose and unite with the lateral nerves of the costa.

1071. (28.) *B. Poeppigiana* (DC. *Prodr.* v. p. 410); fruticosa glabra viscosa ramosissima, foliis obovatis basi cuneatis subsessilibus apice obtusis repando-dentatis, capitulis pedicellatis ad apices ramorum paucis umbellatis, invol.  $\delta$  campanulati squamis lanceolatis vix apice subciliatis. DC.—" *B. alaternoides*, Poepp. *Pl. Chil. exs.* 2. n. 102," (non Kunth). Valparaiso. Cuming. (n. 793.) Quillota and Concon. Bridges, by whom it is marked as "*B. banksiæfolia*, Bertero."—If we are correct, as we think we are, in referring these plants of Cuming and Bridges to the *B. Poeppigiana* DC., it is a plant which we have confounded with *B. concava*, from which it only differs in being not downy on the branches, (though the resinous particles often give them that appearance) and in the terminal heads of flowers being pedicellate and thus umbellate. We fear it is not really distinct. De Candolle compares it with *B. cuneifolia*; itself a very dubious plant.

1072. (29.) *B. concava* (Pers.); fruticosa ramosissima, ramulis angulatis pubero-velutinis (potius pulverulente resinosis, *H. et A.*), foliis late obovato-cuneatis apice obtuse tri-rarius quinquedentatis sessilibus (opacis) glabris crasso-coriaceis uninerviis summis circa capitula subcoriaceis, capitulis ad apices ramulorum 3—5 congestis subsessilibus, invol. campanulati squamis margine scariosis oblongis in  $\delta$  obtusiusculis in  $\varphi$  inter. linearibus subacutis, acheniis compressis glabris. DC. *Prodr.* v. p. 411.—Molina *concava*. *R. et Pav. Syst.* p. 206.—*Baccharis resinosa*, *Hook. et Arn. Bot. of Beech. Voy.* p. 31. (*excl. Syn.*).—*B. tridentata*, *Poepp. Coll. Chil.* n. 211. (*non Vahl.*).—Chili. Valparaiso. *Bridges* (n. 54.).—In our specimens we do not find any difference between the scales of

the involucre in the male and female capitula. The name is a very bad one, and only tends to mislead.

1073. (30.) *B. myrsinoides* (Hook. et Arn.); fruticosa ramosissima, ramulis angulatis glabris, foliis sessilibus oppositis obovato-cuneatis coriaceis nitidis 3-nerviis superne dentatis rarius integerrimis impunctatis, capitulis glomeratis terminalibus brevi-pedicellatis vix umbellatis glomerulis inferne foliosis, involucri ♂ lato-cylindraceuti squamis enerviis integerrimis margine anguste scariosis ext. ovatis, int. oblongis.—Uruguay. *Tweedie* (n. 1000).—A small much branching glabrous shrub, with leaves like those of *Myrsine retusa*, glossy and opposite, and capitula as in *B. concava*, clustered, scarcely pedicellate, at the extremity of the branches.

1074. (31.) *B. Macraei* (Hook. et Arn.); fruticosa ramosissima, ramis teretibus dense pubescenti-tomentosis, foliis sessilibus obovato-cuneatis coriaceis uninerviis superne 3-rarius 5-dentatis junioribus glutinosis, capitulis sessilibus solitariis terminalibus, involucri ♀ parce puberuli campanulati squamis ext. ovatis interioribus lineari-oblongis uninerviis pappo duplo brevioribus.—Valparaiso. *Macrae*.—Leaves much resembling those of *B. concava*, but the branches are stunted, terete, densely downy tomentose, the capitula solitary, terminal, thrice as large as in the preceding species; the pappus much longer and more silky.

1075. (32.) *B. rotundifolia* (Spreng.?) fruticosa, ramis teretibus, ramulis striato-angulatis subviscosis, foliis sessilibus obovato-subrotundis apice dentibus 3—5 repandis trinerviis coriaceis subtus præcipue albido-furfuraceis, capitulis ♂ ad apices ramorum congestis sessilibus, ♀ minus congestis subspicatis bracteis ♂ parvis obovatis, ♀ invol. subæqualibus tridentatis, invol. squamis ♂ ovato-lanceolatis acutis, ♀ magis elongatis vix acutis, acheniis striatis glabris.—Rio Grande, South Brazil, Fort Argentino, N. Patagonia. *Tweedie*. Monte Video. (*ex. Herb. Baldwin. Dr Torrey*).—If we are right in referring these several plants to *B. rotundifolia*, as we think we are, it is a most variable species. From Rio Grande (*Tweedie*) we have three specimens; in all the three, the nerves are distinct

and prominent on both sides of the leaves. In the male specimens, the lower leaves are orbicular and serrated about half way down, the upper are obovato-cuneate, 3—5-toothed at the apex, all are decidedly clothed (though not white) with small furfuraceous scales. In the two other specimens (female plants), the leaves are all obovate like the upper ones in the male plant and less furfuraceous. In our plant, (female) from Fort Argentino (*Tweedie*), the leaves are not furfuraceous, but obscurely dotted, narrow-obovate, coarsely 5—7 toothed, the nerves rather indistinct. In those (male) specimens from Monte Video, the nerves on the leaves are moderately conspicuous, the leaves themselves more coriaceous, more oval, indistinctly toothed, and the younger ones especially, rather glutinous than furfuraceous. The female pappus is scarcely longer than the involucre, in which respect it seems to differ from De Candolle's female plant; this however may be owing to the different ages.

1076. (33.) *B. Tweediei* (Hook. et Arn.); fruticosa glabra subviscosa, ramis angulatis, foliis coriaceis late obovatis basi cuneato-attenuatis subpetiolatis elevato-trinerviis varie angulato-dentatis integerrimisque, capitulis corymboso-paniculatis, corymbis foliosis subnudisve, involucri hemisphærico-campanulati squamis glabriusculis crispato-ciliatis uninerviis ext. ovatis, int. ovalibus acutiusculis.—Maldonado, S. Brazil. *Tweedie*. El Biscachera in the Pampas of Buenos Ayres. *Dr Gillies*.—In some respects the foliage of this plant resembles the last, but the leaves are generally larger and more attenuated at the base, so as to be almost petiolated. The inflorescence and involucre are quite different.

1077. (34.) *B. intermedia* (DC. *Prodr.* v. p. 411); fruticosa glabriuscula resinoso-subviscosa, foliis lineari-cuneatis basi attenuatis apice repando-dentatis margine subrevolutis, capitulis ad apices ramulorum congesto-corymbosis brevissime pedicellatis, invol. ♀ squamis ovali-lanceolatis vix acutis margine scariosis, achænio glabro striato.—Valparaiso. *Gaudichaud*. *Cuming* (n. 79.)—De Candolle places it next *B. concava*, and describes it as intermediate between it and *B.*

*rosmarinifolia* of the 3d section, in which he is certainly correct.

1078. (35.) *B. attenuata* (Don mst.); annua? erecta elongata stricta, ramis angulato-striatis, foliis plerisque oppositis coriaceis lanceolatis obscure trinerviis remote dentato-serratis basi attenuatis gracilibus subpetiolatis, capitulis glomeratis sessilibus vel pedunculatis spicas interruptas terminales formantibus, involucri campanulati squamis ext. ovatis, int. ovato-lanceolatis.—Pampas of Buenos Ayres. *Dr Gillies* (n. 174.) *Tweedie* (n. 1125), *Dr Baldwin* (in *Herb. Nostr.*) Uruguay. *Tweedie*.—Leaves 2—4 inches long, 3—6 lines broad. Pappus deep tawny, considerably longer than the involucre in the female plant. *Dr Gillies* describes the plant as having the odour of honey.—May this not be the same as *B. Platensis*, Spr. et DC. At any rate it should be placed between that and *B. subopposita*, DC.

1079. (36.) *B. Tucumanensis* (Hook. et Arn.); fruticosa glabra, ramis erectis angulatis, foliis alternis subcoriaceis ellipticis lanceolatisque basi cuneatis in petiolum attenuatis oblique penninerviis (costa distincta nervis obscuris) acutis integerrimis vel (in latioribus hic illic dentatis), capitulis 4—6 ad apicem ramorum et in pedunculos axillares solitarios glomeratis, involucri lato-campanulati multifloris squamis ext. ovatis, int. lineari-oblongis, omnibus margine eroso-fimbriatis.—*α.* foliis latioribus subdentatis. Sides of the mountain St Xavier, Tucuman, just above the woods. *Tweedie* (n. 1099 and 1184).—*β.* foliis angustioribus fere omnibus integerrimis. Wood-sides of Tucuman. *Tweedie* (n. 1192).—This would seem to be a tall growing shrub, with leaves three inches and more long, scarcely dotted. Peduncles two inches and more long, bearing glomerules of capitula at the extremity, naked, or occasionally with one or two leaves.

1080. (37.) *B. daphnoides* (Hook. et Arn.); fruticosa glabra, ramis angulatis, foliis alternis ellipticis obtusiusculis transversim obscure penninerviis basi cuneatis in petiolum brevem attenuatis margine omnino integerrimis tenuiter revolutis supra coriaceis subtus obscure squamuloso-punctatis, corymbis



axillaribus pedunculatis foliosis bracteatisque foliis quam in caulinis multo brevioribus, involucri campanulati (masc.) multiflori squamis uninerviis subpuberulis ciliato-fimbriatis ext. ovatis, int. oblongis.—Uruguay. *Baird*.—Leaves two inches long and one broad, perfectly entire. Corymbs copious, about as long as the cauline leaves (including the peduncle) much longer than those of the peduncle, which gradually pass into small bracteas on the pedicels. Male pappus white, clavate.

1081. (38). *B. bracteata* (Hook. et Arn.); fruticosa patenti-ramosa, ramis angulatis junioribus pubescentibus, foliis patentibus alternis sessilibus subcoriaceis opacis lanceolatis acutis basi attenuatis utrinque impresso-punctatis uninerviis integerrimis v. hic illic denticulo instructis, capitulis pedicellatis in apices ramorum vel in ramos proprios bracteatos dispositis, in singula axilla solitarios et ita racemos foliosos simulantibus, involucri lato-campanulati pubescentis squamis uninerviis fimbriato-ciliatis ext. ovatis, int. oblongis.—Rio Grande. *Tweedie*.—Branches spreading, slender. Leaves an inch to an inch and a half long, generally quite entire, occasionally with a solitary tooth on one or on both sides, opaque, distinctly impresso-punctate on both sides, single nerved. Capitula (male) solitary, pedicellate in the axils of numerous small leaves or bracteæ, at the extremity of the common branches or on peculiar branches, so that they form leafy or bracteated racemes, and are longer than the bracteæ when in full flower.

1082. (39). *B. arguta* (Gill. mst.); fruticosa, ramis angulatis pubescentibus, foliis ovatis subcoriaceis oblique penninerviis profunde spinoso-serratis acutis basi sublonge cuneato-attenuatis supra glabris subtus pubescenti-scabris nervis valde elevatis, corymbis terminalibus nudiusculis, involucri campanulati squamis ext. ovatis, int. lineari-oblongis margine scarioso-fimbriatis.—Puente de Marquez, Buenos Ayres. *Dr Gillies*.—Habit of *B. racemosa* (n. 2.) but the leaves are not 3-nerved, all of them obliquely penninerved, and they are much attenuated, almost petiolated at the base.

This and the three preceding species, and even *B. attenuata*,

do not properly belong to this section, but on account of their attenuated or cuneate bases they are placed here rather than in the following division. Even in those species with generally cuneate leaves, they are often seen to vary with oblong and even lanceolate ones.

§ 3. *Oblongifoliæ, nempe foliis oblongis ovalibus linearibusve glabris aut rarius villosis uni- aut penninerviis non distiche imbricatis, ramis apteris.* DC.

1083. (40). *B. petiolata* (DC. *Prodr.* v. p. 408); glabra herbacea erecta ramosa, ramis teretibus apice subglandulosis, foliis petiolatis ellipticis grosse dentatis, corymbis pedunculatis nudis compositis, involucri ♂ campanulati squamis ovato-lanceolatis subacutis.—Chili. *Hænke*.—"Species distinctissima. Petioli sesqui- aut bilineares. Limbus folii 10 lin. longus, 4—5 latus."—Quite unknown to us.

1084. (41). *B. Chilquilla* (DC. *Prodr.* v. p. 419); fruticosa, junior pulverulento-puberula dein glabra subviscosa, ramulis teretiusculis, foliis linearibus elongatis sessilibus acutis hinc inde grosse dentato-serratis aut integerrimis subuninerviis, corymbo terminali polycephalo, involucri ♂ ovati squamis scariosis stramineis glaberrimis ovali-oblongis subobtusis.—Quillota, Chili. *Bertero*. "Vulgo 'Chilquilla del Rio.' Folia 3—4 poll. longa, sesquilin. lata. Affinis *B. marginali*."

1085. (42). *B. paniculata* (DC. *Prodr.* v. p. 419); fruticosa ramosissima, ramis erectis glabris angulatis, foliis linearibus v. lineari-lanceolatis utrinque subacuminatis integerrimis subcarnosis siccitate dorso carinatis supra obsolete trinerviis apice uncinatis nunc (latioribus) margine revolutis, paniculis copiosis elongatis foliosis subpyramidatis, involucri campanulati squamis ext. ovatis, int. oblongo-linearibus acutis uninerviis marginibus obsolete eroso-fimbriatis.—Molina linearis. *R. et P.*?—*Baccharis paniculata*. DC. *Prodr.* v. p. 420. *B. rosmarinifolia*. *Hook. et Arn. Bot. of Beech. Voy.* p. 30.—Chili, frequent. Valparaiso. *Bridges* (n. 57). *Macrae. Cuming* (n. 791). Conception. *Beechey*.—Having received this from Chili under the vernacular name of "Romera," we are in-

clined, on that account, and because it is "fruticose," to consider the *Molina linearis* of Ruiz and Pavon, rather than *B. Pingraea*, (to which De Candolle refers it) to be the same with this plant. We are, however, sure that it is the *B. paniculata* of De Candolle, and we think it safer to preserve that name to it. On the closest examination, indeed, we do not find the leaves to be ever serrated, or otherwise than entire: they are very constantly linear or linear-lanceolate, of a thickish and fleshy character, when dry, at least, carinated at the back, channelled above, and a depressed line will be seen on each side the indistinct costa in the broader ones, indicating a 3-nerved leaf. The flowers or capitula are copious on the very numerous erect branchlets, thus forming a leafy panicle upon every large branch.

1086. (43). *B. paucidentata* (DC. Prodr. v. p. 420); fruticosa ramosissima glabra, ramulis striato-angulatis, foliis sessilibus linearibus aut lineari-oblongis utrinque acutis uninerviis aut ima basi subtrinerviis integerrimis aut dente 1—2 utrinque notatis, capitulis ♀ ad axillas superiores subsessilibus et ideo in spicas breves digestis, involucri squamis lanceolatis acutis margine membranaceis, floribus in invol. circ. 10, acheniis striatis glabris.—β. capitulis paucioribus.—Rio Grande (De Candolle). Los Loamos of Bahia blanca, N. Patagonia. (α. and β.). Tweedie. El Rio cuarto, province of Cordova, and β. Buenos Ayres. Dr Gillies.—The leaves of our plant are too narrow to be considered as approaching to oblong, the teeth are large and spreading, the involucre moderately large, in the female plants almost cylindrical.

1087. (44). *B. coridifolia* (DC. Prodr. v. p. 423); fruticosa erecta, ramis striatis puberulis, foliis linearibus integerrimis mucronatis uninerviis subtus utrinque obscure 1-striatis marginibus scabris, capitulis in ramulis gracilibus foliosis racemosis, involucri (♂ hemisphaerici) ovati ♀ squamis herbaceis apice membranaceis ovatis obtusissimis, int. longioribus multoque latioribus.—South Brazil, and woods of Cordova. Tweedie.—The scabrous margins of the exactly linear entire leaves, and the unusually herbaceous nature of the scales of

the involucre, together with the greater size and breadth of the inner scales, will readily distinguish this species. The male capitula, as De Candolle justly remarks, are small, almost globose and drooping, very much resembling some species of *Artemisia*; those of the female plant are larger, erect, with long tawny pappus.

1088. (45). *B. Megapotamica* (Spreng.); fruticosa glabra ramosissima, ramulis angulatis, foliis linearibus acutis integerrimis margine subrevolutis eciliatis uninerviis, capitulis ad axillas foliorum suprem. solitariis sessilibus in spicam dispositis, involucri (♂ ovati, ♀ subcylindracei) squamis paleaceis ext. ovatis, int. lineari-oblongis elongatis.—*DC. Prodr.* v. p. 422.—β. foliis obtusis.—Rio Grande (Spreng.) *Tweedie* (n. 990, 992).—β. S. Brazil. *Tweedie* (n. 999, 1000).—A small copiously leafy shrub. Leaves  $\frac{5}{8}$  of an inch long. In our plants the pappus of the female flowers is longer than the involucre, and the capitula are often pedicellate.

1089. (46). *B. thymifolia* (Hook. et Arn.); fruticulosa glutinosa nana, ramis pubescentibus striatis, foliis parvis lineari-oblongis obtusis integerrimis crassiusculis patenti-reflexis uninerviis, capitulis racemoso-paniculatis, pedicellis basi foliolosis, involucri ♂ squamis subhemisphæricis paucis lineari-oblongis, int. paulo longioribus.—Crevices of rocks, Cienega de las Arrojas, Andes of Mendoza. *Dr Gillies* (n. 166).—A very distinct and well marked species, with copious glutinous leaves, 2—3 lines long.

1090. (47). *B. ulicina* (Hook. et Arn.); fruticosa ramosissima, ramis erectis striatis glabris, foliis angustissimis subulatis tenui-mucronulatis integris pinnatifidisque supra canaliculatis laciniis subulatis, capitulis solitariis, ramulis brevibus sæpe corymbosis terminantibus, involucri subcampanulati squamis lineari-subulatis nervo viridi notatis.—β. *humilis*. Woods of Cordova (n. 1123), and in N. Patagonia; and β. dry bare places of the Pampas (n. 1118). *Tweedie*.—Leaves  $\frac{1}{2}$  to  $\frac{5}{8}$  of an inch long, most of them deeply pinnatifid, with long slender mucronate segments, by which characters this remarkable species may at once be recognised.

1091. (48). *B. subulata* (Don. mst.); herbacea glabra simplex vel ramosa, caule ramisque teretibus lævibus aut lævissime striatis, foliis erectis subcarnosis alternis remotis linearisubulatis acutis subnerviis integerrimis v. serratis siccitate canaliculatis, capitulis solitariis terminalibus in ramulos ultimos subcorymbosos, involucri campanulato-hemisphærici foliolis coloratis omnibus ovatis acuminatis margine anguste scariosis.—*α.* foliis involucrique squamis integerrimis.—*β.* foliis serratis involucri squamis margine erosis.—*α.* Buenos Ayres (*Herb. Baldwin*). Boggy places, Bahía Blanca, N. Patagonia. *Tweedie* (n. 400). Wet spots, near the mouth of Rio de Uspallata, Andes of Mendoza. *Dr Gillies* (n. 190).—*β.* S. Patagonia, Lat. 47°. *C. Darwin, Esq.*—Evidently an annual plant, varying in height from six inches to two feet, the stems and branches singularly rounded and even, thickish and junciform, spongy within. Leaves always remote, one to nearly two inches long, erect and frequently appressed, slightly fleshy, generally with no appearance of costa or nerve. Capitula large. It is the same species detected by *Dr Gillies* in the Andes of Mendoza which *Mr Tweedie* finds upon the coast of Patagonia. It is readily distinguished by the nature of its stem and leaves, and the beautiful coloured (purple) acuminated scales of the involucre with frequently white silvery margins. Pappus an inch long, tawny.\*

1092. (49). *B. Darwinii* (Hook. et Arn.); suffruticosa erecta puberula, ramis angulato-striatis, foliis remotis linearibus canaliculatis subcarnosis obscure uninerviis integerrimis pilo vel mucrone molli terminatis, capitulis solitariis terminalibus in ramulos ultimos subcorymbosos, involucri hemisphærici squamis obsolete uninerviis lanceolatis acuminatis marginibus late scariosis integerrimis.—Port Desire, lat. 47°. *C. Darwin, Esq.* (n. 397).—Our specimens are small, and do not exhibit the lower part of the plant, but they suffice to show that the species is very distinct from any other. Leaves an inch long.

\* May this not be the *Stephananthus junceus*, *Lehm.* (*Baccharis juncea*, DC. l. c. p. 423), which *Lessing* says is a native of South Brazil, and not of "Egypt;" the character agrees tolerably well.

1093. (50). *B. genistifolia* (DC. *Prodr.* v. p. 423); fruticosa ramosissimaglabra, ramulis striatis, foliis (perpaucis) distantibus sessilibus linearibus obtusis integerrimis subnerviis, capitulis ♂ ad apices ramulorum 3—5 sessilibus spicato-digestis (sub-) ebracteatis (nunc solitariis terminalibus), involucri ♂ subcampanulatisquamis ext. ovatis, int. oblongis, ♀ cylindraceutisquamis ext. ovatis, parvis int. lineari-oblongis, omnibus uninerviis integerrimis.—*An etiam* *B. leptophylla*. DC. *Prodr.* v. p. 423.—*α.* capitulis glomeratis bracteatis.—*β.* capitulis terminalibus solitariis ebracteatis (an distincta?).—*α.* Monte Video and S. Brazil (n. 988). Fort Argentino, N. Patagonia. *Tweedie*.—*β.* Buenos Ayres. *Tweedie*.—Allied to *B. angustifolia* Mx. next to which De Candolle properly places it. May not *B. aphylla* DC. l. c. p. 424, be a leafless var. of this? Pappus elongated, lax, stramineous. In the glomerated var. the female capitula have the involucre much longer, and the inner scales particularly, than the specimens with solitary capitula. It will perhaps prove to be a distinct species.

§ 4. *Discolores, foliis uninerviis ramis penninerviis, supra magis minusve virescentibus, subtus dense cano-tomentosis v. sericeis, ramis apteris.*

1094. (51.) *B. gnaphalioides* (Spreng. *Syst. Veget.* iii. p. 461.) fruticosa subramosa, ramis teretibus albo-tomentosis, foliis linearibus patentibus mucronato-acutis uninerviis integerrimis margine revolutis supra araneosis (demum glabris nitidis) subtus albo-tomentosis, capitulis terminalibus racemosis, involucri hemisphærici squamis ovatis acutis dense tomentosis.—DC. *Prodr.* v. p. 415. Rio Grande, *Sello*. Maldonado. *Dr Gillies*. Monte Video. *Tweedie*.—Capitula rather large. Pappus pale tawny. De Candolle describes the leaves which are nearly an inch long, as obtuse, but they are characterized by Sprengel as acute, and even mucronate.

1095. (52.) *B. velutina* (DC. *Prodr.* v. p. 415); fruticosa ramosa tota molliter velutina, ramulis teretibus, foliis sessilibus linearibus (obtusis) integerrimis 1-nerviis margine subrevolutis, capitulis ♀ ex axillis breviter pedicellatis racemosis pedi-

cellis nudis, invol. squamis oblongis ♀ ex axillis longius pedicellatis, pedicellis bracteolatis, invol. squamis ovatis obtusissimis laxis rufo-velutinis, floribus in ind. ♀ 5-6, achæniis glabris, corolla rigida pappo pluriseriali. DC.—*B. ochracea*, Spr.?—Maldonado. *Tweedie*.—Leaves 4-6 lines long, patent or reflexed. In our specimens the younger ones only are wholly tomentose, in the older ones the upper side is more or less bare, the under always densely velutino-tomentose, the involucre thickly so and ferruginous. Our plants are all male, and the capitula, at first sight, resemble those of *Artemisia Absinthium*; the scales are short, oval, very obtuse, lax and somewhat spreading. De Candolle doubts if the male and female plants he has described belong to the same species, perhaps the following has been confounded with it.

1096. (53.) *B. artemisioides* (Hook. et Arn.); fruticosa ramosissima cano-pubescentis, ramis ramulisque angulato-striatis, foliis numerosissimis lineari-subacicularibus mucronato-acutis uninerviis subtus albo-tomentosis marginibus revolutis, capitulis racemoso-spicatis foliosis, involucri campanulati (♂ subhemisphærici) squamis dense pubescenti-incanis, ext. ovatis, int. oblongis obtusis, omnibus apicibus scariosis.—Between Rio de los Ehovillos and el Rio Quinto, province of San Luis. *Dr Gillies* (n. 185.) Salt Plains of Bahia Blanca, lat. 40°. in N. Patagonia, and in high and dry places of Cordova. *Tweedie* (n. 1126.)—Leaves 4-6 lines long, very slender, almost acicular, scarcely rigid. Capitula rather small. Pappus twice as long as the involucre, rufous.

1097 (54.) *B. phyllifolia* (DC. *Prodr.* v. p. 415); fruticosa, ramis teretibus junioribus canescentibus velutino-hirsutis, foliis sessilibus approximato-patentibus ovato-oblongis basi obtusis subcordatis, apice obtusiusculis submucronulatis margine vix subrevolutis supra glabris subtus cano-tomentosis, panicula subnuda ramosissima apice subcorymbosa, capitulis pedicellatis, involucri ♂ squamis oblongo-linearibus obtusis dorso lanato-hirsutis. DC.—Sandy places of Rio Grande, and the Banda Orientale. *Tweedie* (n. 1023.)

1098. (55.) *B. albida* (Hook. et Arn.); tota albido-canescens.

cens, ramis angulatis, foliis remotis lineari-elongatis acutissimis submucronatis subtus præcipue dense albo-pubescentibus, capitulis corymbosis, involucri subhemisphærici squamis lanceolatis acutis uninerviis dorso albo-pubescentibus reliquis nudis subscariosis.—Santa Fée (in the Argentine Republic?) *Tweedia*.—Our specimen is a solitary one, and the flowers (male) scarcely perfect: but it seems very distinct.

1099. (56.) *B. tenella* (Hook. et Arn.); tota pubescenti-incana suffruticosa, ramis angulatis, foliis alternis remotis lineari-subulatis integerrimis acutis rigidiusculis obscure uninerviis, capitulis terminalibus solitariis majusculis, involucri lato-campanulati squamis ovatis acutis imbricatis apicibus nudis coloratis—*a. gracilior*. N. Patagonia, at Bahia Blanca and Arroya de Napoota. *Tweedia*.—*β. magis robusta*. St Julian (S. Patagonia?) *C. Darwin, Esq.* (n. 379.)—Our plants are all males.

§ 5. Caulopteræ, nempe foliis oblongis linearibus aut subnullis, ramis alas foliaceas e foliorum basi utrinque decurrentes gerentibus. DC.

1100. (57.) *B. Gaudichaudiana*. DC. *Prodr.* v. p. 424. St Catharine, Brazil. *Tweedia*. Rio Grande do Sul. *Isabelle*.—De Candolle says, “this very much resembles *B. articulata*, but it is not glaucous; the articulations are elliptical and broader, 7-8 lines long and 3 lines wide.” Some of our specimens are most beautifully and regularly jointed like an *Opuntia*, but others pass gradually into the following species.

1101. (58.) *B. articulata*. Pers.—DC. *Prodr.* v. p. 424. Conyza. Lam. Molina, *Less.*—Monte Video. *Sello*. Rio Grande. *Tweedia*. Maldonado and the Pampas of Buenos Ayres. *Gillies*, and N. Patagonia. *Tweedia*.—El Morro, Province of San Luis. *Dr Gillies*.—Nothing can be more variable than this plant (which however, can hardly be called glaucous) in the length of its articulations, the breadth of the wings, often having a waved edge, and the number (2-4) and more or less crowded position of the capitula: so that we think it possible that the number of described species in this section will require to be greatly reduced, and that probably



*B. crispa*, Spr. *B. trimera*, Less. and *B. cylindrica*, Less. (all from Rio Grande) should be united with *B. articulata*.

1102. (59.) *B. sagittalis*. DC. v. p. 425. Molina, Less.—Chili. *Chamisso*. Plains near the Andes, province of Valdivia. *Bridges*. (n. 580) Chiloe (n. 57) and Coquimbo (n. 83.) *Cuming*. Mendoza, *Gillies* (n. 182.) Parana, *Tweedie*.

1103. (60.) *B. phyteumoides*. DC. *Prodr.* v. p. 425. Molina, Less.—S. Brazil. *Sello*. Banda Orientale, Rio Parana and Uruguay and Buenos Ayres. *Tweedie*.—In our plants the leaves are from 2 to 4 inches long, triplennerved, and penninerved. The glomerules of capitula form dense spikes.

1104. (61.) *Heterothalamus brunioides* (*Schlecht. in Linnæa* v. 6. p. 504); foliis linearibus integerrimis. DC. *Prodr.* v. p. 216.—*Melananthera aliena*. Spr.—*Sterea Romerilla*. *Don, mst.*—Mountains west of Monte Video. (*Tweedie*). Aguadita and El Cerro del Morro, province of San Luis. *Dr. Gillies*. (n. 163.)

1105. (62.) *H. spartioides* (Hook. et Arn.); ramosissimus aphyllus, rachidis bracteolis caducis, floribus fœmineis ligulatis. —*Baccharis ligularis*. *Don, mst.*—Los Loamos in N. Patagonia. *Tweedie*. Valley of Uspallata and from Mendoza to Rio Desaguadero. *Gillies* (n. 188.) Coquimbo, Chili. *Cuming*. (n. 884).—Habit of *Baccharis genistifolia*, but it has no leaves, and the flowers are decidedly bracteolated. No doubt, also, it greatly resembles *B. aphylla* of DC. *Prodr.* v. p. 424, for De Candolle has referred to it, though doubtfully, Mr Cuming's Chilian specimen. Even in a dried state, on bruising the flowers, they yield a most powerful balsamic smell, and *Tweedie* observes, "I was led to discover this plant from a considerable distance, by its very strong odour. It grows in small dense tufts, and when the wind blows the scent is perceived far and wide. It is called Escoba, and is the only article employed for making brooms."

1106. (63.) *H. trinervis* (Hook. et Arn.); ramulorum foliis oppositis petiolatis ovato-lanceolatis integerrimis trinerviis supra nitidis, panicula terminali pyramidata, rachidis bracteolis caducis, flosc. fœm. filiformibus (haud ligulatis!)

—*Conyza trinervis*, Lam. *Baccharis trinervis*, DC.—Uruguay. Tweedie.—This differs from the generic character only in the female florets not being ligulate. In all other respects it approaches *H. psidioides*, Less. It is surely *Baccharis trinervis*, Pers. and De Cand.

Subtrib. III. TARCHONANTHÆ. Less.

MICROPSIS. DC.

(LASIOPHYTON. Hook. et Arn. *mst.*)

*Involucrum* scariosum subbiseriale. *Capitulum* heterogamum pauci-(sub-9-)-florum; flosculis fœmineis uniserialibus filiformibus in ambitu: *fl. hermaphroditis* tribus tubulosis in centro intra rachidis uniserialibus isarithmas dispositis. *Antheræ* basi bisetosæ. *Stylus* herm. rami pube infra apicem decurrente obsessi. *Achænia* estipitata erostris oblonga; fœm. sericeo-villosa, villis pappum occultantibus; herm. glabra compressiuscula, hinc linea sericea notata, bracteolis membranaceis valde concavis apice scarioso-appendiculatis dorso gibbis omnino involuta. *Pappus* conformis coroniformis brevissimus crenato-dentatus persistens.—*Herba annua, pygmæa, albo-tomentosa. Folia oblongo-spathulata. Capitula glomerata, terminalia, foliis sub capitulis involucrata. Hook. et Arn.*

1107. (1.) *M. nana* (DC. *Prodr.* v. p. 460.) *Lasiophyton pusillum. Hook. et Arn. mst.*—Chili. Valdivia. *Bridges* (n. 642). *Quillota. Bertero.*—We have placed this genus here in deference to the opinion of De Candolle, although our observations on the style of the central florets, which that eminent botanist has described as male, lead us rather to insert it among the *Gnaphaliæ*, near *Gifola*.

1108. (1.) *Micropus globiferus* (*Bert. in De Cand. Prodr.* v. p. 460); totus niveo-tomentosus, caulibus a basi ramosis diffusis, foliis oblongo-linearibus, floralibus latioribus obtusis, capitulis terminalibus lateralibusque invol. squamis planiusculis inermibus tomentosissimis.—Chili, at Rancagua.—*Bertero.* We are unacquainted with this.

PLUCHEA. *Cass.*

1109. (1.) *P. macrocephala* (*De Cand. Prodr. v. p. 450*); herbacea erecta simplex pilosa, caule striato, foliis longe decurrentibus alatis infer. ovali-oblongis serratis basi longe attenuatis, super. lanceolatis linearibusve integerrimis, capitulis 7—8 in corymbum terminalem dispositis, pedicellis patentim hirsutis, involucris tomentoso-lanatis hirsutissimisque.—*Conyza Megapota mica. Spr.*— $\alpha$ . caule angusto elato. Rocks Via Monte and Rio Grande. *Tweedie.*— $\beta$ . caule lato-alata. Boggy ground near Maldonado. *Tweedie.*—Caulis monocephalus.

1110. (2.) *P. Quitoc* (*DC. Prodr. v. p. 450*); herbacea, foliis sessilibus longe in alas foliaceas decurrentibus oblongis lanceolatisve calloso-denticulatis, corymbo composito subfastigiato; invol. squamis lanceolatis subacutis.—Rio Grande, Mato-Grosso, ubi dicitur "Quitoc." *Lund, (De Cand.) Tweedie.* N. Patagonia. *Tweedie.*

1111. (3.) *P. oblongifolia* (*De Cand. Prodr. v. p. 451*); herbacea subfusco-pubescens subglutinosa, foliis basi longe decurrenti-alatis vel junioribus obtuse truncatis sessilibus serratis venoso-reticulatis, corymbo terminali subcomposito, invol. squamis dorso puberis glandulosis lanceolatis acuminatis disco longioribus.—Victoria, S. Brazil. *Tweedie.*—Our plant seems shrubby; in the young branches the leaves are sessile and obtuse at the base, in the older ones singularly decurrent.

1112. (1.) *Pterocaulon spicatum* (*DC. Prodr. v. p. 454*). *Conyza spicata, Lam. C. rugosa, Vahl. Chlænolobus, Cass.*—Buenos Ayres, Rio Grande and Maldonado. *Tweedie.*

1113. (2.) *Pt. angustifolium* (*DC. Prodr. v. p. 454*).—Buenos Ayres. *Tweedie.*—Here the glomerules of capitula form a dense globose head, which seems the only difference between it and *Pt. spicatum*.

1114. (1.) *Tessaria absinthoides* (*DC. Prodr. v. p. 457*); ramis foliisque adpressissime canis subargenteis, foliis lanceolatis utrinque acuminatis, nunc integerrimis, nunc dentibus

grossis acutis hinc inde incisus, subtus nervoso-reticulatis, invol. squamis glabris acutis, disco 7—8-floro. DC.—*Baccharis absinthoides*. Hook. et Arn. *Bot. of Beech. Voy.* p. 57. *Gyneteria incana*, Spr.—Chili. Conception. *Beechey. Cuming.* (n. 822.). Valparaiso. *Bridges* (n. 55.) Mendoza. *Dr Gillies.* (“*Paxaro—Bobo*,” vern. n. 173.). Monte Video and Banda Orientale, and sides of Rio Petombolo. *Tweedie* (n. 1209.).—We have adopted, following De Candolle, the Genera *Pluchea*, *Pterocaulon*, and *Tessaria*; they differ in habit, but are scarcely distinguishable by any characters. The present plant does not belong to *Tessaria*, as defined by Lessing; but to his *Pluchea*.

#### Subtrib. IV. ECLIPTEÆ. Less.

1115. (1.) *Siegesbeckia serrata* (DC. *Prodr.* v. p. 496); foliis ovatis acutis regulariter dentato-serratis breviter petiolatis, summis sessilibus ovato-lanceolatis ciliatis, invol. ext. squamis interiore duplo longioribus, DC.—*S. cordifolia*, *Poepp. Diar. Herb.* n. 55. *Hook. et Arn. mst.* (an H.B.K.?)—Chili. *Chamisso.* Between Valdivia and Los Uanos, Province of Valdivia. *Bridges* (n. 689). Woods of Tucuman. *Tweedie* (n. 1239.).—De Candolle says of this, “*Differre videtur a S. cordifolia*, petiolo semipoll. nec 3-pollic., limbo ovato nec cordato, inv. ext. squamis brevioribus;” but these differences do not appear to us to be constant.

1116. (1.) *Eclipta erecta* (DC. *Prodr.* v. p. 490.)—Rio St Lucia, and banks of the Uruguay, Banda Orientale, and St Catharine, S. Brazil. *Tweedie* (n. 450.)

#### Subtrib. V. MELAMPODIÆ. Less.

1117. (1.) *Polymnia silphoides* (DC. *Prodr.* v. p. 516); caule tereti puberulo-glanduloso, foliis oppositis alternisve membranaceis puberulis triplinerviis grosse dentatis apice subtrilobis basi in petiolum alatum irregulariter dentatum attenuatis prope basin auriculato-dilatatis, inv. squamis ext. ovatis acutis dorso villosis, achæniis obovatis subcompressis, ligulis linearibus integris DC.—Rio Grande (*De Cand.*)

La Plata and Parana. *Tweedie*.—Our specimens from Mr Tweedie are indifferent, yet we think we are right in referring his plant to *P. silphiojdes*.

1118. (1.) *Euxenia grata* (*Cham. Hor. Phys. Berol. p. 75, t. 16*); foliis late ovatis in petiolum non decurrentibus. *DC. Prodr. v. p. 501. Hook. et Arn. in Beech. Voy. p. 57. Ogierra triplinervia, Spr. Podanthus ovatifolius, Lag.—Conception. Beechey. Cuming. (n. 131).*

1119. (2.) *E. Mitiqui* (*De Cand. Prodr. v. p. 501*); foliis ovali-lanceolatis basi longe cuneatis apice acuminatis medio grosse serratis. *DC.*—*Podanthus Mitiqui. Lindl. in De Cand. Prodr. et in Herb. nostr.*—Chili. *Lindl. Valparaiso. Bridges (n. 496).* Buenos Ayres and Entro Rios (cultivated) *Tweedie*.—*De Candolle* notices a var.  $\beta$ , *subintegerrima*, of this species, which is the *Græmia aromatica*, *Poepp. Pl. Exsicc. n. 208. (non Hook.)*, a native also of Chili.

1120. (1.) *Acanthospermum xanthoides* (*DC. Prodr. v. p. 501.*)—*Centrospermum xanthoides, H.B.K. Nov. Gen. Am. iv. p. 271. t. 397.*—Salt plains of Buenos Ayres (*n. 739*), and at Cordova (*n. 1127*). *Tweedie*.

(To be continued.)

IV.—*Historical Eulogium on the late M. A. LAURENT DE JUSSIEU*; translated from the French of M. FLOURENS, Perpetual Secretary to the Academy of Sciences.

[With a Portrait.]

THE Jussieu family belongs originally to the little town of Montrolier, situated amid the mountains of the Lyonnais. One member of this family came to settle at Lyons towards the year 1680, there to practise Pharmacy. He married, and was the father of sixteen children, three of whom, Antoine, Bernard, and Joseph de Jussieu, have been the most celebrated Botanists of the 18th century.

The eldest of all this numerous and gifted family was called



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