CONTRIBUTIONS TO THE PHYTOGRAPHY OF TASMANIA.

By Baron Ferd. von Mueller, C.M.G., M.D., F.R.S.

(IV.)

The majority of the notes, offered now to the Royal Society of Tasmania, were written more than a year ago, being the result of various researches on Tasmanian plants since I had the honour of submitting the third contribution; but this offering was delayed, because it was my wish to follow up some field-work, which I instituted in Midsummer of last year, while travelling, accompanied by Mr. S. B. Emmett and his son, from Circular Head to the Arthur River, chiefly, with a view of making some special comparisons between the vegetation of North-west Tasmania and that of the opposite coast of the colony of Victoria. This wish of revisiting the island could not yet be realised; and as there seems to be much uncertainty when effect could be given by myself to such a desire for further Tasmanian phytographic explorations, I deemed it best to submit my ready notes, especially as they became disinterestedly augmented by communications of plants and memoranda from Mr. Robt. M. Johnston who, as a companion of the Hon. J. R. Scott, traversed for scientific purposes last autumn a large tract of alpine country, also not previously examined for plants. Furthermore the present contribution has been greatly enriched by notes furnished by the Rev. W. W. Spicer, who, chiefly by the aid of friends, obtained plants from several localities of Tasmania previously but little searched, and who is likely thus to advance greatly our insight into the exact geographic distribution of the species over the main island and the adjoining islets.

Some Algæ have also been added from more recent collections perseveringly formed by Mrs. Meredith, and through my mediation rendered available to Dr. Agardh of Lund, the great worker for a very long time on the

occanic plants.

Melbourne, March, 1876. ** Ranunculus muricatus, Linn. New Town, in a wet ditch on the road to Risdon Ferry. It is very similar to the native R. parviflorus Linn., but larger and coarser. W. W. Spicer.

Papaver aculeatum, var.: pusillum, King's Island, Neate. The whole plant barely three inches high. Stem capillary; leaves only 2 to 5 lines long; length of calvx hardly above

two lines.

* Cakile maritima, Scopol. Flor. Carniol. ii., 35. On the coast near Circular Head, not uncommon, particularly near high water mark. It is remarkable that this conspicuous and singular plant should have been overlooked so long in Tasmania, where, from my personal enquiry among the local coast residents, it seems to be indigenous; but it was also not before 1861 that the Cakile became by my own investigations discovered on the coast of the Australian mainland. George's Bay. A. Simson.

** Senebiera coronopus, Poir. An European weed now firmly established in the neighbourhood of Hobart Town. though evidently of much later introduction than S. didyma

Pers.

Drosera binata, La Bill. Southport, J. E. T. Woods; Port Davey, J. R. Scott.

Drosera Menziesii, R. Br. Gould's Country, George's Bay, A. Simson.

Pittosporum bicolor, Hook. Gould's Country. A. Simson.

* Pittosporum undulatum, Venten., hort., Cels. t. 76. rare in the mountainous forests near the Arthur River. credit of the discovery of this beautiful tree is due to Messrs. Emmett, who directed my attention to this plant as new for Tasmania by sending me a coloured drawing, prepared by Mrs. Emmett, and who subsequently conducted me to the spot, where long since the only tree originally observed by them was felled. Such is the equable moisture of those ranges, that the stem, after having been severed from the root for several years, had pushed forth some new foliage; this with the drawing of the flowers has left hardly any doubt of the identity of this Pittosporum with the true P. undulatum, which is known to extend to Western Port on the Victorian coast; fruits from Tasmania have, however, not yet been seen by me. I learn that a few more trees of this noble species were noticed since in the same region.

Comesperma ericinum, Caud. Gould's Country, A. Simson;

Honeywood, J. E. T. Woods.

Comesperma calycomega, La Bill. George's Bay, A. Simson;

Southport, J. E. T. Woods.

Comesperma defoliatum. At Gibson's Plains, and on other heath tracts towards the River Arthur.

Australina pusilla, Gaud. In a damp gully, creeping among moss, etc., near the Fern Tree Bower, Mount Wellington, W. W. Spicer.

Eriostemon virgatus (the Button Rush). In thickets of Bauera, and among Chœtospora sphærocephala towards and

near the Arthur River in vast abundance.

Eriostemon squameus. King's Island, Lieutenant Stanley,

R.N.

Eriostemon montanus, F.M. Plants indigenous to the colony of Victoria, I. 129. Summit of Mount Lomond at a height of nearly 5,000 feet, among masses of greenstone; Dr. Milligan. It occurs first named in my plants indigenous to Victoria, I. 129.

Boronia rhomboidea, Hook. Sparingly at North West Bay,

near the inn, W. W. Spicer.

Frankenia pauciflora. Circular Head.

** Cerastium glomeratum, Thuill. New Town, W. W. Spicer; Mount Wellington, P. E. Spicer.

** Sagina apetala, Linn. Mantiss, 559; King's Island,

Neate.

** Spergula arvensis, Linn. Cultivated ground near Hobart Town, W. W. Spicer.

Polycarpon tetraphyllum. Circular Head.

Claytonia australasica. J. Hook, Pontville, W. W. Spicer.

Hemichroa pentandra, R. Br. On saline meadows near
Circular Head.

Ptilotus spatulatus, Poir. Pontville, W. W. Spicer.

Rhagodia nutans, R. Br. On a wall, Hobart Town, some distance from the Derwent, and in a neighbouring cemetery, W. W. Spicer.

Atriplex paludosum, R. Br. Wet saline flats about Circular

Head.

Salicornia arbuscula, R. Br. Circular Head. Flinders Island, R. M. Johnston.

Rumex bidens, R. Br. In the River Jordan, Pontville, W.

W. Spicer.

Platylobium formosum. Swanport, Dr. Story; Harefield, Mrs. Groome; George's Bay, Bissill; St. Patrick's River, Hannaford; Gould's Country, A. Simson.

Platylobium triangulare. York Town and Port Sorell, C. Stuart.

Glycine clandestina, Wendl. George's Bay, A. Simson; Pontville, P.E. Spicer.

Swainsona lessertifolia. King's Island, where it is dreaded as a weed, poisonous to pastoral animals.

*Trifolium tomentosum, L. sp. pl. 1086. Near Circular Herrather frequent, and permanently established.

Tetracarpaea Tasmanica. River Picton and Lake Pedder,

Johnston; Gould's Country, A. Simson.

Anodopetalum biglandulosum. Adamson's Peak, Hon. J. R. Scott; mountains towards and along Arthur's River, F. v. M.; River Picton and Lake Pedder, Johnston. Leaves sometimes trifid or trifoliate. Well known as the "horizontal scrub" to form in many valleys of Tasmania dense jungles, almost impenetrable.

Eucryphia billardieri. Adamson's Peak, Hon. J. R. Scott;

towards Arthur's River, F. v. M.

Bauera rubioides, flore pleno. Deloraine, J. E. T. Woods.

** Alchemilla arvensis, Scopol. fl. Carniol I, 115, King's
Island, Neate. This plant was not admitted by me into the
census, published in the Society's volume for 1874, inasmuch
as the plant cannot be regarded with certainty as indigenous.
I traced it into New South Wales as far as the Edwards
River. Its claim to nativity in Australia may remain for
ever a disputable point. A vulgaris is, however, truly
indigenous in the glacier-region of the Australian Alps,
and may possible yet be discovered in the snowy mountains
of Tasmania also.

Geum urbanum, Linn. Deloraine, J. E. T. Woods.

Tillæa macrantha, J. Hook. Pontville, also near Hobart Town; W. W. Spicer.

Haloragis ceratophylla, Endl. Pontville, a variety with

strictly opposite leaves, W. W. Spicer.

Ceratophyllum demersum, Linn. The river Jordan at Pontville, W. W. Spicer.

Lythrum Salicaria, Linn. Deloraine, J. E. T. Woods.

Lythrum hyssopifolium, Linn. Deloraine, J. E. T. Woods.

Kunzea corifolia. King's Island, R. Johnston.

Spyridium eriocephalum. Hummock Island, Dr. Milligan; Schouten Island, Dr. Story. On both islands the variety vexillifera.

Spyridium serpillaceum. Spring Bay, Dr. Milligan.

Spyridium obovatum. St. Paul's River, where it is 4 to 10 feet high. Spyridium Gunnii, Eldon's Bluff, Th. Gulliver, is probably a variety of S. obovatum.

Cryptandra amara. Swanport, Dr. Story. In all probability the C. alpina must be regarded as a highland variety of C. amara.

Pomaderris phylicifolia. St. Paul's River, C. St.

Pomaderris racemosa. King's Island, McGowan.

Conospermum taxifolium. George's Bay, A. Simson.

Cenarrhenes nitida. Adamson's Peak, Hon. J. R. Scott; River Picton, River Huon, and Lake Pedder, Johnston; between Circular Head and Arthur's River, F. v. M.; Upper

Arve, J. E. T. Woods.

Agastachys odorata. On heathy hills between Circular Head and Arthur's River, very rare, Emmett; Lake Pedder, River Picton, and River Huon, Johnston; Adamson's Peak, Hon. J. R. Scott; Upper Arve, J. E. T. Woods.

Orites diversifolia. River Picton, Johnston.

Bellendena montana. Mount Ramsay, Emmett; Adamson's Peak, Hon. J. R. Scott.

Pimelea ligustrina. Gould's Country, A. Simson; Deloraine,

Southport, J. E. T. Woods.

Panax Gunnii. Lake Pedder, Johnston.

** Torilis nodosa, Gaertn. de fructib. I., 82. Copiously naturalised at Circular Head.

Hydrocotyle callicarpa, Bunge, near New Town, sparingly,

W. W. Spicer.

* Keniculum vulgare, Gaertn. Abundant at Sandy Bay, W. W. Spicer.

Didiscus pilosus. Swanport, Dr. Milligan; Goshen Road, A. Simson.

Asperula oligantha, F. M. in Neerland. Kruitk. Archiv. IV., 111 ct 112. In the 9th volume of my Fragmenta, p. 187, it was proposed to substitute the above name for that of A. conferta, as incautiously adopted in the census; because very many years ago the appellation of A. oligantha became established in the Dutch journal above mentioned for that variable species, which already in 1848 I recognised as the only Australian one, and then named it A. oligantha (unaware at the time of Dr. Hooker's views), in contrast to the common A. odorata of Europe. The adoption of the specific name conferta as a collective name for the several supposed species formerly described would be apt to lead to confusion.

Galium umbrosum, Solander in G. Forster's Floral. insul. Austral. prodr., p. 89, includes as varieties both G. gaudichaudi and G. ciliare. Furthermore G. Australe includes as one of its forms G. albescens, and seems to stand in the same relation to G. umbrosum as G. aparine to G. spurium.

Nertera depressa has been reduced to Coprosma, as C. nertera in the Fragm. phyt. Austr. IX., 186.

Aster myrsinoides, La Bill. The variety erubescens occurs at Goshen Road, A. Simson.

Aster lepidophyllus. Circular Head.

Cotula reptans, Beuth. Pontville, W. W. Spicer.

** Bellis perennis, Linn. New Town, W. W. Spicer.

Gnaphalium candidissimum, Lam. On the eastern shore of Kangaroo Point, growing in the sand in considerable quantities. In contributions, &c., No.III. (Proc. R.S.T. 1873, p. 61) this plant was noted as found "in the vicinity of Hobart Town, on roadsides and in cultivated fields;" and it is added: "This is the first knowledge which we possess of this pretty species having strayed out of its native home, South Africa." W. W. Spicer.

Gnaphalium Japonicum, var. sciadophora. Near Lake St. Clair, Th. Gulliver. In this curiously aberrant form the capi-

tula are singly pedunculate and dispersed.

Helichrysum dealbatum. Circular Head.

Helichrysum pumilum. Lake Pedder, Arthur and Huon

Plains, Johnston.

* Helichrysum Gravesii. This fragrant shrub, to which attention was first directed by Mr. Graves, came probably from the South of Tasmania. It is allied to H. cuneifolium and H. Backhousii, differing from both already in the form of its leaves.

Senecio velleyoides. Honeywood, W. C. Blyth; Gould's

Country, A. Simson.

Senecis lautus, var.; capillifolius. Sandy Bay, W.W.Spicer.

Near Circular Head, T. Stephens.

** Onopordon acanthium, Linn. This very handsome thistle appears in a few places about New Town. W. W. Spicer.

** Carduus marianus, Gaertn. Common about New Town.

W. W. Spicer.

** Centaurea melitensis. New Town, W. W. Spicer.

** Calendula arvensis and its more showy ally C. officinalis are both thoroughly established at New Town. W.W. Spicer. Crepis virens, Linn. Deloraine, J. E. T. Woods.

** Xanthium spinosum, Linn. (Bathurst Burr). Near the Railway Station, Hobart Town. This very troublesome weed also exists near Launceston; but it does not appear to spread with such rapidity in Tasmania as it does on the Australian continent. W. W. Spicer.

Microseris Forsteri. This plant is mentioned here for several reasons; first, because its extraordinary variability of the pappus is not yet fully recorded; I counted from 10 to 60 setæ or paleæ, more frequently scabrous than plumous, which when numerous are generally most slender, but when fewer often all broad; secondly, in alluding to this plant, which by careful culture might yield a new esculent root for cold countries (it prospering most on our snowy mountains), an opportunity is afforded for pointing out that it was Solander, who in Forster's prodromus called this plant Scorzonera scapigera; it being not generally known that in that pro-

dromus as far back as 1786 the first use was made of attaching to the specific names of any plants the initials of their author, from whom the appellation first arose, a custom which became universal since the earlier part of this century. In Forster's prodromus occurred also for the first time the names of Rammeulus rivularis and Mesembryanthemum australe., both given by Dr. Solander.

Lobelia surrepens. Swanport, Dr. Story.

*Lobelia platycalyx, F.M. fragm.phyt.Aust. IV., 183. Settlement Island, Dr. Milligan (896). The staminigerous plant

only obtained.

Lobelia pratioides. Hobart Town, Hannaford; Spring Bay, Parson's Pass, and Brushy Plains, Dr. Milligan (1297); a short leaved variety, which seems identical with Pratia puberula; but the fruit has not been available for comparison.

* Lobelia Browniana, R. and S. syst. veg. V, 71. Mersey,

C. St.; also under 259 in Dr. Milligan's collection.

* Lobelia microsperma, F. M. fragm. X., 41. In various parts of Tasmania. As explained in the work above quoted, this plant is the L. gibbosa of R. Brown, but at least as far as the fruit is concerned not Labillardière's L. gibbosa, which latter belongs so far to the following species. The extreme minuteness of the seeds distinguish at once L. microsperma and L. Browniana. The ambiguity of Labillardière's plant renders it almost unavoidable to abandon the specific appellation given by the French naturalist.

Lobelia simplicicaulis, R. Br. prodr., 564. Intermixed with the foregoing species. The large seeds, well described by Labillardière as triquetrous under his L. gibbosa, bring this plant nearer to the East Australian L. dentata than to L. Browniana and L. microsperma. Most likely Labillardière did not recognise the differences between L. implexicaulis and L. microsperma, and gathered both promiscuously; whereas R. Brown, although he well distinguished the two species, seems not to have perceived the remarkable difference of the seeds.

Lobelia pedunculata, R. Br. Goshen, A. Simson.
Leeuwenhækia dubia, Lond. Pontville, W. W. Spieer.
Phyllachne bellidifolia, F. v. M. River Picton, Johnston.
Dampiera stricta, R. Br. Boobyalla, J. R. Scott.
Scavola hookeri, F. v. M. Goshen, A. Simson.

Selliera radicans, Cav. Port Esperance, J. E. T. Woods.

Lyonsia straminca, R. Br. Honeywood, J. E. T. Woods, the
most southern locality, I believe, in which this plant has been
observed. W.W.S.

Convolvulus sepium, Linn, var. soldanella George's Bay, A. Simson.

 D^2

Styphelia pinifolia, Spr. Gould's Country and George's Bay, A. Simson.

Etyphelia scoparia, R. Br. The first authority for this plant is Smith's specimen of the Botany of New Holland, p. 48.

Prionotes cerinthoides, R. Br. Adamson's Peak, J. R. Scott; Lake Pedder, Johnston; a variety with flesh coloured flowers occurs.

Richea pandznifolia, J. Hook. Lake Pedder, Johnston; also beyond the River Arthur, Emmett.

Epacris microphylla, R. Br. Gould's Country, A. Simson. Trochocarpa disticha, var. Cunninghami. Picton River,

Lake Pedder, and Huon River, Johnston.

Limnanthemum exaltatum, F. M. fragm. IX., 165. In the elaboration of the census it was overlooked that the genus Limnanthemum has 21 years' priority over that of Villarsia. The names of Villarsia exigua and V. Gunnii have therefore also been changed accordingly.

Gentiana saxosa, R. and G. Forster in Svensk Wetensc. Akad. Hauding., 1777, p. 183, t. 5. This is the oldest record

of the Australian Gentiana.

Sebwa ovata, R. Br. Pontville, P. E. Spicer, very dwarf; New Town, W. W. Spicer.

Utricularia lateriflora. Near Arthur's River.

* Westringia rosmariniformis, Sm. tracts 277, t. 3. South Esk near Launceston, and Tamar near George Town; Hannaford. Undoubtedly the typical plant in every respect, although as a Tasmanian one it has been referred by Bentham to W. brevifolia as a variety. No transits are as yet known to occur, but if such should be found, then Sir James Smith's plant, on which the genus was actually founded, must take precedence.

Westringia brevifolia. Mersey River, C. St.

Westringia angustifolia. River Picton, Johnston.

Teucrium corymbosum, R. Br. Pontville, W. W. Spicer. Solanum vescum. King's Island, Lieutenant Stanley.

Glossostigma elatinoides. King's Island. The recent discovery of a remarkable Limosella in South East Australia has led to a modification of the characteristic of the latter genus, and by analogy this alteration affects also the allied Glossostigma so far as to render its reduction to the older genus Microcarpaea desirable.

Limosella aquatica. C. St.; Circular Head.

** Linaria cymbalaria. Mill. Hobart Town and New Town, W. W. Spicer.

Veronica plebeja. Macquarie Harbour; Dr. Milligan.

** Veronica hederefolia, Linn. New Town, W. W. Spicer.

* Plantago Lagopus, Linné, sp. pl. 114. Recently of spontaneous occurrence on waste places near Hobart Town, W. W. Spicer.

** Plantago major Linn. Sparingly, Hobart Town, W. W.

Spicer.

Fagus Gunnii. Lake Pedder, Johnston.

Vallisneria spiralis, Linn. The River Jordan, at Pontville,

W. W. Spicer.

** Anacharis canadensis, Planch. Was first introduced into the colony about the year 1862, when specimens were discovered in the reservoir, supplying the basin in the Franklin Gardens, Hobart Town, where they are still thriving. It has now found its way to the River Jordan, at Pontville, and will no doubt soon be heard of in other localities. W. W. Spicer.

Dipodium punctatum, R. Br. Gould's Country, A. Simson.

Pterostylis pracox, Lindl. Goshen, A. Simson. Caleana major, R. Br. George's Bay, A. Simson.

Acianthus exsertus, R. Br. Gould's Country, A. Simson.

Lyperanthus nigricans, R. Br. Gould's Country, A. Simson.

Spiranthes Australis. South Esk, Johnston.

Thelymitra aristata. On the Derwent, W. W. Spicer; Port Arthur, J. Coverdale.

Chiloglottis Gunnii. River Picton, Johnston.

Corysanthes pruinosa, Rich. Cunningham, in the New South Wales magazine, No. 1; Lindl. gen. and sp. of archid., pl. 393. This is the Tasmanian species, so well figured by the late hon. W. Archer. To Mr. Rob. Fitzgerald, the Deputy Surveyor-General of New South Wales, belongs the credit of having first clearly distinguished C. pruinosa from C. fimbriata in his fine work on Australian orchids. The former species is now also known from Flinders' Island. Whether more than one Corysanthes occurs in Tasmanian territory remains to be ascertained, four occurring in New South Wales. These minute and tender plants, while early flowering in the season, are easily overlooked in the secluded haunt, in which they delight to conceal themselves.

Gastrodia sesamoides, between Circular Head and Arthur's

River, F. v. M.; River Picton, Johnston.

Caladenia congesta. Omitted as a species of doubtful value from the census; but the writer had recently an opportunity to examine this plant from the mountains of the Murrumbidgee, where it was collected by Miss Chamberlin; and as the characteristics of the labellum seem not subject to any great alteration, it will probably be best to admit the species.

Patersonia glauca, R. Br., Gould's Country, A. Simson.

Hamodorum distichophyllum, Huon Plains and Lake Pedder, Johnston.

Blandfordia marginata. Near Arthur's River, Emmett.

Xyris gracilis. Widely dispersed over heathy ground from Circular Head to Arthur River. The three styles are separated to their base, and the anther-cells disjointed by a dilated connective. In this respect the flowers contrast remarkably with those of X. operculata; both species grow much intermixed. In wet places the leaves of X. gracilis are sometimes not developed, and otherwise they are variable in width.

Hewardia Tasmanica. Lake Pedder, Johnston.

Astelia stylosa. Huon Plains, Johnston. A very dwarf variety, unless a distinct species, which question the want of fruits as yet prevents to settle. Scent, that of hyacinths. A. stylosa must be transferred perhaps to Milligania, which only differs in capsular, not baccate fruit, from the genus astelia.

* Potamogeton praelongus. South Esk. I have assumed that it is this species of which the late Mr. Sam. Hannaford sent me kindly a specimen but not with ripe fruit.

Xerotes glauca, R. Br. Pontville, W. W. Spicer.

Juncus Brownii. Saline meadows at Circular Head.

Juncus maritimus. Circular Head.

Restio complanatus. Southport, J. E. T. Woods; Honeywood, Blyth: dispersed from Arthur's River to Circular Head, F. v. M.

Lepyrodia puniculata. Frequent on the heaths between Circular head and the Arthur River. In dry localities, dwarf with few flowers in the panicle.

Culostrophus elongatus. In swamps replete with Bauera

between Circular Head and the Arthur River.

Centrolepis tenuior, R. and S. Pontville, Mt. Tor., W. W.

Spicer.

*Heleocharis acicularis, R. Br. prodr. 224. South Esk. This plant was already recorded by R. Brown, in his prodromus, as an inhabitant of Tasmania, but under the name of H. pusilla.

Isolepis Gaudichaudiana, Kunth enum. II., 201. In fern tree guilies between Circular Head and the Arthur River.

Scirpus pungens. Macquarie Harbour, Dr. Milligan.

Lepidosperma filiforme. Swanport, Dr. Story; South Esk, C. St.

Lepidosperma Sieberi. Southport and South Esk, C. St.; Swanport, Dr. Story.

Cladium junceum. New Norfolk, Abbott; Southport, C. St.; Swanport, Dr. Story.

*Cladium Radula, R. Br. prodr., 237. Swanport, Dr. Story; towards Mount Field, East, F. v. M.

Cladium schoenoides. Southport, Dr. Story. Cladium Gunnii. Evandale and Merser, C. St.

Chatospora tenuissima. Port Sorrell, C. St.; Swanport, Dr. Story; from Arthur's River to Circular Head, F. v, M.

Chatospora axillaris. Southport, C. St.

Chalospora nitens. Swanport, Dr. Story; Southport, C. St.;

Circular Head, F. v. M.; King's Island, Neate.

Chatospora capillaris. Bay of Fires, Bissill; Southport, C. St.

Schenus fluitans. In brackish stagnant pools near Southport;

Uncinia riparia. Southport, C. St.

Uncinia tenella. Mersey and Southport, C. St.; between Circular Head and the Arthur River in fern tree valleys, not rare, F. v. M.

Carex breviculmis. South Esk, C. St.; Swanport, Dr. Story;

Pontville, W. W. Spicer.

* Carex tereticaulis, F.M., fragm. phyt. Aust. VIII., 256, at

the South Esk and near Perth.

Carex chlorantha, Huon River, Th. Gulliver; on Mount Wellington up to an elevation of 4,000 feet.

Carex Gunniana. Mersey, C. St.

Carex longifolia. Swanport, Dr. Story. Carex cataractae. Swanport, Dr. Story.

Spinifex hirsutus. George's Bay, A. Simson; Sandy Bay,

W. W. Spicer.

** Zoysia pungens, Willd. in Berlin, Verhandlung III., 44 s., King's Island. A small form creeping among Chætospora nitens. Probably overlooked in coast tracts elsewhere.

** Anthoxanthum odoratum. Summit of Mount Tor, New

Town, W. W. Spicer.

** Cynodon dactylon. Hobart Town, W. W. Spicer.

** Aira caryophyllea. Mount Tor, W. W. Spicer. ** Holcus lanatus. Gould's Country, A. Simson; New

Town and Kangaroo Bottom, W. W. Spicer.

** Briza maxima. The Domain, Hobart Town, W. W. Spicer. B. minor has become one of the commonest grasses round Hobart Town.

**Bromus mollis and B. unioloides. Neighbourhood of Hobart

Town, firmly established, W. W. Spicer.

**Lolium temulentum. Corn fields, New Town, W. W. Spicer.

**Lepturus filiformis. Deloraine, J. E. T. Woods; Pont-

ville, on river Derwent, W. W. Spicer.

**Lepturus filiformis, var. incurvatus. Sandy Bay, roadside, abundant, W. W. Spicer.

** Hordeum murinum. New Town, abundant, W.W. Spicer. Festuca distichophylla. Circular Head.

** Festuca ovina. Mt. Tor, W. W. Spicer.

Festuca syrtica. Saline flats at Circular Head.

Hierochloa rariflora. Bay of Fires, Bissill; St. Paul's River, C. St.; Swanport, Dr. Story; Gould's Country, A. Simson.

Stipa teretifolia, Steud. glum. I., 128. Swanport, Dr. Story; Tamar and Southport, C. St.

Stipa crinita, Gaudich., Bot. Voy. Freycin., 407, or an allied species occurs on King's Island.

Grammitis leptophylla. Cataract at Launceston, Johnston.

Lonaria vulcanica. Waterfalls on Mount Wellington, Oldfield; Mount Laperouse, C. St.; North West Bay, W. W. Spicer.

Lomaria fluviatilis. Gould's Country, A. Simson.

Pteris comans. Along Arthur's River and in its vicinity.

Todea Africana. Port Davey, Hon. J. R. Scott; Gould's Country, A. Simson.

Asplenium umbrosum. Gould's Country, A. Simson.

Cyathea medullaris. Between Circular Head and Arthur's River, about eight miles inland. Mr. S. B. Emmett, the discoverer of this noble tree fern in this particular locality, measured stems fully 40 feet long, but always found them remarkably slender. Mr. Stephens recorded this fern in the Royal Society's Publication, 1872, p. 25.

Alsophila Australis. Gould's Country, A. Simson.

*Alsophila excelsa. R. Br., prodr. 158. Var. Cooperi. Base of Adamson's Peak, near Port Esperance, Hon. J. R. Scott. To this reference has been made in the volume of the Royal Society of 1872, p. 50.

Schizœa bifida. The authority given usually for this fern, and also in my census, is not the oldest. Swartz defined the species already in Schrader's Journal for 1800, vol. II., page 7. as shown by Pritzel, Icon. bot. index, 999, and Pfeiffer Nom. bot. II., 1077. Perhaps, however, Sir James Smith already had this species, with others in view when he established the genus in 1791. Mem. Acad. Turin, V. 419, t. 19, f. 9.

Schizea fistulosa. Between Circular Head and the River Arthur.

Dawsonia superba. Between Circular Head and Arthur River.

Cyttaria Gunnii. On the beech trees between Circular Head and Arthur River. From this locality specimens were obtained for Baron von Thümen's Mycotheca.

ALGÆ

(All from Mrs. Meredith's collection formed at Orford).

*Sargassum Sonderi, J. Ag.

Nereia australis, Harv. in J. Hook. fl. Tasm. II., 289.

Halyseris Muelleri, Sond.

Dictyota paniculata, J. Ag. symb., p. 5.

*Dictyota nigricans, J. Ag.

Liebmannia australis, Harv. in J. Hook. fl. Tasm., 291.

*Liebmannia ramulosa, J. Ag.

*Thamnoclonium echinatum.

Lenormandia marginata, Harv. Ner. Austr., 19.

Pollexfenia pedicellata, Harv. in Hook. Lond. Journ. III., 431.

Dictymenia Harveyana, Sond. in Linnaea XXV., 697.

**Chondropsis Harveyana, J. Ag.

Chondria dasyphylla, Ag. sp. alg. I., 350.

Chondria opuntioides, Harv. in J. Hook, fl., Tasm. II., 297.

*Chondria clavata.

Rhytiphlæa australis, Endl. gen. suppl. III., 48.

Polysiphonia Hookeri, Harv. Ner. Austr., 40.

Polysiphonia Hystrix, J. H. and Harv. Ner. Austr., 41.

Dasya Gunniana, Harv. Ner. Austr., 59.

Dasya hapalathrix, Harv. phycol. Austr., 88.

*Dasya elongata.

*Dasya ceramoides.

Delissa pulchra, Mont.

Delissa elegans, Mont.

Laurencia Tasmanica, J. H. and Harv. Ner. Austr., 84.

*Laurencia thyrsoidea.

Wrangelia nobilis, J. H. and Harv. in Lond. Journ. III., 411.

*Wrangelia ballioides, J. Ag.

Wrangelia setigera, Harv. in Hook. fl. Tasm. II., 309.

**Rhodoglossum latissimum, J. Ag.

Rhodophyllis Gunnii, Harv. in J. Hook, fl. Nov. Zel. II., 247.

Rhodophyllis membranacea, Harv., l.c., 247.

Rhodymenia foliifera, Harv.

Areschongia Laurencia, Harv. in trans. Roy. Ir. Acad. XXII., p, 554.

*Areschongia australis, Harv.

Rhabdonia nigrescens, J. H. and Harv. in Lond. Journ., VI., 409.

Gloiosaccion Brownii, Harv. phyc. austr. t. 83.

Mychodea membranacea, J. H. and Harv. in Lond. Journ., VI., 408.

**Corynocladia umbellata, J. Ag.

Polycælia fastigiata, Harv. in J. Hook. fl. Tasm. II., 324. Callophyllis coccinea, Harv. in Lond. Journ., VI., 405.

*Callophyllis Harveyana, J. Ag.

Kallymenia Tasmanica, Harv. in J. Hook. fl. Tasm. II., 325.

*Kallymenia polycælioides, J. Ag.

Gigartina brachiata, Harv. in J. Hook. fl. Tasm. II., 325.

*Epymenia halymenoides, J. Ag.

*Chrysymenia Meredithiana, J. Ag.

Centroceras clavulatum, Mont., fl. Alg., 140.

Ceramium diaphanum, Roth.

*Thamnocarpus Harveyanus, J. Ag.

Griffithia Sonderiana, J. Ag.

**Bornetia Meredithae, J. Ag.

Caulerpa Harveyi, F. v. M. in Harv. phyc. Austr. ,95.

Caulerpa scalpelliformis, Ag. sp. Alg., I., 437.