CONTRIBUTIONS TO THE PHYTOGRAPHY OF TASMANIA.

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II.

The following pages have but slight claims on special scientific consideration. They are merely the results of a short excursion through Tasmania, at a time when the writer sought invigoration from the bracing air and rural tranquillity of the island, and preferred to spend the very few days allotted to his stay rather in the undisturbed highland solitudes than in the pleasures of sociality. He bent his way to the phytologically unexplored ranges of Mount Field, to institute a comparison of their vegetation with that of other alpine rises of Tasmania. The charm of this occupation was augmented by the circumstance that it was his first visit to a country whose vegetation he had aided to elucidate from museum-materials more than 20 years since, and with whose plants he commenced to become acquainted fully 30 years ago. Here, then, for the first time, he could glance over the many endeared highland plants, in all their gay freshness and wild natural grace! This short exploratory tour had still another additional interest. It afforded means of contrasting not only the considerations of many alpine plants of Tasmania with the complexer of highland species in the Australian Alps, but it led also to some researches by which the relation of the existing Tasmanian vegetation to distinct geological formations should be traced. In this direction lengthened inquiries need yet to be carried on—inquiries which are of general philosophical importance.

For the notes herewith offered, some material was also contributed by enlightened and generous friends, whose taste and knowledge led them to observe the forms of vegetation near their domiciles. It may encourage future inquiries to know that the whole tracts of lofty ranges from West Mount Field to Mount Humboldt and Frenchman's Cap remain, as regards vegetable life, hitherto utterly unexplored; that also from the country about Port Davey hardly any plants have ever been brought away, although the snow-clad summits of the former, and the jungles of the latter, must teem with rarities. Even the extreme north-east of Tasmania, as well as Hunter's Island and the adjacent shores, promise to render known to systematic searchers many kinds of plants, with which we are only hitherto acquainted from Gipp's Land, and this remark

applies still more forcibly to portions of the Furneaux Group and to King's Island. Indeed the three genera recorded on this occasion for the first time as Tasmanian—viz., Elæocarpus, Pseudanthus, and Leeuwenhoekia—came from the islands of Bass Straits. The freshwater plants of all Tasmania need yet largely renewed investigation. Again, any tide may cast ashore additions to the 300 Algae which, through the glorious labours of Professor Harvey and his co-adjutors, rendered Tasmania famed as one of the richest and most remarkable phycolagii stations of the globe. Since Flinder's voyage in the beginning of this century, hardly any new searches after marine plants have been instituted at Kent's Group, yet Turner obtained, for his large work, from there some of his rarest treasures. Under any circumstances, we have still much to learn in reference to the range of the species over the main island and all the islets which stand under Tasmanian dominion. To Wilson's Promontory, Queenscliff, or Cape Otway, on the extremes of the Victorian coast, numerous plants extend, of the existence of which on the islands of Bass's Straits we are as yet not aware, however likely such may be. We may be thus reminded of the probability that such plants as Cakile maritima, Erodium cygnorum, Drosera, Whitakiri, Viminaria denudata, Acacia oxycedrus, Myriophyllum, Muelleri, Leptospermum myrsinoides, Eclipta platyglossa, Lobelia platycalyx, Banksia integrifolia, Hakea nodosa, Triglochin muconata, Lemna oligorrhiza, Aspidium decompositum, Blechnum cartilagineum, &c., would likely not in in vain be searched for on the Straits' islands, not to mention many other species. Enough has been explained to demonstrate the desirability of carrying phytological investigations into many new directions within Tasmanian territory; and that this end may early be attained is all the more to be desired, while yet the volumes of the universal work on Australian plants are under elaboration. The writer of this brief record, should life and health be spared him, will always experience delight in the elucidation of plants from any of the localities indicated, or of places otherwise remarkable; and this would afford him also the privilege of continuing this series of essays for the meetings and literary notices of the Tasmanian Royal Society.

Melbourne Botanical Garden,
New Year's Eve, 1869.

Caltha introloba, F. M. in transact, Phil. Soc. Vict. i. 98. On alpine brooks of Mount Field East, at an elevation of 4000′.

Lepidium foliosum, desv. Journ. Bot. iii. 164. King's Island.

**Fumaria officinalis*, L. sp. 984. King's Island, immigrated but now naturalized.

**Papaver aculeatum*, Thunb. Fl. cap, 431. King's Island.

Drosera Arcturi, Hook. Journ. of Bot. i. 247. In Alpine morasses of Mt. Field East, at 3–4000′ elevation.

**Elæocarpus cyaneus*, Ait. Epit. hort. Kew. add. 367. In various parts of King's Island; M'Gowan.

Lasiopetalum dasyphyllum, Sieb. according to Hook. Journ. ii. 404. Schouten Island; Dr. Story.

Acaena montana, T. Hook. in Lond. Journ. of Bot. vi. 276. On alpine springs at Mt. Field East, 3–4000′.

Rubus Gunnii, Hook. icon. plant. t. 291. Descends on Mt. Wellington and Mt. Field East to 2000.′

Bauera rubifolia, Salisb. in Kœn. and Sims's Annal. of Bot. i. 514 t. 10. In a depressed small-leaved state, ascending the summits of Mt. Field East and Mt. Wellington, therefore undoubtedly hardy in Middle Europe.

Donatia Novæ Zelandiæ, J. Hook. Flor. Nov. Zel. i. 81, t. 20. On moist alpine meadows bordering Lake Fenton, at about 3000′ elevation. The remarkably rigid white flowers scattered like pearls over the shining green cushions of the foliage, impart to this plant a singular beauty.

Platylobium formosum, Sm. in Transact. Linn. Soc. ii. 350. At Swanport; G. Story.

Pultenœa pedunculata, Hook. Bot. Mag. t. 2859. Kelvedon; G. Story.

Melaleuca squamea, La Bill. Nov. Holl. plant. spec. ii. 28, t. 68. On the summit of Mt. Field East, bearing flowers and perfect fruit, although only a few inches high.

Eucalyptus urnigera, J. Hook. in Lond. Journ. of Bot. vi. 477. In the alpine regions of Mt. Field East, together with E. coccifera and E. Gunnii.

**Pseudanthus ovalifolius*, F. M. in Transact. Phil. Inst. Vict. ii. 66. Gathered in Flinder's Island nearly a quarter of a century ago, by Dr. Jos. Milligan.

Ricinocarpus pinifolius, Desf. in mem. du mus. iii. t. xxii. Schouten Island; Dr. G. Story.

Stackhousia spatulata, Sieb. in Spreng. syst. cur. post. 124. King's Island.

Spyridium serpillaceum, F. M. Fragm. Phyt. Austr. iii. 80. At Swansea; Story.

Spyridium ulicinum, Benth. flor. Austr. i. 434. The variety with bifid leaves on the Derwent at Fenton's Forest. Fruits separated by the bracts and often solitary. Carpels 1 line long, ovate, without a spacious aperture.

Actinotus bellidioides, Benth. Flor. Austr. iii. 369. On moist alpine meadows at Lake Fenton, 3000.′

Huanara cordifolia, J. Hook. and Benth. gen. plant. i. 877; Diplaspis cordifolia, J. Hook. Fl. Tasm. i. 157. On springs in the highest regions of Mt. Field East.

Galium albescens, J. Hook. in Lond. journ. of Bot xvii. 462. Swanport; Dr. Story.

Abrotanella forsteroides, J. Hook. Handb. New Zeal. Flor. 139. On Mount Field at an elevation, from 3500′ to 5000′, accompanied there by Pterygapappus Lawrencii. The dense cushion-like patches of these two plants impress quite a peculiar feature on the alpine vegetation of Tasmania, when contrasted with that of the Australian Alps, although this cushion-like vegetation of Composites is still more extensively developed among the alpine plants of New Zealand. The patches of Ptorygapappus are less vividly green and shining than those of Abrotanella, and more velvety in aspect. The former I did not observe on Mt. Wellington. Both deserve to be transferred to Musea, and it might be even tried to bring large aged masses to the Sphagnum-moors of Britain. Out of these patches sprout species of Restio, Danthonia, Sprengelia, Styphelia, and other plants in a diminutive state. Pterygopappus forms either cushions by itself or is nesting in those of Abrotanella. The peduncles of the former are not rarely as much as one inch long.

Cotula filicula, J. Hook. in Benth. Fl. Austr. iii. 551. Mt. Field East, 3-4000′.

Cotula alpina, J. Hook. Fl. Tasm. i. 192, t. 51 A. Mt. Field East, 4-5000′.

Aster ledifolius, A. Cunn. in Cand. prodr. v. 269. Mt. Field East.

Aster pinifolius, F. M. fragm. v. 71. Mt. Field East.

Aster persoonoides, A. Cunn. in Cand. prodr. v. 268. Mt. Field East.

Aster obcordatus, F. M. fragm. v. 69. In the alpine and sub-alpine regions of Mt. Field East.

Crospedia Richea, Cass. dict. soreni. nat. xi. 353, var. leucocephala. Mt. Field East.

Helichrysum scorpioides, Lab. Nov. Holl. plant. spec. ii. 45, t. 191; var. pygmaea. Stems when flowering only 2-3 inches high. Alpine summit of Mount Wellington; Abbott and Mueller.

Helichrysum pumilum, J. Hook. Flor. Tasm. i. 213, t. 60. Mt. Sorell; Dr. Milligan.

Helichrysum Backhousii, F. M. in Benth. Flor. Aust. iii. 632. Mt. Sorell and Black Bluff Mountain; Dr. Milligan. Mt. Field East.

Helichrysum Gunnii, F. M. in Benth. Flor. Austr. iii. 630. Flinder's Island; Milligan.

Helichrysum antennarium, F.M. in Benth. Flor. Austr. iii., 632. At an elevation of 2–3000′ on Mt. Field East.

Helichrysum baccharoides, in Benth. Flor. Austr. iii. 633, Mt. Field East in alpine regions.

Helichrysum rosmarinifolium, Less. in Stend. nom. ed. i., 1821; var. erubescens on Mt. Field East. This shrub is of balsamic fragrance.

Helichrysum lycopodioides, Benth. Flor. Austr. iii., 634. On this rare plant Dr. Story offers the following observations:—"I have discovered this on another locality, the summit of the rocky hills above Kelvedon, not growing by itself, as I always found it previously, but amongst other plants, much shaded by them; and hence instead of being a straight stiff plant from 4 to 5 feet, it has grown slender, lax, and crooked, with long naked stems, but is easily recognised by its peculiar flowers. When in perfection it chose a bare spot with but little soil, which forms a shallow basin on the rock holding some water."

Gnaphalium indutum, J. Hook, in Lond. jour. of Bot, t. 121. King's Island.

Gnaphalium Japonicum, Thunb. Fl. Japon. 311, var. monocephala. A dwarf variety less than one inch high, forming dense tufts on the flat, cold summits of Mt. Field East; its leaves are very small, lanceolate or oval, densely grey—downy on both sides. The precise position of G. Travirsi to this variety merits further enquiry, especially as on the Snowy River in the Australian Alps scapelus forms of G. Travirsi occur, scarcely distinguishable from this one-headed variety of G. Japonicum.

Antennaria nubigena, F. M. in transact, Phil. Soc. Vict. i. 45, var. Meredithæ. On the highest alpine meadows of Mt. Field East in springy localities. This new form, to which possibly specific value could be attributed, differs from the ordinary plant in a less dense finally somewhat flavescent indument which in age almost disappears; moreover its stems are often elongated into somewhat distantly foliate or bracteate peduncles, which attain a length of $1\frac{1}{2}$ inches; the radiating scales are longer; the female flowers are far less slender, also less numerous and more persistent; the bristles of the pappus are more rigid and in their length more barbellate, while the achenes are almost silky. These characteristics, whether specific or indicating a singular variety, are sufficiently marked to entitle this plant to a special record, and I avail myself of this opportunity of attaching to this everlasting the name of a lady, who by her artistic skill, her fondness for flowers, and her literary accomplishments, has much contributed to raise a taste for the local study of the lovely Tasmanian vegetation.

To this species approach in many respects Helichrysium Youngii as well as Raoulia subsericea from the South Alps of New Zealand.

Senecio centropappus, F. M. catal. Melb. Bot. Gard. 1858, pag. 26. Descends at least to 2000 feet on Mt. Wellington, which as yet remains the only known locality of this singular plant. It attains a height of at least 20 feet.

Senecio pectinatus, Cand. prodr. vi. 372 ; var. ochroleuca. This variety is frequent on the alpine plateau of Mt. Wellington, but I did not observe it on Mt. Field East. It produces short-toothed leaves, single flower heads and ligules almost white. Although S. pectinatus is widely spread over the Australian Alps, I never noticed it with cream-colored rays. S. leptocarpus, a variety of this plant, occurs on Mt. Field East.

**Lobelia pratioides*, Benth. Flor. Austr. iv. 131. South Esk.

Goodenia humilis, Br. pr. 575. A one-flowered variety, only about one inch high, was discovered many years ago by Dr. Milligan at Macquarie Harbour.

Scaevola Hookeri, F. M. first gen. rep. xv. On springs and in crevices of rocks. On the alpine parts of Mt. Field East.

**Leeuwenhoekia dubia*, Sond. in Lehm. pl. Preiss. i. 392. A solitary specimen of this minute plant adhered to a specimen of Helichrysum bractatum, var. albiflora, from Strzelecki's Peak, Flinder's Island, in Dr. Milligan's collections. The plant abounds in some parts of Australia Felix.

**Styphelia lanceolata*, Sm. Bot. New Holl. xlix. Port Dalrymple; R. Brown according to Bentham.

Styphelia dealbata, Br. pr. in nota 536. Depressed into densely intricate very dwarf masses, like those of Decaspora pumila on the higher parts of Mt. Field East, sometimes growing out of cushions of Pterygopappus.

Styphelia Hookeri, F. M., fragm. vi. 44. Mt. Field East, 3–4000′.

Styphelia pinifolia, Br. pr. in nota 536. Schouten Island; G. Story.

Styphelia straminea, Br. pr. in nota 536. In the higher regions of Mt. Wellington and Mt. Field East. Flowers as indicated by the specific name, greenish yellow, not white.

**Styphelia scoparia*, Sm. Bot. New Holl. 48. Bay of Fires; Walt. Bissell.

**Styphelia elliptica*, Sm. Bot. New Holl. 49. Swanport; Story.

Trochocarpa thymifolia, Spreng. syst. veg. i. 650. Mt. Field East.

**Brachyloma depressum*, Benth. Flor. Austr. iv. 173. Bicheno ; G. Story.

Epacris acuminata, Benth. Flor. Austr. iv. 240. New Norfolk; Mt. Wellington; N. W. Bay; Gunn and J. Hooker.

Richea sprengeloides, F. M. Fragm. vi. 68. Mt. Field East, 3–4000′. Seldom above 3′ high. Corolla yellowish-white.

Richea acerosa, F. M. Fragm. vi. 69. Mt. Field East, 3–4000′, on Alpine flats. A shrub 1½–3′ high. Corolla nearly white.

Richea scoparia, J. Hook. in Lond. Journ. of Bot. vi. 273. Mt. Field East.

Richea Gunnii, J. Hook. in Lond. Journ. vi. 273. Mt. Field East.

Richea dracophylla, Br. prodr. 555. Lake Fenton.

Richea pandanifolia, J. Hook. Fl. antarct. i., 50. Under the shelter of the highest alpine ridges of Mt. Field East, at 4,800′ and descending to 4000′ on the slopes towards Lake Fenton. This magnificent plant is said to occur also on the back parts of Mt. Wellington, but possibly Dracophyllum Milligani, which attains on Mt. La Perouse a height of 40′, may have been confused with this Richea, both being so similar in habit. I noticed on Mt. Field stems clothed to the length of 12 feet, with the very aged leaves and panicles, which thus are shown to be sometimes persistent for many years. The auxiliary inflorescence is remarkable. The flowers occur as often brilliantly red as white, and in all intermediate shades. Mess. Rayner contend that they had seen this Richea attaining a height of about 70 feet in the rich alpine valleys of the Gordon River.

Pernettya Tasmanica, J. Hook. in Lond. Journ. of Bot. vi., 268. At Mount Field East, from 3000′ to 4000′ elevation.

Solanum vescum, F. M. in Transact. Vict. Inst. 1855, 69. King's Island; also towards the Russell's Falls. Probably hybrids between this species and S. avidilare may occur. It produces occasionally white flowers.

Ourisia integrifolia, Br. pr., 439. On the highest alpine brooks of Mt. Field East sparingly, but on the summit of Mt. Wellington frequently occurring. The habitual aspect of this neat plant is almost that of a Gentian. It attains a height of fully six inches, with occasionally three pairs or whorls of cauline leaves. Corolla pure white.

Gratiola nana, Benth. in Cand. prodr. x., 404. Mt. Field East.

**Veronica notabilis*, F. M. First Gen. Report, 1853, 17. St. Patrick's River; R. Gunn.

**Veronica plebeja*, Br. pr. 435. At Swanport; G. Story.

Veronica nivea, Lindl. Bot. Reg. 1842, misc. 42. Mt. Field East.

Mitrasacme montana, J. Hook. Fl. Tasm. i., 274 t. 88 c. On

Lake Fenton. The inequality of the sepals, faithfully represented by Fitch's drawing, is often particularly conspicuous in the fruit-bearing calyx. The ripe seeds of this and the following species need still comparison.

Mitrasacme Archeri, J. Hook. Fl. Tasm. ii. 368. In the most elevated valleys of Mt. Field East and also on Lake Fenton. The leaves are singularly shining and rigid, along the edge remarkably transparent, and not so distinctly narrowed into the petiole as those of the M. montana.

* *Lithospermum arvense*, L. sp. pl. 190. Naturalised in King's Island.

* *Myoporum parvifolium*, Br. pr. 516. In marshes at Long Point, Flinder's Island ; Dr. Milligan. To this plant belongs probably M. Tasmanicum j. J. Hook. Fl. Tasm. i. 287.

Myoporum insulare, Br. pr. 516. To this the ordinary forms of M. Tasmanicum are referable.

Chenopodium glaucum, L. sp. pl. 320. To this belongs probably C. furfuraceum, Mog. in Cand. prodr. xiii. ii., 64, recorded as a Tasmanian plant from D'Entrecasteaux's Straits.

Australina pusilla, Gaudich. voy. Uranie 305. Macquarie Harbour ; Dr. Milligan.

Leptomeria glomerata, F. M. in Jos. Hook. Flor. Tasm. ii. 370. Macquarie Harbour ; Dr. Milligan.

**Pimelia axiflora*, F. M. in Linnaea xxvi. 345. King's Island.

* *Pimelea stricta*, Meissn. in Linnaea, xxvi. 348. Swanport ; Dr. Story.

Pimelea serpillifolia, Br. pr. 360 ; Flinder's Island ; Dr. Milligan. King's Island.

Pimelea sericea, Br. pr. 361. Frequent on Mt. Wellington, but not noticed on Mt. Field East.

Orites acicularis, Br. suppl. 32. Abundant on Mt. Field East from 3-4000′. The foliage of a remarkable yellowish green. Sepals white, with reddish tinge outside.

Orites diversifolia, Br. pr. 388 ; Mt. Field East, 2-4000′. The leaves some times toothed from the base.

Hakea lissosperma, Br. pr. 382. In the fern tree regions of Mt. Field East.

Bellendena montana, Br. pr. 374. In the alpine regions of Mt. Field East, descending to 2500′. Flowers almost white, tinged at the upper extremities with red. The pedicels sometimes dark-red. Some of the leaves may occur perfectly entire.

Fagus Cunninghamii, Hook. journ. 1840, p. 152, t. 7 ; var. alpina. Depressed by exposure and cold to a small shrub, as well on Mt. Wellington as on Mt. Field East. Leaves only 3-4 lines long.

Athrotaxis cupressoides, Don. in Transact. Linn. Sot. xviii. 172 t. 13. On Lake Fenton at 5000′ elevation.

Athrotaxis laxifolia; Hook, icon-plant, t. 573. Among boulders on the descent from Mt. Field East to Lake Fenton. Nearer the following than the preceding species.

Athrotaxis selaginoides; Don. L. P. 172, t. 14. At Mt. Field East, from 3000′ to 4000′.

Podocarpus alpina, R. Br. in Mirb. mem. du mus. xiii., 75. Creeping over boulders on the summit of Mt. Field East.

Microcachrys tetragona, J. Hook, in Lond. Journ. Highest alpine valleys of Mt. Field East. The whole fruit becomes in maturity beautifully crimson.

Pherosphaera Hookeriana (W. Archer in Hook. Lond. Journ. of Botany ii. 52 in part.; J. Hook. Fl. Tasm. i. 355, t. I C). On the highest springs of Mt. Field East. An erect shrub, 2–4′ high. Mr. W. Archer, F.L.S., of Cheshunt, who many years ago defined the genus Pherosphaera and more recently aided Dr. Hooker in the elucidation of the Alpine Coniferæ of Tasmania, has shown me the kindness, while on a visit to Melbourne, to examine this plant with me. We established from remnants of the male amenta the identity of one of the dwarf, but erect, Coniferæ of Mt. Field with his Pherosphaera, fruit not being found, although I searched long for it. It is however not improbable, that Diselma exists also there, and it seems even contained in my collection, as it is not easy to distinguish these bushes, except when in flower or fruit. That Pherosphaera much differs in habit from Microcachrys, is now for the first time rendered known. The absence of the genera Microcachrys, Diselma, Pherosphaera, and Athrotaxis in the Australian and New Zealand Alps, and indeed, in any other part of the globe, remains a remarkable phytographic fact.

* *Potamogeton marinus* L. Sp. 184. In marshes between Bridgewater and New Norfolk; F. Abbott.

Hewardia Tasmanica, Hook. ic. pl., t. 858. Lake Fenton.

Uncinia compacta, Br. pr. 241. On alpine brooks at Mt. Field East.

Oreobolus Pumilio, R. Br. pr. 236. Alpine regions of Mt. Field East.

Herpolirion Novae Zelandiæ, J. Hook, Fl. N. Zeal. i. 258; H. Tasmaniæ, J. Hook, Fl. Tasm. ii. 54, tab. cxxxii. B. Found very many years ago by Mr. Milligan on the summits of the Hampshire Hills.

Lycopodium Selago, L. sp., pl., 1565. Mt. Field East.

Isoetes Gunnii, Al Braun in den Monat's berichten der Koen, Akad., der Wissensch. zu Berlin, 13 Aug., 1868. On the shallow marginal bottom of Lake Fenton I observed tufts fully half a foot in diameter. The leaves are so rigid, that my companions bestowed jocularly the name "Water Porcupine" on this plant.

The Tasmanian species of Isoetes became very recently the subject of Prof. Braun's masterly researches. From the important memoir above quoted I have translated the cardinal characters of the diagnoses, which I here the more readily subjoin, as the essay will not be easily accessible to Australian observers. The repetition of some of the characteristic notes was deemed necessary to contrast the four Tasmanian species with three or four from continental Australia, and with several other, to us, exotic species, those of Tasmania being all endemic. It is, however, possible that some of them may yet be discovered in the Australian Alps, or in the rivers of the lowlands of Victoria.

Isoetes Gunii, Al. Br. L. C., and Monats Berrichton, 22 July, 1869. Lacustrial; rhizome three-lobed; leaves short, very stout, rigid; cuticle olive-brown, thick; sheath brown; stomata absent; vellum, none or rudimentary; sporangium small, upwards flat, acute at the margin, with copious sclerenchymatic cellules, macrospores very large, beset with numerous minute tubercules, microspores indistinctly tuberculate. In alpine lakes.

**Isoetes elatior*, F. M. in Linnea 1852, 722; Al. Br. L. P. 536.

Fluvial; rhizome 3-lobed; leaves very long, flaccid, green; sheath pale; stomata absent; velum none or rudimentary; sporangium pitch-coloured, upwards flat, at the margins acute with copious sclerenchymatic cellules; macrospores moderately large, pale, beset with numerous minute tubercules; microspores distinctly tuberculate. South Esk.

* *Isoetes humiliar*, F. M., L. P. 722; I. Hookeri, Al. Br. L. P. 538.

Fluvial, rhizome, bilobed; leaves hard; cuticle thick, turning brown; sheat brown, short; stomata absent; vellum complete; closed, brown; sporangium without sclerenchymatic cellules; macrospores rather large, pale, beset with numerous minute tubercules; microspores intensely brown, short tuberculate, South Esk.

Isoetes Stuartii. Al Braun, L. P., 539.

Fluvial; rhizome two-lobed; leaves rather slender and soft, green; cuticle thin; sheath pale; stomata absent; vellum complete, closed, pale; sporangium mottled with brown and pale thickened sclerenchmatic cellules; macrospores rather large, pale, beset with numerous minute tubercules. South Esk.

An excellent series of specimens of Isoetes, very obligingly secured by the Honourable W. Archer, from the waters of the Western Mountains, are since some time in the hands of Monsieur Durien de Maisonneuve, for elucidation in his illustrated monography of the genus.