JOTTINGS
IN
AUSTRALIA.

JOTTINGS IN AUSTRALIA:

OR,

NOTES ON THE FLORA AND FAUNA OF VICTORIA.

WITH A

CATALOGUE OF THE MORE COMMON PLANTS, THEIR HABITATS, AND DATES OF FLOWERING.

BY

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"—— He, whose heart will bound to mark
The full bright burst of summer morn,
Loves too each little dewy spark
By leaf or flow'ret worn:
Cheap forms, and common hues, 'tis true,
Through the bright shower-drop meet his view;
The colouring may be of this earth,
The lustre comes of heavenly birth."—*Keble.*

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TO MY VALUED FRIEND,

JOHN MILNER BARRY, ESQ., M.D.

THESE

"JOTTINGS IN AUSTRALIA"

ARE INSCRIBED AS A

MEMORIAL OF PLEASANT SUMMER RAMBLES.

WARRNAMBOOL, 1856.

ERRATA.

At page 4, read *currente* for *currento.*

At page 7, twelfth line from top, read *variifolium.*

At page 13, third line from bottom, read *graminifolii.*

At page 21, sixth line from bottom, read *odoratus.*

At page 30, fifteenth line from top, read *Durham* for *Murray.*

At page 63, read *Onopordum Acanthium.*

JOTTINGS IN AUSTRALIA.

CHAPTER I.—INTRODUCTORY.

THE following "Jottings in Australia" have been published at intervals in various periodical works, and are only re-published in this, we hope, more convenient form, from the want, which we feel assured others have felt in common with ourselves, on newly arriving in this country, of a work which would afford some information relative to the more common Birds, Insects, Plants, &c., met with in their daily rambles. All that is published on the Natural History of Australia is scattered through the writings of travellers, or written in the Latin tongue, which, however familiar to a skilled botanist, is rather apt to damp the ardour of the young student. In ornithology, Goold's is the only work, but far too costly for the general reader. In algology, Professor Harvey's "*Nereis Australis*" is much to be commended, as it contains the whole of the sea-weeds of the Southern Ocean. First and foremost among Botanical Works is the "*Prodromus Floræ Novæ Hollandiæ,*" by Robert Brown, "that most illustrious of living botanists, and the man who first opened out to science the richness and singularity of the Australian Flora."*

So closely have we adhered to our title, "Jottings in Australia," that we might almost say with Montaigne, we "have here made a nosegay of wild-flowers, and have brought nothing of *our* own but the string which binds them;" for other avocations occupy our time and forbid our rambling "ancle deep in flowers," or chasing the

"Insect crowds
That make the sunshine populous."—*Bryant.*

* Lecture by Edward Forbes, F.R.S., on the knowledge of Australian rocks.

Yet do we delight to saunter forth at the commencement of a new day, amidst the beauty and peacefulness of nature, when the dew is glistening on the grass, and listen to the song of some of our native birds, which a later riser misses altogether. There is always something to cheer and gladden the heart, even in the midst of affliction; and when we remember that "ilka blade o' grass keps its ain drap o' dew," we are enabled with much more fortitude to bear up against the little adversities which beset us in this world: truly, indeed, we may at all times find

> "Some shape of beauty to *move* away the pall
> From our dark spirits."

Who is there that does not love flowers? The ancients prized them highly, as we find in the writings of Herodotus, Theophrastus, Anacreon, etc. The misseltoe and vervain were worshipped by the Druids; and Plutarch tells us that the lovely Perigune, in child-like simplicity, addressed her prayers to the plants and bushes as if they were sensible of her misfortune. On the Continent the *Helichrysum* is used to decorate the graves of the young, as an emblem of immortality. The Irish, too, have their floral superstitions; the St. John's wort (*Hypericum*) being used as a charm against evil spirits; and on May eve the young girls gather the yarrow (*Ahi-hallune*), and place it under their pillows, wrapped in the stocking of the right foot, confidently expecting that during the night they will obtain a sight of their future spouses. We all know what exquisite flowers are reared by our Spitalfield weavers, and the magnificent double wallflowers and stocks which are seen in the gardens of our peasantry at home. All our poets loved flowers. Spencer thought the man who could not enjoy the "felicitie" of roaming amidst "flowers and weeds of glorious feature," was well worthy to taste of wretchedness; and the writings of Cowper, George Herbert, Wordsworth, Langhorne, Shenstone, Hartley Coleridge, and that noble soul, Keats, teem with fresh descriptions of wild flowers. Some time before the death of Keats, he said to his faithful friend Severn, who had done so much to soothe his sick bed, that "he thought the sincerest pleasure he had received

in life was in watching the growth of flowers:" again, after lying awhile still and peaceful, said

> "I feel the flowers growing over me."

He delighted far away to leave

> "All meaner thoughts, and take a sweet reprieve
> From little cares, to find, with easy quest,
> A fragrant wild, with nature's beauty drest."

But our chief object in writing this little book is to induce every one, particularly those of sedentary habits, to take proper exercise. We all know how necessary air and exercise are to our well being, yet how prone we are to neglect it on the most trifling excuse. No matter what the inducement is, whether roaming after plants, or shells, or sea-weeds, so long as the mind is thoroughly and pleasantly employed; and to prove this, we cannot do better than insert here a few extracts from the "Journal of Health," shewing how necessary recreation is to keep the brain healthy and unimpaired.

"It is very generally recognised and admitted that deprivation of air and exercise is a great evil; but it is not so well known that abstinence from occasional recreation or amusement is an evil of no slight magnitude. It is, however, a primary law of the human economy, that no organ can maintain its integrity without regular recurrent periods of activity and rest. In the case of the muscular system, if any muscle, or set of muscles, cease to be used, it wastes and disappears; but if it be used too much, it becomes strained, and loses its power. It is the same with the nervous system; if the brain be never exercised, its energy is impaired; but if it be over-exercised its energy is exhausted. If, when a person takes a very long walk, he returns home fatigued, and finds that his muscles are temporarily thrown into a wrong or disordered condition; and if he continues this process of fatiguing himself every day, after a certain time he becomes thoroughly knocked up, ill, and incapable of undergoing even a common amount of exertion. So it is with the brain. If an individual keep his attention upon the stretch for an undue number of hours, he experiences, at the expiration of his task, brain-fatigue, loss of mental power, and a sensible necessity of rest; and if this individual persevere, day after day, month after month, year after year, in subjecting his brain, without intermission or repose, to extreme fatigue, he will end by setting up a peculiar state, which is, unhappily, excessively common in these times, and is known by the name of congestion of the brain. The activity of any organ causes a flow of blood towards itself. If a person raise his arm by the action

of deltoid muscle, that action or contraction of the muscle produces a determination of blood to its interior, and if a person think, the act of thought causes a flow of blood to the brain; but if a person think intently, this flow of blood is often very perceptible, for the head becomes hot, and a sensation of throbbing about the temples, or in the head itself, is experienced. Now, when a man undergoes too much brain-work, a constant and considerable flow of blood to the head occurs, which may become chronic or permanent, and produces that condition which is called determination of blood to the head, which not unfrequently ends in appoplexy or paralysis. Congestion of the brain is one of the most prevailing diseases that torture humanity."

We have thought it advisable to shew how great a number of plants may be obtained with ease, almost at our very doors; to give an index of the more common Phænogamous or flowering plants and ferns, with their habitats and dates of flowering, from specimens in our own herbarium—referring our readers for more full information, to the reports of our esteemed friend, Dr. Ferdinand Mueller, the Government Botanist, on the Vegetation of the Colony; and, at the same time, notice such shells, insects, and fossil remains, as may have come under our immediate notice, trusting that those with more leisure than we have been able to afford the subject, will, at some future time, improve considerably on these few pages written *currento calamo.*

We do not, in these "Jottings," intend to confine ourselves to Botany; but, whilst we introduce such plants as are common, and easily recognisable by externals, we shall have a few words to say, *en passant*, on such of our native birds and insects as may be likely to interest the scientific and unscientific of our readers, and pave the way for a more enlarged study of them. We much regret, for the sake of the less scientific, our inability to give *popular* names of plants,—in fact, there are none, either English or Native, except in a very few instances,—but where practicable they will be given; and we will do all in our power to make them easily known, even to the merest novice in Natural Science.

CHAPTER II.

"To him who, in the love of nature, holds
Communion with her visible forms, she speaks
A various language: for his gayer hours
She has a voice of gladness, and a smile
And eloquence of beauty; and she glides
Into her darker musings with a mild
And healing sympathy that steals away
Their sharpness, ere he is aware."—*Bryant.*

THERE are few things, in this world of ours, more hallowing and more purifying than a love of wild-flowers—"those terrestrial stars that bring down heaven to earth, and carry up our thoughts from earth to heaven;" and never were we more struck with this feeling than on sailing up the beautiful river Yarra Yarra one bright summer morning, after a tedious voyage of nearly four months, and seeing around us on every side something new to cheer and awaken our affections for our adopted land: new plants—new birds—new insects—with our favourite, the swallow, "cheeping and twittering" as of old, endeared to us ever by Tennyson's beautiful lines:—

"O Swallow, swallow, flying, flying south,
Fly to her, and fall upon her gilded eaves,
And tell her, tell her, what I tell to thee.

"O Swallow, swallow, if I could follow and light
Upon her lattice, I would pipe and trill,
And cheep and twitter twenty million loves.

"O were I thou that she might take me in,
And lay me in her bosom, and her heart
Would rock the snowy cradle till I died."

We take it for granted that our readers will not inquire, as many have done, "What is the use of studying flowers, and what is gained by it?" Is this the spirit in which we should look on the

productions of our Creator? and should we value them only as they are a source of profit to us? "God Almighty first planted a garden," says Lord Bacon, "and, indeed, it is the purest of all human pleasures:" so have we ever felt in our communion with nature, and our happiest hours have been spent abroad in the fields and hedgerows, for nothing

> "Bears the impress of Almighty power
> In characters more legible, than those
> Which he hath written on the tiniest flower,
> Whose light bell bends beneath the dew drop's weight."

How sincerely do we hope that the following "Jottings" may induce many, who now complain so bitterly of *ennui*, and want of that amusement which older countries afford them, to embrace that delightful study in which there is always

> "Something to please, something to instruct."

Never was there a wider field for such pursuits than in this country! We remember, on going into our native town, some few years since, after a long absence, and collecting the indigenous plants of the district, to the number of five or six hundred, within a range of four miles, being asked by some friends, to whom the treasures of our herbarium were exposed, "Did all these grow here?" "Yes," we exclaimed, "and many more!" In a few months there were twenty enthusiastic botanists, who felt then, and then only, that he "misses one of the best blessings of life who has not made to himself friends of the wild spring flowers." Think, then, my dear readers, of the treasures awaiting you in this land, where some *ten or twelve thousand* plants are indigenous; whilst those of our British isles do not number two thousand! How many a happy day have we spent on the banks of the river Yarra Yarra, one of the most charming, perhaps, from its many windings, and the beauty of the vegetation covering its banks, in the country. Some short time since, wishing to "possess ourselves in much quietness," we rambled from the bridge at Richmond as far as Dight's Mill, some five or six miles on its margin, bearing in mind honest old Izaak Walton's saying—"When I would beget content

and increase confidence in the power, and wisdom, and providence of Almighty God, I will walk the meadows by some gliding stream, and there contemplate the lilies that take no care, and those very many other little living creatures that are not only created, but feed (man knows not how) by the goodness of the God of nature, and, therefore, trust in him." At this season of the year, the flat grounds are one vast swamp, yet even here springs up the simple little *Claytonia Australasica*,* and the surface of the water is covered with the minute inconspicuous flowers of *Ranunculus inundatus* (water crowfoot). Many aquatics may be secured now for the herbarium—*Potamogeton natans*—*P. obtusifolium* (*gramineum* of R. Brown)–*Myriophyllum varriifolium* (Hooker)–and the *Damasonium*, with its many floating leaves, at first sight, resembling those of a *Potamogeton*, but differing from them in the venation, and its beautiful white *Nymphæa*-like flowers, crimson at the base, is a prize indeed, even though you, my readers, may get a ducking, as was our lot, in your endeavour to obtain it. Overhanging the river the pendulous flowers of the various formed *Acacias* (wattles) drooped most gracefully, emitting a most delicious perfume, interspersed here and there with the delicate spike of pink flowers of *Indigofera sylvatica;* and the beautiful, almost transparent, flowers of *Sida pulchella*, nearly hidden amongst its rich green foliage. Everywhere the ground was studded, as with snow, with that little exquisite gem *Anguillaria dioica* (Star of Bethlehem), its petals circled on the interior with a band of brown; and various species of *Drosera* (sundew); *D. Whittakerii* (Planchon), with radical, rosulate leaves (which impart a reddish dye to paper when pressed), and large white flowers; *D. Planchonii* (J. Hooker), figured in Hooker's "Icones Plantarum" as *D. Menziesii*, from specimens found at Swan Foot, on the east coast of Van Diemen's Land, easily distinguished from other species by its long, slender, prostrate peduncles, and three leaves springing on slight petioles

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* This plant is beautifully figured in Hooker's "Icones Plantarum."—*Vol. I.*, *tab.* 293. It grows in tufts, with elongated linear, somewhat spathulate leaves, from two to four inches long, generally alternate, peduncles flowered; petals pure white, obovate, four times as long as the calyx.

from one point of the stem; and *D. peltata*, (Smith), also figured in the same work, vol. i., tab. 54, as *D. lunata*, from specimens sent from Van Diemen's Land by Mr. Gunn; leaves alternate, those of the stem peltate; radical ones uniform, cordate; flowers pink, in terminal racimes. Mark the beauty with which *Clematis microphylla* "twines airily" around all the shrubs in her vicinity; and further on how lovingly she embraces the trunk of that venerable *Eucalyptus*, as a daughter her aged parent, comforting and protecting him, in the decline of life, for the care with which he sheltered her in youth. Now descend this dark hollow by the river's edge, observe that little "queen of secrecy," the violet, *Erpetion hederaceum*, linked hand in hand with her two graceful handmaidens, *Adiantum assimile* (maiden hair), one of the loveliest of our native ferns, and a small *Hypnum*. What handsomer carpet would ye have than *Kennedya prostrata*, with its bright red pea-shaped flowers, and the splendid spreading blue clusters of *Hardenbergia coccinea*, mantling the ground on all sides. Listen to the sweet plaintive note of that little red-breasted robin, perched fearlessly on yonder *Eurybia!*—the shrill note of the kingfisher, as he skims up the stream! Watch the bright-eyed lizards as they creep hastily by!—the splendid plumage of our feathered friends! Mark well all around you!—and then let us ask, is there not religion in nature? Can ye not here look from nature up to nature's God?

> "Here amid solitude and shade I wander,
> Through the green aisles, and stretched upon the sod,
> Awed, by the silence, reverently ponder
> The ways of God."

"There is no telling" (says Cheever, in his earnest, thoughtful, little book, "Wanderings of a Pilgrim,") "how much more perfectly man communes with nature—how much more deeply, and without effort, he drinks in the spirit of the meadows, the woods, the running streams, and the mountains, going by them and among them, as a friend with a friend. He seems to hear the very breath of nature in her stillness; and, sometimes, when the whole world is hushed, there are murmurs come to him on the air, almost like the distant evening song of angels. Indeed, the world of nature is

filled with quiet soul-like sounds which, when one's attention is gained to them, make a man feel as if he must take his shoes from his feet, and walk barefooted, in order not to disturb them."

On the high banks, near Hodgson's punt, the *Grevillea Latrobei* may be obtained; and about the same locality various *Orchideæ*. *Diuris maculata* (R. Brown, prod. 315) its pretty yellow flowers, richly marked with dark brown spots; *D. sulphurea; D. aurea; Caladenia carnea; C. cœrulea; C. alata; C. pulcherrima* (spider orchis). *Pterostylis cucullata* (hooded orchis), the entire plant green, found at the foot of trees in shady places; and *Glossodia minor*. Of the *Asphodeleae*, *Coesia corymbosa*, with blue flowers, and yellow anthers, is, indeed, a bright star. *Stylidium graminifolium* (N. O. stylideoe) is much too exquisite a flower to be omitted, with its grassy leaves, and pink petals; and *Stackhousia monogyna* abounds everywhere. Mosses, which are so plentiful at home, are less so here, but the following may be gathered without much searching for:—*Hypnum recognitum* (Hedwig); *Dryptodon Africanus* (Mueller): *Funaria hygrometrica* (Hedwig), a species of *Fimbriaria; Dicranum purpureum* (Hedwig); and the handsome lichen, *Cetraria aculeata* (Fries.)

We were amused one day, as we lay in contemplation by the river's side, in watching a nest of ants. Pliny tells us of ants which entered the bowels of the earth, in search of gold; surely this must have been an auriferous district so busily were they all engaged. After observing our little companions for some time, we placed a small pebble at the entrance of the nest, just blocking it up sufficiently to allow of only one of the community being admitted at a time. There were no ants near at the time, but presently one advanced to the mouth of the hole, and, on observing the obstruction, endeavoured with his fore feet to dislodge it; finding it resist all his efforts, he crept into the nest, first removing a portion of the earth to admit of freer ingress or egress;—we anticipated his intention—in a few seconds he returned with a comrade, and they both applied their whole strength;—in a moment the pebble moved, and it was apparent there was some force applied underneath, which was quickly proved by its being rolled gradually away, and about twenty little fellows emerging, each applying its tiny back to

it. They succeeded very soon in getting it off the hole, and the two first mentioned with great ease pushed and pulled it (for one was pushing and the other pulling) to a distance of about three inches away; and, as if to prevent its again annoying them, placed a smaller one before it to keep it stationary. Let Mr. Swainson say what he will about its being "absolutely derogatory to the superior nature of man"* to admit any amount of reason in animals, but what could man have done more suitable to the circumstances than these little creatures? Truly we may say to many, "Go to the ant, consider her ways and be wise."

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* Habits and Instincts of Animals, p. 2.

CHAPTER III.

"When the sun smiles on thee, why, thou art glad;
But when on earth he smileth, she bursts forth
In beauty, like a bride, and gives him back,
In sweet repayment for his warm, bright love,
A world of flowers."

"THE poetry of earth is ceasing never," says one of our sweetest poets; and day by day, as we wander forth amidst nature's haunts, to enjoy the freshness and beauty of the "leafy spring," do we find something new to make us cling more fondly than ever to those pursuits which tend so much to contentment and happiness, and, more than this, to health also. How many there are who neglect to take that proper exercise which is so necessary for the health both of body and mind, solely because they have no object in view; and, even "if they do force themselves to take, daily, what is called a constitutional walk, too frequently they derive little benefit from it, in consequence of the mind not participating with the body in the imposed task, but still recurring to the occupations at home."* What food is to the body, change of scene and amusement are to the mind; and nothing can have so soothing an influence as the wandering in the woods and fields, amongst the flowers, and birds, and insects, with their endless variety of form, of habit, of colour. "Mere communion with nature," says Humboldt, in his great work, the "Cosmos," (Int. p. 3., Bohn's ed.,) "mere contact with the free air, calm the stream of passion, and soften the heart, when shaken by sorrow to its inmost depths. Everywhere—in every region of the globe—in every stage of intellectual culture—the same sources of enjoyment are alike vouchsafed to man. The earnest and solemn thoughts awakened by a communion with nature, intuitively arise from a presentiment of the order and harmony pervading the whole universe, and from the contrast we

* Observations on Natural History, by the Rev. Leonard Jenyns.

draw between the narrow limits of our own existence and the image of infinity revealed on every side; whether we look upwards to the starry vault of heaven—scan the far-stretching plain before us—or seek to trace the dim horizon across the vast expanse of ocean."

Leave for awhile, some of you, my dear readers, the smoky city, and ramble with us along the seashore; cease, for a time, your pursuit after gold, which makes

> "Black, white; foul, fair;
> Wrong, right; base, noble; old, young; coward, valiant.—
> *Timon of Athens*, act iv., sc. 3.

and feel "how sweet it is to breathe the pure and open air of heaven." O, if ye have souls at all, the golden flowers of that little *Ranunculus*, (repens), looking up as an old friend, reminding us of home, and a thousand delightful associations, will surely give you more real pleasure than the brightest golden visions you can ever realise. A short walk through this noble forest of *Eucalypti* and *Banksias* (Honeysuckles, with bottle-brush-shaped flowers), and *Casuarinae* (she oaks), brings us to St. Kilda. Here we get a beautiful view of the sea, and Hobson's Bay crowded with shipping of all descriptions and of every nation. From this point we will skirt the seashore, white as the driven snow, with the pretty *Corallina* ———, and covered with various beautiful *Algae*. In the salt marshes, near the sea, we cannot but notice *Mesembryanthemum aequilaterale* (pigs' faces—fig marigold or canagong), with its green fleshy leaves, and pink star-shaped flowers; the seed vessel, which is about an inch-and-a-half in length, of a reddish-green colour, as well as the leaves, is eaten by the natives with their fish, in lieu of salt, and also makes an agreeable pickle. Just now the little scarlet-breasted robin (*Petroica multicolor*) is rearing her first brood, in a beautifully made nest of grasses, mosses, etc., lined with feathers. It delights, principally, in common with our own "plaintive warbler of the ruddy breast," in places near dwellings, and its song, though not so loud, is yet very sweet. The male bird has its head, throat, and upper parts, black; forehead, white; a longitudinal, and two oblique bands of white in the

wings; breast and under part of neck, scarlet; lower part of belly, white; bill and feet, black. The breast of the female is also red; but the whole of the plumage of a brownish tinge.

On the cliffs we shall find now, in full flower, the beautiful *Leucopogon Richei* (N. O. Epacrideæ), or native currant, a large dense shrub growing only by the sea, and attaining to a height of from four to six or eight feet; the berries are white, small, and of a herby flavour. In D'Entrecasteaux's voyage, in search of La Perouse, a French naturalist, named Richè, was lost for three days on the south coast of New Holland, and supported himself principally upon the berries of this plant, in commemoration of which circumstance, it has received its specific name.* Another smaller species, *L. virgatus*, the petals of which are very minutely fringed is also common on sandy soil. When mentioning the elegant *Stylidium graminifolium* (grass leaved jack-in-the-box) in our last chapter, which may be easily known by its numerous grassy-like radical leaves, and pretty pink flowers, on a long naked stem, we omitted to mention a peculiarity in it, which is said to afford much amusement to the aborigines, who are, generally speaking, fond of, and have a name for, many of the plants common in their own territories. The stigma lies at the apex of a long column, surrounded and concealed by the anthers; this column is exceedingly irritable, and hangs down on one side of the flower, until it is touched, when it suddenly springs up and shifts to the opposite side of the blossom or calyx.† Brown, in his "*Prodromus Florae Novæ Hollandiæ*," p. 423, thinks that this irritability exists in all the species (forty-five in number) in different degrees;‡ and we have also observed the same in the labellum of *Pterostylis*, (hooded orchis,) which is so common under *Eucalypti*.

That rustle in the grass, by yonder swamp, reminds us that

> "It is the bright day that brings forth the adder,
> And that wares many walking;"—*Julius Cæsar*, act. ii. sc. 1.

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* Backhouse.

† Lindley's Veg. Kingdom, 2nd ed. p. 696.

‡ "Columnæ irritabilitas, quæ, in *Stylidii graminiifolii* quindecim circiter abhinc annis a D. Paterson et Dav. Burton visa est, et quam nuper in pluribus speciebus observavimus, forsan in omnibus licet gradibus diversis, existit."

but snakes are timid creatures, and may, with ordinary care, be avoided. They are rarely met with near towns, and we imagine the cause to be, that the intense heat of the memorable "Black Thursday" completely destroyed their haunts. Much as we have traversed marshy lagoons, and places where they are likely to obtain their prey, in search of fresh water mollusca and plants, we have never, after many years' residence in the colony, seen a single live individual. Yet we know of many places where they are often very unwelcome guests, and frequently notice instances of parties being bitten by these reptiles; and we, therefore, do not hesitate to devote a short space to a few simple remedies, to be applied in cases of emergency. First and foremost, then, we recommend *promptitude;* the moment the bite is received, tie a handkerchief as tightly as possible between the wound and the heart, to impede the circulation, and prevent the poison being diffused through it; then, with a sharp knife or lancet, scarify the flesh through and around the wound, until blood flows freely; then, pinching up the flesh, suck it powerfully for some time, (the poison is perfectly innoxious, provided the mouth and throat of the person sucking are free from sores, etc.); the juice of any stimulant plant, (*Aristolochia*) common salt, or even lime, may then be applied. It is, probably, advisable to give to the patient some stimulant as soon as practicable, to prevent his falling into a comatose state; and, above all, avoid frightening him. In other countries various remedies are employed. A preparation of the root of *Simaba cedron* (Zool. Soc. Trans., 9th Nov., 1853). In the Brazils, an infusion in brandy of *Simgunba versicolor* (Lindley's Veg. King., p. 476), and ipecacuanha poultices, are often used with success; but the "simple method above mentioned is practised with the most decisive success among the Parinagotos, Macosies, and other tribes inhabiting the mountains of Sibaroni and Parime, against the bites of the *Crotalus* or rattlesnake, and the more deadly *Quaima* and *Haimararia*."*

Turning aside from the seashore, let us strike through this beautiful scrub of *Riccinocarpus sidaeformis* (a useful purgative), with its snow-white blossoms, around which is twining the pretty dodder-

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* Remarks on Snake Poisons and their Remedies.—Hancock, Cor. Mem. Zool. Soc

like *Cassytha glabella*, contrasting pleasingly with the rich blue of *Dianella revoluta* (narrow leaved dianella), the leaves of which are used by the natives for making baskets; and the graceful lilac *Diopogon leimonophilus*. The grass lands are covered with innumerable little gems, so minute as to be scarcely perceptible, but to the quick eye of the botanist. Of these, perhaps, the most interesting are, *Aphelia pumilo*, *A. cyperoides*, *Desvauxia tenuior*, *Ranunculus sessiliflorus*, *Mitrosacme paradoxa*, *Marchantia polymorpha*, *Sebaea ovata*, valuable for its medicinal virtues, and the rarer *S. albidiflora*, we have observed on the salt marshes, near Brighton, and near Lady Bay, Warrnambool—in the latter situation frequently six to eight inches in height.

S. ovata varies in height, from two to five inches, with five fid yellow flowers; stem, square; leaves, in pairs, opposite, ovate, nerved. In *S. albidiflora* the flowers are only four fid, and the leaves not nerved. We may enrich our portfolio now, or, perhaps, later in the year, November or December, with *Veronica gracilis*,—

> "The meek speedwell,
> Looking up with gentle eye of blue,
> To the younger sky of the self same hue."

Burchardia umbellata, *Hydrocotyle tripartita*, *Chaetospora axillaris*, with many others, for which we refer to our botanical index.

That beautiful little *Fairy Martin*, skimming by, reminds us that he, too, must have his meed of praise. This elegant species is common about Melbourne, building its mud bottle-shaped nest under verandahs, windows, and sides of houses. As far as our own observation goes, it appears to leave the neighbourhood of towns towards winter, and resorts further into the interior, frequenting rivers and watery places, yet great numbers remain the whole year near dwellings. It is a remarkably bold bird, flying within a foot of one's face; and under the head of the ferry-boat, across the Yarra, at Richmond, several pairs have built their nests and reared their broods, flying in and out, quite regardless either of the motion of the boat, or the numerous persons who are constantly crossing. The crown of the head is rust red; back, scapulars, and wing

coverts, deep steel blue; wings and tail, very dark brown; rump, buff; under surface, white, tinged with rust red; eggs, four in number, white, veined with lilac.

And here, as the sun sets, dear readers, let us rest for awhile ere we return, and contemplate the great goodness of the Almighty in all that he has created. Every shrub, every insect, every bird, however small, and however inconspicuous, has a certain place to fill—certain uses, unknown, perhaps, to us, yet, probably, necessary even to our existence—and certain charms, too,

"To move away the pall from our dark spirits."

How much, then, have we to be thankful for!

CHAPTER IV.

"Dear Nature is the kindest mother still,
Though always changing in her aspect mild;
From her bare bosom let me take my fill.
* * * *
Oh! she is fairest in her features wild."

Childe Harold, c. ii. v. 37.

THE summer is come at last, and daily some new face peeps up to greet and assure us of bright warm days, and happy hours.

"It is delightful amidst the early dew
To be a wanderer! When the morning hours
Bear on their wings the perfume of all flowers;
When from the green earth to the heaven's blue
Ascends the song of birds."

To a person accustomed to English country life and scenery, the vegetation of Australia presents rather a sombre appearance, and he misses the varied tints of the elm, the oak, and the splendid blossoming spikes of the chestnut, and, later still, the ash, of which Tennyson makes mention:—

"Why lingereth she to clothe her heart with love,
Delaying as the tender ash delays
To clothe herself, when all the woods are green?"

and he misses the beautiful notes of our less gaudily-coloured song birds—the clear liquid voice of the speckled throstle—the mellow voice of the blackbird,

"Bird of the jetty wing and golden bill;"

the exquisite love notes of the blackcap,

"Glad as the sunshine and the laughing sky."

Yet even here, in this our adopted land, the return of summer is marked by the greener foliage of the *Eucalypti*, the thickly-clothed grass lands, which will soon be scorched by the intense heat of the sun's rays; and the air is enlivened by the twitter of the swallow, the "chit-chit-chit" of the long-tailed tit, and the sweet, soft warble of the robin *(Petroica multicolor)*. The cocoons, so varied in shape, which every one must have observed on the *Eucalypti*—some fasces, some egg-shaped, others octagonal, are all empty, their inmates having cast off their sluggish pupa state, and entered into the world on their own account to taste some of the good things of this life. Tread softly!—the hasty flight of that long-tailed tit,

> "That giddy sprite,
> Bluecap, with his colours bright,"

proves that there is a nest in yonder bush of *Bursaria spinosa*. We thought so—and there flits the hen-bird, remaining with her young to the last. We expected to see a pretty compact nest, like that of our English long-tailed tit (*Parus caudatus*), but this is made of dried grass, carelessly put together, with an aperture at the side —yet more care is taken with the interior, the bottom is soft as velvet with feathers, on which are laid four or five white eggs, about nine lines in length, tinged with pink, and spotted at the base with light brown spots. Much as we long for the nest and eggs we cannot withstand the earnest, piteous cries of the mother-bird for her young. Now watch the male bird (vowing vengeance in that sharp angry note, as he flies around our head) approach the nest, as we retire, and reconnoitre. Assured of its safety, and joined by his mate, how amply are we repaid for our forbearance by those sweet notes of joy and love.

The male bird has its forehead of the most exquisite azure blue; the female is of a more sombre plumage, dull brown, so much resembling the colour of the dried grass of which she forms her nest that it is difficult to detect her when sitting. A wonderful provision of our Creator is this assimilation of the plumage of the female bird, in almost every instance, to the surrounding vegetation, thereby affording protection to her whilst rearing her young brood. The absence of fear, which is mentioned above, we have

[illegible] to disinfections which have preserved the [illegible] [illegible] was swarming in the Hibernian [illegible] [illegible] and prevailing here to present the [illegible] [illegible] which are peculiar to every [illegible] and Dominica, where we were [illegible] by with great fury, and murdering as [illegible] [illegible] Surely she must have a very [illegible] [illegible] other a careful examination, based she found [illegible] [illegible] this proceeding from a hollow branch of a very [illegible] [illegible] the whole of the time we were making our observations [illegible] [illegible] as many times in great orgies, but as [illegible] [illegible] but the quet also returned to her nest, and even quietness [illegible] [illegible] where only had betrayed them.

[illegible] although nesting in the Hibernian, preserves its food [illegible] [illegible] manner as our Alcedo ispida and other kingfishers [illegible] [illegible] and [illegible] [illegible] here is equally the branch of a tree or [illegible] [illegible] Sir Hinton, in his very delightful little book, [illegible] [illegible] and the Aviary," p. 306, which we cannot too [illegible] [illegible] to our readers, gives us a striking instance of [illegible] [illegible] kingfishers were brought up and kept by [illegible] [illegible] birds, and in fact, one nest of kingfishers was [illegible] [illegible] a separate cage with two lovely hawks. These hawks [illegible] [illegible] the most quiet apparently living with not so [illegible] [illegible] and also had the care of the kingfishers, with a very fed [illegible] [illegible] and gorgeous meal they could manage for themselves; but [illegible] [illegible] that he fagged my kingfishers while he thought of [illegible] [illegible] and I was accustomed one day by observing, when [illegible] [illegible] the cage the meat cut up into small pieces, these meat [illegible] [illegible] dashing down upon the meat and darting a against [illegible] [illegible] which they alighted as if to kill the imagined prey, [illegible] [illegible] it."

[illegible] of the Kingfisher (any particularly-marked species of [illegible] (plant bugs) may be observed and thus interesting [illegible] [illegible] the Lamnomma, where singular insects are deserving of [illegible] [illegible] the vast number of them which appeared amid- [illegible] [illegible] the species of insects which infested the whole of [illegible] [illegible] some time summer (1856), and gave a peculiar aspect

also had experience of in the kingfisher, which is so common on the Yarra banks. We were walking one evening in the Richmond paddock, intent on examining, and puzzling how to procure, the various beautiful species of *Loranthus,* which are parasitic on some of the venerable *Eucalyptideae* and *Casuarinae*, when we were startled by a kingfisher darting by with great fury, and uttering at the same time a loud scream. Surely she must have a nest near, we soliloquised, and after a careful examination, heard the harsh cries of the young birds proceeding from a hollow branch of a very tall gum tree. The whole of the time we were making our observations the female flew at us many times in great anger; but as soon as we left the spot she returned to her nest, and soon quieted the young whose cries had betrayed them.

This bird, although nesting in the *Eucalyptus*, procures its food in the same manner as our *Alcedo ispida;* and after immersing itself, and taking its prey, beats it against the branch of a tree to deprive it of life. Mr. Dixon, in his very delightful little book, " The Dovecot and the Aviary," p. 305, which we cannot too strongly recommend to our readers, gives us a striking instance of the power of instinct:—" Kingfishers were brought up and kept by me with the other birds, and, in fact, one nest of kingfishers was confined in a separate cage with two hobby hawks. These hawks were brought up from the nest by my apprentice living with me at that time; he also had the care of the kingfishers, which were fed on dace and gudgeon until they could manage for themselves: but it so happened that he forgot my kingfishers, while he thought of his own hawks, and I was astonished one day by observing, when he threw into the cage the meat cut up into small pieces, these said kingfishers dashing down upon the meat, and, dashing it against the perches on which they alighted, as if to kill the imagined prey, and at length bolt it."

On the bark of the *Eucalypti* many prettily-marked species of *Hemiptera* (plant bugs) may be obtained, and those interesting insects, the ichneumons, whose singular habits are deserving of notice here, from the vast number of them which appeared simultaneously with the myriads of moths which infested the whole of the western coast this summer (1855), and caused needless alarm

to those unacquainted with their economy. The *Ichneumonidae* are hymenopterous insects, *i.e.* having transparent wings, varying much in size, and serve as a useful check on those caterpillars which prove destructive to vegetation. The female has three bristles at the end of her long, slender body, the middle one of which is a tube, called by entomologists an ovipositor, by means of, and through which, the egg is transmitted; the two lateral ones merely serving as a protection to it. This ovipositor varies much in length —in those species which pierce the insect itself it is short, whilst in those which deposit their eggs in the nests of other insects it is remarkably long. Their mode of proceeding is as follows: when a caterpillar is found the female fly alights on it, and with a jerk drives its ovipositor into its body, somewhere near the head, and deposits its egg; it then withdraws the ovipositor and flies away. This does not in any way interfere with the caterpillar, it still feeds on as before, until it arrives at the chrysalis stage, by which time the egg of the ichneumon is hatched to a small white maggot; it then begins eating that fat part of the caterpillar which surrounds the alimentary canal, always avoiding those parts which are essential to life, aware apparently that the death of the caterpillar would also cause its own destruction; by and bye it becomes a chrysalis, and soon after the perfect insect or imago. There are upwards of a thousand species of these insects already described; and it is possible, says Newman in his "History of Insects," page 7 (to which we refer our readers for a more detailed account of this interesting tribe), "that every butterfly and every moth, indeed almost every insect, has one peculiar to itself. The history of them all is nearly similar."

On the high Yarra banks, near the Lunatic Asylum, we may find the rare grass *Cinna ovata*, and the coarse *Anthistiria Australis* (kangaroo grass)—abundantly too *Nicotiana suaveolens* with white flowers; *Muehlenbeckia complexa* (Polygoneæ) is trailing along the banks, and around some of the acacias climbs a beautiful *Billardiera* with long pendulous yellow flowers. The tea trees of the colony, *Melaleuca gunniana* and *Leptospermum*, are now in bloom; and several varieties of the *Helichrysum* (everlasting) ornament the dry stony banks with their rich orange-coloured flowers. As we

rest by the river side we notice footprints of the opossum, kangaroo rat, and native cat, we are startled now and then by the harsh note of the laughing-jackass, and the bronze wing pigeon starts up hurriedly from amidst clusters of *Rhagodia nutans*, on the red fruit of which it feeds. We have always felt an interest in this bird since reading Sturt's account of it in his "Expedition into South Australia," which we will give in his own words:—

"As the sun declined we got into open forest ground, and travelled forwards, in momentary expectation from appearances of coming in sight of water; but we were obliged to pull up at sunset on the outskirts of a large plain without having our expectations realised. The day had been extremely warm, and our animals were as thirsty as ourselves. Hope never forsakes the human breast, and thence it was that, after we had secured the horses, we began to wander around our lonely bivouac. It was almost dark when one of our men came to inform me that he had found a small puddle of water, to which he had been led by a pigeon. It was indeed small enough, probably the remains of a passing shower, it was, however, sufficient for our necessities, and I thanked Providence for its bounty to us."

Of the habits of this bird, and indeed of every native bird and animal which not long since was common around Melbourne, we know but little, it being the unmanly and inhuman practice, one which we condemn most earnestly, for persons newly arrived in the colony to destroy every thing they meet with. We could say much, as we feel strongly, on the cruelty of this practice, particularly as we have so much to learn of the habits of every creature inhabiting a colony so little known as that in which we reside.

This month we may find in flower everywhere *Linum marginale* (flax); *Hypericum involutum* (St. John's wort); *Pelargonium Australe*, a pretty little geranium with a delicious perfume; *Scutellaria humilis* (skull-cap); *Solanum laciniatum* (kangaroo apple); *Mentha Australis; Erpetion hederaceum* (the little white violet which clothes the Yarra banks); *Galium Australe* (bedstraw); *Senecio adoratus*, with a host of others. We will conclude this chapter with a gleaning from a gem, "The Mystery of the Beautiful:"—

"Let each one go to Nature as often as possible, casting aside, for a little while, at least, his worldly cares; let him go in confidence and faith, and he will not seek in vain."

NOTES ON NATURAL HISTORY.

CHAPTER V.

PHASCOLOMYS WOMBAT.—Peron. Desm.
Didelphis ———. Shaw.

We think it the duty of every naturalist, as far as lies in his power, to make known to science whatever particulars he can collect concerning the habits and instincts of those animals which are indigenous in that part of the country in which he resides; and also to correct, where he can, statements made by parties entirely unacquainted, *ex visu,* with their mode of living, where they are at variance with facts. Never was correction more needed than in the "Notes on the Natural History of Australasia," recently published in the "Melbourne Monthly Magazine;" and we lose no time ere such absurd ideas become more generally diffused.

At page 100 we read:—

"Although there is a spinal extenuation, it is destitute of a tail."

* * * * *

"It has no pouch."

* * * * *

"They possess a greater abundance of fat than any other Australian quadruped, which when boiled down makes excellent candles."

* * * * *

"The male shares with the dam the duties of rearing their young."

"Each strives, by parental kindness, to exceed the other in attending to their offspring. This particular tendency on the part of the wombat may be ordained by nature to compensate for the loss of the pouch."

Without noticing these remarks *seriatim,* we will describe, for the information of our readers who are not residing near wombat set-

tlements, their appearance and their habits from actual experience.

The scientific name of this extraordinary animal is *Phascolomys Wombat;* and we would here remark how much we approve of the native names being used specifically as in this case, for it facilitates conversation with the aborigines, when wishing to learn from them any particulars relative to indigenous animals or plants.

The wombat belongs to the *Marsupial* family (having a pouch, from which we have ourselves taken the young); a thick, short, clumsy-looking quadruped, about four feet in length, and weighing nearly a hundredweight (to which our shoulders have often borne witness).* It is covered with a thick coat of strong, stiff hair, of a light brown or grey colour, the back broad and flat, legs very short, the belly almost touching the ground; in fact it has, as Swainson describes, "a shapeless body;"† yet his drawing is that of an arched barrel-shaped animal, higher from the ground than is natural.

The toes in the fore feet, five in number, are all clawed; but in the hind toes four only are clawed, the fifth assuming a tubercled or rounded appearance. The eyes very much apart; head flat, covered with a very thick skin, as is the hinder part of the body, which is in great repute for saddles.

Unattractive as these creatures are, they are perfectly harmless, and social in their habits, feeding on grass; and from the immense number of wombat holes on the sea-coast, seem to have some very extensive settlements "under the sod." They burrow through masses of the shelly sandstone peculiar to this place, being furnished with strong nails;—and during the breeding season we have never seen the male in the same hole with the dam.

There is something particularly exhilarating and inspiriting in the shooting of wombats: the stealing out at dead of night with stealthy footsteps, now and again stopping your breath almost to listen for the sound of the animal grazing, or scratching to rid himself of the enormous ticks by which he is tormented; the stalking

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* Mr. Swainson, in his "Classification of Quadrupeds," p. 339, says, "Its size is that of a rabbit;" and Bulwer, in his clever novel, "The Caxtons," p. 414, speaks of it as "between a miniature pig and a small badger."

† "Swainson's Classification of Quadrupeds," p. 338.

on hands and knees, or crawling along on face and hands, as you near his subterraneous abode. A treacherous twig snaps, and away he scuttles with a motion peculiar to himself to the mouth of his hole, where he remains for a few moments with ears erect, until fear gives way to hunger, and he again makes his appearance. Anxious moments these for the sportsman! The heart beats high —one single rustle and all hopes are gone—but gently, and more gently still, the gun is brought to the shoulder, cocked noiselessly, but not before the timid animal has observed the glittering of the moonbeams on the barrel, and off he scuttles again; but too late this time, his head being pierced through by a bullet, and the sportsman just manages to rush to the hole in time to prevent his crawling into his burrow to die.

In every adult individual we have seen, the spinal extenuation—a tail to all intents and purposes—has been between three or four inches in length. We have skinned several, and noticed the almost entire absence of fat, particularly in the female; and the idea of boiling down and making candles is really too absurd to notice. So far from being "very slow in its motions," its pace when disturbed is remarkably rapid, so as to defy a flying shot; and one old fellow, almost white with age, for some considerable time eluded us by his agility.

We cannot reconcile the statement of Mr. Blandowski ("Phil. Soc. Trans.," vol. i. p. 687), that "the natives object to skin this animal, owing to the pernicious effect which the fat in its raw state has on the phosphorus of the bone of the hand," with our own experience. The blacks have always an objection to skin any animal whose flesh they use as food—simply, we imagine, because the skin is used to protect the flesh whilst cooking—yet, as far as our own observations go, confirmed by those of others even better able to judge than ourselves, they never manifest any reluctance to skin it when required.

These animals are very numerous on the coast about Warrnambool, Port Fairy, etc.

SPINE-TAILED SWALLOW. *Hirundo caudacuta.*

By the seashore at Brighton, on 28th January, 1854, wind N., ther. 93° in shade at eight a.m., observed several specimens of the spine-tailed swallow; an individual of which was shot by our friend Mr. F. C. Christy, at Richmond, from a flock of some hundreds, on 10th December, 1853. The following is a pretty accurate description; but our readers may find a plate of this bird in the "British Birds," by the Rev. F. O. Morris, vol. ii. page 86, figured from a specimen shot in England, on 9th July, 1846, in the parish of Great Hakesley, near Colchester, in Essex:—

Length from tip to tip, seven and a-half inches; expanse of wing, nineteen inches; upper side of wings steel black; the back between the wings dusky brown, approaching to buff; two last minor feathers of each wing, next to body, half white; head dusky black, with metallic hue; rump darkening until it reaches the tail, which is quite black; throat dirty white, extending one inch and a-half; tail feathers ten in number, "the shaft of each feather projecting beyond the web, forming a row of spines about an eighth of an inch long from the middle feathers, and gradually shortening on the side ones."

It is indeed an unaccountable circumstance (as remarked by the Rev. F. O. Morris) why and wherefore this bird should have thus winged its way to so remote a part of the earth, our very antipodes. The length of the wings, and the rapidity with which birds of this genus fly, will easily account for the *how* it winged its course thither, particularly when we remember that the common swallow, *Hirundo rustica*, is able to traverse the distance of three thousand miles in three days, and that the spine-tailed swallow is able to sustain itself in the air during the entire day without cessation. The flight of the eagle has been said to be so rapid that it would be able to go round the world in nine days. As to the "*why*" and the "*wherefore*" this bird paid a visit to the British shores, we can only attribute it to that curiosity which all animals have, more or less (for which, by the bye, it paid dearly), and a desire to see a little more of the world.

This bird is sometimes called the "needle-tailed" and "pin-tailed swallow."

Do Hawks Drink?

We observe that information is solicited on this subject by some of our English naturalists, and we lay the evidence, *pro* and *con*, before our readers, trusting that they will favour us with their opinions, where they result from actual experience.

Audubon, in his "Ornithological Biography," vol. i. page 89, speaking of the Great-footed Hawk, *(Falco peregrinus)*, says, "Many persons believe that this hawk and some others never drink any other fluid than the blood of their victims; but this is an error. I have seen them alight on sand-bars, walk to the edge of them, immerse their bills nearly up to the eyes in water, and drink in a continued manner, as pigeons are known to do." A writer in vol. iv. page 138 of the "Naturalist," corroborates Audubon's assertion—at any rate with regard to the kestrel and the merlin.

We are of opinion that the hawk tribe do not invariably drink, particularly those of this country. A young sparrow-hawk was brought to us about two years since, which was kept in a garden for six months, without having access to any fluid whatever beyond that obtained from the raw meat given him for his morning meal. To test his powers of abstaining, we placed before him one summer's morning a pan of water, into which he plunged instantaneously, and remained standing in it, on one leg, for a considerable time, without attempting to drink. As the winter approached the bath was neglected altogether.

Thus far our own opinion, confirmed too by the fact, that Australian birds are enabled to exist with the smallest quantity of water, often indeed without any; in confirmation of which we cull from "The Dovecote and the Aviary," before mentioned, which no naturalist's shelf should be without, some interesting facts on the power which the pigeon and kingfisher possess of abstaining from water; and the author remarks that "a similar power of abstinence is to a degree enjoyed by other inhabitants of the same terrible wastes—for which the words arid, desert, inhospitable, are far too feeble epithets. The Talpero (*Hapatolis Mitchellii*), an animal with many of the habits of our rabbit, but not much larger than a mouse, must live for many months together without water, feeding

on the tender shoots of plants; and the bronze-wing (*Phaps chalcoptera*) and harlequin pigeon (*Phistrionica*) just take an evening sip of the muddy pool they have flown so far to taste, and are off again to their parching haunts, after having only just wetted their bill:" and Captain Sturt remarks, "It is astonishing indeed that so small a quantity as a bare mouthful, should be sufficient to quench their thirst in the burning deserts they inhabit."

Mr. Darwin, in his "Journal of the Voyage of the Beagle," page 2, says, "It had not now rained for an entire year in St. Jago. The broad, flat-bottomed valleys, many of which serve during a few days only in the season as water-courses, are clothed with thickets of leafless bushes. Few living creatures inhabit these valleys. The commonest bird is a kingfisher (*Dacelo Jagoensis*) which tamely sits on the branches of the castor-oil plant, and thence darts on grasshoppers and lizards. It is brightly coloured, but not so beautiful as the European species; in its flight, manner, and place of habitation, which is generally in the driest valleys, there is also a wide difference."

Mr. Goold, too, in his very beautiful work on the "Birds of Australia," to which reference may be made either at the Museum of Natural History or the Public Library, speaks of kingfishers which appear to be endowed with the power of sustaining and enjoying life, without the least supply of water, and believes too that it is not essential to their existence.

Strange indeed, as Mr. Dixon remarks,* "that amongst creatures so closely allied, and bearing such a striking family resemblance as the kingfishers do to each other, one species, our own (*Alcedo hispida*) should be almost bound to the vicinity of brooks and streams; whilst others, equally occupying their allotted place in creation, and fulfilling the office assigned to them by Providence, should be able, in order to perform that task, to dispense with what is usually considered the necessary element of water, except just the few thimblesful of liquid contained in their living prey, that are absolutely requisite to keep their animal fluids circulating.

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* "Dovecote and Aviary," page 310.

To conclude, we earnestly invite our readers to communicate with us, not only on this, but on every matter connected with natural history, and they may rest assured, not only of our co-operation, but of our imparting to them the little knowledge we possess in exchange for their ideas on subjects with which we are not conversant.

CHAPTER VI.

ON THE COLLECTION AND PRESERVATION OF NATURAL PRODUCTIONS.

In some of our earlier jottings we promised at a future day to give instructions for the collection and preservation of natural productions, and we think it not inappropriate to devote one short chapter to that purpose, more particularly as a museum having been established by the Government of this country it is absolutely necessary, in order that it should attain any degree of utility, that every one should co-operate in furnishing materials. There is nothing so interesting as a really good collection of the indigenous birds, fishes, plants, etc. of a new country; and we sincerely trust that every one who has the progress of natural science at heart will give a helping hand to this valuable institution. For collecting plants we have found nothing necessary besides a small spade, made of steel and iron, for obtaining the specimen entire, and a light portfolio with leather straps (which may be carried as a knapsack), filled with coarse unsized paper, in which to put the plants as they are gathered.

On arriving home the collector should at once make any examination he may think necessary while the specimen is fresh, making notes of any peculiarity which may exist—the habitat, time of flowering, and so on—in a note-book, which he should always have with him. (We make a rule never to trust to memory). He may then, after selecting good and perfect specimens, choosing those in seed where practicable, arrange them carefully and naturally between sheets of coarse paper—newspapers answer the purpose remarkably well,—laying several dry sheets between each specimen as it is more or less succulent. We seldom find it necessary to change the papers (as nearly all botanists recommend), if placed in a dry, warm situation, with a slight pressure; nor do we approve of the plants being overpressed, as is too frequently the case, rendering it impossible to examine them at any subsequent period.

The specimens being thoroughly dry then, they should be placed, each species by itself, in a sheet of white printing paper, either loose, or confined by strips here and there of gummed paper, *but never entirely fastened.* A coloured sheet, of a larger size, may contain all plants of a genus, and a different one all the genera, forming one natural order. For example,—*Polygonum prostratum, P. subsessile,* and so on, are placed on the first sheet, and labelled *Polygonum;* these again, with the genus *Rumex* and *Muehlenbeckia,* form the Natural Order POLYGONEÆ. This forms a neat herbarium. A label should be attached to each sheet with the name of the specimen, when and where collected. For instance:—

Polygonum prostratum. R. Brown.
Banks of Yarra. April, 1856.

A good pocket lens is indispensable; and we have found a small knife, made by Murray of the Melbourne Arcade, for the purpose very useful in dissecting minute plants.

ALGÆ.—Having resided for the last two years near the sea-coast we have taken great interest in the marine algæ, and found some hints kindly given us by Miss Gifford, author of a valuable little work, "The Marine Botanist," of much assistance in properly laying down and preserving the colours of seaweeds.

In collecting seaweeds care should be taken to gather those either growing in the pools left by the tide, or those recently thrown up by the sea; for when exposed to the air they decompose and lose their colour: and we recommend collectors to ascertain before drying their plants, by the help of a lens, whether they are in fruit or not, for such are to be desired, and if so, whether it is granular or capsular. The specimen should then be placed in a flat dish, filled with fresh water, and when properly expanded, a sheet of paper to be gently placed underneath, until the plant assumes a natural appearance; then gently raise the paper, allowing the moisture to run off, after which lay it in blotting paper (which should be kept entirely for marine plants), having thick layers between each, and place under weights,

Where time is an object, as with ourselves, we recommend our

readers to adopt the suggestions of Dr. Harvey, which are most valuable:—

"To preserve algæ in a rough state it is only necessary to spread the specimens, without any previous washing, and even without squeezing the natural moisture from them, drying them in an airy situation, not exposed to too powerful a sun. They must be thoroughly dried to prevent mouldiness or heating, and can then be packed in paper bags, or loosely packed in boxes. Corallines, corals, and sponges, require no trouble when once collected. It is merely necessary to dry them roughly, and pack them amongst the dried seaweeds."

For a list of the indigenous algæ we refer to Dr. Mueller's second report on the vegetation of the colony.

SHELLS.—The collector should invariably obtain live shells; for then the colours are natural, and the specimen less likely to have sustained injury. The animal may be preserved in spirits; or, if the shell only is required, it may easily be destroyed with hot water, and picked out. The shell may then be cleaned with a soft brush and soap, and placed with its operculum in a box with cotton wool, or if for the cabinet, in small cardboard trays. For collecting, nothing is required but a coat with numerous pockets to contain a quantity of small chip or tin boxes, a stiff knife, and, for the fresh-water species, a small mesh hand-net. We have noticed the following in our rambles along the coast at Warrnambool:—*Serpula*, *Balanus* (six miles up the Hopkin's River), *Anatifa*, *Avicula*, *Natica*, *Haliotis*, *Trochus*, *Turbo*, *Phasianella*, *Fusus*, *Nassa*, *Sepia*, *Cerithium*, *Paludina;* in Pertobe Lagoon—*Lymnaea*, *Physa*, *Unio*, *Truncatella;* and in the Merri River—*Planorbis*, etc. etc.

VERTEBRATA.—We know of nothing so good for the thorough preservation of the skins of birds and the vertebrate animals in general, as a weak solution of corrosive sublimate in spirits of wine, as it effectually prevents insects or vermin from attacking the specimens prepared with it; indeed, for the smaller specimens, it is only necessary to take out the entrails and fill the body with the solution. After a few moments have elapsed, drain, and fill the cavity with cotton wool ("dipped in ether.") We have specimens

of the golden-crested wren, the tits, nuthatch, done in this way many years since, quite unimpaired.

Insects.—The smaller *Lepidoptera* are easily killed by slightly pressing the body; the larger by inserting into the thorax a sharply-pointed quill, dipped in a strong solution of oxalic acid. *Coleoptera* and *Orthoptera* should be immersed in boiling water. *Neuroptera*, *Diptera*, and *Hymenoptera* are destroyed in a few seconds by placing them in a bottle with a few drops of chloroform.

Lepidoptera should be killed immediately they are captured, as fluttering destroys their plumage.

For full instructions for collecting and preserving insects we refer our readers to Newman's "History of Insects," where also they will find many useful hints on killing, setting and arranging their specimens, and means for their capture.

Skeletons may easily be prepared by boiling in water, and then removing the flesh by syringing the specimen with cold water, which leaves it perfectly clean.

A CATALOGUE

OF THE

Plants common in the Colony of Victoria,

WITH THEIR HABITATS AND DATES OF FLOWERING.

[Those marked * have been introduced.]

DICOTYLEDONEÆ;

[OR PLANTS HAVING TWO SEED LOBES OR COTYLEDONS.]

THALAMIFLORÆ, CANDOLLE;

[Flowers having both a calyx and corolla, the latter consisting of distinct petals. Stamens always hypogynous, or united to the sides of the ovary.]

RANUNCULACEÆ, JUSSIEU.

Clematis microphylla—Candolle.

HAB. Abundant around Melbourne; climbing gracefully on shrubs in its vicinity: Sand hummocks at Warrnambool.

Fl. Spring.

(Name—from *clema*, a vine branch.)

Clematis appendiculata—Ferd. Mueller

HAB. Mount Disappointment.

Fl.

Ranunculus pimpinellifolius—Hooker.

HAB. Scrubby places.

Fl. December.

Figured in "Icones Plantarum," vol. iii. tab. 260.

Ranunculus inundatus—inundated crowfoot.

HAB. Swamps around Melbourne.

Fl. November.

Ranunculus sessiliflorus—R. Brown. Sessile-flowered crowfoot.

HAB. Marshy places, Melbourne, Warrnambool.

Fl. September

(Name of this genus from *rana*, a frog—from many of the species growing in swamps infested by that animal.)

DILLENIACEÆ, CANDOLLE.

Pleurandra sericea—R. Brown. Silky pleurandra.

HAB. Scrub near Liardet's Beach, Melbourne.

Fl.

(Name of genus from *pleuron*, a side, and *aner*, a male—the stamens being all inserted on one side of the flower.)

Hibbertia pultenæiformis—Ferd. Mueller.

HAB. Delatite.

Fl.

Hibbertia fasciculata—R. Brown.

HAB. Sandy scrub land towards Brighton.

Fl. October.

Hibbertia prostrata—Hooker.

HAB. In sandy soil near Liardet's Beach.

Fl. December.

(Genus named in honour of George Hibbert, F.R.S., F.L.S., a great lover of botany.)

CRUCIFERÆ, JUSSIEU.

Nasturtium terrestre—R. Brown.

HAB. Banks of the Yarra Yarra.

Fl. January.

(Genus named from *nasus*, a nose, and *torsus*, distorted,)

Cardamine remotiflora—Ferd. Mueller.

HAB. On the Yarra.

Fl.

(Genus named from *cardia*, the heart, and *damao*, to strengthen.)

Capsella Australasica—Ferd. Mueller.

HAB. Sandy cliffs by the sea near Brighton.

Fl.

Figured in "Icones Plantarum," vol. iii. tab. 276, and there named *Stenopetalum incisifolium.*

*Capsella bursa-pastoris—Moench.

HAB. Waste ground, common.

Fl. the whole year.

This plant is the "common shepherd's purse," or "fairy pouches," so common by road sides in England; deriving its name from the triangular obcordate pouch: very variable both in size and foliage, probably introduced. It was formerly called "shepherd's scrip," "case weed," "St James' wort," and "poor man's parmacetic," it probably being of some medicinal value; and, in France, "Fleur de St. Jacques."

*Sisymbrium officinale—Scopoli.

HAB. Waste places, common.

Fl.

The "hedge mustard," so abundant in waste places at home—introduced.

The origin of its name is doubtful. Some believe it to have been taken from the name of some Greek aquatic plant, which had an agreeable smell; and Ovid recommends as a propitiatory offering to Venus, garlands of myrrh, roses, and *Sisymbrium.*

*Senebiera didyma—Persoon.

HAB. In waste places.

Fl.

A little plant very common in Ireland, with white flowers, with two and often four stamens.

Genus named after an eminent botanist, M. Senebier.

*Lepidium ruderale—Linné.

HAB. About Melbourne, frequent.

Fl.

The "narrow-leaved pepper-wort of England."

HYPERICINEÆ, CANDOLLE

Hypericum involutum—Candolle.

HAB. Dry places, Melbourne, Warrnambool.

Fl. November to April.

"Saint John's wort."

DROSERACEÆ, CANDOLLE.

Drosera Whittakerii—Planchon.

HAB. Swampy places, common.

Fl. September, October.

Leaves radical, rosulate, imparting a reddish dye to paper when pressed.

Drosera peltata—Smith.

HAB. Boggy places.

Fl. September, October.

This plant is figured in Hooker's "Icones Plantarum," vol. i. tab. 54, as *D. lunata*, from specimens sent from Van Diemen's Land by Mr. Gunn.

Leaves alternate, those of the stem peltate; radical ones, reniform, cordate. Flowers pink, in terminal racemes.

Drosera Planchonii—J. Hooker.

HAB. Hills around Melbourne, in shady situations, common.

Fl. September, October.

Figured in Hooker's "Icones Plantarum" as *D. Menziesii*, from specimens found at Swan Port, on the east coast of Van Diemen's Land. It is very easily distinguished from the other species by its long, slender, prostrate peduncles, and three leaves, springing on slight petioles from one point of the stem.

(Genus named from *droseros*, dewy, the glandular hairs with which all the species are covered appearing as if tipped with dewdrops. The leaves of many, perhaps all the species, are supposed to contract when touched, and to retain insects which alight on them, hence the English name, "Venus's fly-trap.")

Drosera binata—Labillardière.

HAB. Goulburn Ranges.

Fl.

VIOLARINEÆ, CANDOLLE.

Hymenanthera Banksii—Ferd. Mueller.

HAB. Muddy banks of Yarra Yarra.

Fl. November.

(Name from *hymen*, a membrane, and *anthera*, an anther; the anthers being terminated by a membrane.)

Erpetion hederaceum—Candolle. Ivy-like erpetion.

HAB. Banks of Yarra Yarra, Warrnambool.

Fl. December.

The difference between this genus and *Viola* consists merely in the absence of the spur. Name from *erpetos*, creeping, and *ion*, violet. Flowers white, streaked with lilac.

Viola betonicifolia—Smith. Betony-leaved violet.

HAB. Hilly pastures about Hawthorne and Warrnambool.

Fl. December.

Flowers, purple.

POLYGALEÆ, JUSSIEU.

Comesperma calymegum—Labillardière.

HAB. In the scrub towards Brighton.

Fl. January.

Large-calyxed comesperma. Flowers purple.

Comesperma linariæfolium—All. Cunningham.

HAB. Scrub near Brighton.

Fl. November.

Comesperma retusum—Labillardière.

HAB. Mount Aberdeen.

Fl.

Name from *kome*, the hair of the head, and *sperma*, a seed; the seeds being all furnished at their base with a tuft of hairs.

Polygala veronicea—Ferd. Mueller.

HAB. King River.

Fl.

PITTOSPOREÆ, R. BROWN.

Bursaria spinosa—Cavanilles.

HAB. Around Melbourne, Warrnambool, very common.

Fl. December to February.

May easily be recognised from its similarity to the privet (*Ligustrum vulgare*) so common in the south of England; sometimes forming a tree of ten to fifteen feet in height, with rough bark—but generally only a bushy scrub. Various species of *Hemiptera* feed on this plant. The little blue-headed tit builds in it. The seeds resemble a small pouch, hence its generic name. In autumn their rich brown contrasts very beautifully with the bright green foliage.

Rhytidosporum Stuartianum—Ferd. Mueller.

HAB. Gipps Land.

Fl.

Billardiera scandens?

HAB. Twining around shrubs on the Yarra banks, opposite the Lunatic Asylum.

Fl. September.

Well figured in Sweet's "Flora Australasica," pl. 54.

DIOSMEÆ, JUSSIEU.

Zieria lanceolata—R. Brown.

HAB. Sealers' Cove.

Fl.

Boronia dentigera—Ferd. Mueller.

HAB. Latrobe River.

Fl.

Boronia tetrathecoides—Candolle.

HAB. Wilson's Promontory, Buffalo Ranges.

Fl.

Correa Latrobeana—Ferd. Mueller.

HAB. Delatite.

Fl.

Calyx of a rusty brown colour. Flowers pale yellow.

Correa virens—Smith.

HAB. Pastures at Prahran, St. Kilda, Banks of the Hopkins at Warrnambool, etc.

Fl. January to May.

This pretty plant will easily be distinguished by its long, pendulous, greenish corolla, an inch or more in length, and the four acute teeth of the calyx.

Correa alba—Andrews.

HAB. Wilson's Promontory.

Fl.

Leaves obtusely ovate; under surface, as well as the calyx and corolla, nearly white.

Correa cardinalis—Ferd. Mueller.

HAB. Port Albert, Portland.

Fl.

Foliage less beautiful than the preceding, but amply compensated for by the scarlet, yellow-tipped flowers. Calyx rusty brown.

(Genus named after Joseph Correa de Serva, a Portuguese botanist.)

TREMANDREÆ, R. BROWN.

Tetratheca pilosa—Labillardière.

HAB. M'Crae's Island.

Fl.

Flowers light pink colour.

Tetratheca ciliata—Lindley.

HAB.

Fl.

Flowers deep rose colour.

This plant is figured, from specimens found at Westhead, near the mouth of the Tamar, by Ronald Gunn, Esq., in "Icones Plantarum," vol. iii tab. 268, and thus briefly described:—"Ramis elongatis subhirtis, foliis alternis oppositis ternisve rhombeovatis subciliatis subtus pallidioribus, racemis terminalibus foliosis, pedicellis nutantibus calycibus ovariisque glanduloso—setosis, petalis obovatis basi attenuatis, antheris fusiformibus."

BUETTNERIACEÆ, R. BROWN.

Thomasia petalocalyx—Ferd. Mueller.

HAB. Wilson's Promontory.

Fl.

MALVACEÆ, R. BROWN.

Sida pulchella—Bonpland.

HAB. Banks of Yarra Yarra, Merri River near Warrnambool, etc.

Fl. November, December.

A very elegant shrub, with cordate-lanceolate, crenated leaves, of a delicate transparent green, and white flowers.

*Malva vulgaris—Fries.

HAB. Waste places, Melbourne, Warrnambool.

Fl. Spring.

Introduced. Decoctions of the leaves of this plant are useful in dysentery; and the whole plant, in common with other species, yields a tasteless, colourless mucilage—hence its generic name, from the Greek word, *malache*, soft.

GERANIACEÆ, CANDOLLE.

Geranium potentilloides—L'Heritier.

HAB. Delatite, etc.

Fl.

Geranium parviflorum—Willdenow.

HAB. Scrub near Liardet's Beach.

Fl. December.

Geranium erodioides—Hooker.

HAB. Sandy soil in scrub near Liardet's Beach.

Fl. January.

*Erodium moschatum—L'Heritier.

HAB. Common near the sea coast.

Fl. October to February.

The "musky stork's bill," which is a rare plant in England, has found its way here, and covers the cliffs near the sea between St. Kilda and Brighton; and the Flagstaff Hill at Warrnambool. A large form is also common in waste soils. The whole plant is hairy and clammy, exhaling a musky smell. Flowers rose-coloured, in stalked umbels.

Pelargonium Rodneyanum—Mitchell.

HAB. Rocky places.

Fl. Summer.

Leaves radical, serrated. Flowers rose-coloured, in umbels.

Pelargonium Australe—Willdenow.

HAB. In grassy situations, common.

Fl. December.

This elegant little species blooms almost the whole year, shedding its grateful perfume far around, disproving the frequent assertion of English writers, that the flowers of Australia have no smell. Flowers pink, two superior petals, spotted.

(Generic name from *pelargos*, a stork; the head and beak of which bird the carpels somewhat resemble.)

LINEÆ, CANDOLLE.

Linum marginale—All. Cunningham.

HAB. Banks of Yarra Yarra and Hopkins rivers.

Fl. December.

OXALIDEÆ, CANDOLLE.

Oxalis microphylla—Poiret.

HAB. Grassy places, common.

Fl. December.

A small trefoil, with yellow flowers.

STACKHOUSIACEÆ, R. BROWN.

Stackhousia monogyna—Labillardière.

HAB. Grassy situations on the Yarra, banks of Hopkins.

Fl. October, November.

Flowers in dense heads, light yellow.

CARYOPHYLLEÆ, JUSSIEU

*Silene gallica—Linné.

HAB. Waste places.

Fl. Spring.

Stellaria multiflora—Hooker.

HAB. Rocky places near St. Kilda.

Fl. September, October.

Stellaria pungens—Duperrey.

HAB.

Fl.

*Stellaria media—Villars. Common chickweed or Stitchwort.

HAB. Waste places, everywhere.

Fl. September to March.

*Cerastium glomeratum—Thuillier.

HAB. Dry banks.

Fl. Summer.

*Sagina apetala—Linné.

HAB. Sandy soil, walls, etc.

Fl.

"Small annual pearl wort;" petals often wanting.

Polycarpon alsinifolium—Candolle.

HAB. Waste soil near Cremorne Gardens, argillaceous plains near Brighton.

Fl. January.

"Chickweed leaved all-seed." Generic name from *poly*, many, and *karpos*, a seed.

*Spergula arvensis—Linné.

HAB. Sandy soil near Dight's Mill, on the Yarra.

Fl. August.

"Corn spurrey." Generic name from *spargo*, to scatter; the seeds being spread in all directions on the bursting of the capsule.

CALYCIFLORÆ, CANDOLLE.

[Flowers having both calyx and corolla; the latter usually consisting of distinct petals. Stamens always perigynous, *i. e.* inserted on calyx.]

CRASSULACEÆ, CANDOLLE.

Tillæa verticillaris—Candolle.

HAB. Dry places, common.

Fl. January.

Figured in "Icones Plantarum," vol. iii. tab. 295.

Tillæa purpurata—J. Hooker.

HAB. Sandy soil, Brighton.

Fl. January.

Tillæa macrantha—J. Hooker.

HAB. Moist places.

Fl December, January.

A small inconspicuous plant, growing in tufts; stems much branched, twice or thrice; leaves opposite, oblong, acute, fleshy. Flowers terminal, solitary on the ultimate branches or peduncles. Calyx of four, nearly erect, acute, ciliated sepals, streaked within and without with numerous black lines. Petals four.

Figured in "Icones Plantarum," vol. iv. tab. 310.

Tillæa Stuartii—Ferd. Mueller.

HAB. Moist situations.

Fl.

PORTULACEÆ, JUSSIEU.

Claytonia Australasica—J. Hooker.

HAB. Swampy situations.

Fl. November, December.

This delicate, graceful little plant, figured in "Icones Plantarum," vol. iii. tab. 293, ornaments the moist ground around Melbourne, nearly the whole season, with its white flowers, which are larger than in other species. It varies much in size, from two to six inches in height; growing generally, as far as our own observation goes, in rather a straggling manner, with creeping stems, but said by Hooker to grow in "rather dense tufts." Leaves alternate, from two to four inches long.

Calandrinia calyptrata—J. Hooker.

HAB. Granite rocks near Fiery Creek.

Fl.

We received a short time since a specimen from our friend, C. D. Aplin, Esq., who gathered it in the above locality, and at once recognised it as the *Calandrinia calyptrata.* ("Icones Plantarum," vol. iii. tab. 299); but have never observed it growing.

Annual. Stem much branched, with widely-spreading branches; leaves linear, spathulate, the upper ones gradually becoming bracteiform; peduncles axillary, deflexed after flowering; petals united in an extinguisher-shaped corolla. Seeds very numerous.

Tetragonella implexicoma—Miguel.

HAB. Seashore near Brighton.

Fl. November.

MESEMBRYANTHEMEÆ, FENZL.

Mesembryanthemum æquilaterale—Haworth.

HAB. Salt marshes, common.

Fl. Spring.

This plant is called by the colonists, "pigs' faces," "fig marigold;" and "canagong" by the natives, by whom the fleshy leaves and fruit are eaten.

Dr. Mueller mentions other two species, *M. Australe* and *M. sermentosum.*

HALORAGEÆ, R. BROWN.

Myriophyllum variifolium—J. Hooker.

HAB. Lagoons about Melbourne, common.

Fl. December, January.

Figured in "Icones Plantarum," vol. iii. tab. 289.

Myriophyllum heteromorphum—Ferd. Mueller.

HAB. Lagoons, frequent.

Fl. December.

Meionectes Brownii—J. Hooker.

HAB. Wilson's Promontory.

Fl.

Figured in "Icones Plantarum," vol. iv. tab. 306.

ONAGREÆ, JUSSIEU.

Epilobium vanescens?

HAB. Grassy places, frequent.

Fl. Summer.

LYTHRARIEÆ, JUSSIEU.

Lythrum salicaria—Linné.

HAB. Banks of Yarra Yarra, lagoons, common; Merri River, Warrnambool.

Fl. December, January.

All "brothers of the angle" will recognise the tall spike of pink flowers of the "purple loosestrife," which ornaments our river banks in England.

CUNONIACEÆ, R. BROWN.

Bauera Billardierii—Don.

HAB. Buffalo Creek.

Fl. February

EUPHORBIACEÆ, JUSSIEU.

Ricinocarpus sidæformis—Ferd. Mueller.

HAB. Scrub near Sandridge, St. Kilda, and Brighton.

Fl.

Trachycaryon Klotzschii—Ferd. Mueller.

HAB. Wilson's Promontory.

Fl.

Amperea cuneifolia—Ferd. Mueller.

HAB.

Fl.

Phyllanthus Gunnii—J. Hooker.

HAB. Mount Hunter.

Fl. April.

Leaves obtusely ovate.

Phyllanthus hirtellus—Ferd. Mueller.

HAB. Mount Hunter.

Fl.

Leaves cuneate or wedge-shaped.

Micranthea hexandra—J. Hooker.

HAB. Buffalo Ranges.

Fl. February.

Poranthera annua—Ferd. Mueller.

HAB. Melbourne, Warrnambool.

Fl. January.

A small, inconspicuous plant, with white flowers.

Halothamnus microphyllus—Ferd. Mueller.

HAB. Port Gawler.

Fl.

RHAMNACEÆ, R. BROWN.

Pomaderris parvifolia—Hooker.

HAB. Banks of Yarra Yarra.

Fl. August.

Pomaderris ———.

HAB. Banks of Hopkins River, near Tooram.

Fl.

Discaria Australis—Hooker.

HAB. Loddon.

Fl.

MYRTACEÆ, R. BROWN.

Bæckia utilis—Ferd. Mueller.

HAB. Mount Aberdeen.

Fl.

"This plant," says Dr. Mueller, "might serve travellers in these desolate localities as tea; for the volatile oil of its leaves resembles greatly in taste and odour that of lemons, not without a pleasant, peculiar aroma."—*First General Report.* 1853.

Camphoromyrtus crenulata—Ferd. Mueller.

HAB. Mount Aberdeen.

Fl.

The stem covered with very small roundish leaves in pairs.

Fabricia lævigata—Gaertner.

HAB. By the sea near Brighton.

Fl. August.

A small fasces-shaped cocoon is common on this plant. Singular enough, it appears to be much fancied by that curse to all herbarium formers—the cockroach,—and above all others.

Leptospermum grandiflorum—Loddiges.

HAB. Mount Aberdeen, banks of Yarra.

Fl. January.

Leptospermum flavescens—Smith.

HAB. Ovens.

Fl.

Leptospermum grandifolium—Smith.

HAB. Mount Aberdeen.

Fl.

Leptospermum lanigerum—Aiton.

HAB. Banks of Yarra.

Fl. January.

Kunzea peduncularis—Ferd. Mueller.

HAB. Granitic summit of Mount Aberdeen.

Fl. March.

Eucalyptus rostrata—Schlechtendal.

HAB. Common.

Fl.

"Red gum."

Eucalyptus globulus—Labillardière.

HAB. Abundantly in some of the forest districts, principally of the south.

Fl.

The blue gum. "It is already well known for its colossal size; of the circumference of the stem instances are on record by which this tree ranks only second to the famous Boabol from the Senegal."—*Mueller's Second Report*, 1854. The wood is valuable for ship-building.

Eucalyptus sacchariflua—Ferd. Mueller.

HAB. Common everywhere.

Fl.

The "manna" tree, which produces a sweet substance ("not a true sugar") called *Mannite.*

Eucalyptus odorata—Behr and Schlechtendal.

HAB.

Fl.

The "peppermint" gum.

Eucalyptus fabrorum—Schlechtendal.

HAB. Common.

Fl.

The "stringy bark."

Eucalyptus resinifera—Smith.

HAB.

Fl.

For the other species, we refer our readers to Dr. Mueller's Reports on th Vegetation of the Colony, and Mr. Swainson's "Botanical Report," 1853. The leaves of some of the eucalypti present a dotted appearance, which is caused by the presence of numerous cells or cavities, containing essential oil, which with the gum which exudes from their stems, considering their vast number, must render them very valuable.

Melaleuca squarrosa—Smith.

HAB.

Fl.

Easily distinguished by the small, ovate, acute leaves, which lie like scales on the stem.

Melaleuca Gunniana—Schauer.

HAB. Very common around Melbourne.

Fl.

Melaleuca paludosa—R. Brown.

HAB. Loddon.

Fl.

The long lanceolate leaves must decide this species at once.

ROSACEÆ, JUSSIEU.

*Rosa rubiginosa—Linné.

HAB. Near houses, occasionally.

Fl.

"Eglantine or sweet briar."

Rubus macropodus—Seringe.

HAB. Common everywhere.

Fl. December.

The "wild raspberry" of the colonies. The fruit, though smaller, is scarcely inferior in flavour to the cultivated raspberry. It is ripe about January, and affords a most grateful treat to the botanist when parched by the intense heat of summer.

Potentilla anserinoides—Raoul.

HAB. Abundantly on the banks of the Merri, near Warrnambool.

Fl.

*Alchemilla arvensis—Scopoli.

HAB. Moist situations.

Fl. October, November.

"Parsley piert."

Acæna sanguisorbæ—Vahl.

HAB. Near the Yarra, Hopkins, common.

Fl.

LEGUMINOSÆ, JUSSIEU.

Acacia armata—R. Brown.
HAB.
Fl.

Acacia cuspidata—All. Cunningham.
HAB.
Fl.

Acacia verticillata—Willdenow.
HAB.
Fl.

Acacia Oxycedrus—Sieber.
HAB.
Fl.

Acacia Latrobei—Meisner.
HAB.
Fl.

Acacia suaveolens—Willdenow.
HAB. Corner Inlet.
Fl. April.

Acacia retinoides—Schlechtendal.
HAB. Rivulets towards Bacchus Marsh.
Fl. April.

Acacia pycnantha—Bentham.
HAB.
Fl.

Acacia aspera—Lindley.
HAB. Forest Creek.
Fl.

Acacia stricta—Willdenow.
HAB.
Fl.

Acacia vestita?
HAB.
Fl. July.

Acacia mollissima—Willdenow.

HAB. Everywhere, common.

Fl.

Acacia Mitchellii—Bentham.

HAB. Ovens.

Fl.

Acacia paucijuga—Ferd. Mueller.

HAB. King's River.

Fl.

Acacia cephalobotrya—Ferd. Mueller.

HAB. On the Wimmera.

Fl.

Acacia longifolia—Willdenow.

HAB.

Fl.

It would be impossible to enumerate all the species, sixty in number, mentioned by Dr. Mueller in his reports; but we recommend our readers to visit the Botanical Gardens, where nearly the whole of them may be seen; and, we feel sure, our valued friend, Mr. Dallachy, the able superintendent, will afford to all true lovers of botany any information they may require.

Gompholobium Huegelii—Bentham.

HAB. Forest Creek.

Fl.

Viminaria denudata—Smith.

HAB. Near the Eumerella River

Fl. January.

Daviesia corymbosa.

HAB. Hawthorne.

Fl. July.

Daviesia umbellulata—Smith. Lanceolate-leaved Daviesia.

HAB.

Fl.

Daviesia latifolia—R. Brown. Broad-leaved Daviesia.

HAB.

Fl. September.

Dilwynnia cinerescens—R. Brown.

HAB. Hawthorne.

Fl. July

Long ensiform leaves, and yellow flowers.

Dilwynnia hispida—Lindley.

HAB.

Fl.

Sclerothamnus diffusus—Ferd. Mueller.

HAB.

Fl.

Aotus villosa—Smith.

HAB. Scrub near East Brighton, St. Kilda.

Fl. October.

Spadostylis ternata—Ferd. Mueller.

HAB. Buffalo Ranges.

Fl.

Three cuneate leaves, abruptly acuminate, embrace the stem.

Spadostylis pimeloides—Ferd. Mueller.

HAB. Mount Pleasant.

Fl.

Bossiæa prostrata—R. Brown.

HAB. In moist grassy places around Melbourne.

Fl. October.

Bossiæa cinerea—R. Brown.

HAB. Liardet's Beach.

Fl. August.

Hovea linearis—R. Brown.

HAB.

Fl.

Hovea gelida—Ferd. Mueller.

HAB. Mount Buller.

Fl.

Platylobium cordifolium—Ferd. Mueller.

HAB. Trunks of the eucalyptus.

Fl.

Platylobium macrocalyx—Meisner.

HAB. Trunks of the eucalyptus.

Fl.

*Melilotus officinalis—Desrousseaux.

HAB. In William Street, Melbourne.

Fl January.

We have only noticed one specimen of this English trefoil, found in the above habitat.

*Trifolium repens—Linné. Dutch Clover.

HAB. Occasionally in pastures

Fl January.

*Trifolium procumbens—Linné. Hop Trefoil.

HAB. Occasionally in pastures.

Fl. January.

*Trifolium filiforme—Linné. Slender Yellow Trefoil.

HAB. Occasionally in pastures.

Fl. January.

*Medicago sativa—Linné.

HAB Pastures, not common.

Fl. January.

*Lotus tenuifolius—Pollich.

HAB. Pastures.

Fl. January.

*Lotus corniculatus—Linné. Common Birds-foot Trefoil.

HAB Pastures, common.

Fl. January.

Psoraleopsis simplicicaulis—Ferd. Mueller.

HAB. Broken River.

Fl.

Indigofera sylvatica—Sieber.

HAB. Yarra, Merri River.

Fl. August.

This is without exception one of the most beautiful shrubs in the colony; its delicate rose-coloured spike of flowers hanging over the Yarra, as it glides slowly along It is common above Hawthorne Bridge.

Swainsona ———?

HAB. Near Grasmere, on the Merri.

Fl. December.

*Vicia augustifolia—Roth. Narrow-leaved Crimson Vetch.

HAB. In pastures.

Fl. December.

*Ervum hirsutum—Linné. Hairy Tare.

HAB. Pastures.

Fl. January.

Desmodium Tasmanicum—Ferd. Mueller.

HAB. Forest Creek.

Fl.

Zichya Latrobeana—Meisner.

HAB. Near Saltwater River, Survey Paddock, Richmond, etc.

Fl. January.

Zichya augustifolia—Lindley.

HAB. Climbing gracefully around the common brake fern, Melbourne and Warrnambool.

Fl. January.

Hardenbergia monophylla—Bentham.

HAB. Near Gardiner's Creek on the Yarra.

Fl. January.

This plant will easily be recognised by its dense clusters of rich blue flowers, and deep green leaves, encircling many of the larger shrubs.

Kennedya prostrata—R. Brown.

HAB. Common everywhere.

Fl. September.

A beautiful scarlet-flowered trefoil.

UMBELLIFERÆ, JUSSIEU.

Hydrocotyle tripartita—R. Brown.

HAB. About Melbourne and Warrnambool.

Fl. September.

Beautifully figured in "Icones Plantarum," vol. iv. tab. 312.

Trachymene myrtifolia—Sieber.

HAB. Mount Aberdeen.

Fl.

Trachymene crassifolia—Bentham.

HAB. Gipps Land.

Fl.

Fleshy-leaved trachymene.

Trachymene diversifolia—Mueller.

HAB. Scrub near St. Kilda.

Fl. January.

Didiscus pilosus—Bentham.

HAB. Near Liardet's Beach.

Fl. December.

"Icones Plantarum," vol. iv. tab. 307.

Eryngium ——— ?

HAB. Richmond Paddock, near the Yarra, Warrnambool, St Kilda.

Fl. January.

{ Helosciadium prostratum—Bunge.
{ Petroselinum ———De Candolle. Parsley.

HAB. Common by the sea.

Fl. December.

Daucus brachiatus—Sieber.

HAB. Survey Paddock, near Yarra, etc.

Fl. January.

RUBIACEÆ, JUSSIEU.

Galium Australe—Candolle. Bedstraw.

HAB. Common.

Fl. November, December.

Asperula oliganthema—Mueller.

HAB. Survey Paddock, Richmond.

Fl. January.

Caprosma microphylla—All. Cunningham.

HAB. Muddy banks of Yarra.

Fl. October.

Opercularia caprosmoides—Ferd. Mueller.

HAB. Sealer's Cove.

Fl.

Pamax hirta—De Candolle.

HAB. Mount Aberdeen.

Fl.

LORANTHACEÆ, DON.

These are beautiful parasitic plants, resembling our English *Viscum* (misseltoe), They are found, as their specific names denote, on the *Eucalyptus* (gum). *Casuarina* (she oak), *Exocarpus* (cherry), *Melaleuca* (tea tree).

Loranthus eucalyptoides—Candolle.

HAB. Common.

Fl. January.

Loranthus Exocarpi—Behr.

HAB. Common.

Fl. January.

Loranthus melaleuca—Lehmann.

HAB. Common.

Fl.

COMPOSITÆ, VAILLANT.

Eurybiopsis Hookeri—Ferd. Mueller.

HAB. Melbourne.

Fl. December.

Eurybia linearifolia—De Candolle.

HAB. Coast towards La Trobe River.

Fl.

Eurybia glandulosa—De Candolle.

HAB. Dandenong, River Plenty.

Fl.

Eurybia ciliata—Bentham.

HAB. Botanic Gardens, Melbourne.

Fl. July.

Eurybia myrsinoides—Nees.

HAB. Delatite.

Fl.

Eurybia Gunniana—De Candolle.

HAB. Buffalo Ranges.

Fl.

These are the exquisite daisy-like plants, with blue and sometimes white flowers, common almost everywhere.

Brachycome heterodonta—De Candolle.

HAB. Delatite.

Fl.

Brachycome graminea—Ferd. Mueller.

HAB. On the Yarra banks amidst Juncaceæ.

Fl. January.

Also, *var. humilis*, in same locality.

Brachycome angustifolia—De Candolle.

HAB. Marshy places near Brighton.

Fl. August.

Brachycome linearifolia—De Candolle.

HAB. Pastures near Richmond.

Fl. August.

Brachycome multicaulis—Ferd. Mueller.

HAB. Mount Buller, 5000.

Fl.

Brachycome diversifolia—Fischer and Meyer.

HAB. Grassy ridges on the Yarra.

Fl. November.

Siegesbeckia orientalis—Linné.

HAB. Melbourne, Warrnambool

Fl. April, May.

Cotula coronopifolia—Linné.

HAB. About Melbourne, Warrnambool.

Fl. The whole summer.

Cotula anthemoides—Linné.

HAB. By waysides and in grassy places.

Fl. The whole summer.

Gymnogyne cotuloides—Steetz.

HAB. Muddy situations near Brighton.

Fl. October.

Skirrhophorus Fuernrohrii—Ferd. Mueller.

HAB. Sandy pastures around Brighton.

Fl. November.

Strongylosperma Australe—Lessing.

HAB. About Melbourne, moist situations on the Yarra.

Fl.

Leptinella intricata—J. Hooker.

HAB. Shady banks of Yarra.

Fl. January.

Myriogyne minuta—Lessing.

HAB. King's River.

Fl.

Myriogyne Cunninghamii—Candolle.

HAB. Banks of Yarra Yarra.

Fl. January.

Calocephalus lacteus—Lessing.

HAB. Amongst Juncaceæ at St. Kilda, etc.

Fl.

Craspedia alpina—J. Hooker.

HAB. Mount Buller.

Fl.

Apalochlamys Billardierii—Candolle.

HAB. Wilson's Promontory.

Fl.

Ozothamnus obcordatus—De Candolle.

HAB. Forest Creek.

Fl.

Ozothamnus turbinatus—De Candolle.

HAB. Wilson's Promontory.

Fl.

Ozothamnus ferrugineus—De Candolle.

HAB. On the Yarra and Hopkins rivers.

Fl. January.

Tetrachæta perennis—Ferd. Mueller.

HAB. Near St. Kilda.

Fl.

Pumilo argyrolepis—Schlechtendal.

HAB. Grassy places near Melbourne.

Fl. October.

Millotia tenuifolia—Cassini.

HAB. Near Richmond.

Fl. September.

Millotia myosotidifolia—Steetz.

HAB. Glenelg.

Fl.

Chrysocephalum flavissimum—Steetz.

HAB. Near the beach, Melbourne, grassy places on the Yarra.

Fl. December.

Chrysocephalum semipapposum—Steetz.

HAB. Scrub near Brighton.

Fl. October.

Phæoleuca obtusifolia—Ferd. Mueller.

HAB.

Fl.

Helichrysum bracteatum—Willdenow.

HAB. Yarra banks, near Dight's Mill, etc.

Fl. December.

This plant, the "large golden everlasting," will be easily recognised by its bright golden scales.

(Also, v. *angustifolium*)

Helichrysum scorpioides—Labillardière.

HAB. Near the Yarra.

Fl. December.

Helichrysum leucopsidium—Candolle.

HAB. Wilson's Promontory.

Fl.

These plants will be easily recognised by those who know the "*Immortelle*" of the French.

Genus named from *Helios*, the sun, and *chryson*, gold.

All continental tourists are familiar, we think, with the use of the "immortelles;" for who, in visiting churchyards in France, has not been struck with the beauty of the wreaths placed over the graves? Truly a sweet tribute to the memory of dear relatives or friends—more touching far than the most costly monuments; for in these simple wreaths there is no ostentation. There is much sweetness also in the distinction made in the garlands according to the age of the departed: those intended for the graves of the young and unmarried being composed of the purest white, whilst for persons of more advanced age the yellow are used.

Helipterum brachyrrhynchum—Sonder.

HAB. Argillaceous dry hills near Forest Creek.

Fl. December.

*Gnaphalium luteo-album—Linné.

HAB. Common, Yarra banks, Warrnambool, etc.

Fl. January.

This plant, the "Jersey cudweed," is marked as "*very rare*" in England, by Babington, in his "Manual of British Botany."

Gnaphalium indutum—J. Hooker.

HAB. Dry pastures near Brighton and Warrnambool.

Fl. October.

(Name from *gnaphalon*, soft down.)

Erechtites hispidula—Candolle.

HAB. Grassy ridges on the Yarra.

Fl. September.

Senecio rupicola—Lesson and Richard.

HAB. Sandy soil on sea-coast, St. Kilda, Warrnambool, etc.

Fl. September.

Senecio Macquariensis—Candolle.

HAB. Muddy banks of the Yarra.

Fl. November.

Senecio odoratus—Hornemann.

HAB. Banks of the Yarra.

Fl. November.

(Also v. *angustifolius.*)

HAB. North side of the Yarra, near the old slaughter-house.

Fl. January.

Cymbonotus Lawsonianus—Gaudichaud.

HAB. Sandy cliffs by the sea near Brighton.

Fl. August.

*Silybum Marianum—Gaertner.

HAB. Common everywhere.

Fl.

The "milk thistle," which has become so widely diffused throughout the whole colony as to call for an act to be passed by the Legislative Council to make its destruction imperative.

*Centaurea solstitialis—Linné.

HAB. Uncultivated lands.

Fl. January.

The "yellow-star thistle."

*Onopordnil Acanthium—Linné.

HAB. Near Mount William.

Fl. January.

The "cotton thistle."

*Hypochæris glabra—Linné.

HAB. Sandy places, frequent.

Fl.

"Smooth cat's-ear."

*Taraxacum officinale—Weber.

HAB. Common.

Fl. Summer.

"Common dandellon."

Picris angustifolia—Candolle.

HAB. Banks of Yarra.

Fl. January.

*Sonchus oleraceus—Linné.

HAB. Waste places.

Fl. Summer.

"Common sow thistle."

*Sonchus asper—Hoffm.

HAB. Waste ground.

Fl. Summer.

Scorzonera Lawrencii—J. Hooker.

HAB. Near the sea at Brighton.

Fl. August.

"The root of this plant is a favourite food of the natives, and would form, if enlarged by culture, an agreeable substitute for *Scorzonera hispanica*, or asparagus."—*Mueller's Report.*

*Erigeron Canadensis—Linné.

HAB. Near Melbourne.

Fl.

This plant, the "Canadian fleabane," which was brought about a century since from Canada, has become disseminated nearly over the whole world. In England, France, Germany, Holland, Italy, Sicily, it is found, and is frequently met with in this colony.

GOODENIACEÆ, R. BROWN.

Scævola suaveolens—R. Brown.

HAB. Wilson's Promontory.

Fl.

A very pretty plant, with spathulate leaves.

Goodenia ovata—R. Brown.

HAB. Banks of Yarra.

Fl. December.

Flowers yellow, leaves ovate, dentate.

Goodenia humilis—R. Brown.

HAB. Broken River.

Fl.

Flowers yellow; a very slender plant.

Goodenia cordifolia—Ferd. Mueller.

HAB. Mount Buller.

Fl.

Goodenia lanata—R. Brown.

HAB. Brighton.

Fl. January.

Rather a diminutive plant, with yellow flowers.

LOBELIACEÆ, JUSSIEU.

Isotoma axillaris—Lindley.

HAB. Futter's Range.

Fl.

"This plant surpasses all other indigenous Lobeliaceæ in its intense acridity, and can be therefore only cautiously employed instead of *Lobelia inflata*." —*Mueller's First Report.*

The tube of the corolla is remarkably long in this plant.

Laurentia platycalyx—Ferd. Mueller.

HAB. In grassy places, Melbourne.

Fl.

Lobelia hydrophila.

HAB. Banks of Yarra, Hopkins River at Warrnambool.

Fl. December.

Lobelia alata—R. Brown.

HAB. On the Lagoon near Liardet's, etc.

Fl. December.

Lobelia ———.

HAB. Near Warrnambool

Fl. January.

CAMPANULACEÆ, DUBY.

{ Campanula gracilis —R. Brown.
{ Wahlenbergia ———. De Candolle.

HAB. In pastures, common.

Fl. December to March.

The "blue bell," so abundant everywhere. There is a variety with four-fid. flowers, *C. quadrifida*, whilst *C. gracilis* has the flowers five-fid.

STYLIDEÆ, R. BROWN

Stylidium graminifolium—Swartz.

HAB. In pastures: a long spike of pink flowers, with long, radical, grassy leaves.

Fl. August.

EPACRIDEÆ, R. BROWN.

Leucopogon virgatus—R. Brown.

HAB. Liardet's Beach, near Melbourne.

Fl. August.

Leucopogon Richei—R. Brown.

HAB. On the coast, Brighton, Warrnambool.

Fl. August.

Acrotriche prostrata—Ferd. Mueller.

HAB. Delatite.

Fl.

Melichrus glaucifolius—Ferd. Mueller.

HAB. Loddon.

Fl.

Lissanthe montana—R. Brown.

HAB. Mount Buller.

Fl.

Lissanthe Cunninghami—De Candolle.

HAB. Loddon.

Fl.

Sprengelia incarnata—Smith.

HAB.

Fl.

Epacris impressa—Labillardière.

HAB. Brighton, St. Kilda, sandy places.

Fl.

Epacris lanuginosa—Labillardière.

HAB. Wilson's Promontory.

Fl.

These elegant plants are commonly known as "native heaths," and will be easily recognised.

E. impressa is well figured in Sweet's "Flora Australasica," p. 4; and the scale-like leaves clothing the stem will at once decide this species.

BRACHYURA, R. BROWN

[illegible]—R. Brown.

[illegible]

[illegible]

[illegible] R. Brown.

[illegible]

[illegible]—Ferd. Mueller.

[illegible]

[illegible]—Ferd. Mueller.

[illegible]

[illegible]—R. Brown.

[illegible]

[illegible]—De Haan.

[illegible]

[illegible]—Brandt.

[illegible]

[illegible]

[illegible]

[illegible] "[illegible]" and will be

[illegible] "[illegible]" and will

[illegible]

COROLLIFLORÆ, CANDOLLE.

[Embracing all flowers furnished with calyx and corolla, the petals of the latter being united.]

MYRSINEÆ, R. BROWN.

Myrsine Howittiana—Ferd. Mueller.

HAB. Gipps Land.

Fl.

Named in honour of Dr. Godfrey Howitt of Melbourne, a true lover of natural science. It may be seen in the Botanical Gardens, near the old swan enclosure.

MYOPORINÆ, R. BROWN.

Myoporum pentandrum—Ferd. Mueller.

HAB.

Fl. September.

With drooping flowers.

Myoporum tuberculatum—R. Brown.

HAB. Melbourne, Warrnambool.

Fl. September.

Myoporum humile—R. Brown.

HAB. Lagoon near St. Kilda, Pertobe Lagoon, Warrnambool.

Fl. December.

A handsome trailer, with pink flowers, and green, fleshy, spathulate leaves.

VERBENACEÆ, JUSSIEU.

Verbena officinalis—Linné.

HAB. Common in waste places.

Fl. January.

"Vervain."

LABIATÆ, JUSSIEU.

Lycopus Australis—R. Brown.

HAB. Common in waste places near water.

Fl. January.

"Horehound," or "gipsywort."

Mentha Australis—R. Brown.

HAB. Banks of Yarra, Hopkins, etc., common.

Fl. December, January.

Mentha gracilis—R. Brown.

HAB. Common.

Fl. December.

Mentha saturejoides—R. Brown.

HAB. Bacchus Marsh.

Fl.

*Marrubium vulgare—Linné.

HAB. Banks of Yarra, Port Fairy, common.

Fl. February.

Scutellaria humilis—R. Brown.

HAB. Grassy situations, Warrnambool, Melbourne.

Fl. January to March.

(Name from *scutella*, a little vessel.)

Prunella vulgaris—Linné.

HAB. Grassy situations.

Fl. January.

The "self-heal," or "all heal."

Westringia senifolia—Ferd. Mueller.

HAB. Buffalo Range.

Fl.

Ajuga Australis—R. Brown.

HAB. Grassy places.

Fl. July.

The "common bugle flower."

BORAGINEÆ, R. BROWN.

Myosotis Australis—R. Brown.

HAB. Banks of Yarra near Gardiner's Creek, and abundantly about wombat holes in the neighbourhood of Warrnambool.

Fl. December to February.

"Forget-me-not."

Cynoglossum Australe—R. Brown.

HAB. About Melbourne, etc.

Fl. December.

Cynoglossum suaveolens—R. Brown.

HAB. Batman's Hill, Melbourne, Warrnambool.

Fl. December.

"Sweet-scented hound's-tongue."

Name from *cyon*, a dog, and *glossa*, a tongue.

CONVOLVULACEÆ, JUSSIEU.

Calystegia sepium—R. Brown.

HAB. I know of no more beautiful habitat for this large and elegant convolvulus than the Merri River, near Grassmere, where the stream is choked with rushes, which are nearly hidden by the clusters of flowers encircling them.

Fl. Summer.

Convolvulus erubescens—Sims.

HAB. Grassy pastures, common.

Fl. January.

Dichondra repens—R. Brown.

HAB. Generally at the foot of trees.

Fl. September.

Wilsonia rotundifolia—Hooker.

HAB.

Fl.

Cuscuta Australis—R. Brown.

HAB. Goulburn River.

Fl. February.

BIGNONIACEÆ, R. BROWN.

Tecoma Australis—R. Brown.

HAB. In sandy ground, not common.

Fl.

A creeper called the "trumpet flower."

GENTIANEÆ, JUSSIEU.

Gentiana Diemensis—Griesebach.

HAB. Snowy tops of Mount Buller—5500.

Fl.

Dr. Mueller thinks this plant as valuable as the officinal *Gentiana lutea.*

Sebæa ovata—R. Brown.

HAB. Warrnambool, Melbourne, etc., common in meadows.

Fl. October to January.

Flowers quinque-fid., yellow; leaves ovate, nerved; has important medical virtues.

Sebæa albidiflora—Ferd. Mueller.

HAB. Low marshy ground near Brighton, near Pertobe Lagoon, Warrnambool.

Fl. October, November.

This species, which is particularly fine in the latter locality, growing to the height of six to eight inches, has white flowers, four-fid., and fleshy leaves, not nerved. It is a valuable tonic.

Erythræa Australis—R. Brown.

HAB. Sandy soil near St. Kilda.

Fl. December.

Valuable for its bitterness.

Mitrasacme paradoxa—R. Brown.

HAB. Grassy situations at Richmond and Brighton.

Fl. September, October.

A very small, elegant, little plant, often not more than an inch in height, and its stems smaller than the finest hair.

SOLANACEÆ, JUSSIEU.

Solanum nigrum—Linné.

HAB. Waste places about Warrnambool and Melbourne.

Fl. January to March.

"Common nightshade."

Solanum laciniatum—R. Brown.

HAB. Common everywhere.

Fl. January to March.

"Kangaroo apple." The radical leaves are generally slashed, hence its specific name; but we have observed many plants with the leaves quite entire.

Solanum Hystrix—R. Brown.

HAB.

Fl.

The whole of this plant covered with spines; very elegant.

Nicotiana suaveolens—Lehmann.

HAB. On the high Yarra ranges near the Lunatic Asylum.

Fl. November.

This very beautiful tobacco was at one time common in the above situations, but on our last visit we found that sheep had sadly cropped it. The flowers are white, stem herbaceous, nearly simple; leaves subpetiolate, or lanceolate, undulated. Tube of corolla cylindrical, much longer than the calyx, segments of limb rather unequal, roundish, obtuse. Stem villous at the base, smoother at top. Leaves with a few scattered soft hairs on veins and midrib; radical ones sub-spathulate, bluntish, rosulate. Calyx deeply five-cleft; segments acute, unequal.

ACANTHACEÆ, R. BROWN.

Basileophyta Friderici Augusti—Ferd. Mueller.

HAB.

Fl.

A parasite on the fern tree.

SCROPHULARINÆ, R. BROWN.

Mimulus repens—R. Brown.

HAB. Swamps near Melbourne, Warrnambool, etc., common.

Fl. January to April.

Mimulus gracilis—R. Brown.

HAB. Marshy ground near Pertobe Lagoon, Warrnambool.

Fl. November.

Mazus Pumilio—R. Brown.

HAB. Dandenong.

Fl.

Gratiola latifolia—R. Brown.

HAB. Banks of Yarra, Macdonald's Creek, Warrnambool.

Fl. December.

Glossostigma Drummondi—Bentham.

HAB. Ovens.

Fl.

Veronica gracilis—R. Brown.

HAB. Pastures.

Fl. August.

Veronica calycina—R. Brown.

HAB. Moi Swamp.

Fl. April.

Fl. on lateral racemes, few flowered, leaves ovate, unequally crenate, hairy stem creeping.

Veronica labiata—R. Brown.

HAB. About Melbourne.

Fl.

With long axillary racemes of white flowers; leaves elongate, lanceolate, acuminate, unequally serrated.

Elatine gratioloides—All. Cunningham.

HAB.

Fl.

VERBASCEÆ, BARTLING.

*Verbascum Blattaria—Linné.

HAB. In waste places, occasionally.

Fl. January.

"Moth mullein."

*Verbascum virgatum—Withering.

HAB. In waste places, occasionally.

Fl. January.

"Large-flowered primrose-leaved mullein."

LENTIBULARINÆ, RICHARD.

Utricularia lilacina—Ferd. Mueller.

HAB. Brighton.

Fl.

"Bladder-wort"

PRIMULACEÆ, VENTENAT.

Samolus litoralis—R. Brown.

HAB. Amidst rushes in marshy grounds, Melbourne, Warrnambool, Port Fairy.

Fl. December to April.

*Anagallis phœnicea—Lamarck. Red Pimpernel.

HAB. Cultivated places, occasionally.

Fl. December.

*Anagallis cœrulea—Schreber. Blue Pimpernel.

HAB. Cultivated places, not common.

Fl.

PLUMBAGINEÆ, JUSSIEU.

Statice Australis—Sprengel.

HAB.

Fl.

PLANTAGINEÆ, VENTENAT.

*Plantago lanceolata—R. Brown.

HAB. Waysides.

Fl. January.

"Ribwort plantain."

*Plantago Coronopus—R. Brown.

HAB. Waste places, Warrnambool, not common.

Fl. January.

"Buck's-horn plantain."

MONOCHLAMYDEÆ, CANDOLLE.

[Embraces those plants which have no corolla, and occasionally not even a calyx.]

LAURINEÆ, JUSSIEU.

Cassyta glabella—R. Brown.

HAB.

Fl.

Stem glabrous.

Cassyta pubescens—R. Brown.

HAB. Near St. Kilda, Brighton, Warrnambool, twining on Riccinocarpus, etc.

Fl. February.

Stem pubescent.

PROTEACEÆ, R. BROWN.

Persoonia juniperina—Labillardière.

HAB.

Fl.

Persoonia suffruticosa—Ferd. Mueller.

HAB. Ballaarat, Buffalo Ranges.

Fl.

Grevillea Victoriæ—Ferd. Mueller.

HAB. Buffalo Ranges.

Fl.

Grevillea Dallachiana—Ferd. Mueller.

HAB.

Fl.

Named after Mr. Dallachy, the superintendent of the Melbourne Botanic Gardens.

Grevillea chrysophæa—Ferd. Mueller.

HAB.

Fl.

Grevillea Latrobei—Meisner.

HAB. High banks of the Yarra, etc

Fl. August.

Lomatia longifolia—R. Brown.

HAB. Delatite.

Fl

Hakea parilis—Knight and Salisbury.

HAB. Gipps Land.

Fl.

Hakea trisecta.

HAB.

Fl.

Hakea brachyrrhynca—Ferd. Mueller.

HAB.

Fl. July.

Banksia Australis—R. Brown.

HAB. Common.

Fl. February.

This (with four other species) is designated the "native honeysuckle." Its bottle-brush yellow flowers will at once enable the student to distinguish this plant.

THYMELEÆ, JUSSIEU.

Pimelea elata—Ferd Mueller.
HAB. Wilson's Promontory.
Fl.

Pimelea glauca—R. Brown.
HAB. Lagoon near Liardet's Beach, etc.
Fl. December.

Pimelea phylicoides—Meisner.
HAB.
Fl.

Pimelea curviflora—R. Brown.
HAB. Hilly pastures near Hawthorne.
Fl. September.
(There are eighteen species of this very beautiful genus common in Victoria.)

AMARANTHACEÆ, JUSSIEU.

Alternanthera denticulata—R. Brown.
HAB. Banks of Yarra, moist situations, common.
Fl. January.

Hemichroa pentandra—R. Brown.
HAB. M'Crae's Island.
Fl.

SALSOLACEÆ, JUSSIEU.

Rhagodia nutans—R. Brown.
HAB. Banks of Yarra, Hopkins River, etc.
Fl. February.

Rhagodia Billardierii—R. Brown.
HAB. Sandy soil near St. Kilda, Warrnambool.
Fl. February.

*Chenopodium murale—Linné.

HAB. Marshy ground near Yarra.

Fl. January.

"Nettle-leaved goose-foot."

Blitum ———?

HAB. Warrnambool, Melbourne.

Fl. February.

Atriplex paludosum—R. Brown.

HAB. Port Albert.

Fl.

Atriplex cinereum—Poiret.

HAB. Sea coast.

Fl. August.

Chenopodina Australis—Moquin.

HAB.

Fl.

POLYGONEÆ, JUSSIEU.

Polygonum prostratum—R. Brown.

HAB. Yarra banks.

Fl. January.

Polygonum minus—Hudson.

HAB. Moist situations.

Fl. January.

Polygonum glandulosum—R. Brown.

HAB. Shady banks of Goulburn, Broken River, King, Ovens, Murray.

Fl.

Leaves elongate, lanceolate, acuminate, underneath glandulose.

Polygonum subsessile—R. Brown.

HAB. Goulburn, King, Broken River.

Fl.

Leaves elongate, lanceolate, somewhat sessile.

Polygonum gracile—R. Brown.

HAB. Lagoons near the Yarra.

Fl. January.

Polygonum strigosum—R. Brown.

HAB. Shady grassy banks.

Fl.

Stem erect, bracteas ciliate, leaves hastate, branches with recurved *strigæ*, or sharp, closely-pressed hairs.

*Polygonum aviculare—Linné.

HAB. Waste places.

Fl.

"Common knot grass."

Muehlenbeckia complexa—Meisner.

HAB. Banks of Hopkins, at Brighton, etc.

Fl. August.

This is frequently called "sarsaparilla," and used in the same way.

Rumex Brownii—Campdera.

HAB Yarra banks.

Fl.

Rumex spinulosus.

HAB. Yarra banks.

Fl. January.

*Rumex crispus—Linné.

HAB. Waste places.

Fl. January.

"Curled dock."

*Rumex Acetosella—Linné.

HAB. Waste places.

Fl. November.

"Sheep's sorrel."

SANTALACEÆ, JUSSIEU.

Exocarpus cupressiformis—Labillardière.

HAB. Common everywhere.

Fl.

"Native cherry tree."

Exocarpus stricta—R. Brown.

HAB. Common.

Fl.

URTICEÆ, JUSSIEU.

*Urtica urens—Linné.

HAB. Waste places.

Fl. January.

*Urtica dioica—Linné.

HAB. Waste places.

Fl. January.

The leaves of this plant instead of being cordate, as in the English specimens in our herbarium, are elongate, lanceolate.

CASUARINEÆ, MIRBEL.

Casuarina rigida—Miquel.

HAB. Gipps Land.

Fl.

(There are four other species, *C. leptoclada*, *pumila*, *quadrivalvis*, and *cristata*, all known as the "she oak." We may refer to Mr. Swainson's report on these plants, and to the seeds and cones collected by him, which may be seen at the Botanical Gardens. He has named 213 species!!!)

MONOCOTYLEDONEÆ.

[THE plants of this class are also called Endogens, and differ from Exogens, or *Dicotyledoneæ*, in their parallel-veined leaves, the absence of concentric rings, and the seed containing an embryo with only one cotyledon.]

ORCHIDEÆ, JUSSIEU.

Thelymitra pauciflora—R. Brown.

HAB.

Fl.

Diuris maculata—Smith.

HAB. Stony places near Dight's Mill.

Fl. September.

Diuris aurea—Smith.

HAB. Common about Melbourne.

Fl. September.

Caladenia cœrulea—R. Brown.

HAB. In pastures about Melbourne.

Fl.

Caladenia carnea—R. Brown.

HAB. Shady places at Brighton under *Fabricia lævigata*, sand hummocks at Warrnambool.

Fl. September, October.

Caladenia alata—R. Brown.

HAB. Pastures at Hawthorne, etc.

Fl. September.

Caladenia pulcherrima—Ferd. Mueller.

HAB. Common in pastures about Melbourne and Warrnambool.

Fl. October, November.

The "spider orchis." Varies much in the colour and size of its flowers; but under any circumstances, it is indeed one of the "most beautiful" of our native orchideæ.

Glossodia minor—R. Brown.

HAB. About Richmond.

Fl. August, September.

Pterostylis cucullata—R. Brown.

HAB. Common in pastures.

Fl. August, September.

"Hooded orchis," of which eight other species are common in Victoria.

{ Dipodium punctatum—R. Brown.
{ Dendrobium ———. Smith's "Exot. Bot.," i. page 21, tab. 12.

HAB. Near Gardiner's Creek.

Fl. January.

HYPOXIDEÆ, ENDLICHER.

Hypoxis vaginata—Schlechtendal.

HAB. In pastures, common.

Fl. Spring.

Hypoxis glabella—R. Brown.

HAB. Pastures.

Fl. Spring.

LILIACEÆ, CANDOLLE.

Bulbine bulbosa—Haworth.

HAB. Pastures near Hodgson's Punt.

Fl. August.

Dichopogon humilis—Kunth.

HAB. Pastures.

Fl. November.

Dichopogon leimonophilus—Ferd. Mueller.

HAB. Pastures.

Fl. November to January.

Cæsia corymbosa—R. Brown.

HAB. Pastures.

Fl. Spring.

Thysanotus Patersoni—R. Brown.

HAB. Twining around plants in the scrub near East Brighton.

Fl. October.

Flowers pink.

Tricoryne graminifolia.

HAB. Pastures.

Fl. December.

Flowers yellow.

Dianella cœrulea—Sims.

HAB. Amidst rushes about Brighton and St. Kilda.

Fl. October.

Flowers blue.

(The natives use the leaves of this and *D. revoluta* for making baskets.)

Xanthorrhœa minor—R. Brown.

HAB Near Portland.

F Spring.

Xanthorrhea Australis—R. Brown.

HAB. Near Cape Otway, Portland, etc.

Fl. Spring.

"Grass trees." A species of bee is said to bore into the stems of these plants, and deposit honey therein.

MELANTHACEÆ, R. BROWN.

Burchardia umbellata—R. Brown.

HAB. Pastures.

Fl. September.

Flowers white.

Anguillaria dioica—R. Brown.

HAB. Pastures, abundant.

Fl. September, October.

Flowers white.

XEROTIDEÆ, ENDLICHER.

Xerotes collina—R. Brown.

HAB. Richmond, Survey Paddock, pastures.

Fl. August.

Nine other species common in Victoria.

JUNCEÆ, CANDOLLE.

Juncus maritimus—Lamarck.

HAB. Warrnambool, Gipps Land.

Fl. February.

Juncus effusus—Linné.

HAB. Moist situations.

Fl. February.

Juncus bufonius—Linné.

HAB. Marshy ground about Warrnambool.

Fl. February, March.

Juncus pallidus—R. Brown.

HAB. About Melbourne.

Fl.

Luzula campestris—Candolle.

HAB. Pastures.

Fl. July.

JUNCAGINEÆ, RICHARD.

Triglochin nanum—Ferd. Mueller.

HAB. Brighton.

Fl. December.

Triglochin decipiens—R. Brown.

HAB. Lagoons about Warrnambool, etc.

Fl. December.

Cycnogeton Huegelii—Endlicher.

HAB. In the Yarra and lagoons.

Fl.

{ Actinocarpus minor—R. Brown, Prod., p. 199.
{ Damasonium Australe—Salisbury in "Hort. Trans.," i. p. 268.

HAB. This rare plant we discovered in lagoons near the Yarra, and have never noticed it in any other localities. Carpels, nine in number—R. Brown mentions eight only.

Fl. April or May.

Alisma Plantago—Linné.

HAB. Marshy places, rivers.

Fl.

"Great water plantain."

HYDROCHARIDEÆ, JUSSIEU.

{ Damasonium ovalifolium—R. Brown, Prod., p. 200.
{ Ottelia ovalifolia—Lindley.

HAB. On the Yarra and lagoons.

Fl. January.

This elegant water-plant will easily be detected by its large potamogeton-like leaves floating on the water, on long petioles. The flowers are white, crimson at the base, and appear just above the surface. The stem is round, but in some specimens we have observed it triangular.

LEMNACEÆ, LINK.

Lemna minor—Linné.

HAB. Lagoons, common.

Fl.

Lemna trisulca—Linné.

HAB. Lagoon at Leura near Belfast.

Fl.

(A species of *Physa*, is commonly found on this duckweed.)

TYMPHACEÆ, JUSSIEU.

Typha Shuttleworthii—Koch and Sonder.

HAB. Lagoons.

Fl. December.

"Cat's tail," or "bulrush."

POTAMEÆ, JUSSIEU.

Ruppia maritima—Linné.

HAB. In salt water, Warrnambool, etc.

Fl. March.

"Sea tassel grass."

Potamogeton natans—Linné.

HAB. Lagoons, rivers, common.

Fl. December,

Potamogeton obtusifolius—Mertens and Koch.

HAB. In swamps, common.

Fl. January.

(This is *P. gramineum* of Robert Brown. "Prodromus," p. 199, "*foliis linearibus obtusis.*"

DESVAUXIEÆ, BARTLING.

Desvauxia tenuior—R. Brown.

HAB. Moist, grassy situations about Melbourne.

Fl. September.

(Named in honour of D. Desvaux, the author of a work on the *Junceæ*, i "Journal de Botanique.")

Aphelia cyperoides—R. Brown.

HAB. Swamps about Melbourne.

Fl. September.

Aphelia pumilo—Ferd. Mueller.

HAB. Grassy places about Melbourne

Fl. October.

(These plants are very like minute *Scirpi* or *Cyperi*.

RESTIACEÆ, R. BROWN.

Hypolæna fastigiata—R. Brown.

HAB.

Fl.

Restio lateriflorus—R. Brown.
HAB. Gipps Land.
Fl.

Restio tetraphyllus—Labillardière.
HAB. Gipps Land.
Fl.

CYPEROIDEÆ, JUSSIEU.

Cyperus lucidus—R. Brown.
HAB. Banks of the Yarra, etc.
Fl. January.

Cyperus lævis—R. Brown.
HAB. Ovens.
Fl.

Isolepis prolifera—R. Brown.
HAB. Yarra banks, Warrnambool.
Fl.

Fimbristylis brachytricha—Ferd. Mueller.
HAB. Goulburn.
Fl.

Scirpus maritimus—Linné.
HAB. About Melbourne.
Fl. December.

Scirpus leptocarpus—Ferd. Mueller.
HAB. Ovens.
Fl.

Chapelliera loculata.
HAB. Yarra banks.
Fl. January.

Chætospora axillaris—R. Brown.
HAB. Moist situations.
Fl. September.

Schœnus pogonolepis—Ferd. Mueller.

HAB. Yarra.

Fl.

Gahnia sulcata—Ferd. Mueller.

HAB. Muddy Creek.

Fl.

Carex pseudo-Cyperus—Linné.

HAB. Goulburn.

Fl.

C. inversa, *chlorantha*, *appressa*, *vulgaris*, *breviculmis*, *longifolia*, and *litorea* may occasionally be met with.

GRAMINEÆ, JUSSIEU.

Sporobolus Matrella—Nees.

HAB. Salt marshes.

Fl.

Sporobolus indicus—R. Brown.

HAB. Lagoons near the Murray.

Fl.

"Panicula coarctata cylindracea e spicis imbricatis divisis simplicibusve"

Agrostis parviflora—R. Brown.

HAB. Banks of rivers and lagoons, Goulburn, Delatite.

Fl.

"Panicula effusa capillari, glumis æqualibus, perianthii valvula exteriori truncata: interiori minutissima."

Agrostis æmula—R. Brown.

HAB. Banks of Yarra.

Fl.

"Panicula capillari, glumarum carinis denticulatis, valvula exteriori perianthii longitudinaliter pubescente bimucronata: arista dorsali glumis duplo longiori, setula villosa ad basin valvulœ interioris, foliis planis."

Agrostis scabra—R. Brown.

HAB. Near Sealer's Cove, Buffalo Range.

Fl.

"Panicula capillari, glumarum carinis lateribusque scabris, valvula exteriori perianthii glabra; apice denticulata; arista dorsali inclusa, setula villosa ad basin interioris, foliis planis vaginisque scabris."

{Agrostis ovata—R. Brown.
{Cinna ———. Kunth.

HAB. Yarra Banks, Warrnambool.

Fl. January.

"Panicula ovata vel oblongo spiciformi, arista glumis longiori, setula ad basin valvulæ interioris."

Agrostis quadriseta—R. Brown.

HAB. In grassy places.

Fl. Common.

"Triandra, panicula cylindracea; ramis ramulisque imbricatis, glumis acuminatis, valvula exteriori perianthii glabra; arista infra medium dorsi glumis duplo longiori; apice quadridentata dentibus setaceis interioribus brevioribus."

Agrostis lobata—R. Brown.

HAB. On barren lofty places.

Fl.

"Panicula subspicata decomposita lobata."

Polypogon imitans—Ferd. Mueller.

HAB. Darebin Creek.

Fl.

Stipa semibarbata—R. Brown.

HAB. Near Brighton and the Yarra.

Fl.

"Aristis a basi ad geniculum plumosis; supra nudis, perianthiis sericeis, glumis coloratis scabriusculis."

Stipa flavescens—Labillardière.

HAB. In sterile places, not uncommon.

Fl.

"Aristis nudis perianthiis pubescentibus, glumis setaceo-acuminatis, foliis involutis, geniculis vaginisque inferioribus pubescentibus, ligula brevissima ciliata."

Stipa macrantha—Cavanilles.

HAB. On mountains near Wilson's Promontory, particularly in granite rocks, and near the Loddon.

Fl.

"Aristis nudis, perianthiis glabris subsessilibus, glumis mucronatis, panicula effusa, culmo ramoso vaginisque lævibus, foliis planiusculis scabris."

*Avena fatua—Linné.

HAB. Generally in cultivated places.

Fl.

The "wild oat:" too well known to need any description.

Vulpia ——.

HAB. Lonsdale Street, Melbourne.

Fl. February.

We found a single plant growing in the above locality in 1853, but cannot decide the species with any accuracy.

Glyceria fluitans—R. Brown.

HAB. Bacchus Marsh, Black Forest, Deep Creek, Loddon, and lagoons near the Plenty.

Fl.

*Dactylis glomerata—Linné.

HAB. Waysides.

Fl.

"Cock's-foot grass."

Eragrostis parviflora—Trinius.

HAB. King's River.

Fl.

Poa Australis—R. Brown.

HAB. Often in elevated places.

Fl.

"Panicula effusa v. subcoarctata, spiculis 5, 6, floris lanceolatis, glumis scabris, perianthii valvula exteriori basi lanata, foliis setaceo-involutis scabris; ligula brevissima, culmis cæspitosis."

*Poa annua—Linné.

HAB. Waste places.

Fl.

"Annual meadow grass."

"Spiculis ovatis, 5 floris."

*Briza minor—Linné.

HAB. Waste and cultivated places.

Fl. October.

"Lesser quaking-grass."

"Spiculis triangularibus, 7 floris."

Arundo Phragmites—R. Brown.

HAB. Banks of Yarra.

Fl.

"Gluma multiflora, bivalvis."

Cynodon Dactylon—Richard.

HAB. Meadows near the river Ovens.

Fl.

"Spicis 3–5 digitatis, perianthiis glabris subciliatis gluma longioribus, setula imberbi ad basin valvulæ interioris."

Chloris truncata—R. Brown.

HAB. In moist grassy places near St. Kilda.

Fl.

"Spicis 6–8 digitatis divaricatis, glumis bifloris subulatis, perianthiis truncatis compressis glabris, arista valvulam bis superante."

*Phalaris minor—Retz.

HAB. Waste and cultivated places.

Fl.

"Small canary grass."

*Alopecurus geniculatus—Linné.

HAB. Moist places.

Fl.

"Floating fox-tail grass."

Anthistiria Australis—R. Brown.

HAB. Common.

Fl. October.

"Kangaroo grass."

"Glumis involucrisque imberbibus strigisve paucissimis, foliis vaginisque glabris, culmo tereti."

Tetrarrhena acuminata—R. Brown.

HAB. Goulburn River.

Fl.

"Floribus glabris, perianthiis nervosis; exteriore acuto; valvula altera interiori parum breviori; altera longiori acuminata, foliis vaginisque glabris, culmo ramoso.

*Lolium perenne—Linné.

HAB. Cultivated places, etc.

Fl.

"Common Rye-grass." "Red darnel."

*Lolium temulentum—Linné.

HAB. Generally in cultivated land.

Fl.

"The bearded darnel."

Seeds said to cause intoxication.

*Hordeum murinum—Linné.

HAB. On walls and waysides.

Fl.

"Wall barley," "way bennet."

*Holcus lanatus—Linné.

HAB. Grassy places.

Fl.

"Meadowsoft grass."

ACOTYLEDONEÆ.

[PLANTS which have no flowers, but are multiplied by spores, which answer the same purpose as seeds.]

FILICES, JUSSIEU.

Notholœna distans—R. Brown.

HAB. Delatite.

Fr.

"Frondibus bipinnatis lineari-lanceolatis setoso-hirsutissimis, foliolis oppositis deltoidibus distantibus, pinnulis oblongis; inferioribus incisis, rachi stipiteque setosis."—R. Brown's "Prodromus," p. 2 (146:)

Grammitis Australis—R. Brown.

HAB.

Fr.

"Frondibus linearibus vel lanceolato-linearibus obtusiusculis integris glabris; marginibus simplicibus."—*Prodromus*, p. 2 (146.)

Polypodium Billardierii—R. Brown.

HAB.

Fr.

"Frondibus integerrimis pinnatifidisque glabris coriaceis lanceolatis; margine incrassatis; venis anastomozantibus, soris solitariis subsaccatis, surculo squamoso radicante."—*Prodromus*, p. 3 (147.)

(Name from *poly*, many, and *pous*, a foot—referring to the foot-like divisions of the caudex.)

Aspidium proliferum—R. Brown.

HAB.

Fr.

"Frondibus bipinnatis apice proliferis, pinnulis ovato-oblongis glabris crenatis incisisve; inferioribus basi pinnatifidis lobulo antico dilatato obtuso, stipete rachique scarioso-squamosis; squamulis setaceis basi dilitata fimbriata."—*Prodromus*, p. 3 (147.)

Asplenium flabellifolium—Cavanilles.

HAB. Rocky situations near the Yarra.

Fr. January.

"Fan-shaped spleenwort."

"Frondibus pinnatis, pinnis orbiculato-rhombeis antice crenato-dentatis, rachi lævi apice filiformi nudo radicante."—*Prodromus*, p. 6 (150.)

Asplenium obtusatum—Forster.

HAB. Shady situations near springs, Buffalo Ranges.

Fr.

"Frondibus pinnatis coriaceis, pinnis oblongis *obtusis* acutiusculisve grosse serratis basi subattenuatis, rachi marginata."—*Prodromus*, p. 6 (150.)

(Name from *asplenon*, some species having probably been used as a cure for spleen.)

Blechnum striatum—Swartz.

HAB.

Fr.

"Frondibus pinnatis lanceolatis, pinnis lineari-ensiformibus acutis *serrulatis* opacis *venoso-striatis;* inferioribus suboppositis, rachi nuda, stipite semitereti."—*Prodromus*, p. 8 (152.)

{Stegania procera.
{Lomaria ———. Sprengel.

HAB. Banks of the Yarra.

Fr.

"Frondibus pinnatis oblongo-ellipticis, pinnis sterilibus lanceolato-ensiformibus acuminatis serratis basi subcordatis, fertilibus (ejusdem vel diversæ frondis) linearibus; costa subtus paleacea, involucris sub-intramarginalibus."—*Prodromus*, p. 9 (153.)

Pteris esculenta—Forster.

HAB. Common everywhere.

Fr.

This fern needs no description, it is the common bracken of the colony. Mr. Backhouse, in speaking of the root, says, "Pigs feed upon this root, where it has been turned up by the plough, and in sandy soils they will themselves turn up the earth in search of it. The aborigines roast it in the ashes, peel off its black skin with their teeth, and eat it with their roasted kangaroos, and in the same manner as Europeans eat bread."

(Name from *pteron*, a wing—probably from the expanded appearance which this fern presents.)

Adiantum assimile—Swartz.

HAB. Abundant on the banks of the Yarra, and in shrubby places about Warrnambool.

Fr. January.

This, the most elegant of our native ferns, will be at once recognised from its similarity to the *Adiantum capillus-veneris*, or "true maiden's hair," so rare in England. Whether our plant possesses the extraordinary virtues which are attributed to it we know not, but it is a gem in every way; and we recommend it to our fair readers as a great improvement, intermingled with a white rosebud, on the trashy artificial flowers so commonly worn in the hair.

Cheilanthes tenuifolia—Swartz.

HAB. Rocky places on the Yarra, and near Saltwater River.

Fr.

"Frondibus subtripinnatis glabris, pinnulis oblongis incisis pinnatifidisve soris confluentibus."—*Prodromus*, p. 12 (156.)

Trichomanes venosum—R. Brown.

HAB. Gipps Land.

Fr.

"Frondibus pinnatis, pinnis linearibus venosis crenato repandis; inferioribus basi lobatis vel pinnatifidis intusque unifloris."—*Prodromus*, p. 15 (159.)

(Name derived from *trichos*, a hair, and *mania*, excess—in allusion to the exserted hair-like receptacles. "Receptaculo capsularum plerumque exserto, elongato.)

Hymenophyllum nitens—R. Brown.

HAB.

Fr.

"Frondibus tripinnatifidis lanceolatis glabris, laciniis linearibus obtusis subemarginatis integris, involucris terminalibus, valvis oblate orbicularibus." —*Prodromus*, p. 15 (159.)

(Name from *hymen*, a membrane, and *phyllon*, a leaf—from the membranous character of the fronds.)

Gleichenia microphylla—R. Brown.

HAB. Bunyip Creek.

Fr. April.

"Frondibus dichotomis, divaricatis, ramis pinnatis, pinnis pinnatifidis glabris lobis subrotundis margine recurvis, capsulis 3–4 exsertis, rachibus hirtis." *Prodromus*, p. 17 (161.)

Ophioglossum gramineum—Willdenow.

HAB. Near Prahran.

Fr.

We are indebted to our friend, Mr Carl Wilhelmi, for numerous specimens of this elegant and minute species (one to two inches), which he found in swampy ground in the above locality. Those of our readers who are familiar with the "common adder's tongue" *(O. vulgatum)*, which, according to Gerard, "yeelds a balsame for greene wounds," will have no difficulty in determining this plant.

(Name from *ophios*, a serpent, and *glossa*, a tongue—from the resemblance which the fertile fronds bears to the tongue of that reptile.)

Gleichenia dicarpa—R. Brown.

HAB. Buffalo Ranges.

Fr.

"Frondibus dichotomis, ramis pinnatis, pinnis pinnatifidis, lobis orbiculatis subtus concavis latoque margine cinctis, capsulis binis, rachibus pubes, centibus."—*Prodromus*, p. 17 (161.)

Schizæa fistulosa—Labillardière.

HAB. Gipps Land.

Fr.

"Frondibus indivisis teretiusculis antice sulcatis, appendice pinnata sub 12 juga, involucris citiato-laceris."—*Prodromus*, p. 18 (162.)

Schizæa bifida—Swartz.

HAB.

Fr.

"Frondibus sterilibus dichotomis, fertilibus bifidis v. semel dichotomis asperis, appendicibus 10-16 jugis adscendentibus, involucris crinitis."

Botrychium Australe—R. Brown.

HAB. In swampy ground near Richmond.

Fr.

The only specimen of this plant found in Victoria, we discovered in August, 1853, in the above locality; and, although we repeatedly explored the neighbourhood with much diligence, could never obtain a second.

"Scapo subradicali, fronde ternata, foliolis bipinnatis, pinnulis confluentibus incisis."—*Prodromus*, p. 20 (164.)

MARSILLEACEÆ, R. BROWN.

Azolla pinnata—R. Brown.

HAB. Goulburn River.

Fr.

"Fronde circumscriptione triangulari pinnata, foliolis superioribus papulosis, radicibus longitudinaliter plumosis."—*Prodromus*, p. 23 (161.)

Azolla rubra—R. Brown.

HAB. On a swamp near Gardiner's Creek, Botanic Gardens, Melbourne, Merri River, Warrnambool.

"Fronde circumscriptione orbiculata, lobis palmatis lobulis indivisis bifidisve foliolis superioribus lævibus, radicibus extra medium plumosis."

Very small plants, swimming on the surface of the water, covering it as with velvet. Very like Jungermannia.

Hannaford, Samuel
JOTTINGS IN AUSTRALIA

Name	Date	Name	Date