

W. R. GUILFOYLE, F.L.S.
Director, Botanic Gardens

Melbourne Botanic and Domain Gardens, Victoria.

ANNUAL REPORT

ON THE

MELBOURNE BOTANIC GARDENS.

BY

W. R. GUILFOYLE, F.L.S., C.M.R.B.S., LONDON,

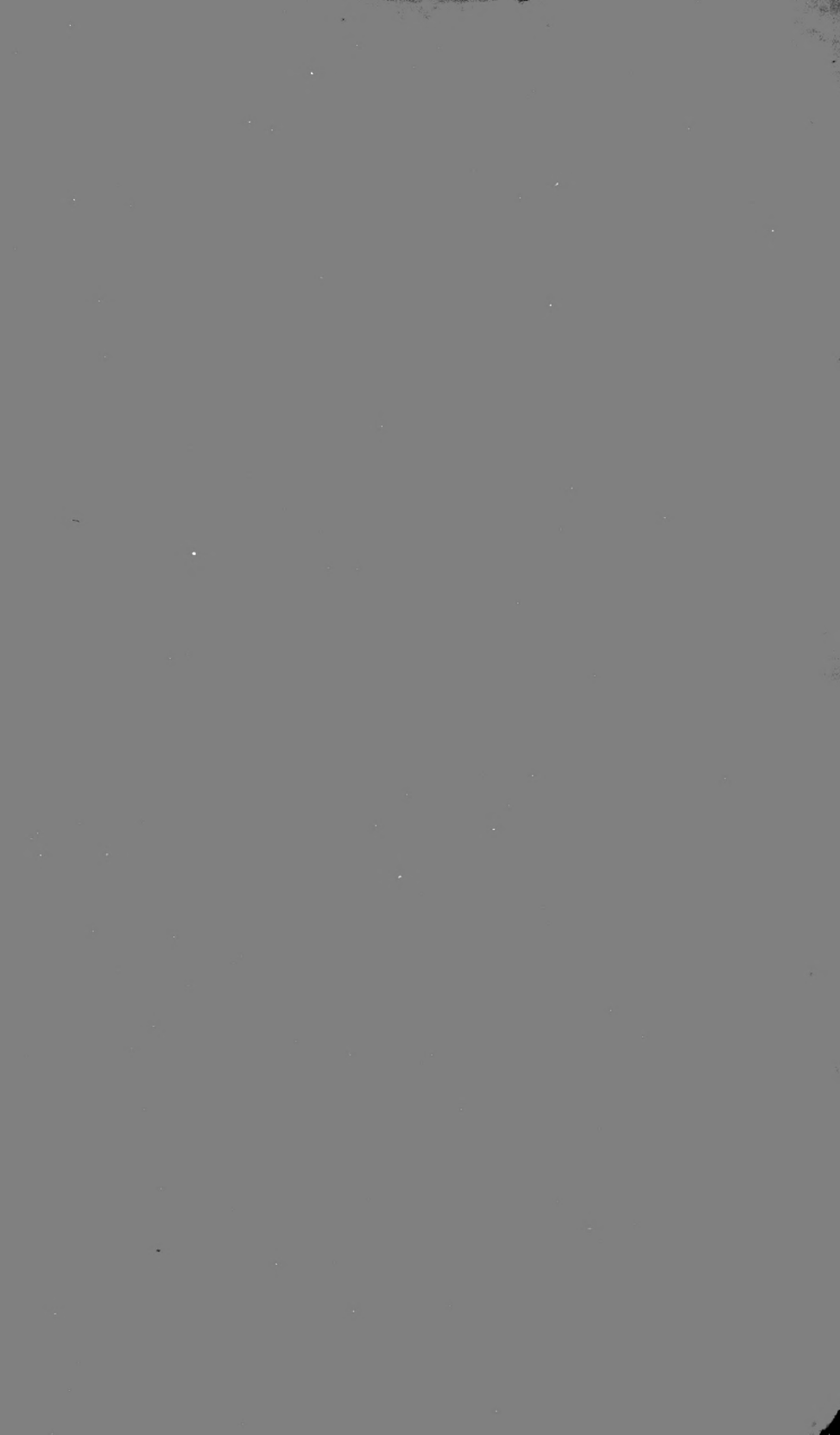
DIRECTOR.

WITH PLAN OF THE GARDEN.

MELBOURNE:

BY AUTHORITY GEORGE SKINNER, ACTING GOVERNMENT PRINTER.

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ANNUAL REPORT

OF THE DIRECTOR OF THE

BOTANIC AND DOMAIN GARDENS, MELBOURNE.

TO THE HONORABLE JAMES JOSEPH CASEY, M.P., MINISTER OF
LANDS AND AGRICULTURE, ETC., ETC.

SIR,

In the Botanic Gardens during the year some important steps were taken in advancing my plan for the general laying out of the grounds; and the production of landscape effect; such as the effacing of narrow and useless walks, the substitution of broad sweeping ones in their stead, formation of lawns, transplanting of trees, clearing the Lagoon, and other necessary works.

During the year there were introduced into the Botanic Garden 1,122 new species and 1,272 new varieties of plants.

The islands in the Lagoon near Princes Bridge were planted with trees and sown with grass seed early in the year.

These islands have not been formed after the style which I think objects of the kind should have in such a sheet of water—they are too flat, and far too numerous. However I did the best I could with them so far as planting was concerned. They were attended to periodically throughout the year. I have again to acknowledge the courtesy of the Colonel Commandant in giving me the use of the pontoon raft to convey very large trees to the islands. *Ceanothus*, *Pittosporum*, *Buddleia*, *Laurustinus*, *Cupressus*, *Dracæna*, *Arundo donax*, *Gynerium*, *Pinus*, *Poplars*, *Agave*, *Araucaria*, &c., &c., were also suitably planted on them. The Fern Gully in the Botanic Garden made great progress during the year. On one of the Lake islands a number of redundant cypresses, which marred the view, were removed, *Dracenas*, *Gynerium*, &c., being substituted. *Aralia papyrifera*, *Aloc arborescens*, *Dracæna*, &c., were removed from other portions of the Garden, and placed in groups in various parts of the ground. A number of choice ferns from New Zealand and the State Nursery at Mount Macedon were also planted. A new walk branching towards the Fern Gully, was laid out, the lawns round the Director's house completed and planted with *Azaleas*,

Camellias, and other choice shrubs. These were placed in this enclosure for protection, to be propagated extensively for the decoration of other parts of the ground. The new borders received large numbers of flowering plants—Chrysanthemums, Pelargoniums, Oxalis, Mesembryanthemums, Lantanas, and bulbs—the latter such as Amaryllis, Narcissus, Nerine, Ixia, Iris, &c. In the Fern Gully two large specimens of Ficus, 20 feet high, were placed; a Loquat 8 feet high; a Balfouria, 25 feet; Gleditschias and Ailanthus, 25 feet, and other large trees, to shade the ferns. Early in August the new collection of camellias in pots was planted out. The botanical collection including many hundred species of dried plants, carpological specimens, &c., was formed. It is being continually added to, and will ultimately prove exceedingly useful for reference. A new walk at the back of the Fern Gully was made; and spaces cut through the Melaleuca scrub, to afford glimpses of the Lake scenery. A temporary strip of ground for a collection of grasses was prepared and planted, the grasses being duly labelled.

In December the rose stocks in the Garden were budded, and an Amaryllidaceous bed was formed and planted. From Bishopscourt, 1,093 plants were received, having been purchased by the Public Works Department some time previously. Throughout the warm weather, every attention was paid to maintain an effective floral display in the Gardens; in fact, this was done throughout the year as far as possible, a succession of bloom suitable to the seasons being kept up, the roses at this time receiving special attention, while the annuals and other flowering shrubs were very plentiful. Lawns and groups were in many places substituted for long formal beds, containing dry, poor soil; and large quantities of earth, were carted to improve the condition of the beds. The soil of the Palm House Lawn is very poor and I intend this season to topdress it with rich mould to make the grass exuberant in growth.

In the Domain, large trees were planted, and drained by cutting long open drains in the stiff clay, the rockery planted with Agave, Aloe, Gasteria, Sedum, Mesembryanthemum, and other suitable plants.

The Rhododendrons from the American Garden were removed to the nurseries in the Botanic Garden. Many large trees—Pinus, Araucaria and Cupressus, were transplanted from the Botanic Garden; new walks were formed; the planting of the Fern Gully in the private grounds continued, and the pruning in the orchard accomplished. About 60 elms were planted along the edge of the Domain, next the St. Kilda Road, Palms, &c., were also planted, with other miscellaneous plants suitable for effective grouping. Much danger was caused during the

hot weather by thoughtless persons smoking, the long grass being like tinder, and great probability existing of fires being caused whereby valuable trees, the growth of years, might be scorched and destroyed in a few minutes. This is a matter which necessitates extreme vigilance. A walk was marked out leading from the house formerly occupied by General Clute; the Domain nursery was extended and trenched, and will be further extended, as I require the space, for hardy trees, and shrubs to ornament Government House Gardens.

The back road and approaches to the Government House, carriage stand, stables, &c., were lined out, and buffalo grass planted along the walk encircling the lawn in front of it. A large quantity of plants have from time to time been lent from the Gardens for exhibition at the various horticultural shows; but I regret to say, the knocking about they receive in most cases takes a long time to repair, thus depriving the public of the display they have a right to expect. It would be a good plan if a space of ground were available in the Garden for shows of this kind to be held, as it would be the only remedy for the evil complained of. Having given above an outline of the work performed in the Botanic and Domain Gardens during the year, I subjoin some general remarks on the progress made.

The incidents occurring, and the ideas suggested, during the working management of these grounds for the past year were of course very numerous. A thorough system of drainage having been carried out in the Botanic Garden, its beneficial effect on plants previously suffering from excessive moisture was markedly apparent. Trees, when planted in stiff clay soils—as I fear is the case with the subsoil of our Botanic Garden, and many parts of the Domain also—are liable to have their growth retarded, if they are not altogether killed; from the fact that the soil not being porous, the moisture given cannot escape, and therefore becomes stagnant. Hence my first step was to thoroughly drain the Garden, the superfluous water being conveyed by drainage into the Lagoon. This sheet of water has been cleared and kept free from weeds, and now presents an attractive appearance. The water-fowl on it are doing well; five eygnets, recently hatched on one of the islands, are all thriving. The gold fish are largely preyed upon by the cormorants; the Mayor of Melbourne having kindly given permission for the use of firearms, numbers of these rapacious birds were shot, but this seemed only to encourage others to fill the places of the defunct. The scenery around the lagoon has been materially improved by planting trees, especially those of pendulous, weeping habit, on its banks.

The point of commencement selected by me to carry out the remodelling of the Garden was the part immediately surrounding the Director's house, and therefore well watched. This ground was then enclosed, and choice camellias, azaleas, &c., thus protected from the attacks of larrikins. Previously, there were only two varieties of camellia in the Garden; we have now eighty of the choicest sorts. My intention is to keep down the buds until the plants attain a good size. A large number of new azaleas and roses have also been planted. This portion of the Garden is now complete, showing broad lawns, thickly clothed with verdant grass, interspersed with varied picturesque groups, single specimens, and clumps of trees, and beds of brilliant flowers. This, as a finished portion of the design (of course allowing time for the plants to come to maturity) affords some idea of the intended general effect; and has attracted great attention from the public. The proportion of visitors during the past year has been greatly in excess of the previous one; and from the notice generally taken of the alterations and the show of plants and flowers, it is evident that public interest in the progress of the Garden has much increased. I trust that this will continue; and that the grounds will not only prove useful to the botanical student, but also become a favourite "lung of Melbourne" for those interested in beautiful scenery simply for its attractions.

Much was accomplished near the Director's house during the year in forming an entrance to the grounds by a broad, sweeping walk, which in its curvatures gives shape to a triangular bed of dwarf shrubs, in no way obstructing the view afforded of the spacious and picturesque sheet of water which is the grand feature of the Garden. Immediately below this bed a gently sloping lawn, descending to the edge of the Lagoon is being substituted for the narrow walks which in this part formerly crossed each other, and upon the sides of which grew so many common indigenous trees plentifully represented in other portions of the grounds. In this spot formerly stood the emu pens and monkey cages.

Before commencing to obliterate these walks, I began to form groups in which tropical and sub-tropical plants will eventually be the prominent features. Through these, dispersed with a view to landscape effect, glimpses will be afforded of the clear lake, studded with islands, the careful plantation of which will materially add to the diversity and charm of the landscape. On this lawn I am endeavouring to imitate as much as possible natural tropical scenery. Most people will agree with me that it is far easier to lay out a *new* garden than to remodel one in which blunders have been made, not only in the general laying out but

in the planting of trees and shrubs. It should always I think be the aim of those in charge of public gardens—not to reproduce vegetation which may be seen in other portions of such gardens—but to bring before the public, in special spots scenes of beauty not to be found elsewhere, by representing plants of a different character to those more or less common to the locality. Thus, on the lawn previously mentioned I have partly created groups of scenery which being uncommon will add to the attractions of the Garden. The iron fence at present round this lawn is merely a temporary one to prevent people walking over the ground until the buffalo grass with which it is being planted has time to spread and form a good sward.

In my first report I mentioned this grass as splendidly adapted for edgings and lawns, and a visit to the Garden will prove that no other grass can excel—even if it can equal—the buffalo grass in clothing the surface on which it is planted for ornamental purposes.

I intend making a good display (when means are available) upon that portion of the Garden known as the Melaleuca Scrub, on the north-eastern side, near the Botanical Bridge. This is an eligible spot for such plants as Magnolias, Azaleas, Rhododendrons, Camellias, Ericas, Arbutus, Palms, Cycads, tree ferns, Hydrangeas and a host of others. It can be rendered one of the most attractive portions of the grounds. From here by a little art the lake surrounding it might be made to represent a beautifully winding river; and glimpses might be occasionally had of the higher parts of the Garden.

On the lawn near the Palm house, I am planting specimens of vegetation of the more temperate zone, such as numerous species of *Abies* (single specimens), many Pines, species of Oak, Poplar, Plane, Ash, Larch, Elm, Chestnut, Walnut, Beech, Holly, &c., &c., which cannot fail to prove interesting to the large number of visitors in whose recollections of "Home" these trees will find a familiar place. To pass gradually from the sub-tropical into the more temperate zone is in my opinion one of the chief objects to be kept in view in creating a public Botanic Garden. I am also adopting a rule of placing various species of any particular genus—such for instance as the *Berberis*, *Veronica*, *Salvia*, *Bouvardia*, &c., &c., in order one after the other, so that the visitor who may take an interest in knowing or learning the names and nature of the kinds of any particular tribe may see them at a glance. I intend creating a *Palmetum* at the head of the fern gully, as the spot chosen will not only be suitable, being sheltered, but appropriate in carrying out the idea of changing the character of the vegetation in

various parts of the Garden. At the same time, I have already paid considerable attention during the past year to the cultivation of this most interesting and charming tribe of plants, with which I have long been associated in the course of my travels in the tropics. There are few of these graceful plants to be met with in the public gardens of this city; and yet a great many kinds would thrive here quite as well as in the other colonies. In order that I might the more readily naturalise here our Australian beautiful kinds—the *Livistonia* or *Corypha Australis*, and *Seaforthia elegans* (two species which are found far north in Queensland as well as in the cooler clime of Illawarra, 50 or 60 miles south of Sydney), I introduced a quantity of seeds from the latter locality, and they have germinated freely. We have now some hundreds of nice plants, which shall be liberally used in the decoration of the Government House grounds as well as the Botanic Garden. The lifting of large trees at certain seasons has generally been looked upon as a great mistake. Many opinions have been expressed to me that to lift a large tree say 35 or 40 feet in height—is utterly impossible in this colony. When doing so in these gardens during the past year, I have often been told that they would perish. I need only instance the fact that large Norfolk Island pines, *Bunya Bunya*, *Pinus insignis*, *Cupressus macrocarpa*, *Brachychiton populneum*, *B. Acerifolium*, *Cordylines*, and many others, averaging from 20 to 30 feet in height, have been lifted with perfect success during a season hitherto generally considered unfavorable for such operations. In my opinion, and it has been the secret of my success—in such a changeable climate as this, when a plant is suddenly forced into active growth, and this growth is observed in its commencement the evergreen and even the deciduous plant, may be lifted if due precautions are taken in digging far enough away from the tree, so as to preserve the numerous fibrous roots which are the principal feeders of the tree. This can only be accomplished by carefully combing them out of the soil with a fork; and when close to the larger roots of the plant, leaving sufficient soil to preserve them, working carefully under them, transporting them with caution to their destined place on a two-wheeled truck, and, when replanting, spreading out the fibrous roots, and staying the tree. They will not be retarded in growth in the slightest degree. In the Botanic Gardens and the Domain also are ample proofs of the correctness of this theory. Hence it appears that the formal rows of *Araucarias*, *Cunninghami*, *excelsa*, and *Bidwilli*, *Pinus Halipensis*, *Cupressus*, and many others, which now stretch across that portion of the Botanic Garden towards Government

House, large though they are, can be removed to other parts of the grounds, thus enabling me to make the place upon which they are growing a picturesque and valuable Pinetum, sufficiently large indeed to admit of grouping in their proper order the extensive collection of coniferous plants obtained from Victorian nurserymen during the past year. This spot, on account of its height, would be very appropriate for the purpose; it overlooks the greater portion of the Garden. Many plants of considerable size were lifted from December, 1874, to March, 1875, and placed in suitable spots; all are now flourishing. In all, 832 fine specimens were thus transplanted, and the loss only amounted to about one in every 140, thus dealt with.

The Band Stand still remains on the Palm House Lawn, but I would decidedly reiterate my former opinion, that it should be placed upon the edge of the Lagoon, or on a promontory jutting from it, where the acoustics would be so favorable as to convey the music to all parts of the Garden. The Palm House is in a very bad condition, liable to be blown down by the first heavy gale. The valuable plants it contains afford a reason for remedying this at once. A design (in the preparation of which Mr. S. H. Merrett of the Public Works Department took the principal share in his spare hours) is in the hands of that department; I consider it about the most suitable one to meet the occasion and if carried out would be a source of great attraction to the public as from its size and the way in which it has been planned the large collection of choice tropical plants would be shown to great advantage.

An exceedingly large number of plants have been added to the Botanic Garden collection during the past year. Many of them have been known for years in the nurseries of this city and also in private collections. It was of course advisable to add these to our collection. Others are quite new and have been purchased from various nurserymen. In addition to the plants thus purchased, I have to thank all the Victorian nurserymen for their extreme kindness in affording me every opportunity of selecting plants and seeds gratuitously. A large and valuable collection was thus obtained. I am also greatly indebted to Mr. A. R. Wallis Secretary for Agriculture for valuable assistance rendered me in obtaining plants and seeds from India and America and to Professor Wyville Thomson Chief of the Scientific Staff attached to H. M. S. *Challenger's* expedition. To the latter I am also indebted for a large and valuable collection of seeds and plants from Kerguelen's Land. Mr. D. Sullivan of Moyston also must be specially mentioned for the kindness he has always shown in collecting and sending the

seeds and plants of his district. Mr. McBirnie of the Industrial Museum kindly gave me three cuttings of the shellac plant (*Ficus religiosa*) which I have been able to multiply. This valuable substance (Shellac) is in India obtained from many plants, and locality favouring production there more in one plant than another, we may yet be able to find some tree in this colony upon which the lac insect would thrive much better than on any of those highly tropical trees. The successful introduction of this insect into the warmer parts of Victoria, New South Wales and the other colonies, would result in the production of a most important article of commerce, and the experiment is well worth trying. I would offer the suggestion to the notice of the Acclimatisation Society. I do not think the attempt has ever yet been made in any of the Australian Colonies. As it is well known that the lac insect does not confine itself to the *Ficus religiosa* but thrives on many other trees, it is certainly advisable to make the attempt, for if but one species of tree could be discovered suitable to its habits a valuable industry would be created. For instance the State Forests of Victoria might be utilised in a large degree by the introduction of even such an atom as this insect.

The piece of ground known as the Botanic Gardens reserve and intended to be used as a cow paddock for Government House has been added to the Garden proper. It consists of thirty acres and the Garden would never be complete without it. A proper experimental ground upon a *large* scale, for the purpose of growing or acclimatising useful plants for distribution amongst those colonists who would be glad to cultivate them will thus be provided for. Another spot in the Domain can easily be selected for a cow paddock. This annexation will admit of handsome entrances to the Botanic Garden from the South Yarra drive one from Park and Millswyn streets one from Anderson street and another nearly opposite to the botanical Museum near the Observatory. At the latter entrance I have placed "pro tem" the Director's office. The two rooms formerly used for the purpose in my private residence left me insufficient accommodation for domestic purposes. The permanent office however should be either central or at one of the principal entrances easily accessible to the public; and when practicable it would be highly desirable to add to it a free botanical library and museum of dried plants Carpological specimens &c., for the use of the public.

It is necessary that a fence should be erected along the bank of the Yarra to prevent larrikins from entering the Gardens at forbidden times and when practicable it will be advisable to have lodges built at all the entrances to the Garden.

I have handed in with this year's estimates an item of £200 which I trust will be granted for the erection of two summer houses in the Garden. These are not only required for shelter in case of rain but can be made highly ornamental, being constructed of rustic work, with thatched roofs. A necessary step is the erection of drinking fountains in the grounds. In hot weather it is distressing to visitors to be unable to obtain a drink of pure water. In Fitzroy Gardens the Yan Yean is laid on, but here it has been cut off for some time; and the grounds are supplied by a six horsepower engine which pumps up from the Yarra, water of a decidedly inferior quality. I trust that as soon as the new Reservoir now approaching completion, is finished the trouble I have had in being forced to use water carts will be at an end.

With respect to labelling the plants it has always been a difficulty with Botanical Directors, the wear and tear involving continual trouble and expense. Dr. Schomburgk Director of the Adelaide Botanic Garden, has had a system in operation since 1871 which his experience induces him to pronounce successful, and I contemplate employing it here, as it is a well known fact that white labels distributed over the ground have an incongruous and displeasing appearance. The label should not be perceptible until the visitor closely approaches the plant. To carry out the system effectually, a special vote would be necessary, but once accomplished there would be a considerable saving in future.

The new Catalogue is approaching completion, but my incessant occupation out of doors prevents me from giving that time to it which I would desire, however, as it will be the first of its kind produced here, and as I am adding largely to the contents of the Garden (as will be seen by the annexed list), and assigning common names to almost all plants, in order that non-scientific people may have a plain guide, I wish to make it as perfect as possible. With that object I am devoting to it my spare time after the day's labor is over. From the same cause I have been unable to give that attention to the rockeries I originally intended; the fact being that finding, after repeated trials, the foreman appointed by me so utterly incapable as to be unable to realise the effect ultimately to be produced, I determined—rather than have the intended design spoiled by unskilful hands—personally to superintend the work, at all events until I am enabled to select a man in whom I can place implicit confidence to faithfully carry out my plans. My late foreman during my confinement to the house for some days through severe illness, displayed a glaring want of taste by erecting a pile of stone far more resembling the great wall of China than a natural looking rockery. I was obliged

to have the unsightly mass pulled down on my recovery; and even at the present time my hands retain traces of severe bruises received while practically showing how the rocks should be placed. Besides this sort of thing there is a large amount of correspondence to answer daily, from persons writing as to the habits and culture of plants, which I am compelled to attend to. The frequent cases of insubordination which occurred during the past year, point to the fact that unless proper control is given, it is in vain to expect discipline. Any man who considers himself harshly or unjustly treated, has always the power of appeal, but so long as the staff are not immediately responsible to the head of the branch the matter becomes serious, especially where neglect or ignorance may cause the loss of valuable plants, some perhaps scarcely to be replaced. The best way to secure proper service would be to leave with the Director the selection and responsibility of his staff. Such is the rule adopted in all other Botanic Gardens.

The bridge over the lagoon near the Fern Gully should, as mentioned in my last annual report be an arched rustic one faced with rock work, to be in keeping with the surroundings. The fern gully is now one of the attractions of the Garden, and it is gratifying to learn from the remarks of the visitors that the prognostications made at its commencement that it would be a failure have proved incorrect in public opinion. The shade afforded the ferns by the transplanted large trees have greatly aided their development, and the spot is now much frequented by visitors to the Garden.

At the close of this report I have given an amended code of regulations for the safe keeping of the Gardens, which I trust will be adopted. They are almost identical with those now in force in the Botanic Gardens of Sydney Adelaide and Brisbane. Rule 1, for instance, would be a decided improvement. Smoking in the Garden is often a source of annoyance. Larrikins puffing their clouds of smoke into ladies' faces is at present a great nuisance, and one often complained of.

Work requires to be pushed on vigorously in the Domain, to make the construction of the private grounds keep pace with the completion of Government House. Until the crest of the hill fronting the house has been removed by the Public Works Department it will be impossible to form the lawn. This work however is now in progress.

An extra sum of money is needed for other improvements in the Domain. The soil in some places is naturally poor, a large amount of labour is necessary; lifting large trees to suitable spots necessitates very heavy work; and the same remark applies to the large quantities of gravel required for walks &c.

When the top of this hill has been removed so that the lawn can be formed and the approaches to the house are complete—which I hope will be the case in the course of six months—I shall then be enabled to make the lawn of buffalo grass, and to arrange the groups and single specimens. There is an abundance of material in the way of plants, specially provided such as they are, propagated from those in the Garden which can be made ready at a moment's notice. In the propagating department, I have endeavoured to multiply all of those ornamental trees and shrubs which will be of use for the Domain and Governor's grounds. Besides these I have saved (by taking up from that portion of the Botanic Gardens near the lagoon previously alluded to where the lawn is being formed) the superfluous shrubs and trees, and planting them in rows ready for use. Nothing has therefore been *destroyed*.

I have ploughed a piece of ground in the Domain for the reception of various grasses, which will be planted on a large scale. I have always borne in mind the importance to the colony generally of this experiment, but want of space in the Botanic Garden prevented me from doing more than propagating the different kinds and planting them in rows until more extended space was available. The Botanic Garden reserve to which I have previously alluded will be of invaluable service in this matter. Amongst these grasses "the Buffalo grass" (of which at the time of mentioning it in my first annual report I had but a small quantity) I have now propagated so largely that I could very shortly be able to supply squatters and others with this splendid grass which besides being of highly ornamental appearance is as I previously stated, a first-class fodder grass tenaciously resisting the most trying heat—a very valuable quality in this colony. I remember that when in Brisbane Mr. Lewis A. Bernays the President of the Acclimatisation Society there, pointed out to me the fact that the deer which were then browsing, selected the little strip of Buffalo grass before any other in the paddock and had nibbled it quite down; and I was often told by gentlemen who had received from Mr. Walter Hill Director of the Brisbane Gardens a few patches to put on their runs that the cattle preferred it so much to other grasses, that the difficulty was to propagate it unless in a specially enclosed paddock, as it was fed down to the roots in summer time. Sheep have been known to eat the roots greedily, and thrive on them, when not a blade of grass was to be had. It must be remembered that though the Buffalo grass as seen upon the edgings I am now making presents a very smooth appearance, that even in poor soils where it is not cut, it attains the

height of 18 inches. The broad blades are full of sap and remarkably nutritious. Hence my determination at once to form a collection of grasses in which this one specially valuable alike to the squatter and agriculturalist can be seen attaining its proper height and luxuriance.

The Doub grass (*Cynodon dactylon*) often erroneously called "doob" is a native of Bermuda; and in my opinion ranks next to the Buffalo grass (*Stenotaphrum glabrum*) as a hardy pasture grass for arid climes, though as a lawn grass it is inferior, presenting in the winter a brown and rusty appearance. I can state from experience however in New South Wales and Queensland that where it has been introduced round a station hut, horses and cattle when left to feed as they chose, have collected round it eagerly, refusing the native grasses in luxuriant growth near them so long as a blade of the doub grass remained. As to the nutriment contained in these two grasses, there can be no doubt, as many squatters across the Murray could testify. Respecting their durability the same may be said; as during seasons of excessive drought, when scarcely a blade of them could be seen, so tenacious of life were they that when the weather broke they sprang up in rich luxuriance; and when native grasses were totally destroyed by the drought, these two species were the only ones that withstood it. An active interchange of seeds and plants has been kept up with intercolouial and Foreign Botanic Gardens acclimatisation societies, nursery and seed establishments, from all of which large and valuable additions of choice plants and seeds have been received. The vote (£400) placed at my disposal for 1874-5 has enabled me to purchase from Melbourne and other nurseries many plants entirely new to these Gardens. This vote will I trust be supplemented by successive yearly grants, until the world's flora is fairly represented here.

As I cannot possibly visit many parts of Victoria on account of the large amount of work before me, I hope that means may be available for me to send a qualified collector to places where I believe many new and beautiful plants are to be found. For instance, I understand that Wilson's Promontory and many parts of Gippsland have never been botanically explored, and a visit to those parts would be amply repaid by the new specimens discovered.

Considering the importance of the Philadelphian International Exhibition I have prepared so far as my limited means allowed, a collection of fibres, fancy woods various kinds of paper made from native products, gums resins &c. from indigenous trees for exhibition. I trust that though the notice given is short the woods will be sufficiently seasoned to take the polish they are capable of receiving, and which

will show them to greater advantage. Should the fibres sent prove of mercantile value the fact is sure to be discovered in such a great gathering of practical men from all parts of the world ; in which case our State forests may supply the materials for local industries and exportation. The collection will be as complete as it can be made. Appended is a list of the principal articles already prepared for exhibition. This colony should certainly be worthily represented in its botanical products as, to say the least of it the exchange of valuable specimens would thus be promoted and attention drawn to the resources of Victoria.

A curious circumstance occurred in connection with the operation of clearing the Lagoon. Three species of weeds had completely covered that sheet of water, viz., *Potamogeton obtusifolius*, *Heleocharis spha-celata* and *Triglochin procera*. By the aid of a contrivance I devised consisting of two scythes fixed to two pieces of wood T shaped which was towed round the lagoon at the stern of the boat these weeds were cut and removed. Strange to say another weed (one of the confervæ) which had not been seen in quantity before, then made its appearance and is giving infinitely more trouble than its predecessors. Periodical dragging however with the contrivance above mentioned, keeps the lake clear. This weed is as difficult to eradicate as thistles.

Now that a number of spacious lawns are being created in the Botanic Gardens, the provision of additional seats would be a great boon to the public. They might very easily and cheaply be placed round trees in the fashion adopted in the English Public Parks and Gardens. Remarks are frequently made respecting this want of accommodation especially during the hot weather when people become fatigued with rambling about the grounds.

One of the lawns now forming in the Botanic Garden to add to the scenery, I am so creating, as to render it available, should it ever be deemed necessary as an archery and croquet ground for public use. This will not in the least interfere with the intended use of the lawn as an addition to the landscape.

I have the honor to be, Sir,

Your obedient servant,

WILLIAM R. GUILFOYLE,

Director.

31st May 1875.

A plan of the Botanic Gardens is herewith appended. The *dark lines* throughout show the condition of the grounds when handed over to my charge on July 1st, 1873; the *red lines and markings* define the landscape improvements effected by me since that date, as well as those which are gradually being carried on towards completion.—W. R. G.

REGULATIONS FOR THE CARE, PROTECTION, AND MANAGEMENT
OF THE BOTANICAL AND DOMAIN GARDEN.

WHEREAS by section 108 of *The Land Act* 1869 it is among other things enacted, that the Board of Land and Works shall have power from time to time to make and alter or rescind rules and regulations for the care, protection, and management of all public parks and reserves: Now therefore the said Board of Land and Works, in exercise of the power conferred as aforesaid, doth hereby make the Rules and Regulations following, to be observed and enforced in respect of the Botanical and Domain Garden:—

1. No person shall interfere with the trees, shrubs, flowers, statuary, labels, fountains, fish, or birds therein, or step on the beds, borders, seats, or edges of the grass plots, or engage in any sport or game, or throw stones, or commit any nuisance therein, or leave any bottles, orange peel, paper, cast off clothing, or litter therein, or light fires therein, or smoke, or be in the garden at unauthorized times, or annoy visitors, or convey flowers into the garden, or detain the gardeners by conversation. Visitors shall leave the garden by the nearest path at the time of closing which is notified by the ringing of a bell.

2. No person shall be allowed to climb or jump over the fences therein, or to stick bills on such fences or on the gates, or to cut names, letters, or marks on the trees seats, gates, posts, or fences, or to write thereon.

3. No person shall be allowed to bring any dog into the garden unless led by a chain or cord, or to run any goats or poultry therein.

4. No children under twelve years of age shall be admitted therein unless accompanied by friends or nurses, with whom they shall remain while in the garden.

5. No person shall be allowed to offer for sale any article therein.

6. Unless the Minister of Lands and Agriculture shall otherwise direct, the gates of the Botanic Garden shall be closed during the summer, from 6 o'clock p.m. until 8 o'clock a.m., and in the winter from 5.30 p.m. to 8 a.m. Any person found taking or injuring plants, flowers or fruits, will be summarily removed from the gardens, or proceeded against by law.

7. Entrance into plots of ground specially enclosed for plantations and for other purposes is prohibited.

8. No person shall be permitted to enter or remain in the garden who is not decorously dressed, and no person shall be allowed to commit any act of indecency either by word or action in this garden. The gardens will not be open to the public on Sundays until after the hour of 1 o'clock p.m.

9. If any person offend against any of these rules such person may be forthwith removed from the garden by a bailiff or constable.

Offenders against these regulations shall in accordance with section 108 of the *Land Act* 1869, on conviction before any justice of the peace, forfeit and pay a penalty not exceeding £5 for each offence; and every person who shall knowingly and wilfully offend against any such regulation shall be forthwith apprehended by such Crown lands bailiff or constable, and be taken before such justice of the peace, and shall on conviction, forfeit and pay a penalty not exceeding £10.

LIST OF DONORS.

- Acclimatisation Society, Melbourne. Several vols. Yearly Reports, &c.
Adelaide Botanic Gardens (Dr. Schomburgk). Miscellaneous and select plants.
Adet, Mons., Melbourne. Seeds from New Caledonia.
Agriculture, Department of, Melbourne. Miscellaneous seeds, &c.
Anderson, Hon. R. S., Melbourne. Bulbs, plants, and cuttings.
Archer, W. H., Melbourne. Plants and seeds.
Bacchus, W. H., Peerwurr, near Ballarat. Several species native grasses.
Banks, T., South Yarra. Quantity miscellaneous bulbs.
Barlee, Hon. F. P., Colonial Secretary, West Australia. Some very valuable seeds.
Belharry, Mr., Melbourne. A few plants.
Beveridge, P., French Island, Western Port. Plants and seeds.
Bishop of Melbourne (Dr. Perry). Miscellaneous plants.
Bosisto, J., Richmond. A few seeds.
Bowen, His Excellency Sir Geo., Melbourne. Quantity miscellaneous plants, &c.
Brisbane Acclimatisation Society (L. A. Bernays, Esq.). Plants, seeds, &c., in quantities.
Brisbane Botanic Gardens (W. Hill, Esq.). Plants, seeds, &c., in quantities.
Bright, R., South Yarra. Several tree Ferns from New Zealand.
Brussels Botanic Gardens (Mons. L. Lubbers). Miscellaneous seeds.
Bunning, G., St. Kilda. Many large specimen and other plants, in quantities.
Buitenzorg Botanic Gardens (Dr. Scheffer). Collections of plants and seeds.
Bull, W., Chelsea, London. Plants, seeds, &c., in quantities.
Calcutta Botanic Gardens (Dr. G. King). Miscellaneous Indian seeds in quantities.
Cape Town Botanic Gardens (J. McGibbou, Esq.). Collection South African seeds.
Carter, W., Emerald Hill. Several specimen and other plants.
Casey, Hon. J. J., Melbourne. A quantity of valuable seeds.
Casey, N. J., Melbourne. Some seeds from New Zealand.
Ceylon Botanic Gardens (Dr. G. H. Thwaites). Miscellaneous seeds.
Coe, Miss, Emerald Hill. Some seeds.
Cole, J. C., Richmond. Miscellaneous plants, bulbs, tubers, &c., in quantities.
Collen, Lieut. E. H., Calcutta. Some Indian seeds.
Corbett, E. P., Pietermaritzburgh, Natal. Several large palms, and miscellaneous plants.
Crofts, Miss L., Windsor. A few seeds.
Cummins, Hon. J., Toorak. Buffalo grass.
Damyon, J., Toorak. New Caledonian plants.
Denton, H. P., Adelaide. Some plants, &c.
Du Boulay, F., Melbourne. Miscellaneous seeds from N. West Australia, and some plants.
Duncan, W., Malveru. Seeds and plants.
Edinburgh Botanic Gardens (Professor Balfour). Collections of Miscellaneous and select seeds.
Ferguson, Mrs., Immigration Depôt, Melbourne. Some seeds.
Ferguson, W., Macedon. Ferns and other plants.
Ford, R. D., West Melbourne. Miscellaneous flower seeds
French, C., Botanic Gardens. Plants in quantities, dried specimens, and seeds.

- Geelong Botanic Gardens (W. Raddenberry, Esq.). Specimen and other miscellaneous and select plants.
- Glenn, C., Entally, Tasmania. Tasmanian seeds.
- Goldie, A., New Zealand. Miscellaneous plants.
- Gordon, T. D., Customs, Melbourne. Victorian seeds.
- Greig, J. W., Toorak. Miscellaneous plants, cuttings, &c.
- Guilfoyle, M., Brisbane. Seeds and plants in quantities.
- Guilfoyle, J., Tweed River, New South Wales. Seeds.
- Guilfoyle, J. A., Sydney, New South Wales. Seeds.
- Gulliver, B., Hobart Town. Quantity of *Eucalyptus globulus* seed.
- Haage and Schmidt, Erfurt, Prussia. Very large and valuable lots of seeds, bulbs, tubers, &c.
- Halberstaedter, A., Mt. Brewer, Queensland. Queensland seeds, plants, bulbs, &c., in quantities.
- Hannecke, C. F., Rangetiki, New Zealand. Some New Zealand seeds.
- Harding, J., Mt. Vernon, New Zealand. Miscellaneous New Zealand seeds.
- Harris, J., South Yarra. Miscellaneous plants, in quantities.
- Hartmann, C. H., Toowoomba, Queensland. Queensland ferns and other plants, in quantities.
- Hayes, M., Melbourne. Some New Zealand seeds.
- Henderson, E. G., and Sons, London. Valuable collection of seeds.
- Herbert, W., Ballarat. Miscellaneous plants.
- Hester, T. J., Prahran. Few seeds from West Australia.
- Heyne, E. B., Adelaide. Seeds and plants in quantities.
- Hobart Town Botanic Gardens (F. Abbott, Esq.). Quantity of seeds and plants.
- Hong Kong Botanic Gardens (C. Ford, Esq.). Select China seeds in quantities.
- Hose, Revd. W. C., Tarraville, Gippsland. A choice fern.
- Huber and Co., Ilyères (Var) France. Valuable lots of seeds, bulbs, tubers, &c.
- Independent Church, Trustees of, Collins street, Melbourne. A large and valuable specimen plant.
- Ireland, W., Melbourne. Some plants.
- Jeffries, J., Geelong. Valuable and select plants.
- Johnson, B. and S., Richmond. Select miscellaneous plants in quantities.
- Johnson, Thomas, Hawthorn. Rose plants.
- Kew Royal Botanic Gardens, London (Dr. J. D. Hooker). Valuable and select collections of seeds.
- Kilner, F., Rockhampton, Queensland. Several collections of Queensland seeds and plants.
- Knight, J. G., Palmerston, N. Australia. Some orchids.
- Krone, Herr J., German Scientific Expedition. Some miscellaneous ferns and other plants from Auckland Islands.
- Lahore, Agri-Horticultural Society of. Collection of Indian seeds.
- Lang, T. and Co., Melbourne. Select plants in quantities.
- Law, Somner and Co., Melbourne. Fine collection of *gladiolus* bulbs.
- Lucas, R., Colac. Miscellaneous ferns.
- Mallett, D., South Yarra. Some select plants.
- McMillan, Dr. Ths., Melbourne. Miscellaneous and select seeds.
- McMillan, J. R., Richmond. Miscellaneous seeds.
- McMillan, T., Prahran. Miscellaneous and select seeds.

- McKenzie, W., Deniliquin, N. S. W. Seeds of native plants.
- McBurnie, Mr., Melbourne. Cuttings of *Ficus religiosa*.
- Miller, Hon. H. (per his gardener, Mr. Boyce), Kew, Melbourne. Several fine specimen and other plants.
- Miller, F. A. (Miller and Sievers), San Francisco, California. Miscellaneous and choice American seeds.
- Milton, J. B., East Melbourne. Quantity of cuttings.
- Moran, H., South Yarra. Miscellaneous plants and cuttings.
- Mueller, Baron Von, Government Botanist. Several collections of miscellaneous seeds.
- Natal Botanic Gardens. Several large palms.
- Poolman, F. (Sugar Works), Sandridge. Baskets for plant protection, &c.
- Powers, Rutherford and Co., Melbourne. Seeds and specimens of native plants.
- Robertson, Mr. (J.P.), Woollan. Some seeds.
- Robinson, G. W., Berwick. Quantity of *Encalyptus* and *Casuarina* seeds.
- Rockhampton Botanic Gardens (R. S. Edgar, Esq.). Queensland Ferns, and Palm seeds, in quantities.
- Sargood, F. T., St. Kilda. Collection Herbaceous plants.
- Scott, J. and Sons, Melbourne. Collection miscellaneous and select plants, in quantity.
- Snee, Major, Victoria Barracks, Melbourne. Some mosses and ferns.
- Sones, E., South Yarra. Tree ferns, and some Botanical specimens.
- Spence Bros. and Co., Melbourne. Some South African fern trees.
- St. Petersburg Botanic Gardens (Dr. E. Regel). Several collections of choice seeds, in quantity.
- Storck, J. C., Fiji. Collection of valuable plants.
- Sullivan, D., Moyston. Seedlings and seeds of native plants, &c., in quantities.
- Sydney Botanic Gardens (C. Moore, Esq.). Several large palms, and other miscellaneous and select plants.
- Taylor and Sangster, Toorak. Collections of select miscellaneous plants, in quantities.
- Thompson, W. K., Melbourne. Plants from Fiji.
- Treen, W. H., Melbourne. Some gladiolus bulbs.
- Turton, J. S., Fitzroy. Collection of South African plants.
- Vettler, J., Echuca. Several species grasses, and some seeds.
- Vienna Botanic Gardens (Dr. Fenzl). Collection of seeds, in quantity.
- Vilmorin Andrieux and Co., Paris. Very large and valuable lots of seeds, bulbs, tubers, &c.
- Waller, W. H., Maldon. Some cuttings of native plants.
- Wallin, R., Melbourne. Some seeds.
- Wallis, A. R., Vancluse, Richmond. Plants and seeds.
- Watt, D., Richmond. Collections of select and miscellaneous plants, in quantities.
- Watters, P., South Yarra. Fern spores.
- Webb, W., Prahran. Miscellaneous plants and cuttings.
- Wellington Colonial Museum (Dr. Hector). Select New Zealand seeds.
- Wharton, G., Hawthorn. Ferns and miscellaneous seeds.
- Wilhelmi, C., Dresden. Collection of seeds.
- White, W. P. and Co., Melbourne. Quantity of tubers.
- Woodd, W. E., St. Kilda. Some seeds.
- Wright, Mr., South Yarra. Miscellaneous ferns, and other plants.
- Wyatt, C., Frogmore, Geelong. Valuable collections of plants, and some cuttings.

LIST OF PLANTS WHICH HAVE BEEN INTRODUCED INTO THE
GARDENS SINCE JUNE 1873.

NEW SPECIES.

Ampelopsis japonica	Anthoxanthum gracile	Arabis alpina
Aloe pulcherrima	Agrostis pulchra	Aralia Veitchii
Abutilon Avicennæ	nebulosa	Arbutus Menziesii
Acacia acuminata	Adenophora latifolia	Argemone hispida
speciosa	Agathæa spathulata	Aster chinensis
odoratissima	Allium Purschii	ledifolius
serissa	Deseglisci	Astragalus caudensis
Catechu	senescens	Azalea Mortii
Albizzia odoratissima	Acer tartaricum	americana
stipulata	Antirrhinum assurgens	Aira cœspitosa
Moluccana	Aristolochia india	Alopecurus pratensis
Artabotrys intermedia	Asclepias princeps	Aveua canadensis
Anosomcles candicans	Asparagus caspius	sempervirens
Aglaonema commutata	Anemone virginiana	Ludwieiaua
Acer striatum	Aubretia Græca	myriantha
Amorphophallus bulbi-	Abronia umbellata	occidentalis
ferous	Abutilon luteum	planiculmis
Rivieri	van Houttei	Bauhinia acumiata
Aristolochia trilobata	Bowenii	purpurea
Alstrœmeria Errenbaulti	Acianthus fornicatus	arborea
peruviana	Anœchtochilus setaceus	malabarica
Antigonum amabile	Ageratum nanum	Brunia nodiflora
Aristea major	Allamanda grandiflora	Banksia Baxteri
Angelonia grandiflora	Hendersoui	Brownii
Alocasia zebriua	violacea	Bouvardia Davidsoni
Alternanthera picta	Alocasia Jenningsii	candidissima
Anthurium Scherzerianum	metallica	Humboldtii corymbi-
Æchmea coralliaua	Allium vineale	flora
Arabis alpina	Amaranthus tricolor	Vrielandi
Aquilegia hortensis	Amaryllis vivipara	jasminiflora
jucuuda	picta	Bromus brizacformis
cœrulea	formosissima	Baptisia leucophala
Ageratum cœlestinum	retusa	leucantha
Alyssum Beuthami	vittata	Bassia latifolia
saxatile	Amorphophallus cam-	Butea superba
Amaranthus caracasanus	panulatus	Brownea Ariza
hypochondriacus	Anechtochilus petola	coccinea
speciosa	Anemone japonica	grandiceps
bicolor	Anthurium magnificum	Bleischmedia Roxburghiana
bullatus	Aquilegia atrata	Bryonia laciniosa
Areca oleracea	chrysantha	Burtonia scabra
Aralia cochleata	canadensis	Bignonia Roczliana
Asparagus verticillaris	flavescens	Bilbergia Saundersii

<i>Berberis fascicularis</i>	<i>Casuarina Sumatrana</i>	<i>Centaurea Amberboi</i>
<i>emarginata</i>	<i>Cephalotus follicularis</i>	<i>atropurpurea</i>
<i>orientalis</i>	<i>Cestrum uocturnum</i>	<i>babylonica</i>
<i>tenuifolius</i>	<i>Chænesthes lanceolata</i>	<i>gymnocarpa</i>
<i>canadensis</i>	<i>Chorozema ilicifolium</i>	<i>Campanula calycanthemus</i>
<i>provincialis</i>	<i>varium</i>	<i>grandiflora</i>
<i>Ehrembergii</i>	<i>Cissus amazonica</i>	<i>grandis</i>
<i>Barringtouia exelsa</i>	<i>Lindeni</i>	<i>latifolia</i>
<i>samoensis</i>	<i>Citrus decumana</i>	<i>Trachelium</i>
<i>Bravoa geminiflora</i>	<i>Claytonia superba</i>	<i>americana</i>
<i>Bromus arvensis</i>	<i>Clerodendron splendens</i>	<i>mexicana</i>
<i>Babiana spathacea</i>	<i>Thompsonæ</i>	<i>versicolor</i>
<i>coerulea</i>	<i>affine</i>	<i>peregrina</i>
<i>purpurea</i>	<i>Kæmpferi</i>	<i>carpathica</i>
<i>Bahia lanata</i>	<i>Collinsia bicolor</i>	<i>Commelyna stricta</i>
<i>Balsamati grandiflora</i>	<i>Combretum Princeanum</i>	<i>dubia</i>
<i>Bauhinia variegata</i>	<i>Comesperma volubilis</i>	<i>Karwinskii</i>
<i>Betula nigra</i>	<i>Coreopsis palmata</i>	<i>clandestina</i>
<i>Biguonia chirere</i>	<i>Corethrostylis Schulzeui</i>	<i>Kunthiana</i>
<i>venusta</i>	<i>Cornus florida</i>	<i>Carex pseudo-cyperus</i>
<i>Boronia crenulata</i>	<i>macrophylla</i>	<i>nutans</i>
<i>serrulata</i>	<i>Cosmidium filifolia</i>	<i>rosea</i>
<i>Bougainvillea brasiliensis</i>	<i>Crotou Guilfoylei</i>	<i>Convolvulus althæoides</i>
<i>splendens</i>	<i>cornutum</i>	<i>Gerardi</i>
<i>Bouvardia Humboldtii</i>	<i>latifolium</i>	<i>maritimus</i>
<i>splendens</i>	<i>insularis</i>	<i>cantabricus</i>
<i>Brodiaea congesta</i>	<i>longifolium</i>	<i>quadricolor</i>
<i>grandiflora</i>	<i>Mortii</i>	<i>mauritanicus</i>
<i>Browallia elata</i>	<i>medium</i>	<i>Cyclotoma platyphylla</i>
<i>Brunsvigia toxicaria</i>	<i>variegatum</i>	<i>Calceolaria scabiosifolia</i>
<i>Buckinghamia cellcissima</i>	<i>Schomburgki</i>	<i>Calliopsis Basalis</i>
<i>Cacalia aurea</i>	<i>oblongifolium</i>	<i>Cacalia sonchifolia</i>
<i>Caladinm atropurpureum</i>	<i>ovatifolium</i>	<i>Coreopsis coronata</i>
<i>atrovirens</i>	<i>Crowea saligna</i>	<i>Collinsia candidissima</i>
<i>amabile</i>	<i>Cuphea Galleottiana</i>	<i>multicolor</i>
<i>argyrospilum</i>	<i>Cyrtodiera chontalensis</i>	<i>Crepis barbata</i>
<i>Bronguiartii</i>	<i>Cytisus Alochingerii</i>	<i>Canna elegans</i>
<i>eseulentum</i>	<i>Cocos flexuosa</i>	<i>Callichroa platyglossa</i>
<i>odoratum</i>	<i>Centaurea Fenzlii</i>	<i>Ceanothus Arnoldii</i>
<i>pictum</i>	<i>orientalis</i>	<i>integerrimus</i>
<i>Calandrina discolor</i>	<i>africana</i>	<i>Cæsalpinia dasyrhachis</i>
<i>Calceolaria hybrida</i>	<i>stereophylla</i>	<i>ferruginea</i>
<i>Calendula maritima</i>	<i>amara</i>	<i>coriacea</i>
<i>Calochortus macrocarpus</i>	<i>involutata</i>	<i>Caladium metallicum</i>
<i>Cantua dependens</i>	<i>adpressa</i>	<i>Costus albescens</i>
<i>Cassia florida</i>	<i>rubra</i>	<i>Chamæranthemum Bey-</i>
<i>pubescens</i>	<i>americana</i>	<i>richianum</i>
<i>marylandica</i>	<i>Clementii</i>	<i>Cyrtosiphonia sumatrana</i>

<i>Campsidium valdivianum</i>	<i>Dahlia imperialis</i>	<i>Danthonia bulbosa</i>
<i>Callicarpa augnata</i>	<i>Dorstenia argentea</i>	<i>racemosa</i>
<i>Carica aurantiaca</i>	<i>Delphinium formosum</i>	<i>Dichelachne crinita</i>
<i>Cattleya Trianae</i>	<i>Daucus Broteri</i>	<i>Epacris exserta</i>
<i>Clematis rubro-violacea</i>	<i>Dæmonorops fissus</i>	<i>Kinghorni</i>
<i>Chorozema Chandleri</i>	<i>salembauicus</i>	<i>Albertus</i>
<i>macrophylla</i>	<i>marginatus</i>	<i>paludosa</i>
<i>Soulangeana</i>	<i>Dipterocanthus spectabilis</i>	<i>Atleana</i>
<i>Chironia floribunda</i>	<i>Dyckia Lemaircana</i>	<i>acuminata</i>
<i>Cordyline amabilis</i>	<i>Dioscorea illustrata</i>	<i>Alexandrina</i>
<i>Cerintho bicolor</i>	<i>Daphniphyllum Roxburghi</i>	<i>grandiflora</i>
<i>Campanula alliariæfolia</i>	<i>Dorstenia Reidiana</i>	<i>corescens</i>
<i>Vidalli</i>	<i>Dianthus nigricans</i>	<i>Copelandi</i>
<i>Capellia biflora</i>	<i>gallicus</i>	<i>Erythrina compacta</i>
<i>Caryotaxus japonicus</i>	<i>siderocaulis</i>	<i>Engenia apiculata</i>
<i>Clematis Jackmanni</i>	<i>dentatus</i>	<i>Erica cruenta</i>
<i>Veitchii</i>	<i>viscidus</i>	<i>ramentacea</i>
<i>Cupressus Oaklandiana</i>	<i>Dieffenbachia lineata</i>	<i>persoluta</i>
<i>Calyptrocalyx spicatus</i>	<i>Digitalis aurea</i>	<i>scoparia</i>
<i>Chamærops elegans</i>	<i>fulva</i>	<i>mammosa</i>
<i>Cynoglossum officinale</i>	<i>lanata</i>	<i>hyemalis</i>
<i>Calandrina umbellata</i>	<i>tomentosa</i>	<i>Mackiana</i>
<i>Coccoloba excoriata</i>	<i>Daviesia brevifolia</i>	<i>alopecuroides</i>
<i>uvifera</i>	<i>Dillwynia ericoides</i>	<i>pyrolæflora</i>
<i>Cratæva Roxburghi</i>	<i>Diplothemium maritimum</i>	<i>coccinea</i>
<i>Calophyllum Inophyllum</i>	<i>Dypsis sp.</i>	<i>conferta</i>
<i>Calceolaria superba</i>	<i>Dalechampia Roezliana</i>	<i>linnæoides</i>
<i>Callichroa platyglossa</i>	<i>Daphne mezereum</i>	<i>Giloi</i>
<i>Cassia sophora</i>	<i>Datura Wrightii</i>	<i>Hammondi</i>
<i>fistula</i>	<i>Daubentonia pinnicea</i>	<i>colorans</i>
<i>occidentalis</i>	<i>Dodecatheon Meadia</i>	<i>Loweswithoi</i>
<i>Crinum amabile roseum</i>	<i>Dracæna Regina</i>	<i>Andromedæflora</i>
<i>Cipodosa sub-scandens</i>	<i>atrosanguinea</i>	<i>autumnalis</i>
<i>Crotalaria verrucosa</i>	<i>Schomburgki</i>	<i>Cavendishi</i>
<i>Chamæpeuce diacantha</i>	<i>Boweni</i>	<i>Tetralix</i>
<i>Chamæranthemum Gaudichaudi</i>	<i>Chelsoni</i>	<i>vagans</i>
<i>chaudi</i>	<i>albomarginata</i>	<i>Eryngium dilatatum</i>
<i>Clematis Standishi</i>	<i>Robinsoniana</i>	<i>Eucalyptus coccifera</i>
<i>Buchani</i>	<i>Hendersoni</i>	<i>Gunni</i>
<i>Caladenia deformis</i>	<i>metallica</i>	<i>melanophloia</i>
<i>barbata</i>	<i>Muelleri</i>	<i>robusta</i>
<i>latifolia</i>	<i>nigrescens</i>	<i>Eugenia gracilis</i>
<i>Cryptostylis reniformis</i>	<i>nobilis</i>	<i>Eupatorium riparium</i>
<i>Corysanthus fimbriatus</i>	<i>Verschaffelti</i>	<i>Elæodendron anstrale</i>
<i>Chaetospora axillaris</i>	<i>Wightii</i>	<i>Elais Guineensis</i>
<i>Carex inversa</i>	<i>Yonngiana</i>	<i>melanocæcea</i>
<i>Grayi</i>	<i>Diurus sulphurea</i>	<i>Eranthemum secundum</i>
<i>Dahlia arborea</i>	<i>pedunculata</i>	<i>Erythrina corallodendron</i>

Erythrina Bagotensis	Gaillardia Richardsons	Isomene undulata
Guilfoylei (Parelli)	graudiflora	Babiensis
Eurycles Amboinensis	Gmelina arborea	Bona-nox
Echites melanoleuca	Gardenia Blumeana	Huberi
rubro-venosa	Gamolepis Tagetes	limbata
Eleusine coracæana	Godetia Lindleyana	siberica
Eranthemum strictum	Whitnana	Ixia canariensis
igneum	Glossodia major	hybrida
Elæocarpus Guilfoylei	Geodorum dilatatum	pallida
Eucharis amazonica	Gardenia Shepherdii	Inga Saman
Euonymus Veitchii	radicans	pulcherrima
Ficus cordifolia	Gazania splendens	bigemina
syringifolia	Gesnera macrantha	Ixora rugosella
quercifolia	oblongata	Iberis hesperidiflora
Frenela Endlicheri	Graptophyllum Earli	Ipomopsis elegans
Fontanesia phillyræoides	Guilfoylea monastachys	Ipomœa Horsfallia
Fourcroya bulbosa	Glyceria fluitans	trideutata
Franciscea latifolia	Hardenbergia gracilis	Ixia amœna
Lindeni	Hedypnois cretica	lilacina
calycina	Heppiella uagelioides	rosea
uniflora	Hibiscus coccineus	secundo-patens
Fumaria media	virginicus	purpurea
Fagus purpurea	Helichrysum argenteum	Ixora princeps
Ficus Hardlandi	Heliconia amarocarpa	rosea
Liviugstoni	Hermaunia plicata	Duffii
salicifolia	Hartwegia comosa	Joica bengalensis
Fittonia argyroneura	Helminthostachys zey-	Jambosa acida
Pearcei	lanica	Kentia gracilis
gigantea	Helichrysum apiculatum	Kaulfussia amelloides
Festuca duriuscula	felinum	Kunzea parvifolia
Billardieri	fruticosum	Kniphofia recurvata
bromoides	fulgidum	Kæmpferia Parishii
Gladiolus ramosus	odoratissimum	robusta
gandavensis	Hyophorbe indica	Lettsonia grandiflora
purpurea-auratus	Hura crepitans	Leca hirta
Grislea tomentosa	Hymenaxis californica	divaricata
Gymnogramme leptophylla	Hemerocalis fragrans	Laurus chloroxylon
Gilia achilleæfolia	Hovea acutifolia	Laurca vespertilionis
liniflora	pulchella	Lagerstrœmia iudica alba
splendens	Hydrangea Otaksa	parviflora
Gynandropsis pentaphylla	Iris spuria	Lychuis Haagcana
Guazuma tomentosa	atomaria	fulgens
Glycine magnifica	eristata	Licuala spinosa
Garcinia Livingstoni	setosa	Lunaria biennis
Gustavia augusta	chamæris	Lansbergia Caraccasana
Guaiacum officinale	stilosa	Lupinus albo-violaceus
Gypsophila elegans	Xiphoides	Livistonia subglobosa
Gaillardia coccinea	Isomene calathina	Leptospermum parvifolium

Lotus Gebelei	Nelumbium Leichardtii	Pardanthus chiucnsis
siliquosus	Nepenthes Phyllamphora	Pelargonium echinatum
Lyperanthus nigricans	Nerine sarniensis	Pedilanthus padifolius
Lantana urticæfolia	undulata	Peperomia argyreæa
Lilium Humboldtii	Nierembergia gracilis	Verschaffelti
Libonia penrhoseiuisis	Olca capensis	Pentstemon glaucum
Lasiandra macrantha	Oncidium trulla	grandiflorum
Leptosiphon roseus	Ophioglossum pendulum	Phaseolus Ricardianus
aureus	Œnanthe peucedanifolia	Philodendron Lindenianum
Lilium Thunbergianum	Oreodaphne Californica	Phyteuma virgatum
Linaria modesta	Osmanthus ilicifolius	Pimelia octophylla
Linum monagynum	Outea bijuga	Platystemon californicus
Lagurus ovatus	Ouviraudra fenistralis	Polianthes tuberosa
Maranta bella	Oxyura chrysanthemoides	Poa alpina
eximia	Portulaca canariensis	Rhodochiton volubile
Porteana	Thelusoni	Rheum officinalis
regalis	Gilliesi	Rhododendron Thibaudioides
sanguinea	Potentilla arguta	neilgaricum
tubispatha	Pothos argyreæa	Ricinocarpus pinifolius
Martinezia granatensis	macrophylla	Rudbeckia hirta
Meuiscium serratum	Primula auricula	Spiræa indica
Mesembryanthemum tri-	cortusoides	Lindleyana
palium	Pringlea antiscorhutica	Scutellaria Ventenati
Malope malacoides	Pultanea mollis	Silene reticulata
trifida	retusa	Sabal havanensis
Myristica spe	rosea	rotuudifolia
Mirabilis planiflora	stricta	Saxifraga rotundifolia
Melianthus Trimemanus	subumbellata	Salvia splendens
Macrozamia zeylanica	Panocratium rotatum	patcus
Magnolia Nordbertiana	Phœnix Leonensis	Sternbergia alba
superba	fariuifera	Stipa elegantissima
macrophylla	paludosa	Taxus adpressa
Mathiola bicoruis	Pterostylis concinna	Tapis barbata
Mesembryanthemum capi-	cucullata	Tricyrtis hirta
tatum	Phycella corusca	Tigridia canariensis
tricolor	Phædrauassa gloriosa	Tropæolum minus
pomeridianum	Pimelia decussata	canariense
Mikania Guaco	Primula japonica	Tagetes lucida
Meyenia Vogeliana	Podocarpus araucaroides	Terminalia Arjuna
Morea collina	Passiflora purpurea	tomentosa
Mirabilis Wrightiana	trifasciata	Tritonia gracilis
Milium multiflorum	sanguinolenta	uvaria
Nicodemia diversifolia	Physianthus albens	maculata
Nauclera cordifolia	Pæony Pottsii	squalida
parvifolia	Panax fruticosum	rosea
Nemophila discoidalis	Pandanus Veitchii	Tunica saxifraga
Nemesia floribuuda	Samak	Tectona grandis
Narcissus calathinus	Papaver fugax	Thunbergia chrysops

Thunbergia Hawtayneana	Tulipa suaveolens	Watsonia coccinea
Tecoma fulva	Vitis incarnata	gigantea
Tetranema mexicanum	Vallisneria spiralis	Wollastonia glabrata
Tetralochea verticillata	Veronica cymosa	Weigela Leononii
Trichonema bicolor	Viburnum Sieboldii	Xanthorrhoea minor
speciosum	Veronica lanigerum	Zephyranthes chloroleuca
Taxicophila Thunbergii	Schmidtii	tubispatha
Tacsonia iguea	Vernania javanica	candida
Tritellia marragana		

VARIETIES.

Azalca—	Azalca—	Amaranthus melancholicus
Hanleyana	Milton	v. ruber
Helene Theleman	Duc de Massena	hypochondriacus v.
Madame de Camaert	crispiflora	monstrosus
d'Hamale	optima	hypochondriacus v.
Sir H. Havelock	Perfection	racemosus
Model	President Herman	bicolor v. albicansis
Souvenir de Prince	Reine des Paysbays	candatus v. luteus
Albert	Juliana	Antirrhinum rupestre v.
Stella	King Leopold	grandiflora
Murrayana	Leopold I.	Anosomeles, ovata v. mol-
Splendens	Duc de Nassau	lissima
Van Geert	Duke of Devonshire	Abutilon luteum v. erectum
Columbus	Comte de Mayence	Thompsonae variegata
alba magna	Etoile de Gand	Alphonse Karr
Son de Pronage	Alex. II.	Souvenir de Aragon
Amœna	Eulalie Van Geert	Comtesse Medici Spada
Columbico	Flag of Truce	Acalypha marginata v. acu-
Duchesse Adelaide de	Baronne Vicry	minata
Nassau	Fulder's white	Acer Wagneri laciniatum
Alba	Empress Eugenie	Agapanthus umbellatus
Bianca	Gledstanesi formosa	variegatus
Bonquet des Roses	Duc d'Arenberg	Alocasia macrorhiza varie-
De Wittiana	Glory of Sunning	gata
Charmcr	Hill	Amaryllis Guilfoylei
President	Agave americana var.	Johnsoni
Sir Chas. Napier	striata	Lady Parker
coccinea major	Abutilon Boule de Nieve	Anemone—
Comte de Flanders	Souvenir de Aragon	Agnarins
Standard of Flanders	Achimenes, Masterpiece	Agnes
Coronata	Asclepias, purpurascens	Belle Emilie
Merker	var. tuberculata	Blen Amaible
rosa superba	purpurascens var.	Blen aznr
Criterion	typica.	Commander in Chief
mycophylla	Ageratum, Imperial Dwarf	Duchess de Lothringen
Magnifica	var.	Fauny
Distinction	Wendlandi album	flora perfecta

Anemone—	Anemone—	Bougainvillæa spectabilis
Josephine	Mulatto	v. glabra
Julie	Mou Trésor	Brunsfelsia americana v.
King of the blue	Newton	latifolia
King of the scarlet	Neptuneus	Brunsvigia hybrida
La majesteuse	Proficta	Buxus sempervirens varie-
Lady Ardens	James Defauts	gata aurea
Leverrier	Spectabilis	sempervirens varie-
L'ornament de l'Nature	William I.	gata argentea
Maria Christina	Pucelle d'Orleans	Camellia—
Marie Antoinette	Philomela	Agnes
Marie Stuart	Prince Jerome	Albertus
Miss Nightingale	Prince Arthur	Arch-Duchesse d'Or-
Navarino	Rouge Charmante	leans
Parfait	Reine Vasthy	Arch-Duchesse Au-
Princess Alice	Romulus	gusta
Reine du Monde	Rosamunda	Azurea
Thalia	Rubro-virens	Bealii rosea
L'Eclair	Rose de Provence	Beeean
Armida	Sir Joseph Paxton	Bronachia
Aimable Bergere	Queen of the Nether-	Cadro
Bleu fonce	lands	Candidissima
Cramoisine	Japonica alba	Charlotte
Coronaria	Aphelandra Roczliana	Charlotte Popudoff
Cerise tendre	rosea	Coerulea
Chapeau rouge	Apidistra elatior variegata	Comte de Paris
Duebese d'Albani	Aster Commista	Cup of Beauty
Dragoman	Haydeni	Czaravene
Dorinde	Aucuba japonica var. elc-	Daviesii
Due de Turenne	gantissima	Edith
Dame d'Honneur	Begonias—	Eld
Eclatante superbe	Duchesse	Emperor
Elegantissima	Weltoniensis	Eva
Euphosine	Madame de Canville	Felicia
Feu de grand Valeur	S. H. Merrett	fimbriata rubra
General Woronzoff	George Brunning	Flanders
Granville	M. L. J. Ellery	Fridoline
Hannah More	Mrs. Ellery	Guilfoylci
Imperator	Gem of Adelaide	Helenor
James Watt	Miss Nind	Henry Favre
Kyanis	Madame Gruntberger	Hon. Mrs. Hope
Leonidas	Alice Anderson	Iris
La Sultana	Diadem	imbricata
La Joyeuse	juntina argentea	Isabel
La Respectable	Beech, white variety	Jouvan
La Fontaine	Babiana villosa v. purpurea	Kezia
L' Etoile du Nord	Bignonia Roczliana villosa	Lady Belmore
Martinet	Bouvardia Hogarathi	Lady Parker

Camellia—	Camellia—	Chrysanthemums—
Lady Hume's blush	Xanthus	Julie Lagravene
Ledia	York and Lancaster	The Damio
Lecana superba	Caladium—	King of Anemones
Lombardo	bieolor splendens	Mrs. Gladstone
Lowi	Chantinii	Beverly
Madame Paling	Houletti	Golden Christine
Marie Theresa (vera.)	Smithii	White Christine
Mathotiana	rubra venium	Viceroy of Egypt
Miss Emily Manning	Wightii	Hereward
Miss Gladstone	Versehaffelti	Ossiau
Miss Grinley Manning	De Candolle	Princesse Charlotte
Miss Knox	Max Kobb	Lord Derby
Miss Moore	bicolor magnifica	Mr. Murray
Miss Murray	Alphonse Karr	Andromeda
Miss Mort	Dr. Lindley	Golden Ball
Mrs. Berresford	Emperor Napoleon	Prinee of Wales
Mrs. Fairfax	Schmidtzii	Gloria Mundi
Mrs. Day	Carnations—	Globe white
Mrs. Mort	Attila	Firefly
Monan	Prinee George	Cedo Nuli (lilac)
Monty	Zouave	aureum multiflorum
Nieetas	Lady Harding	Mr. Wyness
Nilus	Prinee of Wales	Mrs. G. Rundle
ochroleuea	Miss Hannaford	Star
odoratissima	Linda	Fleur de Marie
Optima	Emma	Aimé Ferrier
Plato	Amy Robsart	Amie Salter
Pratti	Rosiuess	Beauté de Nord
Preissi	Laurette	Blonde Beauty
Regia	Regalia	Dr. Masters
reticulata	Dauntless	Empress
Sebbii	Ganymede	Negro
Selina	Purity	formosum album
Souvenir	Francis (Pieotee)	Golden Beauty
Sasanqua rosea	Chrysanthemums—	Golden Standard
Sweetii	Oudinc	Nagasaki violet
Tabbs	Paltuer's Pride	Guernsey Nugget
Triumphans	Pink Pearl	Jardin des Plantes
Ulpian	Prince Satsuma	Lady Godiva
Valtavaredo	Princess Louise	Lady Slade
Vandesia superba	Queen of England	Lady Talford
variegata plena	Rifelman	Leopard
variatisima	Robert James	Marechal Douay
Venus de Mediei	Sylvia	Marquis de Wildermire
White Waratah	The Tyeoon	Madame Chalamy
Woodsii	Viseount Thomas	Madame de Vatry
Wrightii	Golden Beverly	Meyerbeer

Chrysanthemums—	Diathus—	Dahlias—
carinatum	dentatus v. hybridus	Hugh Miller
Dnnetti	Heddwigi v. diadematus	Imperial
tricolor	Brow's Mule Pink	John Downie
Cineraria hybrida	Delphinium ornatum candidalorense	Klein Kirkhauschen
Cissus alba nitens	Digitalis purpurea v. gloxiniflora	Lady Darton
Clerodendron Thompsonæ variegata	Dahlias—	Lady Elcho
Colens Gniffoylei	Andrew Dodds	Lady of the Lake
Display	Attraction	Lady Pennant
Beautiful for ever laciniatus	Bessie	Lady Popham
Versehaffelti	Bird of Paradise	Lady Hubert
Wrightii	Bird of Passage	Little Mystery
Colocasia macrorhiza var.	Bob Ridley	Little Acorn
Crataegus sp. (double crimson)	Burnes	Little Cordula
Cytisus Laburnum v. quercifolium	Child of Faith	Little Daisy
Laburnum v. atropurpureum	Coquette	Little Dear
Crimm amabile roseum	Corouet	Little Julins
Coffea arabica var. (Eden)	Crimson Beauty	Little Lina
Clematis, Lady Bovill	Crimson Orange	Little Philip
Centaurea Fenzli var. moschata v. rubra	Criterion	Little Prince
orientalis v. steuolepis	Delicata	Little Valentine
orientalis multiseeta angustifolia	Donald Beaton	Little Singularist
Commelina Kunthiana v. pallida	Dr. Schwebbes	Little Virginus
Cineraria maritima v. candidissima	Dr. Webb	Little Wilhelmine
Cacalia sonchifolia v. lutea	Duchesse Malhabe	Little Wouder
Clitoria ternata v. alba	Duke of Roxburgh	Leah
Campanula carpathica alba	Duke of Wellington	Madge Wildfire
Calliopsis cardaminifolia v. atrosanguineus	Earl Shaftsbury	Marquis of Beaumont
Ceanothus Africaus variegatus	Emotion	Miss Manners Sutton
Coprosma Baueriana variegata	Epanlette	Model
Dianthus—	Fair Imogene	Mrs. Savory
ehiuentis v. hybridus	Fanny Sturt	Mrs. Sophia Elsmer
ehiuentis v. imperialis	Fanchonette	Mrs. Turuer
ehinensis v. laciniatus	Flambeaux	Mrs. Wyudham
ehinensis v. tartaricus	Free Boy	Mrs. Trotter
moselatum v. scoticus	German Daisy	multiflora
	German Ruby	Nora Creina
	German Youth	Norfolk Hero
	Glowworm	Panline
	Goldfinder	Peri
	Grand Sultan	Pluto
	Heleu Potter	President Lincoln
	Hereules	Prince of Lilliput
	Hervine	Prince of Wales
	Hon. Mrs. Trotter	Prince of Prussia
		Queen Mab
		Remarkable

Dahlias—	Fuchsia—	Fuchsia—
Reussensbaby	Arabella	Inimitable
Rostrilly Jewel	Autocrat	Iustigator
Rostrilly Lad	Avalanche	Instance
Shadow	Bacchus	King of the Doubles
Starlight	Beacon	Lady Dunbell
Summertide	Bland's floribunda	Lady Sale
Sydney Herbert	Bridal Bouquet	La Favorita
Unique	Brigade	Leah
Valentine	Blue Boy	Lizzie Hexham
Vidette	Catherine Parr	Maid of Honor
Von Leupke	Champion	Majestica
White Aster	gracilis variegata	marginata
Annie Keynes	Chicago	Marmion
<i>Daphne indica alba</i>	The Hon. J. Bright	Minnie Banks
<i>odora variegata</i>	Amphion	Model
<i>Diervilla rosea variegata</i>	Marksmen	Monarch
<i>Dracaena ferrea rosea</i>	Lustre	Mrs. Shirley Hibberd
Gayi	Jolly	Norfolk Giant
nigro rubra	Smith's Avalanche	Octavia
<i>Erica persoluta alba</i>	Mrs. E. Bennett	Oracle
<i>persoluta rubra</i>	Lewald	Pillar of Gold
<i>cerinthoides coronata</i>	Canelle's favorite	Pius the IX.
<i>ventricosa erecta</i>	Alicc	President
<i>ventricosa Rothwel-</i>	Mandarin	Priam
<i>liana</i>	Carnaer von	Princess Alexandra
<i>ventricosa rosca</i>	Silistria	Purple Prince
<i>ventricosa rosca mag-</i>	tricolor Beauty	Queen of the whites
<i>nifica</i>	Heligoland	Rhoderick Dhu
<i>ventricosa impressa</i>	Canary Bird	Rose of Denmark
<i>ventricosa grandiflora</i>	Little Bobby	Rustic
<i>ventricosa breviflora</i>	Prince of Wales	S. C. Henchman
<i>ventricosa Browni</i>	Ethel	Standard
<i>ventricosa superba</i>	Lady Heytesbury	Sunshine
<i>ventricosa magnifica</i>	Commander	Sunray
v. Rollissoni	Conquest	The Lord Warden
<i>cinerea alba</i>	Constellation	The Perfect Cure
<i>cinerea purpurea</i>	Corsair	Tower of London
<i>cinerea major</i>	Diadem	Treasure
<i>cinerea coccinea</i>	Dictator	Triumphans
Rubens	Elfrida	Triumph
<i>pellucida v. insulare</i>	Extraordinary	Try me oh!
<i>Epacris impressa v. rosea</i>	Favorite of Fortune	Umpire
<i>Euonymus aurea margi-</i>	Freund J. Durr	Vanqueur de Puebla
<i>nata</i>	Gazelle	Warrior
<i>japonica v. aurea</i>	Grenadier	Warrior Queen
<i>japonica variegata</i>	Harvest Home	Wave of Life
<i>latifolius variegatus</i>	Herald	White Eagle

Fuchsia—	Gladiolus—	Gladiolus—
Planchette	Belle Gabrielle	Lord Byron
Troubadour	Buffon	Le Titien
Funkia spe. variegata	Caffra	La Catherine
Gardenia radicans variegata	Cardinal	Linne
Fortunei variegata	Cornelie	Le Poussin
Gesnera exoniensis	Clemens	Leonard de Vinci
Leopoldii	Cardinal Duval	La Favourite
Godetia reptans v. insignis	Calypso	Marie Antoinette
Gladiolus—	Chas. Dickens	Madame Perriere
Arehimedes	Circe	Madame Leslie
Artaban	Cora	Madame Furtado
Aramis	Canary	(Souchet)
Aristotle	Cecil	Madame de Vatry
Cuvier	Chas. Paxton	Meyerbeer
Curanti fulgens	Comet	Mirella
Compte de Bresson	Comte de Morny	Milton
Don Juan	Calendulaeenn	Montaigne
Eduia	De Candolle	Mazepa
Gloria mundi	Dr. Schomburgk	Maude
Galatea	Delicata	Madame Basseville
Goliath	Dawn	Madame Sevigne
Hebe	Emile	Mary
Helene	Ellen	Mons. Lebrun d'Albane
Jean d'Arc	Envoy	Meteor
Louis van Houtte	Eleanor Norman	Madame Domage
La Quintine	Eldorado	Madame Vilmorin
Madame Arnoldii	Elata	Napier
Madame Fanny Bouchet	Faith	Newton
Madame Paillet	Fairy	Argus
Madame Conder	Flora	Addison
Mons. Vinchon	Fenelon	Antiope
Prince Imperial	Felicieu David	Adele Souchet
Princess de Montrouge	Fanny Rouget	Adelaide Devale
Surprise	Galileo	Angela
Achille	Herald	Agathe
Annie	Hope	Albans
Anaco	Hindoo	Achille
Attraction	Isabella	Arsinac
Auriga	Jason	Anna
Amina	James Carter	Bijou
Apollon	Jessie	Bein
Ariel	Joan of Arc	Bernard de Jussieu
Antonius	Jas. Veiteh	Celine
Beauty	Jenny Lind	Cassine
Bernard de Pallissy	James Watt	Cleopatra
Brenehleyensis	Lord Raglan	Cherubim
Berniee	Lady Bowen	Cnvier

Gladiolus—	Gladiolus—	Hyacinths—
Céliméne	Prime Minister	Alida Catharina
Didou	Pallas	Emilius
De Lamarck	Phoebe	Grand Vanqueur
Diomede	Princess Clothilde	Jaune Suprême
Duc de Nassau	Purpurea	La Virginite
Diana	Princess of Wales	Madame Talleyrand
Donna Maria	Pliny	Maria Theresa
Erato	Premier	Mars
Eurydice	Prince Fredk. William	Othello
Eldorado	Queen of Sheba	Panorama
Fulton	Racine	Pasquin
Greuze	Rana	Regulus
Hortense	Roi Leopold	Anna Maria
Homer	Rossini	Albion
Henri Favre	Rosenberg	Alba maxima
Ida	Romulus	Blocksberg
Junon	Robert Burns	Baron von Thuyll
John Bull	Rev. Berkley	Chas. Dickens
Le Dante	Rajah	Comtesse de la Coste
Lilacina	R. S. Hill	Corymbosa
Lacipede	Rembrandt	Czar Nicholas
Livingstone	Rubens	Elfrida
Leonora	Reine Victoria	Emmeline
La Poussin	Sulphureus	Garrick
Largans	Silenc	General Latham
Martha	Stuart Lowe	Gloria Florum
Mirabilis	Sunshine	Groot Voorst
Marie Dumortier	Sir W. Hooker	Howard
Mozart	Sol	Johanna Cornelia
Ninon de l'Enclos	Susanna	L'Ami du Cœur
Nestor	Village Maid	L'etincelante
Ophir	Vesuvius	Lord Derby
Oracle	Vellida	Lord Grey
Penelope	Van Dyck	Mimosa
Rebecca	Victor Emanuel	Madame Hodson
Scribe	Venus	Mous. de Faesch
Sir Jos. Paxton	Vivian	Ornament of Nature
Thalia	Valentine	Princess Royal
Vulcan	Walter Scott	Victoria Alexandrina
Neptune	Walter Hill	Victoria Regia
Napoleon III.	W. R. Guilfoyle	Hemerocallis fulva variegata
Novelty	Grevillea alpina v. aurea	Hydrangea hortensis variegata
Oscar	Hyacinths—	Imperatrice Eugenie
Pyreus	A la' Mode (double white)	Ipomœa quamoclit v. alba
Phidias		limbata v. hybrida
Princess Mary d'Cambridge	A la' Mode (double blue)	venosa variegata

<i>Iris germanica</i> v. <i>atroviolacea</i>	Myrtus, double white	Pelargoniums—
<i>germanica</i> v. <i>suaveolens</i>	Maurandya Barelayana alba	Asteroid
<i>Ilex aquifolium aurea marginata</i>	Menziesia polifolia floralba	Ruby
<i>aquifolium</i> v. <i>Silver Queen</i>	Myosotis alpestris floralba	Llewellyn
<i>aquifolium</i> v. <i>ferox variegatum</i>	alpestris rosea	Cynthia
<i>aquifolium</i> v. <i>ferox argentea</i>	Nephrolepis exaltata v. pilosa	Royal Albert
<i>aquifolium</i> v. <i>albomarginata</i>	Nerium Oleander alba pleuo	Magnificent
<i>aquifolium</i> v. <i>albopictum</i>	Narcissus jonquilla florepleuo	Alabama
<i>Iris Xiphoides</i> v. <i>Alice</i>	Orange trees—	Fauny Gair
<i>Xiphoides</i> v. <i>Atalante</i>	Cluster Orange	Ellen Beck
<i>Ixia</i> v. <i>Cupid</i>	Parramatta Orange	Ajax
<i>longifolia</i> alba	Siletta Orange	Mrs. Mardell
<i>purpurea striata</i>	Kissing Point Orange	Cardinal
<i>aurantiacea</i> major	Show of Sydney Market	Perfection
<i>Thesius</i>	Pentstemous—	Lady of the Lake
<i>rosea</i> , variety	Antagonist	Sunshine
<i>Jasminum</i> , <i>Maid of Orleans</i>	Aufidus	Assembly
<i>Lantana Ne plus Ultra</i>	Clara	Restitution
<i>Lecca saubueina</i> v. <i>biserata</i>	Madame Rendatler	Rob Roy
<i>Ligustrum ovatifolium variegatum</i>	Miss Love	Madame Sainton Dolby
<i>Lupinus superbus</i> v. <i>Drummondii</i>	Plantagenet	Red Cap
<i>Lilium tigrinum florepleuo lanceifolium corymbiflorum</i>	The Queen	A. Gray
<i>lanceifolium Harrisonii</i>	Pelargoniums—	Warrior
<i>Thunbergianum aurea florepleno</i>	Mrs. F. Abbott	Marguerite
<i>Thunbergianum grandiflorum</i>	Eugene le Gros	Harold
<i>Maximowiczii</i>	Womau iu white	Emily
<i>Lobelia Paxtoni</i> v. <i>tricolor</i>	Duehesse	Confident
<i>Queen Victoria heterophylla</i> v. <i>major</i>	Princess Teek	Envoy
<i>Mangifera</i> , <i>Bombay</i> variety	Paseha	Mrs. Dorling
<i>Singapore</i> variety	Bertha	Jean Sisley
<i>large Malda</i> variety	Pilot	Jeanne d'St. Maur
<i>Gofaulbo</i> variety	Archduke	Lord Derby
	Mrs. Mendale	Lord Stanley
	May Day	Leonidas
	Compacta	Madame Mezzard
	Princess Helena	Miss Depou
	Sonnet	Thomas Speed
	Applause	Unique
	Parisian	Mrs. Pollock
	Fairy	Obedience
	Anu Page	Flag of Truce
	Clarinda	Canary Bird
	Prince Hubert	Nations' Hope
		Sunset
		Flower of Spring
		Aline Sisley
		Crown Prince
		Capt. L'Hermit

Pelargoniums—	Pelargoniums—	Perennial Phlox—
Imperatrice Eugenie	Princeps	Madame Menier
Madame Racouchout	Hofgaertner Keilerman	Souvenir
Madame Rudolph Able	John Hoyle	Madame Domage
M. C. Glijm	Prince Noir	Monsieur Drouot
National	Oddfellow	George Henderson
Pink Perfection	Claribel	Madame Saison
Signet	Heirloom	Souvenir de Berrier
Terre Promise	Gustave Malet	Comtesse Mallert
Victor	Pansies—	Madame Caillard
Victor de Lyon	Butterfly	Comtesse de Panouxe
Wilhelm Pfitzer	Socrates	Madame Ataris
Miss Mortimer	Elcanor	Moisset
Troubadour	Prince	Hugh Low
Genl. Garibaldi	Frenchman	Princess Alice
Alba flora	Goldfinder	Enchantress
Miss Dyson	Hebe	Mrs. Bonner
Jerome	Homer	Pæonia lutea variegata
Madame Heine	Jessie Gow	General Bertram
Mary Hoyle	King of the Yellows	Papaver orientale v. brachy-
Hebe	Mr. Fred	atum
Fantastic	Pandora	Photinia arbutifolia variegata
Model	Perennial Phlox—	serrulata variegata
Ixion	Boree	Pittosporum eugenoides va-
Bonetta	Comet	riegata
Mrs. Greig	De Bois Duval	undulatum variegata
Fair Ellen	Dr. Andry	Polianthes tuberosa flore-
Freedom	Dr. La Croix	pleno.
Virginie Meillez	Flora	Primula vulgaris, pleno
Festus	Louis Lierval	atropurpurea
Queen Victoria	Madame Rendatler	vulgaris, pleno sul-
Eugene Legereau	Neptune	phurca
Picnic	Purity	Ranunculus—
Frederick	Surpasse Mdm. Ren-	Allan Cunningham
Miss Clendinning	datler	Black Turban
Rosy Gem	Monsieur Robini	Cerialis
Alexandra	Lady Hulse	Dr. Horner
Duchess of Sutherland	paniculata alba	General Sylvia
Mrs. Simpson	Van Houttei	Grand Cæsar
Admirable	Madame Barrilot	Grandiflora
Monsieur Lierval	Roi des Roses	Monsieur
Princess Beatrice	Monsieur Rafarin	Princess Sophie
Congress	Sultan	Scarlet Turban
Castanet	Madame Berniaux	St. Jerome
Richard Benyon	Comtesse de Chambord	Vanguard
Bride	Madame Hermine Tu-	Victoria
Royalty	renne	Yellow Turban
Princess Mary	Comtesse Duchatel	White Turban

Ranunculus—	Ranunculus—	Reineekia carnea variegata
Ambassadeur	Rose de Holland	Roses—
Arch Duchesse	Silene	Duc de Rohan
Adeline	aureum punctatum	Duchesse de Camba-
Belle Donna	Lady Clermout	ceeres
Belle Maria	Lord Clyde	Duchesse de Orleans
Belle Lisette	Lord John Rnssell	Dnke of Cambridge
Bonifaciens	Lord Palmerston	Duke of Edinburgh
Boute Held	Michael Waterer	Emperor de Maroc
Comte d'Artois	Mirabilis	Emperor Napoleon
Charlemagne	Mrs. G. W. Heneage	Eugene Appert
Capsicum	Mrs. Holford	Eugene Boucier
Comtesse de Pompadour	Mrs. John Waterer	Evêque de Nismes
Cramoisine	Mrs. Thos. Warne	François Arago
Violet Superbe	Oehrolenca	François Premier
Commodore Napier	Princess Royal	General Delaage
Comte de Ligne	Purity	General Simpson
Venus	Rosabel	General Washington
Caroline	Schiller	Gloire de Mousseuses
Doriuda	Sir Franeis Crossley	Grace Archer
Eldorado	Sir Thomas More	Great Western
Ursulla	Stella	Hortense Blackett
Epicharus	Tippoo Sahib	Jean Goujou
Felixburg	The Queen	John Hopper
Gloria florum	The Warrior	Lady Darling
Henri Quatre	Verschaffeltii	Lady Manuers Sutton
Habit deetoriale	Vulcan	Lady Robiusion
Toison d'Or	Voleano	Louise Van Houtte
Hasetrbal	Alarm	Louise Margotteu
Theodora	Augnste van Geert	Madame Boutin
Kroon van Gent	Chloe	Madame Chas. Wood
La Sublime Geisdeliu	Baron Osy	Madame Clemence
La Charmante	Caractacus	Joigneaux
La Lingulisère	Charles Bagley	Madame Julie Daran
Lina	Duchess of Sutherland	Madame Sonppart
La Couronne	Everestianum	Madame Therese Levet
L'Enehanteur	Everestianum var. ele-	Anna de Diesback
Louis d'Or	gans	Mademoiselle Anne
Ophir d'Or	General Cabiari	Wood
Orange Picoté	Gigantem	Achille Gonnod
Orpheus	Grand Arab	Adolph Noblet
Oeillet parfait	Herschel	Alpaide Rotalier
Quintinianus	Iago	Baron Gonella
Prosperite	Illnmination	Catherine Guillot
Proserpina	Jenny Lind	Dr. Jamain
Prinee de Orange	John Speneer	Marcehal Neil
Rose d'Espagne	John Waterer	Maria Nova
Reine de Violettes	Joseph Whitworth	Marie de Bourges

Roses—

Marquese Boecella
 Marquis of Cotellami
 Mathew Mole
 Miss Appleton
 Miss Hepburn
 Maurice Bernadin
 Mons. Woolfield
 Ponpre de Tyre
 Pierre Notting
 President Lincoln
 President Mas
 President Willermoz
 Prince de Rohan
 Prince Camille de
 Rohan
 Princess Alice
 Princess Beatrice
 Reine de la Cite
 Senateur Vaisse
 Sir Chas. Darling
 Sir Henry Mannors
 Sutton
 Souvenir de Count
 Cavour

Roses—

Souvenir de Montault
 Souvenir de Mons.
 Rosseau
 Souvenir de Wm. Wood
 Triomphe de l'Expo-
 sition
 Triomphe de Lyons
 Alphonse Karr
 Turenne
 Vanqueur de Goliath
 Taxus Canadensis v. va-
 riegata
 Thujopsis borealis variegata
 Tydæa var. Beauty
 Tigridia conchiflora v.
 grandiflora
 Thymus citriodorus va-
 riegatus
 Tulips—
 Rex Rubrorum
 Tournesol
 Artis
 Golden Prince
 Lac Van Rhyu

Tulips—

Monnment
 Thomas Moore
 Wapen van Leyden
 Yellow Prince
 Admiral Kingsbergen
 Blue Flag
 Conrone Imperial
 Duke of York
 Marriage de ma Fille
 Purple Crown
 Parrot Tulip
 Verbenas—
 Royal Duke
 Snowstorm
 Viscaria elegans picta
 Veronica longifolia v. pu-
 bescens
 Vernonia javanica v. ob-
 longata
 Watsonia meriana rosea
 meriana excelsa
 Weigela rosea v. arborca
 grandiflora
 Zante Currant

COLLECTION OF VEGETABLE PRODUCTS

SELECTED AND PREPARED AT THE BOTANIC GARDENS FOR THE PHILADELPHIA
 EXHIBITION, AS PER FOLLOWING LISTS.

*List of Wood Specimens, with common names attached; also a short description of
 their general uses, quality, and geographical distribution.*

No. 1. *Acacia decurrens*: *Willdenow*. Ord. Leguminosæ.—The “Common
 Wattle.” A tree of considerable size. Wood close-grained, hard and tough,
 extensively used for staves of easks, &c.; takes a good polish. Bark valuable for
 its tannic properties, and also as a paper-making material. Yields a gum similar
 to gum arabic. Wood considered one of the best of fuels for heating bakers’ ovens.
 It is of rapid growth, and is found growing abundantly in the colonies of Victoria,
 New South Wales, Tasmania, and portions of South Australia.

No. 2. *Acacia pycnantha*: *Bentham*. Ord. Leguminosæ.—The “Golden
 Wattle.” A tree of medium height, and of graceful appearance, especially in the
 flowering season, when its dense masses of golden blossoms has a beautiful effect
 in the landscape. Wood dense and close-grained, very tough. Bark extensively

used in tanning, also furnishing a valuable paper-making material. Yields a transparent gum, similar to that of *A. decurrens*. It is of rapid growth, and is distributed throughout the colonies of Victoria and South Australia.

No. 3. *Acacia longifolia*: *Willdenow.* Ord. Leguminosæ.—The “Long-leaved Wattle.” A tall shrub or small bushy tree, of quick growth. Wood takes a fine polish and is beautifully grained. Yields a transparent gum; bark possibly useful for tanning purposes. It is found in the colonies of Victoria, New South Wales, Queensland, South Australia, and Tasmania.

No. 4. *Acacia retinodes*: *Schlechtendahl.* Ord. Leguminosæ.—A small-sized tree, wood hard and tough. Yields transparent gum, bark contains tannic properties of considerable value. It is of moderately quick growth, and is found extensively throughout the colonies of Victoria and South Australia in open country and adjacent to water courses.

No. 5. *Acacia armata*: *Robert Brown.* Ord. Leguminosæ.—The “Prickly Acacia.” A tall shrub, growing to a height of twelve feet, extensively used for hedges, for which purpose it is well adapted. Wood very hard and close-grained, useful for manufacture of faucey pipes, rulers, &c., takes a good polish and is very durable. Indigenous to Victoria, New South Wales, South and West Australia.

No. 6. *Acacia saligna*: *Wendland.* Ord. Leguminosæ.—The “Weeping Acacia.” A small tree of drooping habit and quick of growth, suitable for hedge planting. Wood very heavy and tough, but easily worked; it takes a good polish, and is of a fine grain. Yields transparent gum. Bark no doubt valuable for tanning purposes. Indigenous to Western Australia. Wood specimen grown in Melbourne Botanic Gardens.

No. 7. *Araucaria Cunninghami*: *Aiton.* Ord. Coniferæ.—The “Moreton Bay Pine.” A magnificent tree of pyramidal habit, attains from 150 to 200 feet in height in favourable situations. The wood of this tree is very durable, and is esteemed for common household furniture and other domestic purposes. Yields gum-resin in large quantities, which may yet be of great commercial value. It is of moderately quick growth and very ornamental. It is found growing in various parts of Queensland, and on the banks of the Clarence, Richmond, and Tweed rivers in New South Wales. Wood specimen from tree grown in Melbourne Botanic Gardens, where it has attained a height of forty-eight feet.

No. 8. *Araucaria Bidwilli*: *Hooker.* Ord. Coniferæ.—The “Bunya Bunya Pine.” A magnificent foliaged tree, growing to a height of 150 feet, and having a trunk of great girth. Wood dense, hard, and close-grained; makes excellent furniture, takes a good polish, and is very durable, commonly known amongst artisans as Queensland pine. Yields gum-resin in large quantities. The seeds are eaten by the aborigines, and are borne in cones nearly as large as a man's head. Indigenous to Queensland. The tree has attained here a height of thirty-five feet. Wood specimen grown in Melbourne Botanic Gardens.

No. 9. *Sterculia diversifolia*: *G. Don*; syn. *Brachychiton populneum*: *Robert Brown.* Ord. Sterculiaceæ.—The Victorian “Bottle Tree.” One of the “Curri-jongs” of the aborigines. A glabrous tree, growing to a height of sixty feet, with an enormous trunk, somewhat bottle-shaped in appearance, from which fact it derives its common name. Wood very soft and fibrous. It gives early evidence of decay; and would no doubt yield a pulp for paper making. The bark, which is in successive layers, is a valuable fibre material, suitable for manufacture of mats, ropes, rough cordage, and paper; and is very rich in a sweet mucilaginous

matter of an agreeable taste. Indigenous to the colonies of Victoria, Queensland, and New South Wales.

No. 10. *Stereulia acerifolia*: *A. Cunningham*; syn. *Brachychiton acerifolium*: *F. von Mueller*. Ord. Stereuliaceæ.—The “Flame Tree.” A lofty tree of highly ornamental appearance. From the exceeding brilliancy of its flowers it is called The Flame tree by the colonists. It might with great propriety be also called the New South Wales “Lace-bark tree.” Wood useful, but of inferior quality, from the facility with which it opens, on account of the fibrous tissues of its structure. The bast furnished by this tree is of the most beautiful lace-like texture, and in my opinion is superior to Cuba bast; the fibre is suitable for the manufacture of ropes, cordage, mats, &c., and can no doubt be utilised for various other purposes of domestic value; the refuse of the fibre-yielding material would form no mean substitute for horsehair in stuffing mattresses, saddles, &c., &c. Leaves and young wood rich in mucilage, the pith evidently contains a farinaceous matter. Indigenous to the colony of New South Wales. Wood specimen grown in Melbourne Botanic Gardens.

No. 11. *Stereulia fetida*: *Linnaeus*. Ord. Stereuliaceæ.—A tall-growing, handsome timber tree. Wood hard, dense, and of a beautiful grain, suitable for furniture, &c. Bark valuable as a fibre and paper material; it possesses tannic properties also. A native of New South Wales, but found also in the East Indian and Malayan Peninsulas. Wood specimen from branch of tree grown in Melbourne Botanic Gardens.

No. 12. *Bursaria spinosa*: *Cavanilles*. Ord. Pittosporæ.—The “Spined or Prickly Box.” (This must not be confounded with *Eucalyptus melliodora*, also called Box.) A shrubby tree, which attains a height of forty feet in favourable localities, although a mere bush in alpine and subalpine situations. Wood extremely hard and durable; would no doubt make excellent common furniture. It is very suitable (from its rough bark) for rustic work. Found in various forms throughout the Australian continent.

No. 13. *Casuarina quadrivalvis*: *Labillardière*. Ord. Casuarinæ.—The “Drooping Sheoak.” A tree of medium size and of very graceful appearance; found chiefly along the coast, where it is to be seen growing in sand close to high-water mark; it is also met with a considerable distance inland. Wood, red, tough, suitable for pick handles, &c., takes a fine polish, and is very durable. Is considered one of the best woods for fuel, foliage valuable as a paper making material. Indigenous to the colonies of Victoria, New South Wales, South Australia, and Tasmania.

No. 14. *Casuarina suberosa*: *Otto and Dietrich*. Ord. Casuarinæ.—The “Erect Sheoak.” A tree attaining a height of forty feet, and yielding wood for fuel and other purposes; is of a reddish color, and takes a good polish. Found in the colonies of Victoria, New South Wales, Queensland, and Tasmania.

No. 15. *Callitris rhomboidea*: *Robert Brown*. Ord. Coniferæ.—The “Native Cypress.” A shrubby tree, growing to a height of thirty feet. Wood, white and durable. Yields a gum similar to gum sandarac. Indigenous to the colonies of Victoria, New South Wales, South Australia, and Queensland.

No. 16. *Acacia melanoxylon*: *Robert Brown*. Ord. Leguminosæ.—The “Blackwood,” but commonly known amongst the settlers as “Lightwood.” A beautiful tree, attaining to a considerable height and girth in favourable situations. Timber, hard and close-grained, but easily worked; heartwood of a beautiful dark color.

In extensive use for furniture, casks, panneling, for railway carriages, in the manufacture of various musical instruments, and in turnery. It is very durable, and takes a fine polish. Indigenous to the colonies of Victoria, South Australia, New South Wales, and Tasmania.

No. 17. *Callitris rhomboidea*: *Robert Brown*. Var. *Tasmauca*. Ord. *Coniferæ*.—The "Oyster Bay Pine." This tree grows to a considerable size, and yields good timber and a kind of gum sandarac. Found only in Tasmania.

No. 18. *Dammara robusta*: *C. Moore*. Ord. *Coniferæ*.—The "Kauri Pine" of Queensland. A lofty growing timber tree of highly ornamental appearance, attains a height of 150 feet, with stem as straight as an arrow, furnishing excellent spars, planks, &c. Wood light and close-grained, well adapted for ordinary furniture; takes a good polish and is easily worked. Wood specimen from plant grown Melbourne Botanic Gardens.

No. 19. *Duboisia myoporoides*: *Robert Brown*. Ord. *Scrophularinæ*.—The "Cork Wood" of New South Wales and Queensland. A bushy tree, attaining a height of forty feet or more. Wood exceedingly light and soft; bark very suberose. Wood specimen from plant grown in Melbourne Botanic Gardens. This tree is of very rapid growth.

No. 20. *Elæocarpus cyaneus*: *Aiton*. Ord. *Tiliaceæ*.—A shrubby tree, glabrous, and of very ornamental appearance, in some situations attaining a height of fifty and even sixty feet. Wood hard, tough, and close-grained. Found in the colonies of Victoria, New South Wales, and Queensland.

No. 21. *Exocarpus cupressiformis*: *Labillardière*. Ord. *Santalacææ*.—The Native "Cherry-tree." A beautiful tree of cypress-like appearance, growing to a height of thirty feet, with a stem of fifteen to eighteen inches in diameter. Wood of a reddish-brown color, hard, and close-grained, adapted for furniture, and is susceptible of a high polish. Found throughout Australia and Tasmania.

No. 22. *Eucalyptus corynocalyx*: *F. von Mueller*. Ord. *Myrtaceæ*.—A small shrubby tree, indigenous to South Australia. Wood specimen from plant grown in Melbourne Botanic Gardens.

No. 23. *Eucalyptus occidentalis*: *Endlicher*. Ord. *Myrtaceæ*.—One of the Gums of Western Australia. Sometimes attaining a height of eighty feet. Yields a kind of gum kino. Wood specimen from tree grown in Melbourne Botanic Gardens.

No. 24. *Encalyptus cornuta*: *Labillardière*. Ord. *Myrtaceæ*.—The "Yait-tree" of Western Australia. A middling size tree of bushy habit. Wood specimen from plant grown in Melbourne Botanic Gardens.

No. 25. *Ficus macrophylla*: *Desfontaines*. Ord. *Urticææ*.—The "Moreton Bay Fig." A large growing, much branched tree, with beautiful dark green glossy foliage. Yields on incision a thick viscid milky juice similar to "Caoutchouc." Wood soft and light, gives early evidence of decay. Found growing on banks of streams in Queensland and New South Wales.

No. 26. *Grevillea robusta*: *A. Cunningham*. Ord. *Proteaceæ*.—The "Silky Oak." A magnificent tree, with glossy pinnate foliage, and bearing beautiful orange-colored blossoms. Grows to a height of 100 feet, furnishing excellent timber, of a beautiful texture, prized for coopers' work, &c., takes a fine polish. A thick clammy gum of a pale yellow color exudes from this tree, which is no doubt of commercial value; bark rich in tannin. It is a native of the colonies of Queensland and New South Wales. Wood specimen from tree grown in Melbourne Botanic Gardens.

No. 27. *Hakea acicularis*: *Robert Brown*. Ord. Proteaceæ.—A small tree of bushy habit. Wood hard and tough. Indigenous to the Colonies of Victoria, New South Wales, and Tasmania.

No. 28. *Hakea flexilis*: *F. von Mueller*. Ord. Proteaceæ.—A small tree, growing to a height of twenty feet. Wood hard and tough. Found in Victoria and South Australia.

No. 29. *Hakea pugioniformis*: *Cavanilles*. Ord. Proteaceæ.—A low-growing shrub, suitable for hedges. Indigenous to the colonies of Victoria, New South Wales, and Tasmania.

No. 30. *Hakea ulicina*: *Robert Brown*. Ord. Proteaceæ.—The "Native Furze." A shrub from eight to ten feet high, makes good hedges. Found in Victoria, New South Wales, and Tasmania.

No. 31. *Hakea saligna*: *Knight*. Ord. Proteaceæ.—A shrub or small bushy tree, attaining a height of fifteen feet. Wood hard and tough. Indigenous to New South Wales and Queensland. Wood specimen from plant grown in Melbourne Botanic Gardens.

No. 32. *Hakea oleifolia*: *Robert Brown*. Ord. Proteaceæ.—A small tree, growing to a height of twenty feet; wood tough, not of any known value. Native of Western Australia. Wood specimen from plant grown in Melbourne Botanic Gardens.

No. 33. *Hakea laurina*: *Robert Brown*. II. eucalyptoides, *F. von Mueller*.—A beautiful, small growing tree, of drooping habit, bearing remarkable globular, crimson and white colored flowers; attains a height of thirty feet. Wood tough and heavy. Indigenous to Western Australia. Wood specimen from tree grown in Melbourne Botanic Gardens.

No. 34. *Hakea cucullata*: *Robert Brown*. Ord. Proteaceæ.—An erect growing, very ornamental foliaged shrub, attaining a height of fifteen feet. Native of Western Australia. Wood specimen from plant grown in Melbourne Botanic Gardens.

No. 35. *Hymenanthera Banksii*: *F. von Mueller*. Ord. Violariæ.—A rigid prickly shrub, attaining several feet in height in favourable situations. Wood excessively hard, resembling box in appearance, takes a good polish. Found in Victoria and New South Wales.

No. 36. *Leptospermum lævigatum*: *F. von Mueller*. Ord. Myrtaceæ.—The "Coast Tea Tree." A tall-growing shrub or small tree, attaining a height of thirty feet. Wood hard and close-grained, very durable when unexposed to atmospheric influences. Valuable as a hedge plant in exposed situations. It forms dense scrubs on the sea coasts of Victoria, New South Wales, and Tasmania.

No. 37. *Lagunaria Patersoni*: *Aiton*. Ord. Malvaceæ.—The "Cow-itch-tree" of Norfolk Island. A very handsome tree, attaining a height of thirty feet, and bearing a profusion of beautiful rose-coloured flowers. Wood light, soft, and easily worked. Bark valuable as a fibre and paper material. Found in Queensland and Norfolk Island. Wood specimen from branch of tree growing in Melbourne Botanic Gardens.

No. 38. *Melaleuca armillaris*: *Smith*. Ord. Myrtaceæ.—One of the native Tea-trees. A shrubby species, growing to a height of thirty feet. It is found on river banks and creeks. Wood hard and dense, takes a good polish, but is not durable if exposed to the weather. Bark suitable for paper making. Indigenous to the colonies of Victoria, New South Wales, and South Australia.

No. 39. *Melaleuca decussata*: *Robert Brown*. Ord. Myrtaceæ.—A tall-growing shrub, one of the "Tea-trees" of the colonists. This species is found growing chiefly on mountain spurs and ranges in the colonies of Victoria and South Australia.

No. 40. *Melaleuca ericifolia*: *Smith*. Ord. Myrtaceæ.—The common "Swamp Tea Tree." A large-growing shrub or small tree, sometimes attaining a height of thirty feet. Grows chiefly on banks of rivers and other water courses, and also in swampy places, forming dense scrubs. Wood exceedingly hard when seasoned, used by settlers as rafters for huts, &c., will stand for a number of years if protected from atmospheric influences, but soon decays when exposed. Bark valuable as a paper material. Found in the colonies of Victoria, New South Wales, and Tasmania.

No. 41. *Melaleuca uncinata*: *Robert Brown*. Ord. Myrtaceæ.—A tall bushy shrub, also one of the native Tea-trees. Wood not of any known value. Indigenous to the colonies of Victoria, New South Wales, South and West Australia.

No. 42. *Myoporum insulare*: *Robert Brown*. Ord. Myoporinæ.—The "Blueberry tree." A straggling shrub or small much branched tree. Wood white, hard and tough, and, from its rough bark, well adapted for rustic work. An ink or dye could no doubt be expressed from the berries of this tree. It is found, in various forms, throughout Australia and Tasmania.

No. 43. *Notelaea lignstrina*: *Ventenat*. Ord. Jasmineæ.—The Tasmanian "Iron Wood." A small glabrous tree, growing sometimes to a height of thirty feet. Wood extremely hard, heavy, and close-grained; extensively used in turnery and ships' tackle; is of great durability, and takes a good polish. It grows extensively on banks of streams in Tasmania and the subalpine districts of Victoria.

No. 44. *Oxylobium callistachys*: *Bentham*. Ord. Leguminosæ.—A large-growing bushy shrub, native of Western Australia. Value of the wood at present unknown. Specimen from plant grown in Melbourne Botanic Garden.

No. 45. *Panax sambucifolius*: *Sieber*. Ord. Araliaceæ.—The "Elderberry Ash." (This is generally called "Mountain Ash," but I have altered the common name, in order that it may not be confounded with "Eucalyptus Stuartiana," also called Mountain Ash. The latter takes its local name from the character of the wood, the former from its close resemblance to the foliage of the *Sambucus*, though it resembles somewhat the "Rowan Tree" (*Sorbus Aucuparia*). A small growing tree, with dark green ornamental foliage and smooth shining bark. Found growing chiefly as an underwood in alpine and subalpine situations. Wood white, close-grained, and tough. Used for axe handles and purposes of a similar nature by wood splitters. Indigenous to the colonies of Victoria, New South Wales, and Tasmania.

No. 46. *Pittosporum undulatum*: *Ventenat*. Ord. Pittosporæ.—The "Native Laurel." A beautiful glabrous much branched tree, of shrubby habit, growing in some districts to a height of sixty feet. Wood of a light yellow color, exceedingly hard and close-grained, takes a good polish. Forms beautiful ornamental hedges, and its flowers yield a valuable perfume. It is found on banks of streams in the colonies of Victoria and New South Wales.

No. 47. *Pittosporum phillyræoides*: *De Candolle*. Ord. Pittosporæ.—A slender tree, of pendant habit. Wood hard and dense. Found, in various forms, throughout the Australian continent.

No. 48. *Pomaderris apetala*: *Labillardière*. Ord. Rhamnæ.—The "Native Hazel." In some districts a mere shrub, but in humid forests in subalpine

situations a graceful tree, attaining a height of thirty feet or more. Wood white, hard, close-grained, tough, and durable. Indigenous to the colonies of Victoria, New South Wales, South Australia, and Tasmania.

No. 49. *Tristania conferta*: *Robert Brown*. Ord. Myrtaceæ.—A beautiful glabrous, tall-growing tree. Wood white, dense, close-grained, and durable. Found in New South Wales, Queensland, and Northern Australia.

No. 50. *Hakea suaveolens*: *Robert Brown*. Ord. Proteaceæ.—The “Sweet-scented Hakea.” A beautiful bushy shrub, growing to a height of fifteen feet, suitable for hedges. Wood hard and tough. Wood specimen from branch of plant growing in Melbourne Botanic Gardens. Indigenous to Western Australia.

No. 51. *Bedfordia salicina*: *De Candolle*. Ord. Compositæ.—The Victorian “Cotton-tree.” A tall-growing, remarkable looking shrub or small tree, attaining a height of twenty feet or more; under side of leaves and young branches covered with a close downy substance like cotton. Wood very heavy and close-grained. Found growing chiefly in mountain gullies and on banks of creeks in Victoria and Tasmania.

No. 52. *Acacia juniperina*: *Willdenow*. Ord. Leguminosæ.—The “Prickly Wattle.” A tall shrub, found growing on the sea coast, where it forms dense scrubs, and also as an underwood in mountain gullies and ranges in Victoria, New South Wales, Queensland, and Tasmania. Wood very hard and tough, esteemed by splitters for maul handles, &c.; bark no doubt rich in tannin.

No. 53. *Banksia marginata*: *Cavanilles*; syn. *B. Australis*: *Robert Brown*. Ord. Proteaceæ.—The common “Honeysuckle” of the colonists. A low-growing tree. Wood very heavy, soft, of a reddish color, beautifully grained, susceptible of a high polish. Scattered throughout various parts of Victoria, New South Wales, South Australia, and Tasmania.

No. 54. *Hedycarya angustifolia*: *A. Cunningham*; syn. *H. Cunninghamsii* *Tul.* Ord. Mouimiaceæ.—The “Native Mulberry” or “Smooth Holly” of the colonists. A small glabrous tree, of shrubby habit. Found chiefly in fern gullies and ravines adjacent to water in subalpine districts of Victoria and New South Wales. Wood hard and close-grained.

No. 55. *Leptospermum lanigerum*: *Smith*. Ord. Myrtaceæ.—The “Light or Woolly Tea Tree.” A tall bushy shrub or small tree, growing chiefly on banks of water courses in high altitudes in the colonies of Victoria, New South Wales, South Australia, and Tasmania. Wood very dense and heavy, not durable when exposed to atmospheric influences.

No. 56. *Olearia argophylla*: *F. von Mueller*; syn. *Aster argophyllus*: *Labillardière*. Ord. Compositæ.—The “Native Musk tree.” In favorable situations attaining a height of thirty feet or more. The upper side of leaves are of a deep glossy green; the under side of a beautiful silvery grey color, slightly tomentose, and emitting a powerful musky odor. It delights in rich humid forest soils, and is chiefly found in fern gullies and ravines in subalpine situations, where it attains its greatest height. Wood highly esteemed in cabinet work and turnery, picture frames, &c. It is beautifully grained, very durable, and equal to, if not superior to, maple. Indigenous to Victoria, New South Wales, and Tasmania.

No. 57. *Prostanthera lasiantha*: *Labillardière*. Ord. Labiatae.—The “Dogwood.” A shrubby tree, attaining a height of thirty or forty feet in alpine and subalpine gullies, but in low-lying districts a mere bush. Wood hard, tough, and close-grained, young saplings suitable for whip handles and fishing rods. Found growing

principally in rich damp forest gullies or close to streams, where it forms dense scrubs. It is indigenous to Victoria, New South Wales, and Tasmania.

No. 58. *Alsophila Australis*: *Robert Brown*. Ord. Filices.—The “Mountain Fern tree.”—“Umbrella tree” of the settlers. A beautiful species of tree fern, often attaining 40 feet in height. It is found on the sides and often on tops of high ranges, growing luxuriantly even in exposed situations. The heart of this tree, when stripped of its fibrous coating, planed, and varnished, presents a beautiful and novel appearance, somewhat similar to a South Sea Islander’s carved war club.

No. 59. *Dicksonia antarctica*: *Labillardière*. Ord. Filices.—The common Fern-tree of the gullies. Unlike its neighbour, the *Alsophila*, this fern-tree is found only in the most densely sheltered gullies, where in some instances the daylight scarcely penetrates. It attains a great height in rich soils, and presents a magnificent appearance. The heartwood is treated in a similar manner to that of the *Alsophila*.

No. 60. *Cassinia aculeata*: *Robert Brown*. Ord. Compositac.—A white flowering bushy shrub, growing to a height of twelve feet or more. Wood hard, not of any known value. Indigenous to Victoria, New South Wales, and Tasmania.

No. 61. *Atherosperma moschata*: *Labillardière*. Ord. Monimiaceæ.—The “Victorian Sassafras” tree. In the Dandenong and Yarra Yarra range this tree grows to a great size; its leaves are glabrous, of a light green on the upper side, and glaucous underneath. Wood hard and close-grained. All parts of the tree emit a very strong aromatic odor. Bark valuable for its astringent properties. Indigenous to Victoria and Tasmania.

No. 62. *Myrsine variabilis*: *Robert Brown*. Ord. Myrsinacæ.—The “Smooth Beech” of some districts. A small glabrous tree of shrubby habit, but attaining a considerable height in humid forests. Leaves of a dark glossy green color. Wood very hard and durable. Indigenous to the colonies of Victoria, New South Wales, and Queensland.

No. 63. *Melaleuca squarrosa*: *Smith*. Ord. Myrtacæ.—The Victorian “Yellow Wood.” In some localities a mere shrub, but in parts of Gippsland a tree attaining a height of 30 feet or more. Wood hard, dense, and close-grained, of a light yellow color. Like many other species of this genus will last a long time if not exposed to the weather. It is found inhabiting marshy places, banks of rivers and creeks in the colonies of Victoria, New South Wales, South Australia, and Tasmania.

No. 64. *Lomatia Fraserii*: *Robert Brown*. Ord. Proteacæ.—The “Native Holly.” A tall shrub or small tree, sometimes attaining a height of sixty feet. Leaves glabrous, varying in length from 6 to 8 inches, and having deep irregular serratures. Found growing chiefly in mountain regions and deep forest glens, as an underwood, in the colonies of Victoria and New South Wales.

No. 65. *Pittosporum bicolor*: *Hooker*. Ord. Pittosporacæ.—The Victorian “White-wood.” A graceful tree, inhabiting moist fern gullies and ravines, where it attains, sometimes, to a height of fifty feet. Indigenous to the colonies of Victoria and Tasmania.

No. 66. *Coprosma hirtella*: *Labillardière*. Ord. Rubiacæ.—The “Native Woodbine.” A glabrous, erect shrub. Found growing luxuriantly, as an underwood, in rich, damp forests, in upland situations, where its bright scarlet berries form a fine contrast to the dense foliage with which they are surrounded. Indigenous to Victoria, New South Wales, and Tasmania.

No. 67. *Acacia dealbata*: *Link.* Ord. Leguminosæ.—The “Silver Wattle” of the colonists. A beautiful tree, attaining to a height of 100 feet in favourable situations. Foliage excessively glaucous, closely resembling that of *A. decurrens* in form. Wood hard, heavy, and close-grained, very durable: esteemed for casks, and is susceptible of a high polish. The tree is found inhabiting banks of rivers and creeks, and is of exceedingly rapid growth. Its bark is most valuable for tanning purposes, and might also be converted into paper. Indigenous to the colonies of Victoria, New South Wales, and Tasmania.

No. 68. *Fagus Cunninghamii*: *Hooker.* Ord. Cupuliferæ.—The “Native Beech.” A tree of gigantic proportions, attaining a height of 220 feet or more, with a girth of stem of from 40 to 45 feet. It is found growing luxuriantly on the Yarra Yarra Ranges and other districts of Victoria, and also in Tasmania, where it is known to the colonists as the “Myrtle-tree.”

No. 69. *Dieksonia squarrosa*: *Swartz.* Ord. Filices.—A slender tree-fern, growing to a height of twenty feet in moist, rich soils. Generally supposed to be indigenous to New Zealand only, but found also by Mr. D. Boyle in the Dandenong Ranges. The heartwood is treated in a similar manner to that of *Dieksonia antarctica* (No. 59).

No. 70. *Leucopogon Richei*: *Robert Brown.* Ord. Epacridæ.—“The Currant-wood.” A rigid, straggling shrub or small tree, growing to a height of four to fifteen feet. Wood of a reddish color, hard, dense, close-grained, exceedingly heavy and very durable; it takes a good polish, and from its rough bark and tortuous habit, it is well adapted for rustic work. The berries of the plant somewhat resemble currants in size and appearance, and are edible. It is found growing extensively along the coasts of Victoria and also on those of New South Wales, Queensland, South and West Australia, Tasmania, and Chatham Island.

No. 71. *Banksia integrifolia*: *Linnaeus, fil.* Ord. Proteaceæ.—“The Coast Honeysuckle.” This species is found extensively along the coast, in barren sandy wastes, sometimes assuming the character of a large tree, at others that of a low shrub. In the vicinity of Mordialloe and Frankston, and on Phillip Island (Victoria), trees forty feet or more in height, and having a girth of stem of six to nine feet, are frequently met with. The tree is of very ornamental appearance, when well grown. The under side of the leaves are covered with a short, white tomentum, and when agitated by the wind flash out like silver, presenting a pleasing spectacle, especially in the twilight. The wood is soft, beautifully grained and is susceptible of a high polish. The plant is also indigenous to Queensland and New South Wales.

No. 72. *Acacia longifolia*, variety *sophoræ*: *Robert Brown.* Ord. Leguminosæ.—“The Coast Acacia.” Usually a decumbent shrub, but sometimes attaining a height of twelve feet or more. It is found growing extensively on barren sandy, and rocky places along the coasts of Victoria, New South Wales, Queensland, South Australia, and Tasmania. Wood fissile, close-grained and hard, takes a good polish and is very durable.

No. 73. *Acacia verticillata*: *Willdenow.* Ord. Leguminosæ.—A tall shrub or small tree growing to a height of fifteen or twenty feet. Wood, close-grained, hard and tough, takes a good polish and is durable. Found chiefly in humid mountain districts of Victoria. It is also a native of Tasmania.

No. 74. *Helichrysum einereum*: *F. von Mueller.* Ord. Compositæ.—A tall-growing, straggling shrub or small tree, sometimes attaining a height of twenty

fect. Found along the coast and for a considerable distance inland. Wood, white and hard. Indigenous to Victoria, New South Wales, and Tasmania.

No. 75. *Acacia longifolia*, variety, *mucronata*: *Willdenow*. Ord. Leguminosæ.—A tall shrub or small tree. Wood, hard and close-grained, takes a good polish and is durable. Indigenous to Victoria and Tasmania.

No. 76. *Acacia stricta*: *Willdenow*. Ord. Leguminosæ.—An erect shrub, from three to twelve feet in height. Wood very hard and tough. Found growing in Victoria chiefly near the seaboard. Also in the colonies of New South Wales and Tasmania.

No. 77. *Avicennia officinalis*: *Linnaeus*. Ord. Verbenaceæ.—“The Native Mangrove.” A glabrous shrub or small tree, sometimes growing to a height of twenty feet. The shores of Western Port Bay (Victoria), are densely clothed with this plant. It is found chiefly on mud flats, where it grows luxuriantly down to low-water mark, and at flood tide presenting not an unpleasant picture. It is found extensively along the sea coast of most parts of the Australian continent, New Zealand, Tropical Asia, Africa, and America. The wood is exceedingly tough, and is used for mallets, &c. It is very durable under water and for underground work and foundations, but when exposed to atmospheric influences, like the Teatree, it soon perishes. The ashes from this wood supplies one of the best kinds of potash. Its bark is rich in tannin.

No. 78. *Melaleuca Preissiana*? *Schauer*. Ord. Myrtaceæ.—“The Mountain Teatree or Ironwood of Phillip Island.” A handsome tree. Unlike most melaleucas this species, has a rough bark. On Phillip Island, this tree may be seen, perhaps, to its greatest advantage growing on the beach, where it attains a height of 20 to 35 feet with a diameter of 1 to 2 feet. Wood, very heavy, white, close-grained, exceedingly hard and tough, it is very durable, takes a good polish and is used for many domestic purposes. The tree is indigenous to the colonies of Victoria, South and West Australia where it is found chiefly along the sea coast.

No. 79. *Casuarina distyla*: *Ventenat*. Ord. Casuarineæ.—“The Stunted Oak.” A low-growing, rigid shrub, seldom exceeding 10 feet in height. It is extensively distributed through the colonies of Victoria, New South Wales, South and West Australia, and Tasmania, chiefly on heath grounds and marshy places. Wood close-grained and tough, suitable for handles of tools.

No. 80. *Dodonaea viscosa*, variety *conferta*: *G. Don*.—“The Victorian Lignum Vitæ.” A tall-growing shrub or slender tree. Found growing principally on barren sandy ridges, close to the sea-shore; and in some places forming, with *Leptospermum lævigatum*, dense inaccessible scrubs. The wood is very close-grained and heavy and of extraordinary hardness and durability. The heartwood is of a greenish black color, and is suitable for sheaves for ships' blocks, rulers, tree-nails and fancy cabinet work.

No. 81. *Syncarpia laurifolia*: *Tenore*. Ord. Myrtaceæ.—“The New South Wales Turpentine-tree.” A tall slender tree, of graceful appearance. Indigenous to New South Wales and Queensland. Wood, hard, tough and durable. The tree furnishes a valuable resin. Specimen from branch of tree growing in Melbourne Botanic Gardens.

No. 82. *Leptospermum scoparium*: *Forster*. Ord. Myrtaceæ.—A tall, bushy shrub in favourable situations, but in alpine-districts low and prostrate. Wood, close-grained, hard, durable, and nicely shaded; takes a good polish. Indigenous to the colonies of Victoria, New South Wales, South Australia, Queensland, Tasmania, and New Zealand.

List of Barks, &c., from which Paper and Fibre for various purposes have been prepared at the Melbourne Botanic Gardens.

No. 1. Paper prepared from the bark of the "Paper Mulberry" tree.—*Broussonetia papyrifera*. The uses for which this bark is employed, are too well known to be worthy of remark here. The sample of paper exhibited, in a rough state, has been obtained from a plant grown in the Melbourne Botanic Gardens.

No. 2. Paper prepared from *Salvia canariensis*.—This plant, a native of the Canary Islands, has been acclimatised in the Gardens, where it grows very profusely and can be easily propagated. Its fibre producing properties are very great, and no doubt of considerable importance, as it furnishes material for paper of superior quality for writing, packing, &c. Sample prepared in rough state at Melbourne Botanic Gardens.

No. 3. Paper prepared from the bark of *Dais cotinifolia*, a beautiful tree belonging to the order *Daphnaceæ*; native of South Africa, and growing to a height of twenty-five feet or more. The bark, which peels readily, yields a good material for paper of a fine texture and very white, and also a yellow dye. Sample prepared from plant growing in Melbourne Botanic Gardens.

No. 4. Paper also fibre prepared from bark of the "Grass-cloth" tree of Queensland. *Pipturus propinquus*: *Wedd.* Ord. *Urticææ*.—This tree attains a height of fifty feet in favourable situations, furnishing large quantities of fibre yielding bark suitable for paper of good quality, and also (in a young state) for the manufacture of ropes, fishing nets, &c. It is also rich in tannin, and yields a valuable dye. It is a native of Queensland and New South Wales, but is found also scattered throughout the South Sea Islands and Indian Archipelago. Sample prepared in a rough state from plant growing in Melbourne Botanic Gardens.

No. 5. Fibre and bast (in various stages) prepared from the bark of the "Flame-tree" of New South Wales. *Sterculia acerifolia*: *A. Cunningham.* Ord. *Sterculiaceæ*.—The bast furnished by this tree is of the finest lace-like texture possible, and is no doubt superior in many respects to Cuba bast. On large trees the bark is fully two inches in thickness. The fibre can be prepared very simply by a steeping process, and is suitable for the manufacture of ropes, strong cordage, mats, baskets, fishing nets and lines, and paper of superior quality. The refuse, which is of a very elastic nature, could be used for stuffing mattresses, saddles, &c., &c. Samples prepared at Melbourne Botanic Gardens from plants growing there.

No. 6. Fibre and bast prepared from the bark of the Victorian "Bottle-tree" (*Currijong* of the aborigines). *Sterculia diversifolia*: *G. Don.* Ord. *Sterculiaceæ*.—The bast furnished, in large quantities, by this tree is somewhat like that of *Sterculia acerifolia*, but much coarser and of a darker color. It is suitable for ropes, coarse cordage, matting, baskets, paper, &c., and can be prepared very simply by steeping. This tree is found in the colonies of Queensland and New South Wales, as well as in Victoria. Samples prepared at Melbourne Botanic Gardens.

No. 7. Fibre prepared from the bark of *Sterculia foetida*: *Linnaeus.* Ord. *Sterculiaceæ*.—This tree, which is a native of the East Indian and Malayan Peninsulas, as well as of New South Wales, furnishes a valuable bark for paper-making, coarse ropes, bags, matting, &c. Its preparation is very simple. Sample prepared at Melbourne Botanic Gardens from tree growing there.

No. 8. Fibre prepared from the bark of *Abutilon venosum*: One of the "Lantern flower" trees. Ord. Malvaceæ.—A native of Brazil. Fibre of a fine texture suitable for whipcord, fishing lines and textile fabrics, also for paper. Sample prepared from plant grown at Melbourne Botanic Gardens.

No. 9. Fibre also paper prepared from bark of the "Cow-itch-tree" of Norfolk Island. *Lagunaria Patersonii*: *Aiton*. Ord. Malvaceæ.—Fine, strong and glossy suitable for paper, of superior quality, ropes, strong cordage, fine matting and basket work. Indigenous to Queensland and Norfolk Island. Sample prepared from plant growing in Melbourne Botanic Gardens.

No. 10. Samples of fibre prepared in various ways from bark, also paper prepared from the leaves of the Chinese "Grass-cloth" plant. *Bœhmeria nivea*.—This plant is of rapid growth and attains to great perfection in Victoria. Samples prepared at Melbourne Botanic Gardens.

No. 11. Samples of fibre prepared from the green and also from the dead bark of *Sparmannia Africana*.—Though a native of South Africa this plant is of very quick growth in Victoria, where it attains a height of at least ten feet. The fibre, which is produced in very large quantities, is of the finest silky texture and of a beautiful silvery white color; it is very easily prepared and is suitable for textile fabrics. The sample prepared from the dead bark is also very strong and would no doubt make good ropes, cordage, &c. This plant will produce two crops of canes in a season, and in my opinion is equal if not superior to the Chinese grass-cloth plant as a fibre producing material. Samples prepared at Melbourne Botanic Gardens.

No. 12. Fibre prepared from the bark of *Laportea Gigas*: *Wedd.* Ord. Urticaceæ.—The "Tree Nettle" of Queensland and New South Wales, where it attains a height of from 80 to a 100 feet. The wood is soft and fibrous and might be pulped-up for paper. The bark furnishes a very strong and fine fibre suitable for whipcord, fishing lines, &c. The natives avail themselves of this bark for fishing lines and nets, but the fibre obtained from the roots is most prized by them for this purpose. Sample prepared from plant growing in Melbourne Botanic Gardens.

No. 13. Fibre prepared from bark of *Sida retusa*: *Linnaeus*. Ord. Malvaceæ.—The "Queensland Hemp." This plant has established itself at Melbourne and has become very plentiful in the Botanic Gardens, where the samples have been prepared. The bark is suitable for fine paper twine, &c. It is of quick growth in Victoria and seeds very freely by which means it is easily propagated.

No. 14. Samples of fibre prepared from both the green and dead leaves of the "Spear Lily" of East Australia. *Doryanthes exelsa*: *Correa de Serra*. Ord. Amaryllidaceæ.—This plant is of moderately quick growth in Victoria. Its leaves are one mass of fibre of great strength, suitable for strong ropes, cordage, mats, baskets, brushes, &c.; also a good paper material. The plant somewhat resembles the *Fourcroya gigantea* of South America in habit and appearance. Samples prepared from plants growing in Melbourne Botanic Gardens.

No. 15. Paper made from leaves of *Mariera Northiana*: Ord. Iridaceæ.—This plant, a native of Brazil, thrives well in Victoria and furnishes a valuable paper of good texture and of a fine rich yellow color. It is easily propagated by division of the roots. Sample prepared at Melbourne Botanic Gardens.

No. 16. Paper prepared from the stems and leaves of *Scirpus fluvialis*: *A. Gray*. Ord. Cyperaceæ.—A species of "club rush" found growing plentifully

on the banks of streams and lagoons in Victoria and other parts of Australia. Yields large quantities of valuable material suitable for writing, printing and packing paper. It is gregarious in its habit and can be gathered with great facility. Samples prepared at Melbourne Botanic Garden.

No. 17. Paper prepared from *Typha augustifolia*: *Linnaeus*. The "Native Bulrush."—This plant, which is available in large quantities in many parts of Victoria and the other Australian colonies, furnishes a first-class paper material for packing purposes, and might, with proper machinery, be converted into a good writing paper. Samples of bleached and unbleached paper in a rough state prepared at Melbourne Botanic Garden.

No. 18. Samples of fibre prepared from the common "New Zealand Flax." *Phormium tenax*: *Forster*. Ord. Liliaceæ.—The material furnished by this plant is now so well known that it needs no comment here. The samples are sent merely to illustrate to what perfection this valuable plant attains in Victoria, where it is of very quick growth and is easily propagated. A sample of paper is also sent prepared from this plant. Exhibits grown and prepared at Melbourne Botanic Garden.

No. 19. Fibre prepared from the bark of *Abutilon mollis*.—Although a native of South America this plant is of exceedingly rapid growth in Victoria and seems to have thoroughly acclimatised itself. Its fibre is very strong and suitable for ropes, cordage matting, baskets, &c., also a good paper material. Sample prepared at Melbourne Botanic Garden.

No. 20. Fibre also paper prepared from the leaves of *Diaueella latifolia*: syn. *D. Tasmanica*: *Hooker*. Ord. Liliaceæ.—This plant delights to grow on the banks of creeks, &c., where its leaves attain a length of from two to six feet. Yields fibre in large quantities, suitable for mats, baskets, ropes, cordage and paper. It is found in Victoria, principally in high altitudes, and in many parts of Tasmania. Samples prepared at Melbourne Botanic Garden.

No. 21. Fibre prepared from the stems of *Caryota ureus*. The "Jaggery Palm" of India, which is found also on the north-east coast of Australia. Sample from plant grown in Melbourne Botanic Gardens.

No. 22. Fibre prepared from the leaves of *Cordyline indivisa*.—The tall-growing "Palm Lily" of New Zealand. All parts of this tree are composed of a fibrous substance, especially the leaves, which yield a very strong elastic fibre, in almost incredible quantities, suitable for the manufacture of strong ropes, cordage nets, mats, paper, &c. The stem can also be utilised for various purposes. This plant is of very quick growth in Victoria, and produces abundance of seed from which it is easily multiplied. The preparation of the fibre is very simple. Samples prepared at Melbourne Botanic Garden.

No. 23. Fibre prepared from the leaves of *Fourcroya gigantea*.—"The Giant Lily" of South America. This plant attains to great perfection in Victoria and is of moderately quick growth. Sample of fibre prepared at Melbourne Botanic Gardens.

No. 24. Fibre prepared from the "American Aloe," *Agave Americana*: *Linnaeus*. Ord. Amaryllidæ.—Sample prepared from plant grown at Melbourne Botanic Gardens.

No. 25. Fibre prepared from the bark of *Dombeya Natalensis*: *Sonnerat*. Ord. Sterculiaceæ.—A most beautiful flowering shrub, or small tree, native of Natal. It is of very quick growth in Victoria. Fibre suitable for paper making, ropes, cordage, &c. Sample prepared at Melbourne Botanic Gardens.

No. 26. Fibre prepared from the leaves of *Yucca gloriosa*: *Willdenow*. ("Adam's Needle.") Ord. Liliaceæ.—A native of America, but growing to great perfection in Victoria. Its leaves are very rich in fibre of good texture, suitable for ropes, cordage, and matting, and would no doubt yield a strong packing and writing paper. Sample prepared at Melbourne Botanic Gardens.

No. 27. Paper prepared from *Carex appressa*: *Robert Brown*. Ord. Cyperaceæ.—A species of sedge grass which grows very plentifully on the margins of rivers, creeks lagoons, &c., throughout Victoria. Yields a valuable pulp for paper of a strong coarse texture, but with proper appliances a good writing paper might be obtained. Sample prepared at Melbourne Botanic Gardens.

No. 28. Paper prepared from the stems of *Isolepis nodosa*: *Robert Brown*. Ord. Juncaginææ.—A rush found growing plentifully on river banks, and marshy places and yielding a valuable material suitable for packing and writing paper.

No. 29. Paper prepared from the stems of *Juncus maritimus*: *Lambert*. Ord. Juncaginææ.—The "Sea coast Rush." Found growing extensively along the coast and in salt marshes throughout Australia. Sample prepared at Melbourne Botanic Gardens.

No. 30. Paper and fibre prepared from the stems of (small form) *Juncus vaginatus*: *Robert Brown*. Ord. Juncaginææ.—"The Sheathed Rush." Found growing very plentifully throughout Australia. Yields a valuable pulp for paper making, and can be collected in large masses with ease. Samples prepared at Melbourne Botanic Gardens.

No. 31. Fibre prepared from bark of the Queensland "Bottle-tree." *Sterculia rupestris*: *Bentham*. Syn. *Brachychiton Delabechii*: *F. Mueller*.—This tree attains a considerable height and has an enormous bottle-shaped trunk. Its bark is very thick, and yields a very strong fibre, suitable for manufacture of rope, strong cordage, matting, paper, &c. Indigenous to Queensland. Fibre prepared from tree growing in Melbourne Botanic Gardens.

No. 32. Paper prepared from "The Native Nettle." *Urtica incisa*: *Poiret*. Ord. Urticææ.—This plant yields a pulp of very fine texture, which becomes a beautiful white color when bleached, producing what seems to be a very valuable paper. Sample prepared at Melbourne Botanic Gardens.

No. 33. Fibre prepared from bark of *Commersonia Fraseri*: *J. Gay*. Ord. Sterculiaceæ.—A tall-growing shrub or small tree. Found growing chiefly on the banks of rivers in the colonies of Victoria, New South Wales and Queensland. Its bark is extensively used by the settlers as a tying material and yields a fine fibre, in large quantities, suitable for rope, cordage, paper, &c.

No. 34. Fibre prepared from bark of *Abutilon Bedfordianum*: *Hooker*. Ord. Malvaceæ.—One of the "Lantern flowers." A tall rank growing shrub, native of Brazil. The bark of this shrub, which grows quickly in Victoria, yields a fibre of a very superior order, suitable for whipcords, fine matting, paper, and, perhaps, textile fabrics. Sample prepared from plant grown in Melbourne Botanic Gardens.

35. Fibre prepared from bark of *Plagianthus pulchellus*: *A. Gray*. Syn. *Sida pulchella*: *Bonpland*.—A small shrubby tree, found growing extensively on the banks of the Yarra Yarra and other rivers in Victoria, also in the colonies of New South Wales and Tasmania. It yields a very fine bast, the fibre of which is very strong, and suitable for manufacture of whipcord, fishing lines, nets, fine matting, and paper. Sample prepared at Melbourne Botanic Gardens.

No. 36. Fibre prepared from dead leaves of the "Screw Pine" *Pandanus utilis*: *Bojer*. Ord. Pandanaceæ.—Sample prepared from plant growing in Melbourne Botanic Gardens. Indigenous to Mauritius.

No. 37. Fibre prepared from bark of *Abutilon striatum*: *Dickson*.—The striped "Lantern flower." This shrub is of exceedingly quick growth, it is a native of Brazil, but thrives remarkably well in Victoria. The bark, which peels readily, furnishes a fibre of a very fine texture, which is very easily prepared. This plant might be grown with advantage as a fibre yielding material; two crops of canes of considerable length might be obtained in a season under favourable circumstances. Sample prepared at Melbourne Botanic Gardens.

No. 38. Paper prepared from *Ehrharta tenacissima*: *Nesb*. Ord. Gramineæ.—A tall growing wiry grass, which delights to insinuate itself amongst the lower branches of shrubs and trees. Can be obtained in large quantities in the upland regions of Victoria and other parts of Australia. Furnishes pulp suitable for packing and writing paper. Sample prepared at Melbourne Botanic Gardens.

No. 39. Fibre and paper prepared from the bark of *Pimelia axiflora*: *F. von Mueller*.—"Currijong" of the Aborigines.—A tall growing glabrous shrub, with a smooth brown bark of exceeding toughness, very rich in fibre and well adapted for whipcord, fishing lines and nets, matting, baskets, and paper of fine quality. The plant is found growing plentifully as an underwood in forests and gullies in alpine and subalpine situations. Samples prepared at Melbourne Botanic Gardens.

No. 40. Paper prepared from the "Shining Galingale rush," *Cyperus lucidus*: *Robert Brown*. Ord. Cyperaceæ.—This plant is widely distributed throughout Victoria. It is found growing on banks of rivers, lagoons, &c., and is gregarious in its habit, thus affording great facility for its collection in payable quantities. The percentage of pulp which this plant yields is very large and of good quality, suitable for making strong packing paper, and with proper machinery would no doubt furnish an excellent printing and writing paper. Samples prepared at Melbourne Botanic Gardens.

No. 41. Paper also fibre made from (large form) *Juncus vaginatus*: *Robert Brown*. Ord. Juncaginæ.—The tall "Sheathed Rush." Valuable as a paper yielding material. Can be had in large quantities; gives a large percentage of pulp, suitable for manufacture of strong paper. Found growing extensively on margins of lagoons and water courses in Victoria and other parts of Australia. Sample prepared at Melbourne Botanic Gardens.

No. 42. Paper prepared from *Carex pseudo-cyperus*: *Linnaeus*. Ord. Cyperaceæ.—Found growing on margins of lagoons and water courses often amongst *C. appressa*. A good paper material but not to be had in large quantities. Sample prepared at Melbourne Botanic Gardens.

No. 43. Paper prepared from the leaves of *Gahnia psittacorum*: *Linnaeus*; var. *erythrocarpum*. Ord. Cyperaceæ.—A species of sword grass, the leaves of which attain, in favourable situations a length of twelve feet. Found growing chiefly on banks of rivers and creeks, where it can be obtained in very large quantities with ease. Besides yielding material for paper making the leaves can be utilised for common brooms. Indigenous to Victoria and other parts of Australia. Sample prepared at Melbourne Botanic Gardens.

No. 44. Paper prepared from the stems and leaves of a large growing *Cyperus*, possibly *C. vaginatus* found growing plentifully on margins of water courses, in

subalpine situations in Victoria. Yields a pulp suitable for manufacture of writing, printing, and packing paper. Sample prepared at Melbourne Botanic Gardens.

No. 45. Paper prepared from the stems and leaves of *Lepidosperma elatius* : *Labillardière*. Ord. Cyperaceæ.—The tall "Sword Grass." The leaves and stems of this plant grow to a length of nine feet in favourable situations, it is gregarious in its habit and can be had in large quantities. Furnishes a valuable pulp for the making of strong paper and is also adapted for ordinary brooms. Found growing far inland in Victoria principally adjacent to water, in subalpine situations where it attains its greatest perfection. Sample prepared at Melbourne Botanic Gardens.

No. 46. Paper prepared from the stems of *Juncus pauciflorus* : *Robert Brown*.—A species of small rush found growing on the margins of water courses and lagoons. Furnishes a pulp suitable for fine paper. Sample prepared at Melbourne Botanic Gardens.

No. 47. Paper prepared from *Poa australis*. Ord. Gramineæ.—This rigid erect growing grass is to be met with in various forms, throughout Victoria and other parts of Australia; chiefly on banks of streams and in marshy places, where it attains a considerable length and could be collected in payable quantities. It furnishes material for a good strong paper. Sample prepared at Melbourne Botanic Gardens.

No. 48. Paper prepared from the bark of *Eucalyptus obliqua* : *L'Heritier*. Ord. Myrtaeæ.—"The Stringy Bark tree" of the colonists. The fibre producing properties of the bark of this tree are extraordinary it is to be had in almost unlimited quantities in many parts of Victoria and Tasmania and also in the colony of South Australia. The tree grows to an immense height with a diameter of stem of ten feet or more, and clear of branches for a considerable distance. The bark peels readily and is extensively employed by the settlers for roofing their habitations, &c. Although too harsh in itself to make good paper, mixed with other material it can be utilised with advantage in the manufacture of several kinds of paper. The pulp bleaches well and becomes from a rich tan color to yellowish white. The fibre might also be used for some kinds of rope, and for stuffing. The tree also yields a gum possessed of considerable astringent properties. Sample prepared at Melbourne Botanic Gardens.

No. 49. Paper from the bark of *Eucalyptus fissilis* : *F. von Mueller*. Ord. Myrtaeæ.—"Messmate" of the settlers. A large growing timber tree allied to *E. obliqua* and closely resembling it in appearance. The remarks upon the uses of the bark of the preceding apply equally to this. Sample prepared at Melbourne Botanic Gardens.

No. 50. Fibre, also paper, prepared from the bark of *Hibiscus splendens* : *Fraser*. Ord. Malvaceæ.—The "Hollyhoek-tree" of Queensland and New South Wales. A beautiful shrub or small tree attaining a height of twenty feet or more, very pubescent, and bearing large rose-colored or deep pink flowers, resembling a hollyhock in size and appearance. Bark very rich in fibre, suitable for fishing lines, cordage, paper, &c. Sample prepared from plant in Melbourne Botanic Gardens, where it grows quickly.

No. 51. Paper also fibre prepared from the bark of *Hibiscus heterophyllus* : *Ventenat*. Ord. Malvaceæ.—A tall-growing shrub indigenous to the colonies of Queensland and New South Wales but of quick growth in Victoria. Bark rich in fibre suitable for a variety of purposes. Samples from plant grown in Melbourne Botanic Gardens.

No. 52. Fibre prepared from the leaves of *Dracæna Draco*: *Linnaeus*.—The famous "Dragon Tree" of Teneriffe. Sample prepared from plants growing in Melbourne Botanic Gardens, where it is now thoroughly established. Fibre strong and flexible but the tree is of slow growth.

No. 53. Fibre prepared from the leaves of a species of *Astelia* from New Zealand. The leaves of this plant grow to a length of four feet, and are rich in fibre suitable for ropes, cordage, paper, &c. Sample prepared from plants growing in Melbourne Botanic Gardens, where it is of quick growth and of robust habit.

No. 54. Fibre prepared from the leaves of *Yucca filamentosa*: *Willdenow*.—The thready "Adam's Needle." A native of Virginia, North America but attaining great perfection in Victoria. Sample prepared at Melbourne Botanic Gardens.

No. 55. Fibre prepared from the leaves of the "Dwarf Palm Lily." *Cordyline Pumilio*: *Hooker, fil.* Ord. Liliaceæ.—"Ti-rauriki" of the natives. The leaves of this interesting species of *Cordyline* grow to a length of three feet or more and yield an abundance of fibre of long staple, suitable, for ropes, mats, baskets paper, &c. The plant is of quick growth in Victoria. Sample prepared at Melbourne Botanic Garden.

No. 56. Paper prepared from the leaves of *Lepidosperma gladiatum*: *Labillardière*. Ord. Cyperaceæ.—The Coast "Sword Rush." This plant which can be obtained in large quantities, on barren sandy places, almost everywhere, along our coast line furnishes one of the best materials for paper, out of the many with which our colony abounds. Attention was called specially to this plant as a paper material several years ago, by Mr. Cosmo Newbery, who exhibited paper made from this plant and other plants of a similar nature at former exhibitions, which attracted much attention at the time. Sample prepared at Melbourne Botanic Gardens.

No. 57. Paper prepared from the leaves of *Xerotes longifolia*: *Robert Brown*.—The "Tussack Grass" of the colonists. This plant is widely dispersed throughout Victoria, especially on plains and open country, and in the neighborhood of water. It grows to a considerable length and furnishes a large percentage of pulp, suitable for packing paper. Sample prepared at Melbourne Botanic Gardens.

No. 58. Paper prepared from the leaves and stems of *Arundo conspicua*: *Forster*. Ord. Gramineæ.—"The Plume Grass" of New Zealand. This plant although indigenous to New Zealand grows very rapidly in Victoria. The leaves and flower stalks yield a good pulp suitable for the manufacture of several kinds of paper. Sample prepared at Melbourne Botanic Gardens.

No. 59. Paper prepared from the leaves and stems of *Gynereum argenteum*: *Nees*. Ord. Gramineæ.—The "Pampas Grass" of South America. The remarks on the *Arundo conspicua* (No. 58) apply also to this magnificent species of grass, in every respect. Sample prepared at Melbourne Botanic Gardens.

No. 60. Paper prepared from bark of *Melaleuca cricifolia*: *Smith*. Ord. Myrtaceæ.—The "Swamp Tea-tree" of Victoria and New South Wales. The lamellar bark of this tree easily detaches itself and can be had in considerable quantities. It is suitable for making a soft paper and from its absorbent properties well suited for blotting paper. Sample prepared at Melbourne Botanic Gardens.

No. 61. Paper prepared from the bark of *Melaleuca genistifolia*: *Smith*. Ord. Myrtaceæ.—One of the largest of the Tea-tree family attaining in favourable

situations a height of sixty feet. Indigenous to New South Wales, Queensland and North Australia. Bark possessed of similar properties as that of the common "Tea tree" (No. 60) a remark which will apply with equal propriety to most of the *Melaleucas*. Sample prepared from tree growing in Melbourne Botanic Gardens.

No. 62. Paper prepared from bark of *Pittosporum crassifolium*: *Banks and Solander*. Ord. Pittosporæ.—An erect growing shrub or small tree indigenous to New Zealand but of very rapid growth in Victoria where it is used for ornamental hedges. Most of the *Pittosporums* of New Zealand are possessed of tough barks, somewhat similar to *Pimelia axiflora* in texture. Sample prepared at Melbourne Botanic Gardens.

No. 63. Paper prepared from bark of *Melaleuca squarrosa*: *Smith*. Ord. Myrtacæ.—"Yellow Wood" of some districts of Victoria. This species grows to a considerable height in parts of Gippsland. It is also found in the colonies of New South Wales, South Australia and Tasmania. Sample prepared at Melbourne Botanic Gardens.

No. 64. Fibre prepared from the bark of *Plagianthus betulinus*: *A. Cunningham*. Ord. Malvaceæ.—The "Lace Bark" or "Ribbon tree" of New Zealand. A graceful tree attaining a height of seventy or eighty feet. Bark of a beautiful lace-like texture and very strong, suitable for fishing lines and nets, cordage, mats, baskets and paper. It is of very quick growth in Victoria. Sample from plants grown in Melbourne Botanic Garden.

No. 65. Fibre prepared from the bark of *Stereulia lurida*: *F. von Mueller*. Ord. Stereuliaceæ.—A tree of large size, somewhat resembling *S. acerifolium*. It is a native of New South Wales, but succeeds well, in Victoria. Its bark is valuable as a fibre material, suitable for making mats, baskets, ropes, paper, &c.; it is easily prepared by a steeping process. Samples prepared from plant grown in Melbourne Botanic Gardens.

No. 66. Paper made from *Conferva* sp.?—This material can be had in enormous quantities, even in the immediate neighborhood of Melbourne. It completely covers the surface of the various lagoons throughout the colony and is very easily gathered and converted into a good strong paper, fit for packing purposes. Samples prepared at Melbourne Botanic Gardens.

No. 67. Fibre prepared from the leaves of *Yucca aloifolia*.—The Aloe leaved "Adam's-Needle," a native of South America. It succeeds admirably in Victoria and is of moderately quick growth. Sample prepared from plant grown in Melbourne Botanic Gardens.

No. 68. Fibre prepared from *Cladium radula*: *Robert Brown*.—"The Black Reed" or "Cutting Grass." A tall sedge-like grass, on wet land found growing extensively to a height of three to four feet. It is used by brickmakers as a covering material, and by the settlers as a thatch for their houses, for which purpose it is well adapted. The fibre when properly prepared is strong and of good quality. The plant is a valuable paper material and can be had in any quantity. Indigenous to Victoria and many other parts of the Australian continent.

No. 69. Fibre prepared from *Lepidosperma flexuosum*: *Robert Brown*. Order Cyperaceæ.—"The slender Sword Rush" known locally as the "Mat Grass." This plant is found plentifully on low-lying swampy ground in the Dandenong district and many other parts of the colony of Victoria. Like most of the genus it furnishes a valuable paper material and also a good strong fibre. It is made into baskets, &c., by the aborigines.

No. 70. Fibre from leaves of *Diaeuella longifolia* : *Hooker, Fil.* Order Liliaceæ.—This plant was formerly in great repute amongst the aborigines for basket making, fishing lines, &c. It cannot however be had in payable quantities. Indigenous to Victoria and many other parts of the Australian Continent.

List of Gums, Resins, and Barks.

No. 1. Resin from *Eucalyptus fissilis* : *F. von Mueller.* "The Messmate."—This substance is obtainable in large quantities, both in a liquid and solid state. Its properties are akin to those of Gum Kino and is sometimes used as a substitute for that important article. Indigenous to Victoria, Tasmania, and New South Wales.

No. 2. Resin from *Eucalyptus viminalis* : *Labillardière.*—In some districts, known locally as the "Weeping Gum," and "Box-tree," and also as the "Manna" and "Peppermint Gum." The properties of the resinous matter which this tree exudes, in large quantities, are similar to those of *E. fissilis*, a remark which applies equally to the gum obtained from most of the *Eucalypts*. The tree is indigenous to Victoria, New South Wales, South Australia, and Tasmania.

No. 3. Resin from *Eucalyptus leucoxylon* : *F. von Mueller.*—Known locally in the Dandenong ranges Victoria, as the "Milk-white Gum" and in New South Wales as "Iron Bark" and "Black Mountain Ash." It is also found extending over a large tract of country in the colony of South Australia.

No. 4. Resin obtained from *Eucalyptus amygdalina* : *Labillardière.*—The narrow-leaved "Peppermint-tree" of the lowlands, "Stringy Gum" of the mountains. This tree is extensively distributed throughout Victoria, New South Wales, and Tasmania. It has been known to attain a height of 450 feet and a diameter of 30 feet.

No. 5. Resin from *Eucalyptus obliqua* : *L'Heritier.* "The Stringy Bark."—This tree grows to a great size, forming immense forests in Victoria, South Australia, and Tasmania.

No. 6. Gum from *Panax sambucifolius* : *Sieber.* "The Elderberry Ash."—This tree exudes a transparent gum; especially during the summer months. It can be obtained in considerable quantities. The tree is found inhabiting moist forest gullies, principally in high altitudes in the colonies of Victoria, New South Wales, and Tasmania.

No. 7. Gum from *Acacia pycnantha* : *Bentham.* "The Golden Wattle."—This substance might be used as a substitute for gum arabic. It is obtainable in considerable quantities. The tree is plentifully distributed throughout Victoria and South Australia.

No. 8. Gum from *Acacia dealbata* : *Link.* "The Silver Wattle."—Widely distributed throughout the colonies of Victoria, New South Wales, and Tasmania. It bears a close affinity to *A. decurrens*, the common Wattle, and is found invariably on banks of watercourses. Gum similar to that of *A. arabica*, and may be obtained in large quantities.

No. 9. Gum from *Acacia decurrens* : *Willdenow.* "The Common or Black Wattle."—The gum exuded by this tree is similar in every respect to that of *A. dealbata*. The tree is distributed throughout the colonies of Victoria, New South Wales, South Australia, and Tasmania, in some places springing up with great rapidity, and forming dense impenetrable scrubs.

No. 10. Gum similar to Sandarac from *Callitris rhomboidea*: *Robert Brown*. "The Native Cypress."—This tree is found in the colonies of Victoria, New South Wales, Queensland, and South Australia.

No. 11. Gum Sandarac from *Callitris Gumnii*: *Hooker*. "The Native Cypress" of Tasmania. — Sample obtained from plants growing in Melbourne Botanic Gardens.

No. 12. Resin from *Synearpia laurifolia*. The New South Wales "Turpentine-tree."—Sample obtained from plants growing in Melbourne Botanic Gardens. This tree is of tall and slender habit and is indigenous to the colonies of New South Wales and Queensland.

No. 13. Gum from *Grevillea robusta*: *A. Cunningham*. "The Silky Oak."—The exudations from this tree, appear to be distinct in character from any other of the native woods. It is of a pale yellow color and very tenacious. The tree is indigenous to New South Wales and Queensland. Sample obtained from trees growing in Melbourne Botanic Gardens.

No. 14. Gum from *Sterenlia diversifolia*: *G. Don*. "The Victorian Bottle Tree."—Found also in New South Wales and Queensland. The substance which this tree exudes, in large quantities, would no doubt form a good Tragacanth.

No. 15. Gum Sandarac from *Callitris robusta*: *Robert Brown*. "The Murray Pine."—Indigenous to Victoria, bordering the river Murray, and throughout all other parts of the Australian continent. Often growing on barren sandy wastes.

No. 16. Gum obtained from *Hakea gibbosa*: *Cavanilles*.—A tall growing shrub or small tree indigenous to New South Wales. Sample from plant growing in Melbourne Botanic Gardens.

No. 17. Gum from *Corynocarpus laevigata*: *Linnaeus*. "The New Zealand Laurel."—A beautiful glabrous, leafy tree, of pyramidal habit, growing in favorable situations to a height of forty feet or more. Native of New Zealand. Attains to great perfection in Victoria where it is of moderately quick growth. Sample from plants growing in Melbourne Botanic Gardens.

No. 18. Resin from *Araucaria Cunninghamii*: *Aiton*. The "Moreton Bay Pine."—A noble tree, native of Queensland and New South Wales. Samples obtained from trees growing in Melbourne Botanic Gardens.

No. 1. Bark of *Atherosperma moschata*: *Labillardière*. "The Victorian Sassafras."—This bark is highly esteemed for its aromatic and astringent properties, and may be had in considerable quantities. The tree is indigenous to Victoria and Tasmania.

No. 2. Bark of *Melaleuca ericifolia*: *Smith*. "The common Swamp Tea Tree."—Useful as a paper material. It might also be utilised in the manufacture of hats suitable for hot climates. It is obtainable in vast quantities in many parts of Victoria. Sample of paper, also exhibited, made from this bark. New South Wales and Tasmania.

No. 3. Bark of *Melaleuca squarrosa*: *Smith*. "The Victorian Yellow Wood."—In Gippsland, attaining a height of sixty feet, its lamellar bark, which can be stripped off in large sheets, serves for thatching and can be utilised in a similar manner to that of the preceding. The tree or shrub is extensively distributed over Victoria, New South Wales, South Australia, and Tasmania. Sample of paper prepared from this bark also shown.

No. 4. Bark of *Melaleuca genistifolia*: *Smith*.—A very large growing "Tea-tree." A native of New South Wales, Queensland, and North Australia. Sample from tree growing in Melbourne Botanic Gardens, paper prepared from this bark also exhibited.

No. 5. Bark of *Eucalyptus obliqua*: *L'Heritier*. The "Stringy Bark."—Used extensively by the settlers as a thatching material. Sample of paper prepared from this bark also shown.

No. 6. Bark of *Eucalyptus fissilis*: *F. von Mueller*. "The Messmate."—The bark of this tree is also used extensively as a thatching material. Sample of paper also exhibited.

No. 7. Bark of *Acacia pyrenantha*: *Bentham*. "The Golden Wattle."—This bark is used extensively in tanning leather, its astringent properties being very great. It might also be converted into a strong packing paper. The tree is distributed over the colonies of Victoria and South Australia.

No. 8. Bark of *Acacia decurrens*: *Willdenow*. "The common Black Wattle."—Bark extensively used for tanning leather; might also be utilised for paper making. Extensively distributed through the colonies of Victoria, New South Wales, Queensland, South Australia, and Tasmania.

No. 9. Bark of *Acacia dealbata*: *Link*. "The Silver Wattle."—Considered by some authorities to be synonymous with *A. decurrens*, var. *mollissima*. But according to Hooker, it is sufficiently distinct to be separated from the above. This bark is similar in its astringent properties to *A. decurrens*, and is extensively used for tanning; it is also available for paper.

No. 10. Bark of *Pimelia axiflora*: *F. von Mueller*.—This shrub is extensively distributed through the fern gullies, and humid forest valleys of Victoria and New South Wales. Its bark supplies a valuable fibre for whip cords, paper, &c. Samples of paper and fibre from this plant also shown.

No. 11. Bark of *Quercus suber*: *Linnaeus*. "The Cork Oak" of South Europe and Northern Africa.—This tree is now thoroughly established in the Melbourne Botanic Gardens and many other parts of Victoria. Sample obtained from tree growing in Melbourne Botanic Gardens.

Dr. Sturt of Emerald Hill has kindly supplemented our list of exhibits, by presenting two bottles of a preserve made from the "Kai Apple" (*Aberia Caffra*), a native of South Africa, but thriving well in Victoria. The plant bears enormous quantities of fruit of a bright yellow color in size and shape somewhat like the Golden Pippin apple. This shrub is very suitable for hedges.

List of Dyeing Materials, &c., for Exhibition purposes.

No. 1. Dye, obtained from bark of *Pipturus propinquus*. The "Queensland Grass-cloth-plant."—This bark gives—under different treatment—several beautiful shades of brown. Samples of paper and fibre prepared from this bark also exhibited

No. 1A. Piece of woollen cloth, dyed with extract from bark of *Pipturus propinquus*. Mordanted with *Sulphate of Iron*.

No. 1B. Piece of woollen cloth also piece of silk dyed with bark of *Pipturus propinquus*.

No. 1c. Piece of calico stained with liquor obtained from bark of *Pipturus propinquus*.

No. 1d. Piece of woollen cloth, also piece of silk dyed with bark of *Pipturus propinquus*. Mordanted with *Chloride of Tin*.

No. 2. Piece of woollen-cloth, also piece of silk dyed with bark of *Dais cotinifolia*, South Africa. Mordanted with *Sulphate of Iron*. Samples of paper prepared from this bark also exhibited.

No. 2A. Piece of woollen-cloth, also piece of silk dyed with bark of *Dais cotinifolia*.

No. 2B. Piece of woollen cloth, also piece of silk dyed with bark of *Dais cotinifolia*. Mordanted with *Chloride of Tin*.

No. 2c. Piece of woollen cloth, also piece of silk dyed with bark of *Dais cotinifolia*. Mordanted with acetate of Iron.

No. 3. Piece of woollen-cloth dyed with the tubers of the "Sundew," *Drosera* spe.—The roots of this beautiful little plant possess similar properties (as a dyeing material) to the bark of the "Queensland Grass-cloth Plant," *Pipturus propinquus* (No. 1).

No. 4. Dye, obtained from the bark of *Pimelia axiflora* (Currijong of the Aborigines). Qualities not known at present. Samples of paper and fibre prepared from this bark also exhibited.

No. 4A. Piece of woollen cloth also piece of silk dyed with bark of *Pimelia axiflora* ("Currijong" of the Aborigines).

No. 5. Dye, obtained from bark of *Laportea gigas*. The "Tree Nettle" of New South Wales and Queensland.—This bark apparently possesses properties exactly similar to those of the bark of *Pipturus propinquus* (No. 1). Sample of fibre prepared from this bark also exhibited.

No. 5A. Piece of woollen cloth also piece of silk dyed with bark of *Laportea gigas*. The "Tree Nettle" of New South Wales and Queensland.

No. 6. Dye, obtained from the husks of *Sterculia diversifolia*. "The Victorian Bottle-tree."—Quality at present unknown. Samples of fibre and paper, also *fat-acid* obtained from the seeds, exhibited.

No. 6A. Piece of woollen cloth also piece of silk dyed with husks of *Sterculia diversifolia*. The Victorian "Bottle-tree."

No. 7. Oleo-resin, obtained by a boiling process, from seeds of *Pittosporum undulatum*, "The Native Laurel," Victoria.—The properties which these seeds possess are not sufficiently known at present to admit of a definite opinion being expressed as to their economic value. There is no doubt however that with proper appliances a valuable resin might be obtained from them in payable quantities, on account of the abundance of fruit which the tree produces. Sample of polished wood, from branch of this tree also exhibited.

No. 8. Fat-acid, obtained from the seeds of *Sterculia diversifolia*, "The Victorian Bottle-tree."—These seeds would, no doubt yield by expression or otherwise, an oil or fatty-matter of considerable value. Samples of fibre and paper prepared from the bark of this tree also exhibited, also a dye obtained from the husks of the seed.

