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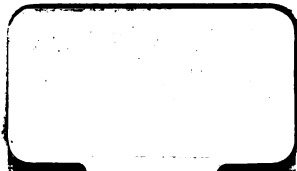
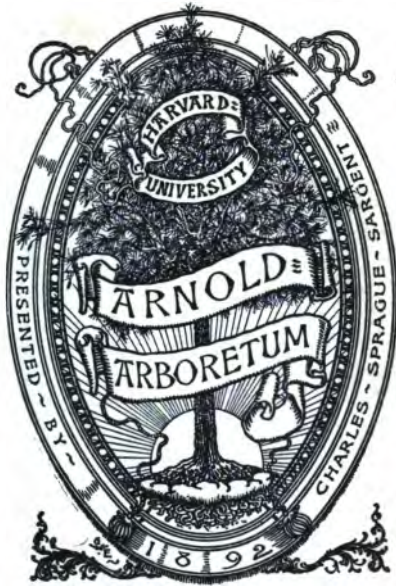
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No. 3.

FOREST DEPARTMENT, SYDNEY

J. EDNIE BROWN, F.L.S., &c., DIRECTOR-GENERAL OF FORESTS.

CATALOGUE OF TREES

AT THE

GOSFORD STATE NURSERY,

FOR

FREE DISTRIBUTION

TO

SCHOOLS AND MUNICIPAL BODIES.

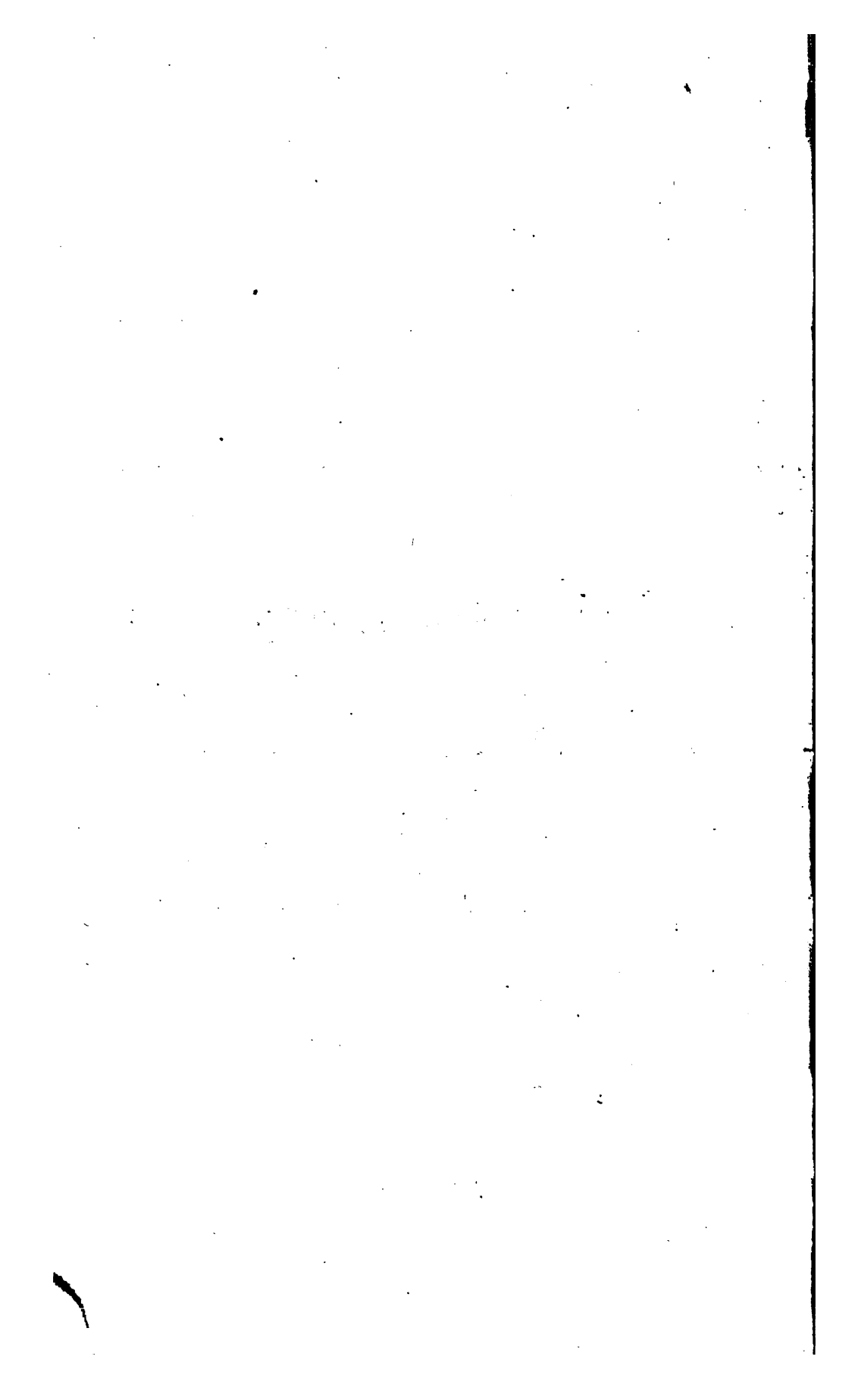
(SEASON, 1891);

With Descriptions of Trees, Soils, and Situations suitable for each kind;
Directions as to Preparation of Soil and Planting; Conditions of issue;
Tables for Planting Trees at per Acre and in Lines, &c., &c.

SYDNEY : GEORGE STEPHEN CHAPMAN, ACTING GOVERNMENT PRINTER.

1891.

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New South Wales—

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INTRODUCTORY.

THE Department of Forests having a surplus of young trees and shrubs on hand this season, a desire has been expressed that such may be placed at the disposal of Schools and other Public Bodies, in connection with the now recognised and very important institution of the planting of trees upon "Arbor Days." The Colonial Secretary having agreed to this, and the Minister for Public Instruction having approved of the selection of plants available for the planting within school grounds, this Catalogue has been specially prepared for the information of Teachers and the Authorities in connection with our Municipal and Corporate Bodies generally in the Colony.

In offering these trees and shrubs to the various Institutions referred to, it may be as well, perhaps, to state that the plants available do not comprise as good a collection for the ornamentation of public grounds generally as might otherwise be selected if such had been grown specially for the purpose; but under the circumstances, such as are available are of a fairly ornamental character, and may be relied upon as being of a strong, healthy nature, and as far as possible, truly named.

The various matters and instructions in connection with the distribution will, in the following pages, be taken up under their respective headings.

J. EDNIE BROWN,
Forest Department, Sydney, Director-General of Forests.
May, 1891.

Catalogue of Trees for Distribution at Gosford State Nursery.

SECTION I.

THE PLANTING OF TREES AND SHRUBS BY CHILDREN IN STATE SCHOOL GROUNDS.

THE following benefits will be derived from the above :—

1. The grounds will be ornamented and become a pleasing, instructive, and practically useful feature in connection with the purposes of such Institutions.

2. By planting and subsequent care of the trees, the children will be taught how to plant, and what to plant, in various soils and situations, as far as possible under the respective circumstances ; and, if properly carried out, there will be ingrafted into them a love for all that is good and beautiful in Nature, and the result should be that in the course of years our Schools, Parks, Roadways, and Streets will be converted into places of comparative sylvan beauty. If a child be made to plant a tree or shrub with his own hands, it is surprising the amount of attention which will be almost daily bestowed upon it afterwards. Its health, appearance, and general treatment will be a matter of daily comment, and hence a sense of watchfulness, carefulness, and general interest will be awakened and instilled into the child, which it will probably retain to an extent during the remainder of its life.

Children at our schools should be taught everything, if possible, in connection with the life of a tree, from the germination of the seed to the maturity of the plant ; and as, of course, any tree-planting by children in the Public School grounds of the Colony will be carried out upon a day or days which may be appointed by the Minister of Public Instruction, and designated "Arbor Days," upon which occasions an Arboricultural Lecture will be supplied to each teacher, by the Minister, it is unnecessary to recapitulate such information here.

SECTION II.

STREET AND PARK PLANTING BY CORPORATE AND OTHER BODIES.

AMONGST the very many improvements which can and should be carried out by Corporate Bodies, whether these be Town and District Councils or Trustees of Parks and Recreation Grounds, upon the lands placed under their jurisdiction, nothing can be more popular and conduce more to the well-being, pleasure, and satisfaction of the people concerned than that of judicious planting of trees and shrubs. As it is intended that the distribution of the surplus stock of plants this year at the Gosford State Nursery shall be available to such bodies, it is perhaps appropriate that a short section of this Catalogue be devoted to a few words of advice in regard to the *modus operandi* in connection with the planting of trees. I therefore venture to make the following remarks in regard thereto.

In all cases where such can be done without interfering with the ordinary traffic, the "Boulevarding," as carried out in Strathfield, Homebush, and other suburbs of Sydney, is commendable beyond degree. This system of street planting has only to be seen to be thoroughly appreciated. It consists of enclosing some six to seven feet of the ground on either side of the street immediately outside of the water-tables proper, which is trenched and planted with trees and shrubs at equal distances apart, and the vacant spaces filled up with flowers of various kinds. Openings are left opposite the gateway to each residence. This system can of course only be adopted in the purely residential streets of a town, and not where there are shops. The effect is, however, very pleasing and generally ornamental, and is highly suited for the suburban residential streets of our towns and cities.

This style of street planting may perhaps be considered somewhat expensive; as the trenching, growing plants, and planting, costs in all about £12 per chain. In carrying out work of this kind, the ground right through must be thoroughly trenched in all its parts.

In streets where there are shops, the "Boulevarding" system of planting would interfere with the business carried out in them. In such streets, however, tree planting of another kind can be done. The system generally adopted for planting trees in such thoroughfares, is simply that of having one row of trees along the edge of each side of the street, at regular distances, ranging from 25 to 40 feet apart. The trees should be of one kind only for each street; holes 4 feet square on top and 2 to 3 feet deep dug for them immediately outside of the water tables; they should be protected by simple guards, and if possible, ought to be of a deciduous kind in order not to keep the roadways and paths wet in winter time, and also not to interfere with the light to the shops during that comparatively cloudy period of the year. Trees planted in streets of this description, should be

of a uniform size and the stems trimmed up to the same distance from the bottom before they leave the nursery. If this be done and attention paid to them afterwards, the result will be perfect regularity which is so desirable and imposing in street tree-planting.

In Parks and Recreation Grounds generally, the following points should be borne in mind in connection with the planting of them :—

1. Secure as great a variety of plants and foliage as possible.
2. Avoid planting the trees in straight lines except, perhaps, when direct avenues are an absolute necessity for the public convenience.
3. Intermix the trees as much as possible ; do not plant them so thickly together that they will interfere with each other's branches ; mass and clump the trees in a natural-looking manner and, except where necessary in avenues, do not trim off their branches but allow them to assume their natural habit.

SECTION III.

SOME GENERAL OBSERVATIONS IN REGARD TO TREES AND TREE-PLANTING.

THE following brief recommendations and observations in regard to matters generally affecting tree-planting are offered :—

1. Before sending for your plants, be sure to have the ground in which they are to be planted out permanently, ready for their reception, in order that no delay may take place in the planting.

2. Although many trees will do well in almost any kind of soil and situation, it is generally essential in order to attain success that their likes and dislikes in these respects should be carefully considered. As a rule it is always best to study and act upon the peculiar predilections of a plant as regards soil, situation, aspect, and general *habitat*.

3. All trees prefer the shelter of a *mass of themselves* to being planted out singly; therefore it is desirable, as far as possible, to bear this in mind in general planting operations.

4. Generally speaking, trees languish if their stems are exposed to the direct rays of the heat of the sun, and hence, close planting is desirable until the branches can protect that part of their organism; and thus the trimming of their lower branches, when placed in avenues, should be carefully and judiciously carried out as the plants progress.

5. Badly-formed, pot-bound, and unhealthy-looking trees *should never be planted*. Neither by their growth nor appearance will they ever give the success desired. It is much better to plant a small healthy tree of a few inches in height, than one of a stunted and misshapen character as many feet high.

6. Before procuring the plants see that the ground is well prepared for their reception. Extra labour in this way will be well-spent. Where clumps and belts are proposed, ploughing and subsoiling to depths of from 12 to 15 inches are very desirable. Where holes only can be prepared, have these dug square, from 2 to 3 feet in depth, 3 to 4 feet broad, and in all cases avoid turning the subsoil upon the top.

7. It is most essential to success, that in the transport of young plants from the Nursery every care should be taken to avoid exposing their roots to the weather. This can only be obviated by careful packing. As the open-root Pines and Deciduous Trees are taken up from the Nursery beds, the roots should be at once "puddled" in a mixture of earth and water, and covered round with damp straw or bagging. Small Gums grown open-root should be carefully lifted with soil attached, and kept damp and covered up until planted out. Plants in pots should be placed in cases, then well watered and covered up.

8. On arrival at home, have the open-root Pines and Deciduous Plants opened out, and their roots properly covered over with soil in a sheltered spot, and afterwards carefully watered. Plants in pots and boxes should also be watered. If the weather be dry, continue a daily watering until the trees are planted out.

9. Choose the weather for planting. Do not attempt it on bright sunny or windy days, but take advantage of the first cloudy, dampish day, and then put on all hands and get the trees put in. These remarks are especially applicable to plants grown open-root and in boxes.

10. Puddle the roots of all open-rooted trees before planting, and spread them out to their full length in the holes. Fill up the holes with good, well-pulverised soil. Do not fill up with lumpy or clayey soil.

11. Small Gums in boxes should be taken out and planted with a little of the soil attached to their roots. This may be done if one side of the box be removed, and the plants taken out carefully with a small trowel. By doing this, the young plants will receive little or no check to their growth.

SECTION IV.

TABLE SHOWING THE NUMBER OF TREES WHICH CAN BE PLANTED ON AN ACRE OF GROUND AT STATED DISTANCES APART.

In the following table will be seen at a glance the number of trees which can be planted upon an acre of ground, with the trees standing at distances from 1 ft. to 30 ft., plant from plant:—

Distance apart.	No. of trees.	Distance apart.	No. of trees.
1 foot	43,500	12 feet	302
1 $\frac{1}{3}$ feet... ..	19,360	12 $\frac{1}{3}$ „	270
2 „	10,890	13 „	257
2 $\frac{1}{3}$ „	6,970	13 $\frac{1}{3}$ „	239
3 „	4,840	14 „	222
3 $\frac{1}{3}$ „	3,556	14 $\frac{1}{3}$ „	207
4 „	2,722	15 „	193
4 $\frac{1}{3}$ „	2,152	15 $\frac{1}{3}$ „	181
5 „	1,742	16 „	170
5 $\frac{1}{3}$ „	1,440	16 $\frac{1}{3}$ „	164
6 „	1,210	17 „	150
6 $\frac{1}{3}$ „	1,031	17 $\frac{1}{3}$ „	142
7 „	889	18 „	134
7 $\frac{1}{3}$ „	774	18 $\frac{1}{3}$ „	127
8 „	680	19 „	120
8 $\frac{1}{3}$ „	603	19 $\frac{1}{3}$ „	114
9 „	537	20 „	108
9 $\frac{1}{3}$ „	482	22 „	90
10 „	435	24 „	75
10 $\frac{1}{3}$ „	395	26 „	64
11 „	360	28 „	55
11 $\frac{1}{3}$ „	329	30 „	48

SECTION V.

TABLE SHOWING THE NUMBER OF PLANTS REQUIRED TO PLANT LINES OF TREES AT STATED DISTANCES APART.

THE number of plants required to put in a mile of a Hedge or Avenue of trees, with the plants put in at distances ranging from 6 in. to 100 ft. apart, is as follows:—

Distance apart.	No. of trees per mile.	Distance apart.	No. of trees per mile.
6 inches ...	10,560	30 feet ...	176
1 foot ...	5,280	31 " ...	170
2 feet ...	2,640	32 " ...	165
3 " ...	1,760	33 " ...	160
4 " ...	1,320	34 " ...	155
5 " ...	1,056	35 " ...	151
6 " ...	880	36 " ...	146
7 " ...	754	37 " ...	142
8 " ...	660	38 " ...	138
9 " ...	586	39 " ...	135
10 " ...	528	40 " ...	132
11 " ...	480	41 " ...	128
12 " ...	440	42 " ...	125
13 " ...	406	43 " ...	122
14 " ...	377	44 " ...	120
15 " ...	352	45 " ...	117
16 " ...	330	46 " ...	114
17 " ...	310	47 " ...	112
18 " ...	293	48 " ...	110
19 " ...	277	49 " ...	107
20 " ...	264	50 " ...	105
21 " ...	251	55 " ...	96
22 " ...	240	60 " ...	88
23 " ...	229	65 " ...	81
24 " ...	220	70 " ...	75
25 " ...	211	75 " ...	70
26 " ...	203	80 " ...	66
27 " ...	195	85 " ...	62
28 " ...	188	90 " ...	58
29 " ...	182	100 " ...	52

SECTION VI.

THE STATE NURSERY.

THIS establishment is situated about half a mile from the Gosford Railway Station, and is easily accessible from there by a good road which has been recently formed. This, at present, is the only Nursery under the jurisdiction of the Forest Department, and from it alone will the trees under this Catalogue be available this season. The soil of this Nursery is of a variable character, being from an almost fine sand to a deep vegetable mould, lying upon a substratum of wonderfully rich and retentive clay. Thus, in many respects, the establishment is well suited to the successful raising of young tree-stock, having an abundance of fibrous roots, which fact alone will enable the plants to withstand the results of transplanting out to other and perhaps less favourable sites. Besides these facts, care has been taken to grow the young plants as much as possible in such a manner that they will be of a strong, branchy and sturdy nature; and hence the results may, under ordinary circumstances, be expected to be fairly successful.

SECTION VII.

CONDITIONS UPON WHICH THE YOUNG TREES WILL BE DISTRIBUTED.

1. APPLICATIONS for trees or shrubs for the planting of School grounds must be made by the teachers through the head of their Department, the Minister of Public Instruction.

These applications must be very explicit, and give full information upon the following points:—

- a. State the general physical conditions of the grounds which are proposed to be planted, giving short details as to character of soil and subsoil, aspect of the situation, and its elevation above the sea.
- b. The number of trees required, and any special wish as regards the description of trees it is desired to plant, leaving it to the Department to decide as to whether these are suitable, and to substitute other kinds if necessary.
- c. Give full and explicit directions regarding the address and route the trees should be despatched. In each case, the plants will be put on board the train at Gosford, and forwarded as directed to railway terminus or shipping port at the expense of the Department of Public Instruction.

2. Applications for trees or shrubs required by district Councils, Trustees of Parks and other Public Bodies, must be made direct to the Director-General of Forests, stating the number of trees required, and giving particulars as to address and route the trees should be sent.

- a. The trees will be forwarded at the expense and risk of the Council or Public Body desiring same.
- b. In no case will the Department bind itself to supply the number of trees asked for, but will endeavour to meet all applications as far as possible.

In order that the results of the planting of the trees thus distributed by the Department, may be recorded in the Annual Report of the Director-General of Forests in each successive year for the information of the Government, a circular form will be sent to each recipient of trees on the first of April following the planting, in which it is requested that full particulars will be given as to the number of trees that have survived the transplanting, and their condition generally.

SECTION VIII.

BRIEF DESCRIPTION OF THE TREES AND SHRUBS AVAILABLE,

with some remarks as to their value for ornamental and useful purposes, and the soils and situations in which they flourish.

NON-AUSTRALASIAN TREES AND SHRUBS.

Acer pseudo-platanus—"Sycamore."—Does well in the moister and cooler parts of the country only. Delights in deep, rich, sandy, and loamy soils.

Ailanthus glandulosa—"Tree of Heaven."—Hardy, deciduous tree, of rather rapid growth, and very ornamental. Useful for reclaiming coast sands. Will grow well in almost any soils.

Catalpa speciosa—"Catalpa tree."—This tree can only be grown to any size in sites having a deep, moist soil, with some shelter. If planted out in exposed situations it makes little or no progress, and eventually dies. The tree is highly recommended for avenue purposes.

Cupressus Benthami—"Bentham's Cypress."—A beautiful tree, attaining a height of 60 feet, and delighting in elevated situations, with soils of a sandy nature on top, and a clay subsoil.

Cupressus Goveniana—"Goven's Californian Cypress."—A beautiful cypress, worthy of a place in all ornamental grounds. It is hardy and does well in this Colony in various soils and situations.

Cupressus horizontalis—"Horizontal Cypress."—A variety of *Cupressus sempervirens*. It is very spreading in habit, and only grows to about 40 or 50 feet in height. It is handsome, and well worthy of a place in ornamental plantations. It will grow in various soils, but is especially adapted for growing upon limestone sites.

Cupressus Lawsoniana—"Lawson's Cypress."—A handsome cypress, attaining a large size and yielding useful timber. Suitable for planting in sandy, loamy soils, having a clay subsoil. The tree does well in the cooler parts of the Colony.

Cupressus macrocarpa—"Large-fruited Cypress."—A large tree, and one of very quick growth, even in poor dry soils. One of the best shelter trees on coast sands.

Cupressus torulosa—"Nepal or twisted Cypress."—This tree seems to prefer limestone soils. Splendid for break-winds and tall hedges. Very ornamental.

Gleditschia horrida, *Gleditschia triacanthos*—"Three-spined Honey-Locust."—These two species are sometimes used for tree planting. Sown closely, they form impenetrable, thorny, and not readily combustible hedges.

Hibiscus sinensis—"Chinese Hibiscus."—A nice ornamental, large shrub.

Juglans regia, *Juglans nigra*—"Common and Black Walnuts."—For timber or fruit; should be largely planted in our cooler districts. Delight in deep, moist and rich soils.

Juniperus virginiana—"Juniper; or, North American Pencil Cedar."—A handsome tree, supplying a fragrant timber much esteemed for strength and durability. Grows best near the sea, but is not particular.

Laurus Camphora—"Camphor Laurel."—This well-known, handsome, hardy, umbrageous tree is worthy of extensive cultivation for ornamental purposes. Will grow in almost any situation and soil.

Ligustrum lucidum, *Ligustrum pubescens*—"Privet."—The privets are useful for hedge planting. They grow under trees where scarcely anything else will live. They are very hardy, and do well in the Colony.

Morus rubra—"Mulberry of North America."—The largest of the Mulberry trees. Useful for ornament, silkworms' food, timber, and its edible fruit.

Olea europea—"Olive."—The well-known tree which flourishes best at no great distance from the sea. For fruit and hedges its cultivation is well known. It is also a very ornamental tree. Will grow in any and specially in calcareous soils.

Phoenix dactylifera—"Date Palm."—This well-known tree is worthy of attention for our arid Western Plains. It will live in saltish soils.

Pinus halepensis—"Aleppo Pine."—In the cooler regions of the colony will grow in almost any soil. Delights in sandy soils, lying upon strong clay bottoms. A massive looking tree, and a rapid grower. Will grow on saline and calcareous soils.

Pinus insignis—"Remarkable Pine."—A rapid grower, with upright habit. Not particular as to soil, although it prefers one of a sandy loam on top, lying upon a strong, retentive subsoil. Its growth is slow and uncertain in exposed positions. Can be planted successfully in the cooler parts of the Colony.

Pinus pinaster—"Cluster Pine."—Large, massive, spreading, ornamental-looking tree. Grows well in the Colony. Prefers low-lying, sandy situations within the influence of the sea breezes; it is therefore suitable for seaside planting.

Pinus Pinea—"Stone Pine."—A quick growing Pine, also suitable for the coast districts. Will grow in poor and ordinary soils.

Platanus acerifolia—"Maple-leaved Plane tree."—An excellent deciduous tree for street and avenue planting. Beautiful, hardy, and worthy of extended cultivation. Prefers strong and rich soils.

Populus fastigiata—"Upright, or Lombardy Poplar."—Of close, upright habit; a rapid grower. Adapts itself well to this climate. Likes deep, rich soils, with plenty of moisture; but will also do well in less favoured sites so long as there is dampness in the subsoil.

Populus canescens—"Silver or Grey Poplar."—Plant in loamy soils with plenty of moisture. It will, however, do well in other soils. A fine ornamental deciduous tree, worthy of extensive cultivation.

Quercus robur—"English Oak."—This tree can only be grown successfully in the cooler and more sheltered portions of the colony. It prefers sheltered situations, and good, rich soils.

Salix aurea—"Golden Osier."—One of the most valuable osiers for basket making. Must be grown in rich soils, with plenty of moisture.

Salix babylonica—"Weeping Willow."—This well-known tree grows luxuriantly in our climate. It prefers deep, rich, moist, and sheltered sites, but will also do well in most places which are not absolutely dry and poor.

Salix russelliana—"Bedford, or Basket Willow."—Attains a large size, and yields a most valuable soft timber. It is extensively raised for basket making. Should be grown in deep, rich, and moist soils.

Tamarix gallica—"Tamarisk."—This well-known tree will grow almost anywhere in this colony. A rapid grower; very graceful in its habit of foliage. Makes a good hedge. Excellent for seaside planting, and also thrives well in fairly exposed positions.

Ulmus campestris—"English Elm."—A deciduous tree, one of the best for avenues. It flourishes best in climates rather cooler than that of Sydney. Yields very durable timber.

AUSTRALASIAN TREES AND SHRUBS.

Araucaria excelsa—"Norfolk Island Pine."—Valuable both for timber and ornamental purposes. It is very accommodating in regard to soil and situation.

Callistemon lanceolatus—"Red Bottle-Brush."—A shrub which bears exceedingly showy flowers. It luxuriates in plenty of moisture.

Ceratopetalum apetalum—"Coachwood."—A shapely tree naturally found, as a rule, in gullies. It is, however, hardy, and besides being ornamental yields useful timber.

Ceratopetalum gummiferum—"Christmas Bush."—This bush or small tree is too well known to need description.

Dysoxylon Fraserianum—Rosewood.—This is an ornamental tree allied to the Red Cedar, and likewise yields a very valuable timber. Requires a mild and rather moist climate.

Eucalyptus capitellata—"Coast Stringybark."—This tree will stand a considerable amount of cold, as well as the moist heat of some of the coast-districts. It flourishes on poor soil.

Eucalyptus corynocalyx—"Sugar Gum."—A most excellent Gum, and the best for general planting. It will grow almost anywhere in the Colony. For dry-country planting it cannot be excelled. As an ornamental tree it is of a high order. Timber heavy and durable. Foliage dark shining green. For planting in our Western plains, I recommend this tree above all others. It attained a height of 8 ft. in one year upon the Mount Brown Forest Reserve in S.A. The tree does not like wet or cold sites.

Eucalyptus crebra—"Grey Ironbark."—An ornamental tree, producing very valuable timber. It prefers ridges and ranges, and also a better soil than some of the other Ironbarks.

Eucalyptus globulus—"Tasmanian Blue Gum."—A very rapid grower, of straight growth; timber of about equal quality to our stringybark; it is now to be found growing in places all over the Colony; prefers good, strong soils, with some moisture. Don't plant on dry, limestone, nor exposed sites.

Eucalyptus leucoxydon—"Red Ironbark."—This tree was originally called *E. sideroxydon*, and is not to be confused with the *leucoxydon* of South Australia and Victoria. It yields a valuable timber, and will flourish both near the coast and in the Western Districts.

Eucalyptus melliodora—"Yellow-box."—An excellent shade tree yielding a useful timber. It will grow almost anywhere.

Eucalyptus microcorys—"Tallow-wood."—A grand timber, well known. Grows with great rapidity in the northern coast districts. It would be interesting to see how far this useful tree is capable of acclimatisation in the cooler parts of the Colony.

Eucalyptus pilularis—"Blackbutt."—Forms a shapely tree, while the timber is one of the most valuable yielded by the Gums. Although the tree is sometimes found in high-lying districts, its chief habitat is on the flats and rich places in the valleys. It therefore delights in good loamy soils.

Eucalyptus resinifera—"Red Mahogany."—This tree yields a durable dark coloured timber, and it will flourish on very poor soils.

Eucalyptus robusta—"Swamp Mahogany."—A magnificent species, with large, handsome foliage, and forming a shapely, umbrageous tree. It flourishes best in the coast districts and will grow in damp places where few other eucalypts will flourish.

Eucalyptus rostrata—"Red Gum" (of the Murray, chiefly).—A superior tree; timber very durable; foliage graceful. Prefers deep, rich soils on flats, but will also do well on hillsides where there is a retentive subsoil. A hardy tree, easily transplanted, and of rapid growth.

Eucalyptus saligna—"Flooded Gum."—This tree yields a good, all-round timber, one of the best and easiest to work of our native hardwoods. As its name denotes, it will flourish in damp, low-lying localities, but it is not by any means confined to such situations.

Eucalyptus tereticornis—"Grey Gum."—A useful timber; tree closely allied to *E. rostrata*.

Ficus macrophylla—"Moreton Bay Fig."—This is one of our most valuable shade trees. It will grow on almost any kind of soil, and is especially valuable for planting in calcareous soils. It is liable to injury from frosts when young, and therefore should be protected for a few months each winter, where frosts are troublesome, until it reaches 5 ft. or 6 ft. in height.

Frenela Endlicheri—"Red or Black Pine."—A smaller tree than *F. robusta*, but very ornamental in appearance; the timber, also, is very ornamental. The *Frenelas* cut into very good boards, but they are brittle and split easily. *F. Endlicheri* and *F. robusta* are interior species, and generally grow on light, sandy ridges.

Frenela Macleayana—"Port Macquarie Pine."—A coast species, loving a moister climate than the other two. Very ornamental.

Frenela robusta—"White or Cypress Pine."—A highly ornamental tree, suitable for planting in dry soils. See *F. Endlicheri*.

Grevillea robusta—"Silky Oak."—An ornamental, quick-growing tree, invaluable for planting in the warmer and moister portions of the Colony. Its timber, also, is valuable for staves.

Kentia Belmoreana—"Curly Palm" (Lord Howe Island).—For ornamental purposes in moist, warm situations.

Lagunaria Patersoni—"White Oak" of Norfolk Island.—A useful tree for street and avenue planting, quick-growing, shapely and leafy. It grows to a large size in congenial surroundings.

Melaleuca leucadendron—"White Tea-tree."—Fond of sea-air, and grows in swampy country in the poorest soils.

Melia Azedarach—"White Cedar."—A free-growing deciduous tree, possessing considerable attractions for avenue purposes. It is more of an ornamental than a useful tree. Transplants readily, and adapts itself to all parts of the country.

Pittosporum crassifolium—The "Karo" of New Zealand.—A coast species valuable for shelter. It will grow close to the sea, and withstands fierce gales.

Pittosporum eugenioides—The "Tarata" of New Zealand.—A small evergreen tree, which is ornamental and very hardy. It is sometimes used as a hedge plant, and bears clipping freely.

Pittosporum phillyræoides—"Native Daphne."—An interior species, and therefore capable of withstanding great drought. It is a graceful small tree, and is sometimes used as a fodder plant.

Pittosporum undulatum—"Mock Orange."—This well-known ornamental tree is worthy of even further cultivation, both on account of its fresh umbrageous character and also as a shelter for other trees and shrubs. It is a coast species, and will grow quite close to the sea.

Podocarpus elata—"Colonial Deal."—A beautiful tree, worthy of cultivation for ornamental purposes, and also because it yields a soft useful timber.

Seaforthia elegans—"Bangalow Palm."—For ornamental purposes, grows in mild, moist situations favoured with rich soil.

Sterculia diversifolia—"Black Kurrajong."—A useful shade tree of good shape, and generally ornamental appearance. It will stand severe droughts, and yet flourish in moist localities.

Syncarpia laurifolia—"Turpentine."—A grand timber tree, shapely, and affording a pleasant shade. It will not stand much cold, and prefers good soils.

Tristania conferta—"Brush, or White Box."—Valuable for street planting and general ornamental purposes.

SECTION VIII.

CATALOGUE OF TREES AVAILABLE FOR DISTRIBUTION FROM
GOSFORD STATE NURSERY, SEASON 1891.

Botanical Name.	Vernacular Name.	Numbers available.
<i>Acer pseudo-platanus</i>	Sycamore	25
<i>Ailanthus glandulosa</i>	Tree of Heaven	500
<i>Araucaria excelsa</i>	Norfolk Island pine	100
<i>Callistemon lanceolatus</i>	Bottle brush	200
<i>Cassia Candelleanum</i>	Native laburnum	200
<i>Catalpa speciosa</i>	Catalpa... ..	1,000
<i>Ceratopetalun apetalum</i>	Coachwood	200
<i>Ceratopetalun gummiferum</i>	Christmas bush	300
<i>Cupressus goveniana</i>	Cypress	300
<i>Cupressus torulosa</i>	Twisted cypress	300
<i>Cupressus horizontalis</i>	Cypress, horizontal	50
<i>Cupressus macrocarpa</i>	Cypress, large-fruited... ..	50
<i>Cupressus lawsoniana</i>	Cypress, Lawson's	200
<i>Cupressus Benthamiana</i>	Cypress, Bentham's	50
<i>Dysoxylon Fraseranum</i>	Rosewood	50
<i>Eucalyptus robusta</i>	Swamp mahogany	100
<i>Eucalyptus resinifera</i>	Red mahogany... ..	50
<i>Eucalyptus capitellata</i>	Stringybark	50
<i>Eucalyptus globulus</i>	Blue gum	50
<i>Eucalyptus melliodora</i>	Yellow box	100
<i>Eucalyptus saligna</i>	Flooded gum	200
<i>Eucalyptus corynocalyx</i>	Sugar gum	1,000
<i>Eucalyptus pilularis</i>	Blackbutt	300
<i>Eucalyptus tereticornis</i>	Grey gum	500
<i>Eucalyptus microcorys</i>	Tallowwood	500
<i>Eucalyptus leucoxyton</i>	Red ironbark	300
<i>Eucalyptus rostrata</i>	Red gun	300
<i>Eucalyptus crebra</i>	Grey ironbark... ..	300
<i>Ficus macrophylla</i>	Moreton Bay fig	150
<i>Frenela robusta</i>	White or Cypress pine	300
<i>Frenela Endlicheri</i>	Red or Black Pine	500
<i>Frenela Macleayana</i>	Port Macquarie pine	100
<i>Gleditschia horrida</i>	Horrid Honey locust	100
<i>Gleditschia tricanthos</i>	Three-spined Honey locust	100
<i>Grevillea robusta</i>	Silky oak	300
<i>Hibiscus sinensis</i>	Chinese Hibiscus	200
<i>Juglans nigra</i>	Black Walnut... ..	25
<i>Juglans regia</i>	Walnut... ..	50
<i>Juniperus virginiana</i>	Juniper... ..	50
<i>Kentia Belmoreana</i>	Curly palm	50
<i>Laurus Camphora</i>	Camphor laurel	300
<i>Lagunaria Patersoni</i>	White Oak	200

Botanical Name.	Vernacular Name.	Numbers available.
<i>Ligustrum lucidum</i>	Privet	50,000
<i>Ligustrum pubescens</i>	Privet	50,000
<i>Melaleuca leucadendron</i> ...	White Tea-Tree	100
<i>Melia Azedarach</i>	White cedar	10,000
<i>Morus rubra</i>	Mulberry	100
<i>Olea europea</i>	Olive	500
<i>Phoenix dactylifera</i>	Date palm	25
<i>Pinus pinaster</i>	Cluster pine	10,000
<i>Pinus halepensis</i>	Aleppo pine	10,000
<i>Pinus Pinea</i>	Stone pine	2,000
<i>Pinus insignis</i>	Remarkable pine	5,000
<i>Pittosporum crassifolium</i>	Karo	100
<i>Pittosporum phylliræoides</i>	Native Daphne	25
<i>Pittosporum eugenioides</i>	Tarata	200
<i>Pittosporum undulatum</i> ...	Mock orange	150
<i>Platanus acerifolia</i>	Plane tree	100
<i>Podocarpus elata</i>	Colonial deal	500
<i>Populus fastigiata</i>	Upright poplar	3,000
<i>Populus cinerea</i>	Silver poplar	500
<i>Quercus robur</i>	English oak	5,000
<i>Salix aurea</i>	Golden osier	1,000
<i>Salix Babylonica</i>	Weeping willow	400
<i>Salix Russelliana</i>	Basket willow	500
<i>Seaforthia elegans</i>	Bangalow palm	500
<i>Sterculia diversifolia</i>	Black Kurrajong	500
<i>Syncarpia laurifolia</i>	Turpentine tree	200
<i>Tamarix gallica</i>	Tamarisk	400
<i>Tristania conferta</i>	Brush or white box	500
<i>Ulmus campestris</i>	English elm	500
Total number of trees and shrubs available		143,400

SECTION IX.

BOOKS AND REPORTS ON FORESTRY.

ADVANTAGE is taken of the possible extensive distribution of this Catalogue to advise that a Work upon Forestry matters generally in these Colonies, to be entitled "The Australian Forester," is now in course of preparation and will shortly be in the press. The subject matter of this book will deal with the modern aspect of the important question of Reafforestation and Planting of Australia.

A pamphlet entitled, "Hints for the Collection and Preservation of botanical and other specimens for the Museum of Economic Forestry," has recently been issued from the Forest Department, and copies of this may be obtained by those desirous of assisting in the important work to which it has reference.

A Work is now in the press entitled, "The Forest Flora of New South Wales," issued by the Forest Department, under the authority of the Government. An effort will be made to illustrate and describe in a popular manner the principal trees and shrubs indigenous to the Colony.

The Illustrations will be in colour, and show natural-sized flowering branchlets of each species, together with its fruits, barks, &c.

A special artist has been engaged for this purpose, and no effort will be spared to render the plates, as far as possible, faithful representations of the plants which will be dealt with.

The descriptive matter will be clear, comprehensive, and up to date. It will be subdivided into the following headings:—

Botanical names of the plants with their synonyms.

Vernacular and Aboriginal (as far as obtainable) names.

Territorial and general Geographical distribution.

Popular description.—This will include the general appearance of the plant, its suitability for economic or ornamental planting, uses of timber, bark, leaves, fruits, &c. Careful observations will also be made in regard to the principal characteristics of each plant, and specially in regard to its habitats.

A purely botanical description of each plant will also be given, in order that the Work may be useful for technical reference.

It will be published in quarterly parts, each containing five plates, with their corresponding letter-press of descriptive matter. The price of the work will be 5s. per Part to subscribers and 7s. 6d. to Non-Subscribers. Postage extra in each case. The liability of subscribers will be limited to four consecutive Parts, prepaid. It is expected that the First Part will be published in June next.



