

SECTION X.

FORESTS, FORESTRY, AND FORESTAL PRODUCTS.

§ 1. The Forests of Australia.

1. **Extent of Forests.**—Although no definite survey of forest lands has been made on a uniform basis for the different States of Australia, the following table gives the results of careful estimates made for each State :—

FOREST RESERVES AND FOREST AREAS, STATES AND COMMONWEALTH, 1908.

State.	Specially Reserved for Timber.	Total Forest Area.	Percentage of State Area.		Percentage of Commonwealth Area.	
			Specially Reserved	Total Forest.	Specially Reserved	Total Forest.
	Acres.	Acres.	%	%	%	%
New South Wales	7,474,260	15,000,000	3.76	7.67	0.39	0.72
Victoria ...	4,009,616	11,797,000	7.13	20.97	0.21	0.62
Queensland ...	3,836,191	40,000,000	0.89	9.32	0.20	2.10
South Australia ...	157,066	3,840,000	0.03	0.66	0.01	0.20
Western Australia	20,400,000*	20,400,000	3.27	3.27	1.07	1.07
Tasmania ...	283,954	11,000,000	1.70	65.56	0.01	0.58
Commonwealth	36,161,087	102,037,000	—	—	1.90	5.36

* Total forest area is reserved.

The actual area of wooded land is probably in all cases much greater than shewn above. For example, that of Western Australia is estimated at 97,900,000 acres; Queensland has probably 143,000,000 acres; and Victoria has a considerable extent of "Mallee" country not included in the above estimate. The basis of estimation for each State in any case cannot be regarded as quite identical. Considerable areas not included as forest lands possess timber of local value.

The absolute and relative forest areas of Australia and other countries are shewn in the table on next page.

In each of the States areas have been set apart as State forests and "timber reserves," in some cases the reservation being made in perpetuity, in others for a definite period, in others again the reservation may be cancelled at any time. The characteristics of the forest areas of the different States are referred to seriatim.

RELATIVE AREAS OF FOREST LANDS, AUSTRALIA AND OTHER COUNTRIES, 1908.

Country.	Total Forest Area.	Percentage of Total Area.	Country.	Total Forest Area.	Percentage of Total Area.
	Sq. Miles.	%		Sq. Miles.	%
Australian C^owealth	159,433	5.36	Rumania ...	10,635	20.98
New Zealand ...	31,250	29.83	Sweden ...	31,746	18.36
United Kingdom ...	4,805	3.96	Norway ...	26,230	21.13
France ...	32,407	15.65	Russia in Europe	859,375	43.04
Algeria ...	10,868	3.17	United States ...	1,000,000	33.67
Germany ...	54,015	25.90	Canada ...	835,938	22.33
Switzerland ...	3,290	20.60	Cape of Good Hope	537	0.19
Italy ...	15,796	14.29	British India ...	127,737	10.83
Austria ...	37,696	31.66	Japan ...	28,027	18.98
Hungary ...	34,775	27.72			

2. **Characteristics of State Forest Areas.**—(i.) *New South Wales.* Great diversity exists in the more dense distribution of timber trees in the coastal region, between the range and the Pacific Ocean. The areas of natural forest, however, are found in nearly every part of the State except the wide plains of the Murrumbidgee, Lachlan, and Darling districts, the level surface of which is chiefly covered with salt bush, scrub, and indigenous grasses, while the tree-growth is, as a rule, confined to belts of red gum, box, sheoak, and myall along the courses of the rivers and their tributaries, and to groves of cypress pine at intervals. The tree-clad regions of the State may be divided into open, brush, and scrub forests. The first class has the widest distribution, being found in every geological formation, and including some of the finest timbers, such as many species of eucalyptus, angophora, and other genera of the natural order of myrtles. Among the hardwoods, red gum usually marks the courses of streams, while on the rough and stony mountain and hill ridges, with their sheltered gorges, are found several varieties of ironbark, blackbutt, tallowwood, spotted gum, grey box, red mahogany, forest red gum, Sydney blue gum, and turpentine. The brush or jungle forests occupy a considerable tract of country between the Dividing Range and the coast. In this region, interspersed occasionally with large Moreton Bay and other figs, fern trees, cabbage trees, and palms, grow some of the most beautiful timbers known for cabinet work and veneers, such as the red cedar, rosewood, silky oak, beech, red bean, beefwood, tulipwood, and coachwood. In addition to these, there are considerable supplies of the colonial or hoop pine, and the brown or berry pine. The scrub forests are represented by the red or black and white varieties of the cypress pine, and many species of acacia and eucalyptus. These are chiefly situated in the western portion of the State, and although the pines and some of the eucalypts are useful for local building and fencing, the bulk of the timber is of little commercial value.

(ii.) *Victoria.* The mountain ranges, principal of which are the Dividing Range and the Australian Alps, constitute the true forest regions of the country, the trees attaining considerable height and girth, and the brush or scrub growth great luxuriance. The lower elevations of the ranges, remote from settlement, are densely wooded to their summits, but the peaks above the winter snow-line are either bare or covered only with dwarfed vegetation. Dense and luxuriant forests characterise the Otway Ranges and Gippsland, south of the Main Divide. The tree-growth in the Grampians consists chiefly of stringy-bark, white gum, grey and yellow box, and white ironbark, with some red gum and wattle. In the Pyrenees there are more valuable hardwoods, chiefly blue gum and messmate, with stringy-bark, grey and yellow box, red and white ironbark on the lower levels. In Wombat Forest, extending along both sides of the Dividing Range from Creswick to Mount Macedon, the timber is almost wholly young messmate of good quality, with peppermint and swamp gum. Further eastward along the range messmate

and stringy-bark prevail, with grey and yellow box and ironbark on the low country. In Delatite, and in the lower ranges of the Australian Alps generally, the timber increases in height and girth, and includes blue gum, messmate, and peppermint of fine quality, with ribbon gum, woollybutt, and silvertop on the higher levels, and grey and yellow box with stringy-bark along the lower slopes and valleys. The northern plains, extending westward from Wodonga to the Grampians, are thinly covered with open forests, the limits of the prevailing trees being defined in clearly-marked belts. Thus the main belt of red gum follows the course of the Murray and extends along the valleys of its tributaries, but is interspersed at intervals near the river with sand ridges bearing grey box and cypress pine. Southward of this belt, and between the streams, the prevailing trees are grey or yellow box, with red and white gum and stringy-bark on the low ridges. From Chiltern a line drawn westward through Rushworth, Heathcote, Bendigo, Dunolly, and St. Arnaud marks a long belt of ironbark, of both red and white varieties, interspersed with stringy-bark and grey or yellow box. In the north-west, between the Wimmera Plains and the Murray, the dwarf eucalypt known as the mallee scrub covers the plains, with belts of cypress pine at intervals, and red gum and box along the courses of streams and lakes. The south-west is poorly timbered, the prevailing tree being stringy-bark, with red gum along the streams and white gum, box, lightwood, and honeysuckle on the plains and undulating country. In the Otway district are valuable timber forests; over 280 square miles are covered with blue gum, spotted gum, messmate, and mountain ash or blackbutt of fine quality, with some stringy-bark and white gum, while the valleys between the ridges bear valuable timber of fine grain such as blackwood, beech, satin box, olive, sycamore, and pencil cedar. Eastward of Melbourne, on the watershed of the Yarra, there is another fine forest region, the trees consisting of spotted gum, mountain ash, messmate, and white gum, with blackwood, beech, sassafras, and silver wattle in the valleys. The ranges of Southern Gippsland bear blue gum, spotted gum, mountain ash, and yellow stringy-bark, while in the western and northern portions of the same district grow the mountain stringy-bark, spotted gum, blackbutt, and the Gippsland mountain ash or silvertop, with woollybutt and ribbon gum on the higher elevations of the Main Divide. In the eastern part of the district, stretching from the Lakes towards the Genoa River, are found the Bairnsdale grey box, the Gippsland mountain ash or silvertop, white and yellow stringy-bark, red ironbark, and bloodwood. The prevailing timber in this part of Gippsland is the white stringy-bark, which forms large forests from the foothills of the Divide to the sea-coast.

(iii.) *Queensland.* The extensive forests of Queensland yield a great variety of woods, esteemed for their strength, durability, or beauty. The principal merchantable timbers lie between the eastern seaboard and the Great Dividing Range, which runs roughly parallel to, and about 200 miles from the coast. At about the 21st parallel of south latitude, a spur runs westward nearly to the South Australian border, and bears on its crests and slopes much valuable timber. Forests are also found on the Denham, Johnstone, and Gilbert Ranges. The principal eucalypts are ironbark, grey, spotted, and red gum, blackbutt, and turpentine; Moreton Bay, brown, and Bunya Bunya pines represent the conifers; and red cedar, beech, tulipwood, rosewood, red bean, and black bean are among the brush timbers of fine grain. On the extensive plateaux west of the Divide there is but little timber; and towards the vast basin of the interior, the low ridges and banks of the short water-courses bear a growth of stunted eucalypts such as the gimlet gum, the desert sheoak, acacias, and mallee.

The chief supply of mill timber (eucalypts, Moreton Bay pine, etc.) is in the southern coastal region, from the New South Wales border as far north as Gladstone. In the regions between Rockhampton and Ingham the supply is not so plentiful; but northward of the latter town, the red cedar, kauri pine, and black bean are luxuriant. Large supplies of these valuable trees are found on the Barron Valley reserves, and in other localities between Ingham and Port Douglas. Inland from this zone of heavy forest is another, less densely timbered, bearing cypress and other pines, ironbarks and acacias. In the south-western regions of the State the cypress pine flourishes.

(iv.) *South Australia and Northern Territory.* The principal forest districts of South Australia proper are restricted largely to the hill ranges in the neighbourhood of Adelaide and Spencer Gulf, and the trees have not the fulness and lofty growth of those of the eastern and south-western borders of Australia. Red gum is widely distributed, though never far from water; and there are belts of timber where, from the general appearance of the surrounding country, they would hardly be expected. The stringy bark has its habitat principally in the hills, and is but rarely seen on the plains; other useful hardwoods are the white and blue gum and peppermint. Blackwood (in demand for cabinet work) is common in the south-east and along the eastern border, but is rare near Adelaide. Wattle also is cultivated for its gum and bark. Sheoak appears in districts less thickly forest-clad, and ti-trees inhabit low, damp situations. The sandalwood tree grows luxuriantly in Yorke Peninsula. On the great plains of the interior there is little vegetation, patches of forest country being occasionally found, while here and there fertile spots of grass land, but generally not of large extent, are met with. Groups of stunted shrubs, and small ramified trees—sheoak, eucalyptus, and wattle—mostly of limited extent, rise from the plains like islands.

In Central and Northern Australia there is little forest, until the hills where the waters of the northern river system take their rise are encountered. On the plains to the north of the McDonnell Ranges there is a thin clothing of mulga scrub, with gum trees marking the water-courses. Occasionally patches of heavier gum forests are met with. Stirling Creek is lined with the bean tree. The mulga scrub thickens, and with stunted and mallee gums furnishes a uniform vegetation as far north as Powell's Creek. Here, with red gums still lining the water-courses and flooded gums on the flats, the vegetation becomes more varied. On the ranges pines, fig trees, and orange trees (*capparis*) occur. Heavy timber clothes the uplands about the Roper River, and the tableland which stretches across the territory at a distance from the coast of from 30 to 100 miles bears large paperbark trees, Leichhardt pines, and palms. On the higher steppes there is also abundance of bloodwood and other varieties of eucalyptus, besides other kinds of trees. Many prominent fibre plants are native to the territory.

(v.) *Western Australia.* The coastal timber belt runs along the western shore from the Muchison River to the Leeuwin, and along the southern shore from that point to beyond Albany, clothing with trees the Victoria, Herschel, Darling, and Stirling Ranges. Pre-eminent among the trees of this State for strength and durability are the jarrah and karri. A great belt of the former stretches eastward of the Darling Range to upwards of 100 miles in breadth, with a length of 350 miles. Between this region and the coast are two well-marked belts of tuart and red gum. In the extreme south-west of the State the main karri belt stretches from Augusta to Albany. Eastward of the jarrah belt a strip of white gum encloses a narrow belt of York gum, its southern extremity almost reaching the coast, while its northern limit extends even beyond that of the jarrah tract. Still further east the forest thins, a poorer growth of white gum giving place to brushes, scrub, and dwarf trees. Along the shores of the Great Australian Bight there are stunted eucalypts, with casuarinas and wattle. In the north-west, on the King Leopold and St. George's Ranges, there are forest areas, but from Dampier Land to below Shark Bay there is no coastal forest, and in many cases the stunted bush and scrub lands infringe on the sea-coast.

(vi.) *Tasmania.* The Tasmanian forest consists chiefly of eucalypts, widely distributed over the island; and of conifers, such as the Huon, the King William, and the celery-top pines, flourishing in the western and southern parts. The principal hardwoods of the eucalypt family are the blue gum, stringy bark, peppermint, and silvertop iron-bark, while among woods of fine grain are the blackwood, beech or myrtle, sassafras, native cherry, and sheoak. Black and silver wattles also inhabit various parts of Tasmania.

3. Distribution of Timber in the Commonwealth Generally.—The more conspicuous timber regions of Australia as a whole are the eastern and southern portions, including Tasmania, and, again, the south-western portion northwards and eastwards from Cape

Leeuwin. In regard to distribution, on the eastern side of the continent the largest timber is found on the crests and coastal slopes of the mountain ranges, but in the south-west, in addition to the vegetation between mountains and sea, a large area of forest stretches inland from the coastal ranges. The hills encircling Adelaide and Yorke and Eyre Peninsulas also bear good forest. The Kimberley district is timbered, and in the Northern Territory and round the shores of the Gulf of Carpentaria there are considerable forest areas. But the coastal regions of West and North-west Australia, except in the case of the districts named and the shores of the Great Australian Bight and Encounter Bay, are devoid alike of mountains and forests. The interior of the continent is thinly timbered, or almost destitute of vegetation, an occasional limited area of forest, generally in connection with mountain systems (though these themselves are scarce), acting as a relief in the landscape, which but for these presents to the eye all the features of a dreary and arid waste.

4. Distribution of Timber in New Zealand.—In the North Island the growth in the Hauraki Peninsula is of a mixed character, kauri being predominant, with red, white, and silver pine, beech, and tawa, extending from the Waikato River to the North Cape. Kauri gum, formed by the hardening of the exuded resin, is dug out of the ground in large quantities and exported chiefly to Europe and America, where it is largely used in the manufacture of varnishes, and also in cotton-spinning centres for glazing calico. Large numbers of men follow the calling of gum-digging, either regularly or intermittently. The great totara region extends from the central part of the west coast to the east and south-east coast, and from the Bay of Plenty southward to Cape Palliser. Among other trees in this region are rimu, white pine, beech, and tawa. The red pine district occupies a considerable tract of the south-western side of the island, and extends from the Makau River to Wellington, being interspersed with totara, tawa, and black and white pine. In the Middle Island the rimu or red pine and the several species of beech may be regarded as the typical forest trees. The former has a very wide range, following the coastal region from Cape Campbell, the extreme north-eastern point, to Cape Farewell on the north-west, and thence the whole of the western and southern coast-line to the Clutha River, while along the eastern coast it is found in well-defined belts near Dunedin, Waimate, and Banks Peninsula. The beech country forms a large, broad belt running through the island from north to south along the Dividing Range.

§ 2. Forestry.

1. Objects.—Economic forestry, aiming at the conservation of forestal wealth by safeguarding forests against inconsiderate destruction, and by the suitable re-forestation of denuded areas, is essential to the preservation of industries dependent upon an adequate supply of timber, and to the perpetuation of a necessary form of national wealth. Though in Australia large areas of virgin forests still remain, the inroads made by timber-getters, by agriculturists, and by pastoralists—who have destroyed large areas by “ringbarking”—are considerable; and it is not unlikely that climatological changes are caused thereby. For it would appear that variations in climate, and alternating periods of drought and flood, desiccation and erosion of soil, with loss or diminution of fertility, have resulted from forest denudation in countries bordering the Mediterranean. In many of the States of America diminished rainfall is said to have followed the destruction of large forest areas. On the other hand beneficial consequences appear also to have followed on the planting of trees on denuded lands, or along encroaching coasts, and it is obvious that a forest covering tends to beneficially regulate the effects of rainfall.

2. Forestry Departments.—Each State of the Commonwealth, excepting Tasmania, has organised a forestry department or branch of service specially charged with forestal matters. Forest improvement work is carried on, areas of young forest being cleaned up

by the felling and removal of stunted, diseased and suppressed growth, the burning of debris and the making of fire breaks. Provision is made for effective patrols in forest districts, to check the ravages caused by fires, often, it is believed, caused through carelessness. The following table gives a comparative indication of the attention paid to the subject, the figures being those for 1908:—

STATE FORESTRY DEPARTMENTS, 1908.

Particulars.	N.S.W.	Victoria.	Q'land.	Sth. Aust.	West. Aus.	Tas.
Designation of officer in charge	Director of Forests	Conservator of Forests	Director of Forests	Conservator of Forests	Insp.-Gen. of Forests.	*
Salaries of persons engaged in administration and control	£ 12,797 †	2,442	3,120 †	450	838	...
Salaries of technical experts, forest rangers, etc.	£ 7,372	7,807	820	820	6,169	260
Incidental expenses	£ 6	4,947	1,532	218	1,307	...
No. of persons forming office staff	6	9	8	5	6	*
No. of persons forming field staff	65	77		38	23	*

* Administered by Lands Department. † Including travelling allowances. ‡ Excluding travelling expenses.

The revenue and expenditure of the State Forestry Departments from 1904-5 to 1908-9 are given below:—

REVENUE OF STATE FORESTRY DEPARTMENTS, 1904-5 to 1908-9.

State.	1904-5.	1905-6.	1906-7.	1907-8.	1908-9.
	£	£	£	£	£
New South Wales ...	34,162	42,738	50,397	56,048	57,593
Victoria ...	17,230	21,508	24,971	29,013	40,672
Queensland ...	11,440*	11,576*	14,560*	22,236	27,880
South Australia ...	3,048	2,832	2,981	3,474	3,416
Western Australia ...	18,479	21,216	22,783	10,500	23,499
Tasmania ...	3,504	3,505	4,220	3,841	3,871
Commonwealth ...	87,863	103,375	119,912	125,112	156,937

* For calendar year ended previous 31st December.

EXPENDITURE ON STATE FORESTRY DEPARTMENTS, 1904-5 to 1908-9.

State.	1904-5.	1905-6.	1906-7.	1907-8.	1908-9.
	£	£	£	£	£
New South Wales ...	16,202	16,639	20,259	19,545	20,169
Victoria ...	17,733	21,974	21,108	18,754	27,066
Queensland ...	4,800	5,200	6,700	6,940	4,652
South Australia ...	6,067	6,445	6,801	7,542	10,171
Western Australia ...	5,089	5,785	6,270	6,271	8,755
Tasmania ...	513	469	426	424	1,492
Commonwealth ...	50,404	56,512	61,564	59,476	72,305

3. **Sylviculture.**—The growing recognition of the necessity for systematic sylviculture has led to the creation in most of the States of a number of sylvicultural nurseries and plantations.

(i.) *New South Wales.* In this State a small forest nursery is maintained at Gosford, between Sydney and Newcastle, from which young trees are widely distributed throughout the State, the bulk being issued to municipal councils and farmers, and for planting in parks, town reserves, hospital grounds, and cemeteries. Large sums have been disbursed by the State in improvement fellings and the thinning out of young timber, principally in the Bogan, Narrandera, and Murray River districts. Over a quarter of a million acres of pine forest and red gum have been so treated.

(ii.) *Victoria.* In Victoria there are four forest nurseries, the largest being situated at Macedon, the smaller at Creswick, Havelock, and Tintarra. At Macedon the arboretum contains many fine specimens of the conifers and deciduous trees of Europe, America, and Asia. While the bulk of the yields are retained for the State plantations, there are considerable distributions for public parks and recreation reserves, "Arbor-day" planting of streets and roads, municipal councils and water trusts, mechanics' institutes and libraries, cemeteries, State schools, and other institutions, and farmers and private persons, the applications of those in dry districts receiving first consideration.

Among the principal native hardwoods raised and distributed are blue gum, sugar gum, and tallowwood, with some jarrah for the plantations; among conifers, the Monterey, Corsican, Black Austrian, Canary Island, Maritime, and Aleppo pines, the blue pine of India, the American white and yellow pines, with several spruces; and among other exotics, peppers, Indian cedars, oaks, elms, planes, silver poplars, sycamores, and chestnuts.

The principal forest plantation is along the lower slopes of the You Yangs, near Geelong, where about 1000 acres have been enclosed and planted with eucalypts and conifers. Good results have attended the cultivation of the broad leaf and feather leaf wattles.

At another plantation, viz., at Sawpit Gully, among the foothills of the Dividing Range, near Creswick, conifers are chiefly grown. Minor plantations of blue gum and sugar gum are established at Havelock and Majorca, near Maryborough; and at Mount Macedon, the principal species of oak, elm, ash, plane, sycamore, pine, spruce, eucalypts, and willows are planted. During 1909 additional planting of conifers was carried out at Creswick, Frankston, and Warrnambool, and a large area was sown with tan-yielding wattles at You Yangs.

(iii.) *Queensland.* In Queensland there is a forest plantation of 310 acres. The questions of replanting and further reservation have lately been attracting attention, and the prominence given to them will probably greatly influence forest policy.

(iv.) *South Australia.* In this State there are several plantations, the most important being at Bundaleer and Wirrabara, situated some 150 and 190 miles respectively to the north of Adelaide in the direction of Spencer Gulf. Of the reserved area, about one-fifth only, it is said, ever bore timber of commercial value, the remainder being covered for the most part with stunted vegetation. Owing to the absence of high mountain ranges and the dryness of the climate, the forests are not dense. Special attention has been given in South Australia to silviculture, and great success has been achieved in clothing areas of treeless plain and hill slope with belts of young trees, such as blue, sugar and red gum, and white ironbark. In some parts the Tasmanian blue gum (*E. globulus*) flourishes, but great success has also been attained with the sugar gum (*E. corynocalyx*), a tree indigenous to the State itself. It is found chiefly in the Flinders Range, and used for railway sleepers, telegraph poles, coachbuilding, and in wharf and jetty construction. Two other eucalypts found in South Australia, the white ironbark (*E. leucoxylon*), known locally as "blue gum," and the grey box (*E. hemiphloia*) furnish strong, tough, and durable timber, inlocked in grain and suitable for the same purposes as sugar gum. The common flooded variety of red gum, which has a fairly wide distribution, being found on clay flats and along streams and water-courses, has also been grown in the plantations, but not with the same success as sugar gum. Among conifers which have been grown with fair success are the Monterey, the Maritime,

Aleppo, and Stone pines. The Monterey pine (*P. insignis*) outstrips all other trees in growth, and its timber, though softer than other first-class pines, has been utilised for deal tables, packing cases, picket fencing, shelving, and generally for purposes where common deal is useful. The Maritime, Aleppo, and Stone pines are naturally of slower growth. In Europe they furnish useful timber, but in these plantations have not yet reached the age suitable for utilisation. The upright poplar (*P. fastigiata*) growing well over a large area, serves for packing cases, flooring boards, etc. The locally-grown American ash (*Fraxinus americana*) has been used in coachbuilding work, and compares well in quality with the imported American ash. The area suitable for its cultivation in South Australia is, however, very limited, as it requires favourable conditions of soil and climate.

During the last twenty-six years the Forest Department has issued very large numbers of young plants to the public free of charge, for wind breaks, avenues, and for the shelter of homesteads and buildings generally, over seven million trees having been so distributed. Formerly, bounties were paid under the Forest Act for the encouragement of private persons in planting timber trees.

(v.) *Western Australia.* A State sylvicultural nursery is established at Drake's Brook, on the south-western railway, the site chosen being a ti-tree swamp, exotic trees of temperate climates being raised. The planting of the Monterey, Maritime, Aleppo, and Canary Island pines, the blue pine of the Himalayas (*P. excelsa*), the Indian cedar, Lawson's cypress, several kinds of poplar, the Virginian catalpa, white cedar, and American ash has been successful. A large number of pepper trees and sugar gums were raised, chiefly for shade purposes. The trees are sold or given away to settlers, being distributed chiefly in the goldfields region and other districts with little natural forest.

There are also forest plantations—for conifers at Bunbury, for Australian wattles at Spencer's Brook, and for the indigenous sandalwood at Meckering. The planted areas are flourishing, the trees making very healthy growth.

(vi.) *Tasmania.* There are at present only two small experimental plots.

Particulars regarding nurseries and plantations in 1908 are given hereunder—

NURSERIES AND PLANTATIONS, 1908.

Particulars.	New South Wales.	Victoria.	Q'land.	South Australia.	Western Australia.	Tasmania.
Expenditure on plantations and upkeep of sylvicultural nurseries	£1050	£7468*	nil	£8921	£219	nil
No. of persons engaged in nurseries	10	28	nil	16	5	nil
No. of sylvicultural nurseries	1	3	nil	7	1	nil
Area of sylvicultural nurseries	60 ac.	54 ac.	nil	7 ac.	17 ac.	nil
No. of forest plantations	2	10	1	107	3	nil
Area of forest plantations	100 ac.	8315 ac.	310 ac.	9684 ac.	158	nil
Extent of public distribution of trees or number of trees issued	83,585	200,000	†	266,000	44,000	nil

* Including improvement work in State forest. † There are no forest nurseries issuing trees in Queensland, but a small number of economic and ornamental trees are issued by the Department of Agriculture.

4. **A Forest School.**—A suitable building, with adequate grounds, has been purchased at Creswick for the establishment of a School of Forestry. The site is near the State plantation and nursery. It is intended to give class-teaching at the school, but the principal aim of the Forest Department will be to keep practical work in the foreground. The principal class subjects, in addition to theoretical forestry, are botany, geology, physics, and land surveying, while in outside work trainees will have regular teaching and experience in the preparation of seed-beds, seed-sowing, propagation, planting out and the general care and improvement of plantations and natural forests. Facilities will also be afforded to members of the present forests staff to qualify in special subjects by attending Winter classes. The school was opened in January, 1910.

§ 3. Commercial Uses of Principal Australian Timbers.

The uses of the more important of Australian timbers are many and various. Four varieties of ironbark, viz., white or grey (*E. paniculata*), narrow-leaved (*E. crebra*), broad-leaved (*E. siderophloia*), and red (*E. sideroxylon*) are largely used for public works, preference being given to the white and narrow-leaved varieties. These timbers are used extensively in the building of bridges and culverts, for railway sleepers and fencing posts, and for framing, naves, spokes, poles and shafts in carriage and waggon building. Ironbark beams are of great strength, hence it is largely employed for girders and joists of upper floors, especially in stores for heavy goods.¹ Another red ironbark (*E. leucoxylon*), heavy, dense, and strong, is greatly valued for bridge beams and piles. Tallowwood (*E. microcorys*) is strong, heavy, very durable, not easily split, and turns and planes well. It is used for bridge-decking, house-flooring (being peculiarly suitable for ballrooms), girders, piles, and fencing posts, and especially for paving blocks, giving even and regular wear under heavy traffic. Even better in this latter regard is blackbutt (*E. pilularis*), a fine hardwood for house and ship building, as well as street paving. Grey gum (*E. mropinquua*), makes excellent railway sleepers, and is used for felloes and spokes in coach building. It makes very durable fencing posts, and is also sometimes split for shingles. Murray red gum (*E. rostrata*), the common river gum of all the eastern States, is one of the best hardwoods in contact with the ground, being largely used for poles, house foundations, wood paving, and railway sleepers. It is also extensively cut for mining shafts and public and municipal works. The forest variety of red gum (*E. tereticornis*) serves the same purposes as the river red gum. White mahogany (*E. acmenoides*) is used for posts, poles, girders, and similar classes of work, being an exceedingly durable timber. Red mahogany (*E. resinifera*) is largely employed for general building work, street paving, fencing, and weatherboards. It is very durable and hardens greatly with age. Grey box (*E. hemiphloia*) is very durable in contact with the ground, and is hence used for railway sleepers (lasting from thirty to thirty-five years in the track), telegraph poles, mine props, fence posts, piles, girders, and for heavy raming and naves, wheel cogs, shafts, dray poles, spokes, etc. Bairnsdale grey box (*E. bosistoana*) serves similar purposes. Brush box (*Tristania conferta*), another hard and durable wood, is used for tram rails, bullock yokes, tool handles, planes, etc. Sydney blue gum (*E. saligna*) is greatly valued by shipwrights and wheelwrights, and furnishes ships' planks, felloes of wheels, etc. It is also used for buildings, and makes very durable paving blocks. Woollybutt (*E. longifolia*) is used for house building, fencing, felloes, spokes, and wheelwrights, work generally. Being durable in contact with the ground, and resistant to heavy traffic, it is also used for street paving. Spotted gum (*E. maculata*) is one of the best hardwoods for bending, even when cold, and is therefore specially valuable in wheelwrights' and coachbuilders' work for poles, shafts, crosspieces, naves, and spokes; also for framing and house building, tram rails, ship planking, decking of bridges, and wood paving. Turpentine (*Syncarpia laurifolia*) is of great durability in the ground or under water, being used for piles or jetties, wharves, bridges, pillars and girders of buildings, wood paving, and hewn posts and rails. Yellow stringy-bark (*E. muelleriana*) is chiefly used for jetty and pier work, and for fencing posts. Blue gum (*E. globulus*) is a valuable timber with straight, symmetrical bole, used for upper timbers and decking in jetty and bridge work, bridge piles, shafts, felloes, spokes and frame work of vehicles, and in general building and construction. Spotted gum (*E. goniocalyx*) furnishes a hard, heavy, and durable timber, similar in appearance to blue gum, and serving the same purposes. Yellow box (*E. melliodora*) bears a large quantity of blossom, and hence is a favourite tree with beekeepers. Its timber is used for piles and posts, squared beams, and stringers

1. Ironbark girders do not burn rapidly and often stand a fire when iron girders yield through the effect of the heat.

for bridges. Messmate (*E. obliqua*) is largely sawn by mills for weatherboards, studs, rafters, joists, etc., and is also used for railway sleepers and fencing posts. Stringy-barks (*E. macrorrhyncha*, *E. capitellata*, *E. piperita*) are sawn by mills into ordinary building timber, and split by settlers into posts and rails and rough building material. Mountain ash (*E. amygdalina regnans*) is sawn into building material, and is also split into palings, shingles, rails, and mining laths. Silvertop (*E. sieberiana seu virgata*)—called also Gippsland mountain ash, green top, and white ironbark—is used for ordinary building purposes, and for fencing rails and rough construction. Sugar gum (*E. corynocalyx*) is held in high repute on account of its toughness and durability, and is chiefly used for railway sleepers, telegraph poles, coach building, and in wharf and jetty construction. White or manna gum (*E. viminalis*) is not a good weather timber, but is suitable for interior construction, such as house frames and floors.

The pre-eminent timber trees of the West are jarrah (*E. marginata*) and karri (*E. diversicolor*). Jarrah is in great request for piles in jetty and bridge construction, and for railway sleepers and street paving. It also furnishes a favourite material for boat-building, fencing, and rough furniture, and makes excellent charcoal. Karri is heavy, dense, elastic, and tough, not so easily wrought as jarrah, and used for bridge-decking, flooring, planking, spokes, felloes, shafts, and street-paving. Tuart (*E. gomphocephala*) is exceedingly strong and tough, suitable for the framework of railway waggons, bridge supports, buffers, keelsons, shafts, wheelwrights' work, and generally for all purposes where great strength and hardness are necessary. The red gum (*E. calophylla*) is a fine shade tree, and is valued for the shelter it affords to cattle and sheep. Its timber, however, is not held in much esteem; but in short lengths it is employed for wheelwrights' work and agricultural implements. Its gum or kino has medicinal properties, and is used locally for tanning hides. Wandoo (*E. redunca*) is used for fencing, wheelwrights' work, and railway buffers and sleepers. The blackbutt (*E. patens*), York gum (*E. loxophleba*), and Yate (*E. cornuta*) of the West are largely used for fencing, building, and rough construction.

The Moreton Bay or hoop pine (*Araucaria cunninghami*) is used for interior work (flooring, ceiling, and lining boards) and for packing cases and butter boxes. Brown pine (*Podocarpus elata*) is also used for interior work, and for bridge, jetty, and pier piles. Cypress pine (*Callitris*), including red or black pine (*C. calcarata*); Murray pine (*C. verrucosa*), Port Macquarie pine (*C. macleayana*), and the Richmond River cypress pine (*C. columellaris*) are used for buildings liable to attacks of white ants, being strongly resistant to these pests. Cypress pine is also suitable for bridge decking and makes fine fuel. Red cedar (*Cedrela australis*) furnishes timber of great beauty; it is easily worked and very durable, and is used for furniture and cabinet-making, doors, panelling, and interior fittings generally. Rosewood (*Dysoxylon fraserianum*) is easily wrought, and is used for furniture, turnery, carving, cabinet work, mouldings, planes, window joints, house-fittings, and wine casks. Red bean (*Dysoxylon muelleri*) has a finely-figured grain and is an excellent furniture wood. White beech (*Glehnina leichhardtii*) is durable and easily worked, and is in great request for decks of vessels, furniture, picture frames, carving, flooring, house-fittings, vats, casks, and general coopers' work. Silky oak (*Grevillea robusta* and *Orites excelsa*) is also in request for coopers' work, and make handsome furniture and wainscoting. The silky oak has also been used for butter kegs, buckets, churns, etc., and makes good butter boxes for the local markets. Black bean (*Castanospermum australe*), or Moreton Bay chestnut, is used for furniture, cabinet-making, and gun stocks. Tulip-wood (*Harpullia pendula*) is highly esteemed for cabinet-work, being used for door panels, dadoes, and billiard tables. Coachwood (*Ceratopetalum apetalum*) is suitable for boat-building, cabinet work, and coach-building. Kauri pine (*Agathis palmerstoni*) gives a light, strong, and durable timber, and is used for general building and construction, wainscoting, furniture and joinery, railway carriages, and ship-decking. Blackwood (*Acacia melanoxylon*) is very strong and durable, diminishing, however, greatly in weight in seasoning, though shrinking very little in volume. Figured blackwood is a beautiful timber; it is used for furniture, such as billiard tables, chairs, secretaires, casings of pianofortes and organs, and general

cabinet work; dados, panelling of railway carriages, boat-building, picture frames, wheel naves, gun stocks, walking sticks, and a great variety of useful and ornamental purposes; it is also split into staves for wine and tallow casks. Evergreen beech (*Fagus cunninghami*) yields also a handsome timber, used for furniture, sashes and doors, light joinery, wood-carving, picture frames, and cog-wheels. Huon pine furnishes a fine, strong, and light timber; it is almost indestructible in water, and hence is largely used for boat planking; its beautiful grain brings it into request for furniture, panelling, and wainscoting. The King William variety is very tough, being used for racing sculls; it is also a favourite timber in joiners' work. Celery-top pine is strong and heavy, suitable for furniture, flooring, house frames, coopers' work, and masts. Other Australian brush timbers of minor importance are sassafras (*Atherosperma moschatum*), used for saddle-trees and boot lasts; and satin box, sycamore, olive, and pencil-wood, giving woods of beautiful grain for parquetry, veneers, carving, and picture frames. The sandalwood of Western Australia (*Santalum cygnorum*) is a very valuable forest product, its export having covered half-a-century.

As aids in the development of Commonwealth industries, the Government is experimenting with Australian woods for rifle stocks, telephone switch boards, etc. State aid has also been given in the seasoning of timbers, with a view to improvement in methods.

§ 4. Forestal Industries and Production.

1. **Timber.**—The returns for quantity and value of timber cut and sawn, as given by the States Forestry Departments, are at present very incomplete. Owing to this fact the figures are, in some cases, necessarily merely estimates.

QUANTITY OF LOCAL TIMBER SAWN OR HEWN IN EACH STATE OF THE COMMONWEALTH DURING THE YEARS 1904 to 1908.

State.	1904.	1905.	1906.	1907.	1908.
	Sup. feet.	Sup. feet.	Sup. feet.	Sup. feet.	Sup. feet.
New South Wales	117,029,000	112,580,000	119,337,000	360,000,000*	122,152,000
Victoria	49,250,000	47,635,358	51,103,000	75,900,000	50,000,000
Queensland	71,293,811	73,930,279	82,801,846	91,752,000	100,760,000
South Australia	94,396	155,662	130,763	143,009	436,000
Western Australia	143,594,953	137,250,340	136,294,697	110,395,000	165,766,000
Tasmania	34,760,628	40,273,429	39,498,697	35,228,000	44,335,000
Commonwealth	416,022,788	411,825,068	429,166,003	673,418,000	463,449,000

* As returned.

The only States for which an annual return is furnished for the value of locally sawn or hewn timber are South Australia and Tasmania. The values for South Australia for the years 1901 to 1908 are respectively, £23; £154; £413; £400; £340; £230; £815; and £1084. For Tasmania the values for the years 1901 to 1908 are respectively, £117,734; £62,573; £89,227; £92,102; £75,817; £110,689; £93,762; £138,492. The estimate for 1901 to 1906 is £5,268,235; for New South Wales 1901 to 1906, £4,050,000; for 1907, Western Australia for £1,440,000, and for 1908, £763,241; for Victoria, for 1907, £256,590; for Queensland, for 1908, £665,350.

2. **Forest Produce.**—Estimates have been made of the total value of forest production, but these must be regarded as mere approximations. Many of the items are very difficult, and some impossible, to obtain. Large returns are credited to firewood, but these have been omitted altogether, since estimates are subject to a wide range of uncertainty.

The Forestry Department of New South Wales estimates that the production in the seven years, 1901-7, averaged at least £685,000 per annum. For Victoria the Government Statist gives the following figures:—1904, £230,567; 1905, £206,725; 1906, £217,569; 1907, £244,170; 1908, £234,154. This is exclusive of hewn timber. No figures on a similar basis are available for Queensland. The estimates for South Australia for 1901 to 1908 are £187; £354; £590; £665; £610; £440; £1086 and £1628. Western Australia averages for the seven years, 1901-7, £984,264. Tasmania supplies the following estimates for the years 1901 to 1906, viz., £152,102, £83,943, £114,227, £119,477, £94,987, £126,514.

5. Oversea Trade.

1. **Imports.**—The timber imports are shewn according to countries of origin in the table below. Prior to 1908 these figures had been tabulated according to countries whence imported, and were so published in the previous issues of the Year Book. They are now presented in the improved form, quantities being given from 1906 to 1908, and values from 1905 to 1908:—

IMPORTS OF DRESSED TIMBER, 1905 to 1908.

Country of Origin.	Quantity.				Value.			
	1905.	1906.	1907.	1908.	1905.	1906.	1907.	1908.
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£	£	£	£
United Kingdom	31,006	45,554	11,853	321	512	553	334
New Zealand...	...	5,125	17,810	32,704	251	65	111	432
Other British Poss.	5,970	5,333	...	68	50	22	...
Norway	44,010,245	52,577,370	35,655,232	226,098	275,286	303,173	228,322
Sweden	2,412,087	7,122,102	7,623,737	14,783	15,054	48,056	50,356
United States	1,737,261	1,710,306	1,661,590	23,221	20,356	19,950	20,079
Other For. Countries	1,428	1,153,309	220,821	101	35	4,730	2,000
Total ...	38,151,816	48,209,222	62,431,784	45,205,997	264,843	311,358	376,606	301,523

IMPORTS OF UNDRESSED TIMBER, INCLUDING LOGS, 1905 to 1908.

Country of Origin.	Quantity.				Value.			
	1905.	1906.	1907.	1908.	1905.	1906.	1907.	1908.
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£	£	£	£
United Kingdom	163,204	102,245	40,848	1,171	1,630	1,424	750
Canada	7,320,589	7,933,877	8,612,606	50,408	31,540	32,004	36,020
India	229,350	825,425	343,674	9,665	3,579	16,900	11,085
New Zealand...	...	65,164,718	69,112,328	82,034,209	329,334	314,522	395,043	498,087
Straits Settlements	128,687	147,757	135,871	988	925	736	745
Other British Poss.	314,987	2,816	62,858	874	7,609	44	1,447
Japan	1,017,426	12,290,109	9,189,839	...	4,574	33,966	34,429
Java	537	806,284	230	...	11	12,999
Norway	1,299,269	2,298,711	5,007,451	11,045	7,021	13,957	31,937
Russia	327,550	1,346,590	8,851,925	11,568	2,157	10,364	51,045
Sweden	2,756,200	6,268,170	4,229,960	22,333	17,764	39,269	29,693
United States	122,753,533	119,498,696	147,463,309	310,364	561,126	631,223	754,780
Other For. Countries	92,891	203,767	259,727	1,406	735	1,154	2,508
Total ...	163,976,501	201,568,404	220,031,028	267,047,561	750,286	953,372	1,176,165	1,465,585

2. Exports.—The quantity and value of undressed (sawn) timber exported from 1904 to 1908 is given below, the countries of destination being also shewn:—

EXPORTS OF UNDRESSED TIMBER (SAWN) 1904 to 1908.

Country to which Exported.	Quantity.					Value.				
	1904.	1905.	1906.	1907.	1908.	1904.	1905.	1906.	1907.	1908.
	1000 Sup. ft.	1000 Sup. ft.	1000 Sup. ft.	1000 Sup. ft.	1000 Sup. ft.	£	£	£	£	£
United Kingdom...	32,784	30,076	25,561	14,156	20,760	215,128	192,891	167,081	88,010	139,223
Canada	282	420	568	368	1,814	2,307	4,207	5,566	4,240	13,143
Cape Colony	12,587	15,244	4,456	4,960	143	78,247	102,886	23,855	25,629	1,353
Ceylon	2,694	1,765	25	21	3	17,816	6,179	213	211	23
Fiji	1,255	1,255	1,713	1,899	1,523	8,498	8,715	11,159	12,144	10,783
India	28,588	47,441	63,249	40,304	39,095	182,238	293,287	394,463	266,801	276,821
Mauritius	690	1,405	820	6	241	4,594	9,398	5,128	66	1,606
Natal	10,243	7,433	1,826	1,543	961	61,200	51,426	11,356	11,064	5,881
New Guinea	116	99	142	94	783	748	1,260	899	...	...
New Zealand	13,582	17,671	17,705	22,212	36,664	79,587	100,438	120,480	151,985	248,636
Ocean Island	169	224	574	705	974	1,146	1,502	3,935	5,579	7,914
Straits Settlements	1,064	290	1,047	254	1,838	7,296	1,952	5,849	1,909	9,943
Other British Pos.	605	769	5	506	4,743	4,087	5,495	38	2,777	31,428
Argentina Repub.	467	835	2,948	1,142	1,590	3,115	5,565	19,652	7,618	10,594
Belgium	101	90	509	1,286	2,515	975	537	3,913	7,659	19,618
China	66	8,221	12,335	2,845	2,373	413	54,816	81,673	19,397	12,370
Egypt	3,117	2,073	20	91	7,831	20,778	13,619	136	635	52,207
Germany	2,476	4,410	3,985	2,199	4,616	15,219	27,394	32,716	19,824	37,354
Japan	31	13	403	527	333	450	117	2,695	5,329	2,889
Kaiser Wilhelm's L.	106	77	30	65	26	730	535	195	475	199
Marshall Island ..	56	101	503	562	460	388	683	3,418	4,177	3,770
Netherlands	704	...	1,175	809	245	4,693	...	5,745	2,854	1,660
New Pommern	96	92	121	170	204	666	223	841	1,242	1,454
New Caledonia	135	153	136	147	190	850	883	943	912	1,415
Philippine Islands	3,855	2,557	2,394	10,589	4,818	23,887	21,901	12,556	64,426	30,849
Port g'ese E. Africa	10,275	10,413	3,262	825	1,296	61,966	68,786	18,636	5,039	7,720
South Sea Islands	220	251	415	431	248	1,480	1,710	2,760	3,233	2,069
U.S. of America ..	280	452	582	799	416	2,812	4,683	5,272	7,248	3,633
Uruguay .....	...	1,928	6,137	4,815	9,300	...	12,892	40,912	32,073	62,003
Other For. Count.	93	142	1,776	967	334	559	961	7,184	6,669	2,642
Total	126,768	155,837	154,422	115,347	145,954	801,893	994,519	979,530	760,124	999,200

In the years 1905 and 1904 the largest quantities of undressed timber were exported. The year 1907 shewed considerable decrease from previous years, both in quantity and value, but the export was again heavy in 1908.

QUANTITIES OF TIMBER IMPORTED INTO, AND EXPORTED FROM, THE COMMONWEALTH, 1904 to 1908.

Description.	1904.	1905.	1906.	1907.	1908.
IMPORTS.					
Dressed ... Sup. feet	54,456,827	38,151,816	48,209,222	62,431,784	48,104,666
Undressed ... "	193,685,731	163,799,852	200,434,075	207,579,407	250,465,749
Logs ... "	522,505	176,649	1,134,329	12,451,619	16,581,812
Palings ... No.	...	...	...	...	...
Pickets ... "	1,743,474	2,122,685	800,260	1,106,364	1,461,726
Shingles ... "	1,079,715	3,913,960	468,990	2,079,041	830,960
Staves—Dressed, etc. No.	1,064,033	1,968,153	2,345,789	1,470,765	62,804
Undressed ... "	...	...	...	...	1,610,571
Laths for Blinds ... "	28,222,263	17,279,293	25,367,993	19,966,870	*
" Other ... "	...	...	...	...	21,660,183
Spokes, Rims, Felloes ... "	...	...	...	...	1,595,127
Doors ... "	29,876	8,799	3,343	975	386
Architraves, Mouldings, etc. ... Lin. feet	119,192	46,622	131,830	65,581	34,175
Other ... "	...	...	...	...	...

* Quantity not available.

QUANTITIES OF TIMBER IMPORTED AND EXPORTED, ETC.—Continued.

Description.	1904.	1905.	1906.	1907.	1908.
EXPORTS.					
Dressed ... Sup. feet	780,237	534,561	745,800	669,647	701,801
Undressed ... "	127,050,520	155,837,454	154,422,490	115,347,179	145,953,614
Logs ... "	3,549,036	1,688,258	1,740,775	4,261,379	3,326,259
Palings ... No.	612,025	972,479	656,170	730,825	826,900
Pickets ... "	24,325	15,390	91,594	7,147	6,050
Shingles ... "	3,240	26,796	48,268	38,312	47,100
Staves—Dressed, etc. No. }	1,470	...	...	...	911
" Undressed ... }					*
Laths for blinds ... "	1,131,480	1,516,120	1,533,040	1,571,705	1,056,781
" other ... }					*
Spokes, Rims, Felloes ... "	...	...	...	...	*
Doors ... "	816	747	1,106	1,338	*
Architraves, Mouldings, etc. ... Lin. feet	12,424	47,064	56,886	50,616	46,848
Other ... "	*	*	*	*	*
EXCESS OF IMPORTS OVER EXPORTS.					
Dressed ... Sup. feet	53,676,090	37,617,255	47,463,422	61,762,137	47,402,865
Undressed ... "	66,635,211	7,962,398	46,011,585	92,232,228	104,512,135
Logs ... "	—3,026,531	—1,511,609	—606,446	8,190,240	13,255,553
Palings ... No.	—612,025	—972,479	—656,170	—730,825	—826,900
Pickets ... "	1,719,149	2,107,295	708,666	1,099,217	1,455,676
Shingles ... "	1,076,475	3,887,164	420,712	2,040,729	783,860
Staves—Dressed, etc. No. }	1,062,563	1,968,153	2,345,789	1,470,765	1,609,660
" Undressed ... }					*
Laths for blinds ... "	27,090,783	15,763,173	23,834,953	18,395,165	20,603,402
" other ... "					*
Spokes, Rims, Felloes ... "	...	...	...	...	*
Doors ... "	29,060	8,052	2,237	—363	*
Architraves, Mouldings, etc. ... Lin. feet	106,768	—442	74,944	14,965	—12,925
Other ... "	*	*	*	*	*

* Quantity not available.

Note. — signifies excess of exports over imports.

VALUES OF TIMBER IMPORTED INTO, AND EXPORTED FROM, THE COMMONWEALTH,
1904 TO 1908.

Description.	1904.	1905.	1906.	1907.	1908.
IMPORTS.					
Dressed ...	£ 395,151	£ 264,843	£ 311,358	£ 376,605	£ 324,997
Undressed ...	874,664	748,817	948,021	1,141,199	1,888,224
Logs ...	1,815	1,469	5,351	34,966	77,361
Palings ...	...	...	...	...	...
Pickets ...	9,313	4,361	2,891	3,748	6,174
Shingles ...	846	2,959	435	2,987	913
Staves—Dressed, etc. }	11,781	15,539	20,612	13,326	1,173
" Undressed ... }					14,215
Laths for blinds ... }	23,321	12,316	18,802	18,118	44
" other ... }					16,547
Spokes, Rims, Felloes ...	...	...	...	...	35,976
Doors ...	12,414	3,197	1,373	438	251
Architraves, mouldings, etc. ...	511	509	676	489	156
Other ...	21,581	18,235	19,937	40,617	20,271
Total values	1,351,397	1,072,275	1,329,456	1,632,493	1,886,302

VALUES OF TIMBER IMPORTED AND EXPORTED, ETC.—Continued.

Description.	1904.	1905.	1906.	1907.	1908.
EXPORTS.					
Dressed	6,285	5,353	6,886	6,603	7,438
Undressed	805,275	994,519	979,530	760,124	999,200
Logs	16,894	12,988	12,662	22,475	18,611
Palings	2,607	4,952	3,065	3,541	4,227
Pickets	176	117	569	66	52
Shingles	3	41	96	108	125
Staves—Dressed, etc.	6	...	...	...	111
Undressed ... ..	...	...	...	...	17
Laths for blinds	1,231	1,899	1,685	1,706	1,073
" Other ... ..	...	...	...	...	1,139
Spokes, rims, felloes ... ..	...	...	...	...	6,131
Doors	577	486	746	1,027	732
Architraves, mouldings, etc.	91	235	467	354	258
Other	6,373	7,013	6,405	9,129	...
Total values	839,518	1,027,603	1,012,111	805,133	1,039,114

EXCESS OF IMPORTS OVER EXPORTS.

Dressed	388,866	259,490	304,472	370,002	317,559
Undressed	69,389	—245,702	—31,509	391,075	389,024
Logs	—15,079	—11,519	—7,311	12,491	58,750
Palings	—2,607	—4,952	—3,065	—3,541	—4,227
Pickets	9,137	4,244	2,322	3,632	6,122
Shingles	843	2,918	339	2,879	788
Staves—Dressed, etc.	11,775	15,569	20,612	13,326	1,062
Undressed ... ..	...	...	...	...	14,198
Laths for blinds	22,090	10,417	17,117	16,412	—1,029
" Other ... ..	...	...	...	...	15,408
Spokes, rims, felloes ... ..	...	...	...	...	29,845
Doors	11,837	2,711	627	—589	—481
Architraves, mouldings, etc.	420	274	209	135	—102
Other	15,208	11,222	13,532	31,488	20,271
Total values	511,879	44,672	317,345	827,360	847,188

— signifies excess of exports over imports.

The exports of sandalwood were :—

EXPORTS OF SANDALWOOD, 1904 to 1908.

Country to which Exported.	Quantity.					Value.				
	1904.	1905.	1906.	1907.	1908.	1904.	1905.	1906.	1907.	1908.
	cwt.	cwt.	cwt.	cwt.	cwt.	£	£	£	£	£
Hong Kong	65,946	68,657	134,769	140,586	158,444	17,369	27,306	55,970	50,903	65,037
Straits Settlements	9,007	14,145	9,369	7,284	1,484	2,264	4,479	3,721	2,542	589
Other British Possessions	260	...	4,364	4,593	14,680	65	...	1,782	1,803	5,604
China	14,987	27,564	28,025	31,637	17,560	5,719	7,008	9,299	10,886	6,238
Other Foreign Countries ... ..	...	61	478	312	...	...	23	215	103	...
Total	90,200	110,427	177,005	184,412	192,168	25,417	38,816	70,987	66,237	77,468

Tanning bark is largely exported from the Commonwealth, as the following table shews:—

EXPORTS OF TANNING BARK, 1904 to 1908.

Country to which Exported.	Quantity.					Value.				
	1904.	1905.	1906.	1907.	1908.	1904.	1905.	1906.	1907.	1908.
	cwt.	cwt.	cwt.	cwt.	cwt.	£	£	£	£	£
United Kingdom ...	99,766	48,306	46,825	35,808	5,878	38,723	17,499	16,078	12,976	1,782
New Zealand ...	52,834	69,945	73,831	67,541	72,933	22,270	27,553	30,844	29,160	31,637
Other British Poss. ...	1,211	3,015	519	462	1,655	508	1,179	218	314	793
Belgium ...	4,698	14,902	6,864	27,011	25,154	2,032	5,667	2,695	10,241	9,432
France ...	3,325	728	1,879	424	328	1,553	270	676	192	167
Germany ...	88,802	368,200	301,219	223,740	142,382	28,432	135,321	110,754	78,352	53,329
Other For. Countries ...	1,152	5,179	759	3,181	12,034	409	2,210	288	1,307	5,270
Total ...	251,988	510,278	431,896	358,167	260,364	93,927	189,699	163,453	132,342	102,410

The import of bark was very small, and the net export is little below the gross export:—

QUANTITIES AND VALUES OF BARK IMPORTED INTO, AND EXPORTED FROM THE COMMONWEALTH, 1904 to 1908.

Particulars.	1904.	1905.	1906.	1907.	1908.
	cwt.	cwt.	cwt.	cwt.	cwt.
QUANTITIES—					
Imports ...	775	960	63	344	38,711
Exports ...	251,986	510,278	431,896	358,167	260,364
Excess of exports over imports	251,211	509,318	431,833	357,823	221,653
	£	£	£	£	£
VALUES—					
Imports ...	340	632	58	156	16,289
Exports ...	93,927	189,699	162,453	132,342	102,410
Excess of exports over imports	93,587	189,067	162,395	132,186	86,121