# 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 COMMON-WEALTH, 1906.

State.	Specially Reserved for	Total Forest	Percenta Ar	e of State ea.	Percentage of Com- monwealth Area.		
	Timber.	Area.	Specially Reserved	Total Forest.	Specially Reserved	Total Forest.	
New South Wales Victoria Queensland South Australia Western Australia Tasmania	Acres. 5,946,000 5,525,000 3,460,000 170,835 	Acres. 20,000,000 11,797,000 40,000,000 3,840,000 20,400,000 11,000,000	$ \begin{array}{c} \% \\ 2.99 \\ 9.82 \\ 0.81 \\ 0.03 \\ \\ 1.59 \end{array} $	% 10.07 20.97 9.32 0.66 3.27 65.56	% 0.31 0.29 0.18 0.009 	% 1.05 0.62 2.10 0.20 1.07 0.58	
Commonwealth	15,367,835	107,037,000			0.81	5.62	

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.

#### THE FORESTS OF AUSTRALIA.

Country.	Total Forest Area.	Percentage of Total Area.	Country.	Total Forest Area.	Percentage of Total Area.
Australian C'wealth New Zealand United Kingdom France Algeria Germany Switzerland Italy Austria Hungary	Sq. Miles. 167,245 32,150 4,325 32,421 10,872 21,868 3,296 15,803 37,759 34,700	% 5.62 30.69 3.56 15.66 3.17 10.47 20.63 14.29 32.58 27.66	Rumania Sweden Norway Russia in Europe United States Canada Cape Good Hope British India Japan	Sq. Miles. 10,640 25,648 26,330 860,781 1,000,000 1,248,800 537 107,125 27,298	% 20.98 14.84 21.21 40.55 33.67 33.34 0.19 9.85 18.49

# RELATIVE AREAS OF FOREST LANDS, AUSTRALIA AND OTHER COUNTRIES, 1906.

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 Among the hardwoods, red gum usually marks the courses of streams, of myrtles. 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 vencers, such as the red cedar, rosewood, silky cak, 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 Pyrenecs 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 vellow 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 grev and vellow 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 foot-hills 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 shecoak, 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.

The principal forest districts of (iv.) South Australia and Northern Territory. 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 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's 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 thirty 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 Murchison 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 a hundred 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 serub 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 ironbark, 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

#### FORESTRY.

Leeuwin. In regard to distribution, on the eastern side of the continent the larger 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. The accompanying map gives a general idea of the distribution.

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-afforestation 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. The following table gives a comparative indication of the attention paid to the subject :—

Particulars.	N.S.W.	Victoria.	Q'sland.	Sth. Aust.	West. Aus.	Tas.
Designation of officer in charge	Chief For- est Officer	Conservator of Forests	Director of Forests	Conservator of Forests	InspGen. of Forests.	•
Salaries of persons engaged in administration and control $\pounds$ Salaries of technical experts.	17,080+	1,486	300 ‡	450	810	310
forest rangers, etc # Incidental expenses # No. of persons forming office staff No, of persons forming field staff	357 7° 62	8,500 4,269    5 56	780 + 576 1 3	770 149 3 17	3,395 † 1,301 5 13	41 75 *

### STATE FORESTRY DEPARTMENTS, 1906.

\* Administered by Lands Department. † Including travelling allowances. ‡ Excluding travelling expenses. # Including travelling and forage allowances.

The revenue and expenditure of the States Forestry Departments from 1901 to 1906 are given below:---

REVENUE	OF.	STATE	FORESTRY	DEPARTMENTS,	1900-1	то	1906-7.

-----

State.	1900-1.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.	1906-7.
	£	£	£			£	£
New South Wales	14,421*	19,813*	$31,872^*$	36,264*	34,162	42,738	50,937
Victoria	14,916	16,735	15,455	16,590	17,230	21,508	24,971
Queensland	7,608*	8,877*	6,663*	8,959*	11,440*	11,576*	14,560
South Australia	3,314	3,109	4,626	3,867	3,048	2,832	2,981
Western Australia	18,477	18,752	20,478	20,018	18,479	21,216	22,783
Tasmania	-2,141	2,722	3,155	2,859	3,504	3,505	4,220
Commonwealth	60,877	70,008	82,249	88,557	87,863	103,375	120,452

\* For calendar year ended previous 31st December.

EXPENDITURE OF STATE FORESTRY DEPARTMENTS, 1900-1 TO 1906-7.

1900-1.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.	1906-7.
£	£ 5.627*	÷£ 10 639*	£ 17.080*	£	£ 16.639	£ 20.959
18,561	18,174	16,766	16,136	17,733	21,974	21,108
4,500 6,661 °	4,400 6,512	4,500 5,747	4,000 5,843	4,800 6,067	6,445	6,801
2,747 375	4,301 322	3,789 273	4,192 254	5,089 513	5,785 469	426
37,745	39,336	41,714	48,105	50,404	56,512	61,564
	1900-1. £ 5,101* 18,561 4,300 6,661 2,747 375 37,745	$\begin{array}{c ccccc} 1900-1. & 1901-2. \\ \hline \pounds & \pounds \\ 5,101^* & 5,627^* \\ 18,561 & 18,174 \\ 4,300 & 4,400 \\ 6,661 & 6,512 \\ 2,747 & 4,301 \\ 375 & 322 \\ \hline \\ 37,745 & 39,336 \\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

\* For calendar year ended previous 31st December.

3. Sylviculture.—The growing recognition of the necessity for systematic sylviculture has led to the creation in all the States except Queensland and Tasmania 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

#### FORESTRY.

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, 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.

(iii.) Queensland. 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 sylviculture, 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 Montcrey 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 quarter of a century 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. Formerly, but not now, 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 three forest plantations—one for conifers at Bunbury, a second for Australian wattles at Spencer's Brook, and a third for the indigenous sandalwood at Meckering. The planted areas are flourishing, the trees making very healthy growth.

Particulars regarding nurseries and plantations in 1906 are given hereunder :---

Particulars.	New South Wales.	Victoria.	Qu'ns- land.	South Australia.	Western Australia.	Tas- mania.
Expenditure on plantations and upkeep of sylvicultural nurseries No. of persons engaged in nurseries No. of sylvicultural nurseries Area of sylvicultural nurseries No. of forest plantations Extent of public distribution of trees or number of trees issued	£697 8 1 67 ac.* 1 20 ac. 53,152	£7530 17 4 30 ac. 13 9676 ac. 108,819	nil nil nil nil nil nil	£6106 13 7 2 ac. 91 9396 ac. 290,149	£223 . 6 1 17 ac. 3 150 ac. 50,000	nil nil nil nil nil nil
	1	•		1		1

NURSERIES AND PLANTATIONS, 1906.

\* 16 acres only are planted.

t 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.

## § 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.<sup>1</sup> Another red ironbark (*E. leucoxylon*),

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

## COMMERCIAL USES OF PRINCIPAL AUSTRALIAN TIMBERS.

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.propingua), 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 colonies, 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 framing 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' plank, 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 of 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 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 preeminent 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, deuse, clastic, and tough, not so easily wrought as jarrah, and used for bridge-decking, flooring, planking, spokes, felloes, shafts, and streetpaving. 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 is 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. lozophleba*), 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. Callitris 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, housefittings, and wine casks. Red bean (Dysoxylon muelleri) has a finely-figured grain and is an excellent furniture wood. White beech (Gmelina 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) are 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, cabinetmaking, 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; dadoes, 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 saddletrees 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.

## § 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. It is proposed by the Commonwealth Bureau of Statistics to secure, if possible, more accurate information in future concerning this important industry.

QUANTITY OF LOCAL TIMBER SAWN OR HEWN IN EACH STATE OF THE COMMONWEALTH DURING THE YEARS 1901 TO 1906.

State.			1901.	1902.	1903.	1904.	1905.	1906.
New South Wales Victoria Queensland South Australia Western Australia Tasmania		···· ··· ···	Sup. feet. 96,907,000 46,495,885 140,443,099 22,877 122.413,865 45,848,526	Sup. feet. 90,308,834 40,494,660 72,478,951 197,088 124,005,005 24,531,922	Sup. feet. 100,408,000 38,841,322 69,508,800 130,565 126,729,833 35,196,700	Sup. feet. 117,029,000 49,250,000 71,293,811 94,396 143,594,953 34,760,628	Sup. feet. 112,580,000 47,635,358 73,930,279 155,662 137,250,340 40,273,429	Sup. feet. 119,337,000 51,103,000 82,801,846 130,763 136,294,697 39,498,697
Commonwea	վեհ		452,131,252	352,016,460	370,815,220	416,022,788	411,825,068	429,166,003

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 1906 are respectively, £23; £154; £413; £400; £340; and £230. For Tasmania the values for the same years are respectively, £117,734; £62,573; £89,227; £92,102; £75,817; and £110,689. The estimate for Western Australia for the .whole six years is £5,268,235; and for New South Wales for the same period, £4,050,000.

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 six years, 1901-6, 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. No figures on a similar basis are available for Queensland. The estimates for South Australia for 1901 to 1906 are £187; £354; £590; £665; £610; and £440. Western Australia averages for the six years, 1901-6, £984,264. Tasmania supplies the following estimates for the same years, viz., £152,102, £83,943, £114,227, £119,477, £94,987. £126,514.

### § 5. Oversea Trade.

1. Imports.—The value of timber imports for 1901 to 1906, and the quantity for 1903 to 1906, are as follows:—

Country whence		Quantity.				Value.					
Imported.	1903.	1904.	1905.	1906.	1901.	1902.	1903.	1904.	1905.	1906.	
United Kingdom Canada New Zealand Other Brit. Pos Norway Sweden United States Other For. Count.	Super, ft. 131,751 6,875 142,823 1,034 17,642,379 3,840,459 2,998,450 	Super. ft. 19,224 104,770 20,336 49,322 41,901,583 8,739,497 3,516,661 104,934	Super. ft. 14,694 9,800 21,238 3,549 33,084,662 2,515,987 2,411,998 89,888	Super. ft. 41,049 833 5,125 5,437 43,712,732 2,412,087 1,727,363 304,596	£ 1,134 2,742 26,398 236 323,937 30,169 56,114 935	£ 3,326 13,890 9,659 243 289,740 28,693 49,641 650	£ 1,429 46 1,109 16 122,416 20,905 26,919 	£ 807 828 216 1,258 312,067 51,379 28,073 523	£ 361 67 231 36 228,306 11,965 23,181 696	£ 894 65 51 273,546 15.054 19,982 1,764	
Total	24,763,771	54,456,327	38,151,816	48,209,222	441,665	——— 395,842	172,840	395,151	264,843	311,358	

IMPORTS OF DRESSED TIMBER, 1901 TO 1906.

NOTE.-Quantity for 1901 and 1902 not available.

Country whence	Quantity.				Value.					
Imported.	1903.	1904.	1905.	1906.	1901.	1902.	1903.	1904.	1905.	1906.
United Kingdom	Super. ft. 48.246	Super. ft. 38 677	Super. ft. 335.782	Super. ft. 293.086	£ 2,181	£ 7.083	£ 535	£ 720	£ 2.869	£ 2.531
Burmah Canada	7,864,000	12,077,976	29,208 13,684,642	290,060 8,380,951	66,553	91,090	36,601	51,270	274 52,119	7,173 42,538
India New Zealand	52,392 51,182,185	29,703 54,342,497	410,797 65,690,179	248,989 65,164,718	3,365 256,396	9,577 218,565	1,656 239,944	603 252,407 754	9,595 329,327	3,921 314,522 055
Other Brit. Pos	100,827	142,395 20,926 9,450,009	151,930 17,832	130,690 8,580 1 984 969	1,150	094 770 34.767	362	139	671 11.957	175 6.987
Russia Sweden	810,400 1.753.237	3,600,067	1,647.700	285,900	17,951	6,722 19,250	5,589 15,024	27,204 21,396	11,569 20,760	1,810 17,764
United States Other For. Count.	85,761,549 85,279	$117,478,797 \\ 1,115,766$	76,814,855 242,870	121,601,462 1,122,591	363,320 1,297	314,783 1,250	398,139 615	503,442 2,505	308,479 1,726	549,534 5,462
Total	152,087,073	194,208,236	163,976,501	201,568,404	717,548	704,751	732,522	876,479	750,286	953,372

# IMPORTS OF UNDRESSED TIMBER, 1901 TO 1906.

NOTE.-Quantity for 1901 and 1902 not available.

2. Exports.—The quantity and value of undressed (sawn) timber exported from 1903 to 1906 is given below, the countries of destination being also shewn. The quantities for 1901 and 1902 are not available, and the values only are given. Countries to which the produce was exported cannot, however, be stated for these years :—

# VALUE OF EXPORTS OF UNDRESSED TIMBER (SAWN), 1901 AND 1902. 1901, £631,257 ; 1902, £544,830.

EXPORTS OF UNDRESSED TIMBER (SAWN), 1903 TO 1906.

Country to which		Quar	atity.			Val	ue.	
Exported.	1903.	1904.	1905.	1906.	1903.	1904.	1905.	1906.
United Kingdom Canada Cape Colony Fiji Martin Mauritius New Guinea New Guinea New Guinea New Guinea New Guinea New Guinea Straits Settlements Other British Pos Other British Pos Other British Pos China China Germany Japan Kaiser Wilhelm's L Marshall Island Netherlands New Pommern New Caledonia Philippine Islands.	$\begin{array}{c} \text{Super. ft.} \\ 24,560,133 \\ 53,266 \\ 27,145,821 \\ 1,408,050 \\ 699,817 \\ 9,677,354 \\ 399,215 \\ 10,446,452 \\ 49,069 \\ 16,475,901 \\ 16,207 \\ 240,000 \\ 1,620,784 \\ -7,365 \\ 93,016 \\ 93,010$	$\begin{array}{c} Super, ft.\\ 32,784,587\\ 281,787\\ 12,556,852\\ 2,503,624\\ 1,225,562\\ 28,588,030\\ 689,968\\ 10,242,758\\ 116,213\\ 13,582,156\\ 168,885\\ 1,093,984\\ 605,732\\ 407,208\\ 407,208\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659\\ 66,406\\ 3,116,808\\ 100,659$		$\begin{array}{c} \text{Super. ft.} \\ 25,561,273 \\ 567,806 \\ 4,455,719 \\ 25,285 \\ 1,712,468 \\ 53,248,657 \\ 63,248,657 \\ 63,248,657 \\ 1,825,763 \\ 141,968 \\ 17,705,412 \\ 573,498 \\ 1,047,381 \\ 5,404 \\ 2,947,860 \\ 20,466 \\ 20,818 \\ 502,627 \\ 1,174,827 \\ 1,174,827 \\ 121,043 \\ 136,383 \\ 2,303,518 \end{array}$	$\begin{array}{c} \pounds \\ 166,616 \\ 166,616 \\ 9,387 \\ 9,387 \\ 4,283 \\ 64,513 \\ 2,716 \\ 32,716 \\ 287 \\ 106,817 \\ 96 \\ 6,612 \\ -975 \\ 211 \\ -975 \\ 211 \\ -975 \\ 211 \\ -975 \\ 211 \\ -326 \\ 6,880 \\ 85 \\ 596 \\ 6,611 \\ 1,300 \\ 3,264 \\ 11,212 \\ \end{array}$	£ 215,128 2,307 78,247 17,816 8,486 182,238 182,238 18,294 61,220 61,220 79,587 1,146 7,296 4,297 3,115 975 3,115 9773 3,115 9773 4,087 4,087 4,693 666 850 23,887	£ 192,891 102,886 6,179 102,886 6,179 293,287 79,328 51,428 51,428 1,502 1,952 5,495 5,565 5,565 5,565 5,565 5,565 5,565 5,565 5,565 5,565 5,565 5,565 5,565 5,565 6,831 117 5,495 6,831 27,394 27,395 27,395 27,395 27,395 27,395 27,495	$\begin{array}{c} \pounds\\ \pounds\\ 167,081\\ 5,566\\ 23,855\\ 213\\ 35,128\\ 11,159\\ 384,463\\ 384,463\\ 1,250\\ 120,480\\ 3,935\\ 5,849\\ 3,913\\ 5,849\\ 3,913\\ 3$
South Sea Islands United States of Am. Uruguay Other For. Countries	21,721,764 299,103 159,234 666,096 10,530	10,274,694 219,649 280,349 93,599	251,277 452,377 1,927,800 142,176	3,201,837 415,071 582,274 6,137,060 1,775,770	2,049 1,543 4,441 88	01,900 1,480 2,812 	03,780 1,710 4,683 12,852 961	18,636 2,760 5,272 40,912 7,184
Total	119,319,275	126,768,522	155,837,454	154,422,490	806,894	801,893	994,519	979,530

### OVERSEA TRADE.

The oversea trade in timber of all kinds is given in the next series of tables :--

# QUANTITIES OF TIMBER IMPORTED AND EXPORTED INTO AND FROM THE COMMONWEALTH, 1901 TO 1906.

Descripti	on.	1901.	1902.	1903.	1904.	1905.	1906.
IMPORTS— Dressed Doors Other EXPORTS— Dressed Undressed Logs Palings Other	Sup. feet. No.  Sup. feet.  No.	* 78,336 * * *	* 57,941 756,661 * 374,290	$\begin{array}{c}$	54,456,327 194,208,236 29,876 789,076 126,768,522 3,549,036 612,025 *	$\begin{array}{c} 38,151,816\\ 163,975,501\\ 8,799\\ *\\ 534,561\\ 155,837,454\\ 1,688,258\\ 972,479\\ *\\ \end{array}$	48,209,222 201,568,404 3,343 * 745,800 154,422,490 1,738,013 656,170 *
EXCESS OF OVER EXPOR Dressed Undressed Other	IMPORTS TS Sup. feet. "	* * *	*	24,131,990 32,767,798 *	53,667,251 67,439,714 *	37,617,255 8,139,047 *	47,463,422 47,145,914 *

• Quantity not available.

VALUES OF TIMBER IMPORTED AND EXPORTED INTO AND FROM THE COMMONWEALTH, 1901 to 1906.

Description.		1901.	1902.	1903.	1904.	1905.	1906.
IMPORTS— Dressed Undressed Doors Other	  	$\pounds$ 441,665 717,548 28,856 180,127	£ 395,842 704,751 29,530 41,011	£ 172,840 732,522 13,912 42,697	£ 395,151 876,479 12,414 66,842	£ 264,843 750,286 3,197 53,949	£ 311,358 953,372 1,373 63,353
Total.val	ues	1,368,196	1,171,134	961,971	1,350,886	1,072,275	1,329,456
EXPORTS— Dressed Undressed Logs Palings Other	· · · · · · · · · · ·	9,356 631,257 14,594 1,568 10,177	6,301 544,830 4,745 1,467 7,606	5,635 806,894 23,300 2,183 10,243	$ \begin{array}{c} 6,366\\801,893\\16,894\\2,607\\8,457\end{array} $	$5,353 \\994,519 \\12,988 \\4,952 \\9,791$	6,886 979,530 12,662 3,065 9,968
Total val	ues	666,952	564,949	848,255	836,217	1,027,603	1,012,111
EXCESS OF IMP OVER EXPORT Dressed Undressed Other	ORTS rs—  	432,309 86,291 182,644	389,541 159,921 55,723	$ \begin{array}{r}     167,205 \\     - 74,372 \\     20,883 \end{array} $	388,785 74,586 51,298	$259,490 \\ - 244,233 \\ 29,415$	$ \begin{array}{r} 304,472 \\ - 26,158 \\ 39,031 \end{array} $
Total val	ues	701,244	606,185	113,716	514,669	44,672	317,345

- Signifies excess of exports over imports.

384

# OVERSEA TRADE.

The exports of sandalwood were :--

# EXPORTS OF SANDALWOOD, 1901 TO 1906.

Country to which	Quantity.						Value.					
Exported.	1901.	1902.	1903.	1904.	1905.	1906.	1901.	1902.	1903.	1904.	1905.	1906.
Hong Kong Straits Settlements Other British l'ossessions China Other Foreign Countries	ewt. * *	cwt. 71,283 33,946 1,348 54,323 —	cwt. 21,606 18,842 10 47,671	cwt. 65,946 9,007 260 14,987 —	ewt. 68,657 14,145 - 27,564 61	cwt. 134,769 9,36 <sup>7</sup> 4,364 28,025 47ε	£ 53,991 15,341 408 7,905 65	£ 27,005 12,119 150 22,497 —	£ 9,782 6,727 5 21,399 —	£ 17,369 2,264 65 5,719 —	£ 27,306 4,479  7,008 23	£ 55,970 3,721 1,782 9,299 215
Total	•	160,900	38,129	90,200	110,427	177,005	77.710	61,771	37,913	25,417	38,816	70,987

\* Quantity not available.

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

EXPORTS OF TANNING BARK, 1901 TO 1906.

Country to which	Quantity.					Value.						
Exported.	d. 1901. 1		1903.	1904.	1905.	1906.	1901.	1902.	1903.	1904.	1905.	1906.
United Kingdom New Zealand Other British Pos Belgium France Germany Other For. Countries	cwt. 41,075 51,350 520 3,560 5,300 16,980 369	cwt. 58,399 45,250 1,546  1,211 20,784 3	cwt. 54,970 73,752 660  3,874 8,562 776	cwt. 99,766 52,834 1,211 4,898 3,325 88,802 1,152	cwt. 48,306 59,945 3,018 14,902 728 368,200 5,179	ewt. 46,825 73,831 519 6,864 1.879 301,219 759	$\pounds$ 16,203 20,614 232 1,510 2,825 6,979 151	£ 24,354 19,493 618  512 9,626 4	£ 21,331 33,138 332 1,927 3,955 330	£ 38,723 22,270 508 2,032 1,553 28,432 409	£ 17,499 27,553 1,179 5,667 270 135,321 2,210	£ 16,978 30.844 218 2,695 676 110,754 288
Total	119,154	127,193	142,594	251,986	510,278	431,896	48,514	54,607	61,013	93,927	189,699	162,453

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

# QUANTITIES AND VALUES OF BARK IMPORTED AND EXPORTED INTO AND FROM THE COMMONWEALTH, 1901 TO 1906.

Particulars.	1901.	1902.	1903.	1904.	1905.	1906.	
QUANTITIES—	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	
Imports	2,073	220	265	775	960	63	
Exports	119,154	127,193	142,594	251,986	510,278	431,896	
Excess of exports over imports	117,081	126,973	142,329	251,211	509,318	431,833	
VALUES—	£	£	£	£	£	£	
Imports	616	128	186	340	632	58	
Exports	48,514	54,607	61,013	93,927	189,699	162,453	
Excess of exports over imports	47,898	54,479	60,827	93,587	189,067	162,395	