### WESTERN AUSTRALIA.

# ANNUAL REPORT

OF THE

# WOODS AND FORESTS DEPARTMENT

FOR THE

## YEAR ENDED 30TH JUNE, 1911,

BY

### C. G. RICHARDSON,

ACTING INSPECTOR GENERAL OF FORESTS.

Presented to both Houses of Parliament by His Excellency's Command.

PERTH:

BY AUTHORITY: FRED. WM. SIMPSON, GOVERNMENT PRÍNTER.

1911.

No. 13.

APPROXIMATE COST OF PAPER:

#### WOODS FORESTS DEPARTMENT.

#### Forests. GENERAL ACTING INSPECTOR OF $\mathbf{B}\mathbf{Y}$ THE

To the Hon. the Minister for Lands.

Woods and Forests Department, Perth, 19th September, 1911.

I have the honour to submit my twelfth Annual Report upon the operations of the Woods and Forests Department for the financial year ended 30th June, 1911.

I have, etc.,

C. G. RICHARDSON, Acting Inspector General of Forests.

#### REVENUE AND EXPENDITURE.

The following statement shows the revenue and expenditure of the Department since its inception in 1895:-

895 :— Year.		Reve	enu	e.		Expe	ndit	ure.
		£		d.		£		d.
1st January to 31st December, 1895 .		3,175	5	2		1,108	5	5
1st January to 31st December, 1896 .		4,838	11	$^{2}$		2,020	11	5
1st January to 31st December, 1897		12,320	6	4	• •	3,489	14	4
1st January to 31st December, 1898 .		30,150	6	3		3,356	5	7
1st January to 31st December, 1899 .		16,999	11	3		2,438	7	5
1st January to 31st December, 1900 .		$15,\!525$	19	$^{2}$		2,648	11	10
1st January to 31st December, 1901 .		18,477	16	2		2,747	6	3
1st January to 31st December, 1902 .		18,752	11	7		4,301	6	1
1st January to 31st December, 1903 .		20,478	9	$\cdot 1$		3,789	3	4
1st January to 31st December, 1904 .		20,018	19	4		4,192	16	9
1st January to 31st December, 1905 .		18,479	18	6		5,089	18	6
6 months 1st January, 1906, to 30th June,								
1906		10,973	18	4		3,385	1	9
1st July, 1906, to 30th June, 1907 .		22,783	1	5		6,270	15	$^2$
T T TOOM ! DOLL T' TOOO		23,498	13	3		8,801	14	3
		$29,\!484$	3	8		9,030	12	6
		31,549	6	11		8,531	0	9
1st July, 1910, to 30th June, 1911 .	•	37,477	3	5	• •	8,862	16	8
	-	£334,984	1	0	. • •	£80,064	8	0
and the second s	_							

From the above statement it will be seen that to the 30th June, 1911, the revenue exceeded the expenditure by the large amount of £254,919 13s.

Revenue and Expenditure for the year ended 30th  $June,\,1911.$ 

The revenue derived from the forests of the State for the year under review amounted to the large sum of £37,477 3s. 5d., and is an increase of £5,927 16s. 6d. over that of the previous year.

Never before in the history of Western Australia has the revenue from this source reached such a high figure, and with the present prosperous condition of the timber industry there is every prospect of the revenue being still higher next year.

The details of the revenue are as follows:-

s. d. Rents on Timber Leases 11,825 0 0 Timber Licenses, Royalty on Timber and Sandalwood 22,842 11 Timber and Inspection Fees 2,809 12 2 The total expenditure of the Department for the

year amounted to £8,862 16s. 8d.

#### THE STAFF.

The staff is composed of the following officers:

#### Head Office.

- C. G. Richardson, Acting Inspector General of Forests.
- F. U. Palmer, Clerk; R. Cooper, Clerk and Typist; R. R. Marshall, Clerk; F. A. Goerke, Clerk.

#### Forest Rangers.

H. S. Brockman, Inspecting Ranger, Donnybrook; R. C. Mackay, Marrinup; J. J. Fitzgerald, Waroona; F. Doust, Bridgetown; F. E. S. Willmott, Bridgetown; G. F. Griffiths, Noggerup; A. Stevenson, Collie; D. Milligan, Muja; W. M. Cusack, Collie; P. E. Port, Donnybrook; D. McVicar, Greenbushes; W. Donovan, Nannup; G. Singleton, Sawyers' Valley; C. D. Ferguson, Coolgardie; Manager, State Nursery, Hamel, A. McFarlane; Caretaker Pine Plantation, Ludlow, W. Pennell.

In addition to the above-mentioned staff, about twelve timber Inspectors are employed in inspecting and branding the timber exported from the State.

The work of the Department, which is increasing rapidly every year, it is gratifying to me to here record, has been carried out by the various officers above mentioned with fidelity and efficiency.

#### PINE PLANTING.

Clearing in a large way is still being carried on at Ludlow, on the South-Western Railway line, for Pine planting, and it is expected that about 150 acres will be planted this season.

The pines will be planted right up to the Railway line, and the plantation will be then visible to the public, and serve as an object lesson to the people of the State.

As an instance of the wisdom of planting pines, and of the potential value of such plantation to the State, it may be mentioned that out of an eight-year-old pine, grown in one of the plantations at the State Nursery, Hamel, forty-two fruit cases were made.

The timber of the Remarkable Pine of California (*Pinus insignis*) is admirably suited for making fruit cases, as well as other more important purposes, and is largely used in the Eastern States and South Africa in place of imported softwood.

Large areas of fruit trees are being planted every year in this State, and as these areas are likely to increase greatly in the future, there is every prospect of pine planting turning out a paying proposition, even if the timber is only used for fruit cases.

Pinus insignis is so highly thought of in New South Wales that the Master Builders' Association expressed the opinion that plantations of it would be of inestimable value to that State in twenty-five or thirty years, when it is anticipated that imported softwoods will be more difficult to obtain, and far more costly than at present. The Association also strongly recommended that an immediate start should be made in planting pines generally.

Altogether, we have now about 300 acres under pines at the Ludlow, and as it is intended to increase the planting every year, there will soon be a large area set apart for this purpose; the total area, including the Hamel plantation, now amounting to about 600 acres.

The plantations generally, I am pleased to say, are looking remarkably well, and promise to be a great success.

The annexed illustrations represent some of the Hamel Pine Plantations, and give a good idea of the rapid growth of the trees which were planted only 12 years ago.

#### STATE NURSERY.

A splendid stock of trees has been grown for distribution at the State Nursery this season.

The various kinds and numbers raised are shown in the following lists:—

List of trees and shrubs raised in Nursery during year under review.

gean amach review.	
Acacia Baileyana, Silver Weeping Wattle	
(New South Wales)	2,016
Acacia decurrens, Black Wattle (New South	
Wales)	1,649
Acacia dealbata, Silver Wattle (Queensland)	2,500
Acacia pycnantha, Golden Wattle	2,600
Araucaria Bidwilli, Queensland Pine	260
Araucaria excelsa, Norfolk Island Pine	2,960
Ceratonia siliqua, Carob Bean	1,860
Cupressus (of sorts). Cypress	8,016
Eucalyptus citriodora, Lemon-scented Gum	,
(Queensland)	916
Eucalyptus corynocalyx, Sugar Gum (South	
Australia)	6,840
Eucalyptus ficifolia, Red Flowering Gum	3,142
Ficus Australia, Pt. Macquarrie Fig	2,300
Ficus macrophylla, Morton Bay Fig	2,006
Lagunaria Patersonii, Pyramid Tree	369
Phoenix dactylifera, Date Palm	1,046
Pittosporum undulatum, Cheese Wood	1,598
Sterculia acerifolia, Queensland Flame Tree	860
Schinus molle, Pepper Tree	10,000
Thuya occidentalis, Northern White Cedar	20,000
(Arbor vitae)	860
Laurus Camphora, Camphor Laurel	3,914
Sterculias Kurrajones	1,006
Robenia, Pseudo Acacia, False Acacia	1,600
Melia Adzedarach, Pride of India	2,190
Salix Aurea, Basket Willows	640
Populus fastigata, Lombardy Poplar	390
Populus alba, Silver Poplar	641
Plantanus orientalis, Plane Tree	980
Pinus insignis, Remarkable Pine	80,000
Pinus Halipensis, Aleppo Pine	600
Eucalyptus globulus, Blue Gum	3,000
Aberia Caffra, Kei Apple	7,000
Acacia Melonoxylon, Blackwood	819
Syncarpia laurifolia, Turpentine	2,380
Lycium horridum, Box Thorn	2,000
Salix Babylonica, Weeping Willow	306
Dracaena Draco, Dragon's Blood Tree	600
	-

#### DISTRIBUTION OF TREES.

The following list shows the number of trees and the various public bodies to which same were supplied during the year ended 30th June; 1911:—

Bowling Clubs	520
Board of Health	200
Cemeteries	322
Churches	279
Convents	183
Government Gardens	60
Hospitals	1,404
Infectious Hospital	500
	745
	900
Lunatic Asylum	270
Municipalities	270 8,026
Methodist Ladies' College	ge 404
Old Men's Home	323
Orphanages	200
Parliament House	755
Progress Associations	
Railways	1,271
Road Boards	10,633
Recreation Grounds	960
Schools	3,531
	13,015
State Farms	501
Zoological Gardens	2,809
	50,300

Gold fields.	
crounieus.	

and the second second	0,000,000	~~~		
Hospitals			100	
Municipalities			2,505	
Road Boards			2,612	
Railways			150	
Schools			715	
State Hotel			65	
Water Supply	Departi	ment	1,352	
		_		7,499

Total number of trees distributed 57,799

From the above list it will be seen that during last season the number of trees distributed throughout the State amounted to 57,799.

Two hundred and seventy-five applications were received for trees during the period above-mentioned, and it is evident that a taste for arboriculture is still increasing amongst the residents of the State.

From reports to hand, the trees generally are doing very well and adding to the beauty of the districts in which they were planted.

The free distribution of trees throughout the State is undoubtedly a wise policy on the part of any Government, and the benefits which the present and future generations will derive therefrom cannot be exaggrated.

The introduction of exotic trees capable of producing valuable timber is a matter of national importance, and if the people of Western Australia are willing to plant and care for such trees, they should receive every encouragement.

#### TIMBER INDUSTRY.

The Timber industry generally is in a flourishing condition; the export trade for the year under review has been very brisk, and in consequence of the increase in the building trade in Perth, Fremantle, and suburbs, and the country generally, the local trade has increased proportionately.

All the mills throughout the South-West are fully occupied, and as there still continues to be an increasing demand for our timbers, there is every prospect of a splendid future for the timber industry of the State.

There are at present 30 saw mills working in our forests, about 4,000 men being employed in the mills and bush, and something like £500,000 is paid them per annum in salaries and wages.

It is interesting to note that, during the year under review, several saw mill permit applications have been made for large areas of karri country.

Large forests of this splendid timber are to be found on the Donnelly, Warren, Gardner, Frankland, and Shannon rivers, and only await opening up by a railway line. These will, in the near future, be rendered accessible by the extension of the railway from Manjimup via Nornalup Inlet to Albany, and lead to a very great expansion in the timber industry of the State.

There is no doubt that the Karri is the finest looking tree in our forests. When matured, its appearance is very grand, and greatly exceeds the Jarrah in beauty. The trees attain enormous dimensions, straight as a ship's mast, and tower upwards without a branch for one hundred and fifty to two hundred feet.

Some idea of the great wealth these forests represent may be gained when it is realised that the Karri area amounts to approximately 1,200,000 acres of land, and that trees 34 feet in circumference at three feet from the ground, 160 feet to the first branch, and 14 feet in circumference at the first branch, have been found.

From the above figures it will be seen that such trees would contain nearly 6,000 cubic feet of timber or 120 loads. The Karri is a very rapid grower, soon attains a considerable height, and produces a large volume of timber, and from the evidences of its growth in the cut-out areas of the Karridale Concession, there is no doubt that a forest of this species could be reproduced in a comparatively short number of years.

There has been considerable demand for this valuable timber during the last few years, and now that this country is being opened up by the railway line referred to, there is every probability of a great increase, in the near future, of the timber industry of the State.

#### TIMBER IMPORTS.

The value of the timber of various sizes imported into Western Australia during the year ended the 30th June, 1910, amounted to £86,452, and for the year ended 30th June, 1911, the value of the imports came to £130,256, being an increase of £43,804 over the previous year.

That such large sums are spent annually on imported timbers is an additional argument in favour of the extension of our pine plantations, as a large percentage of the timber could be grown locally.

I doubt, however, if the softwoods of commerce can be successfully grown in these latitudes; but am quite sure we can grow a timber which can be used as a very good substitute, and thus keep a large sum of money from going out of the State every year.

#### TIMBER EXPORTS.

The following statements, kindly supplied by the Collector of Customs, Fremantle, show the quantity and value of timber exported beyond the Common-

wealth during the years ended 30th June, 1910 and 1911, respectively, and the various countries to which same was exported:—

Statement showing Quantity and Value of Timber Exported to Countries beyond the Commonwealth during the Year ended 30th June, 1910.

	Cou	ntries t	o which	h Expo	orted.				Quantities in Super. feet.	Value.
										£
imber—Undresse					•		•			£
United Kir		n							9,684,592	64,556
Cape Colon	ıÿ								2,208,709	13,568
Ceylon	٠								183,822	946
$\mathbf{India}$	٠								51,329,365	34,256
Mauritius									289,848	1,932
Natal									2,564,634	15,835
New Zealar	nd					• • •			11,435,299	75,911
Singapore						• • •			534,324	3,561
Argentine						• • •			3,891,708	25,696
China		• • •					• • •		55,308	369
Belgium		• • •		• • • • • • • • • • • • • • • • • • • •				•••	919,125	6,118
Brazil			• • •			• •	• •	• •	2,207,664	14,718
Egypt		• •	• • •	• •	••	• •	• •	• •	11,203,661	74,691
France	• •	••	••	• •	• •	• •	• •	• •	11,203,001	14,091
Germany	• •	••	••	• •	••	• •	• •	: •	283,339	2,360
Java	• •	••	••	• •	• •	• •	••	• •	2,400	2,360 31
Philippines	••	• •	• •	• •	• •	• •	• •	• •		
Dartmana	13	A C	• •	• •	• •	• •	•••	• •	79,968	534
Portuguese	. JC	Airica	• •	• •	• •	• •	• •	• •	4,190,460	27,937
Uruguay	• •	• •	••	••	••	••	• •	• •	5,788,848	38,592
		Total	••				••	••	106,853,074	£708,611
imber—Logs no	t sav	vn:			•					
India									685,891	4,403
Argentine									75,000	500
Portuguese	E.	Africa	• •	• •	••	••	• •	••	51,600	344
		Total						••	812,491	5,247
		Grand	Total	••	•••		•••		107665565	£713,858

Owing to the fact that no record was kept by the State Customs Department of the timber shipped to the Eastern States during the year ended 30th June, 1910, I am unable to give details of these exports.

Upon reference to the Customs Department, Melbourne, it was, however, ascertained that during the above-mentioned period, timber valued at £204,453

was exported from Western Australia to the Eastern States.

As the above statement only includes the timber exported beyond the Commonwealth, the value of the shipments to the Eastern States, viz., £204,453, must be added to it; thus bringing the total of the exports for the year ended the 30th June, 1910, up to the large sum of £918,311.

Statement showing the Quantity and Value of Timber Exported to Countries beyond the Commonwealth during the Year ended 30th June, 1911.

	Country t	o which	Expo	rted.				Super, feet.	Value.
		· · · · · ·	· ·				<del>-</del>		
mber—Undressed	L_Other.								£
United King								8,221,487	54,001
Cevlon	,	• • •	• •	• •	•••	• •	•••	394,013	2,655
India	••	• •	• •	• •	••	• •	•••	27,871,434	185,064
New Zealan	4	• •	• •	• •	• •	• •		9,041,180	59,752
Egypt		• •	• •	• •	• •	• •		17,958,779	119,606
Mauritius	••	••	• •	• •	• •	• •	• •	231,216	1,541
Natal	••	• •	• •			• •		7.745,921	48,883
Italy	••	• •	• •	• •	• •	• •		28,280	195
	••	• •	• •	• •	• •	• •	•••	3,434,304	22,895
Uruguay	••	••	. ••	• •	• •	• •	• •		18,722
Philippines		• •	• •	••	• •	• •		2,808,336	21,859
Belgium	••	• •	• •	• • •	• •	• •	•••	3,276,861	21,859 828
Germany	••	• •	• •	• •	• •	• •	•••	124,063	
Argentine	••	• •	• •	• •	• •	• •	••	752,292	5,015
China		• •	• • .	• •	• •	• •	• •	352,032	2,296
Portuguese	East Africa	ı	• •	• •	• •	• •	• •	4,732,613	29,957
Singapore	• • • • • • • • • • • • • • • • • • • •							17,628	118
U.S. of Am		• •	• •	• •	• •	• •	• •	384	3
Hong Kong	• •	• •	• •		• •		• •	24,018	162
Germany								23,520	157
Cape Colony	7	• •	• •		• •	• •	• •	4,925,277	32,196
	Total	••				٠.		91,963,638	605,905
ogs not sawn, ar		the rou	ıgh:			-		2,940	16
United Kin	agom	••	• •	• •	• •	• •	•••		2,807
India		• •	••	• • .	• •	• •	••	461,568	
New Zealan	α	• •	••	• •	• •	• •	•••	37,140	247
Argentine	÷	• •	• •	• •	• •		•••	13,152	88
Portuguese	East Africa	a	••	• •	• •	• •	• •	193,440	1,290
	Total	••,						708,240	4,448
	Grand	Total						92,671,878	610,353

The above statement only shows the timber exported beyond the Commonwealth for the year ended 30th June last. Through the courtesy of the Registrar General, however, I am enabled to give the shipments to the Eastern States during the year mentioned above. These amounted to 43,662,025 super feet, valued at £303,488, thus bringing the value of the total exports for the year ended 30th June last up to £913,841.

From a comparison of the foregoing returns it will be seen that during the year ended 30th June, 1910, the value of the timber exported beyond the Commonwealth amounted to £918,311, and that for the year ended the 30th June last, similar exports, including those to the Eastern States, amounted to £913,841, thus showing a small decrease.

#### SANDALWOOD INDUSTRY.

The following returns show the quantity and value of the sandalwood exported from the State during the years ended 30th June, 1910 and 1911, respectively:—

Return showing quantity and value of Sandalwood exported to countries beyond the Commonwealth during the year ended 30th June, 1910.

Countries	to a	which o	enartad		Quantity.	Value.
Committee	10	WILLOUGE CA	zbor ieu.		${ m cwts.}$	£
India					3,943	1,815
Hong Ko	ng				70,396	30,647
Singapore	3			:.	12,768	4,949
China					26,510	9,870
	T	otals			113,617	£47,281

Return showing the quantity and value of Sandalwood exported to countries beyond the Commonwealth during year ended 30th June, 1911.

Countries to which exported	Quantity. Value. $\varepsilon wts$ .
Singapore	14,374 6,646
India	17,361 7,218
Hong Kong	114,986 52,929
China	7,140 2,348
Total	153,861 £69,141

From the above statements it will be seen that for the year ended 30th June, 1910, the value of the Sandalwood exported from this State amounted to £47,281, while the exports for the year ended the 30th June, 1911, amounted to £69,141, thus showing an increase of £21,860.

The revenue derived from royalty on Sandalwood during the year under review amounted to £2,085, and is £900 in excess of that received for the similar period of 1910.

In the future, however, there is every probability of a considerable falling off in the exports of Sandalwood from this State. The Sandalwood industry is a dying one owing to the awakening of China, and the adoption by her of Western ideas.

This wood is now largely used for burning incense in connection with ancestor worship by the Chinese, and this form of religious rite is rapidly falling into disuse.

#### MALLET BARK EXPORTS.

The following returns show the quantity and value of Mallet bark exported during the years ended 30th

June, 1910 and 1911. No record being kept by the State Customs Department of shipments to the Eastern States, this return only shows what was exported beyond the Commonwealth.

Return showing quantity and value of Mallet Bark exported to countries beyond the Commonwealth during year ended 30th June, 1910.

Countries	to which	exported.	Quantity.	Value. £
United K	$_{ m ingdom}$		 201	111
$\operatorname{Belgium}$			 32,710	12,307
Germany		• • • •	 150,008	58,176
	Totals	s	 	<u></u> - £70,594

As the above return only includes the Mallet bark exported beyond the Commonwealth, the value of the shipments to the Eastern States must be added to it.

These, I have ascertained through the courtesy of the Customs Department, Melbourne, came to the amount of £12,894, and bring the total value of the exports for the year ended 30th June, 1910, up to the large sum of £83,488.

Return showing the quantity and value of Bark exported to countries beyond the Commonwealth during year ended 30th June, 1911.

Countries	.to w	hich e		Quantity.	Value.	
	100 11	HIOH C	zporteu.		cwts.	£
Germany	٠.	• •			160,620	$64,\!166$
$\operatorname{Belgium}$	• •			٠	23,320	9,054
Ceylon	• •				61	27
						<del></del>
		otal		٠.	184,001	£73,247

As the above return also only includes the Mallet bark exported beyond the Commonwealth, the value of the shipments to the Eastern States must be added to it.

These, I am informed by the Registrar General, amounted to £10,675, and bring the total value of the exports for the year ended 30th June, 1911, up to the large sum of £83,922, being an increase of £434 over the previous year.

# FIREWOOD INDUSTRY ON EASTERN GOLDFIELDS.

Throughout the Eastern Goldfields for the year under review there has been a decided increase in the consumption of firewood. This is accountable partly from the fact that the Perseverance Gold Mine has been a greater consumer this year than last, owing to the instalment of the new plant in place of the one which was destroyed by fire the previous year. There was also a marked increase in the consumption of firewood in the Yilgarn District, viz., Southern Cross, Marvel Loch, Transvaal, Parker's Range, Bullfinch, Golden Valley, Mt. Jackson, and Corinthian, although the trade in these centres is at present rather quiet.

The consumption of firewood on the Golden Mile for the period under review was 510,000 tons, showing an increase of 36,000 tons on the previous year. This, in itself, speaks well for the industry. These supplies were mainly kept up by three companies, viz., Kalgoorlie and Boulder Firewood Co., Ltd., operating from Lakeside; the Westralia Firewood Supply, Ltd., operating from Kurramia, and the W.A. Goldfields Firewood Supply, Ltd., operating from Kurrawang.

The three above-named companies contributed 475,000 tons to the Golden Mile supply, and the balance of 35,000 tons was supplied from various cutters operating along the Norseman railway line at from 25 to 35 miles South of Coolgardie, and I estimate the value of firewood supplied to the various mines on the Golden Mile (including Electric Light and Tramways) at £357,000 f.o.r. at the boilers.

Northern Mines, Leonora and Gwalia.—There has been a slight increase in the consumption in this district, the consumption being 38,000 tons as compared with 31,000 tons for the previous year. The main consumer in this district was the Sons of Gwalia Mine, which consumed 32,000 tons, the whole of this consumption being mulga, and hauled on a 24in. gauge light railway running out into the bush some 20 miles.

Lancefield.—The consumption for this district has also increased on the previous year, the consumption for the period under review being 66,800 tons as compared with 47,895 tons for the previous year. The Lancefield Gold Mine was the largest consumer in this district, and alone consumed 54,862 tons for the year. This firewood is also hauled on a 24in. gauge light railway for a distance of 30 miles.

Various State Forests have been gazetted, viz., Koolyanobbing, Bullfinch, Corinthian, Weston, and the boundaries of Coolgardie-Burbanks State Forest and Dedari State Forest have been amended.

Additional new timber areas have been opened up, cwing to the extension of the various timber tramways, and taking all things into consideration, I certainly think that the firewood industry on the Eastern Goldfields is undoubtedly in a very prosperous condition.

It is estimated that the total firewood cut and consumed throughout the Eastern Goldfields for the period under review was 617,000 tons, and the market price of the wood is estimated at £463,350 delivered at the mines' boilers.

The total number of men employed in cutting, carting, and handling the same firewood is estimated at about 1,500 men, and the total area cut over at 320 square miles.

#### INSPECTION OF TIMBER FOR EXPORT.

- 1. The following table shows the quantity of railway sleepers, scantlings, etc., inspected and branded by the various timber inspectors during the year ended the 30th June last, and the countries to which same were sent.
- 2. During the year above mentioned, inspection fees to the amount of £2,809 12s. 2d. were collected by this Department.

Countries to	which		Sleepers.	Scantlings,
exporte	d.			etc., in loads.
Karachi			315,050	
Bombay		••	247,214	$2,\!127$
South Austra	alia		747,392	301
South Africa	ı		406,103	170
Manila			123,888	265
New Zealand	d		45,730	1,890
South Amer	ica		36,619	,
Calcutta			50,046	
Chittagong			41,312	•
Soudan			876	
Ceylon	••			357
Belgium	•.•			65
Egypt				57
		-		
		2	2,038,169	5,232
		-		

#### RESERVES FOR FIREWOOD.

The question of reserving land within easy railage of Perth, in order to provide a future supply of firewood for the metropolis, is one requiring serious attention.

At the present time all the land along the Eastern Railway within a radius of, say, 30 miles of Perth, whether good, bad, or indifferent, is being rapidly alienated.

The result of this will be that in the very near future there will be no Crown Lands for the firewood cutter to work on, and that the selectors of the land will either destroy the timber or charge such a high royalty per load for the wood on their holdings that the price of firewood will increase, or the supply diminish altogether, within a reasonable distance of the metropolis.

I have, during the last 12 years, had various reserves set apart for this purpose, but they are all disappearing bit by bit, and if prompt action is not taken, they will disappear altogether.

I now recommend that all the country along the Eastern Railway be classified; all the land suitable for cultivation surveyed before selection, and the balance set apart as Class "A" Reserves for the preservation and future growth of timber.

Even at the present time the land in this district is being taken up by persons who pose as bona fide selectors, merely for the sake of the sale of the wood, and the firewood-cutter has to pay the owner a high price per cord for the firewood, instead of paying the Department the purely nominal sum of one shilling per month per man.

In this way the State is being defrauded of the revenue formerly derived from firewood, and the selector makes a good thing out of the firewood while it lasts, and then abandons the land as useless.

#### DEPARTMENTAL MUSEUM.

A large number of samples of timbers representative of the hardwoods of the State were, during the year under review, prepared and distributed for educational purposes at home and for advertising our timbers abroad.

The sets of timbers mounted on cardboard, with a brief description of the economic uses of each timber, have been in particular demand, and were widely distributed.

Larger samples were also prepared representative of the timber resources of the State, and comprised specimens of all our timbers suitable for constructional purposes, furniture, showcases, spokes, felloes, naves, etc.

Small collections of indigenous timbers have also been sent to museums, public departments, timber merchants, etc., and to persons outside the State likely to assist in the work of utilising and advertising Western Australian timbers.

The fine exhibit of our native timbers that was prepared for exhibition at the Franco-British Exhibition, and which, on its return, made such a fine

display in the departmental museum has been, unfortunately, taken away and distributed between the Melbourne Agency and the Information Bureau attached to the Lands Department.

This has unquestionably robbed the departmental museum of the attractiveness which it previously possessed, and leaves only a quantity of rough specimens—sleepers, piles, beams, etc.—which, although very valuable for illustrating the durability of our timbers, make a poor show when compared with the handsomely carved furniture and polished panels.

In the Eastern States and every part of the civilised world where Forest Departments or branches exist, museums of economic forestry are attached to them, and it is much to be regretted that in this State, where there is such a wealth of timber, this branch should not now be able to display our native woods, not only for the information of visitors, but also for the education of our own people, who are singularly ignorant of the beauties of our timbers and their uses.

The proper place for the display of forestry exhibits is, of course, a museum attached to a "Forestry Department," as it is naturally there that full information as to their durability, strength, uses, etc., is sought, and it is a regrettable fact that the original very attractive and handsome display should have been removed elsewhere.

Many visitors to the State, when passing through Perth, used to call or be brought by friends interested in Australian woods to see the departmental museum, or get samples of native woods to take away with them, and those who are now anxious to see or obtain the carved or polished specimens have to be referred to the officers of the Information Bureau, who are unacquainted with the qualities and uses of our timbers.

This is obviously wrong, and it is hoped that in the near future the exhibits will be returned or fresh ones prepared for display in more suitable and commodious offices, and where those who have spent years in acquiring an intimate knowledge of them can give data concerning their durability, strength, and economic uses.

# INSPECTION OF FOREST COUNTRY BEFORE ALIENATION.

The most serious menace to the existence and permanency of our forests is the alienation of timber lands under the Conditional Purchase and other clauses of the Land Act.

The timber-cutters and sawmillers combined do not cause half the damage to our forests as the selectors, for the latter destroy the timber altogether, whereas the former, after cutting what they require, abandon the land, and allow Nature to re-afforest it.

The inspection of forest lands before selection is therefore the only way to guard against the alienation of valuable timber country, and this is one of the most important functions of the Department.

During the year under review 230 blocks of land applied for in timber country were examined and reported on by the various rangers.

#### SAW MILL PERMITS.

The following return shows the existing Sawmilling Permits granted under the provisions of "The Land Act Amendment Act, 1904":—

Name.	No.	Area.	District.
	<u> </u>	julia i kati a d	
Whittaker Bros	1/11	acres. 20,000	Mùrray
T.J. T M	3/11	2,370	Wellington
. The state of the	8/11	4,700	Wellington
Sunning, Robert	9/11	10,000	Wellington
exton, W. B., and Drysdale, Simon	10/11	J 19,800	Nelson
CTA TELLO TACTO TALL	12/11	↓106,000	Nelson
wan Saw mills, Ltd	13/11	2,633	Preston
wan Saw Mills, Ltd	14/11	9,000	Preston
Bunning, Robert	15/11	5,300	Wellington
delaide Timber Co., Ltd	16/11	12,000	Wellington
wan Saw Mills, Ltd	19/11	1,000	Wellington
Ilkin, John George	21/11	5,300	Wellington
Bunning Bros., Ltd	25/11	10,000	Wellington
.W. Timber Hewers' Co. Society, Ltd	26/11	17,000	Collie
.W. Timber Hewers' Co. Society, Ltd	27/11	20,000	Collie
Vheatley, Thomas	30/11	10,000	Nelson
Young, Charles	33/11	75,000	Kimberlev
Port. Honey & Co. Ltd	34/11	<b>1</b> 28,510	Murray
The Timber Corporation, Ltd	35/11	<b>√</b> 6,800	Nelson
Sunning Bros, Ltd	36/11	<b>%</b> 10,000	Wellington
ewis, Francis J., Reid, F. W. S.	37/11	19,730	Wellington
'imber Corporation, Ltd	39 /11	75,000	Nelson
Cimherley Forests Ltd	40/11	20,000	King
Chompson, R. A., and De Baun, John	41/11	75,000	King
yall, John W	$\frac{1}{42/11}$	₹19,000	Nelson
Suckingham Bros	44/11	18,000 نىرىس	Wellington
Vincent, W. Hy.	50/11	15,000	Nelson

#### RE-AFFORESTATION.

The small area set apart for experimental reafforestation, near Waroona, has been finished and cleaned up during the year under review.

So far the results are most satisfactory, and this experiment promises to be one which will be of great value to future generations, as it will show what Nature can do in the way of regeneration in our Jarrah forests if assisted by man, and protected from the great forest enemy, fire.

The cost per acre owing to the price of labour is, however, so high as to prevent re-afforestation on these lines being carried out over any extensive tract of country.

As explained in my previous report, the work consists of merely cutting out the old useless timber and burning up all the *debris* left on the ground, thus making room for a young crop to spring up.

The annexed illustrations show the natural reafforestation that is taking place in the cut-over areas and illustrate how Nature is all the time reproducing the species.

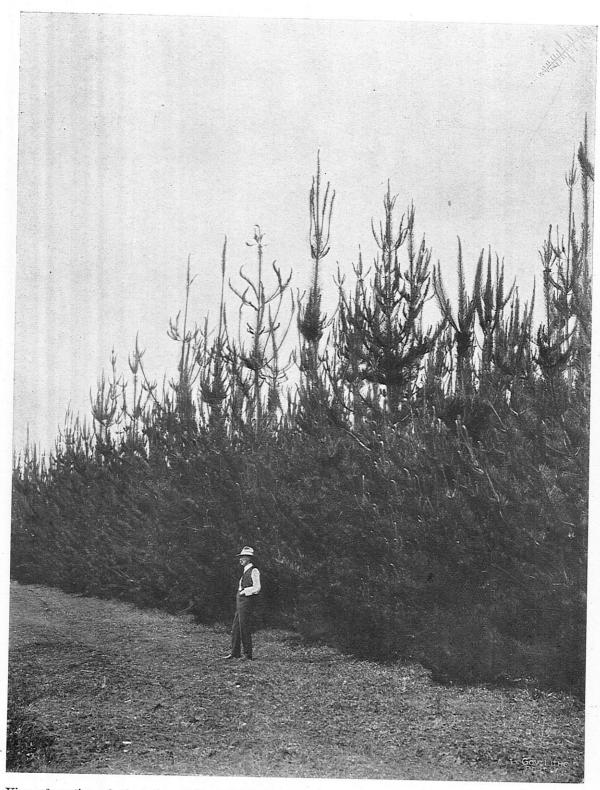
It will be seen, therefore, that the re-afforestation of the cut-out areas of this State is a comparatively simple one, and that as our indigenous timbers possess in a remarkable degree the powers of natural reproduction, the replanting of them, even if this were practicable, is unnecessary.



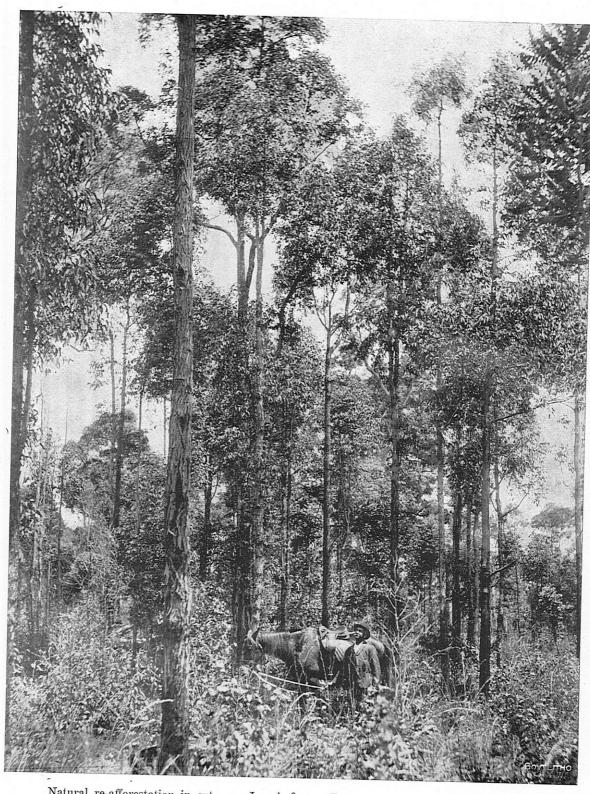
Remarkable Pines (Pinus insignis) near entrance to State Nursery, Hamel; twelve years old.



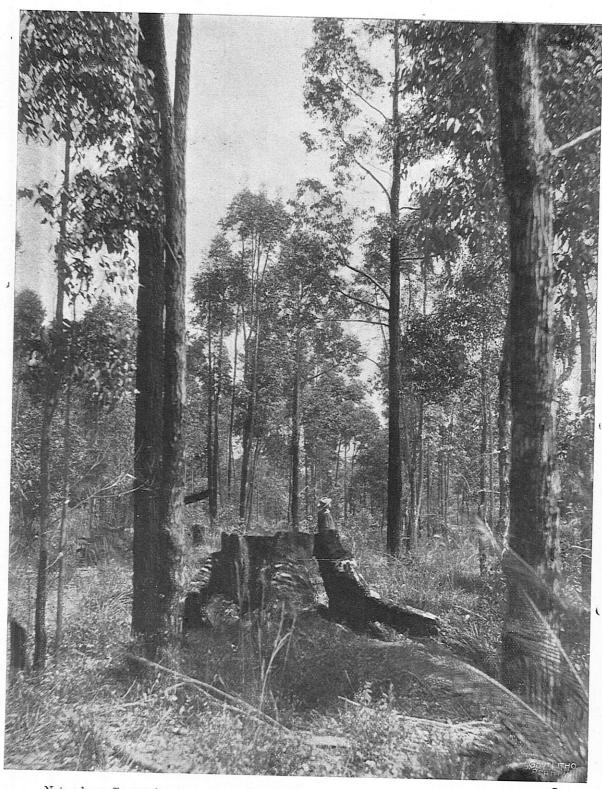
View of portion of plantation of Remarkable Pine (Pinus insignis), State Nursery, Hamel; ten years old,



View of portion of plantation of Remarkable Pine (Pinus insignis), State Nursery, Hamel; five years old.



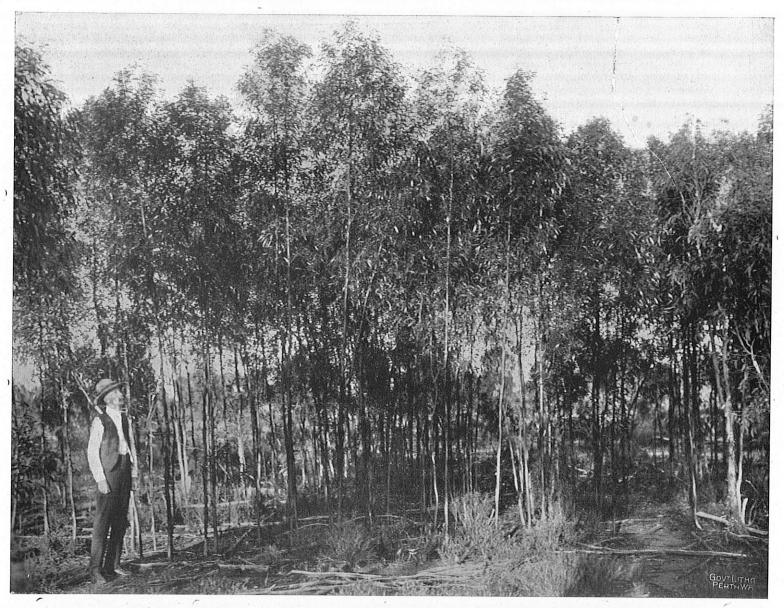
Natural re-afforestation in cut over Jarrah forest, Darling Ranges. New growth of Jarrah (Euc. marginata).



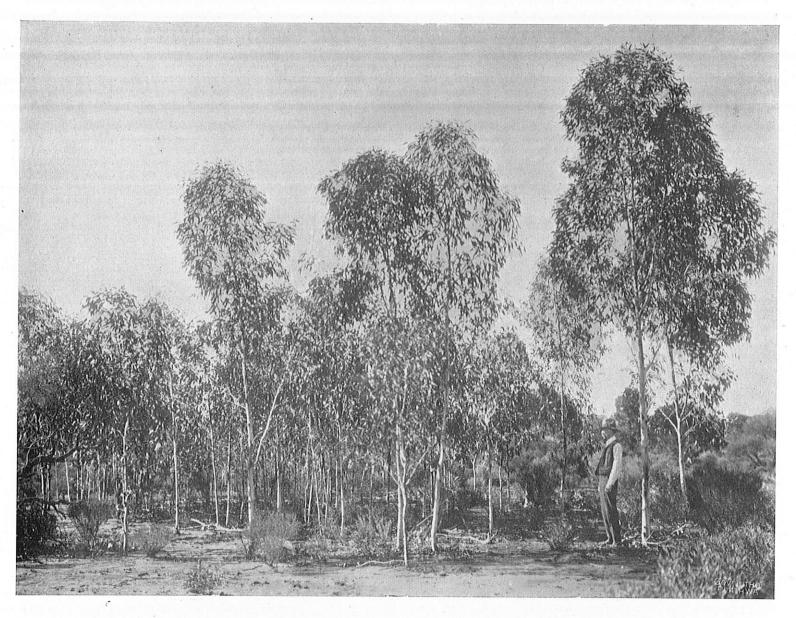
Natural re-afforestation in cut over Jarrah forest, Darling Ranges. New growth of Jarrah (Euc. marginata).



Natural re-afforestation in cut over Jarrah forest, Darling Ranges. New growth of Jarrah (Euc. marginata).



Natural re-afforestation near Coolgardie. New growth of Gimlet (Euc. salubris), 6 to 7 years old.



Natural re-afforestation near Coolgardie. New growth of White Gum (Euc. foecunda), 6 to 7 years old.



Natural re-afforestation near Coolgardie. New growth of Gimlet (Euc. salubris), 6 to 7 years old.