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, STATE AND COMMONWEALTH, 1917.

State.		f Forest erves.	Total Forest	Percent State		Percent Common Are	wealth
State.	Permanent.) (b) Reserved. Forest. Res	Specially Reserved.	Total Forest			
	Acres.	Acres.	Acres.	%	%	%	%
c New South Wales	7,039,074		15,000,000	3.55	7.57	0.37	0.79
Victoria	4,149,035	125,500	11,800,000	7.60	20.98	0.22	0.62
Queensland	1,142,885	2,804,967	40,000,000	0.92	9.32	0.21	2.10
South Australia	135,935	18,704	3,800,000	0.03	1.56	0.01	0.20
Western Australia	10,008	1,611,698	20,400,000(d)	0.26	3.27	0.09	1.07
Tasmania	···	1,028,000	11,000,000	6.13	65.56	0.05	0.58
(e)Commonwealth	18,00	65,806	102,000,000			0.95	5.36

 ⁽a) Reservations in perpetuity.
 (b) Reservations which may be cancelled at any time.
 (c) Inclusive of Federal Area.
 (d) S.W. Division only.
 (e) Exclusive of Northern Territory and portion of Western Australia.

In the case of Victoria, the figures for area of permanent reserves include 3,381,905 acres reducible only by Act of Parliament, and 746,401 acres by resolution of both Houses of Parliament.

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, to the latest available date, are shewn in the table on the next page.

Country. Tota Wood Area			Per- centage of Total Area.	Country.		Total Wooded Area.	Percentage of Total Area.
	_	Sq. Miles.	%			Sq. Miles.	%
Australia New Zealand United Kingdom France Algeria	•••	159,375 26,562 4,740 38,620 10,249	5.36 25.63 3.82 18.65 2.98	Rumania Sweden Norway Russia in Europe United States		10,836 90,241 26,685 859,375 860,000	21.36 52.20 21.50 39.00 24.08
Germany Switzerland Italy Austria Hungary	••	54,015 3,290 17,613 37,700 34,750	25.90 20.60 15.92 31.66 29.30	Canada Cape of Good Hope British India Japan	••	625,000 537 249,867 71,890	17.34 0.19 22.85 48.33

(a) Areas as before the war.

2. Distribution of Timber.—The characteristics of the forest areas are given in some detail for each State in Official Year Book No. 6, pp. 446-9. 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. In the coastal regions of parts of West and North-West Australia, and along the shores of the Great Australian Bight and Encounter Bay, there is little forest. The areas in the centre of the continent are thinly timbered.

Special articles relating to Australian Eucalyptus timbers will be found in Official Year Book No. 10, pp. 85–98.

§ 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 "ring-barking"—are considerable; and it is not unlikely that climatological changes are caused thereby. It is stated that beneficial consequences follow on the planting of trees on denuded lands, or along eroding coasts, and that a forest covering beneficially regulates the effects of rainfall.

Successful planting of exotics in various parts of the Commonwealth has demonstrated that the Australian climate is suitable for the cultivation of a large number of the most valuable and beautiful of the world's timber trees.

2. Forestry Departments.—Each State of the Commonwealth has organised a separate 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 débris and the making of fire breaks. Provision is made for effective patrols in forest districts to check the ravages caused by fires, often due, it is believed, to carelessness.

3. Sylvicultural Nurseries and Plantations.—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. The locality of these establishments, together with a brief statement of the nature of their activities, is given in previous issues of the Year Book. (Reference may be made to Official Year Book No. 6, pp. 451-3.) Details regarding forest nurseries and plantations are as follows:—

FOREST NURSERIES AND PLANTATIONS, 1917.

Particulars.	New South Wales. (a)	Victoria.	Q'land.	South Australia	Western Australia.	Tas- mania.	Common- wealth.
State Forest Nurseries-							}
Number	5	4	3	7	1	1	21
Area (acres)	28	49	15	7	17	20	136
Plantations			ļ].		}
Number	7	19	3		2		31
Area	1,072	20,740	100		594		22,506
Number of persons employed							į
in Forestry Depart-	. j	!					ļ
ments		!			1		l
Administrative	39	11	3	1	1	1	56
Professional	13	4	2	1	1	2	23
General	136	124	35	130	40	7	472
	1	1		i			1

⁽a) Including Federal Territory Area.

4. Revenue and Expenditure.—The revenue and expenditure of the State Forestry Departments from 1913-14 to 1917-18 are given below:—

REVENUE OF STATE FORESTRY DEPARTMENTS, 1913-14 TO 1917-18.

State.	State.			1914–15.	1915–16.	1916–17.	1917–18.
			£	£	£	£	£
New South Wales			99,333	87,386	68,107	67,273	70,969
Victoria			57,746	70,834	59,189	50,615	55,917
Queensland			62,973	75,318	70.691	60,865	66,660
South Australia			6,868	5,588	5,981	10,259	14,279
Western Australia			48,236	53,904	45,726	19,058	23,866
Tasmania	• •		4,659	4,224	3,615	3,860	3,860
Commonweal	th		279,815	297,254	253,309	211,930	235,582(a)

⁽a) Including Northern Territory, £31.

EXPENDITURE OF STATE FORESTRY DEPARTMENTS, 1913-14 TO 1917-18.

State.	State.			1914–15.	1915–16.	1916–17.	1917-18.
			£	£	£	£	£
New South Wales			44,828	47,207	50,531	73,762	77,688
Victoria			58,007	65,219	65,142	53,551	68,557
Queensland			7,386	7,654	7,416	9,516	13,930
South Australia			22,832	24,217	24,892	22,571	21,381
Western Australia			11,463	12,068	8,870	9,807	10,363
Tasmania			760	1,204	683	682	1,204
Commonweal	th		145,276	157,569	157,534	169,889	193,123

- 5. Instruction in Scientific Forestry.—Several schools have been established in which, while general scientific instruction is imparted, special attention is paid to forestry. In the classes, theoretical forestry, botany, geology, physics, land surveying, etc., are taught; while in outside work trainees receive practical instruction in the preparation of seed-beds, seed-sowing, propagation, planting out, pruning, the general care and improvement of plantations and natural forests, and the employment of timber to the best advantage. The desire is to give the prospective forester a thorough training in all branches of the work. Courses of lectures are also given at various centres, and, at some of the higher technical schools, members of the forest staffs are afforded opportunities of qualifying in special subjects. Methods of training, etc., are not uniform in the various States, and one of the prime objects of the Conference of 1916 was the evolution of a system which, while aiming at uniformity, would be sufficiently elastic to provide for special needs in any State.
- 6. Forest Congresses.—Interstate Conferences on Forestry were held in 1911 and 1912, chiefly with a view of securing uniformity of management. An International Forest Congress was held at Paris in June, 1913, when Professor Percy Groom, of South Kensington Imperial College, represented the Commonwealth Government. The papers and reports dealt chiefly with the threatened shortage of timber, and the measures necessary to avert the danger. Interstate Forestry Conferences were held at Adelaide in May, 1916, and at Perth in November, 1917.

§ 3. Commercial Uses of Principal Australian Timbers.

1. General.—The uses of the more important of Australian timbers are many and various, and are indicated in previous issues of this work. (See Official Year Book No. 6, pp. 454-6; and Official Year Book No. 10, Section III., § 7 and 8.)

The Commonwealth Government is experimenting with Australian woods for rifle stocks, telephone switch boards, aeroplane parts, etc. Queensland maple (Flindersia chatawaiana) is at present largely used for rifle stocks, and supplies of coachwood are being accumulated at Lithgow for the same purpose. Money has also been made available for the seasoning and storing of Australian timber, and depots have been established at Canberra and Newington in New South Wales, and at Maribyrnong in Victoria. Timber seasoning depots have also been established by State Governments at the principal centres, and from these, contractors may obtain timber at scheduled rates. Other timber seasoning works have been established by private enterprise.

2. Uniformity in Nomenclature.—Unfortunately the vernacular names applied to the gums, ironbarks, etc., in the various States, and even in different parts of the same State, do not always refer to identical timbers. The resulting confusion has not only been productive of loss, but it has, to some extent, prejudicially affected the timber trade. This subject is referred to at some length in the special article, "Australian Eucalyptus Timbers," in Section III., § 7 and 8, in Official Year Book No. 10. At the 1916 Forestry Conference alluded to above, the matter came up for special consideration, and a resolution was passed affirming the desirability of establishing a uniform nomenclature. It was further resolved that committees should be appointed in each State to take the necessary steps to give practical effect to that resolution.

§ 4. Forestal Industries and Production.

1. Timber.—Estimates of the quantity and value of local timber sawn and hewn in each State are given hereunder:—

QUANTITIES OF LOCAL TIMBER SAWN OR HEWN IN EACH STATE OF THE COMMONWEALTH DURING THE YEARS 1913 TO 1917.

State.	State.			1914.	1915.	1916.	1917.
New South Wales Victoria Queensland South Australia Western Australia Tasmania			sup. feet. 164,899,000 81,770,000 156,634,000 2,342,000 218,908,000 60,780,000	sup. feet. 164,899,000a 84,374,000 168,456,000 2,617,000 227,297,000 52,182,000	sup. feet. 140,940,000 <i>b</i> 62,589,000 144,950,000 2,348,000 123,494,000 47,890,000	sup. feet. 115,201,000b 62,589,000a 121,850,000 2,348,000a 100,356,000 52,019,000	70,038,000 111,663,000
Commonwealth			685,333,000	699,825,000	522,211,000	454,363,000	440,952,000c

- (a) Figures for previous year. (b) Year ended 30th June. (c) Including Northern Territory, 75,000 sup. feet.
- 2. Other Forest Produce.—(i) General. No satisfactory estimates of the total value of forest production are available. Large returns are credited to firewood, but these are subject to a wide range of uncertainty.
- (ii) Eucalyptus Oil. A considerable quantity of eucalyptus oil is produced each year, chiefly in Victoria, the product being used as a drug and also in conhection with ore flotation processes. Complete information regarding local production and consumption is not available. Oversea exports amounted in 1913 to £40,000, in 1914–15 to £21,000, in 1915–16 to £36,000, in 1916–17 to £60,000, and in 1917–18 to £77,000, the bulk of the product being forwarded to the United Kingdom. Large quantities have also been exported to the United States.
- (iii) Tan Barks. In addition to the wattle bark, mentioned at the close of this section, a valuable tan bark is obtained from the mallet (E. occidentalis) of Western Australia. Its exploitation has, however, been so rapid that the available supply is now comparatively small.

§ 5. Oversea Trade.

1. Imports.—The quantity and value of timber imports during the four years 1914-15 to 1917-18 inclusive are shewn according to countries of origin in the following tables. The figures in the first table are exclusive of a few items such as veneers, etc.:—

IMPORTS OF DRESSED TIMBER, COMMONWEALTH, 1914-15 TO 1917-18.

•		Quan	tity.		Value.				
Country of Origin.	1914–15.	1915–16.	1916–17.	1917-18.	1914–15.	191516.	1916–17.	1917–18	
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£	£	£	£	
United Kingdom	12,834	265	1,109	100	211	23	51	18	
New Zealand	25,719	117,929	70,317	163,979	355	1,663	1,070	2,064	
Other British Pos-	-,		,	,	[[1	1	
sessions .,	1	78,622	22,230	40.975	ll	718	252	461	
Germany	447.678	,	1	,	3,383				
Norway	46,289,602	16,858,100	3,245,724	400	334,459	145,895	32,711	. 2	
Sweden	11,699,062	7,690,606	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		95,994	66,729		١	
United States	1,438,799	717,003	481,603	107,323	14,628	7,295	8,023	2,658	
Other Foreign	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,	,		,	.,	1 -,	,,	
Countries	4,530	2,711	20,727	10,838	132	73	398	207	
Total	59,918,224	25,465,236	3.841,710	323,615	449,162	222,396	42,505	5,410	

As the table shews, the bulk of the imports of dressed timbers came from Norway, Sweden (except war years), and the United States. Practically the whole of this timber consists of softwoods—deal and pine—used for lining, weatherboards, flooring, shelving, doors, box-making, etc.

IMPORTS OF UNDRESSED TIMBER, INCLUDING LOGS, COMMONWEALTH, 1914-15 TO 1917-18.

Country of		Quan	tity.			Val	ne.	
Origin.	1914–15.	1915–16.	1916–17.	1917–18.	1914–15.	1915–16.	1916–17.	1917–18.
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£	£	£	£
United Kingdom	236,396	91,707	56,459	6,144		1,336		
Canada	1,484,840	73,166	752,571	11,737,562				
India	858,999	831,939	228,601	109,486	26,550	17,924	6,618	5,113
New Zealand	71,000,372	75,138,381	77,557,033	69,305,936	469,063	479,454	536,608	571,599
Straits Settle-	1	. ,		· ·				
ments	194,255	217,450	282,300	254,325	1,182	1,203	1,586	2,211
Other British								
Possessions	50,273		766,230					
Japan	12,576,157	12,796,031	7,178,349	1,988,267	64,713			
Java	6,239	48,599	4,683	7,495	41	1,345		
Norway	2,857,057	1,557,451	69,695		22,086			
Russia	3,301,910	211,931			20,795			
Sweden	2,276,154	1,653,468	36,500		19,108	14,119		
United States	171,222,415	138,033,305	109,620,926	85,877,463	943,834	792,888	680,077	637,960
Other Foreign	1				i -	1	1	
Countries	265,236	951,732	51,382	94,774	3,465	6,140	955	1,331
m	222 222 222	201 010 070	100 004 700	100 05 5 0 5 5	1 550 001	1 410 400	1.050.100	1 005 555
Total	266,330,303	231,013,879	190,004,729	169,657,075	1,579,001	1,412,466	1,352,136	1,335,555

By far the larger proportion of the undressed timber imports also consists of softwoods such as yellow pine, redwood, and oregon from the United States and Canada; kauri, rimu, and white pine from New Zealand; pine from Japan, and (prior to the war) red deals from Russia, Norway, and Sweden. Amongst the hardwoods imported the principal are oak from the United States and Japan, and teak from India.

2. Exports.—The quantity and value of undressed (sawn) timber exported from 1913 to 1917-18 are given below, the countries of destination being also shewn:—

EXPORTS OF UNDRESSED TIMBER (SAWN), COMMONWEALTH, 1913 TO 1917-18.

ļ			Quantity	y. (a)	_			Value.		
Country to which Exported.	1913.	1914- 15.	1915- 16.	1916~ 17.	1917- 18.	1913.	1914- 15.	1915- 16.	1916- 17.	1917- 18.
	1,000	1,000	1,000	1,000	1,000	£	£	£	£	£
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	sup. ft.	1			1	
United Kingdom	20,222	20,185	5.741	1,478	27	140,082	143,698	45,286	10,118	428
Canada	619	67	19	260	316	8,028	990	321	3,796	6,504
Union of S. Africa	33,793	34,403	23,100	11,944	6,154		241,139	162,788	83,598	
Corrion	1,926	5,307	30	. 5,444		12,923		203	36,041	
Thursday.	2,020		(b) 413	0,111		,		(b) 3,638	00,011	
TREES	1.421	1.534	780	839	916	12,939	17,238	5,830	8,415	12,614
T., 34.	23,960	13,130				160,577	87.260			12,014
Mr	235	655	655	• • •	277	1,587	4,366	4,368	•••	2,310
37 . 77 1 1			15.912	12,666		278,975	202,398		109,323	
New Zealand	38,586	25,517		12,000	5,993			140,307	109,545	03,802
Ocean Island	347	241	197	<u>:</u>	ایندا	3,139	1,690	1,873	5.050	1 ::00
Papua	598	192	205	277	132	6,184		2,412	5,278	1,720
Straits Settlements	88	12	10	2	59	478	118	100	34	899
Other British Pos-		ļ.		1	1					
sessions	249	504	599	510	310	2,151	4,714	4,987	6,211	3,920
Argentine Repub-	Ì				i l	1	1			
lic	1.584	١	١	١	l I	10,558		:		
Belgium	2,429	202				17,146	1,378			
China	l 'i	2,582				. 2	17,764			
Egypt	56	_,				377	49			
0 : mm	1,762	177				14,293	1,365			
Tonon	86	7	1	70	704	890		15		11,827
Kaiser Wilhelm L.	131	28	_	ľi		1,522	297	3	10	-1,0-
Marshall Islands	211	6		2	4	2,227	81	59		53
Bismarck Archi-)	1 .	_	1 * 1	_,,	1	00		"
		282	41	188	99	5,100	3,258	580	2,024	1,378
pelago	201	96	33	25	298	2,123		417	300	
New Caledonia		90	33			2,123	. 800	411		3,710
Philippine Islands	63	٠:.	330		••		239	4.039	••	
Portuguese E. Africa	3,106	24	606	1 . ::	ایندا	21,775			01.04	:
U.S. of America	1,295	294	469	1,433	4,050	13,879		6,826	21,354	75,674
Uruguay		668		• • •		}	4,518	• •	••	
Other Foreign										
Countries	1,836	256	124	193	170	13,752	2,581	1,398	2,512	2,222
Total	134.805	106,376	48,940	35,332	19,509	964,938	778,122	385,650	289,738	230.07

⁽a) Exclusive of timber not measured in super. feet. (b) Previously included with foreign countries.

As the table shews, the bulk of the exports of undressed timber was consigned to South Africa, New Zealand, and (except for latest years) the United Kingdom, and consisted of Australian hardwoods, which have earned an excellent reputation for such purposes as railway sleepers, harbour works, wood paving, etc.

The quantities of timber imported and exported during the last five years are given in the next table:—

QUANTITIES OF TIMBER IMPORTED INTO AND EXPORTED FROM THE COMMONWEALTH, 1913 TO 1917-18.

	,				
Description.	1913.	1914–15.	1915–16.	191617.	1917–18.

IMPORTS.

Veneers sup. feet	1,959,436	1,438,272	430,060	499,514	459,307
Dressed ,,	83,849,002	62,789,849	28,653,427	8,014,939	536,124
Undressed ,,	349,680,896	255,897,777	223,278,433	195,830,413	169,657,075
Logs ,,	23,437,906	10,432,526	8,335,446	774,316	278,320
Palings No.					ļ
Pickets "	2,302,748	923,155	808,342	611,399	688,822
Shingles ,,	1,526,994	1,067,060	2,677,620	2,083,408	2,391,326
Staves-					
Dressed, etc. ,,		73,609	67,380	12,764	8,964
Undressed "	3,639,969	2,535,831	591,750	152,283	575,300
Laths for blinds ,,	(a)	(a)	(a)	(a)	(a)
", other "	46,337,501	18,544,270	17,629,168	11,419,145	17,568,419
Spokes, rims, felloes ,,	(a)	(a)	(a)	(a)	(a)
Doors ,,	1,410	1,611	1,925	300	666
Architraves, mouldings,	,	1	'		
etc lin. feet	80.398	2,313	6,202		1
Other	(a)	(a)	(a)	(a)	(a)
	1	l .		l	1

EXPORTS.

		, ,			
Veneers					
Dressed sup. feet	716.621	742.844	498.074	322,058	297,341
Undressed ,,	134,805,222	106,375,692	48,939,938	35,332,403	19,807,434
Logs,	1,899,474	411,204	226,400	197,721	298,460
Palings No.	487,094	462,705	232,240	603,569	121,506
Pickets ,,	1,411	1,350	800		
Shingles ,,	31,300		• • •		100,000
Staves					
Dressed, etc. ,,					1,230
Undressed ,,	1	840		• •	
Laths for blinds ,,	(a)	(a)	(a) -	(a)	(a)
", other ",	7,190	284,521	111,600	63,000	92,160
Spokes, rims, felloes ,,	(a)	(a)	(a)	(a)	(a)
Doors ,,	(a)	(a)	(a)	(a)	(a)
Architraves, mouldings,					j
etc lin. feet	107,664	99,152	41,673	40,768	48,265
Other		•••			
	1	1		<u> </u>	_

⁽a) Quantity not available.

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

Description.	1913.	1914-15.	1915–16.	1916–17.	1917–18.	
	Excess of	Imports ov	ER EXPORTS.			
Veneers sup. feet	1,959,436	1,438,272	430,060	499,514	459,307	
Dressed ,.	83,132,381	62,047,005	28,155,353	7,692,881	238,783	
Undressed	214,875,674	149,522,085	174,338,495	160,498,010	149,849,641	
Logs ,,	21,538,432	10,021,322	8,109,046	576,595	-20,140	
Palings No.	-487,094	-462,705	-232,240	-603,569	-121,506	
Pickets ,,	2,301,337	921,805	807,542	611,399	688,822	
Shingles,	1,495,694	1,067,060	2,677,620	2,083,408	2,291,326	
Staves—		\	ļ	-	į	
Dressed, etc. ,,	· · ·	73,609	67,380	12,764	7,734	
Undressed ,,	3,639,969	2,534,991	591,750	152,283	575,300	
Laths for blinds ,,	(a)	(a)	(a)	(a)	(a)	
· ,, other ,,	46,330,311	18,259,749	17,517,568	11,356,145	17,476,259	
Spokes, rims, felloes ,,	(a)	(a)	(a)	(a)	(a)	
Doors "	(a)	(a)	(a)	(a)	(a)	
Architraves, mouldings,						
etc lin feet	-27,266	-96,839	-35,471	-40,768	- 48,265	
Other	(a)	(a)	(a)	(a)	(a)	

⁽a) Quantity not available. Note.—The minus sign (-) signifies excess of exports over imports.

The values of the timber imports and exports during the last quinquennium are shewn hereunder:—

VALUE OF TIMBER IMPORTED INTO AND EXPORTED FROM THE COMMONWEALTH, 1913 TO 1917-18.

Description.	1913.	1914–15.	1915–16.	1916-17.	1917–18.	
		Imports.				
	£	£	£	£	£	
Veneers	55,374	43,625	20,610	25,670	21,613	
Dressed	625,032	468,025	243,155	74,477	6,672	
Undressed	2,036,330	1.534,188	1,383,140	1,346,497	1,335,555	
Logs	121,261	44,813	29,326	5,639	2,173	
Palings						
Pickets	8,497	3,406	4,030	2,174	4,040	
Shingles	2,208	1,654	3,487	3,132	4,569	
Staves—	,	,	.]		•	
Dressed, etc		1,607	1,907	337	260	
Undressed,	22,870	16,440	11,164	3,538	3,516	
Laths for blinds	4					
, other	40,131	24,676	14,809	9,230	20,729	
Spokes, rims, felloes	13,993	21,228	11,239	6,001	6,008	
Doors	445	591	910	103	201	
Architraves, mouldings,			1	ļ		
etc	250	31	22			
Other	. 81	156	90	2,030	1,246	
Total value	2,926,476	2,160,440	1,723,889	1,478,828	1,406,582	

VALUE OF TIMBER IMPORTED AND EXPORTED, ETC .- continued.

Description.	1913.	1914–15. 1915–16.		1916–17.	191718.	
	<u>'</u>	Exports.				
	£	· £	£	£	£	
Veneers	~ l	- -	l	~		
Dressed	8,160	9,327	7,190	4,804	5,314	
Undressed	964,938	778,073	385,650	289,738	232,418	
Logs	25,325	4,020	1,716	1,648	2,345	
Palings	2,688	2,403	1,225	4,176	889	
Pickets	40	20	7	• .		
Shingles	42		!		139	
Staves—	i · [
Dressed, etc					127	
Undressed		22		• •	• •	
Laths for blinds	297	367	152	29		
,, other	11	246	245	147	308	
Spokes, rims, felloes	8,039	6,769	6,570	4,333	5,259	
Doors	960	482	554	354	• •	
Architraves, mouldings,						
etc	541	457	152	164	257	
Other	••	••	••	••	• •	
Total value	1,011,041	802,186	403,461	305,393	247,056	

EXCESS OF IMPORTS OVER EXPORTS.

Veneers	55,374	43,625	20,610	25,670	21,613
Dressed	616,872	458,698	235,965	69,673	1.358
Undressed	1,071,392	756,115	997,490	1,056,759	1,103,137
Logs	95,936	40,793	27,610	3,991	-172
Palings	-2.688	-2,403	-1.225	-4,176	889
Pickets	8,457	3,386	4,023	2,174	4,040
Shingles	2,166	1,654	3,487	3,132	4,430
Staves-	,	, , , , ,	•,	-,	-,
Dressed, etc		1.607	1,907	337	133
Undressed	22,870	16,418	11,164	3,538	3,516
Laths for blinds	-293	-367	-152	- 29	.,
,, other	40,120	24,430	14,564	9,083	20,421
Spokes, rims, felloes	5,954	14,459	4,669	1,668	749
Doors	-515	109	356	-251	201
Architraves, mouldings.		- ; -			
etc	- 291	-426	- 130	-164	- 257
Other	81	156	90	2,030	1,246
		100		2,000	2,230
]	·			
Total value	1,915,435	1,349,212	1,320,428	1,173,435	1,159,526

Note.—The minus sign (-) signifies excess of exports over imports.

A fair amount of sandalwood is exported each year, principally from Western Australia, and to a smaller extent from Queensland. The largest proportion of this product is consigned to Hong Kong, China, and the Straits Settlements.

EXPORTS OF SANDALWOOD, 1913 TO 1917-18.

Quantity.				Value.						
Country to which Exported.	1913.	1914- 15.	1915- 16.	1916– 17.	1917- 18.	1913.	1914– 15.	1915- 16.	1916- 17.	1917- 18.
Hong Kong Straits Settlements Other British Possessions China	cwt. 91,054 17,835 10,760 13,540	cwt. 98,600 15,985 11,333 50,845	cwt. 96,949 10,620 8,576 18,850	cwt. 130,314 10,308 7,100 9,660	19,576	£ 41,476 5,931 4,560 5,593	£ 48,338 9,854 6,426 27,544	£ 51,087 6,410 4,602 9,316	£ 71,460 6,504 4,429 5,554	£ 76,093 12,236 1,275 9,857
Other Foreign Countries	486	386	120	120	1,842	387	273	78	102	4,481
Total	133,675	177,149	135,115	157,502	140,528	57,947	92,435	71,493	88,049	103,942

Tanning bark figures both as an export and import in the Commonwealth trade returns, as the following tables shew:—

EXPORTS OF TANNING BARK, 1913 TO 1917-18.

Quantity.				Value.						
Country to which Exported.	1913.	1914- 15.	1915- 16.	1916– 17.	1917– 18.	1913.	1914- 15.	1915- 16.	1916– 17.	1917- 18.
United Kingdom New Zealand	cwt. 3,078 45,013	cwt. 218 57,873	cwt. 3,018 51,138	cwt. 6,797 41,098	cwt. 95,192	£ 1,010 20,559	£ 102 24,604	£ 1,434 23,574	£ 3,103 20,703	£ 45,007
Other British Possessions Belgium Germany	621 36,250 58,011	1,006 7,256 3,256	714 	205	208	307 14,281 23,653	382 2,688 1,109	371 	107 	72
Other Foreign Countries	1,379	8,049	39,598	11,199	1,745	601	3,140	16,354	5,001	611
Total	144,352	77,658	94,468	59,299	97,145	60,411	32,025	41,733	28,914	45,690

Prior to the war there was a fairly considerable export of tan bark to Germany and also to Belgium. The exports westward have naturally dwindled away, and at the present time New Zealand receives the largest share of the available export, while there is an increasing trade with Japan and Java. During recent years the largest proportion of the exports consisted of wattle bark from Tasmania and Victoria.

A comparison of the imports and exports of tanning bark during the last five years is given in the next table :—

TANNING BARK IMPORTED INTO AND EXPORTED FROM THE COMMONWEALTH, 1913 TO 1917-18.

Particulars.	1913.	191415.	1915–16.	1916-17.	1917–18.
QUANTITIES— Imports	cwt. 77,689 144,352 66,663	cwt. 66,136 77,658 11,522	cwt. 122,188 94,468 -27,720	cwt. 148,206 59,299 -88,907	cwt. 71,133 97,145 26,012
Values— Imports Exports Excess of exports over imports	£ 27,987 60,411 32,424	£ 24,924 32,025 7,101	£ 47,698 41,733 -5,965	£ 51,461 28,914 -22,547	£ 24,711 45,690 20,979

Note.—The minus sign (-) denotes excess of imports.

The imports consist almost exclusively of wattle bark from the plantations in South Africa. One variety of Australian wattle was found to flourish in the sandy belts near the coast, but it is the *Acacia decurrens*, var. *mollis*, which is chiefly relied upon for the production of wattle bark in the South African plantations. Seed has been tried from New South Wales, Tasmania, and Victoria, but it is stated that most of the seed is obtained from the best wattle bark areas in eastern Tasmania and western Victoria.

Two reasons have been given to account for the success of the industry in South Africa. (i) It was found that the treeless, grassy highlands of Natal were specially suitable for wattle culture, and the trees could therefore be grown in rows and economically attended to, while the necessary bark sheds and other appurtenances could be placed in the most advantageous positions. (ii) There was an abundance of cheap and efficient Hindoo labour available for employment on the plantations.