

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, 1918.

State.	Area of Forest Reserves.		Total Forest Area.	Percentage of State Area.		Percentage of Commonwealth Area.	
	Permanent. (a)	Temporary. (b)		Specially Reserved.	Total Forest.	Specially Reserved.	Total Forest.
	Acres.	Acres.		Acres.	%	%	%
c New South Wales	5,043,800	1,846,927	11,000,000	3.48	5.55	0.36	0.57
Victoria ..	4,149,035	125,500(f)	11,800,000	7.60	20.98	0.22	0.62
Queensland ..	1,122,129	2,671,139	40,000,000	0.88	9.32	0.20	2.10
South Australia	159,992	18,700(f)	3,800,000	0.07	1.56	0.01	0.20
Western Australia	10,008	1,612,000(f)	15,907,000(d)	0.26	2.55	0.09	0.84
Tasmania ..	..	1,028,000	10,000,000	6.13	59.60	0.05	0.53
(e) Commonwealth	10,484,964	7,302,266	92,507,000	..	..	0.93	4.86

(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. (f) Figures uncertain.

In the case of Victoria, the figures for area of permanent reserves included 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 that 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 the next page.

RELATIVE AREAS OF FOREST LANDS, AUSTRALIA AND OTHER COUNTRIES.(a)

Country.	Total Wooded Area.	Percentage of Total Area.	Country.	Total Wooded Area.	Percentage of Total Area.
	Sq. Miles.	%		Sq. Miles.	%
Australia	144,542	4.86	Rumania	10,836	21.36
New Zealand	26,562	25.63	Sweden	90,241	52.20
United Kingdom	4,740	3.82	Norway	26,685	21.50
France	38,620	18.65	Russia in Europe	859,375	39.00
Algeria	10,249	2.98	United States	860,000	24.08
Germany	54,015	25.90	Canada	625,000	17.34
Switzerland	3,290	20.60	Cape of Good Hope	537	0.19
Italy	17,613	15.92	British India	249,867	22.85
Austria	37,700	31.66	Japan	71,890	48.33
Hungary	34,750	29.30			

(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-forestation of denuded areas, is essential to the preservation of industries dependent upon an adequate supply of timber, and to the perpetuation of a necessary form of national wealth. Though in Australia large areas of virgin forests still remain, the inroads made by timber getters, by agriculturists, and by pastoralists—who have destroyed large areas by “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 debris 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, 1918.

Particulars.	New South Wales. (a)	Victoria.	Q'land.	South Australia.	Western Australia.	Tasmania.	Commonwealth.
State Forest Nurseries—							
Number	1	6	5	7	1	1	21
Area .. (acres)	126	40	3	7	17	20	213
Plantations—							
Number	(b)	23	24	..	2	..	49(c)
Area	(b)	21,740	305	..	624	..	22,669(c)
Number of persons employed in Forestry Departments—							
Administrative	41	8	35	1	1	1	87
Professional	12	5	2	1	1	2	23
General	139	110	39	125	47	7	467

(a) Year ended 30th June.

(b) Not available.

(c) Exclusive of New South Wales.

4. **Revenue and Expenditure.**—The revenue and expenditure of the State Forestry Departments from 1914-15 to 1918-19 are given below:—

REVENUE OF STATE FORESTRY DEPARTMENTS, 1914-15 TO 1918-19.

State.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	£	£	£	£	£
New South Wales	87,386	68,107	67,273	70,969	97,592
Victoria	70,834	59,189	50,615	55,917	57,731
Queensland	75,318	70,691	60,865	66,660	71,985
South Australia	5,583	5,981	10,259	14,279	23,880
Western Australia	53,904	45,726	19,058	23,866	41,015
Tasmania	4,224	3,615	3,860	3,860	3,860
Commonwealth	297,254	253,309	211,930	235,582(a)	296,063

(a) Including Northern Territory, £31.

EXPENDITURE OF STATE FORESTRY DEPARTMENTS, 1914-15 TO 1918-19.

State.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	£	£	£	£	£
New South Wales	47,207	50,531	73,762	77,688	121,162
Victoria	65,219	65,142	53,551	68,557	60,193
Queensland	7,654	7,416	9,516	13,930	21,877
South Australia	24,217	24,892	22,571	21,381	21,968
Western Australia	12,068	8,870	9,807	10,363	23,656
Tasmania	1,204	683	682	1,204	1,204
Commonwealth	157,569	157,534	169,889	193,123	250,060

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 a Conference held in 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 a Professor 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. An Imperial Forestry Conference was held in London in the summer of 1920, at which also Australia was represented. Important Interstate Forestry Conferences were held at Adelaide in May, 1916; at Perth in November, 1917; and at Hobart in April, 1920.

§ 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 utilises Australian woods for rifle stocks, telephone switch boards, aeroplane parts, etc. Queensland maple (*Flindersia chatawaiana*) is 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. 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 1914 TO 1918.

State.	1914.	1915.	1916.	1917.	1918.
	sup. feet.	sup. feet.	sup. feet.	sup. feet.	sup. feet.
New South Wales	184,888,000 ^a	140,940,000 ^b	115,201,000 ^b	125,243,000 ^b	128,745,000 ^b
Victoria	84,374,000	62,589,000	62,589,000 ^a	70,038,000	78,984,000 ^b
Queensland	168,456,000	144,950,000	121,851,000	111,683,000	118,438,000 ^b
South Australia	2,617,000	2,348,000	2,348,000 ^a	3,729,000 ^b	3,425,000 ^b
Western Australia	227,297,000	123,494,000	100,356,000	85,218,000	94,990,000
Tasmania	52,182,000	47,890,000	52,019,000	44,986,000	49,814,000
Commonwealth	699,814,000	522,211,000	454,364,000	440,952,000 ^c	472,394,000

(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 connexion with ore flotation processes. Complete information regarding local production and consumption is not available. Oversea exports amounted in 1914-15 to £21,000, in 1915-16 to £36,000, in 1916-17 to £60,000, in 1917-18 to £77,000, and in 1918-19 to £84,000, 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 1915-16 to 1918-19 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, 1915-16 TO 1918-19.

Country of Origin.	Quantity.				Value.			
	1915-16.	1916-17.	1917-18.	1918-19.	1915-16.	1916-17.	1917-18.	1918-19.
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£	£	£	£
United Kingdom	265	1,109	100	20	23	51	18	3
New Zealand	117,929	70,317	163,979	9,135	1,663	1,070	2,064	206
Other British Countries	78,622	22,230	40,975	31,564	718	252	461	358
Norway	16,858,100	3,245,724	400		145,895	32,711	2	
Sweden	7,690,606			532,845	66,729			9,900
United States	717,003	481,603	107,323	73,459	7,295	8,023	2,658	2,621
Other Foreign Countries	2,711	20,727	10,838	13,294	73	398	207	641
Total	25,465,236	3,841,710	323,615	660,317	222,396	42,505	5,410	13,729

The bulk of the imports of dressed timbers normally comes from Norway, Sweden, and the United States. War conditions caused some dislocation of trade during the period covered by the table. 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,
1915-16 TO 1918-19.**

Country of Origin.	Quantity.				Value.			
	1915-16.	1916-17.	1917-18.	1918-19.	1915-16.	1916-17.	1917-18.	1918-19.
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£	£	£	£
United Kingdom	91,707	56,459	6,144	800	1,336	438	116	3
Canada	73,166	752,571	11,737,562	2,204,774	532	4,479	74,959	22,250
India	831,939	228,601	109,486	89,436	17,924	6,618	5,113	3,687
New Zealand	75,138,381	77,557,933	69,305,936	59,027,859	479,454	536,608	571,599	632,613
Straits Settlements	217,450	282,300	254,325	201,325	1,203	1,586	2,211	1,376
Other British Countries	8,719	766,230	275,623	186,607	158	4,135	1,339	1,382
Japan	12,796,031	7,178,349	1,988,267	2,927,688	83,876	115,930	40,843	68,377
Java	48,599	4,683	7,495	13,399	1,345	136	84	173
Norway	1,557,451	69,695	..	10,140	12,279	570	..	90
Russia	211,931	..	..	..	1,212	..	..	..
Sweden	1,653,468	36,500	..	..	14,119	604	..	..
United States	138,033,305	109,620,926	85,877,463	79,013,943	792,888	680,077	637,960	1,023,391
Other Foreign Countries	951,732	51,382	94,774	106,666	6,140	955	1,331	3,397
Total	231,613,879	196,604,729	169,657,075	143,782,637	1,412,466	1,352,136	1,335,555	1,758,739

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 1914-15 to 1918-19 are given below, the countries of destination being also shown:—

**EXPORTS OF UNDRESSED TIMBER (SAWN), COMMONWEALTH,
1914-15 TO 1918-19.**

Country to which Exported.	Quantity. (a)					Value.				
	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£	£	£	£	£
United Kingdom	1,000	1,000	1,000	1,000	1,000	..	..	..	..	..
Canada	20,185	5,741	1,478	27	536	143,698	45,286	10,118	428	4,458
Union of S. Africa	67	19	260	316	103	990	321	3,796	6,504	2,364
Ceylon	34,403	23,100	11,944	6,154	10,925	241,139	162,788	83,598	43,012	75,314
Egypt	5,307	30	5,444	..	..	36,142	203	36,041	..	..
Fiji	7	413	..	..	..	49	3,638	..	..	..
India	1,534	780	839	916	418	17,238	5,830	8,415	12,614	4,338
Mauritius	13,130	..	..	..	100	87,260	..	..	..	650
New Zealand	655	655	..	277	..	4,366	4,368	..	2,310	..
Ocean Island	25,517	15,912	12,666	5,993	5,374	202,398	140,507	109,323	63,802	80,498
Papua	241	197	..	..	..	1,690	1,873	..	..	..
Straits Settlements	192	205	277	132	98	2,026	2,412	5,278	1,720	1,861
Other British Countries	12	10	2	59	20	118	100	34	899	135
Belgium	504	599	510	310	459	4,714	4,987	6,211	3,920	6,354
China	202	..	..	..	..	1,378	..	..	..	..
Germany	2,582	..	..	..	..	17,764	..	..	..	..
Japan	177	..	..	..	..	1,365	..	..	..	..
Kaiser Wilhelm L.	7	1	70	704	105	73	15	702	11,827	2,276
Marshall Islands	28	..	1	..	..	297	3	10	..	..
Bismarck Archipelago	6	5	2	4	15	81	59	22	53	250
New Caledonia	282	41	188	99	41	3,258	580	2,024	1,378	868
Portuguese E. Africa	96	33	25	298	92	800	417	300	3,710	1,502
U.S. of America	24	606	..	..	..	239	4,039	..	..	..
Uruguay	294	469	1,433	4,050	2,189	3,891	6,826	21,354	75,074	41,867
Other Foreign Countries	668	..	..	..	..	4,518	..	..	..	..
Total	106,376	48,940	35,332	19,509	20,750	778,073	385,650	289,738	230,073	227,230

(a) Exclusive of timber not measured in super. feet.

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. There was a notable increase in the quantity supplied to the United States in the later war years.

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, 1914-15 TO 1918-19.

Description.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
IMPORTS.					
Veneers .. sup. feet	1,438,272	430,060	499,514	459,307	509,855
Dressed .. "	62,789,849	28,653,427	8,014,939	536,124	1,139,401
Undressed .. "	255,897,777	223,278,433	195,830,413	169,378,755	143,754,858
Logs .. "	10,432,526	8,335,446	774,316	278,320	27,779
Palings .. No.	..	..	..	..	..
Pickets .. "	923,155	808,342	611,399	688,822	261,886
Shingles .. "	1,067,060	2,677,620	2,083,408	2,391,326	567,200
Staves—					
Dressed, etc. ..	73,609	67,380	12,764	8,964	2,752
Undressed ..	2,535,831	591,750	152,283	575,300	666,036
Laths for blinds ..	(a)	(a)	(a)	(a)	..
" other ..	18,544,270	17,629,168	11,419,145	17,568,419	6,610,148
Spokes, rims, felloes ..	(a)	(a)	(a)	(a)	(a)
Doors .. "	1,611	1,925	300	666	78
Architraves, mouldings, etc. .. lin. feet	2,313	6,202	..	..	..
Other .. "	(a)	(a)	(a)	(a)	(a)
EXPORTS.					
Veneers .. sup. feet	742,844	498,074	322,058	297,341	251,041
Dressed .. "	106,375,692	48,939,938	35,332,403	19,807,434	20,750,023
Undressed .. "	411,204	226,400	197,721	298,460	184,398
Logs .. "	462,705	232,240	603,569	121,506	60,365
Palings .. No.	..	..	..	..	..
Pickets .. "	1,350	800	..	..	..
Shingles .. "	..	..	..	100,000	7,090
Staves—					
Dressed, etc. ..	..	..	..	1,230	..
Undressed ..	840	..	..	..	..
Laths for blinds ..	(a)	(a)	(a)	(a)	(a)
" other ..	284,521	111,600	63,000	92,160	2,111
Spokes, rims, felloes ..	(a)	(a)	(a)	(a)	(a)
Doors .. "	(a)	(a)	(a)	(a)	(a)
Architraves, mouldings, etc. .. lin. feet	99,152	41,673	40,768	48,265	80,186
Other .. "	..	..	..	..	..

(a) Quantity not available.

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

Description.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
EXCESS OF IMPORTS OVER EXPORTS.					
Veneers .. sup. feet	1,438,272	430,060	499,514	459,307	509,855
Dressed .. "	62,047,005	28,155,353	7,692,881	238,783	888,360
Undressed .. "	149,522,085	174,338,495	160,498,010	149,869,781	123,004,835
Logs .. "	10,021,322	8,109,046	576,595	- 20,140	- 156,619
Palings .. No.	- 462,705	- 232,240	- 603,569	- 121,506	- 60,365
Pickets .. "	921,805	807,542	611,399	688,822	261,886
Shingles .. "	1,067,060	2,677,620	2,083,408	2,291,326	560,110
Staves—					
Dressed, etc. .. "	73,609	67,380	12,764	7,734	2,752
Undressed .. "	2,534,991	591,750	152,283	575,300	666,036
Laths for blinds .. "	(a)	(a)	(a)	(a)	(a)
" other .. "	18,259,749	17,517,568	11,356,145	17,476,259	6,608,037
Spokes, rims, felloes .. "	(a)	(a)	(a)	(a)	(a)
Doors .. "	(a)	(a)	(a)	(a)	(a)
Architraves, mouldings, etc. .. lin feet	- 96,839	- 35,471	- 40,768	- 48,265	- 80,186
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, 1914-15 TO 1918-19.**

Description.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
IMPORTS.					
Veneers	£ 43,625	£ 20,610	£ 25,670	£ 21,613	£ 33,540
Dressed	468,025	243,155	74,477	6,672	21,309
Undressed	1,534,188	1,383,140	1,346,497	1,333,382	1,754,592
Logs	44,813	29,326	5,639	2,173	2,147
Palings .. ..	..	..	..	..	..
Pickets	3,406	4,030	2,174	4,040	3,037
Shingles	1,654	3,487	3,132	4,569	1,476
Staves—					
Dressed, etc. ..	1,607	1,907	337	260	53
Undressed	16,440	11,164	3,538	3,516	6,836
Laths for blinds ..	..	..	..	..	..
" other	24,676	14,809	9,230	20,729	10,119
Spokes, rims, felloes ..	12,186	11,239	6,001	6,125	4,234
Doors	591	910	103	201	256
Architraves, mouldings, etc. ..	31	22	..	..	..
Other	156	90	2,030	1,246	938
Total value ..	2,151,398	1,723,889	1,478,828	1,404,526	1,838,537

VALUE OF TIMBER IMPORTED AND EXPORTED, ETC.—*continued.*

Description.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
EXPORTS.					
	£	£	£	£	£
Veneers .. ..	..	..	..	..	..
Dressed	9,327	7,190	4,804	5,314	6,659
Undressed	778,073	385,650	289,738	230,073	227,230
Logs	4,020	1,716	1,648	2,345	1,159
Palings	2,403	1,225	4,176	889	717
Pickets	20	7	..	..	..
Shingles .. ..	..	..	..	139	41
Staves—					
Dressed, etc. .. ..	..	..	..	127	..
Undressed	22	..	..	..	..
Laths for blinds	367	152	29	..	92
" other	246	245	147	308	12
Spokes, rims, fellows ..	6,769	6,570	4,333	5,259	3,562
Doors	482	554	354	..	307
Architraves, mouldings, etc.	457	152	164	257	608
Other .. ..	..	..	..	..	..
Total value ..	802,186	403,461	305,393	244,711	240,387
EXCESS OF IMPORTS OVER EXPORTS.					
Veneers	43,625	20,610	25,670	21,613	33,540
Dressed	458,698	235,965	69,673	1,358	14,650
Undressed	756,115	997,490	1,056,759	1,103,309	1,527,362
Logs	40,793	27,610	3,991	-172	988
Palings	-2,403	-1,225	-4,176	-889	-717
Pickets	3,386	4,023	2,174	4,040	3,037
Shingles	1,654	3,487	3,132	4,430	1,435
Staves—					
Dressed, etc.	1,607	1,907	337	133	53
Undressed	16,418	11,164	3,538	3,516	6,836
Laths for blinds	-367	-152	-29	..	-92
" other	24,430	14,564	9,083	20,421	10,107
Spokes, rims, fellows ..	5,417	4,669	1,668	866	672
Doors	109	356	-251	201	-51
Architraves, mouldings, etc.	-426	-130	-164	-257	-608
Other	156	90	2,030	1,246	938
Total value ..	1,349,212	1,320,428	1,173,435	1,159,815	1,598,150

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, 1914-15 TO 1918-19.

Country to which Exported.	Quantity.					Value.				
	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	cwt.	cwt.	cwt.	cwt.	cwt.	£	£	£	£	£
Hong Kong	98,600	96,949	130,314	102,325	124,500	48,338	51,087	71,460	76,093	92,518
Straits Settlements ..	15,985	10,620	10,308	19,578	33,980	9,854	6,410	6,504	12,236	22,063
Other British Possessions ..	11,333	8,576	7,100	2,000	2,440	6,426	4,602	4,429	1,275	1,588
China	50,845	18,850	9,660	14,785	29,480	27,544	9,316	5,554	9,857	18,767
Other Foreign Countries ..	386	120	120	1,842	5,420	273	78	102	4,481	4,009
Total ..	177,149	135,115	157,502	140,528	195,820	92,435	71,493	88,049	103,942	138,945

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

EXPORTS OF TANNING BARK, 1914-15 TO 1918-19.

Country to which Exported.	Quantity.					Value.				
	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	cwt.	cwt.	cwt.	cwt.	cwt.	£	£	£	£	£
United Kingdom	218	3,018	6,797	..	1,220	102	1,434	3,103	..	860
New Zealand ..	57,873	51,138	41,098	95,192	27,320	24,604	23,574	20,703	45,007	13,801
Other British Possessions ..	1,006	714	205	208	..	382	371	107	72	..
Belgium ..	7,256	..	..	..	..	2,688	..	..	..	..
Germany ..	3,256	..	..	..	..	1,109	..	..	..	..
Other Foreign Countries ..	8,049	39,598	11,199	1,745	60	3,140	16,354	5,001	611	14
Total ..	77,658	94,468	59,299	97,145	28,600	32,025	41,733	28,914	45,690	14,675

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 also 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, 1914-15 TO 1918-19.

Particulars.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
QUANTITIES—	cwt.	cwt.	cwt.	cwt.	cwt.
Imports	66,136	122,188	148,206	71,133	102,480
Exports	77,658	94,468	59,299	97,145	28,600
Excess of exports over imports	11,522	-27,720	-88,907	26,012	-73,880
VALUES—	£	£	£	£	£
Imports	24,924	47,698	51,461	24,711	43,319
Exports	32,025	41,733	28,914	45,690	14,675
Excess of exports over imports	7,101	-5,965	-22,547	20,979	-28,644

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.