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WESTERN AUSTRALIA.

REPORT

OF

THE FORESTS DEPARTMENT

FOR THE

YEAR ENDED 30TH JUNE, 1919.

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

[THIRD SESSION OF THE TENTH PARLIAMENT.]

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Forests Department,
Perth, 19th September, 1919.

The Hon. Minister for Forests.

Sir,

I have the honour to transmit herewith my Report on the operations of this Department for the Year ended 30th June last.

I have the honour to be,
Sir,
Your obedient servant,
C. E. LANE-POOLE,
Conservator of Forests.

REPORT OF THE FORESTS DEPARTMENT FOR THE YEAR ENDED 30th JUNE, 1919.

CLASSIFICATION OF FORESTS.

The work of classifying the forest country in the South-Western Division was continued. Unfortunately sufficient funds were not made available to carry out the programme laid down. Instead of six camps, which would have enabled the bulk of the work to be completed during the year, only two camps were employed up to April, 1919, when a third camp was organised. The area classified during the period under report was 912,000 acres, and the total since the inception of the work in 1917 amounts to 2,300,000 acres. The best of the Jarrah belt has been finished and also the small Karri belt situated near the Leeuwin, which is generally known under the old name of "Karridale." In the annual report for 1917 the writer drew attention to the fact that the estimates of the area of forest country in Western Australia, which have been accepted and widely published as accurate, are gross exaggerations of our timber assets. It is not possible yet to state accurately what is the area of the prime Jarrah belt, but from the figures at present available, it would seem that instead of possessing 8,000,000 acres of Jarrah, the area is more likely to be in the neighbourhood of 2,000,000 acres. The classification, which is in the nature of a stocktaking of the land of the South-West, will enable the departments concerned to arrive at complete data regarding:—

(1.) The area of Prime Timber Country.
(2.) The area of Second Class Timber Country.
(3.) The area of Agricultural Land.
(4.) The area of Waste Barren Land.

The figures collected in regard to the timbers on 1 and 2 are detailed and are transferred from the classification field books to plans from which may be immediately read over every unit of 10 acres the following information:—

(a.) Whether the country is virgin or cut over.
(b.) The quantity of marketable timber per acre.
(c.) The number of trees per acre below marketable size which will mature during the next 20 years.
(d.) The number of useless trees per acre which, under a sylvicultural operation, will require removing.
(e.) The quality of the younger re-growth.

In addition to the above, the officers of the Lands Department, with whom there has been complete co-operation in this work of classification, have collected all the data regarding the agricultural possibilities. It will be seen, therefore, that the information obtained is sufficient to settle once and for all the vexed question of forestry and land settlement. These two interests are not, as has been so often stated, inimical, but on the contrary are dependent one upon the other. It is a question of determining what is the best use to which a certain type of land can be put. All land capable of growing foodstuffs should be utilised for that purpose once the timber is removed, and land which will best grow trees should be dedicated to forestry. The classification will permit of the choice being made and it will then be possible to—

(1.) Dedicate the prime timber country to forestry for all time under the title of "State Forests."
(2.) Reserve the second class timber country until the marketable timber has been removed under the title of "Timber Reserves."
(3.) Throw open immediately the purely agricultural land for selection.
(4.) Afforest such of the barren or waste land as may be found suitable for such a purpose.

Through lack of the necessary staff the plotting of the forest classification plans has been executed by the drafting staff of the Inspecting Surveyor of the Mines Department. The work has been satisfactorily performed and I am much indebted to the officers of the Mines Department for this co-operation.

RESERVATIONS.

The Forests Act made it possible to start the work of dedicating State Forests. Two such were dedicated:—

	Acres.
State Forest No. 1 (Tuart)	1,341
State Forest No. 2 (Tuart)	2,056
Total	3,397

The old reservations still exist and will be dedicated in due course, together with the prime Jarrah and Karri belts, when the classification is completed. In all, to date, the area of permanent reservations amounts to 11,964 acres, and, as stated in previous reports, this area includes only the Tuart country.

PURCHASES.

A good deal of purely forest country has in the past been alienated and, while most of it has been destroyed by the farmer in his efforts to turn a good forest into bad grazing, a little still remains in a virgin condition and this is being repurchased. During the year under report a fine area of Tuart country near Wonnerup was purchased; it contains 998 acres of timber and, seeing that this is the last remaining area of any size of virgin Tuart in the world, the price paid, £6,750, cannot be considered high. This property will, with the adjoining Crown forest, form one compact State forest.

FOREST WORK.

Through lack of staff and funds the Department continued purely as a revenue-collecting machine. The difficulty as to staff is becoming a most pressing matter. Without trained foresters it is not possible to initiate the sylvicultural work that is required. Australia has one school of forestry in Adelaide which has not turned out a sufficient number of men to meet the requirements of the various States, with the result that to-day it is impossible to find the men that are needed. To get over the difficulty advertisements were inserted in papers throughout the world inviting applications for the post of Working Plans Officer at a salary of £504-636. The response was not good, so that up to now this post has not been filled. With a view to giving training to the existing staff of rangers and forest apprentices, applications were called in Australia for the post of forest instructor, and an officer has been selected. He is a graduate of the Adelaide Forestry School, has served at the Front, and is now taking a post-graduate course at the Oxford Forestry School, and will take up his duties here towards the end of 1919.

FOREST FIRES.

As predicted in the report for 1917 the summer of 1918-19 proved a destructive one from a fire point of view. The previous two years had been exceptionally wet, so that the fires were slight, but the growth of underbush was heavy, with the result that last summer the fires raged through the Jarrah forest along the Darling Ranges down to and through the Karri country in the extreme South. It is quite impossible to estimate the damage that has been done, but it is safe to say that the whole of the young re-growth has been burnt back to the ground, that the young poles have had their tops burnt off, and that the larger timber has had its growth arrested for two to four years, according to the intensity of the fire in the different localities. There are a few residents in the country who insist that fires do good to the forest, but these are now quite in the minority and the bulk of the population realises that it is folly to allow a few graziers to burn millions of pounds worth of timber and destroy the re-growth—our future forests—in order to supply a little more grazing in country which at the best will only feed a beast to a hundred acres. In the case of No. 1 State Forest, a fire was maliciously started and some 200 acres of Tuart re-growth three years old was destroyed. Had it not been for a subdivisional fire-break and the work of a ranger and fire guard, who succeeded in putting the fire out, the whole State Forest would have been burnt over and a more serious loss of young trees would have been sustained.

FOREST RANGING AND TIMBER INSPECTING.

The ranging work has continued satisfactorily. The rangers, freed as they are from all inspection work, were able to devote more time to the policing of the forests, with the result that a number of minor forest offenders were detected. Particulars of prosecutions will be found in Appendix 7. Annual registration, in lieu of the old system of monthly licenses, also reduced the clerical work of the field officers considerably. The work of inspecting land prior to selection is decreasing as the classification work nears completion. The unclassified portion is mainly the Karri country, so that the heaviest land inspection fell on the ranger in charge of the Bridgetown District. The timber inspection work was satisfactory. Now that Karri is finding a wide market in the Eastern States for superstructural work, it is necessary that every care should be exercised to prevent the sale of mixed lots of Jarrah and Karri. Jarrah for an all-round timber can scarcely be excelled, but for heavy superstructural work Karri, with its higher breaking strain, is to be preferred. Again, since Karri is attacked by white ants and by dry rot, and Jarrah is to a large measure immune, it is essential that untreated Karri should not be placed in the ground. Reports reached the writer that certain firms buying only Jarrah were selling it as Karri and

in one instance Karri was sold as Jarrah. Steps were taken to see that all Karri leaving the mills was branded with a K in a square and no square brands were to be used for Jarrah. The sawmillers are very anxious to prevent any mixing of these timbers and co-operated wholeheartedly with the Department in its efforts to maintain the policy of sending out Western Australian timbers true to name. Steps were taken to establish a standard specification for sleepers, and the majority of sleeper-using countries were communicated with to ascertain their views on the subject. We have suffered considerably in the past through inspectors in South Africa and elsewhere not accepting the Western Australian Government inspections and insisting on a second inspection at the port of discharge. With a standard specification and a regulation prohibiting the export of uninspected sleepers, the purchaser should be amply protected.

PLANTATION AND NURSERY WORK.

Ludlow Plantation.—The Monterey Pine having failed, the steps already begun last season to substitute Cluster Pine, which does well in this locality, were continued. It is hoped to treat 150 acres per year. The work of planting up with Cluster Pine the remainder of the area that has been cleared was begun and 50 acres were put in by the 30th June, and at the time of writing the work is completed. There yet remains an area of 180 acres on which the old timber has been pulled down ready for clearing, and about 100 acres of ringbarked timber to be planted up. The flying nursery has proved very successful, the young plants raised being stronger and better fibred than those raised at Hamel. The seedlings resulting from the broadcast sowing of the previous season are looking well. It is only on the higher ground that they have not done so well and may require planting up.

Plantation North of Perth.—Sufficient funds were not made available to start operations here. The work of surveying the tramline connecting the area with West Guildford was completed and the 10 square miles, the site of the proposed plantation, was subdivided into compartments. Experimental work with the object of arriving at the cheapest and most effective system of planting, was continued.

Hamel State Nursery.—In Appendix 5 will be found a list of the trees raised and distributed. The Nursery brought in a revenue of £349 11s., which represents the sale at cost price of trees to settlers and public bodies. The cost of the Nursery amounted to £241, showing a profit of £108 11s. In former years, when the distribution was free, the number of trees sent out to the public was certainly much higher, but the Nursery cost the State between £800 and £1,000 per annum. All the Monterey Pines planted on the sandy portion of the Nursery are failing and the work of cutting them out was continued. The price obtained for the timber was good, and altogether £179 of revenue was derived from this source alone. With the exception of the strip along the railway, where an arboretum has been established, the country cleared of Monterey Pine has been planted with Cluster Pine which is doing very well at Hamel.

Arboreta.—Sites for Arboreta were chosen by the manager of the State Nursery in the following districts:—Donnybrook, Collie, Pinjarra, and Nannup. These trial grounds will prove of great value to the foresters who will be engaged in sylvicultural work in these districts, which cover the main Jarrah belt, and also they will be of value as demonstration areas, and will help to awaken public interest in tree planting in the State. The Arboretum at Hamel has been planted with 87 different species, a list of which will be found in Appendix 6.

TIMBER INDUSTRY.

The industry continued in a depressed condition owing to the shortage of ships, both for interstate and oversea trade. The sawmills have, in consequence, been obliged to increase their stocks of sawn timber considerably. Altogether 123,612 loads of sawn Jarrah and Karri were produced from Crown lands and 19,583 loads of hewn sleepers were cut, while 2,258 loads of sawn Jarrah were produced from forests on private property. The piles and poles cut amounted to 81,050 running feet and 12,975 feet of heart-in beams were hewn. The total value of exports was £344,119, being an increase of £70,000 over the previous year. Compared, however, with the export immediately prior to the war, there is a decrease of £745,362. There is every indication that a rise in the price of timber may be expected in the near future. The countries most seriously affected by the war have lost a large proportion of their standing timber, and their railways and rolling stock are greatly in need of repair. Even a country like South Africa has been unable to effect all the necessary replacements in her railway system during the five years of war, and now requires a large supply of sleepers. Egypt is similarly placed, and contracts have already been signed for the delivery of large consignments of sleepers to that country. The greatest market of all, doubtless, lies in France and Belgium, both for general reconstruction work in the devastated regions and for general repair and construction work of the railways. The visit of M. Mathey, Conservator of Forests of the Cote d'Or, France, in October, 1917, has resulted in a Parisian Syndicate opening up negotiations with a view to the purchase of the State Sawmills. Arrangements have been made to send a delegation to Western Australia in August to go into the whole question.

There is no doubt that for many years past we have been mining our forests and developing an export trade which consisted mainly of sleepers. The prostitution of one of the finest of the world's hardwoods for such a use is to be deplored, and it was therefore without regret that the writer learned that India was not likely in the future to require so many Jarrah sleepers, as experiments had shown that her second class timbers, properly creosoted, were satisfactory.

While we have been selling our timber for entirely 5th class purposes across the seas, we have, at the same time, been destroying between 20 and 25 per cent. of the log in this State. The local market has been insufficient to absorb the smaller sizes of timber, which, in consequence, have been burnt at the sawmill fire chutes. Western Australia should, therefore, look forward to the opening of the French market, for in that country it has been the practice to use timber which is unfit for other uses for the manufacture of sleepers. Around our prime Jarrah forests there are very large areas of second class forests which are only capable of yielding hog-backed sleepers and also in the prime forest itself the crowns of the large milling trees will yield many thousands of loads of such sleepers. It should, therefore, be possible to increase our export of sleepers without in any way depleting our prime forest capital, and once this is demonstrated as feasible, the export of sleepers cut from first grade Jarrah should be prohibited. The Frenchman is accustomed to hardwoods and prefers them to soft woods for all his constructional work and for his floors, so that we should be able to develop a very large trade in our smaller sizes of timbers, and also put Jarrah on the French market in wide well-sawn boards for the furniture trade. This timber was known as "mahogany" by the early settlers and it deserves the name more than the 20 odd varieties of timber which are commonly sold in Europe as mahogany, and which have no connection whatever with Swietenia, the Honduras timber. The visit of General Pau's mission to Western Australia in November last will also help to place the value of our timbers before the French people. The Mission made a tour of inspection through the forests and were greatly impressed with the beauty and strength of Jarrah and Karri, and the members expressed the opinion that there would be no difficulty in placing them profitably on the French market. They took home samples of the timbers and all particulars likely to help them in explaining the timber trade to the French merchants. To assist the Mission, a brochure on the timber industry was published departmentally under the title of "Quelques Aperçus sur les Bois de l'Australie Occidentale." In the production of this booklet the department was much indebted to M. Antoine, of Fremantle, for his assistance.

The Australian market for our hardwoods is steadily increasing. The importing timber merchants both here and in the Eastern States have been unable to obtain supplies of soft woods from overseas, with the result that they have been forced to push the sale of Jarrah and Karri. Their customers are very satisfied with these timbers and there would appear to be some hope that, when shipping is normal once more, they will be preferred to oregon and deal. To advertise our timbers still further, a representative exhibition was prepared by the department and sent to Sydney for the Jubilee Agricultural Show. Owing to the outbreak of pneumonic influenza, the Agricultural Show was abandoned, but, thanks to the courtesy of the New South Wales State officials, arrangements were made to display the Western Australian timber exhibits in the Technological Museum. The exhibits numbered 120, prepared by the department. These included examples of Jarrah, Karri, and our other timbers put to various uses. The main exhibit, however, was a panelled room, the panelling was entirely made of kiln-dried jarrah, as was the furniture, which consisted of a table, chairs, and a chest in Jacobean style. The Sawmillers' Association contributed a very fine exhibit consisting of jarrah furniture and panelling, which were very much admired. The Western Australian Government Railways showed how the Tuart and Wandoo were used by displaying two wooden underframes of trucks, also what a beautiful wood we possess in banksia for internal coach and tram work by an exhibit of panels and tram seats. That the exhibit roused something more than mere admiration in New South Wales is shown by the fact that increased orders for our timbers have since come to hand, and a large consignment of Karri scantling sent over as a trial found a ready market at once.

Hewing.—This destructive calling is still being practised in our best forests. The matter is more fully referred to below under the heading of "Legislation."

Firewood.—The organisation of the firewood industry continued and the permit system is successfully being introduced wherever possible. The number of such permits is now 17, and royalty varies from 1d. to 4½d. a ton, according to local circumstances. Tenders were called for the removal of a large area of ring-barked Jarrah in the Mundaring Catchment Area, but no permit has been granted, owing to the inability of the successful tenderer to obtain rails for his tramway. As soon as this difficulty is overcome and work can be begun, the supply of fuel for the Metropolitan area for some years to come will be assured.

Firewood and Timber used by the Mines.—The quantity of fuel used by the various mines is very large indeed (see Appendix 2F). The Golden Mile, for instance, consumed no less than 333,000 tons. An inspection was made by the writer of the Goldfields and the whole question of the future firewood and timber supply was investigated and a separate report made thereon (File 597/19). The *laissez faire* policy adopted by mining companies regarding the future supplies is to be deprecated. The statement so often made that the timber will outlive the mines is not born out by the experience in other far less valuable mining centres of the world. The heaviest item of cost at present in our gold mines is wood fuel, and it behoves those concerned to study the question seriously with a view to designing some system by which our power reserves may be conserved. The present method of burning the wood to raise steam is uneconomical and results in the cutting out of 1½ to 2 square miles of country per day to supply the Kalgoorlie mines alone. Such a rate of cutting seriously jeopardises the future of the mining industry in the whole district.

At Greenbushes the department attempted to put a stop to the cutting of mining timber into firewood for the tin mining dredges. Unfortunately, this practice has grown up in the past and the dredge

owners have been leaving the crooked, over-mature, and faulty timber in the forest and have been picking out all the straight-grained marketable trees because these were more easy, and therefore cheaper to split. For nine months the department was successful, and the fuel-getters' operations were confined to dead and unmarketable timber. The dredge-owners very naturally used every endeavour to have the policy reversed and failed for a time, but in the end their efforts were successful, and it was decided to revert to the old practice. This decision means that, when a lode is struck at Greenbushes and deep mining takes the place of the present system of alluvial dredging, there will be no timber for props, sills and caps for miles around. Some hold that a lode of tin will never be struck, but this is not the opinion of those whose training and experience best fit them to advise the Government on the subject. Even were it so, it is obviously uneconomical to convert a load of marketable Jarrah worth £4 to fuel worth 13s. Such a system can only result in direct destruction of national wealth.

Kiln-drying.—The timber-drying kiln erected in the University Grounds at Crawley was operated throughout the year under the joint control of the then Acting Professor of Engineering, Mr. A. Tomlinson, and the writer. The work has now passed the experimental stage, for it has been definitely shown that it is commercially practicable to dry Jarrah in the Tiemann kiln. The timber thus dried has been shown to be more satisfactory than the air-seasoned wood hitherto put on the market. The reason for this is that our particularly dry climate causes case-hardening, which can be avoided in the Tiemann kiln; also, kiln-drying does not result in as much end-cracking. When to these advantages is added the saving in interest charges which have to be borne on timber stacked out for 1½ to 2 years, the advantage of kiln-drying is obvious. The timbermen of the State have followed the experiments with interest and two firms have embarked on the erection of kilns to deal with Jarrah boards. Millars' Timber and Trading Co. were good enough to continue co-operation with the department, and the small kiln in their Nash Street yard was used to carry out a number of experiments with other timbers, such as Karri, Morrell, Banksia, etc. Mr. Tomlinson read a paper entitled "The Rapid Seasoning of Jarrah" before the Institute of Engineers, and this paper, which gives all details of the system in use, has been published. In addition, a bulletin by the writer on the same subject was published departmentally for circulation amongst sawmillers and timber users generally.

SHIPBUILDING.

A contract for the building of six wooden ships for the Commonwealth Government was signed on the 17th September. The services of a naval architect of high repute were secured and the lease of an excellent site for the yard was arranged with the State Government; also, the State Government helped the shipbuilding company financially by advancing £30,000. The ships were to be of 3,200 tons, and the price was £64,000 per ship. The raw materials, Jarrah and Karri, were available in large quantities and there seemed every hope of the undertaking being successfully carried through. Unfortunately industrial troubles arose and, while these were not very serious, they sufficiently alarmed the directors and those who had invested their money in the concern that it was decided to wind up the company. A golden opportunity has thus been lost of initiating a most important timber-using industry.

REVENUE AND EXPENDITURE.

The total revenue amounted to £42,050 12s. 4d., being an increase of £1,873 1s. 9d. over the previous year. The expenditure from revenue amounted to £10,872 18s. 3d., being an increase of £457 14s. 10d. The expenditure from Loan moneys amounted to £12,591. The details will be found in Appendix 1F. It will be seen that the purchases of Tuart forests were the heaviest items, amounting to £9,000.

BOTANICAL.

The Forest herbarium was increased by 82 specimens, a list of which will be found in Appendix 4. Photographs of our main sawmilling timber trees were taken by the Government Lithographer. Also a series of photographs of our goldfields specimens were taken by Mr. G. Pitt Morison, Keeper of the Arts of the Perth Museum and Art Gallery. All these photographs are now available for distribution. The inspection of the forests of the goldfields by the writer yielded further botanical information which will, it is hoped, enable the botanists to further differentiate between some of our larger eucalyptus trees which heretofore have been regarded as varieties.

TAN BARKS.

The value of Mallet bark exported amounted to £18,875, an increase of £1,989 over the previous year. It found a market chiefly in the Eastern States, though some was shipped to Java. Unfortunately the opportunity of securing the services of a first class tannin chemist, Mr. Douglas McCandlish, was lost, that gentleman having in the meantime accepted the Chair of Tannin Chemistry at Leeds University. The post of Leather Chemist, which was advertised last year, has not yet been filled. It is interesting to note that, in spite of the condemnation of kino impregnated bark of the redgum as a tannage, this material is being used in increasing quantities by our tanners, and a small tanner in a country district has succeeded in decolourising his tan liquor sufficiently to tan light hides. The difficulty of getting the gum into solution was easily overcome and the resulting liquors carried between 20 and 30 per cent. of tannin. Sound investigation by a properly trained, fully qualified, and experienced Leather Chemist should result in the discovery of the best system of treating this powerful tanning agent so as to render

it satisfactory for tanning heavy hides. The fact that the raw material can be procured in enormous quantities and without destroying the tree makes this one of the most important of our forest problems. Once solved there would seem to be no reason why blended tannin extracts should not be produced in Western Australia and a large export trade developed.

COMMONWEALTH FOREST PRODUCTS LABORATORY.

The decision was arrived at by the Commonwealth Institute of Science and Industry to establish a Forest Products Laboratory in Western Australia. The Director of the Institute visited Western Australia and made a tour of inspection of the forests and investigated the subject personally. In order to assist the undertaking the State Government agreed to find the site and provide £5,000 towards the expense of erecting the building. The University of Western Australia, fully seized as it was of the value of additional scientific research, very kindly agreed to relinquish a portion of the grounds that had been allocated at Crawley as a University site to provide room for the Forests Products Laboratory. The laying out of the laboratory on lines which will permit of the latest machinery and apparatus being installed made it necessary to secure the services of the head of the Laboratory. Mr. I. H. Boas, M.Sc., A.I.C., was chosen and he was sent on a mission of investigation through America, Canada, Europe, India and Malaya. He is expected to return towards the end of this year, when he will be in a position to set to work on the laying out of the Laboratory and the initiation of the research work. The Commonwealth Forests Products Laboratory, as its name implies, is not a State concern, but will be dependent for its funds on the Federal Government. Its actual legal establishment must await the passing of a Bill now before the Federal Parliament entitled the "Science and Industry Bill." That the progress in connection with this laboratory is included in this report is due to the fact that this department hopes to derive the greatest benefit from its research into the many minor forest products which form a hitherto untapped source of wealth to the State. In bringing to a successful issue the negotiations with the Federal Government regarding the Forest Products Laboratory, the Western Australian Committee of Science and Industry deserve great credit.

SANDALWOOD.

The year 1918-19 was the most valuable export year recorded, no less than £117,072 worth of sandalwood having been shipped. The next biggest year was 1882, when the export was valued at £96,050. The quantity shipped was, with the exception of 1882, the greatest since the inception of the industry. In that year the timber was worth £10 per ton, to-day it is worth £13. The wood was chiefly carried in Japanese ships of small tonnage. This industry has been purely a destructive one and the main profits have up to date found their way into the pockets of the Chinese merchants, who dispose of the wood in their own country. The distillation of sandalwood oil continues and approximately 3,720 lbs. were produced during the year under report. The gentleman engaged in this industry secured the services of an essential oil chemist, whose researches into the nature of this oil should be of great value. Up to the present the Western Australian oil has not been accepted by the "British Pharmacopœia." The content of the essential oil has now been brought up to the standard, but a further difficulty has been met with which would seem to require more research work. In the meantime it is finding a ready market in Australia and Java and has given every satisfaction.

LEGISLATION.

A Bill for an Act to provide for the better management and protection of Forests was introduced on the 10th September, 1918, and a Forests Act was assented to on the 3rd January, 1919. As the title of the Bill suggests, the Government hoped to place on the Statute Book a legislative enactment calculated to prevent the destruction of one of the most valuable of the State's assets; to bring such methods of management to bear that, instead of the forests being a fleeting source of wealth to be mined by timber companies without let or hindrance, they should be worked on sound sylvicultural lines with a view to assuring a continuity of timber supplies for all time; to place all timber getters in our prime forest belt on the same basis so far as forest regulations are concerned; finally, to prohibit all wasteful forms of conversion which have come into practice merely to meet the demands of an export trade, and are carried out at the expense of future generations.

The Crown forests of Western Australia are held by sawmillers on various terms. First, there are concessions, which were granted as early as 1874, some of them on a practically peppercorn rental. These concessions cover an area of 378,139 acres and expire between 1924 and 1929. Next, there are timber leases which cover 247,047 acres and were granted from 1899 onwards at the very small rental of £20 per square mile. The last of these expires in 1927. In 1904 the permit system was introduced, and permits to cut timber over given areas have been granted up to 1916. The total area of such permits is 722,892 acres, and the permit holder is at present required to pay 2s. per load measured in the round log by the quarter-girth system for every tree he hauls to his mill. Since 1917 the system of selling milling rights by auction and tender was introduced, which assures the Government a fair royalty on the timber. Leaving aside the permits granted on the tender system, it will be seen there are three distinct forms of timber tenures and this is not all, for there are sets of regulations governing each form of tenure. The concessionaire may cut all growing trees on the 378,139 acres he holds: he avers that he has a right to cut the forests flat and burn them if he so desires. He is cutting immature timber for mill-

ing purposes and gutting the forests of piles and poles. The documents granting the concessions all contained provisions enabling the Government to make regulations for the "conservation and better working of the forests." Unfortunately, no such regulations were introduced.

The leaseholder has a right to all timber over 90in. girth, and he exploits by mill or hewer or in whatever way it pleases him. The undersized timber, however, is reserved and can only be cut by consent of the department. Here again it would have been possible to regulate the rights and powers of the leaseholder. With the exception of one small lease, the operations on which were negligible, the total area of concessions and leases, amounting to 591,248 acres, are held by one firm, and for their cutting rights they paid the department during 1918-19 the sum of £7,888.

The permit-holder is under departmental control and pays for what he cuts and, unlike the concessionaire and leaseholder, cannot destroy milling timber by the agency of the hewer, but must get departmental sanction before he puts hewers into his permit area. The same applies to the cutting of undersized timber. During 1918-19 the permit-holders paid the department £28,985 in royalty.

While there was no intention to deprive the concessionaire and leaseholder of his rights, it was sought by legislation to bring him as far as possible under the same regulations as the permit-holder. It was thought unjust to increase the rentals paid by this firm, but it was hoped to make the regulations apply to all forest tenure alike, so as to preserve the immature timber on the concessions and to prevent the destruction by the hewer of milling timber both on concessions and leases.

Under the Forests Act the Government has lost in large measure the right of even passing regulations for the conservation of the forests held under concessions and leases. The permit-holder must strictly abide by the regulations made by the Forests Department, while the concessionaire and leaseholder can do pretty well as he likes. The introduction of sound forest management in the permit areas would result in placing the holder at such an overwhelming disadvantage as to render administration difficult, if not impracticable, with the result that the passing of the Forests Act definitely puts off the initiation of forestry in the areas being cut over until the concessions and leases expire, or public opinion demands that the present legislation be amended.

Forestry begins, not, as many imagine, with the seed bed, but with the axe and sawmill. It is by restricting the quantity of timber that may be cut to the quantity that the forest will produce that a sustained yield is assured. The country cut over may then be taken in hand and improved to assure a better and larger future crop, and this work should go on alongside the cutting. In this way the future of the timber industry is safe and the sawmills of to-day and to-morrow would both contribute towards the establishment of a continuous supply of timber to meet the requirements of the people for all time. Forestry as a State business is a very sound investment, for its outgoings are always well covered by its revenue, leaving a handsome enough profit to the Treasury, as is shown in all countries where it is practised on scientific lines. The Forests Act may be commended in that it provides for the following:—

(1.) The framing of forest working plans which, when once approved, may only be altered by the consent of the Conservator. This will permit of a continuity of policy, for a working plan is a written scheme covering the sylvicultural and other operations over a given forest for a number of years. Such plans as I have shown above cannot be introduced in the concessions, leases, or permits at present, so that they will for some years be framed solely for the cut-over forests which have been abandoned by sawmillers in the past.

(2.) The provision of funds for forestry. Three fifths of the net revenue is placed to the credit of a special fund for forestry work.

(3.) The dedication of State forests as permanent reserves to forestry purposes, only to be altered by consent of Parliament.

(4.) The formation of timber reserves which can only be alienated by the consent of the Conservator.

It will be possible to lay the foundations of forestry during the coming years of forest destruction, so that, when the time comes to introduce forest methods throughout the whole timber belt, we shall at any rate have a fairly large area of cut-over country improved and a staff of trained men capable of handling the major task of framing working plans over the areas in process of exploitation.

There are a few other minor good points about the Act, but these are overshadowed by the following:—

Hewing.—It was sought to prohibit this destructive system of cutting sleepers in the prime Jarrah forest, but this calling was legalised so far as hewers who wielded the broad axe prior to 1919 were concerned. That no one can now learn this system of destroying national wealth is something. At the same time, since there were 2,500 hewers operating in 1914 a very large area of forests will be destroyed before they cease to be. It is not possible to regulate their operations on the concessions and leases, and already the holder of these forms of sawmilling tenure is utilising them in forest which is better adapted for milling purposes. That they are not allowed to destroy similarly sound timber on the permits has led to much friction and made the administration of the Act very difficult indeed. Comparing

1919 ? ✓

hewing with milling, there is a loss of £1 for every load of timber produced by the hewer, and it has been and will be the endeavour of the department to prevent this loss of wealth on all permit areas and Crown lands under its control.

Fires.—The worst enemy of the forest is fire, and it was sought to provide legislation to minimise the danger and protect both the forests and the *bona fide* settler. Unfortunately, this clause was struck out.

Greenbushes State Forest.—In order to make assurance doubly sure, the tin-mining interests saw to it that a section was added which will prevent the forestry authority from exercising the control necessary to assure a future supply of mining timber. This can only have one result, the destruction of the whole of this State forest.

From the above remarks on the Forests Act, it will be seen that an amending Act is very necessary. It is to be hoped that public opinion will demand this before the expiration of the present-day sawmill tenures, before, in fact, our timber heritage is so destroyed as to make the cost of regeneration almost prohibitive. It was in 1903 that the Royal Commission on Forestry found:—

> That in the interests of the State it would be a wise policy to discourage any increase in the rate of timber-cutting till the consumption of scantling is fairly apace with the export of the larger sizes.
>
> State acquiescence in the destruction of good timber only because the export trade demands it is a crime against coming generations; and any attempts to increase the export in the interest of foreign companies, or with the object of inducing more men to join in timber getting at the expense of posterity, need wise resistance.

Instead of a policy of discouraging the increase in the rate of timber-cutting, every encouragement was given to sawmillers to mine the wealth of the forests as rapidly as possible and by 1913-14 our annual cut was doubled. In 1903 the output was too great for the forests, but we possessed large reserves of Jarrah which would, under forest management, have yielded timber for all time. To-day it is no longer a question of discouraging the increase in the rate of cutting. Even were it now the policy of the Government to continue encouraging sawmillers to mine the forests, there is no possibility of doing so, for we have not a sufficient area of virgin Jarrah forest to support a 40-load mill for 10 years. All the Jarrah country is held by the present-day sawmiller and the rate of cutting will decrease year by year as the forests are cut out. The problem is now one of how to restrict the cutting so as to lengthen the period under which the Jarrah country will be cut-over and so enable the department to restore the forests behind the sawmiller and so shorten the period of lean years which must inevitably follow the closing of the last big mill in the State.

PUBLICATIONS.

During the year the following publications were issued by the department:—

"Some Notes about the Forest Resources of Western Australia."
"Short Descriptive Notes of the Principal Timbers of Western Australia."
"Quelques Apercus sur les Bois de l'Australie Occidentale."
"The Kiln Drying of Jarrah."

A series of short popular pamphlets descriptive of—

"Jarrah."
"Karri."
"Tuart and Wandoo."
"Sandalwood."
"Tan Barks."
"Paper-making Materials."
"Blackboy."
"Grass Tree Fibre."
"Fire Resisting Qualities of Jarrah."
"Wooden Roofing."

And a new abridged edition of Julius' "Physical Characteristics of the Hardwoods of Western Australia," with some further tables relating to tests.

C. E. LANE-POOLE,
Conservator of Forests.

Perth,
September, 1919.

LIST OF APPENDICES.

APPENDICES.

APPENDIX 1A.

Revenue for Year ended 30th June, 1919.

	£ s. d.	£ s. d.
Licenses—		
Woodcutters	544 2 0	
Sandalwood	25 3 0	
Timber	36 4 6	
Mallet Bark	24 15 0	
Pile and Balk	0 15 0	
		630 19 6
Royalty on Logs—		
Jarrah	18,748 7 7	
Karri	5,905 6 7	
Banksia	58 6 8	
Sheaoak	4 4 2	
Pine Thinnings	178 15 0	
		24,895 0 0
Royalty on Hewn Jarrah Sleepers—		
At 4s. 2d. per load	63 7 1	
„ 4s. „	552 7 6	
„ 3s. 9d. „	90 8 4	
„ 3s. 7d. „	32 19 6	
„ 3s. 6d. „	49 9 11	
„ 3s. 3d. „	22 3 11	
„ 3s. 1d. „	30 3 9	
„ 3s. „	133 10 6	
„ 2s. 6d. „	229 10 1	
„ 2s. 1d. „	27 6 10	
„ 2s. „	10 18 2	
		1,242 5 7
Royalty on—		
Piles and Poles	1,023 12 0	
Beams	165 16 1	
Sandalwood	1,605 11 7	
Firewood	66 14 11	
Split Posts	1 16 3	
Shingles	11 11 10	
Blackboy	13 5 0	
Bark	5 0 0	
Extra 10 per cent. charged on overdue accounts	56 1 1	
		2,949 8 9
Inspection Fees on—		
Hewn Sleepers, Crown Lands	398 4 4	
Sawn Sleepers, Crown Lands	270 11 6	
Sawn Timber, Crown Lands	92 10 5	
Hewn Sleepers, private property	470 11 3	
Sawn Sleepers, private property	124 6 11	
Sawn Timber, private property	13 14 9	
Piles and Poles	33 19 0	
Beams	80 11 10	
		1,484 10 0
Miscellaneous	109 2 6	109 2 6
Tree Freight	34 13 9	34 13 9
Branding Hammer Registration Fees	36 0 0	36 0 0
Timber Workers' Registration Fees	21 5 0	21 5 0
Sales—		
Branding Hammers	82 10 6	
Trees	349 11 0	
Publications	20 16 3	
		452 17 9
Rents—		
Timber Leases	8,290 0 0	
Concessions	678 0 0	
Tramlines	1,187 9 6	
Saw Mill Sites	20 0 0	
Tuart Reserve	19 0 0	
		10,194 9 6
Total Revenue for year ended 30/6/1919		£42,050 12 4

APPENDIX 1B.

Trust Fund.

	£ s. d.
Miscellaneous Refunds	479 7 11

APPENDIX 1C.

Expenditure for Year ended 30th June, 1919.

	£ s. d.	£ s. d.
Salaries	4,741 2 10	
Wages	2,394 11 8	
Forage Allowances	2,105 19 7	
Travelling Allowances	387 4 1	
Maintaining State Nursery	241 0 5	
Ludlow Pine Plantation	137 6 3	
Workers' Compensation	33 8 0	
Interest on Tuart Reserve	50 0 0	
Incidentals	782 5 5	
		10,872 18 3

APPENDIX 1D.

Revenue and Expenditure.

The following statement shows the Revenue and Expenditure of the Department since its inception in 1895:—

Year.	Revenue. £ s. d.	Expenditure. £ s. d.
1st Jan. to 31st Dec., 1895 ...	3,175 5 2	1,108 5 5
1st Jan. to 31st Dec., 1896 ...	4,838 11 2	2,020 11 5
1st Jan. to 31st Dec., 1897 ...	12,320 6 4	3,489 14 4
1st Jan. to 31st Dec., 1898 ...	30,150 6 3	3,356 5 7
1st Jan. to 31st Dec., 1899 ...	16,999 11 3	2,438 7 5
1st Jan. to 31st Dec., 1900 ...	15,525 19 2	2,648 11 10
1st Jan. to 31st Dec., 1901 ...	18,477 16 2	2,747 6 3
1st Jan. to 31st Dec., 1902 ...	18,752 11 7	4,301 6 1
1st Jan. to 31st Dec., 1903 ...	20,478 9 1	3,789 3 4
1st Jan. to 31st Dec., 1904 ...	20,018 19 4	4,192 16 9
1st Jan. to 31st Dec., 1905 ...	18,479 18 6	5,089 18 6
6 months, 1st Jan. to 30th June, 1906	10,973 18 4	3,385 1 9
1st July, 1906, to 30th June, 1907	22,783 1 5	6,207 15 2
1st July, 1907, to 30th June, 1908	23,498 13 3	8,801 14 3
1st July, 1908, to 30th June, 1909	29,484 3 8	9,030 12 6
1st July, 1909, to 30th June, 1910	31,549 6 11	8,531 0 9
1st July, 1910, to 30th June, 1911	37,477 3 5	8,862 16 8
1st July, 1911, to 30th June, 1912	44,560 10 10	10,469 4 10
1st July, 1912, to 30th June, 1913	48,236 14 0	11,463 2 11
1st July, 1913, to 30th June, 1914	53,038 16 0	12,092 15 3
6 months, 30th June, to 31st Dec., 1914	22,906 0 0	5,468 14 0
1st Jan. to 31st Dec., 1915 ...	45,725 13 9	8,869 15 11
1st Jan. to 31st Dec., 1916 ...	29,820 12 10	9,575 3 2
1st Jan. to 31st Dec., 1917 ...	36,128 17 11	10,263 2 5
6 months, 1st Jan. to 30th June, 1918	22,113 1 8	6,199 1 11
1st July, 1918, to 30th June, 1919	42,050 12 4	10,872 18 3
	£679,565 0 4	£165,275 6 8

It will be seen from the above statement that to the 30th June, 1919, the revenue exceeded the expenditure by the large sum of £514,289 13s. 8d.

APPENDIX 1E.

Statement of timber inspected by the Inspection Branch of the Forests Department during the year ended 30th June, 1919:—

Revenue.

—	Inspection Fees. Loads.	Rate.	Amount.
		s. d.	£ s. d.
Sawn Jarrah, heart out ...	16,008	0 9	600 6 0
Hewn do. do. ...	19,423	1 0	971 3 0
	Lin. feet.		
Jarrah Beams, heart in ...	16,812	0 1	70 1 0
Do. Piles do.	4,249	0 2	35 8 2
Do. do.	963	0 3½	13 7 6
			£1,690 5 8

APPENDIX 1F.

Loan Expenditure for Year ended 30th June, 1919.

	£	s.	d.
Classification	1,873	18	7
Pine Planting	1,206	12	0
Land Purchase for Tuart Timber	329	17	6
Purchase of Locke Estate, Tuart Country	6,751	12	6
Purchase of Tuart Reserve from Lands Department	2,000	0	0
Advertising generally	428	19	11
	£12,591	0	6

APPENDIX 2A.

Production of Mill Timber for year ended 30th June, 1919.

—	Jarrah.		Karri.		Total.	
	Loads.	cub. ft.	Loads.	cub. ft.	Loads.	Cub. ft.
Concessions	17,924	896,200	...	...	17,924	896,200
Leases	4,685	234,250	...	...	4,685	234,250
Permits	219,977	10,998,850	41,279	2,063,950	261,256	13,062,800
	242,586	12,129,300	41,279	2,063,950	283,865	14,193,250

The logs are measured on the quarter girth system, and the recovery by the mills for Jarrah is 45 per cent., and Karri 35 per cent., so that the above total represents, in sawn timber, 123,612 loads, or 6,180,600 cubic feet.
Mill Logs.—This statement includes all timber from Crown Lands, Sawmill Permits, Timber Leases, and Timber Concessions, but does not include timber cut on private property.

APPENDIX 2B.

Sawn Timber obtained from Private Property.

	Number.	Loads.
Sawn timber		2,102
Dump fruit cases	21,112	101
¾ dump fruit cases	1,230	4
½ dump fruit cases	6,396	15
Flat fruit cases	9,326	33
Grape fruit cases	400	2
Pickets	600	1
Total		2,258

APPENDIX 2C.

Hewn Jarrah Sleepers.

—	Loads.	Cubic feet.
From Crown Lands, Sawmill Permits, etc., inspected and uninspected, on which Royalty has been paid	7,523	376,150
From Private Property, Leases, and Concessions—Inspected	12,060	603,000
Total	19,583	979,150

NOTE.—The average recovery by the hewer is 25 per cent. of the log, the latter being measured on the quarter girth system. The above total represents 78,332 loads, or 3,916,600 cubic feet.

APPENDIX 2D.

Total Timber Production.

—	In the Log.		In the Square.	
	Loads.	Cub. ft.	Loads.	Cub. ft.
Total Milling Timber...	283,865	14,193,250	123,612	6,180,600
Total Hewing Timber	78,332	3,916,600	19,583	436,450
Total Sawn Timber from Private Property ...	5,018	250,900	2,258	112,900
	367,215	18,360,750	145,453	6,729,950

APPENDIX 2E.

Round Piles and Poles	...	81,050 running feet
Heart-in Beams	... ...	12,975 " "

APPENDIX 2F.

Mining Timber and Firewood consumed during the year ended 30th June, 1919.

	Tons.
Wood fuel consumed on Greenbushes Mining Fields	15,120
Mining Timber consumed on Collie Coal Fields	3,464
Wood fuel consumed in Metropolitan Area	154,500
Wood fuel consumed on Golden Mile, Coolgardie, and Norseman Mines	333,565
Mining timber consumed on Golden Mile, Coolgardie, and Norseman Mines	8,700
Wood fuel consumed on Northern Goldfields, Lancefield, Gwalia, Menzies, and Ora Banda	76,605
Mining timber consumed on Northern Goldfields	2,072
Wood fuel consumed in Southern Cross Areas, Westonia, Bullfinch, and Golden Valley	35,779
Mining timber consumed in Southern Cross Areas	18,087
Pumping Stations, Goldfields Water Supply, Nos. 5, 6, 7, 8, plus other small pumping plants	7,599
Household wood, Goldfields	35,059
Bakers' wood, Goldfields	16,181
Breweries, Cordial Factories, Electric Light Plants, Batteries (State and Private outside Golden Mile Batteries)	6,781
Engine wood consumed on Tramways	14,909
Electric Power and Light	50,976
Wood fuel used as charcoal on Eastern Goldfields	300
Sleepers	3,300
	*782,997

* Exclusive of mining timber and firewood consumed on the Murchison and other distant Goldfields not mentioned above.

APPENDIX 2G.

Export of Timber, Tanning Bark, and Sandalwood for year ended 30th June, 1919.

	Quantity. Sup. ft.	Value. £
Timber, dressed (other)—		
Commonwealth of Australia ..	5,109	43
	5,109	43
Timber, undressed (other)—		
Commonwealth of Australia ..	38,238,810	256,602
United Kingdom	408,500	2,815
India	100,000	650
New Zealand	172,600	1,148
South African Union	10,667,500	71,079
Straits Settlements	20,200	135
Tonga, Pacific Islands ..	10,200	68
	49,617,810	332,497
Logs, not sawn—		
South African Union	6,500	44
	6,500	44
Spokes, Rims (undressed)—		
Commonwealth of Australia ..	Quantity not recorded	154
		154
Shafts, Poles, and Bars—		
Commonwealth of Australia ..	„	242
		242
Casks and Shooks—		
Commonwealth of Australia ..	„	9,802
		9,802
Wood Manufactures, N.E.I.—		
Commonwealth of Australia ..	„	1,337
		1,337
Total Timber		344,119
Sandalwood—	Cwts.	
Straits Settlements	33,981	22,063
Hong Kong	107,172	65,990
India	2,420	1,573
China	23,198	14,497
Java	3,269	2,032
Commonwealth of Australia ..	9,921	10,917
	179,961	117,072
Bark, Tanning—		
United Kingdom	1,221	860
Commonwealth of Australia ..	38,928	18,015
	40,149	18,875
Total Value		£480,066

APPENDIX 2H.

Timber Imports for the Year ended 30th June, 1919.

Timber and Country of Origin.	Quantity. Sup. ft.	Value. £
Dressed, N.E.I.—		
United states of America ..	100	2
Commonwealth of Australia ..	34,302	892
	34,402	894
Cut into shape for making boxes and doors—		
Singapore	163,100	974
Commonwealth of Australia ..	17,901	434
	181,001	1,408
New Zealand Pine—		
Commonwealth of Australia ..	50,902	1,101
Logs, not sawn—		
United States of America ..	200	7
New Zealand	..	1
Java	100	4
	300	12
Timber, undressed—		
United States of America ..	813,900	7,875
Japan	15,600	320
Singapore	32,600	368
Java	3,500	42
India	79,900	3,103
Commonwealth of Australia ..	971,752	21,383
	1,917,252	33,091
Veneers, Three-ply—		
Commonwealth of Australia ..	167,230	4,720
	167,230	4,720
Architraves, Mouldings, etc.—		
Commonwealth of Australia ..	Quantity not recorded	1,586
		1,586
Bent or cut into shape—		
United States of America ..	„	25
Commonwealth of Australia ..	„	7
		32
Hubs, other than Elm—		
Commonwealth of Australia ..	96	19
	96	19
Laths for blinds—		
Commonwealth of Australia ..	Quantity not recorded	261
		261
Pictures and Room Moulding—		
United States of America ..	„	456
Commonwealth of Australia ..	„	201
		657
Timber Rims, N.E.I.—		
Commonwealth of Australia ..	3,132	761
	3,132	761
Shafts, Poles, and Bars—		
United States of America ..	Quantity not recorded.	38
Commonwealth of Australia ..	„	1,181
		1,219
Spokes, Dressed or prepared (not being Hickory)—		
Commonwealth of Australia ..	54,201	1,077
	54,201	1,077
Staves, dressed or partly dressed (not shaped)—		
Commonwealth of Australia ..	150	7
	150	7
Wood Shooks, N.E.I.—	No.	
Commonwealth of Australia ..	36,672	533
	36,672	533
Wood Doors—		
Commonwealth of Australia ..	776	662
	776	662
Empty Barrels and Casks—		
Commonwealth of Australia ..	Quantity not recorded	942
		942
Brushmakers' Woodware and Turnery—		
Commonwealth of Australia ..	„	640
		640
Wood Tool Handles—		
Commonwealth of Australia ..	„	4,340
		4,340
Oars and Sculls—		
Commonwealth of Australia ..	„	25
		25
All articles made of, N.E.I.—		
Commonwealth of Australia ..	„	6,108
		6,108
Total Value		£60,095

APPENDIX 2I.

Quantity of Timber Treated by Forest Saw Mills, etc.—Exported during the year ended 31st December, 1918.

Timber Undressed.	Karri.	Jarrah.	Inter-state.	New Zealand.	South Africa.	Singa-pore.	Pacific Ocean Islands Nauru Islands.	Purpose intended.
	Loads.	Loads.	Loads.	Loads.	Loads.	Loads.	Loads.	
Logs and Spars, Piles and Poles	...	333	168	...	165	...	...	...
Undressed, 7 x 2½, up to 12 x 6	8,125	60,634	61,401	1,541	5,682	34	101	...
Undressed, Various	...	940	459	250	231	...	...	...
Laths	...	...	...	...	...	...	...	...
Pickets and Palings	...	101	101	...	...	...	...	...
Flooring Boards	...	2,358	2,358	...	...	...	...	...
Paving Blocks	...	401	401	...	...	...	...	...
Sleepers...	...	14,424	5,766	1,974	6,684	...	...	...
Powellised Timber	2,002	...	2,002	...	...	...	...	...
Telegraph Arms	...	22	22	...	...	...	...	...
Total, Undressed ...	10,127	79,213	72,678	3,765	12,762	34	101	...
Timber, Dressed	...	...	...	...	...	...	...	...
Grand Total	10,127	79,213	72,678	3,765	12,762	34	101	...

APPENDIX 2J.

Summary of Exports of Forest Produce since 1836.

Year.	Timber.		Sandalwood.		Mallet Bark.
	Loads.	Value.	Tons.	Value.	Value.
		£		£	£
1836*a*...	200	2,500	...	...	...
1837 ...	...	...	...	...	...
1838 ...	...	...	...	...	...
1839 ...	...	...	...	...	...
1840 ...	...	...	...	...	...
1841 ...	...	...	...	...	...
1842 ...	...	...	...	...	...
1843 ...	...	...	...	...	...
1844 ...	*b*	163	...	...	...
1845 ...	...	...	4	40	...
1846 ...	51	255	32	320	...
1847 ...	244	1,120	370	4,444	...
1848 ...	67	333	1,335	13,353	...
1849 ...	...	...	...	...	...
1850 ...	210	1,048	...	...	...
1851 ...	25	268	219	1,593	...
1852 ...	141	806	...	...	...
1853 ...	1,044	5,220	...	...	...
1854 ...	1,170	7,023	...	...	...
1855 ...	1,538	12,076	...	...	...
1856 ...	1,410	9,671	...	...	...
1857 ...	1,384	9,449	280	2,524	...
1858 ...	585	2,340	745	7,455	...
1859 ...	1,345	6,051	1,278	17,259	...
1860 ...	1,096	4,932	1,687	16,360	...
1861 ...	555	2,497	2,558	24,945	...
1862 ...	1,376	7,151	2,393	21,541	...
1863 ...	658	2,963	2,807	25,265	...
1864 ...	1,166	5,508	2,724	24,520	...
1865 ...	3,679	15,693	1,686	13,490	...
1866 ...	1,713	6,849	2,965	23,722	...
1867 ...	1,135	4,541	2,305	18,442	...
1868 ...	160	638	3,256	26,045	...
1869 ...	3,598	14,273	4,124	32,998	...
1870 ...	3,144	17,551	6,112	48,890	...
1871 ...	4,370	15,304	3,366	26,926	...
1872 ...	740	2,590	3,942	31,536	...
1873 ...	1,363	4,771	6,292	62,916	...
1874 ...	6,912	24,192	7,057	70,572	...
1875 ...	6,847	23,965	6,646	66,465	...
1876 ...	4,381	23,743	6,577	65,772	...
1877 ...	6,723	36,979	4,247	31,851	...
1878 ...	11,618	63,902	4,675	35,064	...
1879 ...	12,545	69,742	4,667	35,001	...
1880 ...	13,251	66,252	5,097	51,970	...
1881 ...	15,855	79,277	7,716	77,165	...
1882 ...	18,730	93,650	9,605	96,050	...
1883 ...	19,940	79,760	7,031	56,250	...
1884 ...	17,234	68,936	2,620	20,960	...
1885 ...	16,963	67,850	4,527	36,216	...
1886 ...	12,523	50,092	3,431	27,450	...
1887 ...	7,096	28,384	4,317	34,533	...
1888 ...	10,515	42,060	4,470	33,525	...
1889 ...	15,770	63,080	6,385	57,465	...
1890 ...	23,444	82,052	5,136	51,355	...
1891 ...	25,479	89,179	3,760	37,600	...
1892 ...	21,653	78,419	5,716	42,870	...
1893 ...	10,259	33,888	3,893	32,160	...
1894 ...	21,274	74,804	2,784	23,430	...
1895 ...	25,105	88,146	3,851	30,863	...
1896 ...	30,912	116,420	6,848	65,800	...
1897 ...	47,866	192,451	5,852	49,480	...
1898 ...	81,723	326,195	4,349	31,812	...
1899 ...	138,271	553,198	4,084	29,719	...
1900 ...	114,508	458,461	5,095	39,038	...
1901 ...	143,012	572,354	8,864	73,931	...
1902 ...	125,135	500,533	7,995	61,771	...
1903 ...	154,969	619,705	4,406	37,913	859
1904 ...	161,446	654,949	4,510	25,417	32,876
1905 ...	174,190	689,943	5,521	38,817	154,087
1906 ...	*c* 176,614	708,993	8,848	70,958	140,720
1907 ...	*c* 128,091	511,923	9,212	65,999	98,773
1908 ...	*c* 197,390	813,591	9,564	77,668	79,934
1909 ...	*c* 216,609	867,419	4,805	37,456	59,633
1910 ...	*c* 241,482	972,698	8,228	70,775	93,733
1911 ...	*c* 248,990	986,341	6,907	65,506	83,470
1912 ...	*c* 225,942	903,396	3,154	27,533	49,094
1913 ...	*c* 272,397	1,089,481	6,260	47,589	47,377
1914*d*...	*c* 125,595	502,153	4,702	39,800	18,197
1915*e*...	*c* 190,370	808,392	8,375	78,926	6,127
1916*e*...	108,642	441,991	6,271	61,381	10,208
1917*e*...	77,813	310,893	7,230	72,669	18,959
1918*e*...	68,725	274,141	6,494	81,834	16,886
1919*e*...	82,715	344,119	8,998	117,072	18,875
Total ...	3,897,849	15,693,989	321,360	2,827,035	929,808

a The exports up to the year 1834 consisted only of supplies to shipping of which no record is kept.
b Not available.
c Approximate figures only.
d Six months ended 30th June.
e Year ended 30th June.

APPENDIX 3A.

Concessions, Leases, Sawmill Permits, Hewing Permits, Firewood Permits, Sawmilling Permits, and Miscellaneous Permits.

The following Return shows the Concessions, Leases, Sawmill Permits, Hewing Permits, Firewood Permits, Sawmilling Permits, and Miscellaneous Permits in existence up to the 30th June, 1919.

CONCESSIONS.

Concessionaire.	No.	Locality.	Term.	Original Area.	Present Area.
Millar's T. & T. Co., Ltd. ...	12/0	Cockburn Sound ...	1-1-1899 to 31-12-1901 1-1-1902 to 31-12-1915 1-1-1916 to 31-12-1929	250,000	250,000
Millar's T. & T. Co., Ltd. ...	12/1	Canning	1-1-1893 to 31-12-1924	100,000	82,750
Millar's T. & T. Co., Ltd. ...	12/2	Sussex	15-1-1883 to 14-1-1925	46,000	45,389
			Total	396,000	378,139

LEASES.

Lessee.	No.	Locality.	Term.	Original Area.	Present Area.
Ainslie, James	145/113	Nelson	1-1-1899 to 31-12-1923	4,480	4,389
Ainslie, James	149/113	Nelson	1-1-1899 to 31-12-1923	4,480	4,092
Ainslie, James	150/113	Nelson	1-1-1899 to 31-12-1923	4,480	3,522
Millar's T. & T. Co., Ltd. ...	186/113	Wellington	1-1-1899 to 31-12-1923	27,000	16,012
Millar's T. & T. Co., Ltd. ...	227/113	Wellington	1-1-1901 to 31-12-1925	4,480	2,743
Millar's T. & T. Co., Ltd. ...	228/113	Wellington	1-1-1901 to 31-12-1925	4,480	4,130
Millar's T. & T. Co., Ltd. ...	229/113	Wellington	1-1-1901 to 30-12-1925	4,480	3,962
Millar's T. & T. Co., Ltd. ...	230/113	Wellington	1-1-1901 to 31-12-1925	4,480	4,480
Good, Ferderick Daniel ...	244/113	Murray	1-7-1899 to 30-6-1924	17,280	13,259
Good, Frederick Daniel ...	257/113	Nelson	1-10-1899 to 30-9-1924	33,280	28,876
Millar's T. & T. Co., Ltd. ...	261/113	Murray	1-10-1899 to 30-9-1924	58,270	22,937
The Timber Corporation, Ltd.	268/113	Nelson	1-10-1899 to 30-9-1924	49,920	33,938
Wittenoom, Edward Horne ...	269/113	Wellington	1-10-1899 to 30-9-1924	5,000	2,080
Macmurtrie, Wm.	288/113	Wellington	1-7-1900 to 30-6-1925	36,960	12,637
Ainslee, James	291/113	Wellington	1-1-1901 to 31-12-1925	17,920	17,308
Millar's T. & T. Co., Ltd. ...	296/113	Wellington	1-1-1900 to 31-12-1924	11,520	4,146
Millar's T. & T. Co., Ltd. ...	297/113	Wellington	1-1-1900 to 31-12-1924	13,440	12,771
Ainslie, James	299/113	Murray	1-7-1900 to 30-6-1925	19,840	18,795
McNeil, Alexander James ...	309/113	Wellington	1-4-1901 to 31-3-1926	21,310	793
Wittenoom, Edward Horne ...	322/113	Murray and Wellington	1-4-1902 to 31-3-1927	44,800	20,000
Wittenoom, Edward Horne ...	325/113	Wellington	1-4-1902 to 31-3-1927	1,280	1,202
Smith, Henry Teesdale ...	330/113	Murray	1-7-1902 to 30-6-1927	10,240	7,781
Smith, Henry Teesdale ...	331/113	Murray	1-1-1903 to 31-12-1927	9,600	7,194
			Total	409,020	247,047

SAW MILL PERMITS.

Permit Holder.	Original No.	Regranted as No.	Locality.	Term.	Original Area.	Present Area.
					acres.	acres.
Whittaker Bros.	1/11	76/11	North Dandalup ...	1-7-1915 to 30-6-1925	20,000	20,000
Bunning, Robert	8/11	93/11	Near Donnybrook ...	1-10-1916 to 30-9-1926	4,700	4,700
Bunning Bros., Ltd.	9/11	94/11	Collie	1-10-1916 to 30-9-1926	10,000	10,123
Preston Valley Saw Mills, Ltd. ...	10/11	95/11	Noggerup	1-1-1917 to 31-12-1926	10,000	19,723
Swan Saw Mills, Ltd.	13/11	91/11	Preston	1-7-1917 to 30-6-1927	2,633	2,633
Do. do.	14/11	92/11	do.	1-4-1917 to 31-3-1927	19,000	6,700
Bunning, Robert	15/11	96/11	Near Donnybrook ...	1-4-1917 to 31-3-1927	5,300	5,300
Adelaide Timber Co., Ltd. ...	16/11	90/11	Wilga	1-10-1917 to 30-9-1922	12,000	15,775
Swan Saw Mills, Ltd.	19/11	98/11	Noggerup	1-7-1918 to 30-6-1920	1,000	1,000
Bunning Bros., Ltd.	25/11	99/11	Collie	1-7-1918 to 30-6-1920	10,000	10,000
S.W. Timber Hewers' Society ...	27/11	...	Near Dwellingup ...	1-1-1909 to 31-12-1918	20,001	19,696
Port & Co., Ltd.	34/11	...	Waroona	1-7-1910 to 30-6-1920	28,510	28,510
Timber Corporation, Ltd. ...	35/11	...	Greenbushes ...	1-10-1909 to 30-9-1919	6,800	6,800
Bunning Bros., Ltd.	36/11	97/11	Preston	1-4-1917 to 31-3-1927	10,000	10,000
Lewis, Francis Jas. : Reid, F. W. S.	37/11	...	West Collie	1-1-1910 to 31-12-1919	6,000	19,730
Wilgarrup Karri & Jarrah Co., Ltd.	42/11	...	Bridgetown	1-4-1910 to 31-3-1920	23,000	22,302
Buckingham Bros.	44/11	...	Muja	1-7-1910 to 30-6-1920	17,960	17,946
S.W. Timber Hewers' Society...	60/11	...	Yourdanning ...	1-4-1912 to 31-3-1922	38,000	38,000
The Kauri Timber Co., Ltd. ...	61/11	...	Nannup	1-1-1912 to 31-12-1921	58,000	57,595
Bunning, Robert	63/11	...	Near Donnybrook ...	1-4-1912 to 31-3-1922	8,006	8,006
Trees, Ltd.	71/11	...	Collie	1-4-1914 to 31-12-1923	20,028	20,028
Steere, F. W.	72/11	...	Near Brookhampton	1-7-1914 to 30-6-1924	1,500	1,500
Minister for Works and Trading Concerns	73/11	...	Bridgetown	1-1-1915 to 31-12-1924	7,000	7,000
Commissioner of Railways ...	78/11	...	Near Dwellingup ...	1-7-1915 to 30-6-1925	81,500	81,235
Minister for Works and Industries	79/11	...	Wuraming	1-10-1915 to 30-9-1925	38,690	38,690
Do. do. ...	80/11	...	Bingham River ...	1-10-1915 to 30-9-1925	25,740	20,510
Do. do. ...	81/11	...	Wuraming Hill ...	1-10-1915 to 30-9-1925	25,878	25,878
Do. do. ...	82/11	...	Near Worsley ...	1-10-1915 to 30-9-1925	4,750	8,000
Buckingham Bros.	83/11	...	Near Bingham River	1-7-1916 to 30-6-1926	25,000	21,500
Whittaker Bros.	84/11	...	North Dandalup ...	1-1-1916 to 31-12-1925	15,350	15,430
Minister for Works and Industries	85/11	...	Bridgetown	1-7-1916 to 30-6-1926	78,000	78,837
Do. do. ...	86/11	...	do.	1-7-1916 to 30-6-1926	143,000	142,736
Wandoo Timber Co., Ltd. ...	89/11	...	Muja	1-10-1916 to 30-9-1922	37,000	37,000
				Total	814,346	722,892

APPENDIX 3A—*continued.*

Permits Granted under Timber Regulation No. 14 *and in force during the year ended* 30*th June,* 1919.

HEWING PERMITS.

Permit holder.	No.	Locality.	Term. From	Term. To	Area.	Area as at 30–6–19.
Johnson, A. F.	1	Noggerup	26–2–17	26–2–20	2,200	2,200
Plavin, C.	5	Fernbrook	23–3–17	22–3–19	2,720	...
Yoonbusch, L.	16	Brookhampton	29–9–17	28–9–18	220	...
Dore, C.	18	Kirup	5–10–17	3–10–18	1,830	...
Lewis & Reid	23	Worsley	14–1–18	13–1–20	1,150	1,150
Savage, J.	24	Quilergup Siding	17–1–18	30–4–19	1,170	...
Lewis & Reid	25	Muja	14–1–18	14–1–19	1,100	...
Tidy, R.	26	Yornup	2–2–18	1–8–19	560	560
Plozza, P.	27	Dardanup	8–2–18	7–2–20	3,000	3,000
Plavin, C.	29	Worsley	12–3–18	11–3–19	1,270	...
Ireland, G.	30	Newlands	13–3–18	30–4–19	330	...
Plavin, C.	34	Worsley	10–4–18	9–4–20	4,700	4,700
Forbes, J. A.	35	Hester	1–4–18	9–10–18	365	...
Lewis & Reid	42	Muja	7–6–18	1–4–19	1,008	...
Plavin, C.	45	Worsley	20–7–18	19–7–19	640	640
Do.	48	do.	28–8–18	27–8–19	940	940
Forbes, J. A.	51	Hester	10–10–18	20–3–19	240	...
Lewis & Reid	55	Brookhampton	21–10–18	1–2–19	148	...
Plavin, C.	56	Muja	1–11–18	31–10–19	1,250	1,250
Do.	60	Collie	22–2–19	21–11–19	400	400
Savage, J.	63	Quilergup Siding	29–3–19	28–3–20	1,200	1,200
Bunney, A. R.	65	Kelmscott	14–4–19	13–4–20	1,000	1,000
Parsons, C.	71	Brookhampton	23–5–19	24–5–20	148	148
Swan Saw Mills	74	Preston	21–5–19	20–5–20	1,050	1,050
Kendall, J. H.	76	Sawyers' Valley	21–5–19	20–5–20	201	201
			Total		28,840	18,439

FIREWOOD PERMITS.

Fleming, D.	...	Wundowie	12–7–17	31–7–19	236	236
Stubberfield, R. W. and Georgeff, M.	19	Ba catta	7–11–17	6–5–19	240	...
Do. do.	20	do.	7–11–17	6–5–19	300	...
Stubberfield, R. W.	31	do.	20–3–18	19–3–20	300	300
Ablett & Barber	36	Jandakot	24–4–18	30–6–20	209	209
Piggott, A.	52	Ravensthorpe	1–10–18	30–9–29	100	100
Fleming, D.	61	Wundowie	31–3–19	30–3–20	190	190
Luisini, T.	62	Marbellup	25–3–19	24–3–20	185	185
Lloyd, J.	64	do.	16–4–19	15–4–20	1,000	1,000
Morris, C. G.	66	Albany	30–4–19	29–4–20	340	340
Doust, A. W.	68	Mundaring	1–3–19	31–8–20	7,000	7,000
Ferguson, J. H.	69	Wooroloo	3–10–18	31–12–19	3,900	3,900
Georgeff, M.	70	Balcatta	28–4–19	27–4–20	1,200	1,200
Fisher, J. J.	72	Albany	7–5–19	6–5–20	1,900	1,900
Collins, J. A.	73	do.	31–5–19	30–5–20	1,304	1,304
Keighley, J.	77	do.	12–7–19	11–7–20	770	770
The Albany Brewery	78	do.	...	...	1,290	1,290
			Total		20,464	19,924

SAWMILLING PERMITS.

Bunning Bros., Ltd.	28	Sawyers' Valley	8–2–18	7–2–20	1,570	1,570
Firns, C.	32	Keysbrook	20–3–18	19–3–20	560	560
Payne Bros.	33	Capel	27–3–18	4–7–19	176	176
Bunning Bros., Ltd.	38	Preston Line	22–5–18	21–11–19	717	717
Palmer, R., and Smith, G. F.	39	Collie	24–5–18	23–5–20	780	780
Millars' Timber and Trading Co., Ltd.	40	Mt. Lennard	15–5–18	14–9–19	6,400	6,400
Wilson, E.	44	Wooroloo	16–7–18	15–7–20	707	707
Keith, A. E.	46	Hay River	27–8–18	30–4–19	720	...
Bunning Bros., Ltd.	47	Argyle	31–7–18	30–7–19	1,740	1,740
Harper, A. J.	49	Albany	16–9–18	15–9–19	1,180	1,180
Connell, W. R.	50	Hester	16–9–18	15–9–19	240	240
Plavin, C.	54	Inglehope	15–10–18	14–10–28	6,320	6,320
Adelaide Timber Co., Ltd.	57	Wilga	28–11–18	30–9–22	15,775	15,775
Payne, F. A., and Payne, A. W.	59	Capel	28–2–19	23–7–19	1,440	1,440
Griffith, E. A.	75	Donnybrook	15–5–19	14–5–22	3,900	3,900
Mitchell & Ryan	79	Hester	27–6–19	26–6–20	1,720	1,720
			Total		43,945	43,225

APPENDIX 3A—*continued.*

Permits Granted under Timber Regulation No. 14, etc.—continued.

MISCELLANEOUS PERMITS.

Permit Holder.	No.	Locality.	Term.		Area.	Area as at 30–6–19.
			From.	To.		
Groth, H. A.	37	Sawyers' Valley ...	18–5–18	5–5–19	880	...
Do.	41	do.	5–6–18	5–5–19	2,559	...
Flay, G. A.	43	Parry Inlet	1–7–18	30–6–23	4,500	4,500
Robinson, T. W.	53	Keysbrook	1–10–18	30–9–19	3,300	3,300
Groth, H. A.	58	do.	2–1–19	1–1–20	2,240	2,240
Freney, M. R.	67	West Kimberley ...	1–5–19	30–4–22	...	...
The Federal Trading and Engineering Co., Ltd.	80	Pinjarra	6–6–19	5–6–20	5,000	5,000
Strevens, J. L.	81	South-West District ...	16–6–19	15–6–29	...	...
				Total	18,479	15,040

SUMMARY.

	Total Areas.	
	Original.	Present.
	acres.	acres.
Concessions	396,000	378,139
Leases	409,020	247,047
Sawmill Permits	814,346	722,892
Hewing Permits	28,840	18,439
Sawmilling Permits	43,945	43,225
Firewood Permits	20,464	19,924
Miscellaneous Permits	18,479	15,040
Grand Total	1,731,094	1,444,706

APPENDIX 3B.

LIST OF SAWMILLS.

Name of Sawmill and District.	Type of Mill.	Horse Power of Mill.	Average distance from Stump to Landing.	Average distance from Landing to Mill.	Distance from Mill to Main Line Siding.	Distance from Siding to nearest Port.	Output in loads per day.	Per cent. recovery.	Rate per Ton on Sawn Timber to Port of shipment.	Remarks.
			M. Ch.	M. Ch.	M. Ch.	M. Ch.			s. d.	
Lewis & Reid, Ltd.	Twin saws	32	0 60	2 40	6 60	38 0	14·4	42·25	6 0	
Bunning Bros., Ltd., Collie	Twin saws	75	0 40	3 0	6 1½	50 0	20	50	6 10	Bunbury.
Adelaide Timber Co., Ltd., Wilga	Twin saws	16	3 to Mill	No bush landing	0 2	58 0	7·5	47	7 7	
Kauri Timber Co., Barabup	Vertical	90	0 60	5 0	6 40	25 0	50	50	5 11	Closed down.
Kauri Timber Co., Ellis Creek	Band saw	70	0 60	6 0	13 0	45 0	40	48	6 10	
Wilgarrup Karri and Jarrah Co., Ltd., Jarnadup	Vertical saw	75	0 40	5 0	0 30	93 0	30·65	41·02	9 10	Closed down.
Bunning Bros., Ltd., Argyle	Twin saws	50	1 0	7 0	0 12	21 0	14	48	4 4	
Preston Valley Sawmills, Noggerup	Twin saws	40	1 0	4 0	0 15	49 0	25	50	6 10	Closed down.
Swan Sawmills, Ltd., Lowden	Twin saws	48	1 0	7 0	1 10	35 0	30	45	5 8	Closed down.
Donnybrook Sawmills, Donnybrook	Twin saws	9	1 0	No landing	1 0	29 40	*	42	5 2	Situated on private property. Cutting on permit 72/11.
Buckingham Bros., Muja	Twin saws	26	1 60	3 60	0 53	53 0	20	55	7 2	
Lion Sawmills, Lion Mill	Band saw	...	1 40	7 0	0 20	37 0	20	...	5 10	Working on private property.
Whittaker Bros., North Dandalup	Twin saws	60	0 70	9 0	3 60	46 0	31	53	6 8	
J. H. Patterson, Amphion	Twin saws	30	1 0	2 0	0 40	90 0	12	45	11 6	
State Mill, Wuraming	Twin saws	30	1 0	No bush landing	1 0	92 0	19·5	47	11 10	
Railway Department Mill, No. 2, Dwellingup ...	Twin saws	100	1 0	4 0	5 0	97 0	49	47	...	Not exported.
Port & Co., Ltd., Pindalup	Horizontal	30	1 0	2 0	Alongside main line	90 0	13	51	11 8	
State Mill, Manjimup	Vertical and Twin	100	0 60	1–12 0	3 60	90 0	Not supplied	Not supplied	10 8	
State Mill, Pemberton, No. 2	Vertical	300	0 40	6 0	17 0	93 0	50	38	9 10	} Only one working.
State Mill, Pemberton, No. 3	Twin saws	300	0 40	6 0	17 0	93 0	45	38	9 10	
Smith's Mill, Winnigup Road	Circular saw	10	†0 40	...	3 40	62 0	20 (per month)	70	7 11	Working intermittently.
Mitchell & Ryan's Mill, Jayes Road	Circular saw	12	†0 40	...	2 0	67 0	6	40	8 4	Working intermittently.
S.W. Timber Hewers' Co-Operative Society, Ltd., Holyoake	... ...	...	0 40	7 0	On main line	78 0	40	48	9 0	
Denmark Timber Co., Denmark	Twin saws	16	3 0	Landing at mill	2 40	30 0	10	50	...	Does not export Jarrah. Cutting for fruit cases and local orders.
C. Firns, Serpentine	Twin saws	13	...	...	5 0	...	4	...	...	Closed down.
Timber Corporation, Ltd., Greenbushes ...	Vertical saw	60	2 0	7 14	2 0	52 0	30·35	40 to 46	7 1	Closed down.
Millar's Timber and Trading Co., Ltd., Jarrahdale	Twin saws—2 mills	700	0 40	20 0	7 0	41 0	80	45	9 9	Bunbury.
Millar's Timber and Trading Co., Ltd., Wellington	Twin saws and Vertical saw ...	500	0 40	10 0	13 0	9 0	60	45	2 9	Bunbury.
Millar's Timber and Trading Co., Ltd., Canning	Twin saws—2 mills	120	0 40	6 0	8 0	38 0	10	45	6 2	Fremantle. Closed down.
Millar's Timber and Trading Co., Ltd., Marrinup	Twin saws	250	0 40	4 0	On main line	78 0	26	45	8 9	Bunbury. Closed down.

Millar's Timber and Trading Co., Ltd., Yarloop	Vertical and Twin saw combined	350	0 40	9 0	9 0	37 0	50	45	6 1	Bunbury. Closed down.
Millar's Timber and Trading Co., Ltd., Nanga Brook	Twin saws	400	0 40	8 0	28 0	37 0	60	45	10 10	Fremantle. Closed down.
Millar's Timber and Trading Co., Ltd., Mornington	Vertical saw and Twin saws	500	0 40	12 0	6 0	26 0	90	45	5 2	Bunbury, Closed down.
Millar's Timber and Trading Co., Ltd., Kirup, East	Vertical and Twin saws ...	500	0 40	5 0	13 0	57 0	70	45	6 1	Bunbury. Closed down.
Millar's Timber and Trading Co., Ltd., Jarrahwood	Twin saws	40	0 40	8 0	On main line	28 0	20	45	5 1	Busselton. Closed down.
Railway Department, Midland Junction ...	Band saws	80–100	...	...	...	...	10	50–60	...	Cutting Tuart and Wandoo.
Railway Department, No. 1 Mill, Dwellingup ...	Twin saws	35	0 60	4 40	0 2	70 0	12	48	8 7	Closed down.
Coolup Milling Co., Coolup	Circular saw	14	0 60	...	4 0	53 0	3·5	60	7 2	Closed down.
Bethell's Mill, Donnelly River	Twin saws	18	0 50	Landing at mill	12 40	76 0	10	52	1 11	Closed down.
Bunning Bros., Ltd., Muja	Twin saws	90	1 0	2 0	0 60	51 0	15	56	6 8	
Lewis & Reid, Ltd., Harris River	Twin saws	62	0 60	5 0	7 0	38 0	19	42	5 3	
Payne, F. and A., Capel	Two Circular saws	20	0 30	No bush landing	8 0	26 0	3	50	4 11	Cutting fruit cases and local orders, also Sheaoak.
Bowman, J. H., Charlie's Creek...	Two Circular saws	4	...	...	...	...	*a*	...	...	
Barron, C. A., Charlie's Creek	Circular saw	8	...	...	...	...	*b*	75	...	
Jones, Thos. B., Mumballup	Circular saw	10	...	...	...	...	*c*	60	...	
Davers, J. T., Lowden	Circular saw	10	...	...	...	...	*d*	...	...	
Smith, F. S., Boyanup	Circular saw	12	...	...	...	...	*e*	50	...	
Martin R. M., Upper Preston	Circular saw	8	...	...	...	...	1	75	...	
Slattery, B., Ferguson River	Circular saw	4	...	...	...	...	·25	85	...	
Patroni, J., Upper Capel	Circular saw	8	...	...	...	...	1	80	...	
Bourne, C. P., Capel River	Circular saw	10	...	...	...	...	1·5	70	...	
Farley, D., Capel River	Circular saw	7	...	...	...	...	*f*	75	...	
Kirkpatrick, J. K., Charlie's Creek	Circular saw	4	...	...	...	...	*g*	50	...	
Connell, W. R., Jayes Road	Spot Mill (1 bench)	12	0 40	Landing at Mill	2 0	67 0	8	...	8 4	Cutting fruit cases on private property.
Machin, J., Bridgetown	Spot Mill	12	0 40	...	12 0	67 0	4	...	8 4	Cutting fruit cases on private property.
Hill, E. E., Bridgetown	Spot Mill	6	0 40	...	4 0	67 0	2	...	8 4	Cutting fruit cases on private property.
Young, J., Balbarrup	Spot Mill	10	0 30	...	5 0	90 0	1	...	10 8	Cutting fruit cases on private property.
Johnston, J.	Spot Mill	12	*a*	...	No particulars obtainable		...	...	...	Cutting fruit cases on private property.
Palmer & Smith, Collie	Spot Mill, Traveller	16	1 0	50ft.	2 40	0 45	1·5	60	6 2	Bunbury.
Lewis & Reid, Ltd., Arklow Mill	Spot Mill	26	1 40	...	0 20	0 38	3	40	5 3	
Star Sawmilling Co., Marrinup	Spot Mill	12	0 60	...	2 40	0 76	4	50	...	Cutting Sleepers and Scantling on private property.
Plavin, C., Inglehope	Twin saws	...	...	...	...	...	...	...	...	
Buckingham, G., Kelmscott	Twin saws	..	...	...	...	...	...	...	...	Cutting building timber and fruit cases on private property.

* 200 flat fruit cases. † Stump to Mill. *a*. 84 fruit cases. *b*. 100 fruit cases. *c*. 180 dump cases. *d*. 300 dump cases. *e*. 100 dump cases. *f*. 120 fruit cases. *g*. 50 fruit cases.

APPENDIX 3c.

Table showing Number of various Timber Workers Registration Certificates issued from 1st July, 1918, to 30th June, 1919.

Hewers	242
Fallers	157
Haulers	63
Carters	39
Managers and Bush Foremen	26
Teamsters	9
Swampers	44
Chasers	2
Engine Drivers	3
Shingle Splitters	3
*Firewood	196
†Charcoal	15
Blackboy Cutters	3
‡Timber Getters	13
Total	815

* This includes cutters and carters. † This includes burners and carters. ‡ Working on Coal Mining Leases at Collie.

APPENDIX 3d.

Return of Licenses issued from 1st July, 1918, to 30th June, 1919.

*Managers and Bush Foremen	14
*Firewood	6,159
Mining Timber	160
Bark Strippers	1
Sandalwood	227
Fence Post	1
Total	6,542

* These figures allude to Goldfields only.

APPENDIX 4.

List of Herbarium Specimens collected from 1st July, 1918, to 30th June, 1919, and identified by the Government Botanist.

Botanical Name.	Local Name.
Acacia barbinervis, Benth.	Shrub.
,, cyanophylla, Lindl.	Black Wattle.
,, decipiens, R. Br.	Prickly Wattle.
,, diptera, Labill.	Plant.
,, stenoptera, Benth.	Prickly Shrub.
,, strigosa, Link.	Shrub.
Adenanthos barbigera, Labill.	Shrub.
,, cuneata Labill.	Shrub.
,, obovata, Labill.	Shrub.
,, sericea, Labill.	Small Tree.
Andersonia sprengelioides, R. Br.	Shrub.
Anigozanthos humilis, Lindl.	Kangaroo Paw.
,, Manglesii, Don.	Kangaroo Paw.
Astartea fascicularis D.C.	Shrub.
Astroloma cerophyllum, Sond.	Shrub.
Baeckea camphorosmae, Endl.	Shrub.
,, minutifolia, Cheel.	Shrub.
Beaufortia anisandra, Schau.	Shrub.
Boronia, purdieana, Diels.	Baronia.
,, viminea Lindl.	Shrub.
Bossiaea eriocarpa, Benth.	Shrub.
Burtonia conferta, D.C.	Shrub.
Calectasia cyanea, R. Br.	Shrub.
Calothamnus quadrifidus, R. Br.	Shrub.
Calythrix asperula Schau.	Shrub.
Comesperma virgatum, Lab.	Plant.
Conospermum staechadis, Endl.	Shrub.
,, triplinervium, R. Br.	Shrub.
Conostylis candicans, Endl.	Plant.
Daviesia incrassata, Sm.	Shrub.
,, longifolia, Benth.	Shrub.
,, nudiflora, Meissn	Shrub.
Dillwynia cinerascens, R. Br.	Shrub.
Eremaea pilosa, Lindl.	Shrub.
Eucalyptus accedens, W. v. F.	Powder Bark Wandoo.
,, alba, Reinw.	Ridge Gum.
,, decipiens, Endl.	Marluck, or Flooded Gum.
,, Preissiana Schau.	Mallee.
,, rudis, Endl.	Flooded Gum.
,, uncinata, Turcz.	Mallee.
Gompholobium tomentosum, Labill.	Shrub.

APPENDIX 4—*continued.*

List of Herbarium Specimens collected, etc.—continued.

Botanical Name.	Local Name.
Grevillea bipinnatafida R. Br.	Shrub.
,, occidentalis, R. Br.	Shrub.
,, synapheae, R. Br.	Shrub.
,, vestita, Meissn.	Shrub.
,, Wilsoni, Cunn.	Shrub.
Hakea cyclocarpa, Lindl.	Wild Bean.
,, lissocarpha, R. Br.	Shrub.
,, ruscifolia, Labill.	Prickly Shrub.
,, trifurcata, R. Br.	Shrub.
,, varia, R. Br.	Shrub or Small Tree.
Hemiandra pungens, R. Br., var. glabra, Benth.	Shrub.
Hypocalymma angustifilium, Endl.	Shrub.
Ionidium calycinum, Stend	Plant.
Jacksonia Sternbergiana Hueg.	Stinkwood.
Kennedya prostrata, R. Br.	Runner.
Lambetia echinata, R. Br.	Shrub.
,, siniflora, R. Br.	Shrub.
Leschenaultia, biloba, Lindl.	Shrub.
Leucopogon Richei, R. Br.	Shrub.
,, sprengelioides, Sond.	Shrub.
Lysinema ciliatum, R. Br.	Shrub.
Marianthus coeruleo-punctatus, Kletzch.	Creeper.
Marianthus floribundus, Putter.	Climber.
Oxylobium capitatum, Benth.	Shrub.
,, reticulatum, Meissn.	Shrub.
Petrophila linearis, R. Br.	Shrub.
Phyllanthus calycinus, Labill.	Shrub.
Pimelea suaveolens, Meissn.	Banjine Shrub.
Platytheca galioides, Steetz.	Shrub.
Pronaya elegans, Hueg.	Climber.
Psammomoya choretroides, Diels et Lues.	Shrub.
Scaevola striata, R. Br.	Plant.
Sphaerolobium medium, R. Br.	Shrub.
Spyridium globulosum, Benth.	Shrub.
Stirlingia latifolia, Stend.	Plant.
Stylidium scandens, R. Br.	Climber.
Thomasia glutinosa, Lindl.	Shrub.
,, solanacea, J. Gay	Shrub.
Trichinium Manglesii, Lindl.	Plant.
Verticordia penningera, Endl.	Shrub.

APPENDIX No. 5.

Trees raised at and Distributed from Hamel State Nursery during the Year ended the 30th June, 1919.

Botanical Name.	Common Name.	No. of trees on hand 31-3-18.	No. of trees raised year ended 31-3-19.	No. of trees distributed, season 1918.					No. of trees on hand 31-3-19.
				Sold to Public.	Distributed free.	Raised for Plantation.	Otherwise disposed of.	Total.	
Acacia acuminata	Raspberry Jam	70	182	39	15	...	16	70	182
,, Baileyana	Cootamundra Wattle	3,322	995	1,240	91	...	1,956	3,287	1,030
,, dealbata	Victorian Silver Wattle ...	392	700	341	51	...	...	392	700
,, decurrens	Sydney Green Wattle ...	1,196	477	820	76	...	300	1,196	477
,, elata	Cedar Wattle	400	250	252	115	...	11	378	272
,, melanoxylon	Blackwood	256	...	34	28	...	2	64	192
,, normalis	(syn) Acacia decurrens ...	...	153	...	...	...	...	...	153
,, podalyriacfolia ...	Mount Morgan Silver Wattle ...	379	320	...	167	...	...	354	345
,, prunisus	... ...	...	67	...	...	...	...	...	67
,, pycnantha	Golden Wattle	1,974	655	636	51	...	1,253	1,940	689
,, saligna	W.A. Coastal Wattle	127	150	36	51	...	40	127	150
,, assorted	... ...	623	...	271	...	...	354	625	...
Agathus Australis	New Zealand Kauri Pine ...	...	7	...	...	...	...	...	7
Agonis flexuosa	W.A Peppermint	1,870	1,234	1,538	229	...	28	1,795	1,309
Amygdalis communis ...	Bitter Almond	56	...	56	...	...	...	56	...
Araucaria Bidwilli	Bunya Bunya	90	472	70	20	...	...	90	472
,, excelsa	Norfolk Island Pine	612	820	487	78	...	16	581	851
Callitris robusta	Cypress Pine	422	...	45	53	...	11	109	313
Casternospermum Australe ...	Queensland Black Bean ...	...	25	...	...	...	...	...	25
Casuarina stricta	Drooping Seaoak	206	...	...	52	...	82	134	72
Ceratonia siliqua	Carob Bean	2,563	566	1,222	14	...	113	1,349	1,780
Cinnamomum camphora ...	Camphor Laurel	2,418	...	766	78	...	404	1,248	1,170
Cupressus Benthami ...	Bentham's Cypress	370	...	13	53	...	24	90	280
,, Knighti	Knight's Cypress	285	...	54	50	...	4	108	177
,, lusitanica	Busaco Cedar	4,455	427	3,383	236	...	57	3,676	1,206
,, macrocarpa ...	Monterey Cypress	36,498	5,520	24,142	325	...	5,637	30,104	11,914
,, sempervirens ...	Mediterranean Cedar	3,340	...	1,535	50	...	798	2,383	957
,, torulosa	Nepal Cypress	1,285	...	344	52	...	39	435	850
Cytisus proliferus	Tree Lucerne	...	110	...	...	...	...	...	110
Dracaena draco	Dragon's Blood Tree	76	...	6	...	...	8	14	62
Erythrina indica	Coral Tree	80	21	12	12	...	3	27	74
Eucalyptus Bosistoana ...	Gippsland Grey Box ...	...	56	...	...	...	...	...	56
,, botryoides ...	False Mahogany	469	240	123	186	...	134	443	266
,, citriodora ...	Lemon Scented Gum	475	603	370	80	...	2	452	626
,, cornuta	Yate	19	...	...	14	...	5	19	...
,, corynoclayx ...	Sugar Gum	7,360	5,837	6,036	103	...	1,183	7,322	5,875
,, ficifolia	Red Flowering Gum	1,287	2,058	1,075	55	...	157	1,287	2,058
,, globulus	Tasmanian Blue Gum ...	603	837	576	3	...	5	584	856
,, gomphocephala ...	Tuart	27	...	...	15	...	12	27	...
,, leucoxylon ...	White Ironbark	...	56	...	...	...	...	...	56
,, longifolia... ...	Woolly Butt	...	53	...	...	...	...	...	53
,, macrocarpa ...	Sand Plain Gum	525	725	155	102	...	242	499	751
,, marginata ...	Jarrah	19	...	...	10	...	9	19	...
,, maculata... ...	Spotted Gum	...	58	...	...	...	...	...	58
,, melliodora ...	Yellow Box	196	121	140	51	...	...	191	126
,, megacarpa ...	W.A. Blue Gum	22	...	...	14	...	8	22	...
,, obliqua	Messmate	...	54	...	...	...	...	...	54
,, occidentalis ...	Mallet	37	...	...	15	...	22	37	...
,, oleosa	Morrell	8	...	...	4	...	4	8	...
,, patens	W.A Blackbutt	4	...	...	2	...	2	4	...
,, polyanthema ...	Red Box	...	51	...	...	...	...	...	51
,, pyriformis ...	Red Flowering Mallee ...	15	110	4	2	...	9	15	110
,, pyriformis ...	Yellow Flowering Mallee ...	3	130	...	...	...	3	3	130
,, redunca	Wandoo	19	...	...	12	...	7	19	...
,, regnans	Victorian Mountain Ash ...	...	26	...	...	...	...	...	26
,, robusta	Swamp Mahogany	...	56	...	...	...	...	...	56
,, rostrata	Murray River Red Gum ...	...	56	...	...	...	...	...	56
,, tereticornis ...	Gippsland Red Gum	...	56	...	...	...	...	...	56
,, tetraptera ...	Broad Leafed Mallee	80	130	57	18	...	5	80	130
,, torquata ...	Goldfields Red Flowering Gum	78	162	44	8	...	26	78	162
,, salmonophloia ...	Salmon Gum	10	...	...	5	...	5	10	...
,, salubris	Gimlet Wood	9	...	...	4	...	5	9	...
,, sideroxylon ...	Rough Barked Ironbark ...	...	48	...	...	...	...	...	48
,, assorted	... ...	2,500	...	450	125	...	1,925	2,500	...
Ficus Australis	Port Macquarie Fig	2,374	...	194	25	...	299	518	1,856
,, macrophylla	Moreton Bay Fig	2,878	...	312	2	...	109	423	2,455
Granadilla fruit	... ...	...	2	...	...	...	...	...	2
Grevillea robusta	Silky Oak	724	351	193	52	...	375	620	455
Hakea eucalyptoides ...	Red-flowering Hakea	540	288	377	58	...	83	518	310
,, laurina	Emu Tree	...	59	...	...	...	...	...	59
Jacaranda mimosifolia ...	Palixander Tree	11	136	10	1	...	...	11	136
Juglans nigra	Black Walnut Tree	280	...	...	...	...	114	114	166
Juniperus Bermudiana ...	Bermuda Pencil Cedar ...	100	57	36	3	...	...	39	118
,, cedrus	Pencil Cedar	...	84	...	...	...	...	...	84

APPENDIX No. 5—*continued.*

Trees Raised at and Distributed from Hamel State Nursery during the Year ended the 30th June, 1919—continued.

Botanical Name.	Common Name.	No. of trees distributed, season 1918.							No. of trees on hand 31-3-19.
		No. of trees on hand 31-3-18.	No. of trees raised year ended 31-3-19.	Sold to Public.	Distributed free.	Raised for Plantation.	Otherwise disposed of.	Total.	
Lagunaria Patersoni	Pyramid Tree	740	200	76	37	...	5	118	822
Leucadendron argenteum ...	Silver Tree of South Africa ...	...	11	...	...	...	...	...	11
Melia Azedarach	Pride of India	5,590	1,200	824	145	...	4,145	5,114	1,676
Passiflora eudlis	Passion Fruit	112	...	21	9	...	12	42	70
Pinus Canariensis	Canary Island Pine	1,494	200	434	128	...	403	965	729
,, Pinaster	Maritime Pine	42,023	260	3,579	93	20,830	521	25,023	17,260
,, insignus	Monterey Pine	34,634	...	12,747	1,280	...	5,507	19,534	15,100
,, halepensis	Aleppo Pine	70,230	...	6,759	9,102	...	49,339	65,200	5,030
Pittosporum eugenoides ...	... ...	...	12	...	...	...	...	...	12
Pittosporum undulatum ...	Victorian Native Laurel ...	2,865	510	1,092	260	...	150	1,502	1,873
Platanus occidentalis ...	Western Plane	12,600	...	908	28	...	5,914	6,850	5,750
Populus alba	Silver Poplar	...	126	...	...	...	...	...	126
Prosopsis juliflora	Algaroba Bean	...	430	...	...	...	...	...	430
Quercus lusitanica	Portuguese Oak...	670	395	163	12	...	20	195	870
,, suber	Cork Oak	285	...	109	114	...	2	225	60
Robenia pseudo acacia ...	False Acacia	3,290	950	676	12	...	1,552	2,240	2,000
Rosella-fruit	... ...	...	2	...	...	...	...	...	2
Salix purpurea	Bitter Willow	...	23	...	...	...	...	...	23
,, nigra	Black Willow	...	20	...	...	...	...	...	20
,, viminalis	Common Osier of Europe ...	...	43	...	...	...	...	...	43
Schinus molle	Pepper Tree	1,220	1,432	1,139	...	...	81	1,220	1,432
Sterculia hetrophylla ...	Kurrajong	4,000	1,000	1,112	36	...	1,227	2,375	2,625
,, acerifolia	Flame Tree	398	306	281	50	...	23	354	350
Syncarpia laurifolia	Turpentine Tree	240	...	8	58	...	104	170	70
Telopea speciosissima ...	New South Wales Waratah ...	...	13	...	...	...	...	...	13
Thuya occidentalis	Arbor Vitæ	1,939	...	55	3	...	1,419	1,477	462
,, orientalis	Arbor Vitæ	203	...	...	...	...	10	10	193
Tristania conferta	Brush Box	448	692	185	59	...	19	263	877
		267,020	33,476	77,849	14,342	20,830	86,359	199,380	101,116

APPENDIX 6.

List of Trees Planted in the Hamel State Nursery Arboretum.

Botanical Name.	Vernacular Name.	Native Habitat.
Castanospermum Australe	Black Bean, Moreton Bay Chestnut	Queensland.
Cupressus Benthami	Bentham's Cypress	Mexico.
„ macrocarpa	Monterey Cypress	United States of America.
„ lusitanica	Busaco Cedar	Mexico.
Pinus canariensis	Canary Island Pine	Canary Islands.
Cupressus torulosa	Nepal Cypress	India.
„ sempervirens (horizontalis)	Mediterranean Cedar	Mediterranean.
„ Knighti	Knight's Cypress	United States of America.
Syncarpia laurifolia	Turpentine Tree	Queensland and New South Wales.
Cinnamomum camphora	Camphor Laurel	China and Japan.
Callitris robusta	Cypress Pine	Australia.
Casuarina stricta	Drooping Sheaoak	South Eastern Australia.
Ficus Australis	Port Macquarie Fig	New South Wales and Queensland.
Tristania conferta	Brush Box	New South Wales and Queensland.
Grevillea robusta	Silky Oak	Queensland.
Sterculia acerifolia	Flame Tree	Queensland.
Juniperus Bermudiana	Pencil Cedar	Bermuda Island.
Ficus macrophylla	Moreton Bay Fig	New South Wales and Queensland.
Pittosporum undulatum	Victorian Native Laurel	South Eastern Australia.
Juniperus cedrus	Pencil Cedar	Canary Islands.
Pittosporum eugenioides		New Zealand.
Agonis flexuosa	Peppermint	Western Australia.
Prosopis juliflora	Algaroba or Mesquite Tree	Western United States of America.
Ceratonia siliqua	Carob Bean	Mediterranean.
Thuya occidentalis	Arbor Vitæ	North America.
Jacaranda mimosifolia	Palixander Tree	India.
Langunaria Patersoni	Pyramid Tree	New Zealand.
Araucaria Bidwilli	Bunya Bunya Pine	Queensland.
Thuya orientalis	Arbor Vitæ	China and Japan.
Leucadendron argentem	Silver Tree	South Africa.
Hakea laurina	Emu Tree	Western Australia.
Erythrina indica	Coral Tree	New South Wales.
Hakea eucalyptoides	Flowering Hakea	South Eastern Australia.
Eucalyptus pyriformis (yellow)	Flowering Mallee	Western Australia.
„ torquata	Goldfields Red Flowering Gum	Western Australia.
„ macrocarpa	Sand Plain Gum	Western Australia.
„ pyriformis (red)	Flowering Mallee	Western Australia.
„ ficifolia	Red Flowering Gum	Western Australia.
„ tetraptera	Broad Leafed Mallee	Western Australia.
„ oleosa F.v.M., var. longicornis F.v.M.	Morrell	Western Australia.
„ torquata, Leuhn.	Goldfields Red Flowering Gum	Western Australia.
„ feocunda, Schau, var. loxophleba (Benth.) Maiden	York Gum, or Mallee	Western Australia.
Acacia microbotrya, Benth.	Manna Wattle	Western Australia.
„ normalis	Normal Sydney Green Wattle	New South Wales and Queensland.
„ pruinosa		Eastern Australia.
„ melanoxylon	Blackwood	Victoria and Tasmania.
„ dealbata	Victorian Silver Wattle	S. Eastern Australia and Tasmania.
„ elata	Cedar Wattle	New South Wales.
„ podalyriaefolia	Mount Morgan Silver Wattle	Queensland.
„ pycnantha	Golden Wattle	Victoria and South Australia.
„ decurrens	Sydney Green Wattle	New South Wales.
„ Baileyana	Cootamundra Wattle	New South Wales.
„ saligna	Coastal or Weeping Wattle	Western Australia.
Eucalyptus Campaspe, S. le M. Moore	Gimlet Wood	Western Australia.
„ foecunda, Schau	Mallee	Western Australia.
„ calycogona, Turcz., var. gracilis, colletiodes, A. Cunn.	Snap and Rattle	Western Australia.
„ calycogona, Turcz.	Mallee	Western Australia.
„ redunca, Schau (Affin) var. elata, Benth.	White Gum, or Wandoo	Western Australia.
„ clelandi, Maiden	Goldfields Blackbutt	Western Australia.
„ salubris, F. v. M.	Gimletwood	Western Australia.
„ alba, Reinw.	Ridge Gum	Western Australia.
„ vimibralis	Manna Gum	South Eastern Australia.
„ melliodora	Yellow Box	New South Wales and Victoria.
„ polyanthema	Red Box	South Eastern Australia.
„ leucoxylon	White Ironbark	Victoria, S. Australia, and N.S.W.
„ obliqua	Messmate	S. Eastern Australia and Tasmania.
„ coceifera		Tasmania.
„ citriodora	Lemon Scented Gum	Queensland.
„ sideroxylon	Red Ironbark	South Eastern Australia.
„ maculata	Spotted Gum	New South Wales and Queensland.
„ corynocalyx	Sugar Gum	South Australia and Victoria.
„ regnans	Blackbutt and Mountain Ash	South Eastern Australia.
„ bosistoiana	Gippsland Grey Box	South Eastern Victoria.
„ tereticornis	False Mahogany	Eastern Australia.
„ globulus	Blue Gum	Tasmania and Victoria.
„ rostrata	Southern Australian Red Gum	Southern Australia.
„ cornuta	Yate	Western Australia.
„ occidentalis	Brown Mallet	Western Australia.
„ redunca	Wandoo	Western Australia.
„ gomphocephala	Tuart	Western Australia.
Acacia acuminata	Raspberry Jam	Western Australia.
Eucalyptus megacarpa	Western Australian Blue Gum	Western Australia.
„ longifolia	Woolly Butt	Eastern Australia.

APPENDIX No. 7.

Particulars of Prosecutions.

Nature of Offence.	Fines.	Remarks.
	£ s. d.	
Failing to brand stumps	5 0 0	With costs.
Do. do.	..	Case dismissed with costs.
Do. do.	2 0 0	With costs.
Cutting undersized timber	3 0 0	do.
Do. young timber on Crown Lands ..	..	Case dismissed without costs.
Do. do. do. ..	10 0 0	With costs.
Do. do. do. ..	5 0 0	do.
Do. timber on Crown Lands	1 0 0	do.
Do. firewood on Crown Lands ..	5 0 0	do.
Do. poles not specified on Certificate ..	0 5 0	do.
Do. poles undersized on Concession. ..	..	Case dismissed without costs.
Illicit cutting on Crown Lands	5 0 0	
Do. do. do.	..	Withdrawn subject to defendant paying Royalty as stipulated by the Conservator.
Removing young green timber from Crown Lands	..	Dismissed with costs.
Do. do. do. ..	5 0 0	With costs.
Do. do. do. ..	..	Withdrawn upon defendant paying cost of summons.
Do. do. do. ..	5 0 0	With costs.
Do. do. do. ..	..	Dismissed without costs.
Do. firewood from Crown Lands ..	..	Withdrawn subject to defendant paying costs.
Do. green timber from Crown Lands without license	5 0 0	With costs.
Do. dry wood from Crown Lands without license	5 0 0	do.
Do. timber under standard size from Crown Lands	2 18 0	do.
Do. do. do. ..	1 18 0	do.
Hauling log without Registration Certificate	3 0 0	do.
Using insulting language	2 0 0	do.
Total	71 0 0	

By Authority: Fred. Wm. Simpson, Government Printer, Perth.